

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input checked="" type="checkbox"/>
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER NBU 922-29B2BS
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME NATURAL BUTTES
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.						7. OPERATOR PHONE 720 929-6007
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217						9. OPERATOR E-MAIL Kathy.SchneebeckDulnoan@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UO 1207 ST			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (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"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	244 FNL 1675 FEL	NWNE	29	9.0 S	22.0 E	S
Top of Uppermost Producing Zone	17 FNL 2416 FEL	NWNE	29	9.0 S	22.0 E	S
At Total Depth	17 FNL 2416 FEL	NWNE	29	9.0 S	22.0 E	S
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 17		23. NUMBER OF ACRES IN DRILLING UNIT 400	
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1192		26. PROPOSED DEPTH MD: 9554 TVD: 9438	
27. ELEVATION - GROUND LEVEL 4890			28. BOND NUMBER 22013542		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 Danielle Piernot		TITLE Regulatory Analyst			PHONE 720 929-6156	
SIGNATURE		DATE 07/30/2010			EMAIL gnbregulatory@anadarko.com	
API NUMBER ASSIGNED 43047511930000		APPROVAL  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	9554		
Pipe	Grade	Length	Weight			
	Grade I-80 Buttress	9554	11.6			

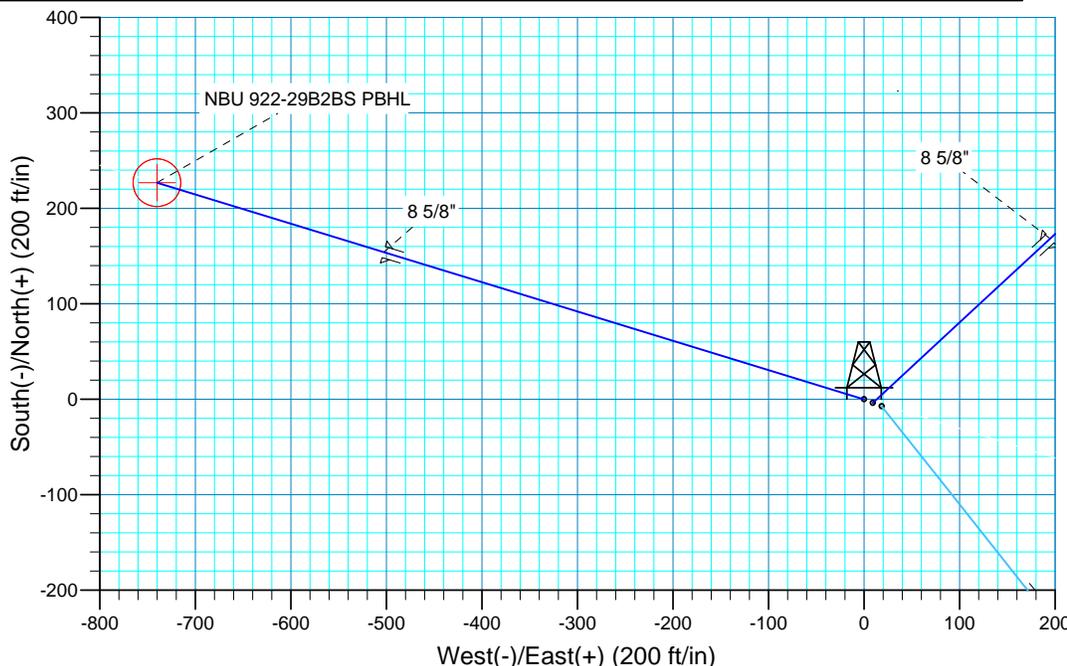
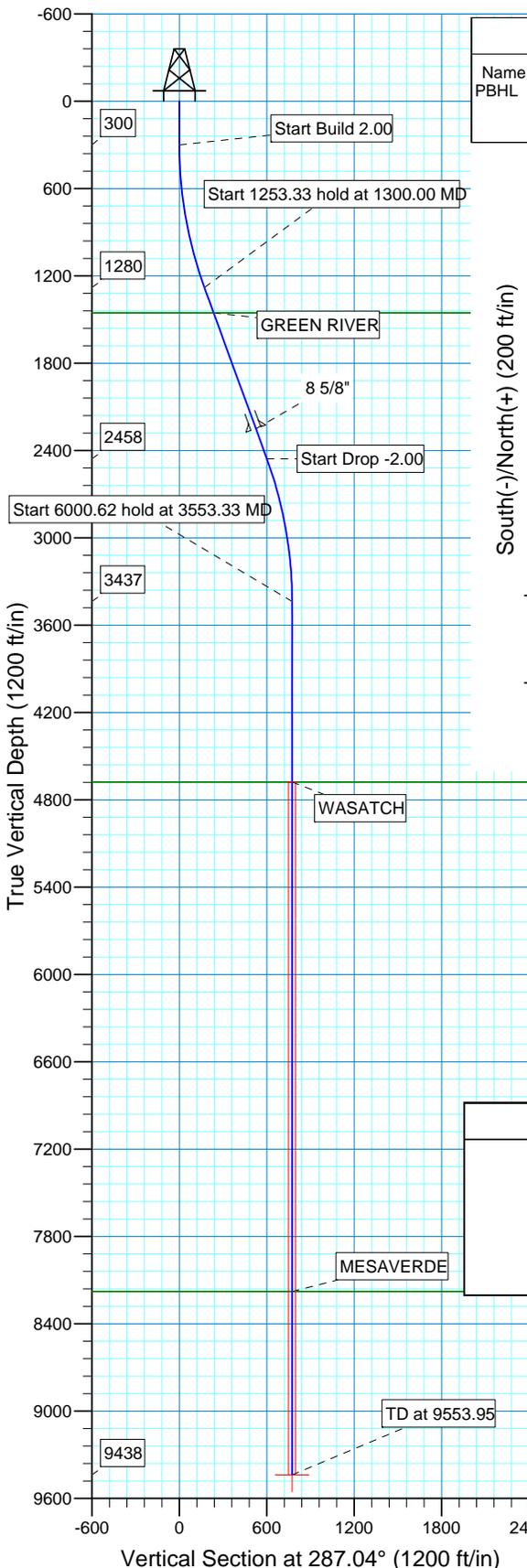
Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2350		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	2350	28.0			

WELL DETAILS: NBU 922-29B2BS					
+N/-S	+E/-W	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)	4886.00	Latitude	Longitude
0.00	0.00	14534737.56	2071704.53	40° 0' 49.090 N	109° 27' 35.039 W

T M
 Azimuths to True North
 Magnetic North: 11.18°

Magnetic Field
 Strength: 52432.4snT
 Dip Angle: 65.91°
 Date: 07/21/2010
 Model: IGRF2010

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	9438.00	226.92	-740.20	14534951.65	2070960.52	40° 0' 51.332 N	109° 27' 44.554 W	Circle (Radius: 25.00)



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	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	300.00	0.00	0.00	0.00	0.00	0.00	
3	1300.00	20.00	287.04	1279.82	50.64	-165.18	2.00	287.04	172.77	
4	2553.33	20.00	287.04	2457.56	176.28	-575.02	0.00	0.00	601.43	
5	3553.33	0.00	0.00	3437.38	226.92	-740.20	2.00	180.00	774.20	
6	9553.95	0.00	0.00	9438.00	226.92	-740.20	0.00	0.00	774.20	NBU 922-29B2BS PBHL

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1454.00	1485.36	GREEN RIVER
4678.00	4793.95	WASATCH
8179.00	8294.95	MESAVERDE

PROJECT DETAILS: Uintah County, UT UTM12	
Geodetic System:	Universal Transverse Mercator (US Survey Feet)
Datum:	NAD 1927 - Western US
Ellipsoid:	Clarke 1866
Zone:	Zone 12N (114 W to 108 W)
Location:	SEC 29 T9S R22E
System Datum:	Mean Sea Level
Local North:	No north reference data is available



Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 922-29B Pad
NBU 922-29B2BS
OH**

Plan: Plan #1

Standard Planning Report

21 July, 2010



SDI
Planning Report



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Uintah County, UT UTM12		
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 922-29B Pad, SEC 29 T9S R22E				
Site Position:		Northing:	14,534,730.60ft	Latitude:	40° 0' 49.018 N
From:	Lat/Long	Easting:	2,071,723.14ft	Longitude:	109° 27' 34.801 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.99 °

Well	NBU 922-29B2BS, 244' FNL 1675' FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,534,737.56 ft	Latitude:	40° 0' 49.090 N
	+E/-W	0.00 ft	Easting:	2,071,704.53 ft	Longitude:	109° 27' 35.039 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,886.00 ft

Wellbore	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/21/2010	11.18	65.91	52,432

Design	Plan #1
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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 0.00 287.04

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	
1,300.00	20.00	287.04	1,279.82	50.64	-165.18	2.00	2.00	0.00	287.04	
2,553.33	20.00	287.04	2,457.56	176.28	-575.02	0.00	0.00	0.00	0.00	
3,553.33	0.00	0.00	3,437.38	226.92	-740.20	2.00	-2.00	0.00	180.00	
9,553.95	0.00	0.00	9,438.00	226.92	-740.20	0.00	0.00	0.00	0.00	NBU 922-29B2BS F



SDI
Planning Report



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	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
Start Build 2.00									
400.00	2.00	287.04	399.98	0.51	-1.67	1.75	2.00	2.00	0.00
500.00	4.00	287.04	499.84	2.05	-6.67	6.98	2.00	2.00	0.00
600.00	6.00	287.04	599.45	4.60	-15.00	15.69	2.00	2.00	0.00
700.00	8.00	287.04	698.70	8.17	-26.66	27.88	2.00	2.00	0.00
800.00	10.00	287.04	797.47	12.76	-41.61	43.52	2.00	2.00	0.00
900.00	12.00	287.04	895.62	18.35	-59.85	62.60	2.00	2.00	0.00
1,000.00	14.00	287.04	993.06	24.94	-81.36	85.10	2.00	2.00	0.00
1,100.00	16.00	287.04	1,089.64	32.53	-106.10	110.98	2.00	2.00	0.00
1,200.00	18.00	287.04	1,185.27	41.10	-134.05	140.21	2.00	2.00	0.00
1,300.00	20.00	287.04	1,279.82	50.64	-165.18	172.77	2.00	2.00	0.00
Start 1253.33 hold at 1300.00 MD									
1,400.00	20.00	287.04	1,373.78	60.66	-197.88	206.97	0.00	0.00	0.00
1,485.36	20.00	287.04	1,454.00	69.22	-225.79	236.17	0.00	0.00	0.00
GREEN RIVER									
1,500.00	20.00	287.04	1,467.75	70.69	-230.58	241.17	0.00	0.00	0.00
1,600.00	20.00	287.04	1,561.72	80.71	-263.28	275.37	0.00	0.00	0.00
1,700.00	20.00	287.04	1,655.69	90.74	-295.98	309.58	0.00	0.00	0.00
1,800.00	20.00	287.04	1,749.66	100.76	-328.68	343.78	0.00	0.00	0.00
1,900.00	20.00	287.04	1,843.63	110.79	-361.38	377.98	0.00	0.00	0.00
2,000.00	20.00	287.04	1,937.60	120.81	-394.08	412.18	0.00	0.00	0.00
2,100.00	20.00	287.04	2,031.57	130.83	-426.78	446.38	0.00	0.00	0.00
2,200.00	20.00	287.04	2,125.54	140.86	-459.48	480.59	0.00	0.00	0.00
2,300.00	20.00	287.04	2,219.51	150.88	-492.18	514.79	0.00	0.00	0.00
2,332.45	20.00	287.04	2,250.00	154.14	-502.79	525.89	0.00	0.00	0.00
8 5/8"									
2,400.00	20.00	287.04	2,313.48	160.91	-524.88	548.99	0.00	0.00	0.00
2,500.00	20.00	287.04	2,407.45	170.93	-557.58	583.19	0.00	0.00	0.00
2,553.33	20.00	287.04	2,457.56	176.28	-575.02	601.43	0.00	0.00	0.00
Start Drop -2.00									
2,600.00	19.07	287.04	2,501.54	180.85	-589.94	617.04	2.00	-2.00	0.00
2,700.00	17.07	287.04	2,596.61	189.94	-619.59	648.05	2.00	-2.00	0.00
2,800.00	15.07	287.04	2,692.70	198.05	-646.04	675.72	2.00	-2.00	0.00
2,900.00	13.07	287.04	2,789.69	205.18	-669.28	700.02	2.00	-2.00	0.00
3,000.00	11.07	287.04	2,887.48	211.30	-689.27	720.93	2.00	-2.00	0.00
3,100.00	9.07	287.04	2,985.94	216.43	-705.98	738.41	2.00	-2.00	0.00
3,200.00	7.07	287.04	3,084.94	220.54	-719.39	752.44	2.00	-2.00	0.00
3,300.00	5.07	287.04	3,184.38	223.64	-729.50	763.01	2.00	-2.00	0.00
3,400.00	3.07	287.04	3,284.12	225.71	-736.28	770.10	2.00	-2.00	0.00
3,500.00	1.07	287.04	3,384.05	226.77	-739.72	773.70	2.00	-2.00	0.00
3,553.33	0.00	0.00	3,437.38	226.92	-740.20	774.20	2.00	-2.00	0.00
Start 6000.62 hold at 3553.33 MD									
3,600.00	0.00	0.00	3,484.05	226.92	-740.20	774.20	0.00	0.00	0.00
3,700.00	0.00	0.00	3,584.05	226.92	-740.20	774.20	0.00	0.00	0.00
3,800.00	0.00	0.00	3,684.05	226.92	-740.20	774.20	0.00	0.00	0.00
3,900.00	0.00	0.00	3,784.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,000.00	0.00	0.00	3,884.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,100.00	0.00	0.00	3,984.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,200.00	0.00	0.00	4,084.05	226.92	-740.20	774.20	0.00	0.00	0.00



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Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	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)
4,300.00	0.00	0.00	4,184.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,400.00	0.00	0.00	4,284.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,500.00	0.00	0.00	4,384.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,600.00	0.00	0.00	4,484.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,700.00	0.00	0.00	4,584.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,793.95	0.00	0.00	4,678.00	226.92	-740.20	774.20	0.00	0.00	0.00
WASATCH									
4,800.00	0.00	0.00	4,684.05	226.92	-740.20	774.20	0.00	0.00	0.00
4,900.00	0.00	0.00	4,784.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,000.00	0.00	0.00	4,884.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,100.00	0.00	0.00	4,984.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,200.00	0.00	0.00	5,084.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,300.00	0.00	0.00	5,184.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,400.00	0.00	0.00	5,284.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,500.00	0.00	0.00	5,384.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,600.00	0.00	0.00	5,484.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,700.00	0.00	0.00	5,584.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,800.00	0.00	0.00	5,684.05	226.92	-740.20	774.20	0.00	0.00	0.00
5,900.00	0.00	0.00	5,784.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,000.00	0.00	0.00	5,884.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,100.00	0.00	0.00	5,984.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,200.00	0.00	0.00	6,084.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,300.00	0.00	0.00	6,184.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,400.00	0.00	0.00	6,284.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,500.00	0.00	0.00	6,384.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,600.00	0.00	0.00	6,484.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,700.00	0.00	0.00	6,584.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,800.00	0.00	0.00	6,684.05	226.92	-740.20	774.20	0.00	0.00	0.00
6,900.00	0.00	0.00	6,784.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,000.00	0.00	0.00	6,884.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,100.00	0.00	0.00	6,984.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,200.00	0.00	0.00	7,084.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,300.00	0.00	0.00	7,184.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,400.00	0.00	0.00	7,284.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,500.00	0.00	0.00	7,384.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,600.00	0.00	0.00	7,484.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,700.00	0.00	0.00	7,584.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,800.00	0.00	0.00	7,684.05	226.92	-740.20	774.20	0.00	0.00	0.00
7,900.00	0.00	0.00	7,784.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,000.00	0.00	0.00	7,884.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,100.00	0.00	0.00	7,984.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,200.00	0.00	0.00	8,084.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,294.95	0.00	0.00	8,179.00	226.92	-740.20	774.20	0.00	0.00	0.00
MESAVERDE									
8,300.00	0.00	0.00	8,184.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,400.00	0.00	0.00	8,284.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,500.00	0.00	0.00	8,384.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,600.00	0.00	0.00	8,484.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,700.00	0.00	0.00	8,584.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,800.00	0.00	0.00	8,684.05	226.92	-740.20	774.20	0.00	0.00	0.00
8,900.00	0.00	0.00	8,784.05	226.92	-740.20	774.20	0.00	0.00	0.00
9,000.00	0.00	0.00	8,884.05	226.92	-740.20	774.20	0.00	0.00	0.00
9,100.00	0.00	0.00	8,984.05	226.92	-740.20	774.20	0.00	0.00	0.00



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	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)	
9,200.00	0.00	0.00	9,084.05	226.92	-740.20	774.20	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,184.05	226.92	-740.20	774.20	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,284.05	226.92	-740.20	774.20	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,384.05	226.92	-740.20	774.20	0.00	0.00	0.00	
9,553.95	0.00	0.00	9,438.00	226.92	-740.20	774.20	0.00	0.00	0.00	
TD at 9553.95 - NBU 922-29B2BS PBHL										

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 922-29B2BS PB	- plan hits target center	0.00	0.00	9,438.00	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
	- Circle (radius 25.00)									

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)		
2,332.45	2,250.00	8 5/8"	8.625	11.000		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
8,294.95	8,179.00	MESAVERDE				
4,793.95	4,678.00	WASATCH				
1,485.36	1,454.00	GREEN RIVER				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 2.00	
1,300.00	1,279.82	50.64	-165.18	Start 1253.33 hold at 1300.00 MD	
2,553.33	2,457.56	176.28	-575.02	Start Drop -2.00	
3,553.33	3,437.38	226.92	-740.20	Start 6000.62 hold at 3553.33 MD	
9,553.95	9,438.00	226.92	-740.20	TD at 9553.95	



Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 922-29B Pad
NBU 922-29B2BS
OH**

Plan: Plan #1

Standard Planning Report - Geographic

21 July, 2010





SDI
Planning Report - Geographic



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Uintah County, UT UTM12		
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 922-29B Pad, SEC 29 T9S R22E				
Site Position:		Northing:	14,534,730.60 ft	Latitude:	40° 0' 49.018 N
From:	Lat/Long	Easting:	2,071,723.14 ft	Longitude:	109° 27' 34.801 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.99 °

Well	NBU 922-29B2BS, 244' FNL 1675' FEL					
Well Position	+N-S	0.00 ft	Northing:	14,534,737.56 ft	Latitude:	40° 0' 49.090 N
	+E-W	0.00 ft	Easting:	2,071,704.53 ft	Longitude:	109° 27' 35.039 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,886.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	07/21/2010	11.18	65.91	52,432

Design	Plan #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	287.04

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	
1,300.00	20.00	287.04	1,279.82	50.64	-165.18	2.00	2.00	0.00	287.04	
2,553.33	20.00	287.04	2,457.56	176.28	-575.02	0.00	0.00	0.00	0.00	
3,553.33	0.00	0.00	3,437.38	226.92	-740.20	2.00	-2.00	0.00	180.00	
9,553.95	0.00	0.00	9,438.00	226.92	-740.20	0.00	0.00	0.00	0.00	NBU 922-29B2BS F



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	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)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,534,737.56	2,071,704.53	40° 0' 49.090 N	109° 27' 35.039 W
100.00	0.00	0.00	100.00	0.00	0.00	14,534,737.56	2,071,704.53	40° 0' 49.090 N	109° 27' 35.039 W
200.00	0.00	0.00	200.00	0.00	0.00	14,534,737.56	2,071,704.53	40° 0' 49.090 N	109° 27' 35.039 W
300.00	0.00	0.00	300.00	0.00	0.00	14,534,737.56	2,071,704.53	40° 0' 49.090 N	109° 27' 35.039 W
Start Build 2.00									
400.00	2.00	287.04	399.98	0.51	-1.67	14,534,738.04	2,071,702.85	40° 0' 49.095 N	109° 27' 35.060 W
500.00	4.00	287.04	499.84	2.05	-6.67	14,534,739.49	2,071,697.82	40° 0' 49.110 N	109° 27' 35.125 W
600.00	6.00	287.04	599.45	4.60	-15.00	14,534,741.90	2,071,689.45	40° 0' 49.135 N	109° 27' 35.232 W
700.00	8.00	287.04	698.70	8.17	-26.66	14,534,745.27	2,071,677.74	40° 0' 49.170 N	109° 27' 35.381 W
800.00	10.00	287.04	797.47	12.76	-41.61	14,534,749.60	2,071,662.71	40° 0' 49.216 N	109° 27' 35.574 W
900.00	12.00	287.04	895.62	18.35	-59.85	14,534,754.87	2,071,644.37	40° 0' 49.271 N	109° 27' 35.808 W
1,000.00	14.00	287.04	993.06	24.94	-81.36	14,534,761.09	2,071,622.75	40° 0' 49.336 N	109° 27' 36.085 W
1,100.00	16.00	287.04	1,089.64	32.53	-106.10	14,534,768.25	2,071,597.88	40° 0' 49.411 N	109° 27' 36.403 W
1,200.00	18.00	287.04	1,185.27	41.10	-134.05	14,534,776.33	2,071,569.79	40° 0' 49.496 N	109° 27' 36.762 W
1,300.00	20.00	287.04	1,279.82	50.64	-165.18	14,534,785.34	2,071,538.50	40° 0' 49.590 N	109° 27' 37.162 W
Start 1253.33 hold at 1300.00 MD									
1,400.00	20.00	287.04	1,373.78	60.66	-197.88	14,534,794.79	2,071,505.63	40° 0' 49.689 N	109° 27' 37.582 W
1,485.36	20.00	287.04	1,454.00	69.22	-225.79	14,534,802.87	2,071,477.57	40° 0' 49.774 N	109° 27' 37.941 W
GREEN RIVER									
1,500.00	20.00	287.04	1,467.75	70.69	-230.58	14,534,804.25	2,071,472.76	40° 0' 49.788 N	109° 27' 38.003 W
1,600.00	20.00	287.04	1,561.72	80.71	-263.28	14,534,813.71	2,071,439.89	40° 0' 49.887 N	109° 27' 38.423 W
1,700.00	20.00	287.04	1,655.69	90.74	-295.98	14,534,823.17	2,071,407.03	40° 0' 49.986 N	109° 27' 38.843 W
1,800.00	20.00	287.04	1,749.66	100.76	-328.68	14,534,832.63	2,071,374.16	40° 0' 50.086 N	109° 27' 39.264 W
1,900.00	20.00	287.04	1,843.63	110.79	-361.38	14,534,842.08	2,071,341.29	40° 0' 50.185 N	109° 27' 39.684 W
2,000.00	20.00	287.04	1,937.60	120.81	-394.08	14,534,851.54	2,071,308.42	40° 0' 50.284 N	109° 27' 40.104 W
2,100.00	20.00	287.04	2,031.57	130.83	-426.78	14,534,861.00	2,071,275.55	40° 0' 50.383 N	109° 27' 40.525 W
2,200.00	20.00	287.04	2,125.54	140.86	-459.48	14,534,870.46	2,071,242.69	40° 0' 50.482 N	109° 27' 40.945 W
2,300.00	20.00	287.04	2,219.51	150.88	-492.18	14,534,879.91	2,071,209.82	40° 0' 50.581 N	109° 27' 41.365 W
2,332.45	20.00	287.04	2,250.00	154.14	-502.79	14,534,882.98	2,071,199.15	40° 0' 50.613 N	109° 27' 41.502 W
8 5/8"									
2,400.00	20.00	287.04	2,313.48	160.91	-524.88	14,534,889.37	2,071,176.95	40° 0' 50.680 N	109° 27' 41.786 W
2,500.00	20.00	287.04	2,407.45	170.93	-557.58	14,534,898.83	2,071,144.08	40° 0' 50.779 N	109° 27' 42.206 W
2,553.33	20.00	287.04	2,457.56	176.28	-575.02	14,534,903.87	2,071,126.55	40° 0' 50.832 N	109° 27' 42.430 W
Start Drop -2.00									
2,600.00	19.07	287.04	2,501.54	180.85	-589.94	14,534,908.19	2,071,111.56	40° 0' 50.877 N	109° 27' 42.622 W
2,700.00	17.07	287.04	2,596.61	189.94	-619.59	14,534,916.76	2,071,081.75	40° 0' 50.967 N	109° 27' 43.003 W
2,800.00	15.07	287.04	2,692.70	198.05	-646.04	14,534,924.42	2,071,055.16	40° 0' 51.047 N	109° 27' 43.343 W
2,900.00	13.07	287.04	2,789.69	205.18	-669.28	14,534,931.14	2,071,031.80	40° 0' 51.118 N	109° 27' 43.642 W
3,000.00	11.07	287.04	2,887.48	211.30	-689.27	14,534,936.92	2,071,011.72	40° 0' 51.178 N	109° 27' 43.899 W
3,100.00	9.07	287.04	2,985.94	216.43	-705.98	14,534,941.75	2,070,994.92	40° 0' 51.229 N	109° 27' 44.114 W
3,200.00	7.07	287.04	3,084.94	220.54	-719.39	14,534,945.63	2,070,981.43	40° 0' 51.269 N	109° 27' 44.286 W
3,300.00	5.07	287.04	3,184.38	223.64	-729.50	14,534,948.55	2,070,971.28	40° 0' 51.300 N	109° 27' 44.416 W
3,400.00	3.07	287.04	3,284.12	225.71	-736.28	14,534,950.51	2,070,964.46	40° 0' 51.321 N	109° 27' 44.503 W
3,500.00	1.07	287.04	3,384.05	226.77	-739.72	14,534,951.51	2,070,961.00	40° 0' 51.331 N	109° 27' 44.547 W
3,553.33	0.00	0.00	3,437.38	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
Start 6000.62 hold at 3553.33 MD									
3,600.00	0.00	0.00	3,484.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
3,700.00	0.00	0.00	3,584.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
3,800.00	0.00	0.00	3,684.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
3,900.00	0.00	0.00	3,784.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,000.00	0.00	0.00	3,884.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,100.00	0.00	0.00	3,984.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,200.00	0.00	0.00	4,084.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W



SDI
Planning Report - Geographic



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	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)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
4,300.00	0.00	0.00	4,184.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,400.00	0.00	0.00	4,284.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,500.00	0.00	0.00	4,384.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,600.00	0.00	0.00	4,484.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,700.00	0.00	0.00	4,584.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,793.95	0.00	0.00	4,678.00	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
WASATCH									
4,800.00	0.00	0.00	4,684.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
4,900.00	0.00	0.00	4,784.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,000.00	0.00	0.00	4,884.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,100.00	0.00	0.00	4,984.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,200.00	0.00	0.00	5,084.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,300.00	0.00	0.00	5,184.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,400.00	0.00	0.00	5,284.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,500.00	0.00	0.00	5,384.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,600.00	0.00	0.00	5,484.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,700.00	0.00	0.00	5,584.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,800.00	0.00	0.00	5,684.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
5,900.00	0.00	0.00	5,784.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,000.00	0.00	0.00	5,884.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,100.00	0.00	0.00	5,984.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,200.00	0.00	0.00	6,084.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,300.00	0.00	0.00	6,184.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,400.00	0.00	0.00	6,284.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,500.00	0.00	0.00	6,384.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,600.00	0.00	0.00	6,484.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,700.00	0.00	0.00	6,584.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,800.00	0.00	0.00	6,684.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
6,900.00	0.00	0.00	6,784.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,000.00	0.00	0.00	6,884.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,100.00	0.00	0.00	6,984.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,200.00	0.00	0.00	7,084.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,300.00	0.00	0.00	7,184.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,400.00	0.00	0.00	7,284.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,500.00	0.00	0.00	7,384.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,600.00	0.00	0.00	7,484.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,700.00	0.00	0.00	7,584.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,800.00	0.00	0.00	7,684.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
7,900.00	0.00	0.00	7,784.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,000.00	0.00	0.00	7,884.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,100.00	0.00	0.00	7,984.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,200.00	0.00	0.00	8,084.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,294.95	0.00	0.00	8,179.00	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
MESAVERDE									
8,300.00	0.00	0.00	8,184.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,400.00	0.00	0.00	8,284.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,500.00	0.00	0.00	8,384.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,600.00	0.00	0.00	8,484.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,700.00	0.00	0.00	8,584.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,800.00	0.00	0.00	8,684.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
8,900.00	0.00	0.00	8,784.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
9,000.00	0.00	0.00	8,884.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
9,100.00	0.00	0.00	8,984.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
9,200.00	0.00	0.00	9,084.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Company:	Kerr McGee Oil and Gas Onshore LP	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Project:	Uintah County, UT UTM12	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ASSUMED)
Site:	NBU 922-29B Pad	North Reference:	True
Well:	NBU 922-29B2BS	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)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
9,300.00	0.00	0.00	9,184.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
9,400.00	0.00	0.00	9,284.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
9,500.00	0.00	0.00	9,384.05	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
9,553.95	0.00	0.00	9,438.00	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W
TD at 9553.95 - NBU 922-29B2BS PBHL									

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 922-29B2BS PB	- plan hits target center - Circle (radius 25.00)	0.00	0.00	9,438.00	226.92	-740.20	14,534,951.65	2,070,960.52	40° 0' 51.332 N	109° 27' 44.554 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,332.45	2,250.00	8 5/8"	8.625	11.000	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,294.95	8,179.00	MESAVERDE			
4,793.95	4,678.00	WASATCH			
1,485.36	1,454.00	GREEN RIVER			

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 2.00
1,300.00	1,279.82	50.64	-165.18	Start 1253.33 hold at 1300.00 MD
2,553.33	2,457.56	176.28	-575.02	Start Drop -2.00
3,553.33	3,437.38	226.92	-740.20	Start 6000.62 hold at 3553.33 MD
9,553.95	9,438.00	226.92	-740.20	TD at 9553.95

NBU 922-29B2BS

Pad: NBU 922-29B

Surface: 244' FNL 1,675' FEL (NW/4NE/4)

BHL: 17' FNL 2,416' FEL (NW/4NE/4)

Section 29 T9S R22E

Uintah County, Utah

Mineral Lease: UO 1207 ST

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	1,454'	
Birds Nest	1,760'	Water
Mahogany	2,103'	Water
Wasatch	4,678'	Gas
Mesaverde	7,224'	Gas
MVU2	8,179'	Gas
MVL1	8,689'	Gas
TVD	9,438'	
TD	9,554'	

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 9,438' TVD, approximately equals 5,782 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,706 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'				3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,350	28.00	IJ-55	LTC	0.88	1.71	5.24
PRODUCTION	4-1/2"	0 to 9,554	11.60	I-80	BTC	2.04	1.08	2.87

*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.29

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 3,706 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 5,782 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	180	60%	15.80	1.15
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	270	0%	15.80	1.15
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1,850'	65/35 Poz + 6% Gel + 10 pps gilsonite + 0.25 pps Flocele + 3% salt BWOW	170	35%	11.00	3.82
	TAIL	500'	Premium cmt + 2% CaCl + 0.25 pps flocele	150	35%	15.80	1.15
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,174'	Premium Lite II +0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	300	10%	11.00	3.38
	TAIL	5,380'	50/50 Poz/G + 10% salt + 2% gel + 0.1% R-3	1,040	10%	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.

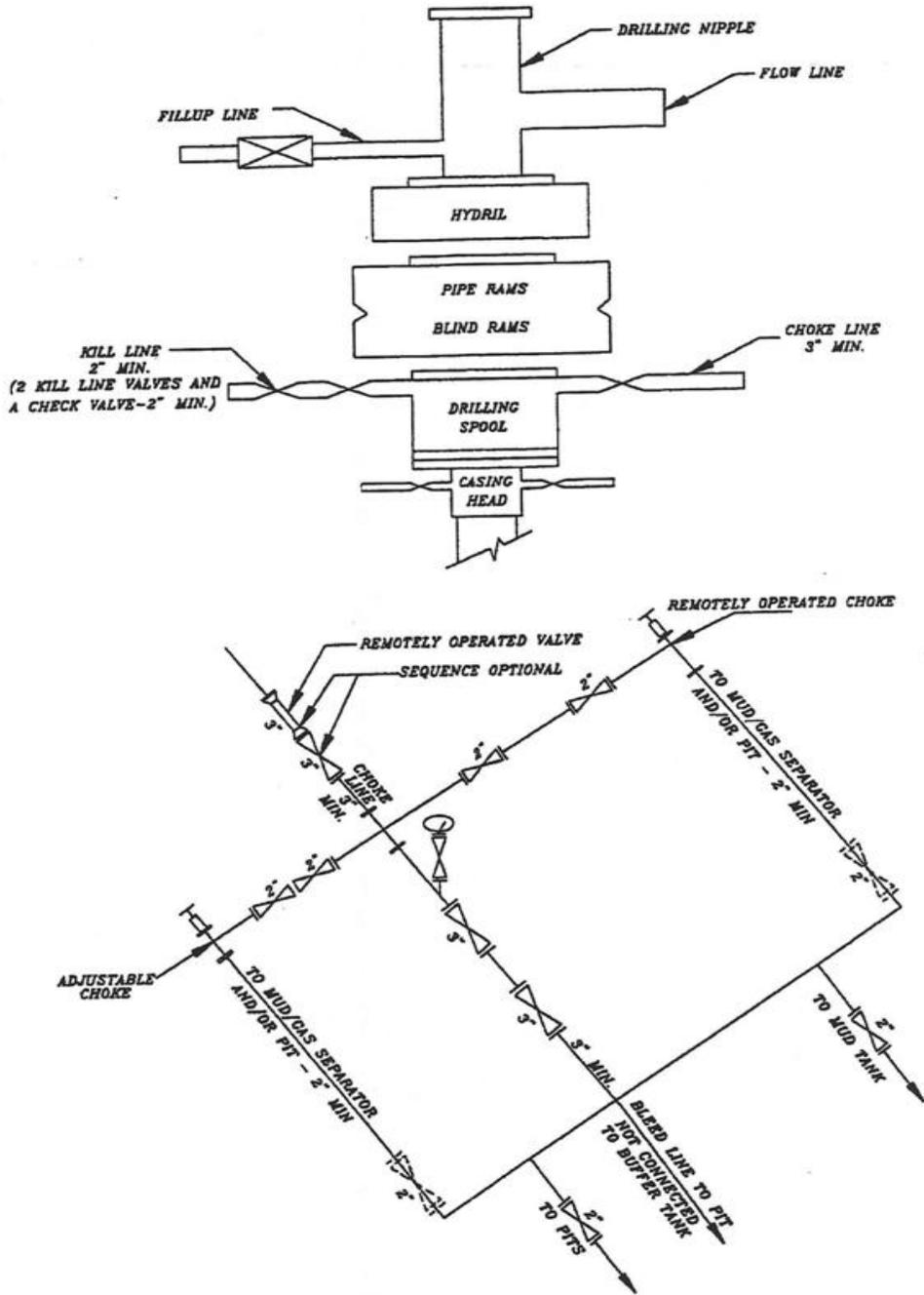
Surveys will be taken at 1,000' minimum intervals.

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 922-29B2BS

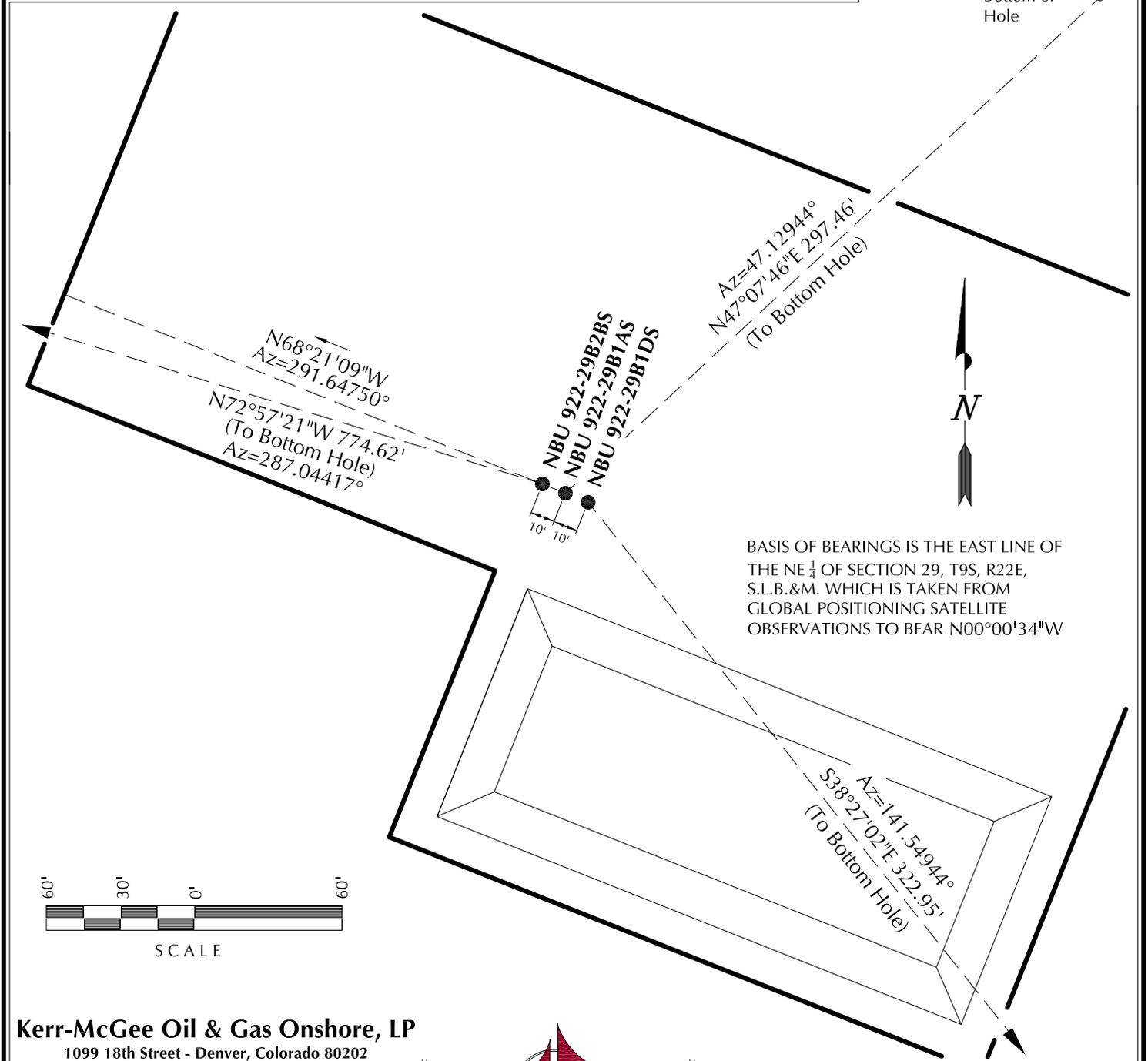


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 922-29B2BS	40°00'48.964"	109°27'37.505"	40°00'49.090"	109°27'35.039"	244' FNL	40°00'51.208"	109°27'47.020"	40°00'51.333"	109°27'44.555"	17' FNL
NBU 922-29B1AS	40.013601°	109.460418°	40.013636°	109.459733°	1675' FEL	40.014224°	109.463061°	40.014259°	109.462376°	2416' FEL
NBU 922-29B1AS	40°00'48.927"	109°27'37.384"	40°00'49.052"	109°27'34.918"	247' FNL	40°00'50.926"	109°27'34.582"	40°00'51.052"	109°27'32.117"	45' FNL
NBU 922-29B1AS	40.013591°	109.460384°	40.013626°	109.459700°	1666' FEL	40.014146°	109.459606°	40.014181°	109.458921°	1448' FEL
NBU 922-29B1DS	40°00'48.890"	109°27'37.265"	40°00'49.016"	109°27'34.800"	251' FNL	40°00'46.391"	109°27'34.685"	40°00'46.517"	109°27'32.219"	504' FNL
NBU 922-29B1DS	40.013581°	109.460351°	40.013616°	109.459667°	1657' FEL	40.012886°	109.459635°	40.012921°	109.458950°	1456' FEL

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
NBU 922-29B2BS	227.0'	-740.6'	NBU 922-29B1AS	202.4'	218.0'	NBU 922-29B1DS	-252.9'	200.8'



BASIS OF BEARINGS IS THE EAST LINE OF THE NE 1/4 OF SECTION 29, T9S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°00'34\"/>

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

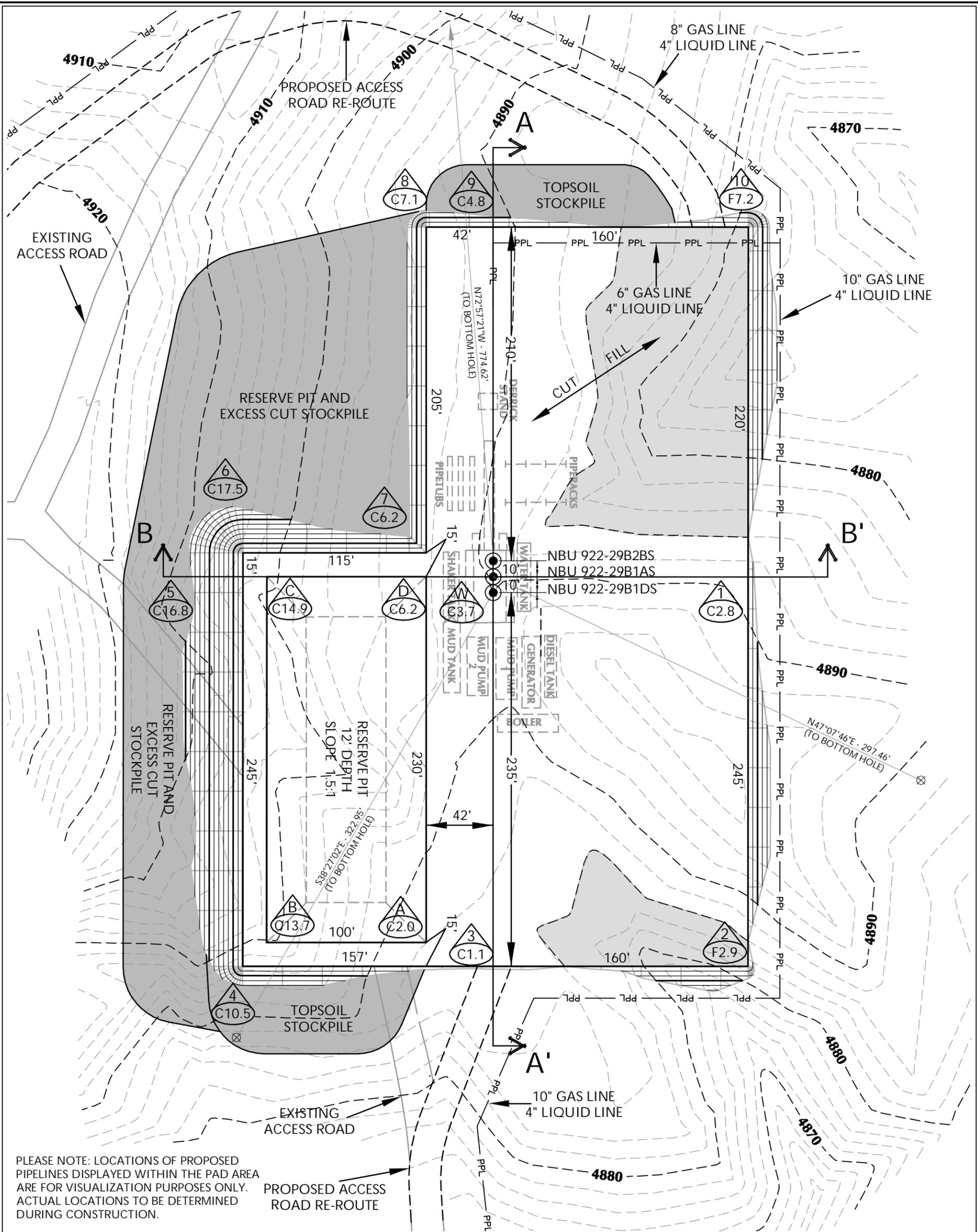
WELL PAD - NBU 922-29B

WELL PAD INTERFERENCE PLAT
WELLS - NBU 922-29B2BS, NBU 922-29B1AS & NBU 922-29B1DS
LOCATED IN SECTION 29, 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: 03-23-10	SURVEYED BY: K.B.C.	SHEET NO: 4
DATE DRAWN: 03-29-10	DRAWN BY: K.O.B.	
SCALE: 1" = 60'	Date Last Revised: 06-03-10 K.O.B.	4 OF 15



PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

WELL PAD - NBU 922-29B DESIGN SUMMARY

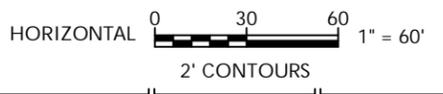
EXISTING GRADE @ CENTER OF WELL PAD = 4889.7'
 FINISHED GRADE ELEVATION = 4886.0'
 CUT SLOPES = 1.5:1
 FILL SLOPES = 1.5:1
 TOTAL WELL PAD AREA = 3.34 ACRES
 TOTAL DAMAGE AREA = 5.89 ACRES
 SHRINKAGE FACTOR = 1.10
 SWELL FACTOR = 1.00

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

WELL PAD QUANTITIES
 TOTAL CUT FOR WELL PAD = 25,175 C.Y.
 TOTAL FILL FOR WELL PAD = 5,078 C.Y.
 TOPSOIL @ 6" DEPTH = 2,694 C.Y.
 EXCESS MATERIAL = 20,097 C.Y.

RESERVE PIT QUANTITIES
 TOTAL CUT FOR RESERVE PIT +/- 7,780 CY
 RESERVE PIT CAPACITY (2' OF FREEBOARD) +/- 29,550 BARRELS

- WELL PAD LEGEND**
- EXISTING WELL LOCATION
 - PROPOSED WELL LOCATION
 - PROPOSED BOTTOM HOLE LOCATION
 - EXISTING CONTOURS (2' INTERVAL)
 - PROPOSED CONTOURS (2' INTERVAL)
 - PPL PROPOSED PIPELINE
 - EPL EXISTING PIPELINE



WELL PAD - NBU 922-29B

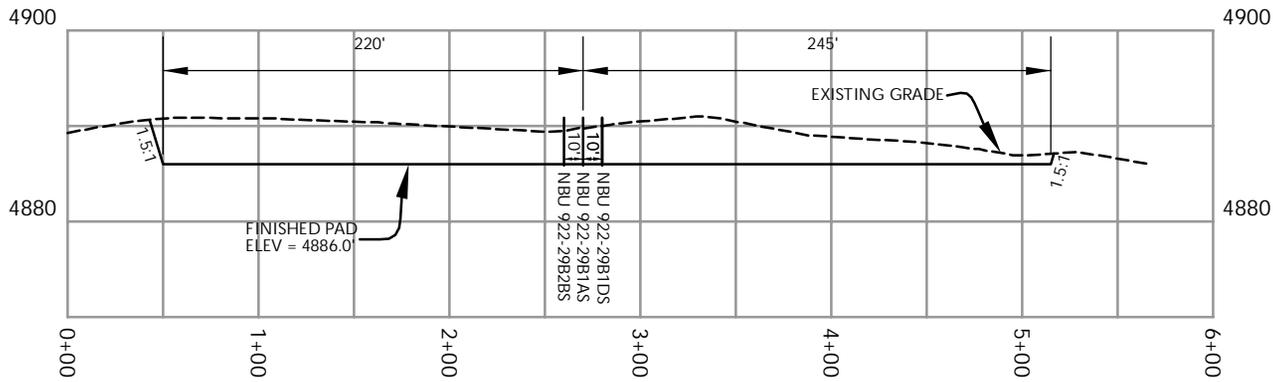
WELL PAD - LOCATION LAYOUT
 NBU 922-29B2BS, NBU 922-29B1AS &
 NBU 922-29B1DS
 LOCATED IN SECTION 29, T9S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH



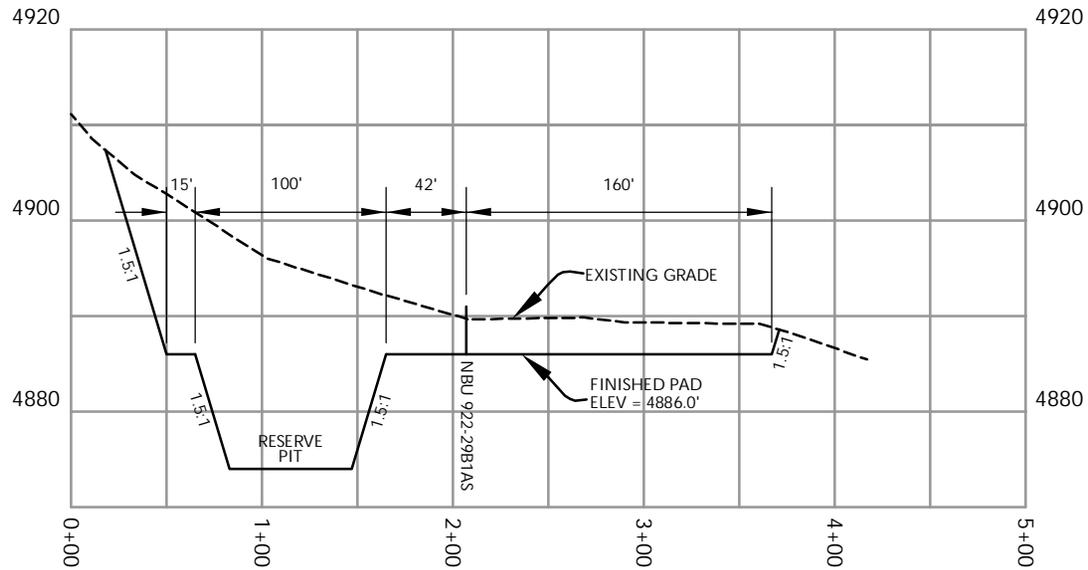
CONSULTING, LLC
 371 Coffeen Avenue
 Sheridan, WY 82801
 Phone 307-674-0609
 Fax 307-674-0182

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

Scale: 1"=60' Date: 4/29/10 SHEET NO:
 REVISED: TAR 8/30/10 **5** 5 OF 15



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 922-29B

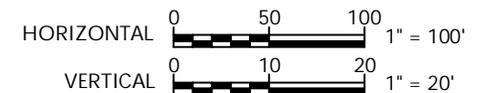
WELL PAD - CROSS SECTIONS
NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
LOCATED IN SECTION 29, T9S, R22E,
S.L.B.&M., Uintah County, Utah



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371 Coffeen Avenue
Sheridan, WY 82801
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Fax 307-674-0182

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

(435) 789-1365



Scale: 1"=100'

Date: 4/29/10

SHEET NO:

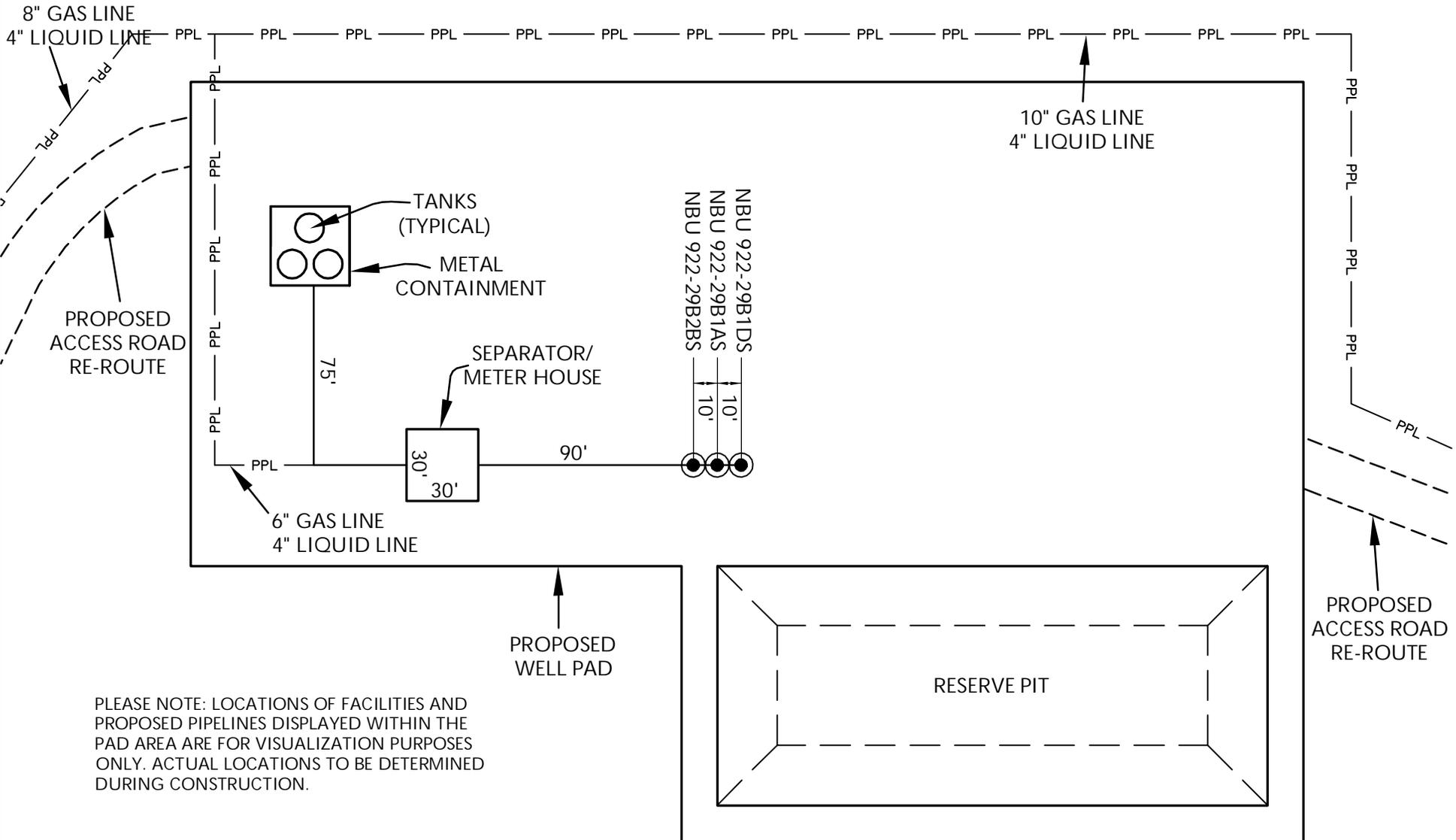
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7/9/10

6

6 OF 15

'APIWellNo:43047511930000'
 K:\MADARKO\2010_35_NBU_FOCUS_SEC_922-29\DWG\NBU 922-29B\NBU 922-29B.dwg, 8/30/2010 3:02:40 PM



PLEASE NOTE: LOCATIONS OF FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

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

WELL PAD - NBU 922-29B

WELL PAD - FACILITIES DIAGRAM
 NBU 922-29B2BS, NBU 922-29B1AS &
 NBU 922-29B1DS
 LOCATED IN SECTION 29, 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

WELL PAD LEGEND

-  EXISTING WELL LOCATION
-  PROPOSED WELL LOCATION
-  PPL — PROPOSED PIPELINE
-  EPL — EXISTING PIPELINE



HORIZONTAL 0 30' 60'
 1" = 60'

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

Scale: 1"=60' Date: 4/29/10
 REVISED: TAR 7/9/10

SHEET NO:
7
 7 OF 15

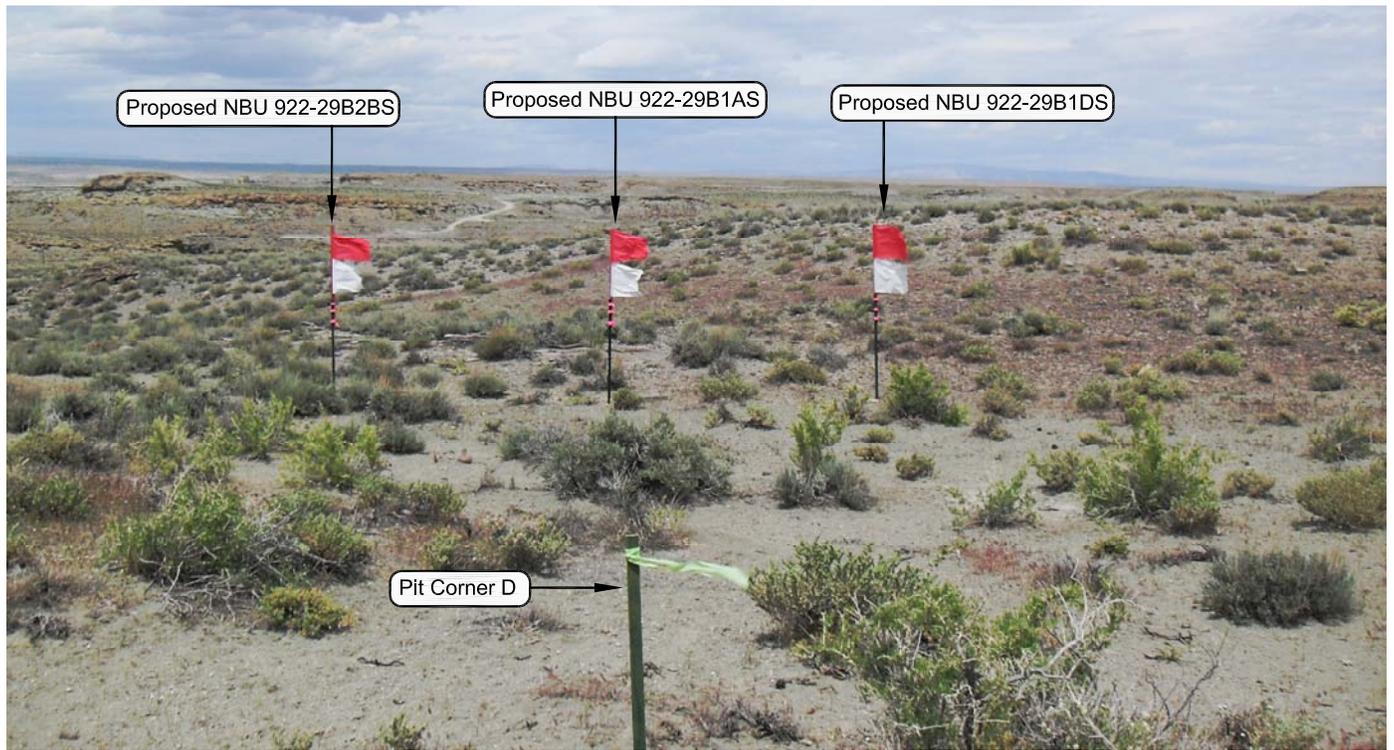


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHWESTERLY

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

Well Pad - NBU 922-29B

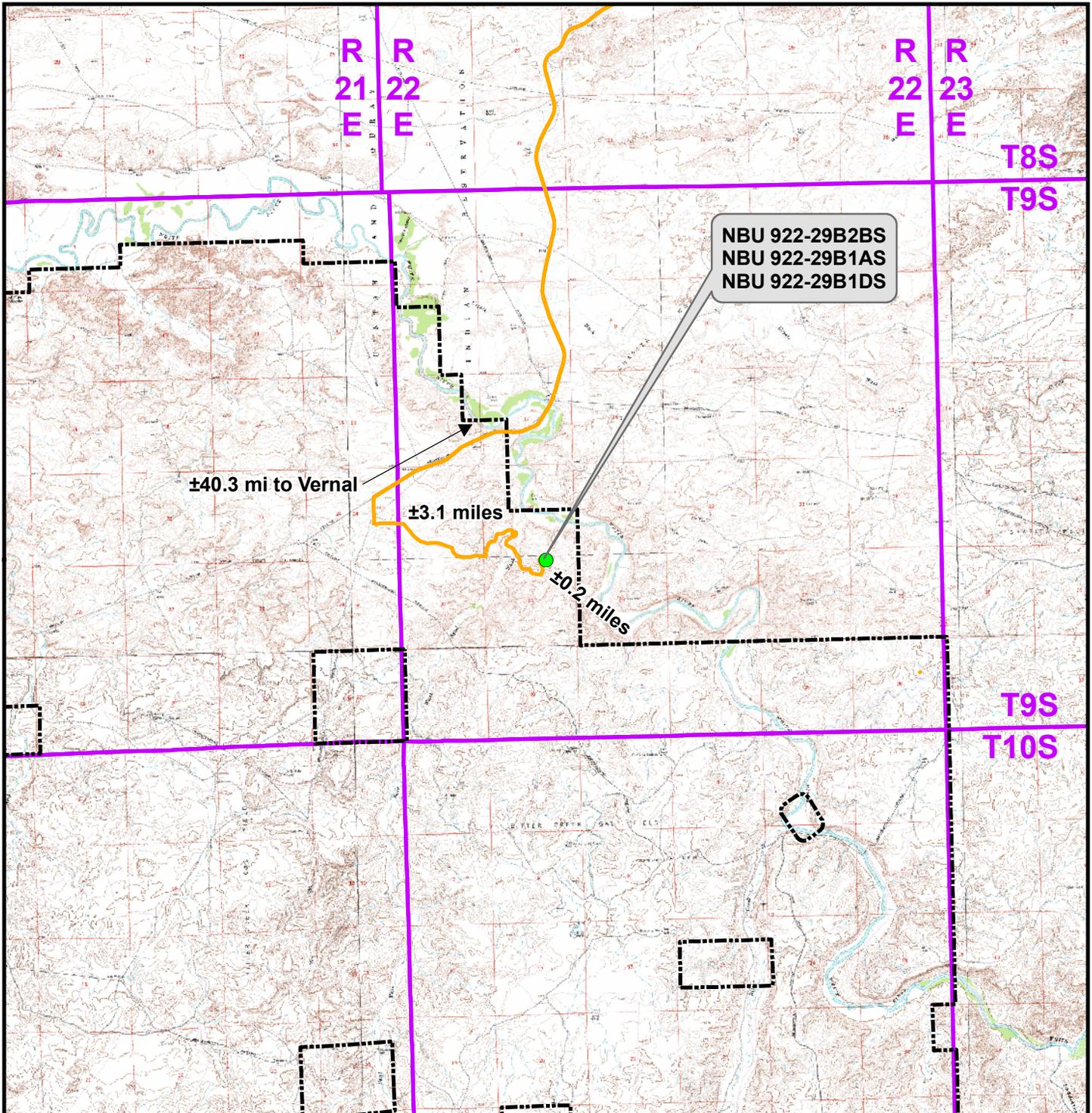
**NBU 922-29B2BS, NBU 922-29B1AS &
 NBU 922-29B1DS
 LOCATION PHOTOS
 LOCATED IN SECTION 29, T9S, R22E,
 S.L.B.&M., UINTAH COUNTY, UTAH.**



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

DATE PHOTOS TAKEN: 03-23-10	PHOTOS TAKEN BY: K.B.C.	SHEET NO: 8
DATE DRAWN: 03-29-10	DRAWN BY: K.K.O.	
Date Last Revised: 06-04-10 K.O.B.		8 OF 15



Legend

- Proposed Well Location
- Natural Buttes Unit Boundary
- Access Route - Proposed

Distance From Well Pad - NBU 922-29B To Unit Boundary: ±1,657ft

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 1099 18th Street, Denver, Colorado 80202

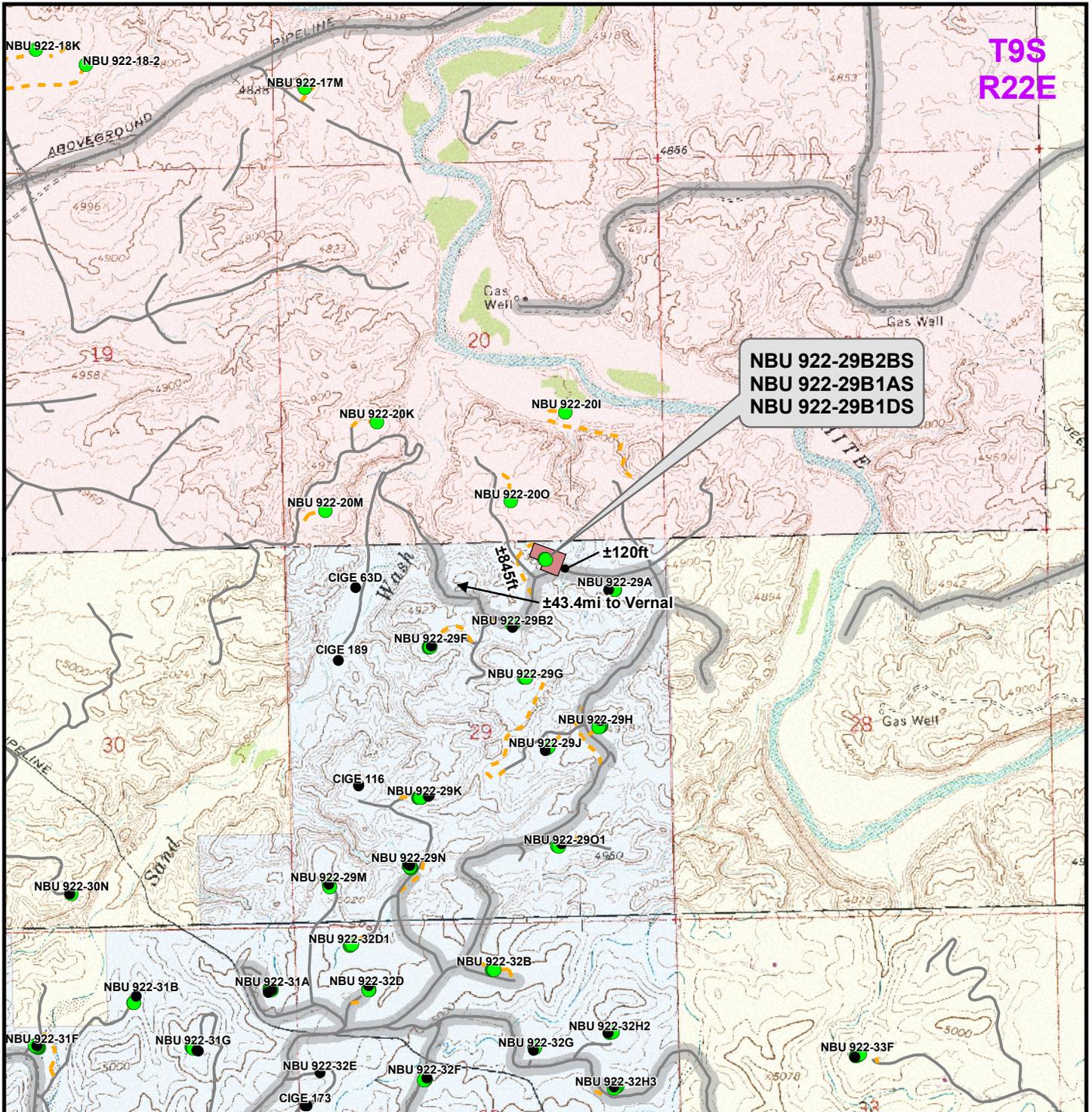
WELL PAD - NBU 922-29B

TOPO A
NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
LOCATED IN SECTION 29, T9S, R22E
S.L.B.&M., UTAH COUNTY, UTAH

609
CONSULTING, LLC
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 Phone (307) 674-0609
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Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 30 Apr 2010	9
Revised: TL	Date: 9 July 2010	
		9 of 15



Legend

- Well - Proposed
- Well - Existing
- Well Pad
- Road - Proposed
- Road - Existing
- County Road
- Bureau of Land Management
- State
- Indian Reservation
- Private

Total Proposed Road Re-Route Length: ±965ft

Kerr-McGee Oil & Gas Onshore, LP
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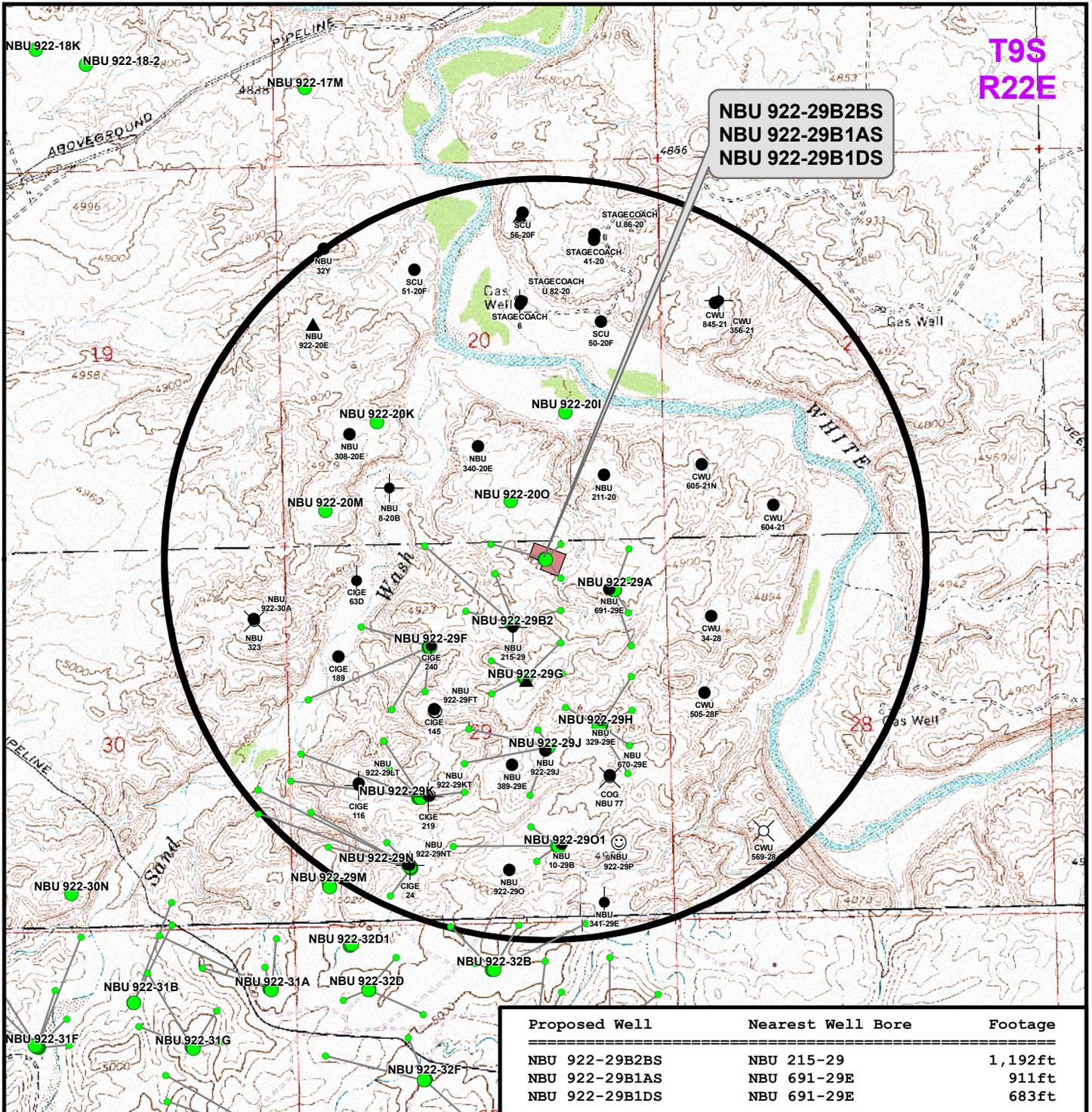
WELL PAD - NBU 922-29B

TOPO B
NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
LOCATED IN SECTION 29, T9S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH

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Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 30 Apr 2010	10 10 of 15
Revised: CPS	Date: 31 Aug 2010	



Proposed Well	Nearest Well Bore	Footage
NBU 922-29B2BS	NBU 215-29	1,192ft
NBU 922-29B1AS	NBU 691-29E	911ft
NBU 922-29B1DS	NBU 691-29E	683ft

Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- Well - 1 Mile Radius

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Producing
- Active
- ⊙ Spudded (Drilling commenced; Not yet completed)
- ▲ Approved permit (APD); not yet spudded
- New Permit (Not yet approved or drilled)
- ⊕ Inactive
- ⊗ Drilling Operations Suspended
- Temporarily-Abandoned
- Shut-In
- Plugged and Abandoned
- ⊗ Location Abandoned
- ⊗ Dry hole marker, buried
- ⊗ Returned APD (Unapproved)

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1099 18th Street, Denver, Colorado 80202

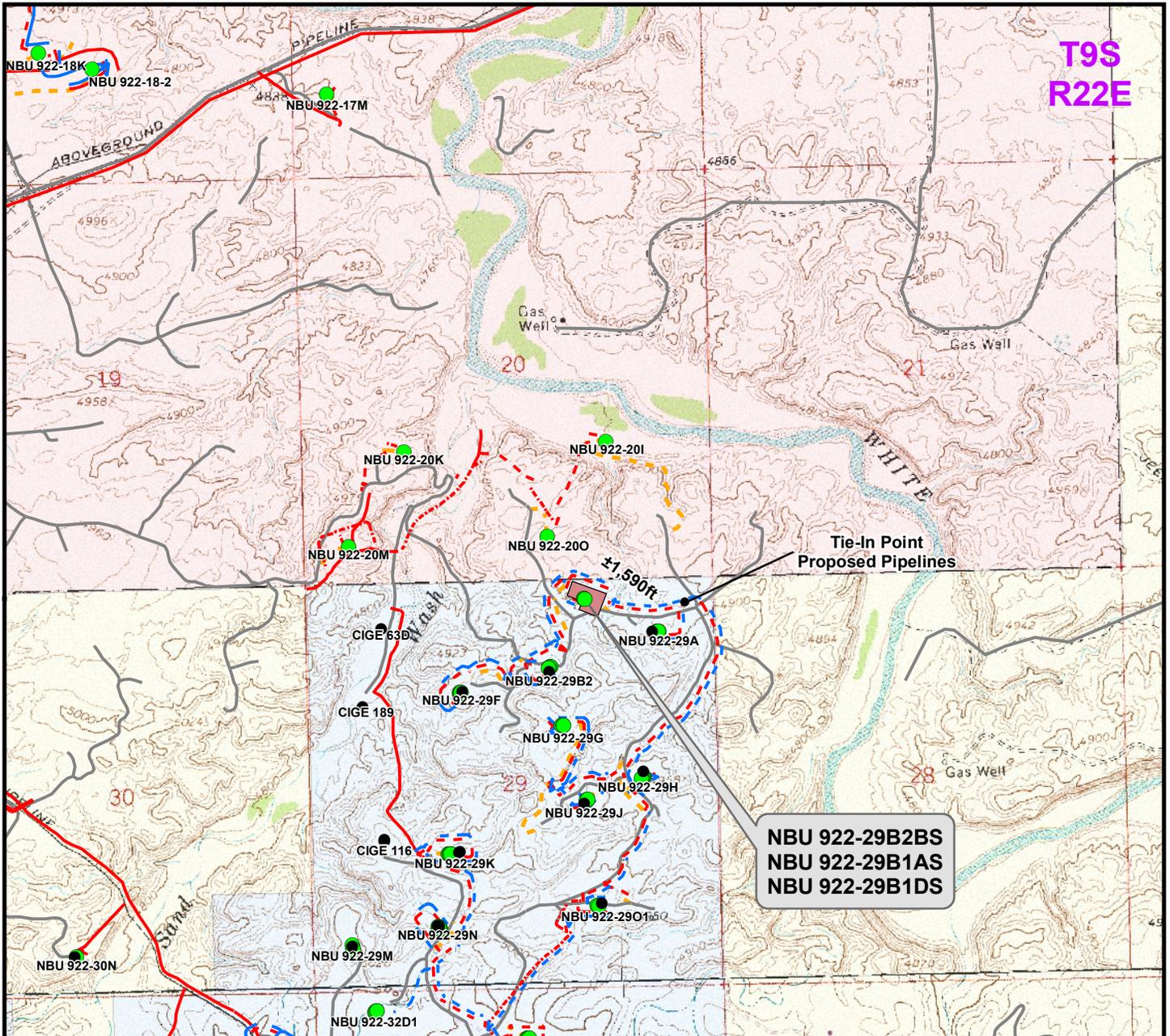
WELL PAD - NBU 922-29B

TOPO C
NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
LOCATED IN SECTION 29, T9S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH

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Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 30 Apr 2010	11
Revised: CPS	Date: 31 Aug 2010	



Proposed Liquid Pipeline	Length
Proposed 4" (Meter House to 29B2 Intersection)	±280ft
Proposed 4" (29B2 Intersection to 29A Intersection)	±1,590ft
TOTAL PROPOSED LIQUID PIPELINE =	±1,870ft

Proposed Gas Pipeline	Length
Proposed 6" (Meter House to 29B2 Intersection)	±280ft
Proposed 10" (29B2 Intersection to 29A Intersection)	±1,590ft
TOTAL PROPOSED GAS PIPELINE =	±1,870ft

Legend

- Well - Proposed - - - Gas Pipeline - Proposed - - - Liquid Pipeline - Proposed - - - Road - Proposed Bureau of Land Management
- Well - Existing - - - Gas Pipeline - To Be Upgraded - - - Liquid Pipeline - To Be Upgraded - - - Road - Existing Indian Reservation
- Well Pad - - - Gas Pipeline - Existing - - - Liquid Pipeline - Existing State
- Private

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1099 18th Street, Denver, Colorado 80202

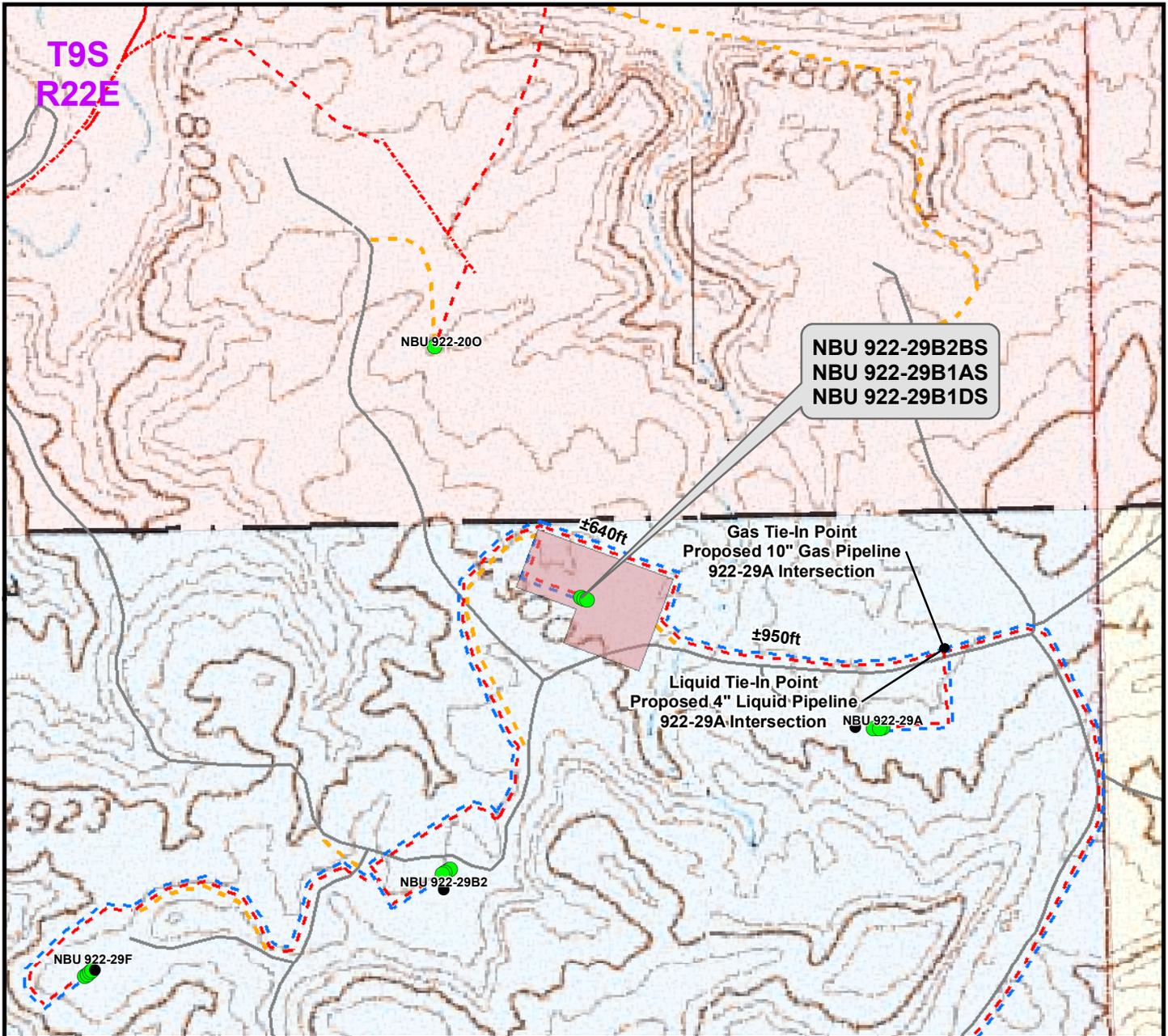
WELL PAD - NBU 922-29B

TOPO D
NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
LOCATED IN SECTION 29, T9S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH

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Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 30 Apr 2010	12 12 of 15
Revised: CPS	Date: 31 Aug 2010	



Proposed Liquid Pipeline		Length	Proposed Gas Pipeline		Length
Proposed 4" (Meter House to 29B2 Intersection)		±280ft	Proposed 6" (Meter House to 29B2 Intersection)		±280ft
Proposed 4" (29B2 Intersection to 29A Intersection)		±1,590ft	Proposed 10" (29B2 Intersection to 29A Intersection)		±1,590ft
TOTAL PROPOSED LIQUID PIPELINE =		±1,870ft	TOTAL PROPOSED GAS PIPELINE =		±1,870ft

Legend

- Well - Proposed - - - Gas Pipeline - Proposed - - - Liquid Pipeline - Proposed - - - Road - Proposed Bureau of Land Management
- Well - Existing - - - Gas Pipeline - To Be Upgraded - - - Liquid Pipeline - To Be Upgraded - - - Road - Existing Indian Reservation
- Well Pad - - - Gas Pipeline - Existing - - - Liquid Pipeline - Existing - - - State
- Private

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

WELL PAD - NBU 922-29B

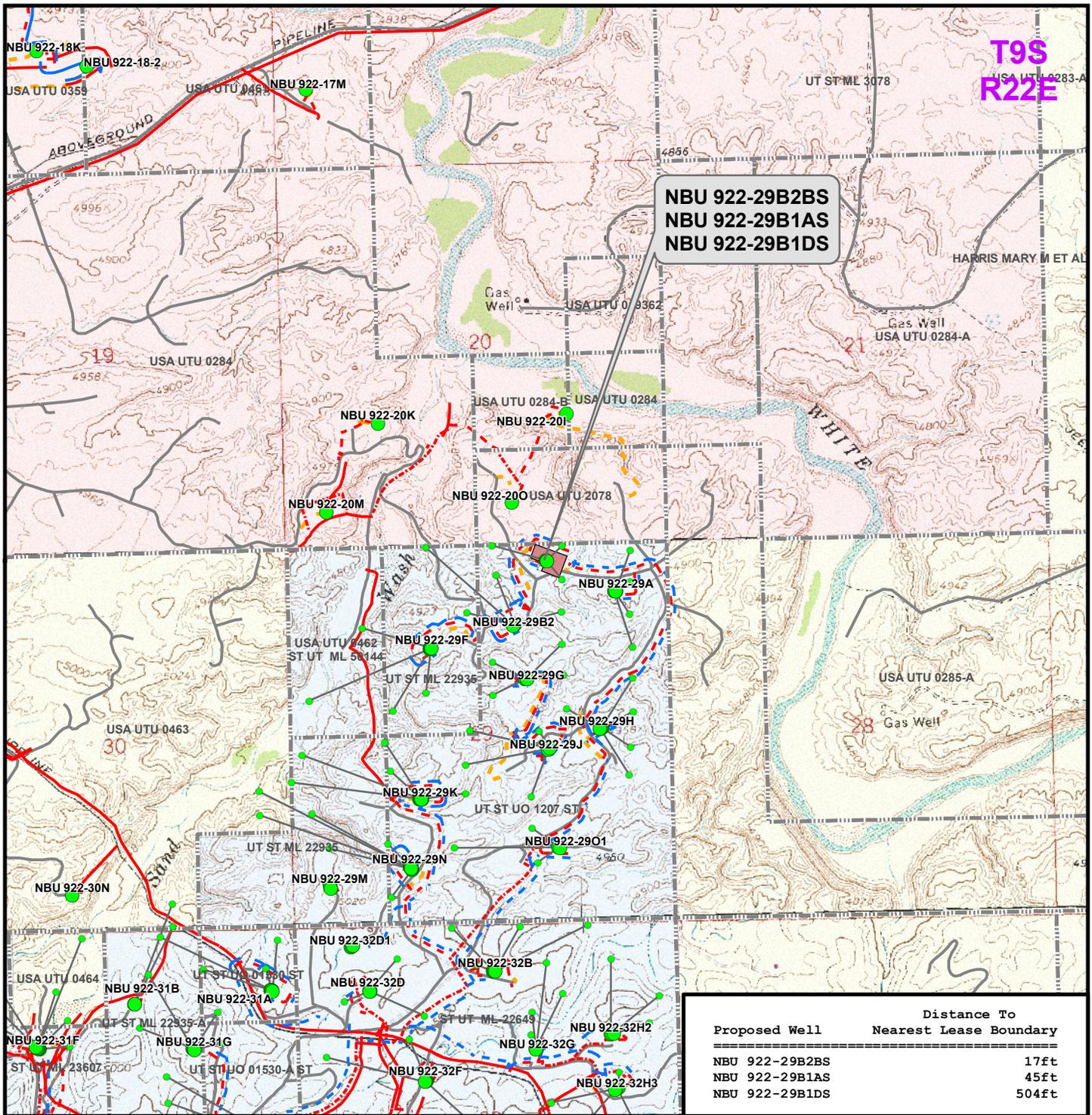
TOPO D2 (PAD & PIPELINE DETAIL)
 NBU 922-29B2BS, NBU 922-29B1AS &
 NBU 922-29B1DS

LOCATED IN SECTION 29, T9S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH

609

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 Phone (307) 674-0609
 Fax (307) 674-0182

Scale: 1" = 500ft	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 30 Apr 2010	13 13 of 15
Revised: CPS	Date: 31 Aug 2010	



Proposed Well	Distance To Nearest Lease Boundary
NBU 922-29B2BS	17ft
NBU 922-29B1AS	45ft
NBU 922-29B1DS	504ft

Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- Lease Boundary
- Road - Proposed
- Road - Existing
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - To Be Upgraded
- Liquid Pipeline - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

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

WELL PAD - NBU 922-29B

TOPO E
NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
LOCATED IN SECTION 29, T9S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH



609

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Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No:
Drawn: CPS	Date: 30 Apr 2010	14
Revised: CPS	Date: 31 Aug 2010	

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 922-29B
WELLS – NBU 922-29B2BS, NBU 922-29B1AS &
NBU 922-29B1DS
Section 29, T9S, R22E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 16.8 miles to a service road to the south. Exit left and proceed in a southerly then southeasterly direction along the service road approximately 3.1 miles to the proposed access road. Follow road flags in a northwesterly then northeasterly direction approximately 845 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 43.6 miles in a southerly direction.



1099 18th Street
Denver, CO 80202
303-296-3600 (main)
303-296-3601 (fax)

ANNA C. CAVALERI
(Direct) 720-929-6029
(Direct Fax) 720-929-7029

July 26, 2010

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 922-29B2BS
T9S R22E
Section 29: NWNE (Surface & Bottom Hole)
Surface Footages: 244' FNL, 1675' FEL
Bottom Hole Footages: 17' FNL, 2416' 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 Directional Drilling of Wells.

- Kerr-McGee's NBU 922-29B2BS 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

A handwritten signature in blue ink, appearing to read 'Cavaleri'.

Anna C. Cavaleri
Landman

NBU 922-29B1AS

Surface: 247' FNL 1,666' FEL (NW/4NE/4)
BHL: 45' FNL 1,448' FEL (NW/4NE/4)

NBU 922-29B1DS

Surface: 251' FNL 1,657' FEL (NW/4NE/4)
BHL: 504' FNL 1,456' FEL (NW/4NE/4)

NBU 922-29B2BS

Surface: 244' FNL 1,675' FEL (NW/4NE/4)
BHL: 17' FNL 2,416' FEL (NW/4NE/4)

Pad: NBU 922-29B
Section 29 T9S R22E
Mineral Lease: UO 1207 ST

Uintah County, Utah
Operator: Kerr-McGee Oil & Gas Onshore LP

MULTI-POINT SURFACE USE PLAN of OPERATIONS (SUPO)

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including, but not limited to, APDs/SULAs/ROEs/ROWs and/or easements).

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

A. Existing Roads:

Existing roads consist of county roads and improved/unimproved lease roads. APC/KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacing, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

B. Planned Access Roads:

Approximately $\pm 925'$ (0.2 miles) of new access road to this pad location is proposed (see Topo Map B). Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

Where roads are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

Turnouts; major cut and fills; culverts; bridges; gates; cattle guards; low water crossings; or modifications needed to existing infrastructure/facilities were determined at the on-site and, as applicable, are typically shown on attached Exhibits and Topo maps.

C. Location of Existing and Proposed Facilities:

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of each well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) aboveground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with SITLA.

Production tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks are not to be used for disposal of liquids from additional sources without prior approval of UDOGM.

Gathering facilities:

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is $\pm 1,870'$ and the individual segments are broken up as follows:

$\pm 280'$ (0.05 miles) –New 6" buried gas pipeline from the meter to the NBU 922-29B2 pad intersection.

$\pm 1,590'$ (0.3 miles) –New 10" buried gas pipeline from the NBU 922-29B2 pad intersection to the proposed 10" buried gas pipeline tie-in point (NBU 922-29A pad intersection).

The total liquid gathering pipeline (Flexsteel) distance from the meter to the tie in point is $\pm 1,870'$ and the individual segments are broken up as follows:

$\pm 280'$ (0.05 miles) –New 4" buried liquid pipeline from the meter to the NBU 922-29B2 pad intersection.

±1,590' (0.3 miles) –New 4" buried liquid pipeline from the NBU 922-29B2 pad intersection to the proposed 4" buried liquid pipeline tie-in point (NBU 922-29A pad intersection).

The proposed pipelines will be buried and will include gas gathering and liquid gathering pipelines in the same trench. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. Kerr-McGee requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, Kerr-McGee requests a temporary 45' construction right-of-way and 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

D. Location and Type of Water Supply:

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

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.

E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

F. Methods of Handling Waste Materials:

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E
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
Ouray #1 SWD in Sec. 1 T9S R21E
NBU 159 SWD in Sec. 35 T9S R21E
CIGE 112D SWD in Sec. 19 T9S R21E
CIGE 114 SWD in Sec. 34 T9S R21E
NBU 921-34K SWD in Sec. 34 T9S R21E
NBU 921-33F SWD in Sec. 33 T9S R21E
NBU 921-34L SWD in Sec. 34 T9S R21E

Drill cuttings and/or fluids will be contained in the reserve/frac pit. Cuttings will be buried in pit(s) upon closure. Unless otherwise approved, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with a synthetic material 20-mil or thicker, The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. Any additional pits necessary to subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented

and/or braced in such a manner as 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.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, accidental release, or in excess of reportable quantities will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule, and, where State wells are participatory to a Federal agreement, according to NTL-3A.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

G. Ancillary Facilities:

None are anticipated.

H. Well Site Layout (see Well Pad Design Summary):

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1983 (NAD83) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but are not limited to: re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by APC/KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The site specific seed mix will be provided by SITLA.

J. Surface/Mineral Ownership:

SITLA

675 East 500 South, Suite 500

Salt Lake City, UT 84102

K. Other Information:

A Class I literature report was completed on July 27, 2010 by Montgomery Archaeological Consultants, Inc. (MOAC). For additional details please refer to report MOAC 10-088.

A paleontological reconnaissance survey was completed by Intermountain Paleo-Consulting (IPC) and a report will be provided under separate cover.

A biological field survey was completed by Grasslands Consulting, Inc. on May 18th and July 1, 2010. For additional details please refer to report GCI-254:

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

Danielle Piernot
Regulatory Analyst I
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6156

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 for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

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.



Danielle Piernot

July 29, 2010

Date

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS
ONSHORE LP'S 42 PROPOSED WELL LOCATIONS IN
T9S, R22E, SECTION 29
(MOAC Report No. 10-088)
UINTAH COUNTY, UTAH

By:

Andrea Van Schmus

Prepared For:

State of Utah
School and Institutional Trust Lands Administration

Prepared Under Contract With:

Kerr-McGee Oil and Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84078

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

MOAC Report No. 10-088

July 26, 2010

State of Utah Public Lands Policy Coordination Office
Permit No. 117

United States Department of Interior (FLPMA)
Permit No. 10-UT-60122



Grasslands Consulting, Inc.

4800 Happy Canyon Road, Suite 110, Denver, CO 80237

(303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT AND WILDLIFE SPECIES REPORT

Report Number: GCI #254

Report Date: July 23, 2010

Operator: Kerr-McGee Oil & Gas Onshore LP

Well: NBU 922-29B well pad (Bores: NBU 922-29B2BS, NBU 922-29B1DS, NBU 922-29B1AS)

Pipeline: Associated pipelines leading to proposed well pad

Access Road: Associated access road re-route leading to proposed well pad

Location: Section 29, Township 9 South, Range 22 East; Uintah County, Utah

Survey-Species: Uinta Basin Hookless Cactus (*Sclerocactus wetlandicus*)

Survey Date: May 18, 2010

Observers: Grasslands Consulting, Inc. Biologists: Brad Snopek, Jennie Sinclair, Jonathan Sexauer, Adrienne Cunningham, Garrett Peterson and field technicians.

From: Jim Davis
To: Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana
CC: Bartlett, Floyd; Laura.Gianakos@anadarko.com; Piernot, Danielle; Upch...
Date: 9/2/2010 9:13 AM
Subject: SITLA approval of Kerr McGee wells
Attachments: KMG approvals and paleo 9.1.2010.xlsx

The following wells have been approved by SITLA including arch clearance. Paleo clearance is also granted with stipulations as noted.

Full Paleo monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist.

NBU 922-29F4DS [API #4304751207]	Full Monitoring	IPC 10-08
NBU 922-29G4CS [API #4304751208]	Full Monitoring	IPC 10-08
NBU 922-29J4BS [API #4304751209]	Full Monitoring	IPC 10-08
NBU 922-29K1DS [API #4304751210]	Full Monitoring	IPC 10-08
NBU 922-29G1AS [API #4304751194]	Full Monitoring	IPC 10-06
NBU 922-29G1DS [API #4304751195]	Full Monitoring	IPC 10-06
NBU 922-29G2BS [API #4304751196]	Full Monitoring	IPC 10-06
NBU 922-29G3BS [API #4304751197]	Full Monitoring	IPC 10-06
NBU 921-25A3DS [API 4304751248]	Full Monitoring	IPC 10-21
NBU 921-25G1CS [API 4304751249]	Full Monitoring	IPC 10-21
NBU 921-25G2AS [API 4304751250]	Full Monitoring	IPC 10-21
NBU 921-25H2AS [API 4304751252]	Full Monitoring	IPC 10-21
NBU 921-25H2DS [API 4304751253]	Full Monitoring	IPC 10-21
NBU 921-25G3AS [API 4304751274]	Full Monitoring	IPC 10-23
NBU 921-25G3CS [API 4304751275]	Full Monitoring	IPC 10-23
NBU 921-25J2CS [API 4304751276]	Full Monitoring	IPC 10-23
NBU 921-25K1CS [API 4304751277]	Full Monitoring	IPC 10-23
NBU 921-25A2AS [API 4304751237]	Full Monitoring	IPC 10-21
NBU 921-25B1CS [API 4304751238]	Full Monitoring	IPC 10-21

Spot Paleo Monitoring: All ground-disturbing activities must be monitored by a permitted paleontologist at the beginning of construction and thereafter spot-monitored as paleontological conditions merit.

NBU 921-25C1AS [API 4304751239]	Spot Monitoring	IPC 10-20
NBU 921-25D1BS [API 4304751240]	Spot Monitoring	IPC 10-20
NBU 921-25D1CS [API 4304751251]	Spot Monitoring	IPC 10-20
NBU 921-25E1CS [API 4304751241]	Spot Monitoring	IPC 10-20
NBU 921-25E3AS [API 4304751242]	Spot Monitoring	IPC 10-20
NBU 921-25F1BS [API 4304751243]	Spot Monitoring	IPC 10-21
NBU 921-25F1CS [API 4304751244]	Spot Monitoring	IPC 10-21
NBU 921-25F3AS [API 4304751245]	Spot Monitoring	IPC 10-21
NBU 921-25F3CS [API 4304751246]	Spot Monitoring	IPC 10-21
NBU 921-25L1BS [API 4304751247]	Spot Monitoring	IPC 10-21
NBU 921-25J1DS [API 4304751256]	Spot Monitoring	IPC 10-23
NBU 921-25J4AS [API 4304751254]	Spot Monitoring	IPC 10-23
NBU 921-25J4CS [API 4304751255]	Spot Monitoring	IPC 10-23
NBU 921-25K4BS [API 4304751257]	Spot Monitoring	IPC 10-22
NBU 921-25L2AS [API 4304751258]	Spot Monitoring	IPC 10-22
NBU 921-25L4AS [API 4304751259]	Spot Monitoring	IPC 10-22
NBU 921-25N2BS [API 4304751260]	Spot Monitoring	IPC 10-22
NBU 921-25K4CS [API 4304751261]	Spot Monitoring	IPC 10-23
NBU 921-25N2DS [API 4304751262]	Spot Monitoring	IPC 10-23
NBU 921-25N3AS [API 4304751263]	Spot Monitoring	IPC 10-23

NBU 921-25O4BS [API 4304751264]	Spot Monitoring	IPC 10-23	
NBU 921-25B3AS [API 4304751265]	Spot Monitoring	IPC 10-20	
NBU 921-25B3DS [API 4304751266]	Spot Monitoring	IPC 10-20	
NBU 921-25C2DS [API 4304751267]	Spot Monitoring	IPC 10-20	
NBU 921-25C3AS [API 4304751268]	Spot Monitoring	IPC 10-20	
NBU 921-25IT [API 4304751273]	Spot Monitoring	IPC 10-23	
NBU 921-25H3DS [API 4304751269]	Spot Monitoring	IPC 10-23	
NBU 921-25I2AS [API 4304751270]	Spot Monitoring	IPC 10-23	
NBU 921-25I4AS [API 4304751271]	Spot Monitoring	IPC 10-23	
NBU 921-25I4DS [API 4304751272]	Spot Monitoring	IPC 10-23	
NBU 922-29A1BS [API #4304751183]	Spot Monitoring	IPC 10-06	
NBU 922-29A1CS [API #4304751184]	Spot Monitoring	IPC 10-06	
NBU 922-29A4CS [API #4304751185]	Spot Monitoring	IPC 10-06	
NBU 922-29H1BS [API #4304751186]	Spot Monitoring	IPC 10-06	
NBU 922-29B2CS [API #4304751187]	Spot Monitoring	IPC 10-06	
NBU 922-29B4AS [API #4304751188]	Spot Monitoring	IPC 10-06	(SITLA surf/ Fed Min)
NBU 922-29C2AS [API #4304751189]	Spot Monitoring	IPC 10-06	(SITLA surf/ Fed Min)
NBU 922-29C4AS [API #4304751190]	Spot Monitoring	IPC 10-06	
NBU 922-29B1AS [API #4304751191]	Spot Monitoring	IPC 10-06	
NBU 922-29B1DS [API #4304751192]	Spot Monitoring	IPC 10-06	
NBU 922-29B2BS [API #4304751193]	Spot Monitoring	IPC 10-06	
NBU 922-29D4DS [API #4304751198]	Spot Monitoring	IPC 10-05	
NBU 922-29E3BS [API #4304751199]	Spot Monitoring	IPC 10-05	
NBU 922-29F3AS [API #4304751200]	Spot Monitoring	IPC 10-05	
NBU 922-29F3BS [API #4304751201]	Spot Monitoring	IPC 10-05	
NBU 922-29G4AS [API #4304751202]	Spot Monitoring	IPC 10-06	
NBU 922-29H1CS [API #4304751203]	Spot Monitoring	IPC 10-06	
NBU 922-29H4CS [API #4304751204]	Spot Monitoring	IPC 10-06	
NBU 922-29I1BS [API #4304751205]	Spot Monitoring	IPC 10-06	
NBU 922-29I1CS [API #4304751206]	Spot Monitoring	IPC 10-06	
NBU 922-29K2CS [API #4304751211]	Spot Monitoring	IPC 10-07	
NBU 922-29K4AS [API #4304751212]	Spot Monitoring	IPC 10-07	
NBU 922-29L1AS [API #4304751213]	Spot Monitoring	IPC 10-07	
NBU 922-29L2BS [API #4304751214]	Spot Monitoring	IPC 10-07	
NBU 922-29L2CS [API #4304751215]	Spot Monitoring	IPC 10-07	
NBU 922-29L3CS [API #4304751216]	Spot Monitoring	IPC 10-07	
NBU 922-29M2AS [API #4304751217]	Spot Monitoring	IPC 10-07	
NBU 922-29N2BS [API #4304751218]	Spot Monitoring	IPC 10-07	
NBU 922-29N3BS [API #4304751219]	Spot Monitoring	IPC 10-07	
NBU 922-30I4BS [API #4304751220]	Spot Monitoring	IPC 10-07	(SITLA surf/ Fed Min)
NBU 922-30I4CS [API #4304751221]	Spot Monitoring	IPC 10-07	(SITLA surf/Fed Min)
NBU 922-29J4CS [API #4304751222]	Spot Monitoring	IPC 10-08	
NBU 922-29N1BS [API #4304751223]	Spot Monitoring	IPC 10-08	
NBU 922-29O1CS [API #4304751224]	Spot Monitoring	IPC 10-08	

That's quite a list, so I'm attaching a quick-and-dirty spreadsheet of the same data. This may be helpful to some of you.

Thanks.
-Jim

'APIWellNo:43047511930000'

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

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 922-29B2BS 4304751193			
String	Surf	Prod		
Casing Size(")	8.625	4.500		
Setting Depth (TVD)	2350	9438		
Previous Shoe Setting Depth (TVD)	40	2350		
Max Mud Weight (ppg)	8.3	12.0		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5757	11.7		

Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1018	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	736	NO <input type="text" value="air drill"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	501	NO <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	510	NO <input type="text"/>
Required Casing/BOPE Test Pressure=		2350	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

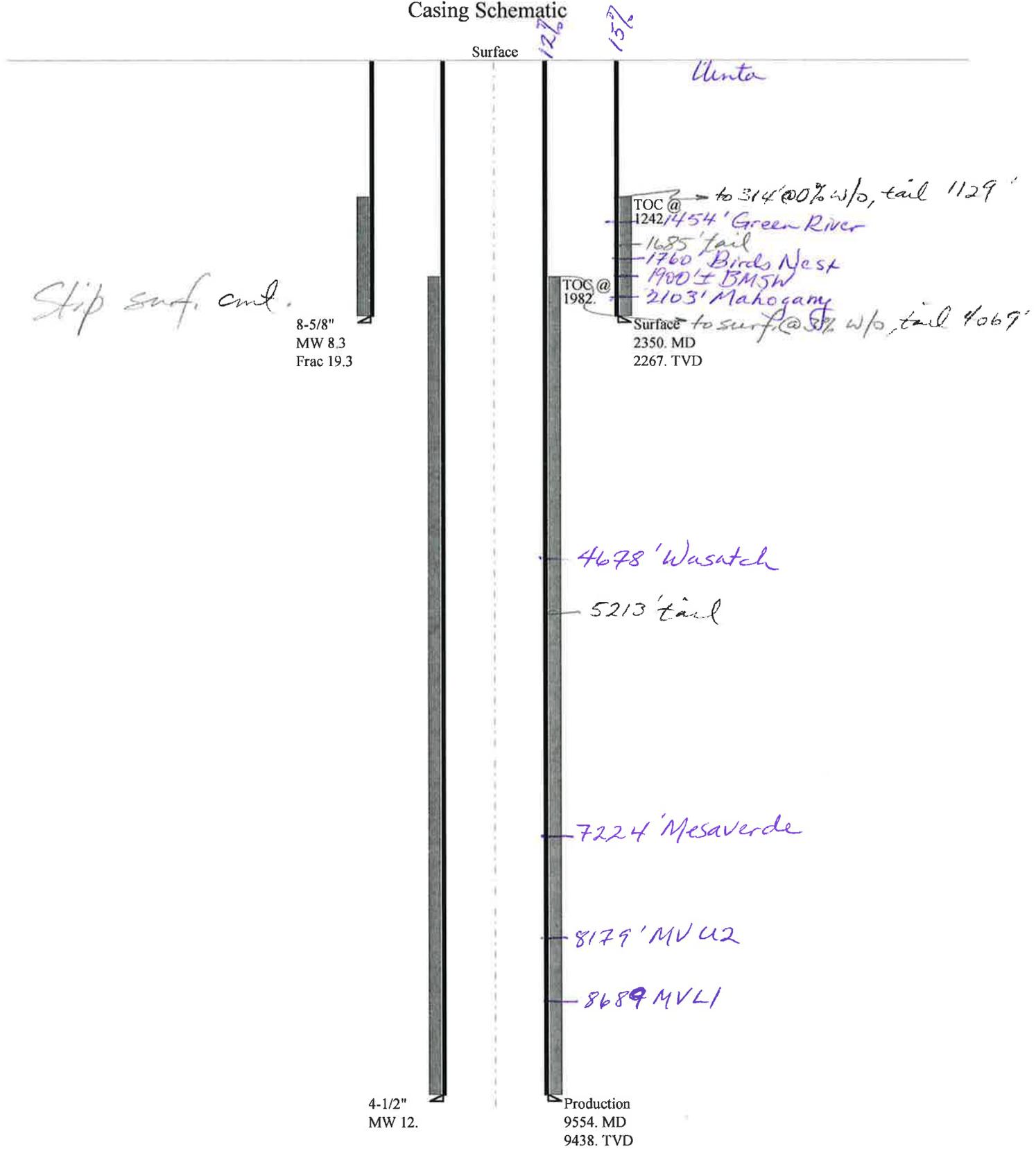
Calculations	Prod String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	5889	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4756	YES <input type="text"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3813	YES <input type="text" value="OK"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4330	NO <input type="text" value="Reasonable"/>
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2350	psi *Assumes 1psi/ft frac gradient

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

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

43047511930000 NBU 922-29B2BS

Casing Schematic



Well name:	43047511930000 NBU 922-29B2BS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Surface	Project ID:	43-047-51193
Location:	UINTAH COUNTY		

Design parameters:

Collapse

Mud weight: 8.330 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: 1,242 ft

Burst

Max anticipated surface pressure: 2,068 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,340 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: 2,054 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 532 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 19.99 °

Re subsequent strings:

Next setting depth: 9,438 ft
Next mud weight: 12.000 ppg
Next setting BHP: 5,883 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,350 ft
Injection pressure: 2,350 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	2350	8.625	28.00	I-55	LT&C	2267	2350	7.892	93060
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	981	1880	1.917	2340	3390	1.45	63.5	348	5.48 J

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

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

Date: September 13, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2267 ft, a mud weight of 8.33 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

Well name:	43047511930000 NBU 922-29B2BS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Production	Project ID:	43-047-51193
Location:	UINTAH	COUNTY	

Design parameters:

Collapse

Mud weight: 12.000 ppg
 Internal fluid density: 1.000 ppg

Burst

Max anticipated surface pressure: 3,807 psi
 Internal gradient: 0.220 psi/ft
 Calculated BHP: 5,883 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor: 1.125

Burst:

Design factor: 1.00

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)

Tension is based on air weight.
 Neutral point: 7,861 ft

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 206 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 100 ft

Cement top: 1,982 ft

Directional Info - Build & Drop

Kick-off point: 300 ft
 Departure at shoe: 774 ft
 Maximum dogleg: 2 °/100ft
 Inclination at shoe: 0 °

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	9554	4.5	11.60	I-80	LT&C	9438	9554	3.875	126113
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	5393	6360	1.179	5883	7780	1.32	109.5	212	1.94 J

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

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

Date: September 13, 2010
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9438 ft, a mud weight of 12 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to TD. 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

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

Application for Permit to Drill

Statement of Basis

9/15/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2858	43047511930000	LOCKED	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 922-29B2BS		Unit	NATURAL BUTTES	
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	NWNE 29 9S 22E S 244 FNL 1675 FEL GPS Coord (UTM) 631460E 4430199N				

Geologic Statement of Basis

Kerr McGee proposes to set 2,350' 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 1,900'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the proposed location. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect any usable ground water.

Brad Hill
APD Evaluator

9/8/2010
Date / Time

Surface Statement of Basis

The general area is within the Natural Buttes Unit in the lower portion of the Sand Wash Drainage of Uintah, County, approximately 36 air miles and 43.6 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing or planned oilfield development roads to the site. Approximately 845 feet of County road will be rerouted. 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.

The NBU 922-29B pad will be constructed on broken topography on the northeast side of a ridge which extends to the south and east beyond the location. A draw to the east will be avoided. The topography becomes gentler to the west as it extends to Ute Tribal lands. The broad valley of Sand Wash, as it enters the White River, is visible to the north. No drainages intersect the site and no diversions are needed. The White River is approximately 1 mile down drainage. The selected site appears to be suitable for constructing a pad, drilling and operating the proposed wells and is the best site in the general area.

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 excepted as covered above. SITLA will provide site reclamation standards and a seed mix.

Ben Williams and Alex Hansen represented the Utah Division of Wildlife Resources. Mr. Williams stated the area is classified as crucial yearlong antelope habitat but recommended no restrictions for this species. No other wildlife will be significantly affected.

Floyd Bartlett
Onsite Evaluator

8/25/2010
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
-----------------	------------------

Application for Permit to Drill Statement of Basis

9/15/2010

Utah Division of Oil, Gas and Mining

Page 2

Pits	A synthetic liner with a minimum thickness of 30 mils with a double felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/30/2010

API NO. ASSIGNED: 43047511930000

WELL NAME: NBU 922-29B2BS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: NWNE 29 090S 220E

Permit Tech Review:

SURFACE: 0244 FNL 1675 FEL

Engineering Review:

BOTTOM: 0017 FNL 2416 FEL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.01365

LONGITUDE: -109.45970

UTM SURF EASTINGS: 631460.00

NORTHINGS: 4430199.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: UO 1207 ST

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

Commingling 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: Suspends General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations:
1 - Exception Location - ddoucet
3 - Commingling - ddoucet
5 - Statement of Basis - bhill
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason
25 - Surface Casing - hmadonald



GARY R. HERBERT
Governor

GREGORY S. BELL
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 922-29B2BS
API Well Number: 43047511930000
Lease Number: UO 1207 ST
Surface Owner: STATE
Approval Date: 9/15/2010

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

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

Commingle:

In accordance with Board Cause No. 173-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well 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 <https://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
801-231-8956 - 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:

Approved by:

A handwritten signature in black ink, appearing to read "B. D. ...", written in a cursive style.

Acting Associate Director, Oil & Gas

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
 Submitted By ANDY LYTLE Phone Number 720.929.6100
 Well Name/Number NBU 922-29B2BS
 Qtr/Qtr NWNE Section 29 Township 9S Range 22E
 Lease Serial Number UO-1207 ST
 API Number 4304751193

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 03/28/2011 13:00 HRS AM PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
 Intermediate Casing
 Production Casing
 Liner
 Other

RECEIVED

MAR 28 2011

DIV. OF OIL, GAS & MINING

Date/Time 04/09/2011 08:00 HRS AM PM

BOPE

- Initial BOPE test at surface casing point
 BOPE test at intermediate casing point
 30 day BOPE test
 Other

Date/Time _____ AM PM

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT

435.828.0986 OR LOVEL YOUNG AT 435.781.7051

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207 ST
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 922-29B2BS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047511930000	
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: 0244 FNL 1675 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 29 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 type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 3/29/2011 <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX. SPUD WELL LOCATION ON 03/29/2011 AT 1530 HRS.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 3/31/2011	

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

FORM 6

ENTITY ACTION FORM

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

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751193	NBU 922-29B2BS		NEW	29	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	3/29/2011			3/31/11	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 03/29/2011 AT 1530 HRS. <u>BHL = N W N E</u>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
				17			
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

Well 3

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

ACTION CODES:

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

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

3/31/2011

Title

Date

RECEIVED

MAR 31 2011

DIV. OF OIL, GAS & MINING

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 1207 ST																														
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU AIR RIG ON APRIL 4, 2011. DRILLED 11" SURAFCE HOLE TO 2550'. RAN 8 5/8" 28# IJ55 SURFACE CASING. CEMENTED SURFACE CASING. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.																																
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY																																
NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II																														
SIGNATURE N/A	DATE 4/7/2011																															

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
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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
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		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 checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/1/2011 <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU ROTARY RIG. FINISHED DRILLING FROM 2550' TO 9570' ON MAY 31, 2011. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED ENSIGN RIG 145 ON JUNE 1, 2011 @ 21:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES. THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY		
NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 6/2/2011	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UO 1207 ST																														
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2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047511930000																															
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: 0244 FNL 1675 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 29 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 type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/20/2011	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"><input type="checkbox"/> ACIDIZE</td> <td style="width: 33%; border: none;"><input type="checkbox"/> ALTER CASING</td> <td style="width: 33%; border: none;"><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td style="border: none;"><input type="checkbox"/> CHANGE TUBING</td> <td style="border: none;"><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> CHANGE WELL STATUS</td> <td style="border: none;"><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td style="border: none;"><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DEEPEN</td> <td style="border: none;"><input type="checkbox"/> FRACTURE TREAT</td> <td style="border: none;"><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> OPERATOR CHANGE</td> <td style="border: none;"><input type="checkbox"/> PLUG AND ABANDON</td> <td style="border: none;"><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td style="border: none;"><input checked="" type="checkbox"/> PRODUCTION START OR RESUME</td> <td style="border: none;"><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td style="border: none;"><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td style="border: none;"><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td style="border: none;"><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> TUBING REPAIR</td> <td style="border: none;"><input type="checkbox"/> VENT OR FLARE</td> <td style="border: none;"><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> WATER SHUTOFF</td> <td style="border: none;"><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td style="border: none;"><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td style="border: none;"><input type="checkbox"/> OTHER</td> <td style="border: none;">OTHER: <input style="width: 100px;" type="text"/></td> </tr> </table>		<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	<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: <input style="width: 100px;" type="text"/>
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 07/20/2011 AT 11:00 AM. 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																																
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst																														
SIGNATURE N/A	DATE 7/25/2011																															

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

AMENDED REPORT FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:
UO 1207 ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 922-29B2BS

9. API NUMBER:
4304751193

10. FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
NWNE 29 9S 22E S

12. COUNTY
UINTAH

13. STATE
UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER _____

b. TYPE OF WORK: NEW WELL HORIZ. LATS. DEEP-EN RE-ENTRY DIFF. RESVR. OTHER _____

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

3. ADDRESS OF OPERATOR: P.O. BOX 173779 CITY **DENVER** STATE **CO** ZIP **80217** PHONE NUMBER: **(720) 929-6100**

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: **NWNE 244 FNL 1675 FEL S29, T9S, R22E**
AT TOP PRODUCING INTERVAL REPORTED BELOW: **NWNE 4 FNL 2419 FEL S29, T9S, R22E**
AT TOTAL DEPTH: **NWNE 3 FNL 2421 FEL S29, T9S, R22E**

14. DATE SPUDDED: **3/29/2011** 15. DATE T.D. REACHED: **5/31/2011** 16. DATE COMPLETED: **7/20/2011** ABANDONED READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):
4886 GL

18. TOTAL DEPTH: MD **9,570** TVD **9,454** 19. PLUG BACK T.D.: MD **9,520** TVD **9,404** 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)
RCBL-CHI TRIPLE COMBO, RMT E

23. WAS WELL CORED? NO YES (Submit analysis)
WAS DST RUN? NO YES (Submit report)
DIRECTIONAL SURVEY? NO YES (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			
11"	8 5/8" IJ-55	28#		2,524		780		0	
7 7/8"	4 1/2" I-80	11.6#		9,564		1,468		174	

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"	8,883							

26. PRODUCING INTERVALS **W.S.MUD**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) MESAVERDE	7,354	9,382		
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
7,354 9,382	0.36	191	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"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7354 - 9382	PUMP 10,512 BBLs SLICK H2O & 210,858 LBS SAND

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT DST REPORT DIRECTIONAL SURVEY

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER: _____

30. WELL STATUS:
PROD

RECEIVED
SEP 07 2011
DIV. OF OIL, GAS & MINING

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED: 7/20/2011	TEST DATE: 7/25/2011	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL - BBL: 0	GAS - MCF: 2,152	WATER - BBL: 500	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,700	CSG. PRESS. 2,400	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	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: →	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: →	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: →	INTERVAL STATUS:

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

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	1,499				
BIRD'S NEST	1,825				
MAHOGANY	2,190				
WASATCH	4,786	7,340			
MESAVERDE	7,340	9,570	TD		

35. ADDITIONAL REMARKS (Include plugging procedure)

The first 210' of the surface hole was drilled with a 12 1/4" bit. The remainder of surface hole was drilled with an 11" bit. Attached is the chronological well history, perforation report & 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) GINA BECKER

TITLE REGULATORY ANALYST

SIGNATURE 

DATE 8/29/2011

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 922-29B2BS YELLOW		Spud Conductor: 3/29/2011		Spud Date: 4/4/2011	
Project: UTAH-UINTAH		Site: NBU 922-29B PAD		Rig Name No: PROPETRO 11/11, ENSIGN 145/145	
Event: DRILLING		Start Date: 3/15/2011		End Date: 6/1/2011	
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/4/2011	14:00 - 16:30	2.50	MIRU	01	A	P		DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWIE LINE. BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP.. SET CATWALK AND PIPE RACKS. RIG UP AND PRIME PIT PUMP AND MUD PUMP.
	16:30 - 17:00	0.50	PRSPD	01	B	P		P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8016 . 7/8 LOBE .17 RPM. M/U 12.25" Q506 SN 7024086 2ND RUN, W/ 6-18'S. INSTALL RUBBER.
	17:00 - 18:30	1.50	DRLSUR	02	A	P		SPUD SURFACE 04/04/2011 @ 17:00 HRS. DRILL 12.25" SURFACE HOLE F/40'-210' (170' @ 170'/HR) PSI ON/ OFF 700/500, UP/ DOWN/ ROT 25/20/23. 532 GPM, 45 RPM ON TOP DRIVE,90 RPM ON MM 15-18K
	18:30 - 20:00	1.50	DRLSUR	06	A	P		TOOH, LD 12.25" HUGHES BIT, PU NEW 11" SN# 7019738, HUGHES BIT, PU AND ORIENT DIR TOOLS, TIH T/210
	20:00 - 20:30	0.50	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 210'-265 (55' @ 110'/HR) PSI ON/ OFF 700/500, UP/ DOWN/ ROT 28/24/24. 136 SPM, 560 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, CIRCULATING RESERVE
	20:30 - 23:30	3.00	MAINT	08	A	Z		TROUBLE SHOOT, WAIT ON MECHANIC AND PARTS F/ VERNAL, REPAIR BRAKING SYSTEM ON TOP DRIVE.
	23:30 - 0:00	0.50	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 265'-320' (55' @ 110'/HR) PSI ON/ OFF 830/620, UP/ DOWN/ ROT 35/30/32. 136 SPM, 560 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, CIRCULATING RESERVE
4/5/2011	0:00 - 0:00	24.00	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 320'-2360' (2040' @ 86'/HR) PSI ON/ OFF 1560/1310, UP/ DOWN/ ROT 82/60/70. 136 SPM, 560 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, CIRCULATING RESERVE
								NO FLUID LOSSES
4/6/2011	0:00 - 1:30	1.50	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 2360'-2500' (140' @ 93'/HR) PSI ON/ OFF 1560/1310, UP/ DOWN/ ROT 82/60/70. 136 SPM, 560 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, CIRCULATING RESERVE
								NO FLUID LOSSES
	1:30 - 8:30	7.00	MAINT	08	B	Z		TROUBLE SHOOT PIT PUMP, WAIT WHILE OUTBACK RENTALS BRING ANOTHER F/VERNAL, TROUBLE SHOOT AND REPAIR MUD PUMP
	8:30 - 9:00	0.50	DRLSUR	02	C	P		DRILL/ SLIDE 11" SURFACE HOLE F/ 2500'-2550 (500' @ 100'/HR) PSI ON/ OFF 1609/1390, UP/ DOWN/ ROT 83/62/73. 136 SPM, 560 GPM, 18-20K WOB, 45 RPM ON TOP DRIVE, CIRCULATING RESERVE
								NO FLUID LOSSES
	9:00 - 10:30	1.50	DRLSUR	05	F	P		CURC AND COND HOLE CLEAN F/ SURF CSG
	10:30 - 15:00	4.50	DRLSUR	06	A	P		TOOH, LDDS AND DIR BHA
	15:00 - 16:00	1.00	CSG	12	A	P		RU TO RUN 8.625" 28# SURFACE CSG, MOVE PIPR RACKS AND CATWALK, MOVE CSG OVER TO WORK AREA

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW Spud Conductor: 3/29/2011 Spud Date: 4/4/2011
 Project: UTAH-UINTAH Site: NBU 922-29B PAD Rig Name No: PROPETRO 11/11, ENSIGN 145/145
 Event: DRILLING Start Date: 3/15/2011 End Date: 6/1/2011
 Active Datum: RKB @4,899.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:00 - 18:30	2.50	CSG	12	C	P		HELD SAFETY MEETING, RUN CSG. RAN 57JTS OF 8-5/8", 28#, J-55, 8 RND SURFACE CSG W/ LTC THREADS. LANDED FLOAT SHOE @ 2515.00' KB. RAN BAFFLE PLATE IN TOP OF SHOE JT LANDED 2469.01' KB. FILL CSG @ 500', 1500', AND 2510'.
	18:30 - 0:00	5.50	CSG	12	E	P		RUN 200' OF 1" DOWN BACK SIDE HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 110 BBLS OF 8.3# H2O AHEAD. FULL CIRC. @ 95 BBLS, PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. FULL CIRC. PUMP 180 SX(122.5 BBLS) 11# 3.82 YIELD LEAD CEMENT, PUMP 200 SX (41 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4#/SK OF FLOCELE). FULL CIRC. DROP PLUG ON FLY AND DISPLACE W/154 BBLS OF 8.3# H2O. LIFT PRESSURE WAS 200 PSI, BUMP PLUG AND HOLD 1000 PSI FOR 5 MIN. FLOAT HELD. TOP OUT, PUMP 200 SX (18 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4#/SK OF FLOCELE) DOWN 1". WAIT TW HRS, PUMP 200 SX (41 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4#/SK OF FLOCELE) CMT STAYED AT SURFACE. RIG DOWN AND RELEASE CEMENTERS & RIG 04/07/2011 @ 00:00 HRS. CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28 SPUD DATE/TIME: 04/04/2011 @ 17:00 HRS. SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,550 Total SURFACE hours: 27.5 Surface Casing size: 8.625" # of casing joints ran: 57 Casing set MD: 2515.00' # sx of cement: 180/200/400 Cement blend (ppg): 11/15.8/15.8 Cement yield (ft3/sk): 3.82/1.15/1.15 # of bbls to surface: 20 Describe cement issues: NONE Describe hole issues: NONE
5/27/2011	6:00 - 8:00	2.00	MIRU	01	C	P		PREP TO SKID,SKID,PREP FOR NIPPLE UP, CENTER & LEVEL RIG
	8:00 - 10:00	2.00	MIRU	14	A	P		NIPPLE UP BOP,FLOW LINES,FLARE LINES
	10:00 - 13:30	3.50	MIRU	15	A	P		HELD SAFTEY MEETING, RIG UP SINGLE JACK TESTER, TEST BOP, I-BOP, MANUEL I-BOP, PIPE RAMS, TIW, HCR, 250 LOW 5000 HIGH, TEST HCR, MANUEL HCR, BLIND RAMS, INSIDE/OUTSIDE KILL, CHOKE MANIFOLD TO 250 LOW 5000 HIGH, TEST ANNULAR TO 2500 AND CASING TO 1500, RIG DOWN TESTER, INSTALL WEAR BUSHING, PRE DRILL INSPECTION
	13:30 - 16:30	3.00	DRLPRO	06	A	P		PICK UP BIT, MOTOR & DIRECTIONAL TOOLS, TRIP IN HOLE TO 2384
	16:30 - 18:30	2.00	DRLPRO	09	A	P		SLIP CUT 100' OF DRILL LINE

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW		Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH		Site: NBU 922-29B PAD	Rig Name No: PROPETRO 11/11, ENSIGN 145/145
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Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	18:30 - 20:30	2.00	DRLPRO	02	F	P		DRILL CEMENT AND FLOAT EQUI. & CLEAN OUT OPEN HOLE BELOW SURFACE CASING, F/2398 TO 2559
	20:30 - 0:00	3.50	DRLPRO	02	D	P		DRILL F/ 2559' TO 3123' = 1106' 116.4 FPH STKS #1 & #2 PUMPS 60/60, 540 GPM PSI OFF / ON BOTTOM 1220/1640 MOTOR RPM / ROTARY RPM, 113/50 TQ ON / OFF BOTTOM 7K/4K FT/LBS PU / SO / ROT WT 113 / 98/ 105 WT ON BIT 15K TO 22K NO LOSS, DRILLING WITH WATER
5/28/2011	0:00 - 12:00	12.00	DRLPRO	02	D	P		DRILL F/ 3123' TO 5026' = 1903' 158.5 FPH STKS #1 & #2 PUMPS 60/60, 540 GPM PSI OFF / ON BOTTOM 1420/1840 MOTOR RPM / ROTARY RPM, 113/50 TQ ON / OFF BOTTOM 10K/7K FT/LBS PU / SO / ROT WT 144 / 117/ 130 WT ON BIT 15K TO 22K NO LOSS, DRILLING WITH WATER
	12:00 - 12:30	0.50	DRLPRO	07	A	P		DAILY RIG SERVICE
	12:30 - 0:00	11.50	DRLPRO	02	D	P		DRILL F/ 5026' TO 6639' = 1613' 140.2 FPH STKS #1 & #2 PUMPS 60/60, 540 GPM PSI OFF / ON BOTTOM 1686/1920 MOTOR RPM / ROTARY RPM, 113/50 TQ ON / OFF BOTTOM 10K/7K FT/LBS PU / SO / ROT WT 180 / 145/ 159 WT ON BIT 15K TO 22K NO LOSS, DRILLING WITH WATER
5/29/2011	0:00 - 7:30	7.50	DRLPRO	02	D	P		DRILL F/ 6639' TO 7363' = 724' 96.5 FPH STKS #1 & #2 PUMPS 60/60, 540 GPM PSI OFF / ON BOTTOM 1755/2048 MOTOR RPM / ROTARY RPM, 113/50 TQ ON / OFF BOTTOM 10K/7K FT/LBS PU / SO / ROT WT 190 / 145/ 160 WT ON BIT 15K TO 22K NO LOSS, DRILLING WITH WATER
	7:30 - 12:00	4.50	DRLPRO	02	D	P		DRILL F/ 7363' TO 7744' = 381' 84.6 FPH STKS #1 & #2 PUMPS 55/55, 496 GPM PSI OFF / ON BOTTOM 2101/2308 MOTOR RPM / ROTARY RPM, 104/48 TQ ON / OFF BOTTOM 9K/10K FT/LBS PU / SO / ROT WT 200 / 161/ 174 WT ON BIT 15K TO 22K MUD SYSTEM CLOSED IN NO LOSS, MUD UP 9.7WT, 31 VIS, 10% LCM, DAILY RIG SERVICE
	12:00 - 12:30	0.50	DRLPRO	07	A	P		DAILY RIG SERVICE
	12:30 - 0:00	11.50	DRLPRO	02	D	P		DRILL F/ 7744' TO 8315' = 571' 49.6 FPH STKS #1 & #2 PUMPS 55/55, 496 GPM PSI OFF / ON BOTTOM 2101/2308 MOTOR RPM / ROTARY RPM, 104/48 TQ ON / OFF BOTTOM 9K/10K FT/LBS PU / SO / ROT WT 200 / 161/ 174 WT ON BIT 15K TO 22K MUD SYSTEM CLOSED IN NO LOSS, MUD UP 10.5WT, 35 VIS, 10% LCM,

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW		Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH		Site: NBU 922-29B PAD	Rig Name No: PROPETRO 11/11, ENSIGN 145/145
Event: DRILLING		Start Date: 3/15/2011	End Date: 6/1/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/30/2011	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 8315' TO 8536' = 221' 36.8 FPH STKS #1 & #2 PUMPS 105/00, 473 GPM PSI OFF / ON BOTTOM 2100/2402 MOTOR RPM / ROTARY RPM, 99/45 TQ ON / OFF BOTTOM 9K/10K FT/LBS PU / SO / ROT WT 212 / 174/ 184 WT ON BIT 15K TO 22K MUD SYSTEM CLOSED IN NO LOSS, MUD UP 11.5WT, 43 VIS, 8% LCM
	6:00 - 13:00	7.00	DRLPRO	02	D	P		DRILL F/ 8536' TO 8825' = 289' 41.2 FPH STKS #1 & #2 PUMPS 00/105, 473 GPM PSI OFF / ON BOTTOM 2100/2230 MOTOR RPM / ROTARY RPM, 99/45 TQ ON / OFF BOTTOM 9K/10K FT/LBS PU / SO / ROT WT 212 / 174/ 184 WT ON BIT 15K TO 27K MUD SYSTEM CLOSED IN NO LOSS, MUD UP 11.5WT, 43 VIS, 8% LCM
	13:00 - 20:30	7.50	DRLPRO	06	A	P		TRIP FOR BIT DO TO SLOW ROP, BACK REAM 3 STANDS OFF BOTTOM, PUMP SLUG, TRIP OUT TO 5034' NO TIGHT SPOTS, LAY DOWN 10 STANDS TO REMOVE EXTRA PIPE IN DERRICK FROM LAST WELL, CONTINUE TRIP OUT WITH STANDS, PULLED 20K OVER @ 3536', PULLED 25K OVER @ 2977', LAY DOWN BIT & MOTOR, BIT GRADED 2-4
	20:30 - 0:00	3.50	DRLPRO	06	A	P		TRIP IN HOLE WITH BHA #2, PICK UP BIT MOTOR, SCRIBE MWD, TRIP IN HOLE TO 3500' NO TIGHT SPOTS, FILL PIPE @ 3212'
5/31/2011	0:00 - 4:00	4.00	DRLPRO	06	A	P		TRIP IN HOLE TO 8645', NO TIGHT SPOTS, WASH REAM LAST 2 STANDS (180') TO BOTTOM
	4:00 - 16:30	12.50	DRLPRO	02	D	P		DRILL F/ 8825' TO 9467' = 642' 51.3 FPH STKS #1 & #2 PUMPS 00/105, 473 GPM PSI OFF / ON BOTTOM 2223/22459 MOTOR RPM / ROTARY RPM, 75/45 TQ ON / OFF BOTTOM 9K/10K FT/LBS PU / SO / ROT WT 220 / 175 200 WT ON BIT 15K TO 22K MUD SYSTEM CLOSED IN NO LOSS, MUD UP 12 WT, 43 VIS, 8% LCM
	16:30 - 17:00	0.50	DRLPRO	07	A	P		DAILY RIG SERVICE
	17:00 - 19:30	2.50	DRLPRO	02	D	P		DRILL F/ 9467' TO 9570' = 103' 51.5 FPH STKS #1 & #2 PUMPS 00/105, 473 GPM PSI OFF / ON BOTTOM 2223/22459 MOTOR RPM / ROTARY RPM, 75/40 TQ ON / OFF BOTTOM 9K/10K FT/LBS PU / SO / ROT WT 220 / 175 200 WT ON BIT 15K TO 22K MUD SYSTEM CLOSED IN NO LOSS, MUD UP 12 WT, 43 VIS, 8% LCM
	19:30 - 21:30	2.00	DRLPRO	05	C	P		CIRCULATE PUMP SWEEP FOR HOLE CLEANING PRIOR TO TRIP
	21:30 - 0:00	2.50	DRLPRO	06	A	P		TRIP OUT, LAY DOWN PIPE, BACK REAM OUT TO 8803', PUMP SLUG, TRIP OUT LAYING DOWN PIPE TO 6258'
	6/1/2011	0:00 - 8:00	8.00	DRLPRO	06	A	P	

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW		Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH		Site: NBU 922-29B PAD	Rig Name No: PROPETRO 11/11, ENSIGN 145/145
Event: DRILLING		Start Date: 3/15/2011	End Date: 6/1/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:00 - 15:30	7.50	CSG	12	C	P		HELD SAFTEY MEETING, RIG UP CASING CREW, RUN DCT I-80 SHOE,FLOAT, 15 CENTRALIZERS, 230 JOINTS 4.5, 11.6, I-80, BTC CASING LANDED AT MD 9563', FLOAT TOP AT 9520' MD, BREAK CIRC @ 4719, FILL PIPE @ 7013', MVERDE MARKER 7262, WASATCH MARKER 4719', HELD SAFTEY MEETING RIG DOWN CASING CREW & INSTALL CEMENT HEAD
	15:30 - 17:00	1.50	CSG	05	D	P		FILL PIPE CIRCULATE GAS FROM WELL BORE FOR CEMENT JOB
	17:00 - 19:30	2.50	CSG	12	E	P		HELD SAFTEY MEETING, HOOK UP BJ IRON TO HEAD, TEST LINES TO 5000 PSI, PUMP 40 BBL FRESH WATER AHEAD, PUMP CEMENT LEAD 187.6 BBL 458 SKS PL2 12.0 PPG, 2.30 YEILD, 12.7 GPS WATER TAIL 235 BBL 1010 SKS POZ 50/50 14.3 PPG 1.31 YEILD, 5.90 GPS WATER DROP PLUG DISPLACE WITH 148 BBL FRESH WATER WITH CLAY CARE & MAGNACIDE, BUMP PLUG TO 3202, FINAL LIFT 2300, 902 PSI OVER, 1.5 BBL BACK TO TRUCK, FULL RETURNS, 10 BBL CEMENT BACK, EST TOP OF LEAD CEMENT 0, TOP OF TAIL 4300, HELD SAFTEY MEETING RIG DOWN BJ
	19:30 - 21:00	1.50	CSG	12	C	P		FLUSH STACK, READY STACK TO SET SLIPS, SET SLIPS, WITH WEATHERFORD HAND 90K ON SLIPS, LIFT STACK & CUT CASING, CLEAN PITS. RELEASE RIG 6/1/2011 21:00

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW		Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH		Site: NBU 922-29B PAD	Rig Name No: PROPETRO 11/11, ENSIGN 145/145
Event: DRILLING		Start Date: 3/15/2011	End Date: 6/1/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	21:00 - 21:01	0.02	CSG					<p>PRODUCTION: Rig Move/Skid start date/time: 5/27/2011 6:00 Rig Move/Skid finish date/time: 5/27/2011 8:00 Total MOVE hours: 2.0 Prod Rig Spud date/time: 5/27/2011 20:30 Rig Release date/time: 6/1/2011 21:00 Total SPUD to RR hours: 120.5 Planned depth MD 9,580 Planned depth TVD 9,458 Actual MD: 9,570 Actual TVD: 9,454 Open Wells \$: AFE \$: Open wells \$/ft:</p> <p>PRODUCTION HOLE: Prod. From depth: 2,559 Prod. To depth: 9,570 Total PROD hours: 135 Log Depth: NO LOGS Production Casing size: 4 1/2 # of casing joints ran: 230 Casing set MD: 9,763.0 # sx of cement: 1,468 Cement blend (ppg): LEAD 12.0#, TAIL 14.3# Cement yield (ft3/sk): LEAD 2.30 YD, TAIL 1.31 YD Est. TOC (Lead & Tail) or 2 Stage : LEAD 0, TAIL 4300' Describe cement issues: N/A Describe hole issues: N/A</p> <p>DIRECTIONAL INFO: KOP: 40 Max angle: 17.68 Departure: 824.06 Max dogleg MD: 3.85</p>

1 General

1.1 Customer Information

Company	US ROCKIES REGION		
Representative			
Address			

1.2 Well Information

Well	NBU 922-29B2BS YELLOW		
Common Name	NBU 922-29B2BS		
Well Name	NBU 922-29B2BS	Wellbore No.	OH
Report No.	1	Report Date	7/6/2011
Project	UTAH-UINTAH	Site	NBU 922-29B PAD
Rig Name/No.		Event	COMPLETION
Start Date	7/6/2011	End Date	7/20/2011
Spud Date	4/4/2011	Active Datum	RKB @4,899.00ft (above Mean Sea Level)
UWI	NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0		

1.3 General

Contractor	CUTTERS WIRELINE	Job Method	PERFORATE	Supervisor	KEN WARREN
Perforated Assembly	PRODUCTION CASING	Conveyed Method	SLICKLINE		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fluid Density		Gross Interval	7,354.0 (ft)-9,382.0 (ft)	Start Date/Time	7/11/2011 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	27	End Date/Time	7/11/2011 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	191	Net Perforation Interval	53.00 (ft)
Hydrostatic Press		Press Difference		Avg Shot Density	3.60 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	MESAVERDE/			7,354.0	7,356.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	N

2.1 Perforated Interval (Continued)

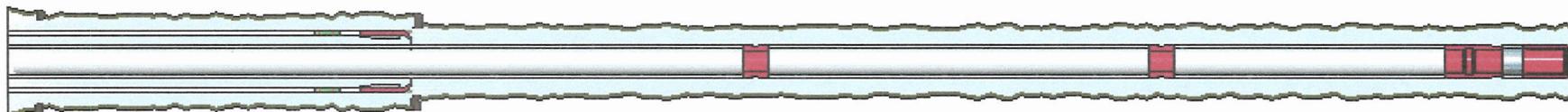
Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00	AMMESAVERDE/			7,408.0	7,410.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,452.0	7,454.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,510.0	7,511.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,537.0	7,538.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,558.0	7,559.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,633.0	7,635.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,668.0	7,670.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			7,854.0	7,856.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,016.0	8,019.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,070.0	8,073.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,214.0	8,216.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,316.0	8,320.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,431.0	8,433.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,494.0	8,496.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,526.0	8,528.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,640.0	8,642.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,710.0	8,712.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,820.0	8,822.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,918.0	8,920.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			8,982.0	8,983.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00	AMMESAVERDE/			9,044.0	9,046.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	MESAVERDE/			9,070.0	9,072.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,251.0	9,252.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,332.0	9,334.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,368.0	9,370.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	MESAVERDE/			9,380.0	9,382.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW	Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH	Site: NBU 922-29B PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 7/6/2011	End Date: 7/20/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)	UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/9/2011	6:45 - 7:00	0.25	COMP	48		P		HSM. HIGH PRESSURE LINES
	7:00 - 15:00	8.00	COMP	33	C	P		MOVE IN RU B & C QUICK FILL SURFACE CSG. PRESS TEST TO 1000 PSI. HOLD FOR 15 MIN. LOST 12 PSI PRESS TEST TO 3500 PSI HOLD FOR 15 MIN. LOST 31 PSI 1 ST PRES TEST TO 7000 PSI. HELD 30 MN. LOST 112 PSI 2 ND PRES TEST TO 7000 PSI. HELD 30 MIN. LOST 82 PSI 3 RD PRES TEST TO 7000 PSI. HELD 30 MIN. LOST 62 PSI 4 TH PRES TEST TO 7000 PSI. HELD 30 MIN. LOST 62 PSI OKAYED BY JEFF SAMUELS

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW		Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH		Site: NBU 922-29B PAD	Rig Name No: MILES 3/3
Event: COMPLETION		Start Date: 7/6/2011	End Date: 7/20/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/11/2011	6:45 - 18:00	11.25	COMP	36	B	P		<p>PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. X-OVER TO FRAC CREW</p> <p>FRAC STG 1)WHP 560 PSI, BRK 3120 PSI @ 4.8 BPM. ISIP 2490 PSI, FG .71 PUMP 100 BBLS @ 49.8 BPM @ 6068 PSI = 80% HOLES OPEN. ISIP 2835 PSI, FG .74, NPI 345 PSI. MP 6555 PSI, MR 50.1 BPM, AP 5561 PSI, AR 48.2 BPM, PMP 1222 BBLS SW & 21,931 LBS OF 30/50 SND. NO RESIN. TOTAL PROP 21,931 LBS. X-OVER TO W L</p> <p>PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9122' P/U PERF AS PER PERF DESIGN. POOH. X-OVER TO FRAC CREW</p> <p>FRAC STG 2)WHP 2196 PSI, BRK 2984 PSI @ 6.8 BPM. ISIP 2354 PSI, FG .70 PUMP 100 BBLS @ 39.3 BPM @ 5688 PSI = 60% HOLES OPEN. ISIP 2763 PSI, FG .75, NPI 369 PSI. MP 6281 PSI, MR 50.3 BPM, AP 5641 PSI, AR 46.8 BPM, PMP 932 BBLS SW & 19,044 LBS OF 30/50 SND. NO RESIN TOTAL PROP 19,044 LBS X-OVER TO W L</p> <p>PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8862' P/U PERF AS PER PERF DESIGN. POOH.X-OVER FOR FRAC CREW</p> <p>FRAC STG 3)WHP 1915 PSI, BRK 4344 PSI @ 6.6 BPM. ISIP 2777 PSI, FG .76 PUMP 100 BBLS @ 33.5 BPM @ 5894 PSI = 60% HOLES OPEN. ISIP 2494 PSI, FG .72, NPI -283 PSI. MP 6463 PSI, MR 50.0 BPM, AP 5907 PSI, AR 44-6 BPM, PMP 612 BBLS SW & 10,993 LBS OF 30/50 SND & NO RESIN SND. TOTAL PROP 10,993 LBS X-OVER TO W L</p> <p>PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8578' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 4)WHP 718 PSI, BRK PSI @ 6.4 BPM. ISIP 2086 PSI, FG .68 PUMP 100 BBLS @ 35.3 BPM @ 5594 PSI = 60% HOLES OPEN. ISIP 2363 PSI, FG .72, NPI 277 PSI. MP 6302 PSI, MR 51.3 BPM, AP 5642 PSI, AR 47.5 BPM, PMP 608 BBLS SW & 11,046 LBS OF 30/50 SND NO RESIN SND. TOTAL PROP 11,046 LBS SWIFN HSM. HIGH PSI LINES.</p>
7/12/2011	6:45 - 7:00	0.25	COMP	48		P		

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW	Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH	Site: NBU 922-29B PAD	Rig Name No: MILES 3/3
Event: COMPLETION	Start Date: 7/6/2011	End Date: 7/20/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 18:00	11.00	COMP	36	B	P		<p>PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8370' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 5)WHP 1428 PSI, BRK 3702 PSI @ 4.7 BPM. ISIP 2077 PSI, FG .69 PUMP 100 BBLS @ 49.6 BPM @ 5688 PSI = 76% HOLES OPEN. ISIP 2709 PSI, FG .77 NPI 632 PSI. MP 5714 PSI, MR 50.2 BPM, AP 5296 PSI, AR 49.0 BPM, PMP 710 BBLS SW & 13,081 LBS OF 30/50 SND NO RESIN SND.TOTAL PROP 13,081 LBS X-OVER TO W L</p> <p>PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8123' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 6)WHP 3793 PSI, BRK 2032 PSI @ 4.8 BPM. ISIP 2359 PSI, FG .73 PUMP 100 BBLS @ 46.1 BPM @ 5546 PSI = 75% HOLES OPEN. ISIP 2682 PSI, FG .78, NPI 323 PSI. MP 6194 PSI, MR 50.2 BPM, AP 5685 PSI, AR 49.0 BPM, PMP 615 BBLS SW & 11,288 LBS OF 30/50 SND, NO RESIN SND.TOTAL PROP 11,288 LBS X-OVER TO W L</p> <p>PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7720' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 7)WHP 298 PSI, BRK 2195 PSI @ 4.8 BPM. ISIP 1501 PSI, FG .64 PUMP 100 BBLS @ 51.2 BPM @ 5198 PSI = 79% HOLES OPEN. ISIP 2262 PSI, FG .74, NPI 761 PSI. MP 5987 PSI, MR 53.5 BPM, AP 4814 PSI, AR 51.4 BPM, PMP 2063 BBLS SW & 46,751 LBS OF 30/50 SND NO RESIN SND.TOTAL PROP 46,751 LBS X-OVER W L</p> <p>PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7484' P/U PERF AS PER PERF DESIGN. POOH.X-OVER FOR FRAC CREW</p> <p>FRAC STG 8)WHP 1808 PSI, BRK 2105 PSI @ 4.7 BPM. ISIP 1845 PSI, FG .69 PUMP 100 BBLS @ 49.5 BPM @ 5454 PSI = 73% HOLES OPEN. ISIP 2528 PSI, FG .78, NPI 683 PSI. MP 6404 PSI, MR 49.6 BPM, AP 5513 PSI, AR 48.8 BPM, PMP 3750 BBLS SW & 76,724 LBS OF 30/50 SND NO RESIN SND.TOTAL PROP 76,724 LBS X-OVER TO W L</p> <p>PU 4 1/2' CBP SET KILL PLUG @ 7304 POOH</p>

**US ROCKIES REGION
Operation Summary Report**

Well: NBU 922-29B2BS YELLOW Spud Conductor: 3/29/2011 Spud Date: 4/4/2011
 Project: UTAH-UINTAH Site: NBU 922-29B PAD Rig Name No: MILES 3/3
 Event: COMPLETION Start Date: 7/6/2011 End Date: 7/20/2011
 Active Datum: RKB @4,899.00ft (above Mean Sea Level) UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								RD FRAC CREW AND WIRE LINE MOVE OFF LOCATION
								TOTAL SAND =210,858 TOTAL CLFL = 10,512 TOTAL SCALE = 924 TOTAL BIO = 212
7/19/2011	7:00 - 7:15	0.25	COMP	48		P		JSA- RDSU. RUSU. ND/NU. PU TBG.
	7:15 - 9:00	1.75	COMP	30	A	P		RDSU. MOVE OVER FROM 29B1AS. RUSU. ND WH. NU BOP. RU FLOOR AND TBG EQUIP. SPOT TBG.
	9:00 - 13:30	4.50	COMP	31	I	P		MU 3-7/8" BIT, POBS, 1.87" XN. RIH AS MEAS AND 231-JTS 2-3/8" L-80 TBG. TAG AT 7302'. RU DRLG EQUIP. FILL TBG AND PRES TEST TO 3000#. GOOD. EST CIRC AND D/O PLUGS.
	13:30 - 16:00	2.50	COMP	44	C	P		#1- C/O 20' SAND TO CBP AT 7311'. D/O IN 8 MIN. 500# INC. FCP 0. RIH. #2- C/O 30' SAND TO CBP AT 7484'. D/O IN 5 MIN. 400# INC. FCP 0-100. RIH. #3- C/O 30' SAND TO CBP AT 7700'. D/O IN 3 MIN. 200# INC. FCP 100-200. RIH. #40 C/O 31' SAND TO CBP AT 8104'. D/O IN 4 MIN. 400# INC. FCP 150-400. CIRC AND FLOW CLEAN. 257-JTS IN, EOT AT 8142'. SWIFN.
7/20/2011	7:00 - 7:15	0.25	COMP	48		P		JSA- BWD. D/O PLUGS. PWR SWIVEL.
	7:15 - 11:30	4.25	COMP	44	C	P		SITP 0, SICP 2100. BWD TO PIT. CONT RIH AS D/O PLUGS. #5- C/O 25' SAND TO CBP AT 8350'. D/O IN 6 MIN. 300# INC. FCP 500-300. RIH. #6- C/O 25' SAND TO CBP AT 8558'. D/O IN 4 MIN. 400# INC. FCP 300-500. RIH. #7- C/O 25' SAND TO CBP AT 8862'. D/O IN 4 MIN. 300# INC. FCP 500-700. RIH. #8- C/O 30' SAND TO CBP AT 9102'. D/O IN 4 MIN. 400# INC. FCP 600-700. RIH. PBTD- C/O 80' SAND TO PBTD AT 9504' (122' RATHOLE) W/ 300-JTS IN. CIRC CLEAN.
								RD PWR SWIVEL. POOH AS LD 20-JTS TBG. PU 4" 10K HANGER. LUB IN AND LAND 280-JTS 2-3/8" L-80 TBG W/ EOT AT 8882.98'. RD FLOOR. ND BOP. NU WH. POBS AT 2600#. SITP 950. SICP 1950. SURFACE OPEN- TRICKLE 3 GAL THEN QUIT. HOOK UP HAL 9000 AND TURN OVER TO FBC AND SALES. RDSU. RACK OUT EQUIP. MOVE OFF.
								TBG DETAIL KB 13.00 4" 10K HANGER .83 280-JTS 2-3/8" L-80 8866.95 1.87" XN FE POBS 2.20 EOT 8882.98
								309-JTS DELIVERED, 29-JTS RETURNED
	11:00 - 11:00	0.00	PROD	50				TWTR 10,512 / TWR 2100 / LTR 8412. WELL TURNED TO SALES @ 1100 HR ON 7/20/11 - 1488 MCFD, 1920 BWPD, CP 2000#, FTP 1000#, CK 20/64"

**US ROCKIES REGION
Operation Summary Report**

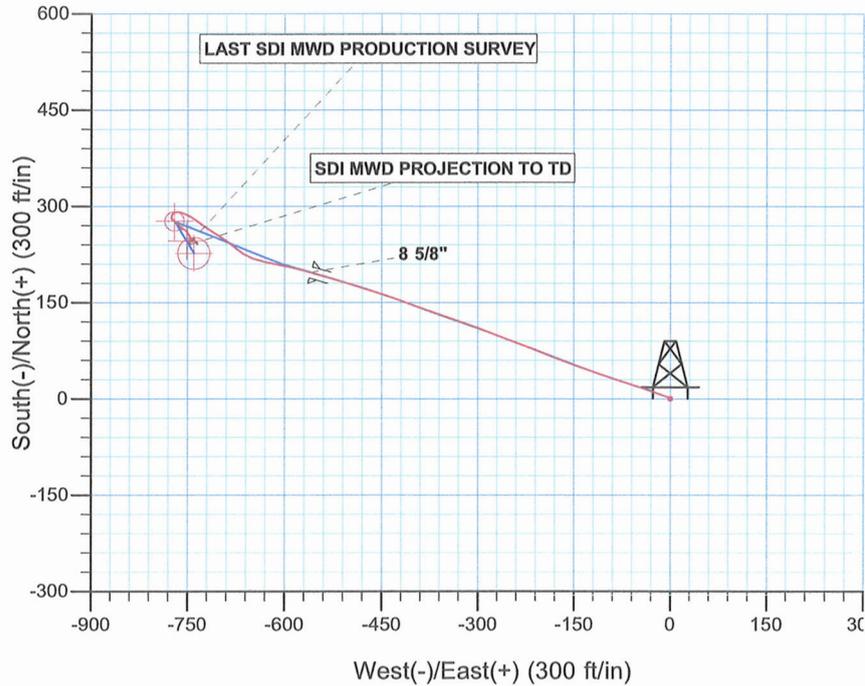
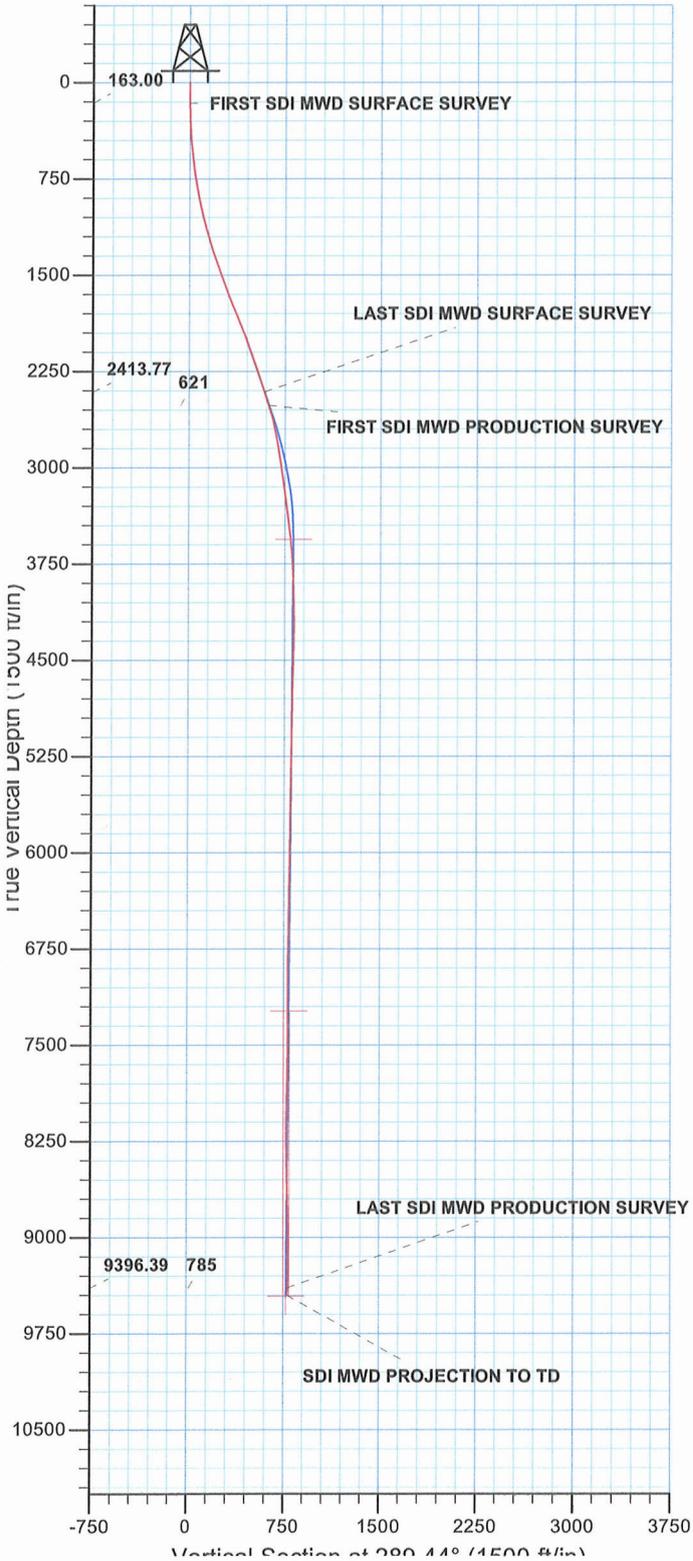
Well: NBU 922-29B2BS YELLOW		Spud Conductor: 3/29/2011	Spud Date: 4/4/2011
Project: UTAH-UINTAH		Site: NBU 922-29B PAD	Rig Name No: MILES 3/3
Event: COMPLETION		Start Date: 7/6/2011	End Date: 7/20/2011
Active Datum: RKB @4,899.00ft (above Mean Sea Level)		UWI: NW/NE/0/9/S/22/E/29/0/0/26/PM/N/244/E/0/1675/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/21/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2800#, TP 2000#, 20/64" CK, 55 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 3335 BBLS LEFT TO RECOVER: 7177
7/22/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2850#, TP 1950#, 20/64" CK, 45 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4492 BBLS LEFT TO RECOVER: 6020
7/23/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2600#, TP 1800#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 5387 BBLS LEFT TO RECOVER: 5125
7/24/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2400#, TP 1700#, 20/64" CK, 22 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 6017 BBLS LEFT TO RECOVER: 4495
7/25/2011	7:00 -			50				WELL IP'D ON 7/25/11- 2152 MCFD, 0 BOPD, 500 BWPD, CP 2400#, FTP 1700#, CK 20/64", LP 155#, 24 HRS

WELL DETAILS: NBU 922-29B2BS					
GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14534737.56	2071704.53	40° 0' 49.090 N	109° 27' 35.039 W

Azimuths to True North
Magnetic North: 11.07°

Magnetic Field
Strength: 52347.9snT
Dip Angle: 65.89°
Date: 05/27/2011
Model: IGRF2010



PROJECT DETAILS: Uintah County, UT UTM12
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 - Western US
Ellipsoid: Clarke 1866
Zone: Zone 12N (114 W to 108 W)
Location: SEC 29 T9S R22E
System Datum: Mean Sea Level



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 922-29B Pad
NBU 922-29B2BS**

OH

Design: OH

Standard Survey Report

08 June, 2011

Anadarko 
Petroleum Corporation

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-Roberts-Local

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 922-29B Pad, SEC 29 T9S R22E				
Site Position:		Northing:	14,534,730.60 usft	Latitude:	40° 0' 49.018 N
From:	Lat/Long	Easting:	2,071,723.13 usft	Longitude:	109° 27' 34.801 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.99 °

Well	NBU 922-29B2BS, 244' FNL 1675' FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,534,737.57 usft	Latitude:	40° 0' 49.090 N
	+E/-W	0.00 ft	Easting:	2,071,704.53 usft	Longitude:	109° 27' 35.039 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,886.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	05/27/2011	11.07	65.89	52,348

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	289.44	

Survey Program	Date 06/08/2011				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
10.00	2,505.00	Survey #1 SDI MWD SURFACE (OH)	MWD SDI	MWD - Standard ver 1.0.1	
2,614.00	9,570.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1	

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	
10.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	
163.00	0.70	339.89	163.00	0.88	-0.32	0.60	0.46	0.46	0.00	
FIRST SDI MWD SURFACE SURVEY										
250.00	1.23	307.63	249.98	1.95	-1.24	1.82	0.85	0.61	-37.08	
333.00	2.90	288.56	332.93	3.16	-3.94	4.77	2.15	2.01	-22.98	
423.00	4.40	288.73	422.74	4.99	-9.37	10.50	1.67	1.67	0.19	
513.00	5.45	288.91	512.41	7.49	-16.68	18.22	1.17	1.17	0.20	
603.00	6.51	293.04	601.92	10.87	-25.42	27.59	1.27	1.18	4.59	
693.00	8.18	287.15	691.18	14.75	-36.23	39.08	2.03	1.86	-6.54	

Company: Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference: Well NBU 922-29B2BS
Project: Uintah County, UT UTM12	TVD Reference: GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site: NBU 922-29B Pad	MD Reference: GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well: NBU 922-29B2BS	North Reference: True
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: EDM5000-RobertS-Local

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)
783.00	9.32	287.42	780.13	18.82	-49.31	52.76	1.27	1.27	0.30
873.00	10.73	288.38	868.75	23.65	-64.21	68.42	1.58	1.57	1.07
963.00	11.96	288.21	956.99	29.20	-81.02	86.12	1.37	1.37	-0.19
1,053.00	13.54	288.21	1,044.77	35.41	-99.89	105.98	1.76	1.76	0.00
1,143.00	15.21	289.53	1,131.95	42.65	-121.02	128.32	1.89	1.86	1.47
1,233.00	16.36	290.23	1,218.56	50.98	-144.04	152.80	1.30	1.28	0.78
1,323.00	18.03	291.81	1,304.53	60.54	-168.87	179.39	1.93	1.86	1.76
1,413.00	19.08	290.93	1,389.85	70.97	-195.54	208.01	1.21	1.17	-0.98
1,503.00	19.87	290.76	1,474.70	81.64	-223.58	238.01	0.88	0.88	-0.19
1,593.00	20.58	291.46	1,559.15	92.85	-252.61	269.11	0.83	0.79	0.78
1,683.00	21.46	290.40	1,643.16	104.38	-282.76	301.38	1.07	0.98	-1.18
1,773.00	21.63	288.82	1,726.87	115.47	-313.89	334.43	0.67	0.19	-1.76
1,863.00	21.28	289.88	1,810.64	126.37	-344.95	367.35	0.58	-0.39	1.18
1,953.00	21.63	289.26	1,894.40	137.40	-375.97	400.27	0.46	0.39	-0.69
2,043.00	22.16	289.26	1,977.91	148.47	-407.65	433.83	0.59	0.59	0.00
2,133.00	18.73	289.96	2,062.23	159.00	-437.27	465.26	3.82	-3.81	0.78
2,223.00	19.26	287.24	2,147.33	168.34	-465.03	494.54	1.15	0.59	-3.02
2,313.00	18.91	286.98	2,232.38	176.99	-493.15	523.94	0.40	-0.39	-0.29
2,403.00	19.08	287.24	2,317.48	185.61	-521.15	553.21	0.21	0.19	0.29
2,505.00	19.43	286.36	2,413.77	195.33	-553.35	586.81	0.45	0.34	-0.86
LAST SDI MWD SURFACE SURVEY									
2,614.00	17.68	282.53	2,517.11	204.03	-586.91	621.35	1.96	-1.61	-3.51
FIRST SDI MWD PRODUCTION SURVEY									
2,705.00	14.87	282.51	2,604.45	209.56	-611.80	646.67	3.09	-3.09	-0.02
2,795.00	12.35	283.91	2,691.92	214.38	-632.42	667.71	2.82	-2.80	1.56
2,886.00	11.13	288.99	2,781.02	219.57	-650.17	686.18	1.76	-1.34	5.58
2,976.00	10.98	307.10	2,869.37	227.57	-665.23	703.04	3.85	-0.17	20.12
3,067.00	8.75	307.86	2,959.02	237.05	-677.61	717.87	2.45	-2.45	0.84
3,158.00	8.48	306.74	3,048.99	245.31	-688.45	730.84	0.35	-0.30	-1.23
3,248.00	7.08	300.57	3,138.17	252.10	-698.54	742.62	1.81	-1.56	-6.86
3,339.00	8.08	302.57	3,228.37	258.40	-708.76	754.35	1.14	1.10	2.20
3,429.00	7.38	306.81	3,317.55	265.27	-718.72	766.03	1.00	-0.78	4.71
3,520.00	7.39	305.13	3,407.80	272.13	-728.18	777.24	0.24	0.01	-1.85
3,611.00	7.36	305.65	3,498.04	278.90	-737.71	788.47	0.08	-0.03	0.57
3,701.00	5.94	299.81	3,587.44	284.57	-746.43	798.59	1.75	-1.58	-6.49
3,792.00	4.91	292.28	3,678.03	288.39	-754.12	807.11	1.37	-1.13	-8.27
3,882.00	3.81	282.26	3,767.77	290.49	-760.61	813.93	1.48	-1.22	-11.13
3,973.00	2.85	269.64	3,858.62	291.12	-765.82	819.05	1.32	-1.05	-13.87
4,063.00	1.98	247.82	3,948.54	290.51	-769.50	822.32	1.39	-0.97	-24.24
4,154.00	1.65	229.21	4,039.49	289.06	-771.95	824.15	0.74	-0.36	-20.45
4,245.00	1.72	208.02	4,130.45	287.00	-773.58	825.00	0.68	0.08	-23.29
4,335.00	1.76	189.77	4,220.41	284.45	-774.45	824.97	0.61	0.04	-20.28
4,426.00	1.97	179.74	4,311.36	281.51	-774.68	824.21	0.43	0.23	-11.02

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

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)	
4,516.00	1.75	121.26	4,401.32	279.25	-773.50	822.34	2.03	-0.24	-64.98	
4,607.00	1.76	121.18	4,492.28	277.80	-771.12	819.61	0.01	0.01	-0.09	
4,698.00	1.64	136.63	4,583.24	276.13	-769.03	817.09	0.52	-0.13	16.98	
4,788.00	1.84	143.02	4,673.20	274.04	-767.27	814.74	0.31	0.22	7.10	
4,879.00	0.54	74.25	4,764.18	272.99	-765.98	813.17	1.89	-1.43	-75.57	
4,969.00	0.85	127.15	4,854.18	272.70	-765.04	812.19	0.75	0.34	58.78	
5,060.00	0.84	136.91	4,945.17	271.81	-764.05	810.95	0.16	-0.01	10.73	
5,151.00	1.29	140.71	5,036.15	270.53	-762.94	809.49	0.50	0.49	4.18	
5,241.00	1.33	149.59	5,126.13	268.84	-761.77	807.82	0.23	0.04	9.87	
5,332.00	1.31	149.52	5,217.10	267.04	-760.71	806.22	0.02	-0.02	-0.08	
5,422.00	1.71	149.20	5,307.07	265.00	-759.50	804.40	0.44	0.44	-0.36	
5,513.00	0.51	49.86	5,398.06	264.09	-758.50	803.15	2.05	-1.32	-109.16	
5,604.00	0.49	43.04	5,489.05	264.64	-757.92	802.79	0.07	-0.02	-7.49	
5,694.00	0.44	71.28	5,579.05	265.03	-757.33	802.36	0.26	-0.06	31.38	
5,785.00	0.81	112.16	5,670.05	264.90	-756.40	801.45	0.61	0.41	44.92	
5,875.00	0.93	128.25	5,760.04	264.21	-755.24	800.12	0.30	0.13	17.88	
5,966.00	0.84	131.53	5,851.02	263.31	-754.16	798.80	0.11	-0.10	3.60	
6,057.00	1.16	129.08	5,942.01	262.28	-752.95	797.32	0.35	0.35	-2.69	
6,147.00	1.11	140.17	6,031.99	261.04	-751.68	795.71	0.25	-0.06	12.32	
6,238.00	1.24	140.82	6,122.97	259.60	-750.50	794.11	0.14	0.14	0.71	
6,329.00	1.44	145.05	6,213.95	257.90	-749.22	792.34	0.25	0.22	4.65	
6,419.00	1.56	155.84	6,303.92	255.86	-748.07	790.58	0.34	0.13	11.99	
6,510.00	0.91	150.36	6,394.90	254.10	-747.21	789.18	0.73	-0.71	-6.02	
6,600.00	0.91	147.06	6,484.89	252.88	-746.46	788.07	0.06	0.00	-3.67	
6,691.00	1.24	152.52	6,575.87	251.40	-745.62	786.78	0.38	0.36	6.00	
6,782.00	1.14	160.96	6,666.85	249.67	-744.87	785.49	0.22	-0.11	9.27	
6,872.00	1.21	164.60	6,756.83	247.90	-744.32	784.39	0.11	0.08	4.04	
6,963.00	1.48	163.29	6,847.81	245.85	-743.73	783.15	0.30	0.30	-1.44	
7,053.00	0.40	94.43	6,937.79	244.71	-743.08	782.16	1.54	-1.20	-76.51	
7,144.00	1.23	339.38	7,028.79	245.60	-743.11	782.49	1.59	0.91	-126.43	
7,235.00	0.64	338.63	7,119.77	246.99	-743.64	783.45	0.65	-0.65	-0.82	
7,325.00	0.17	297.75	7,209.77	247.52	-743.94	783.91	0.58	-0.52	-45.42	
7,416.00	0.17	273.06	7,300.77	247.59	-744.19	784.17	0.08	0.00	-27.13	
7,506.00	0.34	100.05	7,390.77	247.55	-744.06	784.03	0.57	0.19	-192.23	
7,597.00	0.65	85.81	7,481.77	247.54	-743.28	783.30	0.36	0.34	-15.65	
7,688.00	0.81	94.05	7,572.76	247.54	-742.13	782.20	0.21	0.18	9.05	
7,778.00	0.91	120.12	7,662.75	247.13	-740.87	780.89	0.44	0.11	28.97	
7,869.00	0.73	112.72	7,753.74	246.55	-739.71	779.60	0.23	-0.20	-8.13	
7,959.00	1.19	146.11	7,843.73	245.55	-738.66	778.28	0.78	0.51	37.10	
8,050.00	1.20	126.54	7,934.71	244.20	-737.37	776.61	0.45	0.01	-21.51	
8,140.00	1.47	148.20	8,024.69	242.65	-736.01	774.81	0.63	0.30	24.07	
8,231.00	0.33	135.38	8,115.67	241.48	-735.21	773.66	1.26	-1.25	-14.09	
8,322.00	0.53	35.64	8,206.67	241.63	-734.78	773.31	0.74	0.22	-109.60	
8,412.00	1.92	313.71	8,296.65	243.01	-735.62	774.57	2.13	1.54	-91.03	

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

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)	
8,503.00	1.86	328.35	8,387.60	245.32	-737.50	777.10	0.53	-0.07	16.09	
8,593.00	1.65	329.66	8,477.56	247.68	-738.92	779.23	0.24	-0.23	1.46	
8,684.00	1.31	299.38	8,568.53	249.32	-740.49	781.26	0.92	-0.37	-33.27	
8,775.00	1.25	305.57	8,659.51	250.41	-742.20	783.23	0.17	-0.07	6.80	
8,866.00	0.98	260.92	8,750.49	250.87	-743.78	784.87	0.97	-0.30	-49.07	
8,956.00	0.57	249.77	8,840.49	250.59	-744.96	785.89	0.48	-0.46	-12.39	
9,047.00	0.11	205.94	8,931.48	250.36	-745.42	786.25	0.55	-0.51	-48.16	
9,137.00	0.88	215.89	9,021.48	249.72	-745.87	786.46	0.86	0.86	11.06	
9,228.00	0.98	208.11	9,112.47	248.47	-746.64	786.77	0.18	0.11	-8.55	
9,319.00	1.01	196.57	9,203.45	247.01	-747.24	786.85	0.22	0.03	-12.68	
9,409.00	1.44	190.82	9,293.43	245.14	-747.68	786.64	0.50	0.48	-6.39	
9,512.00	1.96	148.47	9,396.39	242.37	-747.00	785.08	1.28	0.50	-41.12	
LAST SDI MWD PRODUCTION SURVEY										
9,570.00	1.96	148.47	9,454.36	240.68	-745.96	783.53	0.00	0.00	0.00	
SDI MWD PROJECTION TO TD										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
163.00	163.00	0.88	-0.32	FIRST SDI MWD SURFACE SURVEY	
2,505.00	2,413.77	195.33	-553.35	LAST SDI MWD SURFACE SURVEY	
2,614.00	2,517.11	204.03	-586.91	FIRST SDI MWD PRODUCTION SURVEY	
9,512.00	9,396.39	242.37	-747.00	LAST SDI MWD PRODUCTION SURVEY	
9,570.00	9,454.36	240.68	-745.96	SDI MWD PROJECTION TO TD	

Checked By: _____ Approved By: _____ Date: _____



Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

**Uintah County, UT UTM12
NBU 922-29B Pad
NBU 922-29B2BS**

OH

Design: OH

Survey Report - Geographic

08 June, 2011

Anadarko 
Petroleum Corporation

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Project	Uintah County, UT UTM12		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	NBU 922-29B Pad, SEC 29 T9S R22E		
Site Position:	Northing:	14,534,730.60 usft	Latitude: 40° 0' 49.018 N
From: Lat/Long	Easting:	2,071,723.13 usft	Longitude: 109° 27' 34.801 W
Position Uncertainty:	0.00 ft	Slot Radius: 13.200 in	Grid Convergence: 0.99 °

Well	NBU 922-29B2BS, 244' FNL 1675' FEL		
Well Position	+N/-S 0.00 ft	Northing: 14,534,737.57 usft	Latitude: 40° 0' 49.090 N
	+E/-W 0.00 ft	Easting: 2,071,704.53 usft	Longitude: 109° 27' 35.039 W
Position Uncertainty	0.00 ft	Wellhead Elevation: ft	Ground Level: 4,886.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	05/27/2011	11.07	65.89	52,348

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	289.44	

Survey Program	Date 06/08/2011				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
10.00	2,505.00	Survey #1 SDI MWD SURFACE (OH)	MWD SDI	MWD - Standard ver 1.0.1	
2,614.00	9,570.00	Survey #2 SDI MWD PRODUCTION (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	14,534,737.57	2,071,704.53	40° 0' 49.090 N	109° 27' 35.039 W	
10.00	0.00	0.00	10.00	0.00	0.00	14,534,737.57	2,071,704.53	40° 0' 49.090 N	109° 27' 35.039 W	
163.00	0.70	339.89	163.00	0.88	-0.32	14,534,738.44	2,071,704.19	40° 0' 49.098 N	109° 27' 35.043 W	
FIRST SDI MWD SURFACE SURVEY										
250.00	1.23	307.63	249.98	1.95	-1.24	14,534,739.49	2,071,703.25	40° 0' 49.109 N	109° 27' 35.055 W	
333.00	2.90	288.56	332.93	3.16	-3.94	14,534,740.66	2,071,700.53	40° 0' 49.121 N	109° 27' 35.089 W	
423.00	4.40	288.73	422.74	4.99	-9.37	14,534,742.40	2,071,695.07	40° 0' 49.139 N	109° 27' 35.159 W	
513.00	5.45	288.91	512.41	7.49	-16.68	14,534,744.76	2,071,687.72	40° 0' 49.164 N	109° 27' 35.253 W	
603.00	6.51	293.04	601.92	10.87	-25.42	14,534,747.99	2,071,678.92	40° 0' 49.197 N	109° 27' 35.366 W	
693.00	8.18	287.15	691.18	14.75	-36.23	14,534,751.69	2,071,668.04	40° 0' 49.235 N	109° 27' 35.505 W	
783.00	9.32	287.42	780.13	18.82	-49.31	14,534,755.53	2,071,654.90	40° 0' 49.276 N	109° 27' 35.673 W	

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
873.00	10.73	288.38	868.75	23.65	-64.21	14,534,760.10	2,071,639.92	40° 0' 49.323 N	109° 27' 35.864 W	
963.00	11.96	288.21	956.99	29.20	-81.02	14,534,765.36	2,071,623.01	40° 0' 49.378 N	109° 27' 36.080 W	
1,053.00	13.54	288.21	1,044.77	35.41	-99.89	14,534,771.24	2,071,604.04	40° 0' 49.440 N	109° 27' 36.323 W	
1,143.00	15.21	289.53	1,131.95	42.65	-121.02	14,534,778.12	2,071,582.78	40° 0' 49.511 N	109° 27' 36.594 W	
1,233.00	16.36	290.23	1,218.56	50.98	-144.04	14,534,786.05	2,071,559.62	40° 0' 49.593 N	109° 27' 36.890 W	
1,323.00	18.03	291.81	1,304.53	60.54	-168.87	14,534,795.18	2,071,534.63	40° 0' 49.688 N	109° 27' 37.210 W	
1,413.00	19.08	290.93	1,389.85	70.97	-195.54	14,534,805.14	2,071,507.79	40° 0' 49.791 N	109° 27' 37.552 W	
1,503.00	19.87	290.76	1,474.70	81.64	-223.58	14,534,815.33	2,071,479.57	40° 0' 49.897 N	109° 27' 37.913 W	
1,593.00	20.58	291.46	1,559.15	92.85	-252.61	14,534,826.04	2,071,450.35	40° 0' 50.007 N	109° 27' 38.286 W	
1,683.00	21.46	290.40	1,643.16	104.38	-282.76	14,534,837.04	2,071,420.00	40° 0' 50.121 N	109° 27' 38.673 W	
1,773.00	21.63	288.82	1,726.87	115.47	-313.89	14,534,847.59	2,071,388.69	40° 0' 50.231 N	109° 27' 39.074 W	
1,863.00	21.28	289.88	1,810.64	126.37	-344.95	14,534,857.96	2,071,357.44	40° 0' 50.339 N	109° 27' 39.473 W	
1,953.00	21.63	289.26	1,894.40	137.40	-375.97	14,534,868.44	2,071,326.24	40° 0' 50.448 N	109° 27' 39.872 W	
2,043.00	22.16	289.26	1,977.91	148.47	-407.65	14,534,878.97	2,071,294.37	40° 0' 50.557 N	109° 27' 40.279 W	
2,133.00	18.73	289.96	2,062.23	159.00	-437.27	14,534,888.99	2,071,264.58	40° 0' 50.661 N	109° 27' 40.660 W	
2,223.00	19.26	287.24	2,147.33	168.34	-465.03	14,534,897.84	2,071,236.66	40° 0' 50.753 N	109° 27' 41.016 W	
2,313.00	18.91	286.98	2,232.38	176.99	-493.15	14,534,906.01	2,071,208.39	40° 0' 50.839 N	109° 27' 41.378 W	
2,403.00	19.08	287.24	2,317.48	185.61	-521.15	14,534,914.14	2,071,180.25	40° 0' 50.924 N	109° 27' 41.738 W	
2,505.00	19.43	286.36	2,413.77	195.33	-553.35	14,534,923.30	2,071,147.88	40° 0' 51.020 N	109° 27' 42.152 W	
LAST SDI MWD SURFACE SURVEY										
2,614.00	17.68	282.53	2,517.11	204.03	-586.91	14,534,931.42	2,071,114.18	40° 0' 51.106 N	109° 27' 42.583 W	
FIRST SDI MWD PRODUCTION SURVEY										
2,705.00	14.87	282.51	2,604.45	209.56	-611.80	14,534,936.52	2,071,089.20	40° 0' 51.161 N	109° 27' 42.903 W	
2,795.00	12.35	283.91	2,691.92	214.38	-632.42	14,534,940.98	2,071,068.50	40° 0' 51.208 N	109° 27' 43.168 W	
2,886.00	11.13	288.99	2,781.02	219.57	-650.17	14,534,945.87	2,071,050.66	40° 0' 51.260 N	109° 27' 43.396 W	
2,976.00	10.98	307.10	2,869.37	227.57	-665.23	14,534,953.60	2,071,035.47	40° 0' 51.339 N	109° 27' 43.590 W	
3,067.00	8.75	307.86	2,959.02	237.05	-677.61	14,534,962.87	2,071,022.93	40° 0' 51.433 N	109° 27' 43.749 W	
3,158.00	8.48	306.74	3,048.99	245.31	-688.45	14,534,970.94	2,071,011.94	40° 0' 51.514 N	109° 27' 43.888 W	
3,248.00	7.08	300.57	3,138.17	252.10	-698.54	14,534,977.55	2,071,001.73	40° 0' 51.581 N	109° 27' 44.018 W	
3,339.00	8.08	302.57	3,228.37	258.40	-708.76	14,534,983.67	2,070,991.41	40° 0' 51.644 N	109° 27' 44.149 W	
3,429.00	7.38	306.81	3,317.55	265.27	-718.72	14,534,990.37	2,070,981.33	40° 0' 51.711 N	109° 27' 44.277 W	
3,520.00	7.39	305.13	3,407.80	272.13	-728.18	14,534,997.07	2,070,971.75	40° 0' 51.779 N	109° 27' 44.399 W	
3,611.00	7.36	305.65	3,498.04	278.90	-737.71	14,535,003.67	2,070,962.11	40° 0' 51.846 N	109° 27' 44.522 W	
3,701.00	5.94	299.81	3,587.44	284.57	-746.43	14,535,009.19	2,070,953.29	40° 0' 51.902 N	109° 27' 44.634 W	
3,792.00	4.91	292.28	3,678.03	288.39	-754.12	14,535,012.88	2,070,945.53	40° 0' 51.940 N	109° 27' 44.733 W	
3,882.00	3.81	282.26	3,767.77	290.49	-760.61	14,535,014.86	2,070,939.01	40° 0' 51.961 N	109° 27' 44.816 W	
3,973.00	2.85	269.64	3,858.62	291.12	-765.82	14,535,015.40	2,070,933.79	40° 0' 51.967 N	109° 27' 44.883 W	
4,063.00	1.98	247.82	3,948.54	290.51	-769.50	14,535,014.73	2,070,930.12	40° 0' 51.961 N	109° 27' 44.930 W	
4,154.00	1.65	229.21	4,039.49	289.06	-771.95	14,535,013.24	2,070,927.70	40° 0' 51.947 N	109° 27' 44.962 W	
4,245.00	1.72	208.02	4,130.45	287.00	-773.58	14,535,011.15	2,070,926.10	40° 0' 51.926 N	109° 27' 44.983 W	
4,335.00	1.76	189.77	4,220.41	284.45	-774.45	14,535,008.58	2,070,925.28	40° 0' 51.901 N	109° 27' 44.994 W	
4,426.00	1.97	179.74	4,311.36	281.51	-774.68	14,535,005.64	2,070,925.10	40° 0' 51.872 N	109° 27' 44.997 W	
4,516.00	1.75	121.26	4,401.32	279.25	-773.50	14,535,003.40	2,070,926.32	40° 0' 51.850 N	109° 27' 44.982 W	
4,607.00	1.76	121.18	4,492.28	277.80	-771.12	14,535,002.00	2,070,928.72	40° 0' 51.835 N	109° 27' 44.951 W	
4,698.00	1.64	136.63	4,583.24	276.13	-769.03	14,535,000.36	2,070,930.84	40° 0' 51.819 N	109° 27' 44.924 W	
4,788.00	1.84	143.02	4,673.20	274.04	-767.27	14,534,998.30	2,070,932.63	40° 0' 51.798 N	109° 27' 44.902 W	
4,879.00	0.54	74.25	4,764.18	272.99	-765.98	14,534,997.27	2,070,933.94	40° 0' 51.788 N	109° 27' 44.885 W	
4,969.00	0.85	127.15	4,854.18	272.70	-765.04	14,534,997.00	2,070,934.89	40° 0' 51.785 N	109° 27' 44.873 W	
5,060.00	0.84	136.91	4,945.17	271.81	-764.05	14,534,996.13	2,070,935.90	40° 0' 51.776 N	109° 27' 44.860 W	
5,151.00	1.29	140.71	5,036.15	270.53	-762.94	14,534,994.87	2,070,937.02	40° 0' 51.763 N	109° 27' 44.846 W	
5,241.00	1.33	149.59	5,126.13	268.84	-761.77	14,534,993.20	2,070,938.22	40° 0' 51.747 N	109° 27' 44.831 W	
5,332.00	1.31	149.52	5,217.10	267.04	-760.71	14,534,991.41	2,070,939.32	40° 0' 51.729 N	109° 27' 44.817 W	
5,422.00	1.71	149.20	5,307.07	265.00	-759.50	14,534,989.39	2,070,940.56	40° 0' 51.709 N	109° 27' 44.802 W	
5,513.00	0.51	49.86	5,398.06	264.09	-758.50	14,534,988.51	2,070,941.58	40° 0' 51.700 N	109° 27' 44.789 W	
5,604.00	0.49	43.04	5,489.05	264.64	-757.92	14,534,989.06	2,070,942.15	40° 0' 51.705 N	109° 27' 44.781 W	

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,694.00	0.44	71.28	5,579.05	265.03	-757.33	14,534,989.46	2,070,942.73	40° 0' 51.709 N	109° 27' 44.774 W	
5,785.00	0.81	112.16	5,670.05	264.90	-756.40	14,534,989.35	2,070,943.66	40° 0' 51.708 N	109° 27' 44.762 W	
5,875.00	0.93	128.25	5,760.04	264.21	-755.24	14,534,988.68	2,070,944.83	40° 0' 51.701 N	109° 27' 44.747 W	
5,966.00	0.84	131.53	5,851.02	263.31	-754.16	14,534,987.80	2,070,945.93	40° 0' 51.692 N	109° 27' 44.733 W	
6,057.00	1.16	129.08	5,942.01	262.28	-752.95	14,534,986.79	2,070,947.16	40° 0' 51.682 N	109° 27' 44.717 W	
6,147.00	1.11	140.17	6,031.99	261.04	-751.68	14,534,985.57	2,070,948.45	40° 0' 51.670 N	109° 27' 44.701 W	
6,238.00	1.24	140.82	6,122.97	259.60	-750.50	14,534,984.15	2,070,949.66	40° 0' 51.655 N	109° 27' 44.686 W	
6,329.00	1.44	145.05	6,213.95	257.90	-749.22	14,534,982.48	2,070,950.96	40° 0' 51.639 N	109° 27' 44.670 W	
6,419.00	1.56	155.84	6,303.92	255.86	-748.07	14,534,980.45	2,070,952.15	40° 0' 51.618 N	109° 27' 44.655 W	
6,510.00	0.91	150.36	6,394.90	254.10	-747.21	14,534,978.71	2,070,953.04	40° 0' 51.601 N	109° 27' 44.644 W	
6,600.00	0.91	147.06	6,484.89	252.88	-746.46	14,534,977.50	2,070,953.81	40° 0' 51.589 N	109° 27' 44.634 W	
6,691.00	1.24	152.52	6,575.87	251.40	-745.62	14,534,976.03	2,070,954.68	40° 0' 51.574 N	109° 27' 44.623 W	
6,782.00	1.14	160.96	6,666.85	249.67	-744.87	14,534,974.32	2,070,955.46	40° 0' 51.557 N	109° 27' 44.614 W	
6,872.00	1.21	164.60	6,756.83	247.90	-744.32	14,534,972.57	2,070,956.03	40° 0' 51.540 N	109° 27' 44.607 W	
6,963.00	1.48	163.29	6,847.81	245.85	-743.73	14,534,970.52	2,070,956.66	40° 0' 51.520 N	109° 27' 44.599 W	
7,053.00	0.40	94.43	6,937.79	244.71	-743.08	14,534,969.40	2,070,957.33	40° 0' 51.508 N	109° 27' 44.591 W	
7,144.00	1.23	339.38	7,028.79	245.60	-743.11	14,534,970.29	2,070,957.29	40° 0' 51.517 N	109° 27' 44.591 W	
7,235.00	0.84	338.63	7,119.77	246.99	-743.64	14,534,971.67	2,070,956.73	40° 0' 51.531 N	109° 27' 44.598 W	
7,325.00	0.17	297.75	7,209.77	247.52	-743.94	14,534,972.19	2,070,956.42	40° 0' 51.536 N	109° 27' 44.602 W	
7,416.00	0.17	273.06	7,300.77	247.59	-744.19	14,534,972.26	2,070,956.17	40° 0' 51.537 N	109° 27' 44.605 W	
7,506.00	0.34	100.05	7,390.77	247.55	-744.06	14,534,972.22	2,070,956.30	40° 0' 51.536 N	109° 27' 44.603 W	
7,597.00	0.65	85.81	7,481.77	247.54	-743.28	14,534,972.22	2,070,957.08	40° 0' 51.536 N	109° 27' 44.593 W	
7,688.00	0.81	94.05	7,572.76	247.54	-742.13	14,534,972.24	2,070,958.23	40° 0' 51.536 N	109° 27' 44.578 W	
7,778.00	0.91	120.12	7,662.75	247.13	-740.87	14,534,971.85	2,070,959.49	40° 0' 51.532 N	109° 27' 44.562 W	
7,869.00	0.73	112.72	7,753.74	246.55	-739.71	14,534,971.29	2,070,960.66	40° 0' 51.526 N	109° 27' 44.547 W	
7,959.00	1.19	146.11	7,843.73	245.55	-738.66	14,534,970.31	2,070,961.73	40° 0' 51.517 N	109° 27' 44.534 W	
8,050.00	1.20	126.54	7,934.71	244.20	-737.37	14,534,968.98	2,070,963.05	40° 0' 51.503 N	109° 27' 44.517 W	
8,140.00	1.47	148.20	8,024.69	242.65	-736.01	14,534,967.46	2,070,964.44	40° 0' 51.488 N	109° 27' 44.500 W	
8,231.00	0.33	135.38	8,115.67	241.48	-735.21	14,534,966.30	2,070,965.26	40° 0' 51.476 N	109° 27' 44.489 W	
8,322.00	0.53	35.64	8,206.67	241.63	-734.78	14,534,966.46	2,070,965.68	40° 0' 51.478 N	109° 27' 44.484 W	
8,412.00	1.92	313.71	8,296.65	243.01	-735.62	14,534,967.82	2,070,964.81	40° 0' 51.491 N	109° 27' 44.495 W	
8,503.00	1.86	328.35	8,387.60	245.32	-737.50	14,534,970.10	2,070,962.90	40° 0' 51.514 N	109° 27' 44.519 W	
8,593.00	1.65	329.66	8,477.56	247.68	-738.92	14,534,972.44	2,070,961.43	40° 0' 51.538 N	109° 27' 44.537 W	
8,684.00	1.31	299.38	8,568.53	249.32	-740.49	14,534,974.05	2,070,959.84	40° 0' 51.554 N	109° 27' 44.557 W	
8,775.00	1.25	305.57	8,659.51	250.41	-742.20	14,534,975.11	2,070,958.11	40° 0' 51.565 N	109° 27' 44.579 W	
8,866.00	0.98	260.92	8,750.49	250.87	-743.78	14,534,975.54	2,070,956.52	40° 0' 51.569 N	109° 27' 44.600 W	
8,956.00	0.57	249.77	8,840.49	250.59	-744.96	14,534,975.24	2,070,955.35	40° 0' 51.566 N	109° 27' 44.615 W	
9,047.00	0.11	205.94	8,931.48	250.36	-745.42	14,534,975.00	2,070,954.89	40° 0' 51.564 N	109° 27' 44.621 W	
9,137.00	0.88	215.89	9,021.48	249.72	-745.87	14,534,974.35	2,070,954.46	40° 0' 51.558 N	109° 27' 44.626 W	
9,228.00	0.98	208.11	9,112.47	248.47	-746.64	14,534,973.09	2,070,953.70	40° 0' 51.545 N	109° 27' 44.636 W	
9,319.00	1.01	196.57	9,203.45	247.01	-747.24	14,534,971.62	2,070,953.13	40° 0' 51.531 N	109° 27' 44.644 W	
9,409.00	1.44	190.82	9,293.43	245.14	-747.68	14,534,969.74	2,070,952.73	40° 0' 51.513 N	109° 27' 44.650 W	
9,512.00	1.96	148.47	9,396.39	242.37	-747.00	14,534,966.98	2,070,953.45	40° 0' 51.485 N	109° 27' 44.641 W	
LAST SDI MWD PRODUCTION SURVEY										
9,570.00	1.96	148.47	9,454.36	240.68	-745.96	14,534,965.31	2,070,954.52	40° 0' 51.468 N	109° 27' 44.628 W	
SDI MWD PROJECTION TO TD										

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-29B2BS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Site:	NBU 922-29B Pad	MD Reference:	GL 4886' & RKB 14' @ 4900.00ft (ENSIGN 145)
Well:	NBU 922-29B2BS	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM5000-RobertS-Local

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
163.00	163.00	0.88	-0.32	FIRST SDI MWD SURFACE SURVEY
2,505.00	2,413.77	195.33	-553.35	LAST SDI MWD SURFACE SURVEY

Checked By: _____ Approved By: _____ Date: _____