

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING				FORM 3 AMENDED REPORT ☐		
APPLICATION FOR PERMIT TO DRILL				1. WELL NAME and NUMBER NBU 922-32A2DS		
2. TYPE OF WORK DRILL NEW WELL ☒ REENTER P&A WELL ☐ DEEPEN WELL ☐				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 307-752-1169		
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217				9. OPERATOR E-MAIL Laura.Gianakos@anadarko.com		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML 22649		11. MINERAL OWNERSHIP FEDERAL ☐ INDIAN ☐ STATE ☒ FEE ☐		12. SURFACE OWNERSHIP FEDERAL ☐ INDIAN ☐ STATE ☒ FEE ☐		
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 ☒ (Submit Commingling Application) NO ☐		19. SLANT VERTICAL ☐ DIRECTIONAL ☒ HORIZONTAL ☐		
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1555 FNL 931 FEL	SENE	32	9.0 S	22.0 E	S
Top of Uppermost Producing Zone	510 FNL 902 FEL	NENE	32	9.0 S	22.0 E	S
At Total Depth	510 FNL 902 FEL	NENE	32	9.0 S	22.0 E	S
21. COUNTY UINTAH		22. DISTANCE TO NEAREST LEASE LINE (Feet) 510		23. NUMBER OF ACRES IN DRILLING UNIT 640		
		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 766		26. PROPOSED DEPTH MD: 9429 TVD: 9262		
27. ELEVATION - GROUND LEVEL 4985		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						
☒ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER			☒ COMPLETE DRILLING PLAN			
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)			☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
☒ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)			☒ TOPOGRAPHICAL MAP			
NAME Danielle Piernot		TITLE Regulatory Analyst		PHONE 720 929-6156		
SIGNATURE		DATE 03/02/2010		EMAIL gnbregulatory@anadarko.com		
API NUMBER ASSIGNED 43047509770000		APPROVAL  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	9429		
Pipe	Grade	Length	Weight			
	Grade I-80 Buttress	9429	11.6			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2160		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	2160	28.0			

T9S, R22E, S.L.B.&M.Found 1977
Brass Cap.
Pile of Stones.

S89°58'W - 80.12 (G.L.O.)

Found 1977
Brass Cap.
Pile of Stones.

S89°57'38"W - 2643.14' (Meas.)

S89°57'04"W - 2643.87' (Meas.)

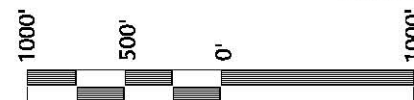
Found 1977
Brass Cap.
Pile of Stones.N0°06'W - 40.14 (G.L.O.)
N00°03'01"W - 2649.38' (Meas.)**WELL LOCATION:
NBU 922-32A2DS**

ELEV. UNGRADED GROUND = 4984.6'

Found 1977
Brass Cap.
Pile of Stones.**32**Found 1977
Brass Cap.
Pile of Stones.N00°00'59"W (Basis of Bearings)
2649.28' (Measured)
N0°03'W - 40.14 (G.L.O.)N0°02'W - 40.07 (G.L.O.)
N00°01'20"E 2644.48' (Meas.)**NBU 922-32A2DS (Surface Position)**NAD 83 LATITUDE = 39.995521° (39° 59' 43.876")
LONGITUDE = 109.457742° (109° 27' 27.871")NAD 27 LATITUDE = 39.995556° (39° 59' 44.002")
LONGITUDE = 109.457058° (109° 27' 25.407")**NBU 922-32A2DS (Bottom Hole)**NAD 83 LATITUDE = 39.998388° (39° 59' 54.198")
LONGITUDE = 109.457641° (109° 27' 27.507")NAD 27 LATITUDE = 39.998423° (39° 59' 54.323")
LONGITUDE = 109.456956° (109° 27' 25.043")Found 1977
Brass Cap.
Pile of Stones.N89°58'56"E - 2647.21' (Meas.)
N89°57'E - 40.11 (G.L.O.)Found 1977
Brass Cap, Pile
of Stones.N89°56'35"E - 2647.66' (Meas.)
N89°54'E - 40.14 (G.L.O.)Found 1977
Brass Cap, Pile
of Stones.**NOTES:**

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains.
1 chain = 66 feet.
3. The Bottom of hole bears N01°33'07"E 1045.10' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. Basis of elevation is Tri-Sta "Two Water" located in the NW $\frac{1}{4}$ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202**WELL PAD - NBU 922-32H2****NBU 922-32A2DS
WELL PLAT**510' FNL, 902' FEL (Bottom Hole)
NE $\frac{1}{4}$ NE $\frac{1}{4}$ OF SECTION 32, T9S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH.**CONSULTING, LLC**
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

SCALE

SURVEYOR'S CERTIFICATE

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

PROFESSOR OF SURVEYING
No. 6028691
JOHN R. SLAUGH
REGISTERED LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

TIMBERLINE

(435) 789-1365

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

DATE SURVEYED: 11-03-09	SURVEYED BY: M.S.B.	SHEET NO: 3 3 OF 14
DATE DRAWN: 11-24-09	DRAWN BY: E.M.S.	
SCALE: 1" = 1000'	Date Last Revised:	



ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)

NBU 922-32H2 Pad

NBU 922-32A2DS

NBU 922-32A2DS

Plan: PLAN #1 2-25-10 RHS

Standard Planning Report

26 February, 2010



API Well No: 43047509770000'



Project: UINAH COUNTY, UTAH (nad 27)
 Site: NBU 922-32H2 Pad
 Well: NBU 922-32A2DS
 Wellbore: NBU 922-32A2DS
 Section: SECTION 32 T9S R22E
 SHL: 1555 FNL 931 FEL
 Design: PLAN #1 2-25-10 RHS
 Latitude: 39° 59' 44.002 N
 Longitude: 109° 27' 25.409 W
 GL: 4984.00
 KB: WELL @ 4998.00ft (Original Well Elev)



Weatherford®



Azimuths to True North
 Magnetic North: 11.25°

Magnetic Field
 Strength: 52475.2nT
 Dip Angle: 65.93°
 Date: 2/25/2010
 Model: BGGM2009

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1294.00	1329.32	GREEN RIVER
4531.00	4698.05	WASATCH
7971.00	8138.05	MESAVERDE

CASING DETAILS

TVD	MD	Name	Size
2160.00	2250.90	8 5/8"	8.62

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	D Leg	T Face	V Sec	Annotation
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	Start Build 3.00
966.63	20.00	1.57	953.18	115.12	3.15	3.00	1.57	115.17	Start 2212.47 hold at 966.63 MD
3179.10	20.00	1.57	3032.23	871.51	23.85	0.00	0.00	871.84	Start Drop -2.00
4179.05	0.00	0.00	4012.00	1044.20	28.57	2.00	180.00	1044.59	Start 5250.00 hold at 4179.05 MD
9429.05	0.00	0.00	9262.00	1044.20	28.57	0.00	0.00	1044.59	TD at 9429.05

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

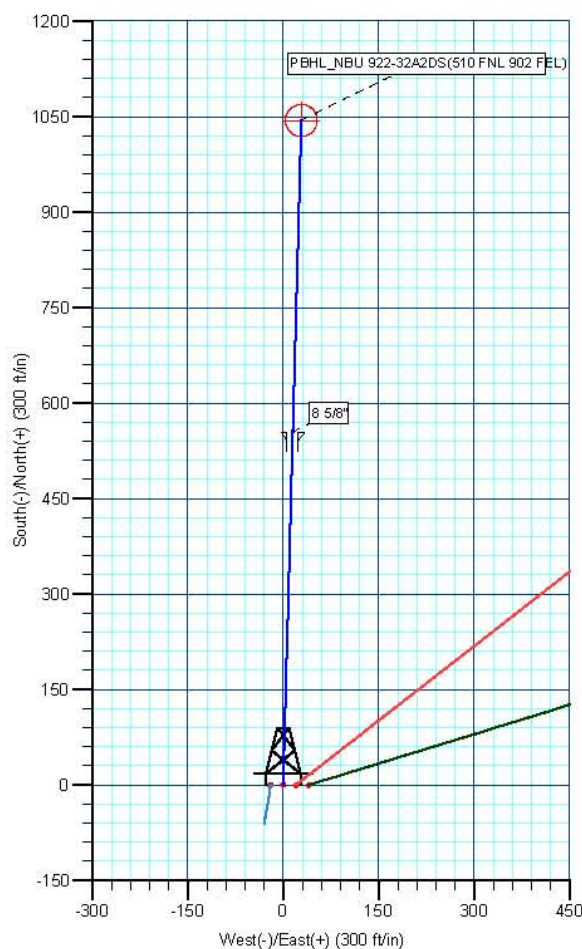
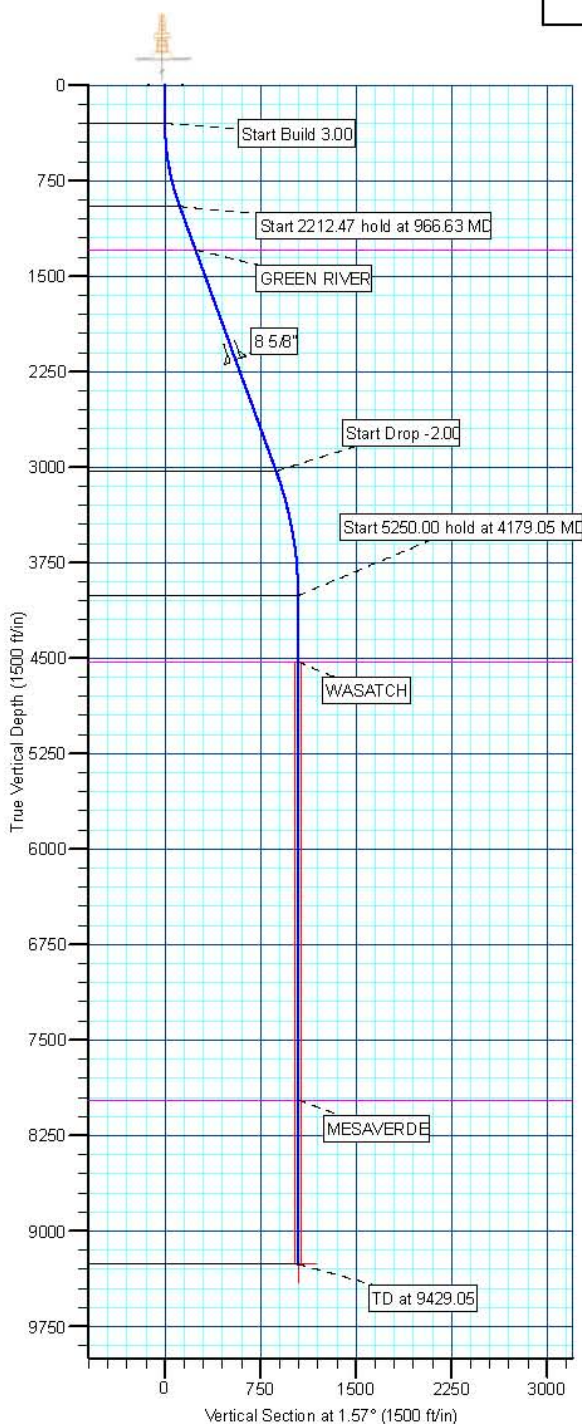
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	9262.00	1044.20	28.57	39° 59' 54.323 N	109° 27' 25.042 W	Circle (Radius: 25.00)

WELL DETAILS: NBU 922-32A2DS

+N/-S	+E/-W	Northing	Ground Level: Easting	4984.00 Latitude	Longitude	Slot
0.00	0.00	14528166.56	2072567.59	39° 59' 44.002 N	109° 27' 25.409 W	

LEGEND

- NBU 922-32A4DS, NBU 922-32A4DS, PLAN #1 2-25-10 RHS W
- NBU 922-32H EXISTING, NBU 922-32H EXISTING, NBU 922-32H EXISTING W
- NBU 922-32H1BS, NBU 922-32H1BS, PLAN #1 2-25-10 RHS W
- PLAN #1 2-25-10 RHS



Plan: PLAN #1 2-25-10 RHS (NBU 922-32A2DS/NBU 922-32A2DS)

Created By: Robert H. Scott Date: 9:20, February 26 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site:	NBU 922-32H2 Pad	North Reference:	True
Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-32A2DS		
Design:	PLAN #1 2-25-10 RHS		

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

Site		NBU 922-32H2 Pad, SECTION 32 T9S R22E			
Site Position:		Northing:	14,528,166.56 ft	Latitude:	39° 59' 44.002 N
From:	Lat/Long	Easting:	2,072,567.59 ft	Longitude:	109° 27' 25.409 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.99 °

Well	NBU 922-32A2DS					
Well Position	+N/-S	0.00 ft	Northing:	14,528,166.56 ft	Latitude:	39° 59' 44.002 N
	+E/-W	0.00 ft	Easting:	2,072,567.59 ft	Longitude:	109° 27' 25.409 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,984.00 ft

Wellbore	NBU 922-32A2DS				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	2/25/2010	11.25	65.93	52,475

Design	PLAN #1 2-25-10 RHS				
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	1.57	

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	
966.63	20.00	1.57	953.18	115.12	3.15	3.00	3.00	0.00	1.57	
3,179.10	20.00	1.57	3,032.23	871.51	23.85	0.00	0.00	0.00	0.00	
4,179.05	0.00	0.00	4,012.00	1,044.20	28.57	2.00	-2.00	0.00	180.00	
9,429.05	0.00	0.00	9,262.00	1,044.20	28.57	0.00	0.00	0.00	0.00	PBHL_NBU 922-32

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site:	NBU 922-32H2 Pad	North Reference:	True
Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-32A2DS		
Design:	PLAN #1 2-25-10 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 3.00									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	3.00	1.57	399.95	2.62	0.07	2.62	3.00	3.00	0.00
500.00	6.00	1.57	499.63	10.46	0.29	10.46	3.00	3.00	0.00
600.00	9.00	1.57	598.77	23.50	0.64	23.51	3.00	3.00	0.00
700.00	12.00	1.57	697.08	41.72	1.14	41.74	3.00	3.00	0.00
800.00	15.00	1.57	794.31	65.05	1.78	65.08	3.00	3.00	0.00
900.00	18.00	1.57	890.18	93.44	2.56	93.48	3.00	3.00	0.00
Start 2212.47 hold at 966.63 MD									
966.63	20.00	1.57	953.18	115.12	3.15	115.17	3.00	3.00	0.00
1,000.00	20.00	1.57	984.53	126.53	3.46	126.58	0.00	0.00	0.00
1,100.00	20.00	1.57	1,078.50	160.72	4.40	160.78	0.00	0.00	0.00
1,200.00	20.00	1.57	1,172.47	194.91	5.33	194.98	0.00	0.00	0.00
1,300.00	20.00	1.57	1,266.44	229.09	6.27	229.18	0.00	0.00	0.00
GREEN RIVER									
1,329.32	20.00	1.57	1,294.00	239.12	6.54	239.21	0.00	0.00	0.00
1,400.00	20.00	1.57	1,360.41	263.28	7.20	263.38	0.00	0.00	0.00
1,500.00	20.00	1.57	1,454.38	297.47	8.14	297.58	0.00	0.00	0.00
1,600.00	20.00	1.57	1,548.35	331.66	9.08	331.78	0.00	0.00	0.00
1,700.00	20.00	1.57	1,642.32	365.84	10.01	365.98	0.00	0.00	0.00
1,800.00	20.00	1.57	1,736.29	400.03	10.95	400.18	0.00	0.00	0.00
1,900.00	20.00	1.57	1,830.26	434.22	11.88	434.38	0.00	0.00	0.00
2,000.00	20.00	1.57	1,924.23	468.41	12.82	468.58	0.00	0.00	0.00
2,100.00	20.00	1.57	2,018.20	502.59	13.75	502.78	0.00	0.00	0.00
2,200.00	20.00	1.57	2,112.17	536.78	14.69	536.98	0.00	0.00	0.00
8 5/8"									
2,250.90	20.00	1.57	2,160.00	554.18	15.16	554.39	0.00	0.00	0.00
2,300.00	20.00	1.57	2,206.14	570.97	15.62	571.18	0.00	0.00	0.00
2,400.00	20.00	1.57	2,300.11	605.16	16.56	605.38	0.00	0.00	0.00
2,500.00	20.00	1.57	2,394.08	639.34	17.49	639.58	0.00	0.00	0.00
2,600.00	20.00	1.57	2,488.05	673.53	18.43	673.78	0.00	0.00	0.00
2,700.00	20.00	1.57	2,582.02	707.72	19.37	707.98	0.00	0.00	0.00
2,800.00	20.00	1.57	2,675.99	741.91	20.30	742.18	0.00	0.00	0.00
2,900.00	20.00	1.57	2,769.96	776.09	21.24	776.38	0.00	0.00	0.00
3,000.00	20.00	1.57	2,863.93	810.28	22.17	810.58	0.00	0.00	0.00
3,100.00	20.00	1.57	2,957.90	844.47	23.11	844.78	0.00	0.00	0.00
Start Drop -2.00									
3,179.10	20.00	1.57	3,032.23	871.51	23.85	871.84	0.00	0.00	0.00
3,200.00	19.58	1.57	3,051.90	878.58	24.04	878.91	2.00	-2.00	0.00
3,300.00	17.58	1.57	3,146.68	910.44	24.91	910.78	2.00	-2.00	0.00
3,400.00	15.58	1.57	3,242.52	938.96	25.69	939.31	2.00	-2.00	0.00
3,500.00	13.58	1.57	3,339.29	964.12	26.38	964.48	2.00	-2.00	0.00
3,600.00	11.58	1.57	3,436.89	985.90	26.98	986.27	2.00	-2.00	0.00
3,700.00	9.58	1.57	3,535.18	1,004.25	27.48	1,004.63	2.00	-2.00	0.00
3,800.00	7.58	1.57	3,634.06	1,019.17	27.89	1,019.55	2.00	-2.00	0.00
3,900.00	5.58	1.57	3,733.39	1,030.62	28.20	1,031.01	2.00	-2.00	0.00
4,000.00	3.58	1.57	3,833.07	1,038.61	28.42	1,038.99	2.00	-2.00	0.00
4,100.00	1.58	1.57	3,932.96	1,043.11	28.54	1,043.50	2.00	-2.00	0.00
Start 5250.00 hold at 4179.05 MD									
4,179.05	0.00	0.00	4,012.00	1,044.20	28.57	1,044.59	2.00	-2.00	0.00
4,200.00	0.00	0.00	4,032.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
4,300.00	0.00	0.00	4,132.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
4,400.00	0.00	0.00	4,232.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site:	NBU 922-32H2 Pad	North Reference:	True
Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-32A2DS		
Design:	PLAN #1 2-25-10 RHS		

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)
4,500.00	0.00	0.00	4,332.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
4,600.00	0.00	0.00	4,432.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
WASATCH									
4,698.05	0.00	0.00	4,531.00	1,044.20	28.57	1,044.59	0.00	0.00	0.00
4,700.00	0.00	0.00	4,532.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
4,800.00	0.00	0.00	4,632.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
4,900.00	0.00	0.00	4,732.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,000.00	0.00	0.00	4,832.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,100.00	0.00	0.00	4,932.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,200.00	0.00	0.00	5,032.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,300.00	0.00	0.00	5,132.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,400.00	0.00	0.00	5,232.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,500.00	0.00	0.00	5,332.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,600.00	0.00	0.00	5,432.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,700.00	0.00	0.00	5,532.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,800.00	0.00	0.00	5,632.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
5,900.00	0.00	0.00	5,732.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,000.00	0.00	0.00	5,832.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,100.00	0.00	0.00	5,932.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,200.00	0.00	0.00	6,032.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,300.00	0.00	0.00	6,132.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,400.00	0.00	0.00	6,232.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,500.00	0.00	0.00	6,332.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,600.00	0.00	0.00	6,432.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,700.00	0.00	0.00	6,532.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,800.00	0.00	0.00	6,632.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
6,900.00	0.00	0.00	6,732.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,000.00	0.00	0.00	6,832.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,100.00	0.00	0.00	6,932.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,200.00	0.00	0.00	7,032.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,300.00	0.00	0.00	7,132.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,400.00	0.00	0.00	7,232.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,500.00	0.00	0.00	7,332.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,600.00	0.00	0.00	7,432.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,700.00	0.00	0.00	7,532.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,800.00	0.00	0.00	7,632.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
7,900.00	0.00	0.00	7,732.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
8,000.00	0.00	0.00	7,832.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
8,100.00	0.00	0.00	7,932.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
MESAVERDE									
8,138.05	0.00	0.00	7,971.00	1,044.20	28.57	1,044.59	0.00	0.00	0.00
8,200.00	0.00	0.00	8,032.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
8,300.00	0.00	0.00	8,132.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00
8,400.00	0.00	0.00	8,232.95	1,044.20	28.57	1,044.59	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site:	NBU 922-32H2 Pad	North Reference:	True
Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Wellbore:	NBU 922-32A2DS		
Design:	PLAN #1 2-25-10 RHS		

Design Targets**Target Name**

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
PBHL_NBU 922-32A2	0.00	0.00	9,262.00	1,044.20	28.57	14,529,211.09	2,072,578.08	39° 59' 54.323 N	109° 27' 25.042 W
- plan misses target center by 1029.05ft at 8400.00ft MD (8232.95 TVD, 1044.20 N, 28.57 E)									
- Circle (radius 25.00)									

Casing Points

Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(ft)	(ft)		(in)	(in)
2,250.90	2,160.00	8 5/8"	8.62	11.00

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
1,329.32	1,294.00	GREEN RIVER			
4,698.05	4,531.00	WASATCH			
8,138.05	7,971.00	MESAVERDE			

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
300.00	300.00	0.00	0.00	Start Build 3.00
966.63	953.18	115.12	3.15	Start 2212.47 hold at 966.63 MD
3,179.10	3,032.23	871.51	23.85	Start Drop -2.00
4,179.05	4,012.00	1,044.20	28.57	Start 5250.00 hold at 4179.05 MD
9,429.05	9,262.00	1,044.20	28.57	TD at 9429.05



ANADARKO PETROLEUM CORP.

**UINTAH COUNTY, UTAH (nad 27)
NBU 922-32H2 Pad
NBU 922-32A2DS**

**NBU 922-32A2DS
PLAN #1 2-25-10 RHS**

Anticollision Report

26 February, 2010



Weatherford®



Weatherford International Ltd.

Anticollision Report



Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 2-25-10 RHS		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	0.00 to 20,000.00ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 2/25/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	9,429.05	PLAN #1 2-25-10 RHS (NBU 922-32A2DS	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NBU 922-32H2 Pad						
NBU 922-32A4DS - NBU 922-32A4DS - PLAN #1 2-25-1	345.51	345.50	19.88	18.59	15.332	CC
NBU 922-32A4DS - NBU 922-32A4DS - PLAN #1 2-25-1	400.00	399.95	19.99	18.45	12.967	ES
NBU 922-32A4DS - NBU 922-32A4DS - PLAN #1 2-25-1	500.00	499.63	22.22	20.21	11.077	SF
NBU 922-32H EXISTING - NBU 922-32H EXISTING - NE	300.00	286.00	19.67	18.51	16.948	CC
NBU 922-32H EXISTING - NBU 922-32H EXISTING - NE	400.00	385.97	19.83	18.29	12.885	ES
NBU 922-32H EXISTING - NBU 922-32H EXISTING - NE	500.00	485.63	22.41	20.49	11.646	SF
NBU 922-32H1BS - NBU 922-32H1BS - PLAN #1 2-25-1	300.00	300.00	40.06	38.97	36.672	CC, ES
NBU 922-32H1BS - NBU 922-32H1BS - PLAN #1 2-25-1	9,300.00	9,175.67	1,026.42	981.73	22.966	SF

Offset Design												Offset Site Error:		0.00 ft
Survey Program: 0-MWD												Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	19.89	19.89					
100.00	100.00	100.00	100.00	0.10	0.10	90.00	0.00	19.89	19.89	19.70	0.19	102.896		
200.00	200.00	200.00	200.00	0.32	0.32	90.00	0.00	19.89	19.89	19.25	0.64	30.941		
300.00	300.00	300.00	300.00	0.55	0.55	90.00	0.00	19.89	19.89	18.80	1.09	18.208		
345.51	345.50	345.50	345.50	0.65	0.65	89.99	0.00	19.89	19.88	18.59	1.30	15.332	CC	
400.00	399.95	399.95	399.95	0.78	0.77	95.95	0.00	19.89	19.99	18.45	1.54	12.967	ES	
500.00	499.63	499.63	499.63	1.02	0.99	116.39	0.00	19.89	22.22	20.21	2.01	11.077	SF	
600.00	598.77	598.77	598.77	1.28	1.22	138.77	0.00	19.89	30.38	27.89	2.49	12.183		
700.00	697.08	697.08	697.08	1.61	1.44	153.74	0.00	19.89	45.74	42.76	2.98	15.365		
800.00	794.31	794.31	794.31	2.02	1.66	162.31	0.00	19.89	67.53	64.08	3.45	19.572		
900.00	890.18	890.18	890.18	2.52	1.87	167.32	0.00	19.89	95.03	91.11	3.92	24.247		
966.63	953.18	953.18	953.18	2.90	2.01	169.54	0.00	19.89	116.33	112.10	4.23	27.492		
1,000.00	984.53	984.53	984.53	3.10	2.08	170.47	0.00	19.89	127.59	123.20	4.39	29.061		
1,100.00	1,078.50	1,078.50	1,078.50	3.73	2.30	172.48	0.00	19.89	161.46	156.59	4.87	33.123		
1,200.00	1,172.47	1,172.47	1,172.47	4.36	2.51	173.79	0.00	19.89	195.45	190.08	5.37	36.411		
1,300.00	1,266.44	1,266.44	1,266.44	5.01	2.72	174.71	0.00	19.89	229.50	223.63	5.87	39.113		
1,400.00	1,360.41	1,360.41	1,360.41	5.66	2.93	175.40	0.00	19.89	263.59	257.21	6.37	41.363		
1,500.00	1,454.38	1,454.38	1,454.38	6.31	3.14	175.93	0.00	19.89	297.70	290.82	6.88	43.262		
1,600.00	1,548.35	1,548.35	1,548.35	6.97	3.35	176.35	0.00	19.89	331.83	324.44	7.39	44.883		
1,700.00	1,642.32	1,642.32	1,642.32	7.63	3.56	176.69	0.00	19.89	365.98	358.07	7.91	46.280		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design NBU 922-32H2 Pad - NBU 922-32A4DS - NBU 922-32A4DS - PLAN #1 2-25-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
1,800.00	1,736.29	1,736.29	1,736.29	8.29	3.77	176.97	0.00	19.89	400.13	391.71	8.42	47.497	
1,900.00	1,830.26	1,830.26	1,830.26	8.95	3.99	177.21	0.00	19.89	434.29	425.35	8.94	48.564	
2,000.00	1,924.23	1,924.23	1,924.23	9.62	4.20	177.41	0.00	19.89	468.46	459.00	9.46	49.508	
2,100.00	2,018.20	2,018.20	2,018.20	10.28	4.41	177.59	0.00	19.89	502.63	492.65	9.98	50.347	
2,200.00	2,112.17	2,112.17	2,112.17	10.95	4.62	177.74	0.00	19.89	536.81	526.30	10.51	51.099	
2,300.00	2,206.14	2,206.14	2,206.14	11.61	4.83	177.88	0.00	19.89	570.98	559.96	11.03	51.776	
2,400.00	2,300.11	2,314.49	2,314.47	12.28	5.07	177.90	0.89	21.04	604.45	592.88	11.58	52.219	
2,500.00	2,394.08	2,433.10	2,432.77	12.94	5.33	177.42	5.99	27.58	634.61	622.46	12.14	52.253	
2,600.00	2,488.05	2,553.61	2,552.20	13.61	5.61	176.45	15.79	40.15	661.22	648.47	12.74	51.886	
2,700.00	2,582.02	2,675.09	2,671.34	14.28	5.92	175.02	30.33	58.81	684.39	671.00	13.39	51.102	
2,800.00	2,675.99	2,796.56	2,788.72	14.94	6.28	173.20	49.49	83.41	704.36	690.24	14.12	49.886	
2,900.00	2,769.96	2,914.97	2,901.02	15.61	6.72	171.04	72.54	112.98	721.51	706.56	14.96	48.245	
3,000.00	2,863.93	3,010.72	2,990.99	16.28	7.13	169.21	92.67	138.81	738.05	722.26	15.79	46.756	
3,100.00	2,957.90	3,106.46	3,080.95	16.94	7.58	167.45	112.80	164.64	755.33	738.65	16.68	45.294	
3,179.10	3,032.23	3,182.19	3,152.12	17.47	7.96	166.12	128.72	185.08	769.49	752.07	17.42	44.172	
3,200.00	3,051.90	3,202.21	3,170.93	17.60	8.06	165.80	132.93	190.48	773.22	755.59	17.63	43.858	
3,300.00	3,146.68	3,298.21	3,261.14	18.09	8.56	164.23	153.11	216.37	789.50	770.87	18.63	42.379	
3,400.00	3,242.52	3,394.47	3,351.60	18.55	9.09	162.66	173.34	242.34	803.12	783.47	19.65	40.876	
3,500.00	3,339.29	3,490.89	3,442.20	18.97	9.64	161.06	193.61	268.36	814.14	793.46	20.68	39.365	
3,600.00	3,436.89	3,587.33	3,532.83	19.34	10.20	159.42	213.89	294.38	822.62	800.89	21.73	37.860	
3,700.00	3,535.18	3,683.69	3,623.38	19.67	10.77	157.72	234.14	320.37	828.63	805.85	22.78	36.371	
3,800.00	3,634.06	3,779.85	3,713.74	19.96	11.35	155.94	254.36	346.31	832.27	808.43	23.84	34.906	
3,900.00	3,733.39	3,875.69	3,803.79	20.19	11.94	154.07	274.51	372.17	833.65	808.75	24.91	33.472	
4,000.00	3,833.07	3,971.09	3,893.44	20.39	12.53	152.10	294.56	397.91	832.93	806.96	25.97	32.074	
4,100.00	3,932.96	4,065.94	3,982.57	20.53	13.13	150.01	314.50	423.50	830.25	803.22	27.03	30.720	
4,179.05	4,012.00	4,140.45	4,052.59	20.61	13.60	149.83	330.17	443.60	826.88	799.02	27.86	29.684	
4,200.00	4,032.95	4,160.14	4,071.09	20.63	13.72	149.37	334.30	448.91	825.88	797.80	28.09	29.403	
4,300.00	4,132.95	4,254.11	4,159.39	20.71	14.33	147.15	354.06	474.26	821.96	792.76	29.20	28.148	
4,400.00	4,232.95	4,348.07	4,247.69	20.80	14.93	144.91	373.81	499.61	819.46	789.14	30.31	27.034	
4,500.00	4,332.95	4,442.04	4,335.99	20.89	15.54	142.66	393.57	524.96	818.37	786.96	31.41	26.052	
4,526.01	4,358.96	4,466.49	4,358.96	20.92	15.70	142.07	398.71	531.56	818.32	786.62	31.70	25.817	
4,600.00	4,432.95	4,536.01	4,424.30	20.99	16.15	140.41	413.32	550.31	818.71	786.22	32.50	25.193	
4,700.00	4,532.95	4,631.81	4,514.78	21.08	16.68	138.21	432.65	575.12	820.38	786.92	33.47	24.513	
4,800.00	4,632.95	4,729.83	4,608.39	21.18	17.14	136.19	450.49	598.02	823.01	788.69	34.33	23.976	
4,900.00	4,732.95	4,829.83	4,704.87	21.28	17.57	134.38	466.66	618.76	826.23	791.12	35.11	23.531	
5,000.00	4,832.95	4,931.65	4,803.98	21.38	17.98	132.78	480.98	637.14	829.70	793.88	35.82	23.161	
5,100.00	4,932.95	5,035.05	4,905.41	21.48	18.34	131.42	493.30	652.96	833.12	796.67	36.46	22.853	
5,200.00	5,032.95	5,139.80	5,008.84	21.59	18.66	130.31	503.48	666.02	836.23	799.22	37.01	22.594	
5,300.00	5,132.95	5,245.65	5,113.90	21.69	18.94	129.44	511.40	676.18	838.83	801.33	37.49	22.372	
5,400.00	5,232.95	5,352.32	5,220.17	21.80	19.17	128.84	516.96	683.32	840.73	802.83	37.90	22.181	
5,500.00	5,332.95	5,459.51	5,327.24	21.91	19.36	128.50	520.10	687.34	841.84	803.59	38.24	22.012	
5,600.00	5,432.95	5,565.23	5,432.95	22.02	19.50	128.43	520.83	688.28	842.10	803.58	38.52	21.861	
5,700.00	5,532.95	5,665.23	5,532.95	22.14	19.63	128.43	520.83	688.28	842.10	803.32	38.78	21.715	
5,800.00	5,632.95	5,765.23	5,632.95	22.25	19.76	128.43	520.83	688.28	842.10	803.05	39.05	21.567	
5,900.00	5,732.95	5,865.23	5,732.95	22.37	19.89	128.43	520.83	688.28	842.10	802.78	39.32	21.419	
6,000.00	5,832.95	5,965.23	5,832.95	22.49	20.03	128.43	520.83	688.28	842.10	802.51	39.59	21.272	
6,100.00	5,932.95	6,065.23	5,932.95	22.61	20.17	128.43	520.83	688.28	842.10	802.23	39.86	21.125	
6,200.00	6,032.95	6,165.23	6,032.95	22.73	20.31	128.43	520.83	688.28	842.10	801.96	40.14	20.978	
6,300.00	6,132.95	6,265.23	6,132.95	22.85	20.45	128.43	520.83	688.28	842.10	801.67	40.42	20.832	
6,400.00	6,232.95	6,365.23	6,232.95	22.98	20.59	128.43	520.83	688.28	842.10	801.39	40.71	20.686	
6,500.00	6,332.95	6,465.23	6,332.95	23.10	20.74	128.43	520.83	688.28	842.10	801.10	41.00	20.541	
6,600.00	6,432.95	6,565.23	6,432.95	23.23	20.88	128.43	520.83	688.28	842.10	800.81	41.29	20.396	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design NBU 922-32H2 Pad - NBU 922-32A4DS - NBU 922-32A4DS - PLAN #1 2-25-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (ft)	Offset Wellbore Centre +E-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,700.00	6,532.95	6,665.23	6,532.95	23.36	21.03	128.43	520.83	688.28	842.10	800.52	41.58	20.252	
6,800.00	6,632.95	6,765.23	6,632.95	23.49	21.18	128.43	520.83	688.28	842.10	800.22	41.88	20.109	
6,900.00	6,732.95	6,865.23	6,732.95	23.62	21.33	128.43	520.83	688.28	842.10	799.92	42.18	19.966	
7,000.00	6,832.95	6,965.23	6,832.95	23.76	21.48	128.43	520.83	688.28	842.10	799.62	42.48	19.825	
7,100.00	6,932.95	7,065.23	6,932.95	23.89	21.63	128.43	520.83	688.28	842.10	799.32	42.78	19.684	
7,200.00	7,032.95	7,165.23	7,032.95	24.03	21.79	128.43	520.83	688.28	842.10	799.01	43.09	19.544	
7,300.00	7,132.95	7,265.23	7,132.95	24.17	21.94	128.43	520.83	688.28	842.10	798.70	43.40	19.404	
7,400.00	7,232.95	7,365.23	7,232.95	24.30	22.10	128.43	520.83	688.28	842.10	798.39	43.71	19.266	
7,500.00	7,332.95	7,465.23	7,332.95	24.45	22.26	128.43	520.83	688.28	842.10	798.07	44.02	19.129	
7,600.00	7,432.95	7,565.23	7,432.95	24.59	22.42	128.43	520.83	688.28	842.10	797.76	44.34	18.992	
7,700.00	7,532.95	7,665.23	7,532.95	24.73	22.57	128.43	520.83	688.28	842.10	797.44	44.66	18.856	
7,800.00	7,632.95	7,765.23	7,632.95	24.87	22.74	128.43	520.83	688.28	842.10	797.12	44.98	18.722	
7,900.00	7,732.95	7,865.23	7,732.95	25.02	22.90	128.43	520.83	688.28	842.10	796.79	45.30	18.588	
8,000.00	7,832.95	7,965.23	7,832.95	25.16	23.06	128.43	520.83	688.28	842.10	796.47	45.63	18.456	
8,100.00	7,932.95	8,065.23	7,932.95	25.31	23.22	128.43	520.83	688.28	842.10	796.14	45.95	18.324	
8,200.00	8,032.95	8,165.23	8,032.95	25.46	23.39	128.43	520.83	688.28	842.10	795.81	46.28	18.194	
8,300.00	8,132.95	8,265.23	8,132.95	25.61	23.56	128.43	520.83	688.28	842.10	795.48	46.62	18.065	
8,400.00	8,232.95	8,365.23	8,232.95	25.76	23.72	128.43	520.83	688.28	842.10	795.15	46.95	17.936	
8,500.00	8,332.95	8,465.23	8,332.95	25.91	23.89	128.43	520.83	688.28	842.10	794.81	47.28	17.809	
8,600.00	8,432.95	8,565.23	8,432.95	26.06	24.06	128.43	520.83	688.28	842.10	794.48	47.62	17.683	
8,700.00	8,532.95	8,665.23	8,532.95	26.22	24.23	128.43	520.83	688.28	842.10	794.14	47.96	17.558	
8,800.00	8,632.95	8,765.23	8,632.95	26.37	24.40	128.43	520.83	688.28	842.10	793.80	48.30	17.434	
8,900.00	8,732.95	8,865.23	8,732.95	26.53	24.57	128.43	520.83	688.28	842.10	793.45	48.64	17.312	
9,000.00	8,832.95	8,965.23	8,832.95	26.69	24.74	128.43	520.83	688.28	842.10	793.11	48.99	17.190	
9,100.00	8,932.95	9,065.23	8,932.95	26.84	24.92	128.43	520.83	688.28	842.10	792.76	49.33	17.069	
9,200.00	9,032.95	9,165.23	9,032.95	27.00	25.09	128.43	520.83	688.28	842.10	792.42	49.68	16.950	
9,300.00	9,132.95	9,265.23	9,132.95	27.16	25.26	128.43	520.83	688.28	842.10	792.07	50.03	16.832	
9,363.79	9,196.74	9,329.02	9,196.74	27.27	25.38	128.43	520.83	688.28	842.10	791.84	50.25	16.757	
9,400.00	9,232.95	9,357.28	9,225.00	27.32	25.43	128.43	520.83	688.28	842.13	791.77	50.37	16.720	
9,429.05	9,262.00	9,357.28	9,225.00	27.37	25.43	128.43	520.83	688.28	842.91	792.49	50.42	16.718	

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design NBU 922-32H2 Pad - NBU 922-32H EXISTING - NBU 922-32H EXISTING - NBU 922-32H EXISTING												Offset Site Error:	0.00 ft
Survey Program: 100-NS-GYRO-MS												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.00	0.00	-19.89	24.32				
100.00	100.00	86.04	86.04	0.10	0.11	-89.60	0.14	-19.81	19.81	19.60	0.21	93.927	
200.00	200.00	186.01	186.01	0.32	0.35	-88.92	0.37	-19.67	19.67	19.00	0.68	29.087	
238.76	238.76	224.76	224.76	0.41	0.46	-88.91	0.38	-19.67	19.67	18.81	0.86	22.769	
300.00	300.00	286.00	286.00	0.55	0.61	-88.91	0.38	-19.67	19.67	18.51	1.16	16.948 CC	
332.79	332.79	318.80	318.80	0.62	0.68	-91.32	0.37	-19.66	19.67	18.38	1.30	15.176	
400.00	399.95	385.97	385.97	0.78	0.77	-98.49	0.22	-19.61	19.83	18.29	1.54	12.885 ES	
500.00	499.63	485.63	485.63	1.02	0.92	-119.34	-0.03	-19.52	22.41	20.49	1.92	11.646 SF	
600.00	598.77	584.77	584.77	1.28	1.15	-140.64	-0.04	-19.52	31.00	28.59	2.41	12.862	
700.00	697.08	682.94	682.94	1.61	1.31	-154.84	-0.19	-19.51	46.72	43.90	2.81	16.612	
800.00	794.31	780.07	780.06	2.02	1.40	-163.10	-0.59	-19.43	68.99	65.85	3.14	21.958	
900.00	890.18	876.42	876.42	2.52	1.55	-167.94	-0.75	-19.30	96.69	93.16	3.53	27.390	
966.63	953.18	939.49	939.49	2.90	1.68	-170.03	-0.54	-19.24	117.81	113.98	3.82	30.812	
1,000.00	984.53	970.70	970.70	3.10	1.75	-170.90	-0.48	-19.23	129.02	125.03	3.99	32.364	
1,100.00	1,078.50	1,064.51	1,064.50	3.73	1.98	-172.80	-0.46	-19.22	162.90	158.41	4.49	36.308	
1,200.00	1,172.47	1,158.19	1,158.18	4.36	2.17	-174.06	-0.51	-19.17	196.94	191.98	4.97	39.660	
1,300.00	1,266.44	1,251.94	1,251.93	5.01	2.32	-175.04	-0.76	-18.82	231.22	225.80	5.42	42.672	
1,400.00	1,360.41	1,346.14	1,346.13	5.66	2.49	-175.83	-0.99	-18.19	265.49	259.60	5.89	45.102	
1,500.00	1,454.38	1,439.64	1,439.63	6.31	2.67	-176.33	-1.08	-18.03	299.70	293.33	6.37	47.038	
1,600.00	1,548.35	1,531.69	1,531.68	6.97	2.82	-176.77	-1.61	-17.69	334.35	327.52	6.83	48.981	
1,700.00	1,642.32	1,625.85	1,625.84	7.63	2.93	-177.02	-2.48	-18.08	369.40	362.15	7.25	50.942	
1,800.00	1,736.29	1,724.41	1,724.39	8.29	3.07	-177.14	-2.26	-19.00	403.41	395.70	7.71	52.345	
1,900.00	1,830.26	1,816.83	1,816.81	8.95	3.25	-177.32	-2.03	-19.31	437.36	429.16	8.20	53.341	
2,000.00	1,924.23	1,913.19	1,913.17	9.62	3.46	-177.48	-1.56	-19.56	471.08	462.37	8.71	54.079	
2,100.00	2,018.20	2,003.28	2,003.25	10.28	3.61	-177.57	-1.33	-20.16	505.06	495.88	9.18	55.012	
2,200.00	2,112.17	2,096.61	2,096.58	10.95	3.73	-177.66	-1.52	-20.72	539.46	529.84	9.62	56.061	
2,300.00	2,206.14	2,185.51	2,185.48	11.61	3.84	-177.78	-2.14	-20.89	574.31	564.26	10.05	57.129	
2,400.00	2,300.11	2,276.15	2,276.11	12.28	3.96	-177.91	-3.44	-20.91	609.83	599.35	10.49	58.143	
2,500.00	2,394.08	2,370.90	2,370.85	12.94	4.09	-178.03	-4.97	-20.94	645.53	634.59	10.94	59.016	
2,600.00	2,488.05	2,463.72	2,463.66	13.61	4.23	-178.12	-6.27	-21.03	681.02	669.63	11.40	59.760	
2,700.00	2,582.02	2,555.89	2,555.81	14.28	4.38	-178.18	-7.76	-21.51	716.75	704.89	11.86	60.427	
2,800.00	2,675.99	2,648.97	2,648.88	14.94	4.54	-178.25	-9.36	-21.70	752.56	740.22	12.34	61.006	
2,900.00	2,769.96	2,739.60	2,739.49	15.61	4.70	-178.33	-11.01	-21.73	788.45	775.64	12.81	61.534	
3,000.00	2,863.93	2,825.69	2,825.56	16.28	4.86	-178.39	-13.15	-21.84	824.96	811.67	13.29	62.077	
3,100.00	2,957.90	2,910.63	2,910.45	16.94	5.02	-178.45	-16.11	-22.02	862.41	848.64	13.77	62.637	
3,179.10	3,032.23	2,986.87	2,986.63	17.47	5.17	-178.49	-18.93	-22.26	892.20	878.03	14.17	62.978	
3,200.00	3,051.90	3,006.67	3,006.42	17.60	5.21	-178.51	-19.62	-22.33	899.95	885.67	14.28	63.015	
3,300.00	3,146.68	3,098.56	3,098.25	18.09	5.40	-178.56	-22.90	-22.78	935.19	920.39	14.80	63.208	
3,400.00	3,242.52	3,191.48	3,191.10	18.55	5.59	-178.59	-26.38	-23.39	967.31	952.03	15.29	63.283	
3,500.00	3,339.29	3,287.18	3,286.73	18.97	5.79	-178.61	-30.06	-24.16	996.21	980.45	15.76	63.205	
3,600.00	3,436.89	3,384.03	3,383.50	19.34	6.00	-178.61	-33.76	-25.02	1,021.74	1,005.53	16.21	63.023	
3,700.00	3,535.18	3,479.62	3,479.02	19.67	6.21	-178.60	-37.48	-25.92	1,043.95	1,027.31	16.64	62.753	
3,800.00	3,634.06	3,575.43	3,574.75	19.96	6.43	-178.60	-41.42	-26.75	1,062.95	1,045.92	17.03	62.416	
3,900.00	3,733.39	3,671.76	3,670.98	20.19	6.65	-178.59	-45.60	-27.52	1,078.75	1,061.35	17.40	62.005	
4,000.00	3,833.07	3,768.51	3,767.63	20.39	6.87	-178.58	-50.02	-28.17	1,091.31	1,073.57	17.74	61.534	
4,100.00	3,932.96	3,867.24	3,866.25	20.53	7.10	-178.58	-54.71	-28.68	1,100.57	1,082.53	18.05	60.985	
4,179.05	4,012.00	3,946.11	3,945.03	20.61	7.28	-177.02	-58.49	-28.91	1,105.45	1,087.18	18.27	60.500	
4,200.00	4,032.95	3,967.03	3,965.92	20.63	7.33	-177.02	-59.49	-28.95	1,106.45	1,088.10	18.35	60.289	
4,300.00	4,132.95	4,000.00	3,998.85	20.71	7.41	-177.02	-61.07	-28.98	1,113.26	1,094.67	18.59	59.874	
4,400.00	4,232.95	4,000.00	3,998.85	20.80	7.41	-177.02	-61.07	-28.98	1,128.44	1,109.68	18.76	60.152	
4,500.00	4,332.95	4,000.00	3,998.85	20.89	7.41	-177.02	-61.07	-28.98	1,152.12	1,133.19	18.93	60.869	
4,600.00	4,432.95	4,000.00	3,998.85	20.99	7.41	-177.02	-61.07	-28.98	1,183.81	1,164.71	19.10	61.985	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design NBU 922-32H2 Pad - NBU 922-32H EXISTING - NBU 922-32H EXISTING - NBU 922-32H EXISTING													Offset Site Error:	0.00 ft
Survey Program: 100-NS-GYRO-MS													Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
4,700.00	4,532.95	4,000.00	3,998.85	21.08	7.41	-177.02	-61.07	-28.98	1,222.88	1,203.61	19.27	63.459		
4,800.00	4,632.95	4,000.00	3,998.85	21.18	7.41	-177.02	-61.07	-28.98	1,268.64	1,249.20	19.44	65.246		
4,900.00	4,732.95	4,000.00	3,998.85	21.28	7.41	-177.02	-61.07	-28.98	1,320.40	1,300.78	19.62	67.300		
5,000.00	4,832.95	4,000.00	3,998.85	21.38	7.41	-177.02	-61.07	-28.98	1,377.49	1,357.70	19.80	69.582		
5,100.00	4,932.95	4,000.00	3,998.85	21.48	7.41	-177.02	-61.07	-28.98	1,439.27	1,419.30	19.98	72.053		
5,200.00	5,032.95	4,000.00	3,998.85	21.59	7.41	-177.02	-61.07	-28.98	1,505.17	1,485.01	20.16	74.679		
5,300.00	5,132.95	4,000.00	3,998.85	21.69	7.41	-177.02	-61.07	-28.98	1,574.66	1,554.32	20.34	77.430		
5,400.00	5,232.95	4,000.00	3,998.85	21.80	7.41	-177.02	-61.07	-28.98	1,647.29	1,626.77	20.52	80.280		
5,500.00	5,332.95	4,000.00	3,998.85	21.91	7.41	-177.02	-61.07	-28.98	1,722.67	1,701.96	20.70	83.207		
5,600.00	5,432.95	4,000.00	3,998.85	22.02	7.41	-177.02	-61.07	-28.98	1,800.44	1,779.56	20.89	86.193		
5,700.00	5,532.95	4,000.00	3,998.85	22.14	7.41	-177.02	-61.07	-28.98	1,880.32	1,859.25	21.08	89.220		
5,800.00	5,632.95	4,000.00	3,998.85	22.25	7.41	-177.02	-61.07	-28.98	1,962.05	1,940.79	21.26	92.277		
5,900.00	5,732.95	4,000.00	3,998.85	22.37	7.41	-177.02	-61.07	-28.98	2,045.40	2,023.95	21.45	95.350		
6,000.00	5,832.95	4,000.00	3,998.85	22.49	7.41	-177.02	-61.07	-28.98	2,130.18	2,108.54	21.64	98.432		
6,100.00	5,932.95	4,000.00	3,998.85	22.61	7.41	-177.02	-61.07	-28.98	2,216.24	2,194.40	21.83	101.514		
6,200.00	6,032.95	4,000.00	3,998.85	22.73	7.41	-177.02	-61.07	-28.98	2,303.41	2,281.39	22.02	104.589		
6,300.00	6,132.95	4,000.00	3,998.85	22.85	7.41	-177.02	-61.07	-28.98	2,391.60	2,369.38	22.22	107.651		
6,400.00	6,232.95	4,000.00	3,998.85	22.98	7.41	-177.02	-61.07	-28.98	2,480.68	2,458.27	22.41	110.696		
6,500.00	6,332.95	4,000.00	3,998.85	23.10	7.41	-177.02	-61.07	-28.98	2,570.56	2,547.96	22.60	113.721		
6,600.00	6,432.95	4,000.00	3,998.85	23.23	7.41	-177.02	-61.07	-28.98	2,661.16	2,638.36	22.80	116.721		
6,700.00	6,532.95	4,000.00	3,998.85	23.36	7.41	-177.02	-61.07	-28.98	2,752.42	2,729.42	23.00	119.694		
6,800.00	6,632.95	4,000.00	3,998.85	23.49	7.41	-177.02	-61.07	-28.98	2,844.26	2,821.07	23.19	122.639		
6,900.00	6,732.95	4,000.00	3,998.85	23.62	7.41	-177.02	-61.07	-28.98	2,936.64	2,913.25	23.39	125.553		
7,000.00	6,832.95	4,000.00	3,998.85	23.76	7.41	-177.02	-61.07	-28.98	3,029.50	3,005.91	23.59	128.435		
7,100.00	6,932.95	4,000.00	3,998.85	23.89	7.41	-177.02	-61.07	-28.98	3,122.80	3,099.02	23.79	131.283		
7,200.00	7,032.95	4,000.00	3,998.85	24.03	7.41	-177.02	-61.07	-28.98	3,216.51	3,192.52	23.99	134.097		
7,300.00	7,132.95	4,000.00	3,998.85	24.17	7.41	-177.02	-61.07	-28.98	3,310.58	3,286.39	24.19	136.877		
7,400.00	7,232.95	4,000.00	3,998.85	24.30	7.41	-177.02	-61.07	-28.98	3,404.99	3,380.60	24.39	139.621		
7,500.00	7,332.95	4,000.00	3,998.85	24.45	7.41	-177.02	-61.07	-28.98	3,499.71	3,475.12	24.59	142.329		
7,600.00	7,432.95	4,000.00	3,998.85	24.59	7.41	-177.02	-61.07	-28.98	3,594.72	3,569.93	24.79	145.002		
7,700.00	7,532.95	4,000.00	3,998.85	24.73	7.41	-177.02	-61.07	-28.98	3,689.99	3,664.99	24.99	147.639		
7,800.00	7,632.95	4,000.00	3,998.85	24.87	7.41	-177.02	-61.07	-28.98	3,785.50	3,760.31	25.20	150.240		
7,900.00	7,732.95	4,000.00	3,998.85	25.02	7.41	-177.02	-61.07	-28.98	3,881.24	3,855.84	25.40	152.805		
8,000.00	7,832.95	4,000.00	3,998.85	25.16	7.41	-177.02	-61.07	-28.98	3,977.19	3,951.59	25.60	155.334		
8,100.00	7,932.95	4,000.00	3,998.85	25.31	7.41	-177.02	-61.07	-28.98	4,073.34	4,047.53	25.81	157.828		
8,200.00	8,032.95	4,000.00	3,998.85	25.46	7.41	-177.02	-61.07	-28.98	4,169.67	4,143.65	26.01	160.287		
8,300.00	8,132.95	4,000.00	3,998.85	25.61	7.41	-177.02	-61.07	-28.98	4,266.16	4,239.94	26.22	162.711		
8,400.00	8,232.95	4,000.00	3,998.85	25.76	7.41	-177.02	-61.07	-28.98	4,362.81	4,336.39	26.43	165.101		
8,500.00	8,332.95	4,000.00	3,998.85	25.91	7.41	-177.02	-61.07	-28.98	4,459.61	4,432.98	26.63	167.457		
8,600.00	8,432.95	4,000.00	3,998.85	26.06	7.41	-177.02	-61.07	-28.98	4,556.55	4,529.72	26.84	169.779		
8,700.00	8,532.95	4,000.00	3,998.85	26.22	7.41	-177.02	-61.07	-28.98	4,653.62	4,626.58	27.05	172.067		
8,800.00	8,632.95	4,000.00	3,998.85	26.37	7.41	-177.02	-61.07	-28.98	4,750.81	4,723.56	27.25	174.323		
8,900.00	8,732.95	4,000.00	3,998.85	26.53	7.41	-177.02	-61.07	-28.98	4,848.12	4,820.66	27.46	176.547		
9,000.00	8,832.95	4,000.00	3,998.85	26.69	7.41	-177.02	-61.07	-28.98	4,945.53	4,917.86	27.67	178.739		
9,100.00	8,932.95	4,000.00	3,998.85	26.84	7.41	-177.02	-61.07	-28.98	5,043.04	5,015.17	27.88	180.899		
9,200.00	9,032.95	4,000.00	3,998.85	27.00	7.41	-177.02	-61.07	-28.98	5,140.65	5,112.57	28.09	183.029		
9,300.00	9,132.95	4,000.00	3,998.85	27.16	7.41	-177.02	-61.07	-28.98	5,238.35	5,210.06	28.30	185.128		
9,400.00	9,232.95	4,000.00	3,998.85	27.32	7.41	-177.02	-61.07	-28.98	5,336.14	5,307.63	28.51	187.197		
9,429.05	9,262.00	4,000.00	3,998.85	27.37	7.41	-177.02	-61.07	-28.98	5,364.56	5,335.99	28.57	187.792		

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design NBU 922-32H2 Pad - NBU 922-32H1BS - NBU 922-32H1BS - PLAN #1 2-25-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (ft)	+E-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	40.06	40.06				
100.00	100.00	100.00	100.00	0.10	0.10	90.00	0.00	40.06	40.06	39.87	0.19	207.242	
200.00	200.00	200.00	200.00	0.32	0.32	90.00	0.00	40.06	40.06	39.42	0.64	62.317	
300.00	300.00	300.00	300.00	0.55	0.55	90.00	0.00	40.06	40.06	38.97	1.09	36.672	CC, ES
400.00	399.95	397.95	397.90	0.78	0.76	90.82	0.74	42.46	42.48	40.95	1.53	27.724	
500.00	499.63	495.36	495.02	1.02	0.99	96.52	2.93	49.60	50.10	48.10	2.00	25.060	
600.00	598.77	591.74	590.61	1.28	1.25	102.76	6.54	61.32	63.53	61.01	2.52	25.181	
700.00	697.08	686.60	683.96	1.61	1.57	107.87	11.46	77.33	83.02	79.90	3.13	26.551	
800.00	794.31	780.83	775.84	2.02	1.95	111.69	17.61	97.34	108.27	104.44	3.83	28.261	
900.00	890.18	876.19	868.59	2.52	2.38	115.51	24.12	118.50	136.80	132.19	4.61	29.693	
966.63	953.18	939.08	929.76	2.90	2.67	118.05	28.41	132.45	157.44	152.27	5.16	30.482	
1,000.00	984.53	970.43	960.25	3.10	2.81	119.50	30.55	139.41	168.18	162.72	5.45	30.839	
1,100.00	1,078.50	1,064.37	1,051.63	3.73	3.25	122.92	36.96	160.25	200.82	194.49	6.33	31.732	
1,200.00	1,172.47	1,158.31	1,143.01	4.36	3.70	125.39	43.36	181.10	233.94	226.72	7.21	32.424	
1,300.00	1,266.44	1,252.26	1,234.38	5.01	4.16	127.25	49.77	201.94	267.34	259.23	8.11	32.968	
1,400.00	1,360.41	1,346.20	1,325.76	5.66	4.61	128.69	56.18	222.79	300.94	291.93	9.01	33.407	
1,500.00	1,454.38	1,440.14	1,417.14	6.31	5.07	129.85	62.59	243.63	334.68	324.77	9.91	33.772	
1,600.00	1,548.35	1,534.09	1,508.51	6.97	5.53	130.79	69.00	264.48	368.52	357.70	10.81	34.075	
1,700.00	1,642.32	1,628.03	1,599.89	7.63	5.99	131.58	75.41	285.32	402.43	390.70	11.72	34.331	
1,800.00	1,736.29	1,721.97	1,691.27	8.29	6.45	132.25	81.82	306.16	436.39	423.76	12.63	34.551	
1,900.00	1,830.26	1,815.91	1,782.64	8.95	6.91	132.81	88.23	327.01	470.41	456.87	13.54	34.741	
2,000.00	1,924.23	1,909.86	1,874.02	9.62	7.37	133.31	94.64	347.85	504.45	490.00	14.45	34.907	
2,100.00	2,018.20	2,003.80	1,965.40	10.28	7.83	133.74	101.05	368.70	538.53	523.17	15.36	35.054	
2,200.00	2,112.17	2,097.74	2,056.77	10.95	8.29	134.12	107.46	389.54	572.63	556.35	16.28	35.184	
2,300.00	2,206.14	2,191.69	2,148.15	11.61	8.76	134.45	113.87	410.39	606.75	589.56	17.19	35.299	
2,400.00	2,300.11	2,285.63	2,239.53	12.28	9.22	134.75	120.27	431.23	640.89	622.78	18.10	35.403	
2,500.00	2,394.08	2,379.57	2,330.90	12.94	9.69	135.02	126.68	452.08	675.04	656.02	19.02	35.497	
2,600.00	2,488.05	2,482.37	2,431.26	13.61	10.07	135.41	133.24	473.39	708.61	688.75	19.86	35.674	
2,700.00	2,582.02	2,585.75	2,532.82	14.28	10.42	136.01	138.89	491.77	741.05	720.39	20.66	35.874	
2,800.00	2,675.99	2,689.49	2,635.30	14.94	10.73	136.80	143.61	507.12	772.40	751.01	21.40	36.096	
2,900.00	2,769.96	2,793.38	2,738.40	15.61	11.00	137.74	147.38	519.38	802.76	780.68	22.08	36.350	
3,000.00	2,863.93	2,897.22	2,841.80	16.28	11.22	138.83	150.18	528.50	832.22	809.51	22.71	36.645	
3,100.00	2,957.90	3,000.80	2,945.18	16.94	11.41	140.05	152.02	534.47	860.90	837.62	23.27	36.992	
3,179.10	3,032.23	3,082.42	3,026.75	17.47	11.53	141.10	152.79	536.98	883.12	859.45	23.67	37.311	
3,200.00	3,051.90	3,103.94	3,048.28	17.60	11.56	141.46	152.89	537.31	888.87	865.10	23.77	37.391	
3,300.00	3,146.68	3,202.35	3,146.68	18.09	11.67	143.03	152.97	537.58	914.64	890.46	24.18	37.823	
3,400.00	3,242.52	3,298.18	3,242.52	18.55	11.79	144.35	152.97	537.58	937.98	913.40	24.58	38.165	
3,500.00	3,339.29	3,394.96	3,339.29	18.97	11.91	145.46	152.97	537.58	958.80	933.84	24.95	38.427	
3,600.00	3,436.89	3,492.55	3,436.89	19.34	12.04	146.38	152.97	537.58	976.97	951.67	25.30	38.609	
3,700.00	3,535.18	3,590.85	3,535.18	19.67	12.17	147.14	152.97	537.58	992.41	966.77	25.63	38.714	
3,800.00	3,634.06	3,689.72	3,634.06	19.96	12.30	147.73	152.97	537.58	1,005.02	979.08	25.94	38.741	
3,900.00	3,733.39	3,789.06	3,733.39	20.19	12.44	148.18	152.97	537.58	1,014.76	988.53	26.23	38.693	
4,000.00	3,833.07	3,888.73	3,833.07	20.39	12.58	148.49	152.97	537.58	1,021.56	995.08	26.49	38.571	
4,100.00	3,932.96	3,988.63	3,932.96	20.53	12.72	148.66	152.97	537.58	1,025.40	998.68	26.72	38.375	
4,179.05	4,012.00	4,067.67	4,012.00	20.61	12.84	150.27	152.97	537.58	1,026.34	999.45	26.89	38.168	
4,200.00	4,032.95	4,088.62	4,032.95	20.63	12.87	150.27	152.97	537.58	1,026.34	999.39	26.95	38.090	
4,300.00	4,132.95	4,188.62	4,132.95	20.71	13.02	150.27	152.97	537.58	1,026.34	999.12	27.22	37.705	
4,400.00	4,232.95	4,288.62	4,232.95	20.80	13.17	150.27	152.97	537.58	1,026.34	998.84	27.50	37.321	
4,500.00	4,332.95	4,388.62	4,332.95	20.89	13.32	150.27	152.97	537.58	1,026.34	998.55	27.78	36.940	
4,600.00	4,432.95	4,488.62	4,432.95	20.99	13.47	150.27	152.97	537.58	1,026.34	998.26	28.07	36.560	
4,700.00	4,532.95	4,588.62	4,532.95	21.08	13.63	150.27	152.97	537.58	1,026.34	997.97	28.37	36.183	
4,800.00	4,632.95	4,688.62	4,632.95	21.18	13.78	150.27	152.97	537.58	1,026.34	997.67	28.66	35.809	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design NBU 922-32H2 Pad - NBU 922-32H1BS - NBU 922-32H1BS - PLAN #1 2-25-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (ft)	Offset Wellbore Centre +E-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,732.95	4,788.62	4,732.95	21.28	13.94	150.27	152.97	537.58	1,026.34	997.37	28.96	35.437	
5,000.00	4,832.95	4,888.62	4,832.95	21.38	14.10	150.27	152.97	537.58	1,026.34	997.07	29.27	35.069	
5,100.00	4,932.95	4,988.62	4,932.95	21.48	14.27	150.27	152.97	537.58	1,026.34	996.76	29.57	34.703	
5,200.00	5,032.95	5,088.62	5,032.95	21.59	14.43	150.27	152.97	537.58	1,026.34	996.45	29.89	34.342	
5,300.00	5,132.95	5,188.62	5,132.95	21.69	14.60	150.27	152.97	537.58	1,026.34	996.14	30.20	33.983	
5,400.00	5,232.95	5,288.62	5,232.95	21.80	14.77	150.27	152.97	537.58	1,026.34	995.82	30.52	33.629	
5,500.00	5,332.95	5,388.62	5,332.95	21.91	14.94	150.27	152.97	537.58	1,026.34	995.50	30.84	33.278	
5,600.00	5,432.95	5,488.62	5,432.95	22.02	15.11	150.27	152.97	537.58	1,026.34	995.17	31.17	32.932	
5,700.00	5,532.95	5,588.62	5,532.95	22.14	15.28	150.27	152.97	537.58	1,026.34	994.84	31.49	32.589	
5,800.00	5,632.95	5,688.62	5,632.95	22.25	15.45	150.27	152.97	537.58	1,026.34	994.51	31.82	32.250	
5,900.00	5,732.95	5,788.62	5,732.95	22.37	15.63	150.27	152.97	537.58	1,026.34	994.18	32.16	31.916	
6,000.00	5,832.95	5,888.62	5,832.95	22.49	15.80	150.27	152.97	537.58	1,026.34	993.84	32.49	31.585	
6,100.00	5,932.95	5,988.62	5,932.95	22.61	15.98	150.27	152.97	537.58	1,026.34	993.50	32.83	31.259	
6,200.00	6,032.95	6,088.62	6,032.95	22.73	16.16	150.27	152.97	537.58	1,026.34	993.16	33.17	30.937	
6,300.00	6,132.95	6,188.62	6,132.95	22.85	16.34	150.27	152.97	537.58	1,026.34	992.82	33.52	30.619	
6,400.00	6,232.95	6,288.62	6,232.95	22.98	16.52	150.27	152.97	537.58	1,026.34	992.47	33.87	30.306	
6,500.00	6,332.95	6,388.62	6,332.95	23.10	16.70	150.27	152.97	537.58	1,026.34	992.12	34.21	29.997	
6,600.00	6,432.95	6,488.62	6,432.95	23.23	16.88	150.27	152.97	537.58	1,026.34	991.77	34.57	29.692	
6,700.00	6,532.95	6,588.62	6,532.95	23.36	17.07	150.27	152.97	537.58	1,026.34	991.42	34.92	29.391	
6,800.00	6,632.95	6,688.62	6,632.95	23.49	17.25	150.27	152.97	537.58	1,026.34	991.06	35.28	29.095	
6,900.00	6,732.95	6,788.62	6,732.95	23.62	17.44	150.27	152.97	537.58	1,026.34	990.70	35.63	28.803	
7,000.00	6,832.95	6,888.62	6,832.95	23.76	17.62	150.27	152.97	537.58	1,026.34	990.34	35.99	28.515	
7,100.00	6,932.95	6,988.62	6,932.95	23.89	17.81	150.27	152.97	537.58	1,026.34	989.98	36.36	28.231	
7,200.00	7,032.95	7,088.62	7,032.95	24.03	18.00	150.27	152.97	537.58	1,026.34	989.62	36.72	27.951	
7,300.00	7,132.95	7,188.62	7,132.95	24.17	18.19	150.27	152.97	537.58	1,026.34	989.25	37.08	27.676	
7,400.00	7,232.95	7,288.62	7,232.95	24.30	18.38	150.27	152.97	537.58	1,026.34	988.88	37.45	27.404	
7,500.00	7,332.95	7,388.62	7,332.95	24.45	18.57	150.27	152.97	537.58	1,026.34	988.51	37.82	27.136	
7,600.00	7,432.95	7,488.62	7,432.95	24.59	18.76	150.27	152.97	537.58	1,026.34	988.14	38.19	26.873	
7,700.00	7,532.95	7,588.62	7,532.95	24.73	18.95	150.27	152.97	537.58	1,026.34	987.77	38.56	26.613	
7,800.00	7,632.95	7,688.62	7,632.95	24.87	19.15	150.27	152.97	537.58	1,026.34	987.40	38.94	26.357	
7,900.00	7,732.95	7,788.62	7,732.95	25.02	19.34	150.27	152.97	537.58	1,026.34	987.02	39.31	26.106	
8,000.00	7,832.95	7,888.62	7,832.95	25.16	19.53	150.27	152.97	537.58	1,026.34	986.64	39.69	25.857	
8,100.00	7,932.95	7,988.62	7,932.95	25.31	19.73	150.27	152.97	537.58	1,026.34	986.27	40.07	25.613	
8,200.00	8,032.95	8,088.62	8,032.95	25.46	19.92	150.27	152.97	537.58	1,026.34	985.89	40.45	25.372	
8,300.00	8,132.95	8,188.62	8,132.95	25.61	20.12	150.27	152.97	537.58	1,026.34	985.50	40.83	25.135	
8,400.00	8,232.95	8,288.62	8,232.95	25.76	20.32	150.27	152.97	537.58	1,026.34	985.12	41.22	24.901	
8,500.00	8,332.95	8,388.62	8,332.95	25.91	20.51	150.27	152.97	537.58	1,026.34	984.74	41.60	24.671	
8,600.00	8,432.95	8,488.62	8,432.95	26.06	20.71	150.27	152.97	537.58	1,026.34	984.35	41.99	24.445	
8,700.00	8,532.95	8,588.62	8,532.95	26.22	20.91	150.27	152.97	537.58	1,026.34	983.96	42.37	24.222	
8,800.00	8,632.95	8,688.62	8,632.95	26.37	21.11	150.27	152.97	537.58	1,026.34	983.58	42.76	24.002	
8,900.00	8,732.95	8,788.62	8,732.95	26.53	21.31	150.27	152.97	537.58	1,026.34	983.19	43.15	23.785	
9,000.00	8,832.95	8,888.62	8,832.95	26.69	21.51	150.27	152.97	537.58	1,026.34	982.80	43.54	23.572	
9,100.00	8,932.95	8,988.62	8,932.95	26.84	21.71	150.27	152.97	537.58	1,026.34	982.40	43.93	23.362	
9,200.00	9,032.95	9,088.62	9,032.95	27.00	21.91	150.27	152.97	537.58	1,026.34	982.01	44.32	23.155	
9,261.71	9,094.66	9,150.32	9,094.66	27.10	22.03	150.27	152.97	537.58	1,026.34	981.77	44.57	23.029	
9,300.00	9,132.95	9,175.67	9,120.00	27.16	22.09	150.27	152.97	537.58	1,026.42	981.73	44.69	22.966 SF	
9,400.00	9,232.95	9,175.67	9,120.00	27.32	22.09	150.27	152.97	537.58	1,032.53	987.65	44.88	23.004	
9,429.05	9,262.00	9,175.67	9,120.00	27.37	22.09	150.27	152.97	537.58	1,036.11	991.17	44.94	23.055	

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @ 4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @ 4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4998.00ft (Original Well Elev)Coordinates are relative to: NBU 922-32A2DS

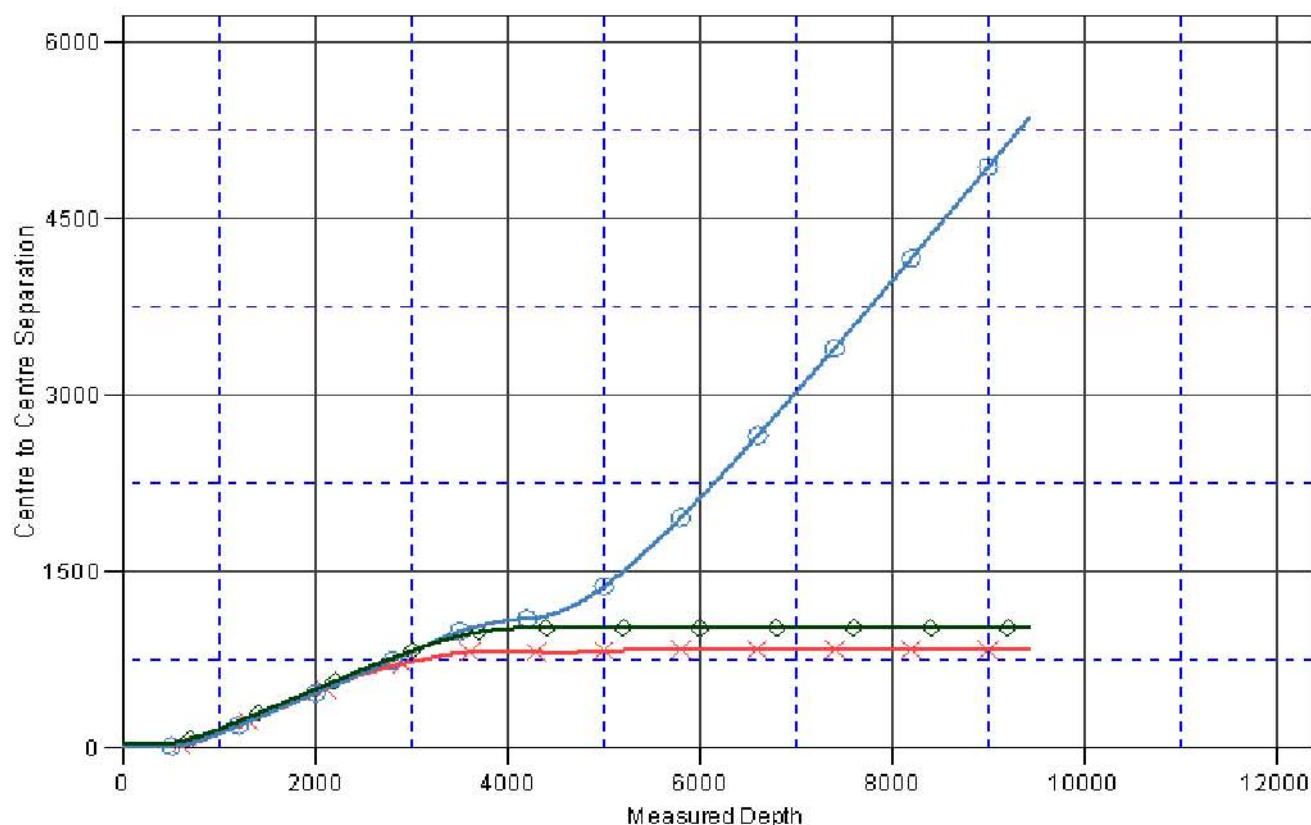
Offset Depths are relative to Offset Datum

Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N

Central Meridian is 111° 0' 0.000 W°

Grid Convergence at Surface is: 0.99°

Ladder Plot



LEGEND

PLAN #1 2-25-10 RHS

NBU 922-32H EXISTING, NBU 922-32H EXISTING, NBU 922-32H EXISTING

NBU 922-32H1B, NBU 922-32H1B, PL

Company:	ANADARKO PETROLEUM CORP.	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	UINTAH COUNTY, UTAH (nad 27)	TVD Reference:	WELL @4998.00ft (Original Well Elev)
Reference Site:	NBU 922-32H2 Pad	MD Reference:	WELL @4998.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	NBU 922-32A2DS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	NBU 922-32A2DS	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 2-25-10 RHS	Offset TVD Reference:	Offset Datum

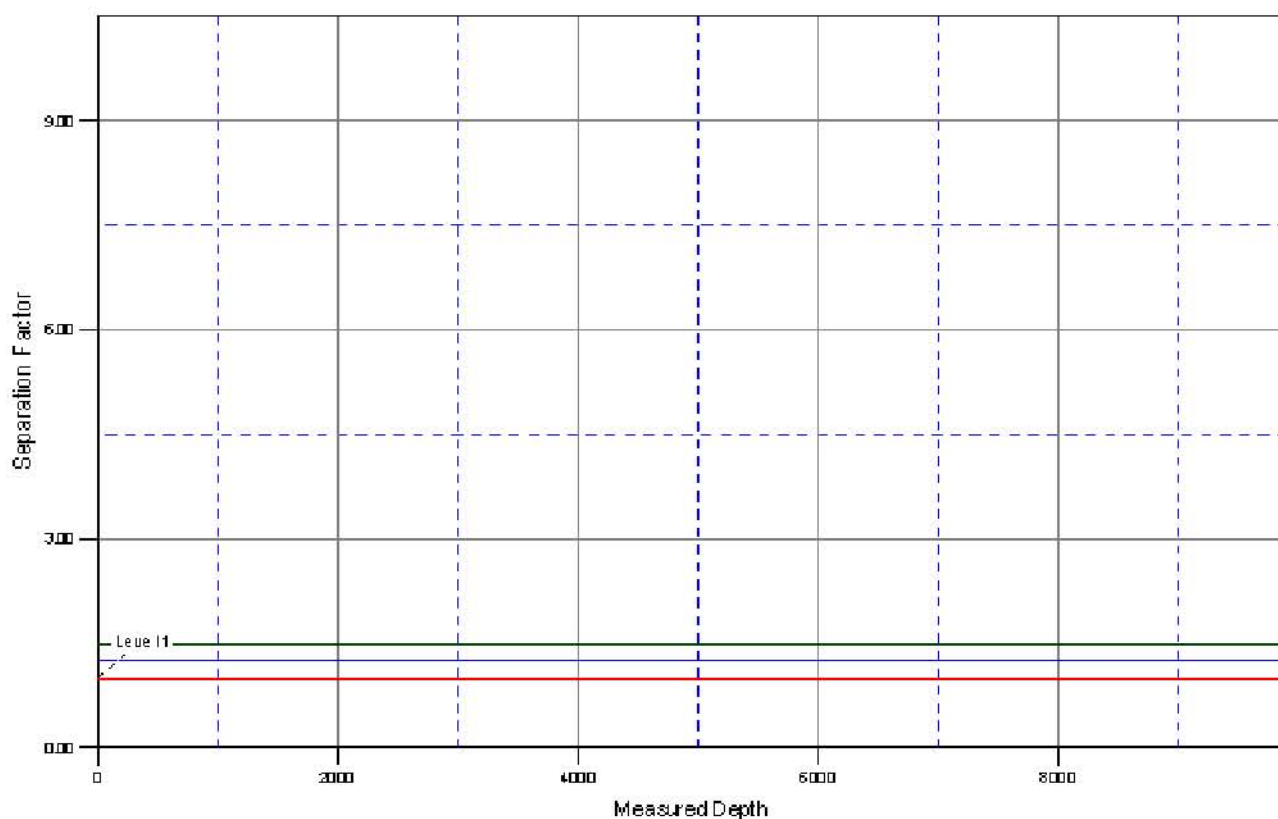
Reference Depths are relative to WELL @4998.00ft (Original Well Elev)Coordinates are relative to: NBU 922-32A2DS

Offset Depths are relative to Offset Datum

Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N

Grid Convergence at Surface is: 0.99°

Separation Factor Plot



LEGEND

WDS, PLAN#1 2-25-10 RHS WD

 NBU 922-32H EXISTING, NBU 922-32H EXISTING, NBU 922-32H EXISTING WD

 NBU 922-32H1BS, NBU 922-32H1BS, PL

NBU 922-32A2DS

Pad: NBU 922-32H2

Surface: 1,555' FNL 931' FEL (SE/4NE/4)

BHL: 510' FNL 902' FEL (NE/4NE/4)

Sec. 32 T9S R22E

Uintah, Utah

Mineral Lease: ML 22649

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	1,294'	
Birds Nest	1,639'	Water
Mahogany	2,008'	Water
Wasatch	4,531'	Gas
Mesaverde	7,039'	Gas
MVU2	7,971'	Gas
MVL1	8,550'	Gas
TVD	9,262'	
TD	9,429'	

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 9,262' TVD, approximately equals 5,482 psi (calculated at 0.59 psi/foot).

Maximum anticipated surface pressure equals approximately 3,444 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

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP					DATE	March 2, 2010		
WELL NAME	NBU 922-32A2DS					TD	9,262'	TVD	9,429' MD
FIELD	Natural Buttes		COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION		4,984'
SURFACE LOCATION	SE/4 NE/4	1,555' FNL	931' FEL	Sec 32	T 9S	R 22E			
	Latitude:	39.995556	Longitude:	-109.457058	NAD 27				
BTM HOLE LOCATION	NE/4 NE/4	510' FNL	902' FEL	Sec 32	T 9S	R 22E			
	Latitude:	39.998423	Longitude:	-109.458958	NAD 27				
OBJECTIVE ZONE(S)	Wasatch/Mesaverde								
ADDITIONAL INFO	Regulatory Agencies: SITLA (Minerals), UDOGM (Surface), UDOGM Tri-County Health Dept.								

GEOLOGICAL FORMATION			MECHANICAL		
LOGS	TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			11"	8-5/8", 26#, U-55, LTC	Air mist
All water flows encountered while drilling will be reported to the appropriate agencies.					
		1,294'			
		1,639'			
		2,008'			
		2,160'			
		MD			
Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.					
		4,531'			
Mud logging program TBD Cased hole logging program from TD - surf csg					
		7,039' TVD	7-7/8"	4-1/2" 11.6# I-80 or equivalent BTC csg	Water / Fresh Water Mud 8.3-11.6 ppg
		7,971' TVD			
		8,550' TVD			
Max anticipated Mud required 11.6 ppg					
		9,262' TVD			
		9,429' MD			
		TD @			



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 2,160	28.00	IJ-55	LTC	0.94	1.86	5.70
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 9,429	11.60	I-80	BTC	2.19	1.14	2.91

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

D.F. = 2.48

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.6 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MVV)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3,444 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 11.6 ppg)

0.59 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MVV)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 5,482 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized					
Option 2	LEAD	1,660'	65/35 Poz + 6% Gel + 10 pps gilsonite	150	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	4,029'	Premium Lite II +0.25 pps	330	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,400'	50/50 Poz/G + 10% salt + 2% gel	1,320	40%	14.30	1.31
			+ 0.1% R-3				

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

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

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:

John Huycke / Emile Goodwin

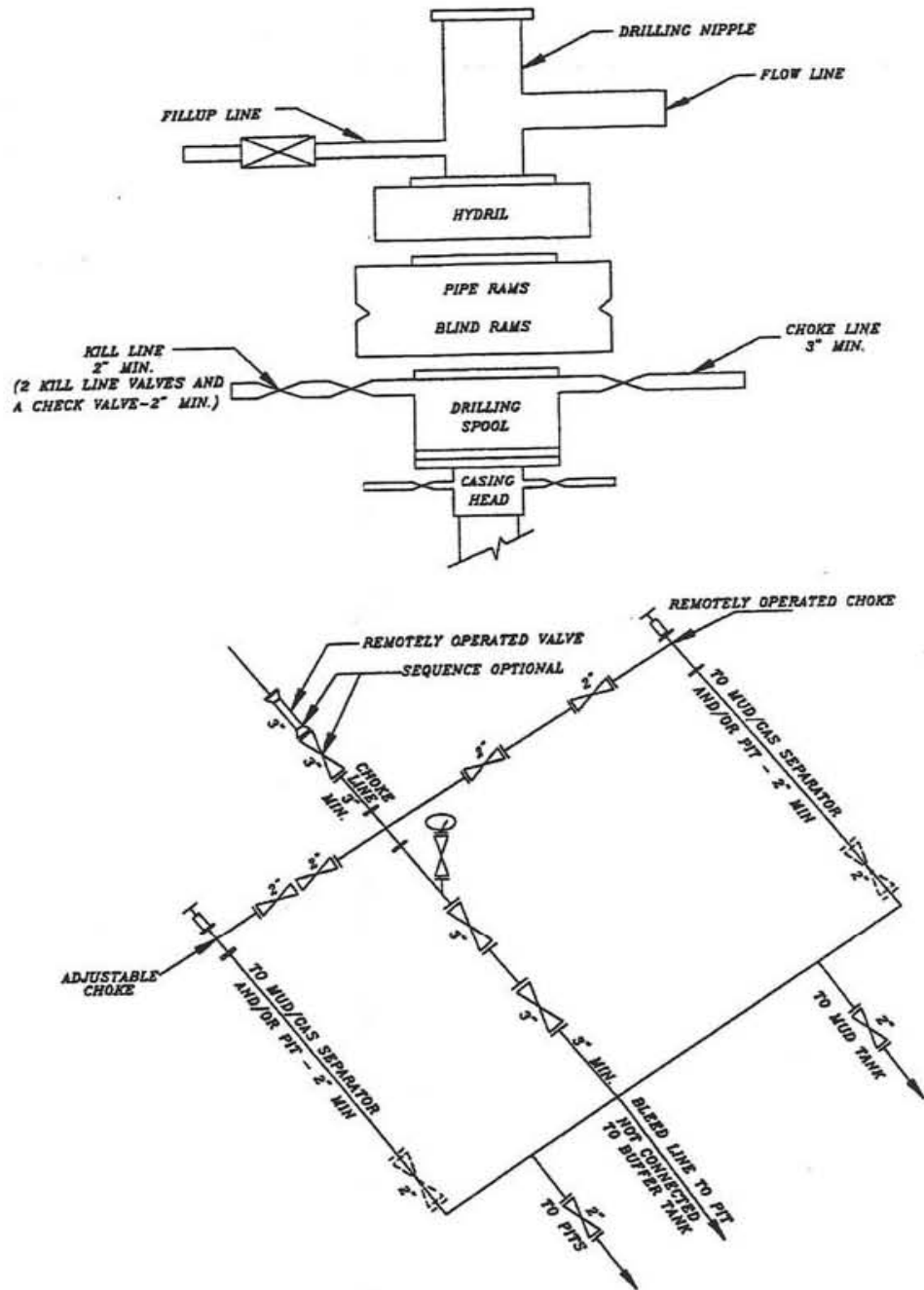
DATE:

DRILLING SUPERINTENDENT:

John Merkel / Lovel Young

DATE:

EXHIBIT A NBU 922-32A2DS

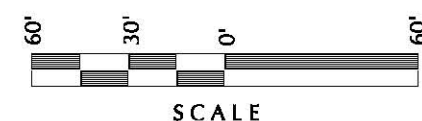


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
NBU 922-32H1BS	39°59'43.875"	109°27'27.357"	39°59'44.000"	109°27'24.894"	1555' FNL 891' FEL	39°59'45.389"	109°27'20.966"	39°59'45.514"	109°27'18.502"	1402' FNL 393' FEL
NBU 922-32A4DS	39°59'43.874"	109°27'27.615"	39°59'43.999"	109°27'25.151"	1555' FNL 911' FEL	39°59'49.026"	109°27'19.027"	39°59'49.151"	109°27'16.563"	1034' FNL 242' FEL
NBU 922-32A2DS	39°59'43.876"	109°27'27.871"	39°59'44.002"	109°27'25.407"	1555' FNL 931' FEL	39°59'54.198"	109°27'27.507"	39°59'54.323"	109°27'25.043"	510' FNL 902' FEL
NBU 922-32H WELL HEAD	39°59'43.878"	109°27'28.128"	39°59'44.003"	109°27'25.665"	1555' FNL 951' FEL					

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
NBU 922-32H1BS	153.3'	497.6'	NBU 922-32A4DS	521.5'	668.5'	NBU 922-32A2DS	1044.7'	28.3'



Az=01.55194°
N01°33'07"E - 1045.10'
(To Bottom Hole)

Az=52.04361°
N52°02'37"E - 847.88'
(To Bottom Hole)

Az=72.87250°
N72°52'21"E - 520.66'
(To Bottom Hole)

S89°39'04"E
Az=90.34889°

EXISTING WELL: NBU 922-32H
NBU 922-32A2DS
Az. to Exist. W.H. = 270.34889° 20.0'
NBU 922-32A4DS
Az. to Exist. W.H. = 270.34889° 40.0'
NBU 922-32H1BS
Az. to Exist. W.H. = 270.34889° 60.0'

BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 32, T9S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°00'59"W.

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

WELL PAD - NBU 922-32H2

WELL PAD INTERFERENCE PLAT
WELLS - NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS
LOCATED IN SECTION 32, T9S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH.



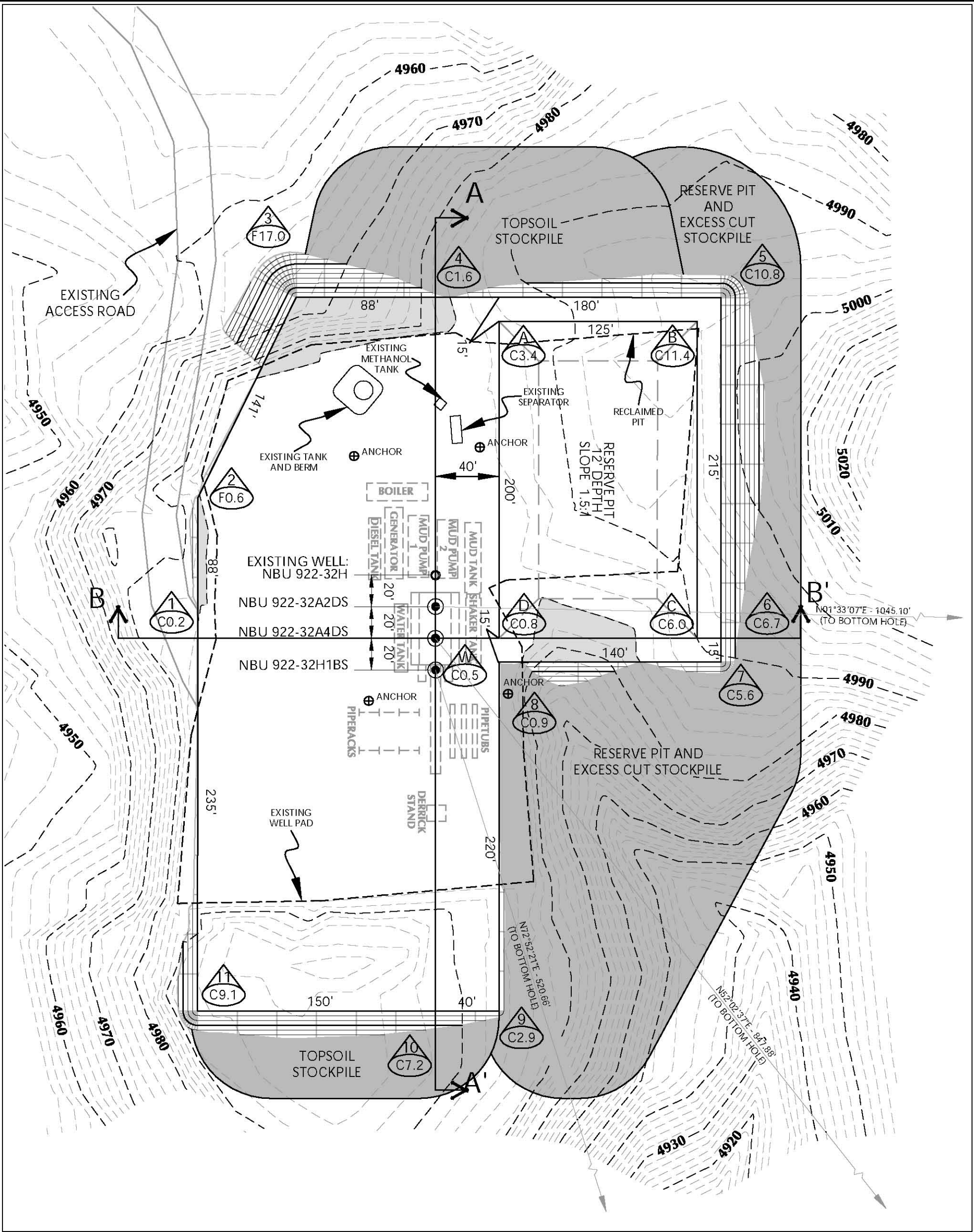
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

(435) 789-1365

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

DATE SURVEYED: 11-03-09	SURVEYED BY: M.S.B.	SHEET NO: 4 4 OF 14
DATE DRAWN: 11-23-09	DRAWN BY: E.M.S.	
SCALE: 1" = 60'	Date Last Revised:	



WELL PAD - NBU 922-32H2 DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 4984.5'
FINISHED GRADE ELEVATION = 4984.0'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1
TOTAL WELL PAD AREA = 2.97 ACRES
TOTAL DAMAGE AREA = 5.92 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00

WELL PAD QUANTITIES
TOTAL CUT FOR WELL PAD = 14,938 C.Y.
TOTAL FILL FOR WELL PAD = 2,112 C.Y.
TOPSOIL @ 6" DEPTH = 1,192 C.Y.
EXCESS MATERIAL = 12,826 C.Y.

RESERVE PIT QUANTITIES
TOTAL CUT FOR RESERVE PIT
+/- 8,710 CY
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 33,300 BARRELS

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

WELL PAD - NBU 922-32H2

WELL PAD - LOCATION LAYOUT
NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS,
LOCATED IN SECTION 32, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH



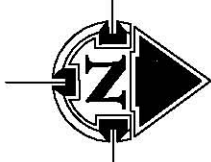
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TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

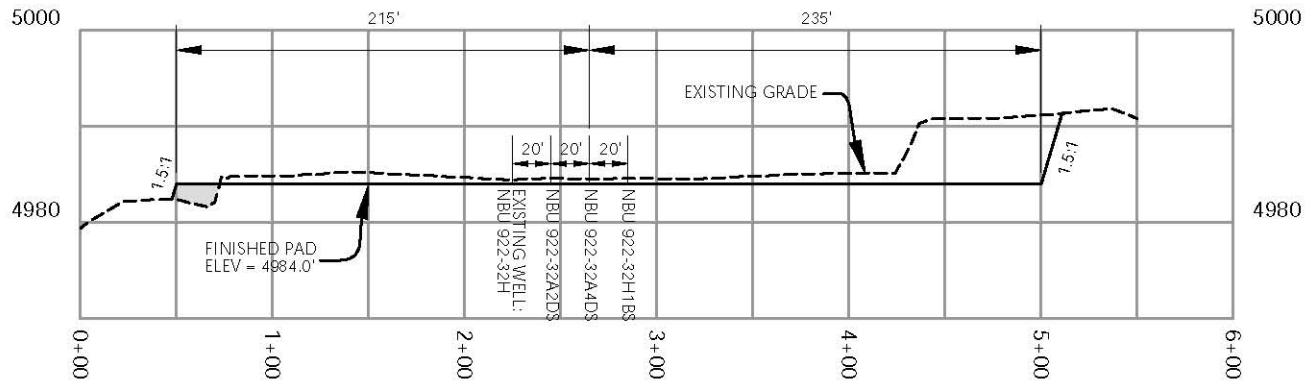
WELL PAD LEGEND

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

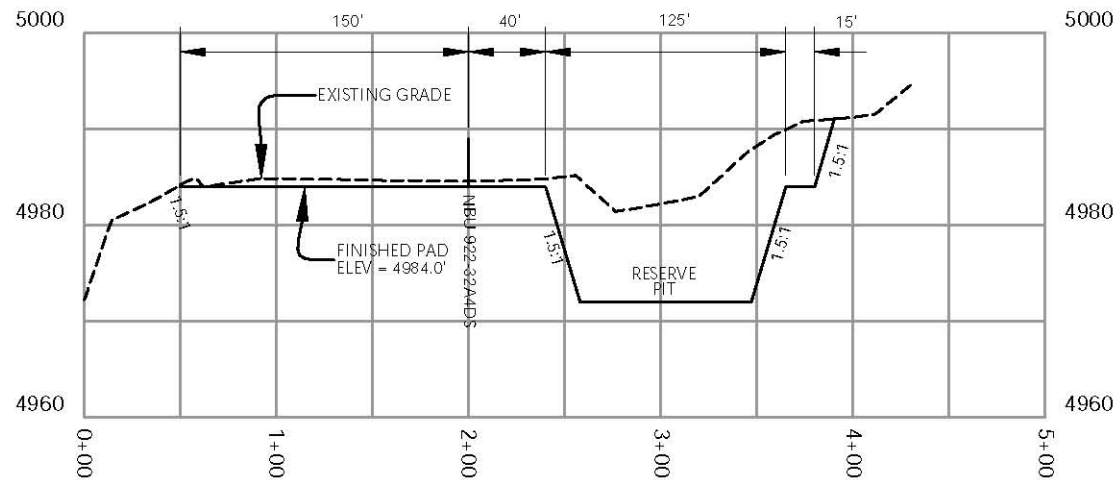


HORIZONTAL 0 30 60 1" = 60'
2' CONTOURS

Scale: 1"=60' Date: 1/06/10 SHEET NO: 5 OF 14
REVISED:



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 922-32H2

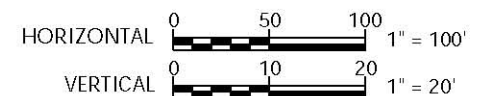
WELL PAD - CROSS SECTIONS
NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS,
LOCATED IN SECTION 32, T9S, R22E,
S.L.B.&M., UTAH COUNTY, UTAH



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

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

(435) 789-1365



Scale: 1"=100'

Date: 1/06/10

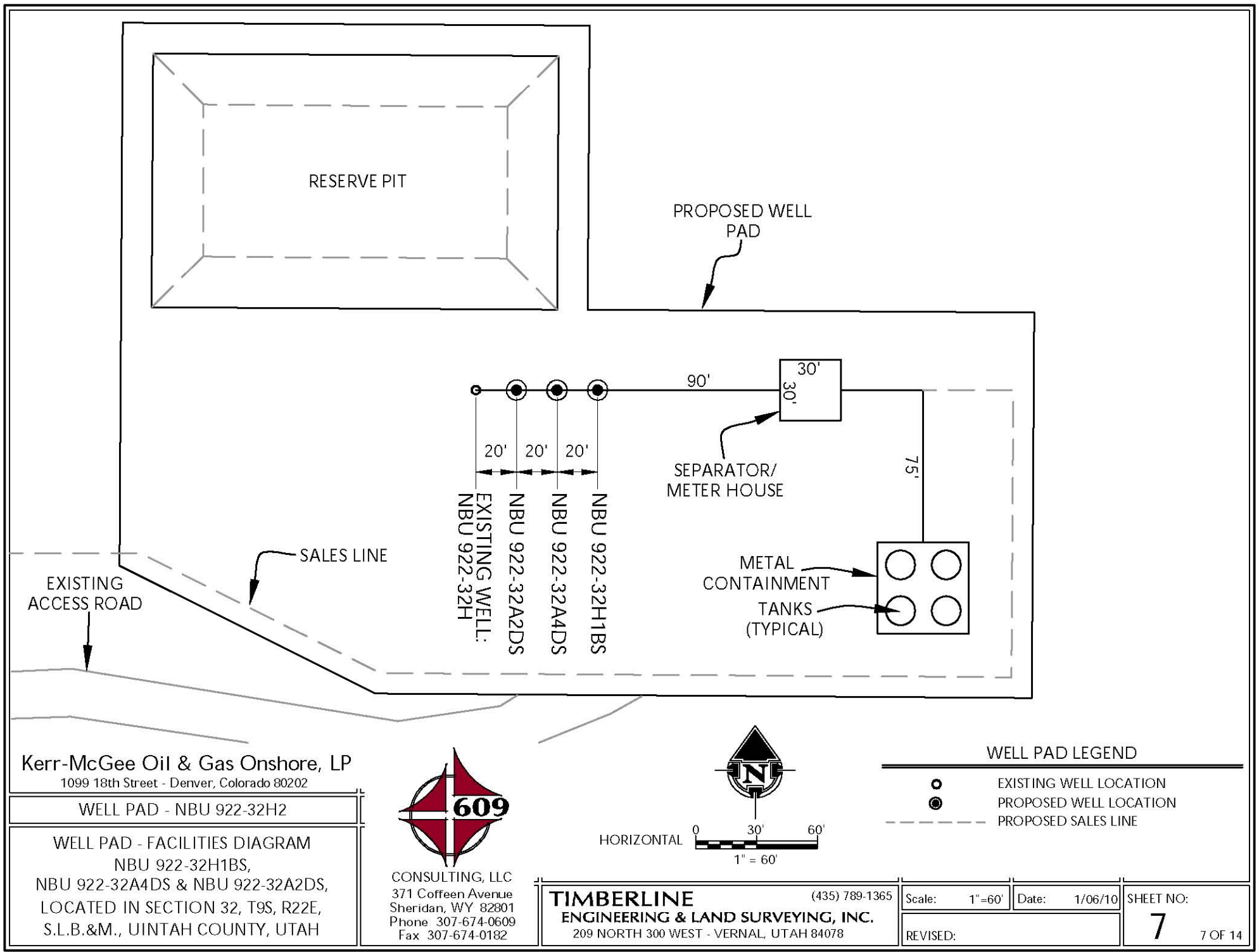
REVISED:

SHEET NO:

6

6 OF 14

'APIWellNo:43047509770000'
K:\ANDRKO\2009_47\NBU_FOCUS_SEC_32-922\DWGS\NBU 922-32H2.dwg, 1/6/2010 10:13:18 AM



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

WELL PAD - NBU 922-32H2

WELL PAD - FACILITIES DIAGRAM
NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS,
LOCATED IN SECTION 32, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH

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

HORIZONTAL 0 30' 60'
1" = 60'

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

(435) 789-1365

WELL PAD LEGEND		
○	EXISTING WELL LOCATION	
●	PROPOSED WELL LOCATION	
- - -	PROPOSED SALES LINE	

Scale: 1"=60'	Date: 1/06/10	SHEET NO: 7 7 OF 14
REVISED:		

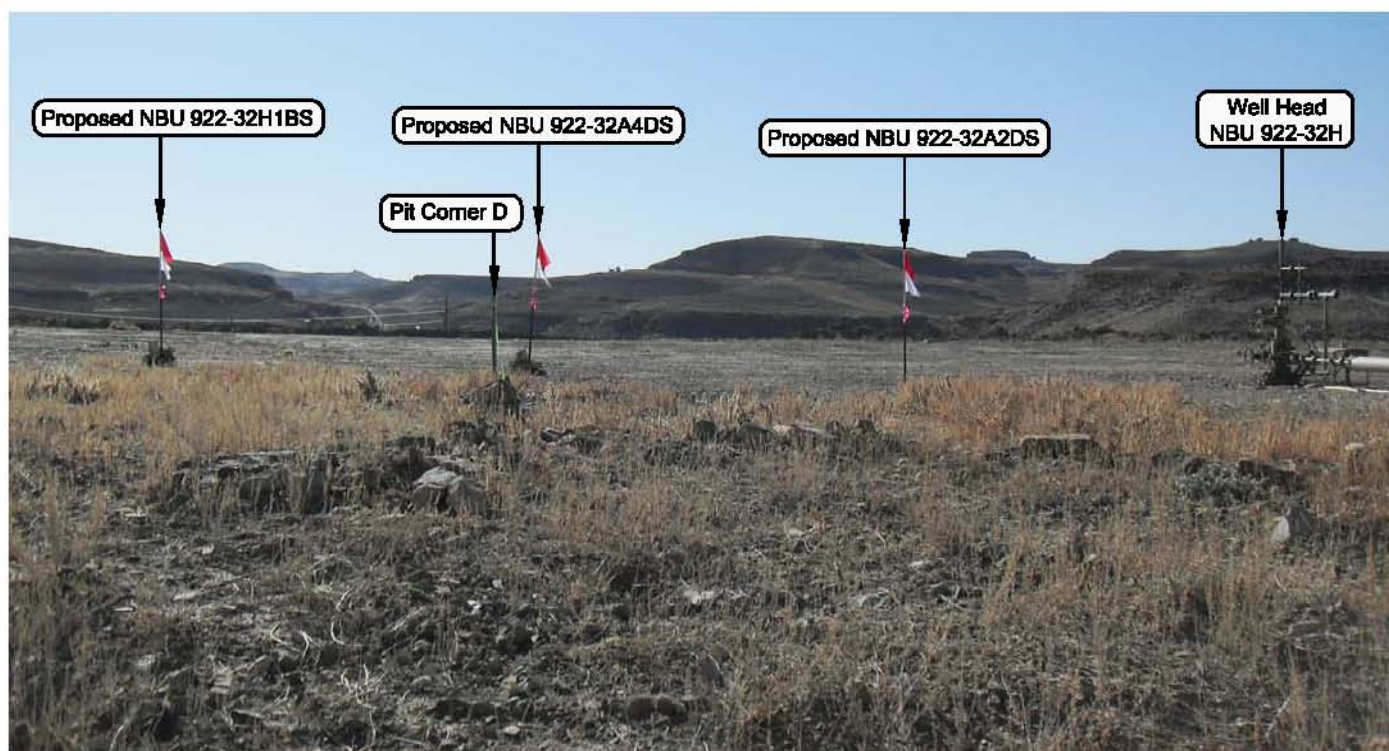


PHOTO VIEW: FROM PIT CORNER D TO LOCATION

CAMERA ANGLE: SOUTHERLY



PHOTO VIEW: EXISTING ACCESS ROAD

CAMERA ANGLE: EASTERLY

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

Well Pad - NBU 922-32H2

**NBU 922-32H1BS, NBU 922-32A4DS
& NBU 922-32A2DS
LOCATION PHOTOS
LOCATED IN SECTION 32, T9S, R22E,
S.L.B.&M., UINTAH COUNTY, UTAH.**



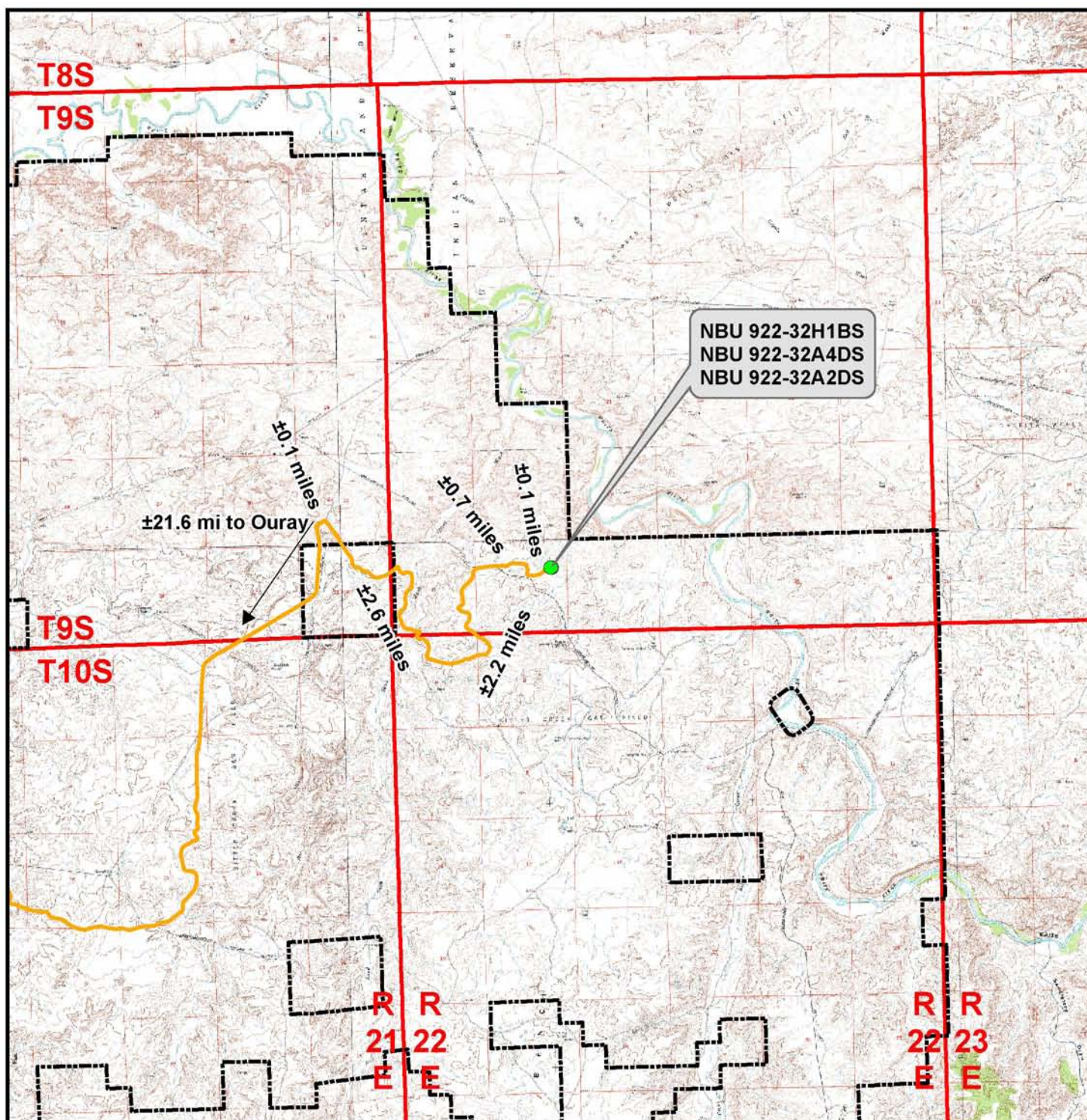
CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

(435) 789-1365

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

DATE PHOTOS TAKEN: 11-03-09	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 8 8 OF 14
DATE DRAWN: 11-24-09	DRAWN BY: E.M.S.	
Date Last Revised:		

**Legend**

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

Distance From Well Pad - NBU 922-32H2 To Unit Boundary: $\pm 1,971$ ft

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

WELL PAD - NBU 922-32H2

NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS
TOPO A
LOCATED IN SECTION 32, T9S, R22E
S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1:100,000	NAD83 USP Central	Sheet No:
Drawn: JELo	Date: 7 Jan 2010	9
Revised:	Date:	9 of 14

Total Proposed Road Length: ±0ft

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

NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS
TOPO B
LOCATED IN SECTION 32, T9S, R22E
S.L.B.&M., UINTAH COUNTY, UTAH

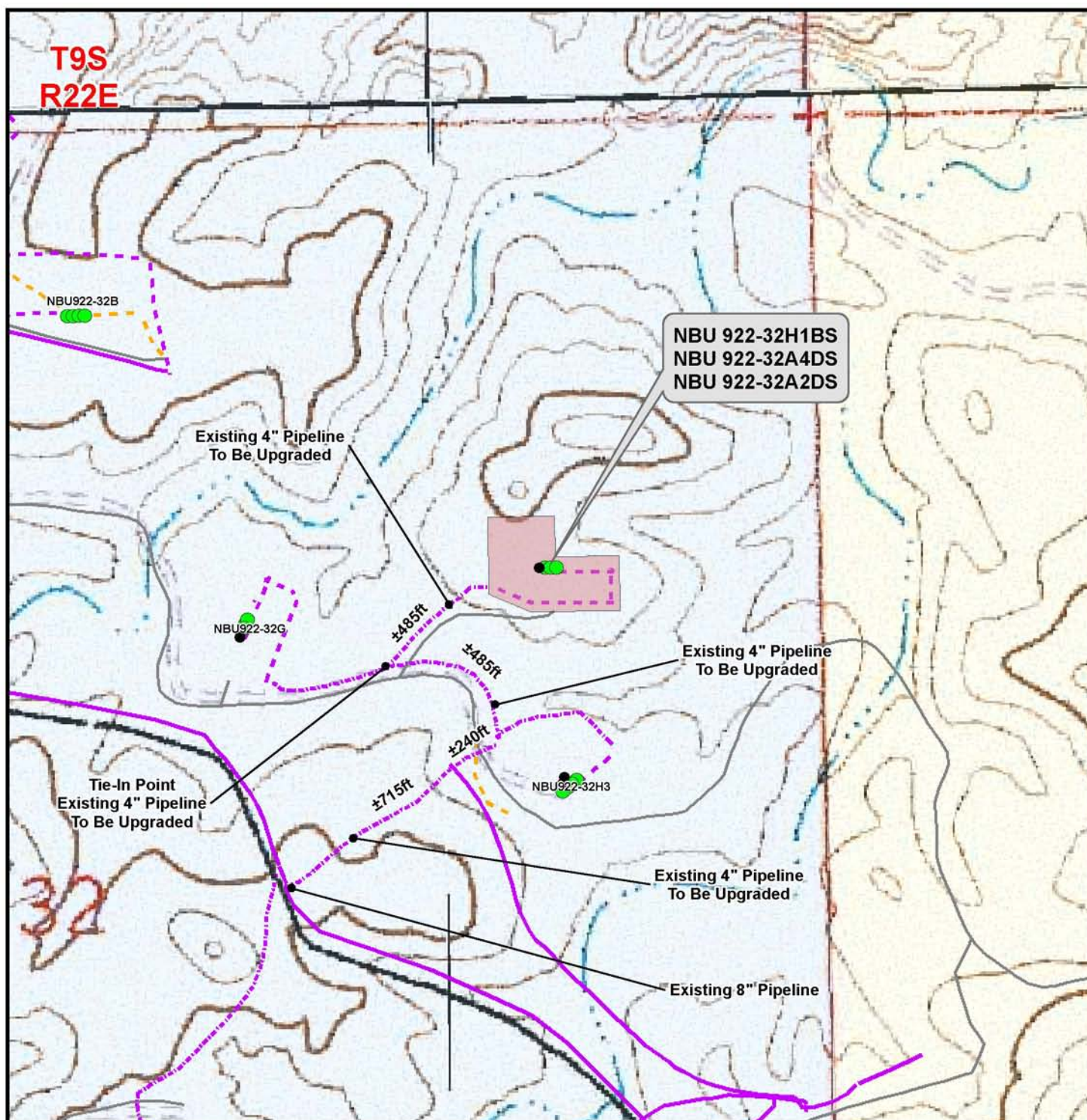


CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
Fax (307) 674-0182



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: JELO	Date: 7 Jan 2010
Revised:	Date:

Sheet No:
10 10 of 14



Legend

- | | | | | | |
|-------------------|----------|---------------------------|-------------------|---------------------------|---------|
| ● Well - Proposed | Well Pad | Pipeline - Proposed | — Road - Proposed | Bureau of Land Management | State |
| ● Well - Existing | | Pipeline - To Be Upgraded | — Road - Existing | Indian Reservation | Private |
| | | Pipeline - Existing | | | |

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±485ft
 Proposed Pipeline Length From Edge Of Pad To Meter House: ±680ft

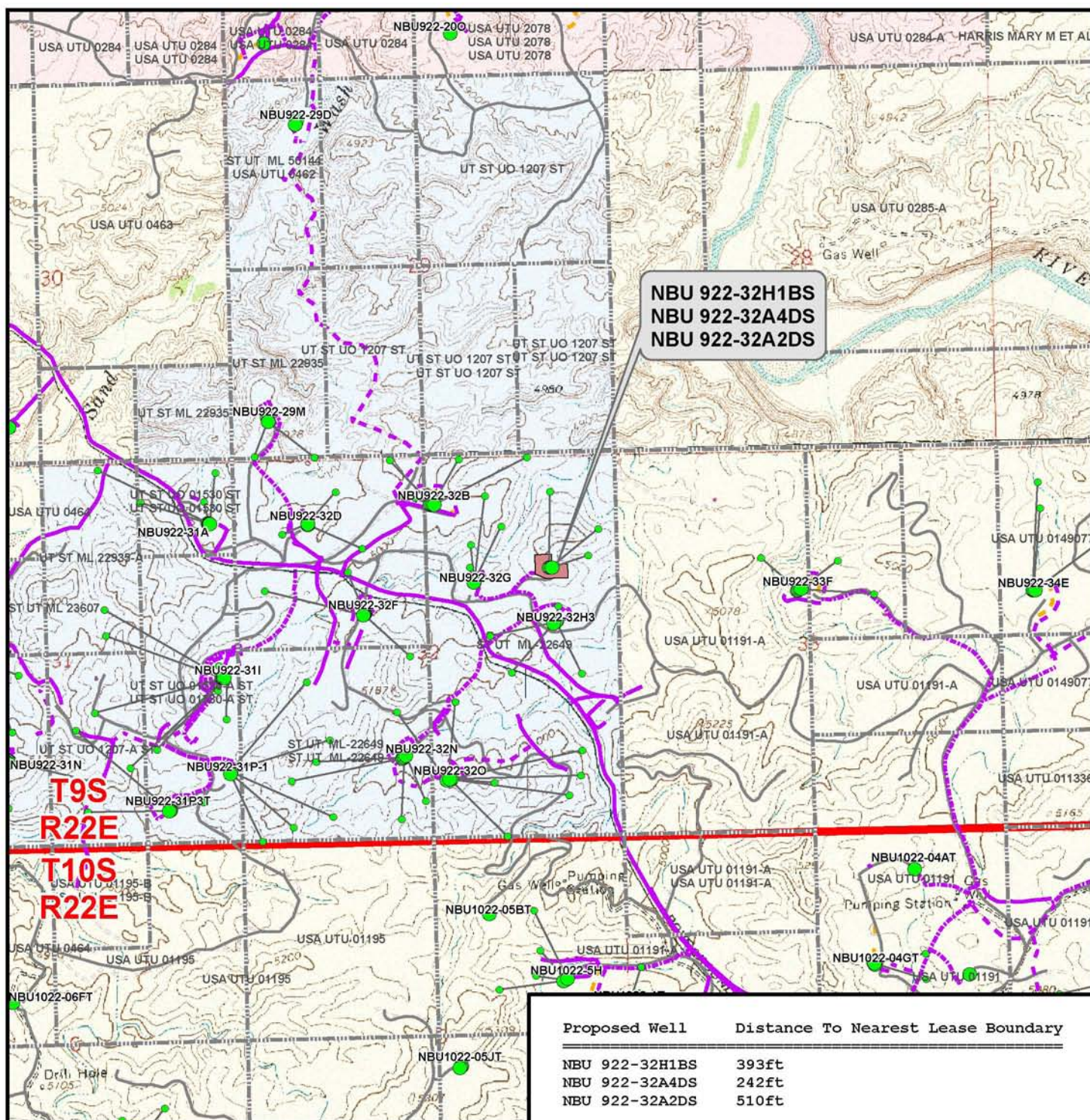
Kerr-McGee Oil & Gas Onshore, LP
 1099 18th Street, Denver, Colorado 80202

WELL PAD - NBU 922-32H2

NBU 922-32H1BS,
 NBU 922-32A4DS & NBU 922-32A2DS
TOPO D (PAD & PIPELINE DETAIL)
 LOCATED IN SECTION 32, T9S, R22E
 S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1" = 500ft	NAD83 USP Central	Sheet No:
Drawn: JELO	Date: 7 Jan 2010	12A
Revised:	Date:	12A of 14



Legend

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

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

WELL PAD - NBU 922-32H2

**NBU 922-32H1BS,
NBU 922-32A4DS & NBU 922-32A2DS
TOPO E
LOCATED IN SECTION 32, T9S, R22E
S.L.B.&M., UTAH COUNTY, UTAH**

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



Scale: 1" = 2,000ft
NAD83 USP Central
Drawn: JELO
Revised:
Date: 7 Jan 2010

Sheet No:
13
13 of 14

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – NBU 922-32H2
WELLS – NBU 922-32H1BS, NBU 922-32A4DS & NBU 922-32A2DS
Section 32, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 13.9 MILES TO THE JUNCTION OF STATE HIGHWAY 88. EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 88 APPROXIMATELY 16.8 MILES TO OURAY, UTAH. FROM OURAY, PROCEED IN A SOUTHERLY DIRECTION ALONG THE SEEP RIDGE ROAD (COUNTY B ROAD 2810) APPROXIMATELY 11.2 MILES TO THE INTERSECTION OF THE GLEN BENCH ROAD (COUNTY B ROAD 3260). EXIT LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 10.4 MILES TO A CLASS D COUNTY ROAD BEARING NORTHEAST. EXIT RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 0.1 MILES TO A SECOND CLASS D COUNTY ROAD BEARING SOUTHEAST. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 2.6 MILES TO A THIRD CLASS D COUNTY ROAD BEARING EASTERLY. EXIT LEFT AND PROCEED IN AN EASTERLY, THEN NORTHEASTERLY DIRECTION ALONG THE THIRD CLASS D COUNTY ROAD APPROXIMATELY 2.2 MILES TO A SERVICE ROAD TO THE EAST. EXIT RIGHT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTRLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.7 MILES TO THE EXISTING ACCESS ROAD FOR THE NBU 922-32H WELL PAD. EXIT LEFT AND PROCEED IN A NORTHEASTRLY DIRECTION APPROXIMATELY 640 FEET TO THE PROPOSED WELL LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 58.0 MILES IN A SOUTHERLY DIRECTION.

NBU 922-32A2DS

Surface: 1,555' FNL 931' FEL (SE/4NE/4)
BHL: 510' FNL 902' FEL (NE/4NE/4)

NBU 922-32A4DS

Surface: 1,555' FNL 911' FEL (SE/4NE/4)
BHL: 1,034' FNL 242' FEL (NE/4NE/4)

NBU 922-32H1BS

Surface: 1,555' FNL 891' FEL (SE/4NE/4)
BHL: 1,402' FNL 393' FEL (SE/4NE/4)

Pad: NBU 922-32H2
Sec. 32 T9S R22E
Mineral Lease: ML 22649

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

ONSHORE ORDER NO. 1

***MULTI-POINT SURFACE USE & OPERATIONS PLAN
SUBMITTED WITH SITE-SPECIFIC INFORMATION***

To schedule an onsite, please contact Sheila Wopsock at 435-781-7024.

Directional Drilling:

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

A. Existing Roads:

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

B. Planned Access Roads:

See MDP for additional details on road construction.

No new access road is proposed. Please refer to the attached Topo Map B. No pipelines will be crossed with the new construction.

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

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

Please refer to Topo Map C.

D. Location of Existing and Proposed Facilities:

See MDP for additional details on Existing and Proposed Facilities.

This pad will expand the existing pad for the NBU 922-32H, which is a producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records.

The following guidelines will apply if the well is productive.

Approximately 680' (± 0.13 miles) of buried pipeline is proposed from the edge of the pad to the meter house. Another approximately $\pm 485'$ (± 0.09 miles) of existing 4" pipeline will be upgraded and buried from the tie in point to the edge of the pad. Please refer to Topo D for the existing pipeline. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place.

E. Location and Type of Water Supply:

See MDP for additional details on Location and Type of Water Supply.

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

49-2243	Target Trucking Inc.	Green River- Various points
49-2300	R.N. Industries	White River- Various points
49-2298	RNI Trucking	White River- Various points
49-2231	Nile Chapman	Green River- Various points
49-2299	R.N. Industries	Green River- Various points
49-2306	R.N. Industries	White River- Various points

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.

F. Source of Construction Materials:

See MDP for additional details on Source of Construction Materials.

G. Methods of Handling Waste Materials:

See MDP for additional details on Methods of Handling Waste Materials.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E
NBU #159 in Sec. 35 T9S R21E
Ace Oilfield in Sec. 2 T6S R20E
MC&MC in Sec. 12 T6S R19E
Pipeline Facility in Sec. 36 T9S R20E
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
Bonanza Evaporation Pond in Sec. 2 T10S R23E

H. **Ancillary Facilities:**

See MDP for additional details on Ancillary Facilities.

None are anticipated.

I. **Well Site Layout:** (See Location Layout Diagram)

See MDP for additional details on Well Site Layout.

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

- Net wire (39-inch) will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.
- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

J. **Plans for Reclamation of the Surface:**

See MDP for additional details on Plans for Reclamation of the Surface.

K. **Surface/Mineral Ownership:**

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

L. **Other Information:**

See MDP for additional details on Other Information.

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

Danielle Piernot
Regulatory Analyst
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 pursuant to 43 CFR 3104 for lease activities is being provided by State Surety Bond 22013542.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.


Danielle Piernot

March 2, 2010

Date



Kerr-McGee Oil & Gas Onshore LP
P.O. Box 173779
Denver, CO 80217-3779

ANNA C. CAVALERI
TELEPHONE: (720) 929-6029
EMAIL: ANNA.CAVALERI@ANADARKO.COM

March 1, 2010

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

Re: Directional Drilling R649-3-11
NBU 922-32A2DS
T9S R22E
Section 32: SENE (Surface), NENE (Bottom Hole)
Surface: 1555' FNL, 931' FEL
Bottom Hole: 510' FNL, 902' FEL
Uintah County, Utah

Dear Mrs. Mason:

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

- Kerr-McGee's NBU 922-32A2DS 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', written over a faint circular stamp.

Anna C. Cavaleri
Landman

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS
ONSHORE LP'S 41 PROPOSED NBU WELL LOCATIONS
(TOWNSHIP 9S, RANGE 22E, SEC. 31, 32 AND 34)
UINTAH COUNTY, UTAH

By:

Jacki A. Montgomery

Prepared For:

Bureau of Land Management
Vernal Field Office
and
State of Utah
School & 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. 09-234

January 20, 2010

United States Department of Interior (FLPMA)
Permit No. 09-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

IPC #09-233

Paleontological Reconnaissance Survey Report

**Block Section Survey of the NE Quarter of Section 32, Including
Kerr McGee's Proposed "NBU #922-32B, C1DS, C1BS,
B2AS & A2BS, NBU #922-32G, B4AS, B1CS, B3DS
& G2AS, NBU #922-32H2, H1BS, A4DS, A2DS &
NBU #922-32H3, H3AS, I1CS, G4CS &
J1DS" (Sec. 32, T 9 S, R 22 E)**

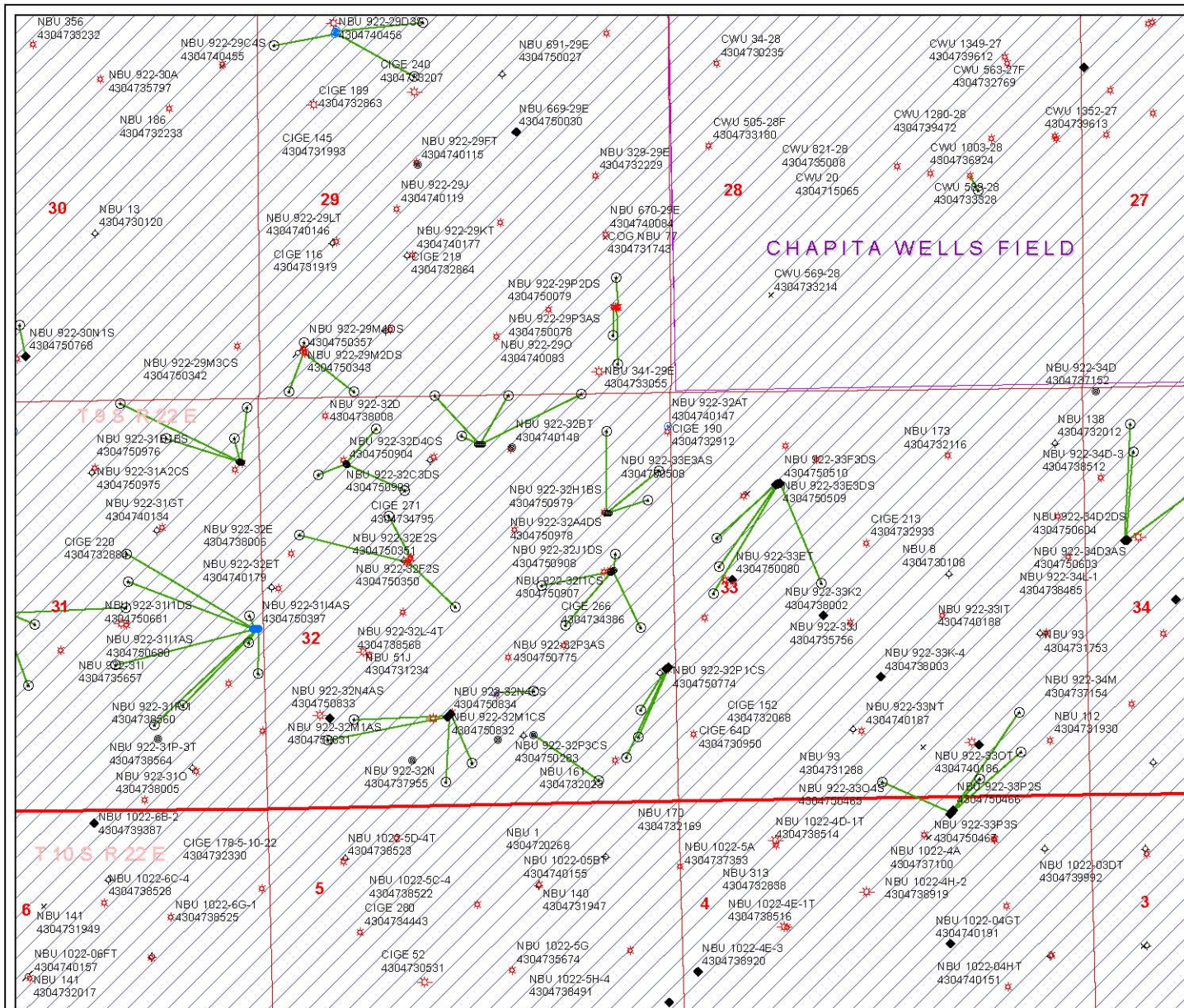
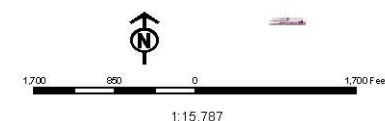
Archy Bench
Topographic Quadrangle
Uintah County, Utah

February 3, 2010

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

API Number: 4304750977
Well Name: NBU 922-32A2DS
Township 09.0 S Range 22.0 E Section 32
Meridian: SLBM
Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
 Map Produced by Diana Mason



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

March 15, 2010

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Natural Buttes Unit
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ WASATCH-MESA VERDE)

43-047-50952	NBU 921-30P2AS	Sec 30 T09S R21E 0612 FSL 1259 FEL
	BHL	Sec 30 T09S R21E 1180 FSL 0885 FEL

43-047-50973	NBU 922-31A1AS	Sec 31 T09S R22E 0845 FNL 0315 FEL
	BHL	Sec 31 T09S R22E 0136 FNL 0230 FEL

43-047-50974	NBU 922-31A1CS	Sec 31 T09S R22E 0839 FNL 0324 FEL
	BHL	Sec 31 T09S R22E 0533 FNL 0399 FEL

43-047-50975	NBU 922-31A2CS	Sec 31 T09S R22E 0834 FNL 0332 FEL
	BHL	Sec 31 T09S R22E 0523 FNL 1270 FEL

43-047-50976	NBU 922-31B1BS	Sec 31 T09S R22E 0828 FNL 0340 FEL
	BHL	Sec 31 T09S R22E 0062 FNL 1853 FEL

43-047-50977	NBU 922-32A2DS	Sec 32 T09S R22E 1555 FNL 0931 FEL
	BHL	Sec 32 T09S R22E 0510 FNL 0902 FEL

43-047-50978	NBU 922-32A4DS	Sec 32 T09S R22E 1555 FNL 0911 FEL
	BHL	Sec 32 T09S R22E 1034 FNL 0242 FEL

43-047-50979	NBU 922-32H1BS	Sec 32 T09S R22E 1555 FNL 0891 FEL
	BHL	Sec 32 T09S R22E 1402 FNL 0393 FEL

43-047-50982	NBU	921-28K3BS	Sec 28	T09S	R21E	1881	FSL	2247	FWL
		BHL	Sec 28	T09S	R21E	1689	FSL	1585	FWL
43-047-50983	NBU	921-28L3BS	Sec 28	T09S	R21E	1886	FSL	2266	FWL
		BHL	Sec 28	T09S	R21E	1656	FSL	0251	FWL
43-047-50984	NBU	921-28N1DS	Sec 28	T09S	R21E	1900	FSL	2324	FWL
		BHL	Sec 28	T09S	R21E	0805	FSL	2356	FWL
43-047-50985	NBU	921-28N2CS	Sec 28	T09S	R21E	1895	FSL	2305	FWL
		BHL	Sec 28	T09S	R21E	0792	FSL	1498	FWL
43-047-50988	NBU	921-27E3AS	Sec 27	T09S	R21E	1906	FSL	0712	FWL
		BHL	Sec 27	T09S	R21E	2027	FNL	0387	FWL
43-047-50989	NBU	921-27L1AS	Sec 27	T09S	R21E	1901	FSL	0721	FWL
		BHL	Sec 27	T09S	R21E	2427	FSL	1152	FWL
43-047-50990	NBU	921-27L2BS	Sec 27	T09S	R21E	1912	FSL	0704	FWL
		BHL	Sec 27	T09S	R21E	2349	FSL	0314	FWL
43-047-50991	NBU	921-27L3CS	Sec 27	T09S	R21E	1895	FSL	0729	FWL
		BHL	Sec 27	T09S	R21E	1570	FSL	0327	FWL
43-047-50992	NBU	921-27M2BS	Sec 27	T09S	R21E	1890	FSL	0737	FWL
		BHL	Sec 27	T09S	R21E	1079	FSL	0327	FWL
43-047-50997	NBU	921-26H1AS	Sec 26	T09S	R21E	1869	FNL	0224	FEL
		BHL	Sec 26	T09S	R21E	1594	FNL	0283	FEL
43-047-50998	NBU	921-26H2DS	Sec 26	T09S	R21E	1869	FNL	0254	FEL
		BHL	Sec 26	T09S	R21E	1791	FNL	0883	FEL
43-047-50999	NBU	921-26H4DS	Sec 26	T09S	R21E	1869	FNL	0234	FEL
		BHL	Sec 26	T09S	R21E	2330	FNL	0276	FEL
43-047-51002	NBU	921-26L2BS	Sec 26	T09S	R21E	1603	FSL	0718	FWL
		BHL	Sec 26	T09S	R21E	2475	FSL	0300	FWL
43-047-51003	NBU	921-26L3BS	Sec 26	T09S	R21E	1599	FSL	0709	FWL
		BHL	Sec 26	T09S	R21E	1817	FSL	0320	FWL
43-047-51004	NBU	921-26L4AS	Sec 26	T09S	R21E	1612	FSL	0736	FWL
		BHL	Sec 26	T09S	R21E	1932	FSL	1017	FWL
43-047-51005	NBU	921-26L4CS	Sec 26	T09S	R21E	1608	FSL	0727	FWL
		BHL	Sec 26	T09S	R21E	1325	FSL	0966	FWL

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

/s/ Michael L. Coulthard

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

MCoulthard:mc:3-15-10

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. NBU 922-32A2DS 4304750977			
String	Surf	Prod		
Casing Size(in)	8.625	4.500		
Setting Depth (TVD)	2160	9262		
Previous Shoe Setting Depth (TVD)	40	2160		
Max Mud Weight (ppg)	8.3	11.6		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3390	7780		
Operators Max Anticipated Pressure (psi)	5465	11.3		

Calculations	Surf String	8.625	"
Max BHP (psi)	.052*Setting Depth*MW=	932	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	673	NO Air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	457	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	466	NO Reasonable depth in area
Required Casing/BOPE Test Pressure=		2160	psi
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi *Assumes 1psi/ft frac gradient

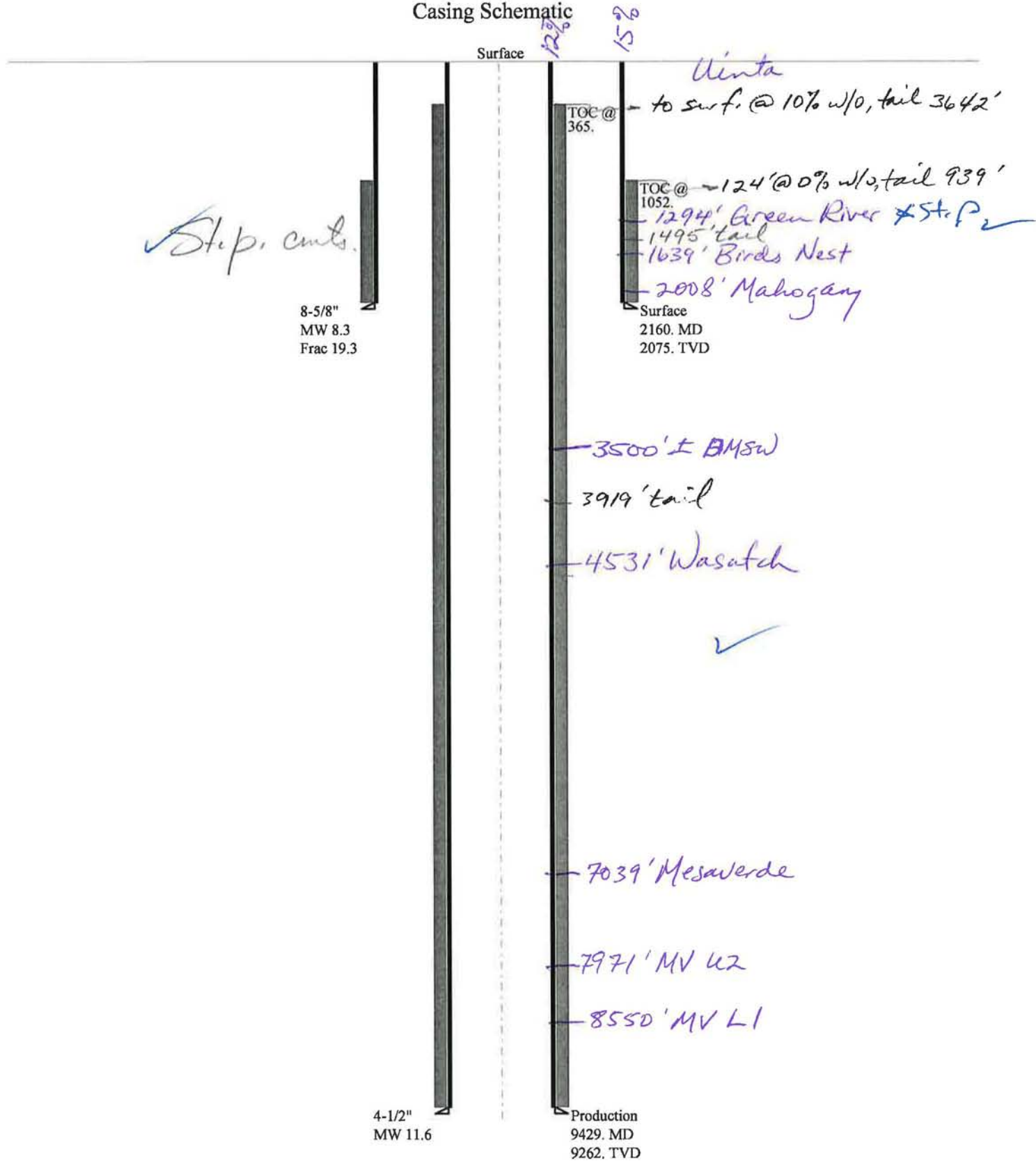
Calculations	Prod String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	5587	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	4476	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3549	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	4025	NO Reasonable
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2160	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
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max 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
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43047509770000 NBU 922-32A2DS

Casing Schematic



Well name:	43047509770000 NBU 922-32A2DS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Surface	Project ID:	43-047-50977
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: 103 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 1,052 ft

Burst

Max anticipated surface pressure: 1,901 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,150 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: 1,889 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 523 ft
Maximum dogleg: 3 °/100ft
Inclination at shoe: 20.01 °

Re subsequent strings:

Next setting depth: 9,262 ft
Next mud weight: 11.600 ppg
Next setting BHP: 5,581 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,160 ft
Injection pressure: 2,160 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	2160	8.625	28.00	I-55	LT&C	2075	2160	7.892	85536

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	898	1880	2.094	2150	3390	1.58	58.1	348	5.99 J

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

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

Date: April 1, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2075 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:	43047509770000 NBU 922-32A2DS		
Operator:	KERR-MCGEE OIL & GAS ONSHORE, L.P.		
String type:	Production	Project ID:	43-047-50977
Location:	UINTAH	COUNTY	

Design parameters:**Collapse**

Mud weight: 11.600 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: 204 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 365 ft

Burst

Max anticipated surface pressure: 3,544 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 5,581 psi

No backup mud specified.

Tension:

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

Tension is based on air weight.

Neutral point: 7,823 ft

Directional Info - Build & Drop

Kick-off point 300 ft
Departure at shoe: 1045 ft
Maximum dogleg: 3 °/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	9429	4.5	11.60	I-80	LT&C	9262	9429	3.875	124463
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	5581	6360	1.140	5581	7780	1.39	107.4	212	1.97 J

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

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

Date: April 1, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 9262 ft, a mud weight of 11.6 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

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

From: Jim Davis
To: Bonner, Ed; Hill, Brad; Mason, Diana
CC: Danielle Piernot; Garrison, LaVonne; Hayden, Martha; kathy.schneebeck...
Date: 4/14/2010 12:33 PM
Subject: Kerr McGee approvals (23)

With the noted conditions of approval, the following wells have been approved by SITLA including arch and paleo clearance.

Paleo monitoring during all phases of construction is required on these wells.
Kerr-McGee's NBU 922-31O1CS [API #4304751013]

Kerr-McGee's NBU 922-31N3DS [API #4304751012]

Kerr-McGee's NBU 922-31N2DS [API #4304751011]

Kerr-McGee's NBU 922-31N4BS [API #4304751010]

Kerr-McGee's NBU 922-31N2AS [API #4304751009]

Kerr-McGee's NBU 922-31M4CS [API #4304751008] (SITLA Surface / Fed Minerals)

Kerr-McGee's NBU 922-31M4BS [API #4304751007] (SITLA Surface / Fed Minerals)

Spot paleo monitoring is required during construction of these wells.
Kerr-McGee's NBU 922-32O1CS [API #4304751037]

Kerr-McGee's NBU 922-32K4BS [API #4304751036]

Kerr-McGee's NBU 922-32J3AS [API #4304751035]

Kerr-McGee's NBU 922-32O4DS [API #4304751038]

Kerr-McGee's NBU 922-32M4CS [API #4304751024]

Kerr-McGee's NBU 922-32M4AS [API #4304751023]

Kerr-McGee's NBU 922-32M3CS [API #4304751022]

Kerr-McGee's NBU 922-32L4DS [API #4304751021]

Kerr-McGee's NBU 922-32L1CS [API #4304751020]

Kerr-McGee's NBU 922-32H1BS [API #4304750979]

Kerr-McGee's NBU 922-32A4DS [API #4304750978]

Kerr-McGee's NBU 922-32A2DS [API #4304750977]

Kerr-McGee's NBU 922-31B1BS [API #4304750976]

Kerr-McGee's NBU 922-31A1CS [API #4304750974]

Kerr-McGee's NBU 922-31A1AS [API #4304750973]

Kerr-McGee's NBU 922-31A2CS [API #4304750975]

Thanks.
-Jim

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

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.			
Well Name	NBU 922-32A2DS			
API Number	43047509770000	APD No	2434	Field/Unit NATURAL BUTTES
Location: 1/4,1/4	SENE	Sec 32	Tw 9.0S	Rng 22.0E 1555 FNL 931 FEL
GPS Coord (UTM)	631620 4428356	Surface Owner		

Participants

Floyd Bartlett (DOGM), Clay Einerson, Grizz Oleen, Charles Chase, Roger Perry and Shelia Wopsock (Kerr McGee), Alex Hansen and Ben Williams (UDWR) and Mitch Batty and John Slaugh, (Timberline Engineering and Land Surveying).

Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in a major un-named drainage east of the lower portion of the Sand Wash drainage of Uintah, County, approximately 32 air miles and 58 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the general area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the area. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. Also, no springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The existing pad of the producing NBU 922-32H gas well will be enlarged to add three wells that will be directionally drilled. They are the NBU 922-32H1BS, NBU 922-32A4DS and NBU 922-32A2DS. The site is in broken and uneven topography. The existing pad will be enlarged to the east excavating into a hill and a short distance to the west into a deep drainage. The reserve pit is in the previous area but will be slightly enlarged. No diversions are needed around the pad. The White River is approximately 1 mile down drainage.

Both the surface and minerals are owned by SITLA.

Surface Use Plan

Current Surface Use

Grazing
Wildlife Habitat
Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	Width 340 Length 450	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is a salt desert shrub type. Principal species present are cheatgrass, prickly pear, wild onion, shadscale, halogeton, pepper grass, annuals and curly mesquite grass.

Cattle, antelope and small mammals and birds.

Soil Type and Characteristics

Surface soils are a shallow rocky loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

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

Reserve Pit

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)	100 to 200	5
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)		20
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
	Final Score	40
		1 Sensitivity Level

Characteristics / Requirements

The reserve pit will be on the northwest corner of the location with a small portion of the east side within fill. With the provided 2 feet of pit freeboard, the 15-foot outside bench, the reserve pit spoils located in this area and the proposed double 30-mil liner, the pit should be stable. Dimensions are 125' x 200' x 12' deep with 2' of freeboard.

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

Other Observations / Comments

Floyd Bartlett
Evaluator

3/16/2010
Date / Time

Application for Permit to Drill Statement of Basis

4/20/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2434	43047509770000	SITLA	GW	S	No
Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.		Surface Owner-APD		
Well Name	NBU 922-32A2DS		Unit	NATURAL BUTTES	
Field	NATURAL BUTTES		Type of Work	DRILL	
Location	SENE 32 9S 22E S 1555 FNL 931 FEL GPS Coord (UTM) 631728E 4428193N				

Geologic Statement of Basis

Kerr McGee proposes to set 2,160' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,500'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 32. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill
APD Evaluator

3/30/2010
Date / Time

Surface Statement of Basis

The general area is the Natural Buttes Unit in a major un-named drainage east of the lower portion of the Sand Wash drainage of Uintah, County, approximately 32 air miles and 58 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the general area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the area. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. Also, no springs exist in the area. An occasional constructed pond occurs furnishing water for antelope or livestock.

The existing pad of the producing NBU 922-32H gas well will be enlarged to add three wells that will be directionally drilled. They are the NBU 922-32H1BS, NBU 922-32A4DS and NBU 922-32A2DS. The site is in broken and uneven topography. The existing pad will be enlarged to the east excavating into a hill and a short distance to the west into a deep drainage. The reserve pit is in the previous area but will be slightly enlarged. No diversions are needed around the pad. The White River is approximately 1 mile down drainage.

Both the surface and minerals are owned by SITLA. Ed Bonner and Jim Davis of SITLA were invited by phone and email to the pre-site evaluation. Mr. Bonner attended and had no concerns regarding the proposal. Mr. Charles Chase of the Kerr McGee will provide a site restoration plan to SITLA for their concurrence.

Alex Hansen of the Utah Division of Wildlife Resources also attended. He stated that the area was yearlong antelope habitat but recommended no stipulations. No other wildlife is expected to be significantly affected.

Floyd Bartlett
Onsite Evaluator

3/16/2010
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
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.

Application for Permit to Drill Statement of Basis

4/20/2010

Utah Division of Oil, Gas and Mining

Page 2

Surface

The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 3/2/2010

API NO. ASSIGNED: 43047509770000

WELL NAME: NBU 922-32A2DS

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

PHONE NUMBER: 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SENE 32 090S 220E

Permit Tech Review: ☒

SURFACE: 1555 FNL 0931 FEL

Engineering Review: ☒

BOTTOM: 0510 FNL 0902 FEL

Geology Review: ☒

COUNTY: UINTAH

LATITUDE: 39.99554

LONGITUDE: -109.45697

UTM SURF EASTINGS: 631728.00

NORTHINGS: 4428193.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

LEASE NUMBER: ML 22649

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

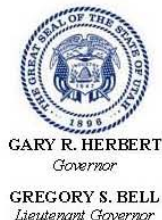
Effective Date: 12/2/1999

Siting: 460' Fr U Bdry and Uncommitted Tract

☒ **R649-3-11. Directional Drill**

Comments: Presite Completed

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



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 922-32A2DS
API Well Number: 43047509770000
Lease Number: ML 22649
Surface Owner: STATE
Approval Date: 4/22/2010

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

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):

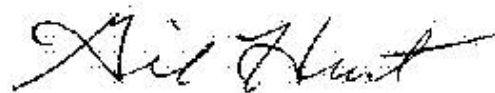
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

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:



Gil Hunt
Associate Director, Oil & Gas

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

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

Well Name: NBU 922-32A2DS

Api No: 43-047-50977 Lease Type STATE

Section 32 Township 09S Range 22E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

SPUDDED:

Date 07/05/2010

Time 2:00 PM

How DRY

Drilling will Commence: JULY 16, 2010

Reported by GARRETT EATON

Telephone # (435) 790-2060

Date 07/06/2010 Signed CHD

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: ML 22649			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 922-32A2D S				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047509770000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1555 FNL 0931 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 32 Township: 09.0S Range: 22.0E Meridian: S		COUNTY: UTAH STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION	TYPE OF ACTION				
☐ NOTICE OF INTENT Approximate date work will start: ☐ SUBSEQUENT REPORT Date of Work Completion: ☒ SPUD REPORT Date of Spud: 7/5/2010 ☐ DRILLING REPORT Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> ☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUT OFF ☐ WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> ☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☐ OTHER </td> <td style="width: 33%; vertical-align: top;"> ☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION OTHER: </td> </tr> </table>		☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUT OFF ☐ WILDCAT WELL DETERMINATION	☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☐ OTHER	☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION OTHER:
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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 JULY 5, 2010 AT 14:00 HRS.					
NAME (PLEASE PRINT) Andy Lytle		PHONE NUMBER 720 929-6100			
SIGNATURE N/A		TITLE Regulatory Analyst DATE 7/8/2010			

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 July 13, 2010

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

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995
Address: P.O. Box 173779
city DENVER
state CO zip 80217 Phone Number: (720) 929-6100

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750979	NBU 922-32H1BS		SENE	32	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<u>B</u>	99999	<u>2900</u>	7/5/2010			<u>7/20/10</u>	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 7/5/2010 AT 10:00 HRS. <u>BHL = SENE</u>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750978	NBU 922-32A4DS		SENE	32	9S	22E	UINTA
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<u>B</u>	99999	<u>2900</u>	7/5/2010			<u>7/20/10</u>	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 7/5/2010 AT 12:00 HRS. <u>BHL = NENE</u>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750977	NBU 922-32A2DS		SENE	32	9S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<u>B</u>	99999	<u>2900</u>	7/5/2010			<u>7/20/10</u>	
Comments: MIRU PETE MARTIN BUCKET RIG. <u>WSMVD</u> SPUD WELL LOCATION ON 7/5/2010 AT 14:00 HRS. <u>BHL = NENE</u>							

ACTION CODES:

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

ANDY LYTLE

Name (Please Print)


Signature

REGULATORY ANALYST

Title

7/8/2010

Date

JUL 12 2010

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: ML 22649			
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 922-32A2D S			
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PHONE NUMBER: 720 929-6007 Ext		9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
COUNTY: UTAH		STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION	TYPE OF ACTION				
☐ NOTICE OF INTENT Approximate date work will start: ☐ SUBSEQUENT REPORT Date of Work Completion: ☐ SPUD REPORT Date of Spud: ☒ DRILLING REPORT Report Date: 7/14/2010	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> ☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUT OFF ☐ WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> ☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☐ OTHER </td> <td style="width: 33%; vertical-align: top;"> ☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION OTHER: </td> </tr> </table>		☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUT OFF ☐ WILDCAT WELL DETERMINATION	☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☐ OTHER	☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION OTHER:
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PROPETRO AIR RIG ON 7/11/2010. DRILLED 11" SURFACE HOLE TO 2200'. RAN 8-5/8" 28# J55 SURFACE CSG. PUMP 120 BBLS OF 8.3 LBS H2O AHEAD. FULL CIRC. PUMP 20 BBLS OF 8.4 LBS GEL WATER AHEAD. FULL CIRC. LEAD CMT W/160 SX CLASS PREM LITE @ 11.0 PPG, 3.82 YIELD. FULL CIRC. TAILED CMT W/220 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YLD. FULL CIRC. DROP PLUG ON FLY AND DISPLACE W/125 BBLS OF 8.3 LB H2O. FULL RETURNS. BUMP PLUG AND HOLD 1200 PSI FOR 5 MIN. FLOAT HELD. PUMP 100 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YLD. CEMENT STAYED AT SURFACE. WORT.					
NAME (PLEASE PRINT) Andy Lytle		PHONE NUMBER 720 929-6100			
SIGNATURE N/A		TITLE Regulatory Analyst			
DATE 7/14/2010		DATE 7/14/2010			

RECEIVED July 14, 2010

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: ML 22649																														
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TYPE OF SUBMISSION ☒ NOTICE OF INTENT Approximate date work will start: 8/4/2010 ☐ SUBSEQUENT REPORT Date of Work Completion: ☐ SPUD REPORT Date of Spud: ☐ DRILLING REPORT Report Date:	TYPE OF ACTION <table style="width: 100%; border: none;"> <tr> <td>☐ ACIDIZE</td> <td>☐ ALTER CASING</td> <td>☐ CASING REPAIR</td> </tr> <tr> <td>☐ CHANGE TO PREVIOUS PLANS</td> <td>☐ CHANGE TUBING</td> <td>☐ CHANGE WELL NAME</td> </tr> <tr> <td>☐ CHANGE WELL STATUS</td> <td>☐ COMMINGLE PRODUCING FORMATIONS</td> <td>☐ CONVERT WELL TYPE</td> </tr> <tr> <td>☐ DEEPEN</td> <td>☐ FRACTURE TREAT</td> <td>☐ NEW CONSTRUCTION</td> </tr> <tr> <td>☐ OPERATOR CHANGE</td> <td>☐ PLUG AND ABANDON</td> <td>☐ PLUG BACK</td> </tr> <tr> <td>☐ PRODUCTION START OR RESUME</td> <td>☐ RECLAMATION OF WELL SITE</td> <td>☐ RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td>☐ REPERFORATE CURRENT FORMATION</td> <td>☐ SIDETRACK TO REPAIR WELL</td> <td>☐ TEMPORARY ABANDON</td> </tr> <tr> <td>☐ TUBING REPAIR</td> <td>☐ VENT OR FLARE</td> <td>☐ WATER DISPOSAL</td> </tr> <tr> <td>☐ WATER SHUTOFF</td> <td>☐ SI TA STATUS EXTENSION</td> <td>☐ APD EXTENSION</td> </tr> <tr> <td>☐ WILDCAT WELL DETERMINATION</td> <td>☒ OTHER</td> <td>OTHER: Pit Refurb/ ACTS Pit</td> </tr> </table>		☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION	☐ WILDCAT WELL DETERMINATION	☒ OTHER	OTHER: Pit Refurb/ ACTS Pit
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore, LP is requesting to refurb the existing pit on this multi-well pad for completion operations. The refurb pit will be relined per the requirements in the COA of the APD. Upon completion of the wells on this pad, Kerr-McGee is also requesting to utilize this pit as an ACTS staging pit to be utilized for other completion operations in the area. There will be 2-500 bbl temporary frac tanks placed on the location. The trucks will unload water into these tanks before the water is placed into the refurbished pit. The purpose of the frac tanks is to collect any hydro-carbons that may have been associated with the other completion operations before releasing into the pit. We plan to keep this pit open for 1 year. During this time the surrounding well location completion fluids will be recycled in this pit and utilized for other frac jobs in the surrounding sections.																																
Approved by the Utah Division of Oil, Gas and Mining Date: August 03, 2010 By:																																
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst																														
SIGNATURE N/A	DATE 7/28/2010																															



The Utah Division of Oil, Gas, and Mining

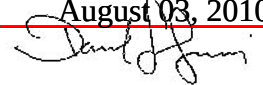
- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047509770000

A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the pit.

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

Date: August 03, 2010
By: 

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		8. WELL NAME and NUMBER: NBU 922-32A2DS
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COUNTY: UINTAH		STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUTOFF ☐ WILDCAT WELL DETERMINATION	☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☐ OTHER	☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION OTHER:
☐ SUBSEQUENT REPORT Date of Work Completion:			
☐ SPUD REPORT Date of Spud:			
☒ DRILLING REPORT Report Date: 9/18/2010			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 FINISHED DRILLING FROM 2200' TO 9429' ON SEPTEMBER 17, 2010. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 520 SX CLASS G ECONOCHEM @ 12.8 PPG, 1.85 YD. TAILED CEMENT W/ 1070 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.25 YD. DISPLACED W/ 146 BBLS WATER W/ CLAYFIX & ALDACIDE, FULL RETURNS, BUMPED PLUG TO 2359. FINAL LIFT 2800, 500 PSI OVER, 2 BBL BACK TO TRUCK. RD CEMENTERS AND CLEANED PITS. RELEASED ENSIGN RIG #145 ON SEPTEMBER 18, 2010 @ 20:00 HRS.

NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A		DATE 9/20/2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
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COUNTY: UTAH		STATE: UTAH

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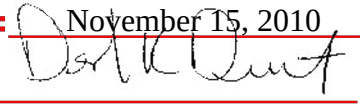
TYPE OF SUBMISSION	TYPE OF ACTION		
☒ NOTICE OF INTENT Approximate date work will start: 11/17/2010 ☐ SUBSEQUENT REPORT Date of Work Completion: ☐ SPUD REPORT Date of Spud: ☐ DRILLING REPORT Report Date:	☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☐ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUTOFF ☐ WILDCAT WELL DETERMINATION	☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☒ OTHER	☒ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION OTHER: Completion

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

Per request, please find attached procedure for proposed repair and completion work on the subject well location. This well has not been fully completed yet. Please contact the undersigned if you have any questions and/or concerns.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: November 15, 2010

By: 

NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 11/15/2010

Greater Natural Buttes Unit



NBU 922-32A2DS
COMPLETIONS PROCEDURE

DATE: 11/3/2010
AFE#:2037858
USER ID:JVN975 (Frac Invoices Only)

COMPLETIONS ENGINEER: Michael Sollee, Denver, CO
(720)-929-6057 (Office)
(832)-859-0515 (Cell)

SIGNATURE:

ENGINEERING MANAGER: JEFF DUFRESNE

SIGNATURE:

REMEMBER SAFETY FIRST!

RECEIVED November 15, 2010

Name: NBU 922-32A2DS
Location: SE NW NE NE Sec 32 T9S R22E
Uintah County, UT
Date: 11/3/2010

ELEVATIONS: 4984' GL 4997' KB

TOTAL DEPTH: 9460' **PBTD:** 9407'
SURFACE CASING: 8 5/8", 28# IJ-55 LT&C @ 2190'
PRODUCTION CASING: 4 1/2", 11.6#, I-80 LT&C @ 9452'
Marker Joint **7139-7160'**

TUBULAR PROPERTIES:

	BURST (psi)	COLLAPSE (psi)	DRIFT DIA. (in.)	CAPACITIES	
				(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55 tbg	7,700	8,100	1.901"	0.00387	0.1624
4 1/2" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
2 3/8" by 4 1/2" Annulus				0.0101	0.4227

TOPS:

1427' Green River Top
1768' Bird's Nest Top
2234' Mahogany Top
4684' Wasatch Top
7199' Mesaverde Top

BOTTOMS:

7199' Wasatch Bottom
9460' Mesaverde Bottom (TD)

T.O.C. @ N/A'

GENERAL:

- A minimum of **24** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons RMTE log dated **10/25/2010**.
- **7** fracturing stages required for coverage.
- Procedure calls for **7** CBP's (**8000** psi).
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gpt (in pad and until 1.25 ppg ramp up is reached) and 10 gpt in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, **Slickwater frac**.
- Maximum surface pressure **7000** psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.
- **Call flush at 0 PPG @ inline densimeters. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.**

RECEIVED November 15, 2010

- **If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing - over flush stage by 5 bbls (from top perf)**
- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump **curable resin coated sand** last 5,000# of all frac stages
- **Note: Equipment to have on location:**
 - a. 2 jts 4-1/2" x 11.6# x 8rd
 - b. 2 jts 4-1/2" x 11.6" x Butress
 - c. Butress x 8rd change overs.
 - d. Elevators for 4-1/2" csg.
 - e. Tongs for 4-1/2" csg.

All Weatherford well head parts needed, with Weatherford hand.

PROCEDURE: Prior to initiating back-off or casing cutting activities the UDOGM will be notified. Specifically, Mr. Dave Hackford (435-722-7589) will be called, and if not available, Dan Jarvis (801-538-5338) and or Dustin Doucet (801-538-5281) will be notified. No work will be accomplished prior to notifying the appropriate UDOGM representative.

1. MIRU service rig. Check & bleed pressure off 4 1/2" prod csg x 8 5/8" surf csg annulus.
2. If a casing backoff can be performed, proceed with Step 3. If a casing patch will be run, proceed with Step 10.
3. NDWH. PU 4 1/2" internal casing cutter on 10' X 2 3/8" L-80 8RD tbg sub & RIH. RU pwr swivel & cut off 4 1/2" prod csg 2' below mandrel hanger.
4. POOH & LD cutting tools, LD mandrel hanger & 2' x 4 1/2" csg stub.
5. PU 7 3/8" OD overshot w/ 4 1/2" grapple & RIH. Latch fish.
6. MIRU wireline w/ lubricator. PU string shot & RIH. Shoot @ ~46'. (csg collar below 4' landing sub)
7. Back off csg @ ~46' & POOH. LD csg.
8. PU new 4 1/2" 11.6# csg jt, 10' x 4 1/2" csg sub & rih. Screw into csg. Pull 80 – 100k lbs. Install C-22 csg slips. Pressure tst csg to 7000 psi. Casing will be tested to 200 psi, 2,000 psi and finally 7,000 psi with each step held and charted for 10 minutes. Final pressure to be held for 30 minutes. Check for communication at each step. Land csg & install WH. Pressure test annulus to 50 psi, 200 psi and 900 psi. with each step held and charted for 10 minutes. Check for communication at each step.
9. Continue with completion procedure at Step 16.
10. NDWH. PU 4 1/2" mechanical internal csg cutter on 2 3/8" L-80 8RD tbg jt & RIH. RU pwr swivel & cut off 4 1/2" prod csg @ +/- 35'. POOH, LD tbg and csg cutter.
11. POOH, LD 4' x 4 1/2" landing sub, mandrel hanger & cut off 4 1/2" prod csg.
12. PU Logan Oil Tools 10,000 psi 4 1/2" external csg patch, 1 jt 11.6# l-80 Butress csg w/crossover subs to 6" drl collar & bmp sub. Work csg patch over fish top.

13. PU 80,000 lbs. LD bumper sub and drill collar. Pressure test 4 ½" csg to 7000 psi. Pressure test csg to 7000 psi. Casing will be tested to 200 psi, 2,000 psi and finally 7,000 psi with each step held and charted for 10 minutes. Final pressure to be held for 30 minutes. Check for communication at each step. Hold and record pressure for 30 minutes. Check for communication. Pressure test annulus to 50 psi, 200 psi and 900 psi. with each step held and charted for 10 minutes.
14. Install Weatherford C-22 slips & land csg in 60,000 - 80,000 lbs tension.
15. Cut off 4 ½" csg stub. Bevel cut to the inside as directed by wellhead recommendation.
16. NU and test BOPs. RIH 3 7/8" mill and clean out to PBTD @ ~9407' if possible, or to 9234' at a minimum. Circulate hole clean with recycled water. POOH. Run CBL (if needed).
17. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
MESAVERDE	9046	9047	3	3
MESAVERDE	9077	9078	3	3
MESAVERDE	9126	9127	3	3
MESAVERDE	9166	9167	3	3
MESAVERDE	9188	9189	3	3
MESAVERDE	9202	9204	3	6
18. Breakdown perfs and establish injection rate (include scale inhibitor in fluid). Spot 250 gal of 15% HCl and let soak. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~9046' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
19. Set 8000 psi CBP at ~8,996'. Perf the following 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
MESAVERDE	8744	8746	4	8
MESAVERDE	8777	8778	4	4
MESAVERDE	8930	8933	4	12
20. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~8744' and trickle 250gal 15%HCL w/ scale inhibitor in flush.
21. Set 8000 psi CBP at ~8,694'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
MESAVERDE	8439	8440	3	3
MESAVERDE	8493	8494	3	3
MESAVERDE	8507	8508	3	3
MESAVERDE	8548	8549	3	3
MESAVERDE	8605	8606	3	3
MESAVERDE	8644	8646	3	6
22. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~8439' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

23. Set 8000 psi CBP at ~8,389'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
MESAVERDE	8132	8133	3	3
MESAVERDE	8154	8155	3	3
MESAVERDE	8193	8194	3	3
MESAVERDE	8257	8258	3	3
MESAVERDE	8288	8289	3	3
MESAVERDE	8332	8334	3	6

24. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~8132' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

25. Set 8000 psi CBP at ~7,816'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
MESAVERDE	7472	7473	4	4
MESAVERDE	7558	7559	3	3
MESAVERDE	7578	7579	3	3
MESAVERDE	7621	7622	4	4
MESAVERDE	7648	7649	4	4
MESAVERDE	7715	7716	4	4

26. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~7472' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

27. Set 8000 psi CBP at ~7,422'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
WASATCH	7146	7147	3	3
MESAVERDE	7218	7219	3	3
MESAVERDE	7227	7228	3	3
MESAVERDE	7246	7247	3	3
MESAVERDE	7332	7334	3	6
MESAVERDE	7364	7366	3	6

28. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 6 on attached listing. Under-displace to ~7146' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

29. Set 8000 psi CBP at ~6,894'. Perf the following 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
WASATCH	6760	6764	4	16
WASATCH	6792	6794	4	8

30. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 7 on attached listing. Under-displace to ~6760' and flush only with recycled water.

31. Set 8000 psi CBP at ~6,710'.

32. TIH with 3 7/8" bit, pump off sub, SN and tubing.
33. Drill plugs and clean out to PBTD. Land tubing, remove BOPs, install wellhead. Shear off bit and land tubing at $\pm 8714'$ unless indicated otherwise by the well's behavior
34. Clean out well with foam and/or swabbing unit until steady flow has been established from completion.
35. RDMO

**For design questions, please call
Michael Sollee, Denver, CO
(720)-929-6057 (Office)
(832)-859-0515 (Cell)**

**For field implementation questions, please call
Jeff Samuels, Vernal, UT
435-781 7046 (Office)**

NOTES:

Fracturing Schedules

Name NEU 922-32A2DS

Copy to new book

Recomplete?
Pad?

ACTS?

N

Y

Swabbing Days 0 Enter Number of swabbing days here for recompletes

Production Log 0 Enter 1 if running a Production Log

DFT 0 Enter Number of DFTs

Slickwater Frac

Stage	Zone	Top, ft.	Perfs Bot, ft.	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.
1	MESAVERDE	9046	9047	3	3	Varied	Pump-in test			Slickwater	12,296	0	0	0						
	MESAVERDE	9077	9078	3	3	0 ISIP and 5 min ISIP		0.25	1.25	Slickwater	12,296	12,296	293	293	15.0%	0.0%	0	0		58
	MESAVERDE	9126	9127	3	3	50 Slickwater Pad				Slickwater	23,226	35,522	553	846	28.3%	18.7%	17,419	17,419		37
	MESAVERDE	9166	9167	3	3	50 Slickwater Ramp				Slickwater	0	35,522	0	846	0.0%	0.0%	0	17,419		70
	MESAVERDE	9188	9189	3	3	50 SW Sweep		1.25	1.5	Slickwater	23,226	58,748	553	1,399	28.3%	34.3%	31,936	49,355		0
	MESAVERDE	9202	9204	3	6	50 Slickwater Ramp		0	0	Slickwater	5,250	63,998	125	1,524	0.0%	0.0%	0	49,355		0
	MESAVERDE					50 SW Sweep		0.5	1.5	Slickwater	3,000	66,998	71	1,595	3.2%	3.2%	3,000	52,355		0
	MESAVERDE					50 Slickwater Ramp		1.5	2	Slickwater	23,226	90,224	553	2,148	28.3%	43.7%	40,645	93,000		0
	MESAVERDE					50 Flush (4-1/2)				Slickwater	5,905	96,129	141	2,289			93,000	93,000		58
	MESAVERDE					ISDP and 5 min ISDP														223
	MESAVERDE									Sand laden Volume	81,974					gal/md-ft	38,000	43,112	lbs sand/md-ft	
	MESAVERDE				Look	21							Flush depth		9046	CBP depth	8,996	50		
2	MESAVERDE	8744	8746	4	8	45.8	<< Above pump time (min)			Slickwater	0	0	0	0						
	MESAVERDE	8777	8778	4	8	Varied	Pump-in test			Slickwater	7,547	7,547	180	180	15.0%	0.0%	0	0		23
	MESAVERDE	8930	8933	4	4	0 ISIP and 5 min ISIP		0.25	1.25	Slickwater	14,256	21,804	339	519	28.3%	19.4%	10,692	10,692		43
	MESAVERDE				12	50 Slickwater Ramp		0	0	Slickwater	0	21,804	0	519	0.0%	0.0%	0	10,692		0
	MESAVERDE					50 SW Sweep		1.25	1.5	Slickwater	14,256	36,060	339	859	28.3%	35.5%	19,602	30,294		0
	MESAVERDE					50 Slickwater Ramp		0	0	Slickwater	0	36,060	0	859	0.0%	0.0%	0	30,294		0
	MESAVERDE					50 SW Sweep		0.5	1.5	Slickwater	0	36,060	0	859	0.0%	0.0%	0	30,294		0
	MESAVERDE					50 Slickwater Ramp		1.5	2	Slickwater	14,256	50,316	339	1,198	28.3%	45.2%	24,948	55,243		0
	MESAVERDE					50 Flush (4-1/2)				Slickwater	5,708	56,024	136	1,334			55,243	55,243		56
	MESAVERDE					ISDP and 5 min ISDP														122
	MESAVERDE				Look	24				Sand laden Volume	50,316					gal/md-ft	38,000	41,721	lbs sand/md-ft	
	MESAVERDE					26.7	<< Above pump time (min)						Flush depth		8744	CBP depth	8,694	50		

Name NBU 922-32A2DS
Perforation and CBP Summary

Stage	Zones	Perforations		SPF	Holes	Fracture Coverage		
		Top, ft	Bottom, ft					
1	MESAVERDE	9046	9047	3	3	9037	to	9049
	MESAVERDE	9077	9078	3	3	9064	to	9083.5
	MESAVERDE	9126	9127	3	3	9122.5	to	9140.5
	MESAVERDE	9166	9167	3	3	9142.5	to	9180.5
	MESAVERDE	9188	9189	3	3	9182.5	to	9195.5
	MESAVERDE	9202	9204	3	6	9196.5	to	9209.5
	MESAVERDE							
	# of Perfs/stage				Look			
2	MESAVERDE	8744	8746	4	8	8736	to	8762
	MESAVERDE	8777	8778	4	4	8770	to	8785
	MESAVERDE	8930	8933	4	12	8919	to	8949
	MESAVERDE							
	MESAVERDE							
	MESAVERDE							
	MESAVERDE							
	# of Perfs/stage				Look			
3	MESAVERDE	8439	8440	3	3	8429	to	8446.5
	MESAVERDE	8493	8494	3	3	8461	to	8522.5
	MESAVERDE	8507	8508	3	3	8461	to	8522.5
	MESAVERDE	8548	8549	3	3	8537	to	8563
	MESAVERDE	8605	8606	3	3	8578	to	8608.5
	MESAVERDE	8644	8646	3	6	8627	to	8652.5
	MESAVERDE							
	# of Perfs/stage				Look			
4	MESAVERDE	8132	8133	3	3	8126	to	8135.5
	MESAVERDE	8154	8155	3	3	8141.5	to	8169
	MESAVERDE	8193	8194	3	3	8183.5	to	8219
	MESAVERDE	8257	8258	3	3	8248.5	to	8306
	MESAVERDE	8288	8289	3	3	8248.5	to	8306
	MESAVERDE	8332	8334	3	6	8311	to	8336.5
	MESAVERDE							
	# of Perfs/stage				Look			
5	MESAVERDE	7472	7473	4	4	7459	to	7477
	MESAVERDE	7558	7559	3	3	7546.5	to	7589.5
	MESAVERDE	7578	7579	3	3	7546.5	to	7589.5
	MESAVERDE	7621	7622	4	4	7614	to	7628.5
	MESAVERDE	7648	7649	4	4	7644	to	7653
	MESAVERDE	7715	7716	4	4	7705.5	to	7726.5
	MESAVERDE							
	# of Perfs/stage				Look			
6	WASATCH	7146	7147	3	3	7141.5	to	7154
	MESAVERDE	7218	7219	3	3	7199	to	7230
	MESAVERDE	7227	7228	3	3	7199	to	7230
	MESAVERDE	7246	7247	3	3	7243	to	7251
	MESAVERDE	7332	7334	3	6	7323	to	7338.5
	MESAVERDE	7364	7366	3	6	7353	to	7372
	MESAVERDE							
	# of Perfs/stage				Look			
7	WASATCH	6760	6764	4	16	6744.5	to	6771.5
	WASATCH	6792	6794	4	8	6784	to	6801.5
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				Look			
Totals					157			



Logan High Pressure Casing Patches Assembly Procedure

All parts should be thoroughly greased before being assembled.

1. Install all four Logan Type “L” Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type “L” Packers.
3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.
4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.
5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.
6. Install the Cutlipped Guide into the lower end of the Bowl.
7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.
8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

Follow recommended Make-Up Torque as provided in chart.

PACKER PROTECTOR FULLY SEATED IN TOP SUB

4.49

4.08

4.07

4.75

31.75

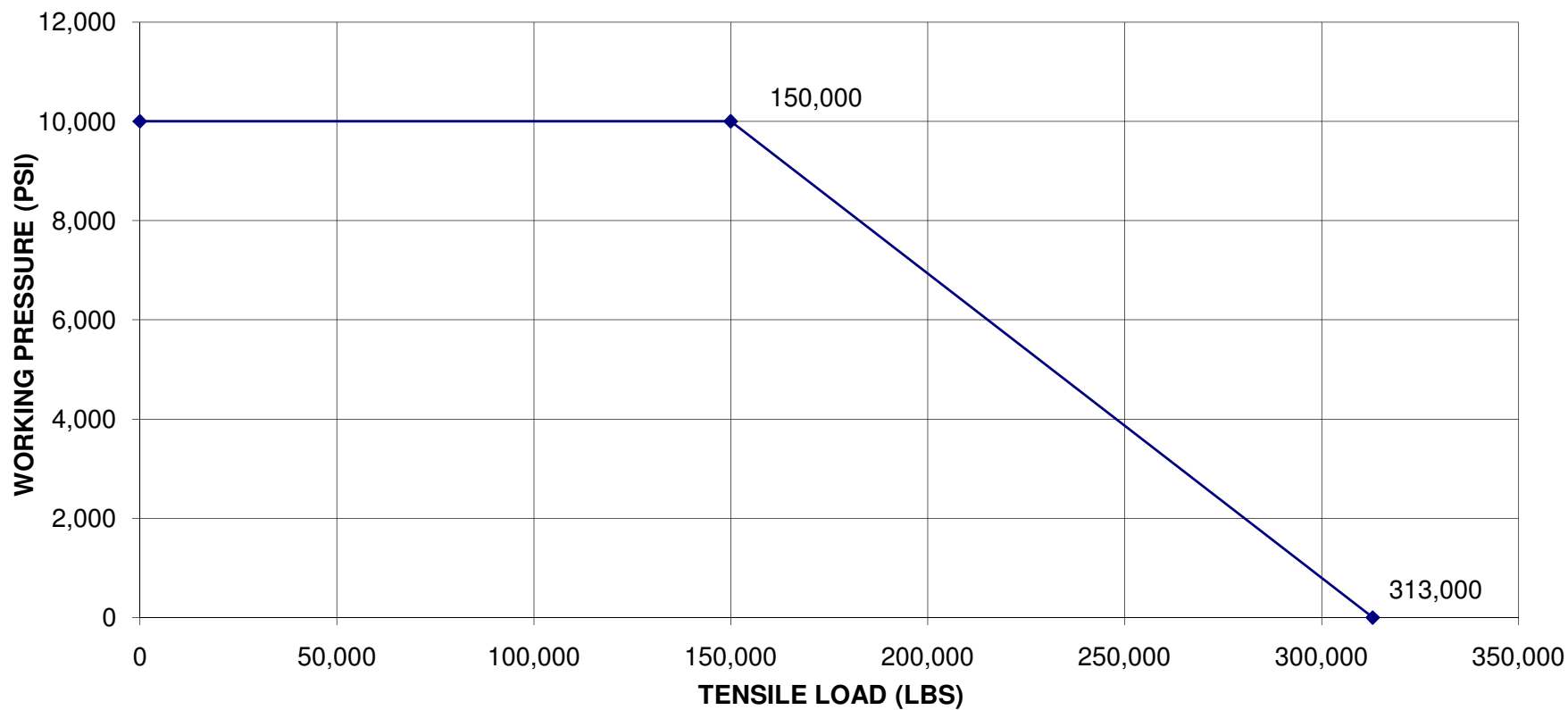
36.24

21.43

52.70

PACKER PROTECTOR IN RUNNING POSITION

**STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH
4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L
LOGAN ASSEMBLY NO. 510L-005 -000**



COLLAPSE PRESSURE:
11,222 PSI @ 0 TENSILE
8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield:
Tensile Strength w/ 0 Int. Press.= 472,791lbs.
Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

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: ML 22649
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 922-32A2DS
PHONE NUMBER: 720 929-6007 Ext		9. API NUMBER: 43047509770000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1555 FNL 0931 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 32 Township: 09.0S Range: 22.0E Meridian: S		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
		COUNTY: UINTAH
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE ☐ CHANGE TO PREVIOUS PLANS ☐ CHANGE WELL STATUS ☐ DEEPEN ☐ OPERATOR CHANGE ☒ PRODUCTION START OR RESUME ☐ REPERFORATE CURRENT FORMATION ☐ TUBING REPAIR ☐ WATER SHUTOFF ☐ WILDCAT WELL DETERMINATION	
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ ALTER CASING ☐ CHANGE TUBING ☐ COMMINGLE PRODUCING FORMATIONS ☐ FRACTURE TREAT ☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE ☐ SIDETRACK TO REPAIR WELL ☐ VENT OR FLARE ☐ SI TA STATUS EXTENSION ☐ OTHER:	
☐ SPUD REPORT Date of Spud:	☐ CASING REPAIR ☐ CHANGE WELL NAME ☐ CONVERT WELL TYPE ☐ NEW CONSTRUCTION ☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION ☐ TEMPORARY ABANDON ☐ WATER DISPOSAL ☐ APD EXTENSION	
☒ DRILLING REPORT Report Date: 12/7/2010		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. THE SUBJECT WELL WAS PLACED ON PRODUCTION ON DECEMBER 7, 2010 AT 10:00 A.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY 12/8/2010		
NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER 720 929-6086	TITLE Regulatory Analyst II
SIGNATURE N/A	DATE 12/7/2010	

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:
ML 22649

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME
UTU63047A

8. WELL NAME and NUMBER:
NBU 922-32A2DS

9. API NUMBER:
4304750977

10. FIELD AND POOL, OR WILDCAT
NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE,
MERIDIAN:
SENE 32 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: SENE 1555 FNL 931 FEL S32,T9S,R22E
AT TOP PRODUCING INTERVAL REPORTED BELOW: NENE 500 FNL 914 FEL S32,T9S,R22E
AT TOTAL DEPTH: NENE 507 FNL 889 FEL S32,T9S,R22E

BHL Reviewed
by HSM

14. DATE SPUDDED: 7/5/2010 15. DATE T.D. REACHED: 9/17/2010 16. DATE COMPLETED: 12/7/2010 ABANDONED ☐ READY TO PRODUCE ☒

17. ELEVATIONS (DF, RKB, RT, GL):
9460 GL

18. TOTAL DEPTH: MD 9,460 TVD 9,300 19. PLUG BACK T.D.: MD 9,409 TVD 9,249 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)

CHI TRIPLE COMBO-RMTE

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#		2,190		480			
7 7/8"	4 1/2" I-80	11.6#		9,452		1,590			

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"	8,719							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) WASATCH	6,760	7,147			6,760 7,147	0.36	27	Open ☒ Squeezed ☐
(B) MESAVERDE	7,218	9,204			7,218 9,204	0.36	130	Open ☒ Squeezed ☐
(C)								Open ☐ Squeezed ☐
(D)								Open ☐ Squeezed ☐

27. PERFORATION RECORD

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6760 - 9204	PUMP 10,817 BBLS SLICK H2O & 431,230 LBS 30/50 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

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED: 12/7/2010		TEST DATE: 12/11/2010		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 2,127	WATER – BBL: 672	PROD. METHOD: FLOWING
CHOKE SIZE: 20/64	TBG. PRESS. 1,500	CSG. PRESS. 2,450	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 0	GAS – MCF: 2,127	WATER – BBL: 672	INTERVAL STATUS: PROD

INTERVAL B (As shown in item #26)

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

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

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	1,427				
BIRD'S NEST	1,768				
MAHOGANY	2,234				
WASATCH	4,684	7,199			
MESAVERDE	7,199	9,460	TD		

35. ADDITIONAL REMARKS (Include plugging procedure)

Attached is the chronological well history & final survey. A Sundry Notice was submitted 11/15/2010 for wellhead/casing repair work. This work is documented in attached chrono. Completion chrono details individual frac stages. The Rig Release Sundry submitted 9/20/2010 reported TD @ 9429'; it should have reported TD @ 9460'.

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

NAME (PLEASE PRINT) GINA BECKERTITLE REGULATORY ANALYST

SIGNATURE

DATE 1/7/2011

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

DIV. OF OIL, GAS & MINING

US ROCKIES REGION

Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]				Spud Conductor: 7/5/2010				Spud Date: 7/11/2010			
Project: UTAH-UINTAH				Site: NBU 922-32H2 PAD				Rig Name No: PROPETRO/, ENSIGN 145/145			
Event: DRILLING				Start Date: 7/10/2010				End Date: 9/17/2010			
Active Datum: RKB @4,998.00ft (above Mean Sea Level)				UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation			
7/11/2010	3:30 - 13:30	10.00	MIRU	01	A	P		MOVE ONTO LOCATION. CLEAN CONDUCTOR PILES UP AROUND WELL HEAD. DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWIE LINE. BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP. RIG UP AND PRIME PIT PUMP AND MUD PUMP. SET CATWALK AND PIPE RACKS.			
	13:30 - 14:00	0.50	PRPSPD	01	B	P		P/U 1.83 DEG BENT HOUSE MOTOR SN 775-77294. 7/8 LOBE .16 RPM. M/U Q507F SN 7018431 W/ 7-18'S. INSTALL RUBBER			
	14:00 - 15:30	1.50	PRPSPD	02	A	P		SPUD 7/11/2010 14:00 DRILL 44'- 150'.			
	15:30 - 17:30	2.00	DRLSUR	06	A	P		TOOH, PU AND ORIENT DIR TOOLS, TIH T/150'			
	17:30 - 23:00	5.50	DRLSUR	02	C	P		DRILL/SLIDE 150-420" (270' @ 50'/HR) 2 DEG.BUILD RATE TO 1.10 DEG 19.77 AZIMITH. WOB=18K, GPM = 450, ROT= 50, UP/DOWN/ROT 45/43/44. DRAG= 1K.. ON/OFF PSI = 1000/1200. CIRC RESERVE PIT. 8.3 WT 27 VIS. FULL RETURNS, DRLG W/ WATER, MUD MOTOR FAILED (LOCKED UP), KELLY HOSE BLEW AT SAME TIME. 53.5 TOTAL HRS ON MTR AT TIME OF FAILURE.			
7/12/2010	23:00 - 0:00	1.00	DRLSUR	06	A	X		TOOH DUE TO MUD MTR FAILURE/ KELLY HOSE			
	0:00 - 8:00	8.00	MAINT	08	A	X		REPLACE LOWER KELLY HOSE WITH NEW ONE			
	8:00 - 9:30	1.50	DRLSUR	06	A	P		PU NEW MUD MTR (NVR 1.83 BEND, 1.6 SPEED) TIH W/ PREVIOUS BIT AND DIR BHA			
	9:30 - 0:00	14.50	DRLSUR	02	C	P		DRILL/SLIDE 420'-1500' (1050' @ 72'/HR) 2 DEG.BUILD RATE TO 22.81DEG 359.96 AZIMITH. WOB=18K, GPM = 450, ROT= 45, UP/DOWN/ROT 63/58/60. DRAG= 3K.. ON/OFF PSI = 900/1250. CIRC RESERVE PIT. 8.3 WT 27 VIS. FULL RETURNS, DRLG W/ WATER			
7/13/2010	0:00 - 11:00	11.00	DRLSUR	02	C	P		DRILL/SLIDE 1500'-2200' (500' @ 45'/HR) 2 DEG.BUILD RATE TO 22.81DEG .79 AZIMITH. WOB=20K, GPM = 450, ROT= 45, UP/DOWN/ROT 63/58/60. DRAG= 3K.. ON/OFF PSI = 900/1250. CIRC RESERVE PIT. 8.3 WT 27 VIS. FULL RETURNS, DRLG W/ WATER			
	11:00 - 12:30	1.50	DRLSUR	05	A	P		CIRC AND COND HOLE CLEAN			
	12:30 - 16:00	3.50	DRLSUR	06	A	P		TOOH LDDS AND BHA			
	16:00 - 17:00	1.00	CSG	12	A	P		MOVE CATWALK AND PIPE RACKS, MOVE CSG OVER TO WORK AREA.			
	17:00 - 20:00	3.00	CSG	12	C	P		HELD SAFETY MEETING, RIG UP TO RUN CSG. RAN 49JTS OF 8-5/8", 28#, IJ-55 CSG W/ LTC THREADS. LANDED FLOAT SHOE @ 2180.55 'KB. RAN BAFFLE PLATE IN TOP OF SHOE JT LANDED 2134.45 'KB. FILL CSG @ 500', 1500', AND 2175'.			
	20:00 - 20:30	0.50	RDMO	01	E	P		RD/MO RELEASE RIG 7/13/2010 @ 20:30			

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]		Spud Conductor: 7/5/2010	Spud Date: 7/11/2010
Project: UTAH-UINTAH	Site: NBU 922-32H2 PAD		Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING	Start Date: 7/10/2010		End Date: 9/17/2010
Active Datum: RKB @4,998.00ft (above Mean Sea Level)		UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	20:30 - 22:00	1.50	CSG	12	E	P		HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 120 BBLS OF 8.3# H2O AHEAD. FULL CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. FULL CIRC. PUMP 160 SX (109 BBLS) OF 11# 3.82 YIELD LEAD CMT, 220 SX (4640.9 BBLS) OF 15.8# (2 % CALC, 1/4# /SK OF FLOCELE). FULL CIRC. DROP PLUG ON FLY AND DISPLACE W/125 BBLS OF 8.3# H2O. FULL RETURNS. BUMP PLUG AND HOLD 1200 PSI FOR 5 MIN. FLOAT HELD. PUMP 100 SX (20 BBLS) OF 15.8# (4 % CALC, 1/4# /SK OF FLOCELE). CEMENT STAYED @ SURFACE, RIG DOWN CEMENTERS AND RELEASE CEMENTERS 22:00 HRS. Cond. Depth set: 40' Cement sx used: 28 SPUD DATE/TIME: 7/11/2010 14:00 SURFACE HOLE: Surface From depth: 40' Surface To depth: 2200' Total SURFACE hours: 25.5 Surface Casing size: 8.625" # of casing joints ran: 49 Casing set MD: 2180.55' # SX OF LEAD 160 CMT PPG 11 CMT YIELD 3.82 # sx of cement: 320 Cement blend (ppg:) 15.8 Cement yield (ft3/sk): 1.15 # of bbls to surface: 13 Describe cement issues: NO ISSUES, CMT JOB WENT PERFECT Describe hole issues: NO MAJOR PROBLEMS
9/11/2010	17:00 - 18:30	1.50	MIRU	01	E	P		RIG DOWN RIG/ READY RIG TO SKID. PULL OUT CAT WALK. UNDO FLOW LINE, DISCONNECT FLARE LINES.
	18:30 - 20:30	2.00	MIRU	01	C	P		SKID RIG OVER HOLE WELL #1 ON PAD. (WELL 3 OF 3) CENTER AND LEVEL RIG.
	20:30 - 21:30	1.00	MIRU	14	A	P		SET DOWN STACK. INSTALL BOP. INSTALL FLOW LINE, FLARE LINES.
	21:30 - 0:00	2.50	MIRU	15	A	P		TEST BOP. FLOOR VALVE, DART VALVE, TOP DRIVE VALVE, INSIDE AND OUTSIDE BOP VALVES, KILL LINE VALVES, PIPE RAMS TO 5000 PSI FOR 10 MIN AND 250 LOW FOR 5 MIN.
9/12/2010	0:00 - 2:30	2.50	MIRU	15	A	P		TEST BOP BLIND RAMS, CHOKES LINES, KILL LINES, CHOKES MANIFOLD VALVES. TO 5000 PSI FOR 10 MIN AND 250 PSI FOR 5 MIN. TEST ANNULAR TO 2500 PSI FOR 10 MIN AND 250 PSI FOR 5 MIN. TEST CSG TO 1500 PSI FOR 30 MIN.
	2:30 - 3:00	0.50	MIRU	23	A	P		PERFORM PRESPUD INSPECTION. PRE SPUD SAFETY MEETING.
	3:00 - 6:30	3.50	MIRU	06	A	P		P/U SDI (HUNTING 6.5 7/8 LOBE 3.5 STG 1.5 BH .21 RPG SN 6339) M/U Q506F SN 7126652 W/ 6-13'S. SCRIBE MOTOR, MAKE UP DIRECTIONAL TOOLS. INSTALL DIRECTIONAL TOOLS. TRIP IN HOLE. TAG CEMENT 2064'.

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]		Spud Conductor: 7/5/2010	Spud Date: 7/11/2010
Project: UTAH-UINTAH		Site: NBU 922-32H2 PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING		Start Date: 7/10/2010	End Date: 9/17/2010
Active Datum: RKB @4,998.00ft (above Mean Sea Level)		UWI: SE/NE/O/S/22/E/32/O/0/26/PM/N/1555/E/O/931/O/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	6:30 - 7:00	0.50	DRLPRO	02	F	P		SPUD 06:30 9/12/2010 DRILL CEMENT 2064'-2115'. WHEN MAKING CONNECTION GRABBLER BOX WAS UNABLE TO HOLD STAND FROM TURNING. RIG SERVICE, CHANGE DIES IN TOP GRABBLER. LUBRICATE RIG.
	7:00 - 7:30	0.50	DRLPRO	07	A	P		
	7:30 - 9:00	1.50	MAINT	21	D	Z		WE WENT TO CHANGE OUT SAVER SUB AND SAVER SUB HAD DAMAGED PIN. WAIT FOR HAND TO RUN AND GET DIFFERENT SAVER SUB FROM OTHER RIG. MAKE UP SAVER SUB.
	9:00 - 10:30	1.50	DRLPRO	02	F	P		DRILL CEMENT 2115'- 2209'. PROBLEMS DRILLING PLUG AND BAFFLE. WORK PLUG TO GET PLUG TO DRILL.
	10:30 - 0:00	13.50	DRLPRO	02	D	P		DRILL SLIDE 2209'-3397' (1188', 88'/HR) WOB 15-22K SPM 107, 482 GPM , PSI ON/OFF 1000/1500 DIFF 500 MOT RPM 100, ROT 55-65, TOR ON/OFF 7/4, PU/ SO/ROT 131/107/119 DRAG 12 K . PROBLEMS W/ SLIDING. DROPPING HARD. HAVING TO SLIDE EXTRA TO KEEP NOSE UP. 248' SLID 60'/HR. 20% SLIDE, 80 % ROTATION.
9/13/2010	0:00 - 11:30	11.50	DRLPRO	02	D	P		DRILL 3397'- 4303' (906', 79'/HR) WOB 15-22K SPM 107, 482 GPM , PSI ON/OFF 1100/1500 DIFF 400 MOT RPM 100, ROT 45-55, TOR ON/OFF 7/4, PU/ SO/ROT 157/113/128 DRAG 29 K . PROBLEMS W/ SLIDING. DROPPING HARD. HAVING TO SLIDE EXTRA TO KEEP NOSE UP. SLIDE 313' @ 65'/HR. SLIDE 34% ROT 66 %
	11:30 - 12:00	0.50	DRLPRO	07	D	P		RIG SERVICE, GREASE TOP DRIVE, FUNCTION BOP'S.
	12:00 - 0:00	12.00	DRLPRO	02	D	P		DRILL 4303'- 5674' (1371, 114'/HR) WOB 18-22K SPM 107, 482 GPM , PSI ON/OFF 1350/1750 DIFF 400 MOT RPM 100, ROT 45-55, TOR ON/OFF 8/5, PU/ SO/ROT 185/124/150 DRAG 35 K .STARTED MUD UP @ 5500' MUD IN 8.9 / 32, MUD OUT 8.9 / 32. HOLE SEEPING. USE LCM SWEEPS AND POLY SWELL TO CONTROL LOSSES. SLIDE 75' @ 45'/HR. SLIDE 5% ROT 95%.
9/14/2010	0:00 - 12:30	12.50	DRLPRO	02	D	P		DRILL SLIDE 5674'- 6601' (927',74'/HR) WOB 18-22K SPM 107, 482 GPM , PSI ON/OFF 1550/1950 DIFF 400 MOT RPM 100, ROT 45-55, TOR ON/OFF 11/7, PU/ SO/ROT 190/130/159 DRAG 31 K .MUD IN 9.2 / 39, MUD OUT 9.2+ / 37. SLID 53' @ 37'/HR SLIDE 5% ROT 95%. USE LCM SWEEPS AND POLY SWELL TO CONTROL SEEPAGE.
	12:30 - 13:00	0.50	DRLPRO	07	A	P		RIG SERVICE, FUNCTION BOP'S. LUBRICATE TOP DRIVE.
	13:00 - 0:00	11.00	DRLPRO	02	D	P		DRILL SLIDE 6601'-7273' (671', 61'/HR) WOB 18-22K SPM 107, 482 GPM , PSI ON/OFF 1750/2150 DIFF 400 MOT RPM 100, ROT 45-55, TOR ON/OFF 13/10, PU/ SO/ROT 195/145/167 DRAG 28 K .MUD IN 9.6+ / 39, MUD OUT 9.6+ / 40. SLIDE 51' @ 24'/HR SLIDE 7% ROT 93% . USE LCM SWEEPS AND POLY SWELL TO CONTROL LOSSES.

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]	Spud Conductor: 7/5/2010	Spud Date: 7/11/2010
Project: UTAH-UINTAH	Site: NBU 922-32H2 PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING	Start Date: 7/10/2010	End Date: 9/17/2010
Active Datum: RKB @4,998.00ft (above Mean Sea Level)	UWI: SE/NE/O/S/22/E/32/O/O/26/PM/N/1555/E/O/931/O/O	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/15/2010	0:00 - 12:30	12.50	DRLPRO	02	D	P		ROT/SLIDE DRILL F/ 7273' TO 7836'/ 564' = 45 FPH STKS #1 & #2 PUMPS 105/000, 473 GPM PSI OFF BOTTOM / ON BOTTOM 2200/2500 MOTOR RPM / ROTARY RPM, 99/50 TQ ON / OFF BOTTOM 16K/12K FT/LBS PU / SO / ROT WT 237 / 159/ 176 ROTATING = 90% FOOTAGE DRILLED SLIDING = 9% FOOTAGE DRILLED CONNECTION & SURVEY TIME = .5 HOUR, ACTUAL DRILL TIME 11.5 HOURS NO LOSS
	12:30 - 13:00	0.50	DRLPRO	07	A	P		DAILY RIG SERVICE
	13:00 - 0:00	11.00	DRLPRO	02	D	P		ROT/SLIDE DRILL F/ 7836' TO 8320'/ 484' = 44 FPH STKS #1 & #2 PUMPS 00/105, 473 GPM PSI OFF BOTTOM / ON BOTTOM 2200/2500 MOTOR RPM / ROTARY RPM, 99/45 TQ ON / OFF BOTTOM 25K/20K FT/LBS PU / SO / ROT WT 220 / 150/ 190 ROTATING = 90% FOOTAGE DRILLED SLIDING = 9% FOOTAGE DRILLED CONNECTION & SURVEY TIME = .5 HOUR, ACTUAL DRILL TIME 10.5 HOURS NO LOSS
9/16/2010	0:00 - 11:30	11.50	DRLPRO	02	D	P		ROT/SLIDE DRILL F/ 8320' TO 8833'/ 484' = 44 FPH STKS #1 & #2 PUMPS 105/00, 473 GPM PSI OFF BOTTOM / ON BOTTOM 2300/2550 MOTOR RPM / ROTARY RPM, 99/45 TQ ON / OFF BOTTOM 10K/8K FT/LBS PU / SO / ROT WT 258 / 157/ 198 ROTATING = 100% FOOTAGE DRILLED SLIDING = 0% FOOTAGE DRILLED CONNECTION & SURVEY TIME = .5 HOUR, ACTUAL DRILL TIME 11 HOURS NO LOSS
	11:30 - 12:00	0.50	DRLPRO	07	A	P		DAILY RIG SERVICE
	12:00 - 0:00	12.00	DRLPRO	02	D	P		ROT/SLIDE DRILL F/ 8833' TO 9286'/ 453' = 38 FPH STKS #1 & #2 PUMPS 105/00, 473 GPM PSI OFF BOTTOM / ON BOTTOM 2700/3000 MOTOR RPM / ROTARY RPM, 99/40 TQ ON / OFF BOTTOM 9K/6K FT/LBS PU / SO / ROT WT 258 / 160/ 200 ROTATING = 100% FOOTAGE DRILLED SLIDING = 0% FOOTAGE DRILLED CONNECTION & SURVEY TIME = .5 HOUR, ACTUAL DRILL TIME 11 HOURS NO LOSS
9/17/2010	0:00 - 5:00	5.00	DRLPRO	02	D	P		ROT/SLIDE DRILL F/ 9286' TO 9460'/ 174' = 35 FPH STKS #1 & #2 PUMPS 105/00, 473 GPM PSI OFF BOTTOM / ON BOTTOM 2700/3000 MOTOR RPM / ROTARY RPM, 99/40 TQ ON / OFF BOTTOM 9K/6K FT/LBS PU / SO / ROT WT 258 / 160/ 200 ROTATING = 100% FOOTAGE DRILLED SLIDING = 0% FOOTAGE DRILLED CONNECTION & SURVEY TIME = .5 HOUR, ACTUAL DRILL TIME 4 HOURS NO LOSS
	5:00 - 9:30	4.50	DRLPRO	05	C	P		CIRCULATE HIGH VIS SWEEPS FOR HOLE CLEANING, WEIGH UP FROM 11PPG IN 10.7 OUT TO 11.6 PPG 11.4 OUT, NO FLARE, NO FLOW

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]			Spud Conductor: 7/5/2010			Spud Date: 7/11/2010			
Project: UTAH-UINTAH			Site: NBU 922-32H2 PAD				Rig Name No: PROPETRO/, ENSIGN 145/145		
Event: DRILLING			Start Date: 7/10/2010				End Date: 9/17/2010		
Active Datum: RKB @4,998.00ft (above Mean Sea Level)				UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
9/18/2010	9:30 - 23:30	14.00	DRLPRO	06	A	P		TRIP OUT, PUMPING OUT STANDS TO 6855, PUMP SLUG START LAYING DOWN DRILL PIPE @ 14:00, START TRIPPING STANDS IN HOLE @ 18:00, LAYING DOWN STANDS FROM DERRICK BHA & DIRECTIONAL TOOLS @ 19:30, PULL WEAR BUSHING	
	23:30 - 0:00	0.50	DRLPRO	12	C	P		HELD SAFTEY MEETING, RIG UP CASERS	
	0:00 - 7:30	7.50	DRLPRO	12	C	P		RUN DCT SHOE.FLOAT, 15 CENTRALIZERS, 228 JOINTS 4.5,11.6, I-80, BTC CASING, MANDREL ASSEMBLY & LANDING JOINT. CASING LANDED AT MD 9452,' FLOAT TOP AT 9408' MD, FILLED PIPE @ SHOE & 6350', WASH THROUGH BRIDGE LANDED CASING WITH 164K	
	7:30 - 9:00	1.50	DRLPRO	05	D	P		CIRCULATE WITH RIG PUMPS, HELD SAFTEY MEETING RIG DOWN WEATHERFORD, HELD SAFTEY MEETING SPOT HALLIBURTON TRUCKS AND RIG UP. MUD WT IN 11.6 OUT 11.5 NO FLOW, NO FLARE	
	9:00 - 11:30	2.50	DRLPRO	12	E	P		HELD SAFTEY MEETING, INSTALL HALLIBURTON HEAD, HOOK UP IRON TO HEAD, TEST LINES TO 5000 PSI, PUMP 40 BBL FRESH WATER AHEAD LEAD 171 BBL 520 SKS ECONCEM 12.8PPG, 1.85 YEILD, 9.72 GPS WATER	
								TAIL 238 BBL 1070 SKS POZ PREMIUM 50/50 14.3 PPG 1.25 YEILD, 5.41 GPS WATER	
								DISPLACE WITH 146 BBL FRESH WATER WITH CLAY FIX & ALDACIDE, FULL RETURNS, BUMP PLUG TO 3359, FINAL LIFT 2800, 500 PSI OVER, 2 BBL BACK TO TRUCK	
	11:30 - 12:30	1.00	DRLPRO	12	C	P		PULL LANDING JOINT, SET PACK OFF	
	12:30 - 20:00	7.50	DRLPRO	14	A	P		NIPPLE DOWN CLEAN RIG PITS AND PRE MIX FOR LONG RIG MOVE	

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]		Spud Conductor: 7/5/2010	Spud Date: 7/11/2010
Project: UTAH-UINTAH		Site: NBU 922-32H2 PAD	Rig Name No: PROPETRO/, ENSIGN 145/145
Event: DRILLING		Start Date: 7/10/2010	End Date: 9/17/2010
Active Datum: RKB @4,998.00ft (above Mean Sea Level)		UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	20:00 - 20:00	0.00	DRLPRO					CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28 SPUD DATE/TIME: 7/11/2010 0:30 SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,200 Total SURFACE hours: 28.50 Surface Casing size: 8-5/8" # of casing joints ran: 49 Casing set MD: 2,166.8 # sx of cement: 390 SX Cement blend (ppg:) LEAD 11PPG, TAIL 15.8 PPG Cement yield (ft3/sk): LEAD 3.82 YD, TAIL 1.15 YD # of bbls to surface: 0 BBLs Describe cement issues: CEMENT TO SURFACE Describe hole issues: NONE PRODUCTION: Rig Move/Skid start date/time: 9/11/2010 18:30 Rig Move/Skid finish date/time: 9/11/2010 20:30 Total MOVE hours: 2.0 Prod Rig Spud date/time: 9/12/2010 6:30 Rig Release date/time: 9/18/2010 20:00 Total SPUD to RR hours: 157.5 Planned depth MD 9,455 Planned depth TVD 9,275 Actual MD: 9,460 Actual TVD: 9,300 Open Wells \$: \$704,743 AFE \$: \$725,465 Open wells \$/ft: \$75.21 PRODUCTION HOLE: Prod. From depth: 2,200 Prod. To depth: 9,460 Total PROD hours: 112 Log Depth: NO LOGS Production Casing size: 4 1/2 # of casing joints ran: 228 Casing set MD: 9,452.0 # sx of cement: 1,590 Cement blend (ppg:) LEAD 12.8, TAIL 14.3 Cement yield (ft3/sk): LEAD 1.85, TAIL 1.25 Est. TOC (Lead & Tail) or 2 Stage : LEAD 100', TAIL 4200' Describe cement issues: N/A Describe hole issues: N/A DIRECTIONAL INFO: KOP: 40 Max angle: 25.47 Departure: 1062.55 Max dogleg MD: 4427/2.83

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]			Spud Conductor: 7/5/2010				Spud Date: 7/11/2010	
Project: UTAH-UINTAH			Site: NBU 922-32H2 PAD				Rig Name No: LEED 698/698, GWS 1/1	
Event: COMPLETION			Start Date: 11/10/2010				End Date: 11/16/2010	
Active Datum: RKB @4,998.00ft (above Mean Sea Level)			UWI: SE/NE/O/9/S/22/E/32/O/O/26/PM/N/1555/E/O/931/O/O					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/15/2010	7:00 - 7:15	0.25	MAINT	48		P		HSM, SLIPS, TRIPS & FALLS, MOVING RIG, CUTTING OR BACKING OFF CSG.
	7:15 - 15:00	7.75	MAINT	47	C	P		MIRU, WAIT ON APPROVALS
11/16/2010	7:00 - 7:15	0.25	MAINT	48		P		HSM, SLIPS, TRIPS & FALLS, CUTTING OFF CSG, PRESS TESTING, PULLING 80K ON CSG.
	7:15 - 11:00	3.75	MAINT	47	C	P		PU INTERNAL CSG CUTTER & CUT OFF CSG @ 39' L/D TOOLS, PU 1 JT 4 1/2" 11.6# L-80 CSG & PATCH LATCH ONTO FISH & PULL 80K, MIRU B&C QUICK TEST & PRESS TEST CSG W/ 80K PULLED ON IT TO 200 PSI FOR 10 MIN HELD OK, 2,000 PSI FOR 10 MIN HELD OK, 7,000 PSI FOR 30 MIN HELD OK, SET C-22 CSG SLIPS W/ 100K, PRESS TEST ANNULUS TO 50 PSI FOR 10 MIN HELD OK, 200 PSI FOR10 MIN HELD OK, 900 PSI SLIP INTERNAL PACK OFF STARTED LEAKING NOT ENOUGH STRETCH IN CSG TO COMPRESS INTERNAL PACKING, TESTED @ 800 PSI FOR 10 MIN HELD OK, WHEN 11" X 5K X 4 1/16" X10K IS INSTALLED WEATHERFORD WH HAND WILL FILL W/ GREASE WHEN HE TESTS TO 5,000 PSI RDMO B&C QUICK TEST, RD MOVE TO NEXT WELL ON PAD.
11/22/2010	15:00 - 23:59	8.98	COMP	37	B	P		HSM, PUT ON NEW WEATHERFORD CSG & WELL HEAD FLANGE,MIRU B&C TESTERS P/T CSG & FRAC VALVES TO 7000# [GOOD TEST] MIRU CASED HOLE, P/U RIH W/ 3-3/8 EXPEND, 23 GRM, 0.36" HOLE, PERF MESAVERDE. 9,202'-9,204' 3 SPF, 120* PH, 6 HOLES. 9,188'-9,189' 3 SPF, 120* PH, 3 HOLES. 9,166'-9,167' 3 SPF, 120* PH, 3 HOLES. 9,126'-9,127' 3 SPF, 120* PH, 3 HOLES. 9,077'-9,078' 3 SPF, 120* PH, 3 HOLES. 9,046'-9,047' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] SWIFN.
11/23/2010	6:30 - 7:00	0.50	COMP	48		P		HSM, PERF & FRAC

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]	Spud Conductor: 7/5/2010	Spud Date: 7/11/2010
Project: UTAH-UINTAH	Site: NBU 922-32H2 PAD	Rig Name No: LEED 698/698, GWS 1/1
Event: COMPLETION	Start Date: 11/10/2010	End Date: 11/16/2010
Active Datum: RKB @4,998.00ft (above Mean Sea Level)		UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 19:00	12.00	COMP	36	E	P		FRAC STG # 1 MESAVERDE 9,046'-9,204' [21 HOLES] STG #1] WHP=1293#, BRK DN=3628#, @=3.8 BPM, INJ RT=50.6, INJ PSI=5142#, ISIP=3056#, FG=.77, PUMP'D 2,476 BBLS SLK WTR W/ 93,229# 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=3,146#, FG=.78, AR=51.7, AP=4,700#, MR=54.3, MP=6,037#, NPI=90#, 21/21 CALC PERFS OPEN. STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8,996', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8,930'-8,933' 4 SPF, 90* PH, 12 HOLES. 8,777'-8,778' 4 SPF, 90* PH, 4 HOLES. 8,744'-8,746' 4 SPF, 90* PH, 8 HOLES. [24 HOLES] STG #2] WHP=2,795#, BRK DN=3,492#, @=4.5 BPM, INJ RT=52, INJ PSI=4,960#, ISIP=2,922#, FG=.77, PUMP'D 1,392 BBLS SLK WTR W/ 55,508# 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=3,152#, FG=.79, AR=50, AP=4700#, MR=53, MP=5,618#, NPI=230#, 24/24 CALC PERFS OPEN. STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8,694', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8,644'-8,646' 3 SPF, 120* PH, 6 HOLES. 8,605'-8,606' 3 SPF, 120* PH, 3 HOLES. 8,548'-8,549' 3 SPF, 120* PH, 3 HOLES. 8,507'-8,508' 3 SPF, 120* PH, 3 HOLES. 8,493'-8,494' 3 SPF, 120* PH, 3 HOLES. 8,439'-8,440' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] STG #3] WHP=2,069#, BRK DN=3,050#, @=4.6 BPM, INJ RT=51.6, INJ PSI=5,255#, ISIP=2,455#, FG=.72, PUMP'D 1,051 BBLS SLK WTR W/ 40,084# 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=2,885#, FG=.77, AR=49.9, AP=4,500#, MR=51.7, MP=5,935#, NPI=430#, 21/21 CALC PERFS OPEN. STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8,389', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8,332'-8,334' 3 SPF, 120* PH, 6 HOLES. 8,288'-8,289' 3 SPF, 120* PH, 3 HOLES. 8,257'-8,258' 3 SPF, 120* PH, 3 HOLES. 8,193'-8,194' 3 SPF, 120* PH, 3 HOLES. 8,154'-8,155' 3 SPF, 120* PH, 3 HOLES. 8,132'-8,133' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] STG #4] WHP=1,111#, BRK DN=4,121#, @=5.2 BPM, INJ RT=49.6, INJ PSI=4,751#, ISIP=2,562#, FG=.74, PUMP'D 1,086 BBLS SLK WTR W/ 42,458# 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=2,749#, FG=.77, AR=50.2, AP=4,300#, MR=50.7, MP=5,646#, NPI=187#, 21/21 CALC PERFS OPEN. STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 7,816', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 7,715'-7,716' 4 SPF, 90* PH, 4 HOLES. 7,648'-7,649' 4 SPF, 90* PH, 4 HOLES.

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]		Spud Conductor: 7/5/2010		Spud Date: 7/11/2010	
Project: UTAH-UINTAH		Site: NBU 922-32H2 PAD		Rig Name No: LEED 698/698, GWS 1/1	
Event: COMPLETION		Start Date: 11/10/2010		End Date: 11/16/2010	
Active Datum: RKB @4,998.00ft (above Mean Sea Level)		UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/24/2010	6:30 - 8:00	1.50	COMP	48		P		7,621'-7,622' 4 SPF, 90* PH, 4 HOLES. 7,578'-7,579' 3 SPF, 120* PH, 3 HOLES. 7,558'-7,559' 3 SPF, 120* PH, 3 HOLES. 7,472'-7,473' 4 SPF, 90* PH, 4 HOLES. [22 HOLES] SWIFN.
	8:00 - 8:58	0.97	COMP	36	E	P		HSM, COLD WEATHER / THAW FRAC VALVES FRAC STG #5] MESAVERDE 7,472'-7,716' [22 HOLES] STG #5] WHP=1,508#, BRK DN=3,588#, @=5.6 BPM, INJ RT=49.6, INJ PSI=4,751#, ISIP=1,905#, FG=.68, PUMP'D 1,068 BBLS SLK WTR W/ 38,518# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL. ISIP=2,704#, FG=.79, AR=50, AP=4,200#, MR=53.1, MP=5,680#, NPI=799#, 22/22 CALC PERFS OPEN. STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 7,422', PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, O.36" HOLE. 7,364'-7,366' 3 SPF, 120* PH, 6 HOLES. 7,332'-7,334' 3 SPF, 120* PH, 6 HOLES. 7,246'-7,247' 3 SPF, 120* PH, 3 HOLES. 7,227'-7,228' 3 SPF, 120* PH, 3 HOLES. 7,218'-7,219' 3 SPF, 120* PH, 3 HOLES. 7,146'-7,147' 3 SPF, 120* PH, 3 HOLES. [24 HOLES] STG #6] WHP=1,434#, BRK DN=2,278#, @=5.1 BPM, INJ RT=57, INJ PSI=4,337#, ISIP=1,814#, FG=.68, PUMP'D 2,996 BBLS SLK WTR W/ 125,387# 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=2,942#, FG=.84, AR=55, AP=4,100#, MR=58.5, MP=5,952#, NPI=1,128#, 24/24 CALC PERFS OPEN. STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 6,894', PERF WASATCH USING 3-3/8 EXPEND, 23 GRM, O.36" HOLE. 6,792'-6,794' 4 SPF, 90* PH, 8 HOLES. 6,760'-6,764' 4 SPF, 90* PH, 16 HOLES. [24 HOLES] STG #7] WHP=879#, BRK DN=2,355#, @=3.7 BPM, INJ RT=51.7, INJ PSI=4,206#, ISIP=1,701#, FG=.68, PUMP'D 803 BBLS SLK WTR W/ 36,046# 30/50 MESH W/ 5000# RESIN COAT IN TAIL. ISIP=2,296#, FG=.77, AR=53, AP=4000#, MR=54.8, MP=5,272#, NPI=595#, 24/24 CALC PERFS OPEN. P/U RIH W/ HALIBURTON 8K CBP FOR KILL PLUG, SET @ 6,710' TOTAL SAND=431,230# TOTAL WTR=10,817 BBLS SCALE INHIB=1,124 GALS BIO=130 GALS 7AM. JSA R/D RIG, R/U RIG, P/U TBG R/D RIG FROM BLUE WELL. MIRU, NDWH, NUBOP. R/U FLOOR & TBG EQUIP. P/U 3-7/8" BIT, POBS W/ XN AND RIH ON 2-3/8" L-80 TBG. [SLM] TBG WAS DRIFTED. PICKED UP ALL TBG FROM TRAILER. TAG KILL PLUG AT 6710'. R/U SWVL 3PM SDFD
12/4/2010	7:00 - 15:00	8.00	COMP	30	A	P		

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]		Spud Conductor: 7/5/2010	Spud Date: 7/11/2010
Project: UTAH-UINTAH		Site: NBU 922-32H2 PAD	Rig Name No: LEED 698/698, GWS 1/1
Event: COMPLETION		Start Date: 11/10/2010	End Date: 11/16/2010
Active Datum: RKB @4,998.00ft (above Mean Sea Level)		UWI: SE/NE/O/9/S/22/E/32/O/0/26/PM/N/1555/E/0/931/O/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/6/2010	7:00 - 15:00	8.00		30	A	P		PLUG #1 @ 6710' W/ 10' SAND 4 MIN 25# KICK PLUG #2 @ 6894' W/ 15' SAND 4 MIN 50# KICK PLUG #3 @ 7422 W/ 20' SAND 3 MIN 50# KICK PLUG #4 @ 7716' W/ 35' SAND 4 MIN 50# KICK PLUG #5 @ 8389' W/ 30' SAND 4 MIN 100# KICK PLUG #6 @ 8694 W/ 30' SAND 4 MIN 100# KICK PLUG #7 @ 8996 W/ 16' SAND 3 MIN 100# KICK RIH C/O TO 9407', 300 JTS. CIRC HOLE CLEAN, POOH LD 23 JTS, PU HANGER LAND TBG, ND BOPS, NU WH. 277 JTS EOT @ 8719.38' EOT XNSN 1.875" @ 8717.18', POBS 2700#, TURN TO FBC. 3100BBL RECOVERED. 7717BBL LEFT TO RECOVER. FTP 1950 ON 20 CHOKE. SICP 2150. 7 AM FLBK REPORT: CP 2950#, TP 2050#, 20/64" CK, 65 BWPH, HVY SAND, MED GAS TTL BBLS RECOVERED: 4300 BBLS LEFT TO RECOVER: 6517
12/7/2010	7:00 -			33	A			WELL TURNED TO SALES @ 1000 HR ON 12/7/10 - 935 MCFD, 1200 BWPD, CP 3100#, FTP 2000#, CK 20/64"
	10:00 -		PROD	50				
12/8/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 3000#, TP 2000#, 20/64" CK, 40 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 5320 BBLS LEFT TO RECOVER: 5497
12/9/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2650#, TP 1800#, 20/64" CK, 35 BWPH, MED SAND, - GAS TTL BBLS RECOVERED: 6160 BBLS LEFT TO RECOVER: 4657
12/10/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2425#, TP 1650#, 20/64" CK, 35 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 7000 BBLS LEFT TO RECOVER: 3817
12/11/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2250#, TP 1475#, 20/64" CK, 28 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 7732 BBLS LEFT TO RECOVER: 3085
	7:00 -			50				WELL IP'D ON 12/11/11 - 2127 MCFD, 0 BOPD, 672 BWPD, CP 2450#, FTP 1500#, CK 20/64", LP 97#, 24 HRS

WELL DETAILS: NBU 922-32A2DS

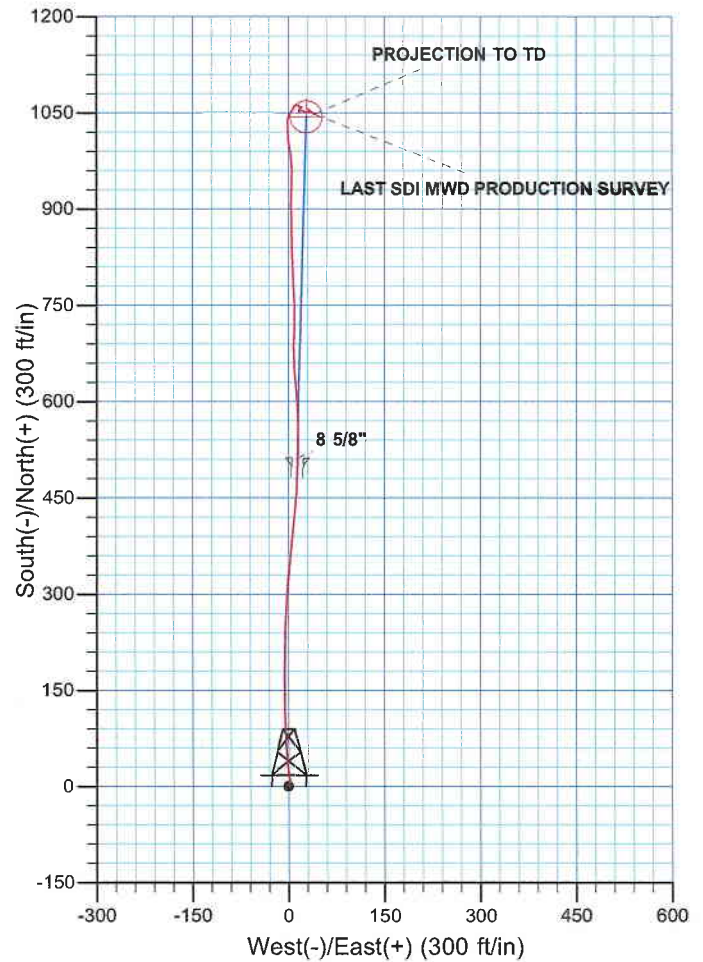
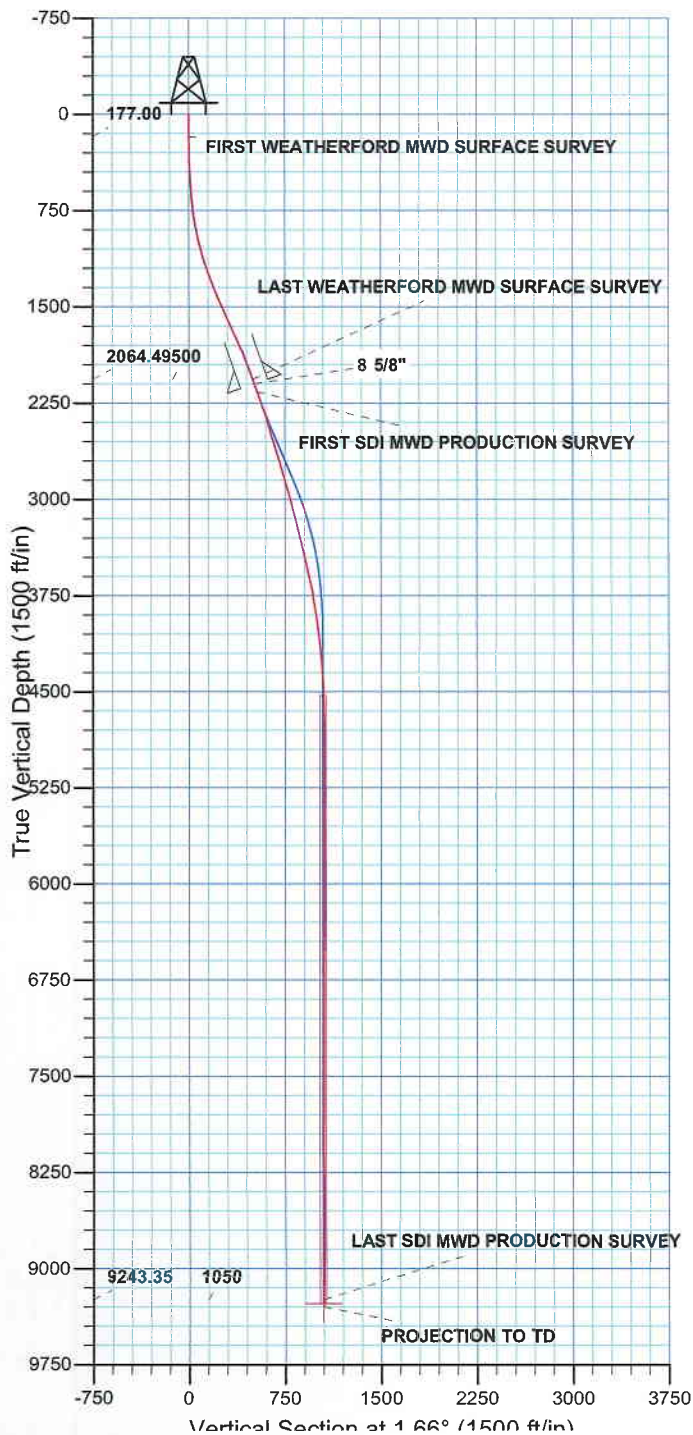
GL 4984 & RKB 14' @ 4998.00ft (ENSGN 145)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14528166.54	2072567.60	39° 59' 44.001 N	109° 27' 25.409 W



Azimuths to True North
Magnetic North: 11.16°

Magnetic Field
Strength: 52416.5nT
Dip Angle: 65.89°
Date: 08/11/2010
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: SECTION 32 T9S R22E
System Datum: Mean Sea Level

Design: OH (NBU 922-32A2DS/OH)



Kerr McGee Oil and Gas Onshore LP

Uintah County, UT UTM12

NBU 922-32H2 Pad

NBU 922-32A2DS

OH

Design: OH

Standard Survey Report

21 September, 2010



Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
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 922-32H2 Pad, SECTION 32 T9S R22E			
Site Position:		Northing:	14,528,166.54 usft	Latitude: 39° 59' 44.001 N
From:	Lat/Long	Easting:	2,072,567.60 usft	Longitude: 109° 27' 25.409 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 0.99 °

Well	NBU 922-32A2DS, 1555 FNL 931 FEL			
Well Position	+N/-S	0.00 ft	Northing:	14,528,166.54 usft
	+E/-W	0.00 ft	Easting:	2,072,567.60 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
			Ground Level:	4,984.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/11/2010	11.16	65.89	52,417

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	1.66	

Survey Program	Date 09/21/2010				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
10.00	2,152.00	Survey #1 Weatherford Surface MWD (OH)	MWD	MWD - Standard	
2,253.00	9,460.00	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)	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
177.00	0.64	47.42	177.00	0.63	0.69	0.65	0.38	0.38	0.00
FIRST WEATHERFORD MWD SURFACE SURVEY									
265.00	1.10	19.77	264.99	1.76	1.33	1.80	0.69	0.52	-31.42
352.00	1.87	15.24	351.96	3.91	1.99	3.97	0.89	0.89	-5.21
442.00	2.63	359.21	441.89	7.40	2.35	7.46	1.09	0.84	-17.81
532.00	3.94	353.09	531.74	12.53	1.95	12.58	1.50	1.46	-6.80
622.00	5.00	350.59	621.46	19.47	0.93	19.49	1.20	1.18	-2.78
712.00	6.50	353.21	711.01	28.40	-0.31	28.38	1.69	1.67	2.91

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
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)
802.00	8.31	354.71	800.25	39.93	-1.51	39.87	2.02	2.01	1.67
892.00	10.56	355.96	889.03	54.64	-2.69	54.54	2.51	2.50	1.39
982.00	13.69	357.59	977.01	73.51	-3.72	73.37	3.50	3.48	1.81
1,072.00	15.94	357.99	1,064.01	96.50	-4.60	96.33	2.50	2.50	0.44
1,162.00	17.75	358.34	1,150.15	122.57	-5.43	122.36	2.01	2.01	0.39
1,252.00	19.25	359.96	1,235.50	151.12	-5.84	150.89	1.76	1.67	1.80
1,342.00	21.44	0.33	1,319.88	182.41	-5.76	182.17	2.44	2.43	0.41
1,432.00	22.81	1.21	1,403.25	216.30	-5.29	216.06	1.57	1.52	0.98
1,522.00	23.50	2.21	1,486.00	251.67	-4.23	251.44	0.88	0.77	1.11
1,612.00	24.81	3.46	1,568.12	288.45	-2.40	288.26	1.56	1.46	1.39
1,702.00	24.88	4.71	1,649.79	326.17	0.29	326.04	0.59	0.08	1.39
1,792.00	24.00	5.58	1,731.72	363.26	3.63	363.21	1.06	-0.98	0.97
1,882.00	24.69	5.71	1,813.72	400.18	7.28	400.22	0.77	0.77	0.14
1,972.00	22.81	5.46	1,896.09	436.25	10.81	436.38	2.09	-2.09	-0.28
2,062.00	20.25	3.33	1,979.81	469.17	13.37	469.36	2.97	-2.84	-2.37
2,152.00	19.36	0.79	2,064.49	499.64	14.48	499.85	1.38	-0.99	-2.82
LAST WEATHERFORD MWD SURFACE SURVEY									
2,253.00	18.64	2.11	2,159.98	532.51	15.31	532.73	0.83	-0.71	1.31
FIRST SDI MWD PRODUCTION SURVEY									
2,343.00	20.31	359.29	2,244.83	562.50	15.64	562.72	2.13	1.86	-3.13
2,434.00	18.20	356.57	2,330.74	592.48	14.60	592.66	2.52	-2.32	-2.99
2,524.00	16.88	353.67	2,416.55	619.50	12.32	619.60	1.76	-1.47	-3.22
2,615.00	16.88	356.04	2,503.63	645.81	9.95	645.83	0.76	0.00	2.60
2,706.00	17.67	358.68	2,590.53	672.80	8.72	672.77	1.22	0.87	2.90
2,796.00	17.94	2.63	2,676.22	700.30	9.04	700.27	1.37	0.30	4.39
2,887.00	16.71	1.58	2,763.09	727.38	10.04	727.37	1.39	-1.35	-1.15
2,977.00	15.39	357.53	2,849.58	752.25	9.88	752.22	1.92	-1.47	-4.50
3,068.00	15.56	356.39	2,937.29	776.49	8.59	776.42	0.38	0.19	-1.25
3,159.00	15.74	357.89	3,024.91	801.01	7.37	800.89	0.49	0.20	1.65
3,249.00	14.51	357.89	3,111.79	824.48	6.51	824.32	1.37	-1.37	0.00
3,340.00	14.33	358.24	3,199.93	847.13	5.74	846.94	0.22	-0.20	0.38
3,430.00	13.63	0.87	3,287.26	868.86	5.56	868.66	1.05	-0.78	2.92
3,521.00	12.57	359.47	3,375.89	889.49	5.63	889.28	1.22	-1.16	-1.54
3,611.00	12.13	358.68	3,463.81	908.73	5.32	908.50	0.52	-0.49	-0.88
3,702.00	12.75	1.23	3,552.67	928.33	5.32	928.09	0.91	0.68	2.80
3,793.00	12.57	1.40	3,641.46	948.27	5.78	948.04	0.20	-0.20	0.19
3,883.00	10.82	359.12	3,729.59	966.51	5.89	966.27	2.01	-1.94	-2.53
3,974.00	8.79	352.61	3,819.26	981.95	4.86	981.67	2.54	-2.23	-7.15
4,064.00	8.35	347.69	3,908.25	995.15	2.58	994.81	0.95	-0.49	-5.47
4,155.00	7.56	352.88	3,998.38	1,007.55	0.43	1,007.14	1.17	-0.87	5.70
4,246.00	7.21	1.14	4,088.63	1,019.20	-0.20	1,018.76	1.23	-0.38	9.08
4,336.00	6.42	352.35	4,177.99	1,029.83	-0.75	1,029.38	1.45	-0.88	-9.77
4,427.00	5.01	14.32	4,268.55	1,038.72	-0.45	1,038.27	2.83	-1.55	24.14

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
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)
4,517.00	3.87	24.87	4,358.28	1,045.29	1.80	1,044.90	1.55	-1.27	11.72
4,608.00	2.99	27.86	4,449.11	1,050.17	4.20	1,049.85	0.99	-0.97	3.29
4,699.00	1.76	47.19	4,540.04	1,053.22	6.34	1,052.96	1.59	-1.35	21.24
4,789.00	1.76	19.51	4,630.00	1,055.46	7.81	1,055.24	0.94	0.00	-30.76
4,880.00	1.76	21.88	4,720.95	1,058.08	8.80	1,057.89	0.08	0.00	2.60
4,971.00	1.58	43.50	4,811.91	1,060.28	10.18	1,060.13	0.72	-0.20	23.76
5,061.00	0.88	56.51	4,901.89	1,061.56	11.61	1,061.45	0.83	-0.78	14.46
5,152.00	1.14	62.66	4,992.88	1,062.37	13.00	1,062.30	0.31	0.29	6.76
5,242.00	0.79	111.18	5,082.87	1,062.55	14.37	1,062.52	0.95	-0.39	53.91
5,333.00	0.70	120.14	5,173.86	1,062.05	15.44	1,062.05	0.16	-0.10	9.85
5,423.00	1.14	131.92	5,263.85	1,061.17	16.58	1,061.21	0.53	0.49	13.09
5,514.00	1.14	136.40	5,354.83	1,059.91	17.88	1,059.98	0.10	0.00	4.92
5,605.00	1.32	123.48	5,445.81	1,058.68	19.38	1,058.79	0.36	0.20	-14.20
5,695.00	0.35	62.84	5,535.80	1,058.23	20.49	1,058.38	1.32	-1.08	-67.38
5,786.00	0.79	110.21	5,626.80	1,058.14	21.32	1,058.32	0.67	0.48	52.05
5,876.00	0.26	30.76	5,716.79	1,058.10	22.01	1,058.30	0.87	-0.59	-88.28
5,967.00	0.70	336.97	5,807.79	1,058.79	21.90	1,058.98	0.64	0.48	-59.11
6,057.00	0.35	342.15	5,897.79	1,059.56	21.60	1,059.74	0.39	-0.39	5.76
6,148.00	0.35	187.64	5,988.78	1,059.55	21.48	1,059.73	0.75	0.00	-169.79
6,239.00	0.53	308.14	6,079.78	1,059.53	21.11	1,059.70	0.85	0.20	132.42
6,329.00	0.44	238.97	6,169.78	1,059.61	20.48	1,059.76	0.62	-0.10	-76.86
6,420.00	0.79	207.42	6,260.78	1,058.87	19.90	1,059.01	0.52	0.38	-34.67
6,510.00	0.62	236.07	6,350.77	1,058.05	19.21	1,058.16	0.43	-0.19	31.83
6,601.00	0.79	211.11	6,441.76	1,057.24	18.47	1,057.33	0.38	0.19	-27.43
6,692.00	0.79	204.87	6,532.75	1,056.13	17.89	1,056.21	0.09	0.00	-6.86
6,782.00	0.70	183.07	6,622.75	1,055.02	17.60	1,055.09	0.33	-0.10	-24.22
6,873.00	0.88	185.45	6,713.74	1,053.77	17.50	1,053.84	0.20	0.20	2.62
6,963.00	1.41	173.58	6,803.72	1,051.98	17.56	1,052.05	0.64	0.59	-13.19
7,054.00	0.53	187.91	6,894.71	1,050.45	17.62	1,050.52	1.00	-0.97	15.75
7,145.00	1.06	13.53	6,985.70	1,050.86	17.76	1,050.93	1.75	0.58	-191.63
7,235.00	0.79	16.52	7,075.69	1,052.26	18.13	1,052.34	0.30	-0.30	3.32
7,326.00	0.97	49.04	7,166.68	1,053.37	18.90	1,053.47	0.57	0.20	35.74
7,416.00	0.88	91.84	7,256.67	1,053.84	20.16	1,053.98	0.76	-0.10	47.56
7,507.00	0.88	106.78	7,347.66	1,053.62	21.53	1,053.80	0.25	0.00	16.42
7,598.00	1.41	126.29	7,438.64	1,052.75	23.10	1,052.98	0.72	0.58	21.44
7,688.00	0.88	119.35	7,528.62	1,051.76	24.60	1,052.03	0.61	-0.59	-7.71
7,779.00	0.97	80.24	7,619.61	1,051.55	25.96	1,051.86	0.69	0.10	-42.98
7,869.00	1.23	90.87	7,709.59	1,051.66	27.68	1,052.02	0.37	0.29	11.81
7,960.00	1.23	91.84	7,800.57	1,051.62	29.63	1,052.03	0.02	0.00	1.07
8,051.00	1.58	104.94	7,891.55	1,051.26	31.82	1,051.74	0.52	0.38	14.40
8,141.00	1.32	94.30	7,981.52	1,050.86	34.05	1,051.41	0.41	-0.29	-11.82
8,232.00	1.58	331.26	8,072.50	1,051.89	34.50	1,052.44	2.80	0.29	-135.21
8,322.00	1.14	322.91	8,162.48	1,053.69	33.36	1,054.21	0.53	-0.49	-9.28
8,413.00	0.70	317.19	8,253.47	1,054.82	32.44	1,055.31	0.49	-0.48	-6.29

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
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)
8,504.00	0.18	337.67	8,344.46	1,055.36	32.00	1,055.84	0.59	-0.57	22.51
8,594.00	0.35	299.79	8,434.46	1,055.63	31.71	1,056.10	0.26	0.19	-42.09
8,685.00	0.09	5.27	8,525.46	1,055.83	31.48	1,056.30	0.36	-0.29	71.96
8,775.00	0.18	148.36	8,615.46	1,055.78	31.56	1,056.26	0.29	0.10	158.99
8,866.00	0.79	103.88	8,706.46	1,055.51	32.24	1,056.00	0.74	0.67	-48.88
8,957.00	0.88	145.02	8,797.45	1,054.79	33.25	1,055.31	0.65	0.10	45.21
9,047.00	1.14	143.78	8,887.43	1,053.50	34.18	1,054.05	0.29	0.29	-1.38
9,138.00	1.23	124.80	8,978.42	1,052.21	35.51	1,052.80	0.44	0.10	-20.86
9,229.00	0.88	126.73	9,069.40	1,051.24	36.87	1,051.86	0.39	-0.38	2.12
9,319.00	1.49	126.56	9,159.38	1,050.13	38.37	1,050.80	0.68	0.68	-0.19
9,403.00	1.58	122.78	9,243.35	1,048.85	40.22	1,049.57	0.16	0.11	-4.50
LAST SDI MWD PRODUCTION SURVEY									
9,460.00	1.58	122.78	9,300.33	1,048.00	41.54	1,048.76	0.00	0.00	0.00
PROJECTION TO TD									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
177.00	177.00	0.63	0.69	FIRST WEATHERFORD MWD SURFACE SURVEY
2,152.00	2,064.49	499.64	14.48	LAST WEATHERFORD MWD SURFACE SURVEY
2,253.00	2,159.98	532.51	15.31	FIRST SDI MWD PRODUCTION SURVEY
9,403.00	9,243.35	1,048.85	40.22	LAST SDI MWD PRODUCTION SURVEY
9,460.00	9,300.33	1,048.00	41.54	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 922-32H2 Pad
NBU 922-32A2DS

OH

Design: OH

Survey Report - Geographic

21 September, 2010

Company:	Kerr McGee Oil and Gas Onshore LP	Local Co-ordinate Reference:	Well NBU 922-32A2DS
Project:	Uintah County, UT UTM12	TVD Reference:	GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
Site:	NBU 922-32H2 Pad	MD Reference:	GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
Well:	NBU 922-32A2DS	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 922-32H2 Pad, SECTION 32 T9S R22E				
Site Position:		Northing:	14,528,166.54 usft	Latitude:	39° 59' 44.001 N
From:	Lat/Long	Easting:	2,072,567.60 usft	Longitude:	109° 27' 25.409 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.99 °

Well	NBU 922-32A2DS, 1555 FNL 931 FEL					
Well Position	+N/-S	0.00 ft	Northing:	14,528,166.54 usft	Latitude:	39° 59' 44.001 N
	+E/-W	0.00 ft	Easting:	2,072,567.60 usft	Longitude:	109° 27' 25.409 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,984.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	08/11/2010	11.16	65.89	52,417

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	1.66	

Survey Program	Date	09/21/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
10.00	2,152.00	Survey #1 Weatherford Surface MWD (OH)	MWD	MWD - Standard	
2,253.00	9,460.00	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	14,528,166.54	2,072,567.60	39° 59' 44.001 N	109° 27' 25.409 W
10.00	0.00	0.00	10.00	0.00	0.00	14,528,166.54	2,072,567.60	39° 59' 44.001 N	109° 27' 25.409 W
177.00	0.64	47.42	177.00	0.63	0.69	14,528,167.19	2,072,568.27	39° 59' 44.008 N	109° 27' 25.400 W
FIRST WEATHERFORD MWD SURFACE SURVEY									
265.00	1.10	19.77	264.99	1.76	1.33	14,528,168.32	2,072,568.90	39° 59' 44.019 N	109° 27' 25.392 W
352.00	1.87	15.24	351.96	3.91	1.99	14,528,170.49	2,072,569.52	39° 59' 44.040 N	109° 27' 25.383 W
442.00	2.63	359.21	441.89	7.40	2.35	14,528,173.98	2,072,569.82	39° 59' 44.075 N	109° 27' 25.378 W
532.00	3.94	353.09	531.74	12.53	1.95	14,528,179.10	2,072,569.33	39° 59' 44.125 N	109° 27' 25.384 W
622.00	5.00	350.59	621.46	19.47	0.93	14,528,186.02	2,072,568.20	39° 59' 44.194 N	109° 27' 25.397 W
712.00	6.50	353.21	711.01	28.40	-0.31	14,528,194.93	2,072,566.80	39° 59' 44.282 N	109° 27' 25.413 W
802.00	8.31	354.71	800.25	39.93	-1.51	14,528,206.44	2,072,565.40	39° 59' 44.396 N	109° 27' 25.428 W

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
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
892.00	10.56	355.96	889.03	54.64	-2.69	14,528,221.12	2,072,563.96	39° 59' 44.541 N	109° 27' 25.443 W
982.00	13.69	357.59	977.01	73.51	-3.72	14,528,239.98	2,072,562.61	39° 59' 44.728 N	109° 27' 25.456 W
1,072.00	15.94	357.99	1,064.01	96.50	-4.60	14,528,262.95	2,072,561.33	39° 59' 44.955 N	109° 27' 25.468 W
1,162.00	17.75	358.34	1,150.15	122.57	-5.43	14,528,289.00	2,072,560.04	39° 59' 45.213 N	109° 27' 25.478 W
1,252.00	19.25	359.96	1,235.50	151.12	-5.84	14,528,317.54	2,072,559.14	39° 59' 45.495 N	109° 27' 25.484 W
1,342.00	21.44	0.33	1,319.88	182.41	-5.76	14,528,348.82	2,072,558.68	39° 59' 45.804 N	109° 27' 25.483 W
1,432.00	22.81	1.21	1,403.25	216.30	-5.29	14,528,382.72	2,072,558.56	39° 59' 46.139 N	109° 27' 25.477 W
1,522.00	23.50	2.21	1,486.00	251.67	-4.23	14,528,418.10	2,072,559.01	39° 59' 46.489 N	109° 27' 25.463 W
1,612.00	24.81	3.46	1,568.12	288.45	-2.40	14,528,454.91	2,072,560.20	39° 59' 46.853 N	109° 27' 25.440 W
1,702.00	24.88	4.71	1,649.79	326.17	0.29	14,528,492.67	2,072,562.24	39° 59' 47.225 N	109° 27' 25.405 W
1,792.00	24.00	5.58	1,731.72	363.26	3.63	14,528,529.81	2,072,564.94	39° 59' 47.592 N	109° 27' 25.362 W
1,882.00	24.69	5.71	1,813.72	400.18	7.28	14,528,566.78	2,072,567.95	39° 59' 47.957 N	109° 27' 25.315 W
1,972.00	22.81	5.46	1,896.09	436.25	10.81	14,528,602.91	2,072,570.85	39° 59' 48.313 N	109° 27' 25.270 W
2,062.00	20.25	3.33	1,979.81	469.17	13.37	14,528,635.87	2,072,572.85	39° 59' 48.639 N	109° 27' 25.237 W
2,152.00	19.36	0.79	2,064.49	499.64	14.48	14,528,666.35	2,072,573.43	39° 59' 48.940 N	109° 27' 25.223 W
LAST WEATHERFORD MWD SURFACE SURVEY									
2,253.00	18.64	2.11	2,159.98	532.51	15.31	14,528,699.23	2,072,573.69	39° 59' 49.265 N	109° 27' 25.212 W
FIRST SDI MWD PRODUCTION SURVEY									
2,343.00	20.31	359.29	2,244.83	562.50	15.64	14,528,729.23	2,072,573.50	39° 59' 49.561 N	109° 27' 25.208 W
2,434.00	18.20	356.57	2,330.74	592.48	14.60	14,528,759.19	2,072,571.94	39° 59' 49.858 N	109° 27' 25.221 W
2,524.00	16.88	353.67	2,416.55	619.50	12.32	14,528,786.16	2,072,569.19	39° 59' 50.125 N	109° 27' 25.250 W
2,615.00	16.88	356.04	2,503.63	645.81	9.95	14,528,812.43	2,072,566.36	39° 59' 50.385 N	109° 27' 25.281 W
2,706.00	17.67	358.68	2,590.53	672.80	8.72	14,528,839.39	2,072,564.67	39° 59' 50.652 N	109° 27' 25.297 W
2,796.00	17.94	2.63	2,676.22	700.30	9.04	14,528,866.90	2,072,564.51	39° 59' 50.923 N	109° 27' 25.293 W
2,887.00	16.71	1.58	2,763.09	727.38	10.04	14,528,893.99	2,072,565.05	39° 59' 51.191 N	109° 27' 25.280 W
2,977.00	15.39	357.53	2,849.58	752.25	9.88	14,528,918.85	2,072,564.46	39° 59' 51.437 N	109° 27' 25.282 W
3,068.00	15.56	356.39	2,937.29	776.49	8.59	14,528,943.07	2,072,562.75	39° 59' 51.677 N	109° 27' 25.298 W
3,159.00	15.74	357.89	3,024.91	801.01	7.37	14,528,967.56	2,072,561.10	39° 59' 51.919 N	109° 27' 25.314 W
3,249.00	14.51	357.89	3,111.79	824.48	6.51	14,528,991.01	2,072,559.83	39° 59' 52.151 N	109° 27' 25.325 W
3,340.00	14.33	358.24	3,199.93	847.13	5.74	14,529,013.64	2,072,558.67	39° 59' 52.375 N	109° 27' 25.335 W
3,430.00	13.63	0.87	3,287.26	868.86	5.56	14,529,035.37	2,072,558.12	39° 59' 52.590 N	109° 27' 25.337 W
3,521.00	12.57	359.47	3,375.89	889.49	5.63	14,529,055.99	2,072,557.83	39° 59' 52.793 N	109° 27' 25.336 W
3,611.00	12.13	358.68	3,463.81	908.73	5.32	14,529,075.23	2,072,557.19	39° 59' 52.984 N	109° 27' 25.340 W
3,702.00	12.75	1.23	3,552.67	928.33	5.32	14,529,094.82	2,072,556.85	39° 59' 53.177 N	109° 27' 25.340 W
3,793.00	12.57	1.40	3,641.46	948.27	5.78	14,529,114.77	2,072,556.96	39° 59' 53.374 N	109° 27' 25.334 W
3,883.00	10.82	359.12	3,729.59	966.51	5.89	14,529,133.00	2,072,556.75	39° 59' 53.555 N	109° 27' 25.333 W
3,974.00	8.79	352.61	3,819.26	981.95	4.86	14,529,148.42	2,072,555.46	39° 59' 53.707 N	109° 27' 25.346 W
4,064.00	8.35	347.69	3,908.25	995.15	2.58	14,529,161.59	2,072,552.95	39° 59' 53.838 N	109° 27' 25.375 W
4,155.00	7.56	352.88	3,998.38	1,007.55	0.43	14,529,173.94	2,072,550.59	39° 59' 53.960 N	109° 27' 25.403 W
4,246.00	7.21	1.14	4,088.63	1,019.20	-0.20	14,529,185.58	2,072,549.76	39° 59' 54.075 N	109° 27' 25.411 W
4,336.00	6.42	352.35	4,177.99	1,029.83	-0.75	14,529,196.20	2,072,549.02	39° 59' 54.181 N	109° 27' 25.418 W
4,427.00	5.01	14.32	4,268.55	1,038.72	-0.45	14,529,205.10	2,072,549.17	39° 59' 54.269 N	109° 27' 25.414 W
4,517.00	3.87	24.87	4,358.28	1,045.29	1.80	14,529,211.70	2,072,551.30	39° 59' 54.333 N	109° 27' 25.386 W
4,608.00	2.99	27.86	4,449.11	1,050.17	4.20	14,529,216.63	2,072,553.62	39° 59' 54.382 N	109° 27' 25.355 W
4,699.00	1.76	47.19	4,540.04	1,053.22	6.34	14,529,219.71	2,072,555.70	39° 59' 54.412 N	109° 27' 25.327 W
4,789.00	1.76	19.51	4,630.00	1,055.46	7.81	14,529,221.98	2,072,557.14	39° 59' 54.434 N	109° 27' 25.308 W
4,880.00	1.76	21.88	4,720.95	1,058.08	8.80	14,529,224.61	2,072,558.08	39° 59' 54.460 N	109° 27' 25.296 W
4,971.00	1.58	43.50	4,811.91	1,060.28	10.18	14,529,226.84	2,072,559.43	39° 59' 54.482 N	109° 27' 25.278 W
5,061.00	0.88	56.51	4,901.89	1,061.56	11.61	14,529,228.15	2,072,560.83	39° 59' 54.494 N	109° 27' 25.259 W
5,152.00	1.14	62.66	4,992.88	1,062.37	13.00	14,529,228.97	2,072,562.21	39° 59' 54.502 N	109° 27' 25.242 W
5,242.00	0.79	111.18	5,082.87	1,062.55	14.37	14,529,229.18	2,072,563.58	39° 59' 54.504 N	109° 27' 25.224 W
5,333.00	0.70	120.14	5,173.86	1,062.05	15.44	14,529,228.69	2,072,564.65	39° 59' 54.499 N	109° 27' 25.210 W
5,423.00	1.14	131.92	5,263.85	1,061.17	16.58	14,529,227.84	2,072,565.81	39° 59' 54.490 N	109° 27' 25.196 W
5,514.00	1.14	136.40	5,354.83	1,059.91	17.88	14,529,226.60	2,072,567.13	39° 59' 54.478 N	109° 27' 25.179 W
5,605.00	1.32	123.48	5,445.81	1,058.68	19.38	14,529,225.39	2,072,568.65	39° 59' 54.466 N	109° 27' 25.160 W

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Survey										
Measured			Vertical			Map	Map			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
5,695.00	0.35	62.84	5,535.80	1,058.23	20.49	14,529,224.97	2,072,569.76	39° 59' 54.461 N	109° 27' 25.145 W	
5,786.00	0.79	110.21	5,626.80	1,058.14	21.32	14,529,224.89	2,072,570.60	39° 59' 54.460 N	109° 27' 25.135 W	
5,876.00	0.26	30.76	5,716.79	1,058.10	22.01	14,529,224.87	2,072,571.29	39° 59' 54.460 N	109° 27' 25.126 W	
5,967.00	0.70	336.97	5,807.79	1,058.79	21.90	14,529,225.55	2,072,571.16	39° 59' 54.467 N	109° 27' 25.127 W	
6,057.00	0.35	342.15	5,897.79	1,059.56	21.60	14,529,226.31	2,072,570.85	39° 59' 54.474 N	109° 27' 25.131 W	
6,148.00	0.35	187.64	5,988.78	1,059.55	21.48	14,529,226.30	2,072,570.73	39° 59' 54.474 N	109° 27' 25.133 W	
6,239.00	0.53	308.14	6,079.78	1,059.53	21.11	14,529,226.28	2,072,570.36	39° 59' 54.474 N	109° 27' 25.137 W	
6,329.00	0.44	238.97	6,169.78	1,059.61	20.48	14,529,226.35	2,072,569.74	39° 59' 54.475 N	109° 27' 25.145 W	
6,420.00	0.79	207.42	6,260.78	1,058.87	19.90	14,529,225.60	2,072,569.16	39° 59' 54.468 N	109° 27' 25.153 W	
6,510.00	0.62	236.07	6,350.77	1,058.05	19.21	14,529,224.77	2,072,568.49	39° 59' 54.460 N	109° 27' 25.162 W	
6,601.00	0.79	211.11	6,441.76	1,057.24	18.47	14,529,223.94	2,072,567.77	39° 59' 54.452 N	109° 27' 25.171 W	
6,692.00	0.79	204.87	6,532.75	1,056.13	17.89	14,529,222.83	2,072,567.20	39° 59' 54.441 N	109° 27' 25.179 W	
6,782.00	0.70	183.07	6,622.75	1,055.02	17.60	14,529,221.71	2,072,566.93	39° 59' 54.430 N	109° 27' 25.183 W	
6,873.00	0.88	185.45	6,713.74	1,053.77	17.50	14,529,220.46	2,072,566.85	39° 59' 54.417 N	109° 27' 25.184 W	
6,963.00	1.41	173.58	6,803.72	1,051.98	17.56	14,529,218.67	2,072,566.94	39° 59' 54.400 N	109° 27' 25.183 W	
7,054.00	0.53	187.91	6,894.71	1,050.45	17.62	14,529,217.14	2,072,567.04	39° 59' 54.384 N	109° 27' 25.182 W	
7,145.00	1.06	13.53	6,985.70	1,050.86	17.76	14,529,217.55	2,072,567.17	39° 59' 54.388 N	109° 27' 25.180 W	
7,235.00	0.79	16.52	7,075.69	1,052.26	18.13	14,529,218.96	2,072,567.52	39° 59' 54.402 N	109° 27' 25.176 W	
7,326.00	0.97	49.04	7,166.68	1,053.37	18.90	14,529,220.08	2,072,568.26	39° 59' 54.413 N	109° 27' 25.166 W	
7,416.00	0.88	91.84	7,256.67	1,053.84	20.16	14,529,220.57	2,072,569.51	39° 59' 54.418 N	109° 27' 25.150 W	
7,507.00	0.88	106.78	7,347.66	1,053.62	21.53	14,529,220.37	2,072,570.89	39° 59' 54.416 N	109° 27' 25.132 W	
7,598.00	1.41	126.29	7,438.64	1,052.75	23.10	14,529,219.54	2,072,572.47	39° 59' 54.407 N	109° 27' 25.112 W	
7,688.00	0.88	119.35	7,528.62	1,051.76	24.60	14,529,218.57	2,072,573.98	39° 59' 54.397 N	109° 27' 25.093 W	
7,779.00	0.97	80.24	7,619.61	1,051.55	25.96	14,529,218.38	2,072,575.36	39° 59' 54.395 N	109° 27' 25.075 W	
7,869.00	1.23	90.87	7,709.59	1,051.66	27.68	14,529,218.52	2,072,577.07	39° 59' 54.396 N	109° 27' 25.053 W	
7,960.00	1.23	91.84	7,800.57	1,051.62	29.63	14,529,218.51	2,072,579.02	39° 59' 54.396 N	109° 27' 25.028 W	
8,051.00	1.58	104.94	7,891.55	1,051.26	31.82	14,529,218.20	2,072,581.22	39° 59' 54.392 N	109° 27' 25.000 W	
8,141.00	1.32	94.30	7,981.52	1,050.86	34.05	14,529,217.84	2,072,583.46	39° 59' 54.389 N	109° 27' 24.971 W	
8,232.00	1.58	331.26	8,072.50	1,051.89	34.50	14,529,218.87	2,072,583.88	39° 59' 54.399 N	109° 27' 24.965 W	
8,322.00	1.14	322.91	8,162.48	1,053.69	33.36	14,529,220.65	2,072,582.71	39° 59' 54.416 N	109° 27' 24.980 W	
8,413.00	0.70	317.19	8,253.47	1,054.82	32.44	14,529,221.76	2,072,581.77	39° 59' 54.428 N	109° 27' 24.992 W	
8,504.00	0.18	337.67	8,344.46	1,055.36	32.00	14,529,222.29	2,072,581.33	39° 59' 54.433 N	109° 27' 24.997 W	
8,594.00	0.35	299.79	8,434.46	1,055.63	31.71	14,529,222.56	2,072,581.03	39° 59' 54.436 N	109° 27' 25.001 W	
8,685.00	0.09	5.27	8,525.46	1,055.83	31.48	14,529,222.76	2,072,580.79	39° 59' 54.438 N	109° 27' 25.004 W	
8,775.00	0.18	148.36	8,615.46	1,055.78	31.56	14,529,222.71	2,072,580.87	39° 59' 54.437 N	109° 27' 25.003 W	
8,866.00	0.79	103.88	8,706.46	1,055.51	32.24	14,529,222.45	2,072,581.56	39° 59' 54.434 N	109° 27' 24.994 W	
8,957.00	0.88	145.02	8,797.45	1,054.79	33.25	14,529,221.75	2,072,582.59	39° 59' 54.427 N	109° 27' 24.981 W	
9,047.00	1.14	143.78	8,887.43	1,053.50	34.18	14,529,220.47	2,072,583.53	39° 59' 54.415 N	109° 27' 24.969 W	
9,138.00	1.23	124.80	8,978.42	1,052.21	35.51	14,529,219.21	2,072,584.89	39° 59' 54.402 N	109° 27' 24.952 W	
9,229.00	0.88	126.73	9,069.40	1,051.24	36.87	14,529,218.26	2,072,586.27	39° 59' 54.392 N	109° 27' 24.935 W	
9,319.00	1.49	126.56	9,159.38	1,050.13	38.37	14,529,217.17	2,072,587.78	39° 59' 54.381 N	109° 27' 24.916 W	
9,403.00	1.58	122.78	9,243.35	1,048.85	40.22	14,529,215.93	2,072,589.66	39° 59' 54.369 N	109° 27' 24.892 W	
LAST SDI MWD PRODUCTION SURVEY										
9,460.00	1.58	122.78	9,300.33	1,048.00	41.54	14,529,215.10	2,072,590.99	39° 59' 54.360 N	109° 27' 24.875 W	
PROJECTION TO TD										

Company: Kerr McGee Oil and Gas Onshore LP
Project: Uintah County, UT UTM12
Site: NBU 922-32H2 Pad
Well: NBU 922-32A2DS
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well NBU 922-32A2DS
TVD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
MD Reference: GL 4984 & RKB 14' @ 4998.00ft (ENSIGN 145)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM5000-RobertS-Local

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
177.00	177.00	0.63	0.69	FIRST WEATHERFORD MWD SURFACE SURVEY
2,152.00	2,064.49	499.64	14.48	LAST WEATHERFORD MWD SURFACE SURVEY
2,253.00	2,159.98	532.51	15.31	FIRST SDI MWD PRODUCTION SURVEY
9,403.00	9,243.35	1,048.85	40.22	LAST SDI MWD PRODUCTION SURVEY
9,460.00	9,300.33	1,048.00	41.54	PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____

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: ML 22649
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. UNIT or CA AGREEMENT NAME: NATURAL BUTTES
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		8. WELL NAME and NUMBER: NBU 922-32A2DS
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1555 FNL 0931 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SENE Section: 32 Township: 09.0S Range: 22.0E Meridian: S		9. API NUMBER: 43047509770000
PHONE NUMBER: 720 929-6456		9. FIELD and POOL or WILDCAT: NATURAL BUTTES
COUNTY: UINTAH		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	
☒ SUBSEQUENT REPORT Date of Work Completion: 7/11/2016	☐ ALTER CASING	
☐ SPUD REPORT Date of Spud:	☐ CASING REPAIR	
☐ DRILLING REPORT Report Date:	☐ CHANGE TO PREVIOUS PLANS	
	☐ CHANGE TUBING	
	☐ CHANGE WELL STATUS	
	☐ COMMINGLE PRODUCING FORMATIONS	
	☐ CONVERT WELL TYPE	
	☐ DEEPEN	
	☐ FRACTURE TREAT	
	☐ NEW CONSTRUCTION	
	☐ OPERATOR CHANGE	
	☐ PLUG AND ABANDON	
	☐ PLUG BACK	
	☐ PRODUCTION START OR RESUME	
	☐ RECLAMATION OF WELL SITE	
	☐ RECOMPLETE DIFFERENT FORMATION	
	☐ REPERFORATE CURRENT FORMATION	
	☐ SIDETRACK TO REPAIR WELL	
	☐ TEMPORARY ABANDON	
	☐ TUBING REPAIR	
	☐ VENT OR FLARE	
	☐ WATER DISPOSAL	
	☐ WATER SHUTOFF	
	☐ SI TA STATUS EXTENSION	
	☐ WILDCAT WELL DETERMINATION	
	☒ OTHER	
	OTHER: WORKOVER	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. A WELLBORE CLEANOUT HAS BEEN COMPLETED ON THE NBU 922-32A2DS WELL. PLEASE SEE THE ATTACHED OPERATIONS SUMMARY REPORT FOR DETAILS.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 08, 2016		
NAME (PLEASE PRINT) Candice Barber	PHONE NUMBER 435 781-9749	TITLE HSE Representative
SIGNATURE N/A	DATE 8/5/2016	

US ROCKIES REGION
Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]				Spud Conductor: 7/5/2010			Spud date: 7/11/2010			
Project: UTAH-UINTAH				Site: NBU 922-32H2 PAD				Rig name no.: MILES 2/2		
Event: WELL WORK EXPENSE				Start date: 7/11/2016				End date: 7/18/2016		
Active datum: RKB @4,998.00usft (above Mean Sea Level)				UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation		
7/11/2016	7:00 - 7:15	0.25	MAINT	48		P		HSM/ JSA		
	7:15 - 12:00	4.75	MAINT	30	A	P		RDMO 920-23K, MOVE RIG & EQUIP TO 922-32A2DS, MIRU, SPOT EQUIP		
	12:00 - 17:00	5.00	MAINT	31		P		CP 100 PSI, PMP 10 BBLS TMAC BRK CIRC, NDWH, UNLAND TBG HANGER, TBG STUCK, ADD 6' PUP JT UNDER HANGER, RELAND, NUBOP, UNLAND REMOVE HANGER, WORK TBG @ 80K FOR 2.5 HRS, STACK OUT LEAVE TBG IN COMP, SWIFN.		
7/12/2016	7:00 - 7:15	0.25	MAINT	48		P		HSM/ JSA		
	7:15 - 14:30	7.25	MAINT	34	A	P		SICP 0 PSI, MIRU CUTTERS WL, RUN STUCK PIPE LOG FIND BRIDGE @ 6755'-6780', RIH PERF TBG @ 6770', WORK TBG 1 HR @ 80K, RIH PERF TBG @ 8680', WORK TBG 30 MIN, RIH CUT TBG @ 6720', RDMO CUTTERS.		
	14:30 - 17:00	2.50	MAINT	31	S	P		MIRU SCAN TECH, POOH SCAN 213 JTS TBG, 52 JTS YB, 161 JTS RB, RDMO SCAN TECH, SWIFN.		
7/13/2016	7:00 - 7:15	0.25	MAINT	48		P		HSM/ JSA		
	7:15 - 18:00	10.75	MAINT	31	B	P		SICP 400 PSI, CONTROL W/ 20 BBLS TMAC, PU OS, BS, JARS, 4 DRL CLLRS, & INTENSIFIER RIH W/ 209 JTS 2 3/8" P110 TBG LATCH FISH @ 6741', JAR 3.5 HRS 75-90K, RELEASE FISH LD 5 JTS TBG POOH STD BK 204 JTS TBG & DRL CLLRS, LD OS, BS, JARS, & ITENSIFIER, PU WS, 4 JTS WP, BS, JARS, DRL CLLRS, & INTENSIFIER RIH W/ 84 JTS TBG, SWIFN.		
	7/14/2016	7:00 - 7:15	0.25	MAINT	48		P		HSM/ JSA	
	7:15 - 14:30	7.25	MAINT	44	D	P		SICP 300 PSI, CONTROL W/ 20 BBLS TMAC, CONT TO RIH W/ 120 JTS TBG (204 TOTAL), RU PWR SWVL, MIRU WTRFD FU BRK CIRC, C/O 6750'-6985', RIH TAG @ 7473' CIRC CLN, LD 2 JTS TBG POOH STD BK 226 JTS, LD WP.		
	14:30 - 18:00	3.50	MAINT	31	B	P		PU OS RIH W/ 228 JTS TBG LATCH FISH @ 7367', POOH W/ 124 JTS, SWIFN		
	7/15/2016	7:00 - 7:15	0.25	MAINT	48		P		HSM/ JSA	
	7:15 - 14:30	7.25	MAINT	31	B	P		SICP 700 PSI, CONTROL W/ 20 BBLS TMAC, POOH STD BK 104 JTS TBG, LD DRL CLLRS INTENSIFIER, JARS, BS, & OS, LD REM 63 JTS OF FISH.		
	14:30 - 18:00	3.50	MAINT	44	D	P		PU 3 7/8" MILL, POBS, & XN SN RIH W/ 298 JTS TBG TAG FILL @ 9238', RU PWR SWVL & FU W/ N2 BRK CIRC, C/O TO 9395', CIRC CLN, RD PWR SWVL & FOAM UNIT, POOH LD 22 JTS TBG, LAND TBG W/ 275 JTS 2 3/8" P110 EOT @ 8712', SWIFWE.		
								KB- 13' HANGER- 1' 275 JTS 2 3/8" P110- 8696.42' C/O TO OLD POBS- 9395' PBTD- 9407'		
7/18/2016	7:00 - 7:15	0.25	MAINT	48		P		HSM/JSA		

US ROCKIES REGION

Operation Summary Report

Well: NBU 922-32A2DS [YELLOW]		Spud Conductor: 7/5/2010		Spud date: 7/11/2010	
Project: UTAH-UINTAH		Site: NBU 922-32H2 PAD			Rig name no.: MILES 2/2
Event: WELL WORK EXPENSE		Start date: 7/11/2016		End date: 7/18/2016	
Active datum: RKB @4,998.00usft (above Mean Sea Level)			UWI: SE/NE/0/9/S/22/E/32/0/0/26/PM/N/1555/E/0/931/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
	7:15 - 10:00	2.75	MAINT	30	H	P		WSIP 800psi. Dropped ball and Pumped 40BBLs to POBS. Broached Tubing. L/D broach lubricator. NDBOP NUWH. RDMO @ 10am to NBU 1022-10M1CS.
7/20/2016	7:00 - 15:00	8.00	PROD	42		P		Arrived to location, rigged up and blew tubing pressure down. Started swabbing made 8 runs, fluid level was at 5000 ft, recovered 44 bbls. Well was on a suck for the first runs, and the last 3 runs it started to blow. Casing was just climbing. Shut well in and headed back to the shop. [casing valve is leaking and also the plunger sensor is broken]
7/21/2016	7:00 - 15:00	8.00	PROD	42		P		Arrived to location, rigged up and blew tubing pressure down. Started swabbing made 7 runs, fluid level was at 5500 ft, recovered 50 bbls. Well was on a suck for the first 3 runs and then it started blowing, finally on the last run it unloaded for a little bit and operator asked me to set it back on sales and see if it would sale for a while i did and it died right after. shut well in and headed back to the shop
7/22/2016	7:00 - 12:00	5.00	PROD	42	B	P		Arrived to location, rigged up and blew tubing pressure down. Started swabbing made 4 runs, fluid level was at 5500 ft, recovered 38 bbls. Chased spring to bottom and dropped plunger in, tripped plunger once. Rigged down and headed back to the shop

Effective Date: 6/30/2020

FORMER OPERATOR:	NEW OPERATOR:
Kerr-McGee Oil and Gas Onshore, L.P.	Caerus Uinta, LLC
Groups: 10/9/2020 sent list to operators to review.	

WELL INFORMATION:

Well Name	API Number	Town	Dir	Range	Dir	Sec	Entity Number	Type	Status
See Attached list									

Total Well Count: 3508
Pre-Notice Completed: 11/10/2020

OPERATOR CHANGES DOCUMENTATION:

- Sundry or legal documentation was received from the **FORMER** operator on: 8/11/2020
- Sundry or legal documentation was received from the **NEW** operator on: 8/11/2020
- New operator Division of Corporations Business Number: 11801118-0161

REVIEW:

Receipt of Acceptance of Drilling Procedures for APD on: 10/16/2020
Reports current for Production/Disposition & Sundries: 11/10/2020
OPS/SI/TA well(s) reviewed for full cost bonding: Approved by Dustin 11/9/2020
UIC5 on all disposal/injection/storage well(s) Approved on: Approved by Dayne 10/16/2020
Surface Facility(s) included in operator change:

East Bench
Archie Bench
Bonanza
Bridge
Goat Pasture
Goat Pasture Manifold
Morgan State 921-36P
Morgan States
NBU 1022-14B
NBU 921-25A
NBU 922-29J
NBU 922-32N
Pipeline
Sage Grouse
Sand Wash

NEW OPERATOR BOND VERIFICATION:

State/fee well(s) covered by Bond Number(s): 6135000111
LPM9344488-Shut-In Bond

DATA ENTRY:

Well(s) update in the RBDMS on: 11/19/2020
Group(s) update in RDBMS on: 11/19/2020
Surface Facilities update in RBDMS on: 11/19/2020
Entities Updated in RBDMS on: 11/19/2020

COMMENTS: Shut-In Wells that were reviewed.

CIGE 236 4304732861
CIGE 42 4304730492
CIGE 55 4304730512
Love 1121-16N 4304736256
Morgan State 16-36 4304733093
NBU 341-29E 4304733055
NBU 691-29E 4304750027
NBU 921-33F 4304736391
NBU 99 4304731745
Ouray SWD 1 4304733449
State 1022-32O 4304735315
State 921-32M 4304734872

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:

U-02278-ST

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

NATURAL BUTTES

1. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER _____

8. WELL NAME and NUMBER:

CIGE 20

2. NAME OF OPERATOR:

CAERUS UINTA LLC

9. API NUMBER:

43047304850000

3. ADDRESS OF OPERATOR:

1001 17TH ST. STE 1600

CITY

DENVER

STATE

CO

ZIP

80202

PHONE NUMBER:

303-565-4600

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1162 FSL 1365 FWL

COUNTY: UTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 20 10S 21E S

STATE:

UTAH

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

TYPE OF SUBMISSION

TYPE OF ACTION

☒ NOTICE OF INTENT
(Submit in Duplicate)

Approximate date work will start:

06/30/2020

☐ SUBSEQUENT REPORT
(Submit Original Form Only)

Date of work completion:

☐ ACIDIZE

☐ ALTER CASING

☐ CASING REPAIR

☐ CHANGE TO PREVIOUS PLANS

☐ CHANGE TUBING

☐ CHANGE WELL NAME

☐ CHANGE WELL STATUS

☐ COMMINGLE PRODUCING FORMATIONS

☐ CONVERT WELL TYPE

☐ DEEPEN

☐ FRACTURE TREAT

☐ NEW CONSTRUCTION

☒ OPERATOR CHANGE

☐ PLUG AND ABANDON

☐ PLUG BACK

☐ PRODUCTION (START/RESUME)

☐ RECLAMATION OF WELL SITE

☐ RECOMPLETE - DIFFERENT FORMATION

☐ REPERFORATE CURRENT FORMATION

☐ SIDETRACK TO REPAIR WELL

☐ TEMPORARILY ABANDON

☐ TUBING REPAIR

☐ VENT OR FLARE

☐ WATER DISPOSAL

☐ WATER SHUT-OFF

☒ OTHER: Transfer remediation liabilities

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

Effective June 30, 2020, operation of the following wells was taken over by:

Caerus Uinta LLC

1001 17th Street, Suite 1600

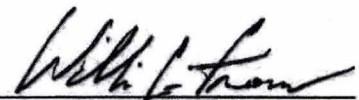
Denver, CO 80202

303-565-4600

The previous Operator was Kerr-McGee Oil & Gas Onshore LP

PO Box 173779

Denver, CO 80217-3779



William C. Irons

Attorney-in-Fact

Please see the attached wells for a complete list that will be transferred upon approval. As the Attorney-in-Fact for Kerr-McGee Oil & Gas Onshore LP I ask that you accept this letter as Kerr-McGee's official resignation and request to transfer operating rights to Caerus Uinta LLC, whose operator number is 105039. UDOGM Bond# 6135000111 and BLM Bond# COB000387.

Kerr-McGee will be transferring cleanup/soils remediation to Caerus Uinta LLC for Incident #5772. The new contact for Caerus is Grizz Oleen, EHS Field Lead (435) 790-9669.

NAME (PLEASE PRINT) Aubree Besant

TITLE Director of Land

SIGNATURE _____

DATE _____

(This space for State use only)

APPROVED

By: *Rachel Medina*

Utah Division of
Oil, Gas, and Mining

(5/2000)

(See Instructions on Reverse Side)

RECEIVED

AUG 11 2020

DIV OF OIL, GAS & MINING

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

FORM 9

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U-02278-ST

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7. UNIT or CA AGREEMENT NAME:
NATURAL BUTTES

1. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER _____

8. WELL NAME and NUMBER:
CIGE 20

2. NAME OF OPERATOR:
CAERUS UINTA LLC

9. API NUMBER:
43047304850000

3. ADDRESS OF OPERATOR:
1001 17TH ST. STE 1600 CITY DENVER STATE CO ZIP 80202
PHONE NUMBER: 303-565-4600

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1162 FSL 1365 FWL

COUNTY: UINTAH

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 20 10S 21E S

STATE: UTAH

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	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☒ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☒ OTHER: Transfer remediation liabilities
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

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303-565-4600

The previous Operator was Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779

William C. Irons
Attorney-in-Fact

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NAME (PLEASE PRINT) Aubree Besant

TITLE Director of Land

SIGNATURE

DATE

July 17, 2020

RECEIVED

(This space for State use only)

APPROVED

By: Rachel Medina
Utah Division of
Oil, Gas, and Mining

AUG 11 2020

DIV OF OIL, GAS & MINING



October 2, 2025

Utah Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple
Suite 1210
Salt Lake City, UT 84116
Attn: MykelLynn Bryson

RE: Notice of Name Change – Caerus Uinta, LLC

To Whom It May Concern:

Effective September 1, 2025, Caerus Uinta, LLC has changed its name to **KODA GNB, LLC**. KODA Uinta, LLC remains a wholly owned subsidiary of KODA Holdings, LLC.

This is a name change only; there is no change to addresses, tax identification numbers, or bank accounts.

Enclosed for your processing and records are the following:

1. Delaware Secretary of State Name Change Certificate
2. Updated W9 showing name change
3. Name Change Rider B014249 - Blanket Bond
4. Name Change Rider 612418229 - Blanket Idle well Bond
5. Name Change Rider B013581 – Pipeline Pit 1 & 2
6. Name Change Rider B013582 – Bonanza Pit 1 & 2
7. Name Change Rider B013583 – Goat Pasture Pit 1 & 2

Please feel free to contact me at aly.schuster@kodaresources.com or 720-500-0140 should you have any questions or need any additional information.

Sincerely,
KODA GNB, LLC

A handwritten signature in blue ink, appearing to read "Aly Schuster". The signature is fluid and cursive, with a long horizontal stroke at the end.

Aly Schuster
Senior Landman

Enclosure

1401 Wynkoop St, Suite 300
Denver, CO 80202

owners@kodaresources.com | www.kodaresources.com

Delaware

The First State

Page 1

I, CHARUNI PATIBANDA-SANCHEZ, SECRETARY OF STATE OF THE
STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND
CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "CAERUS UINTA
LLC", CHANGING ITS NAME FROM "CAERUS UINTA LLC" TO "KODA GNB,
LLC", FILED IN THIS OFFICE ON THE TWENTY-NINTH DAY OF AUGUST,
A.D. 2025, AT 9:14 O'CLOCK P.M.



7877090 8100
SR# 20253839085

You may verify this certificate online at corp.delaware.gov/authver.shtml

A handwritten signature in cursive script, reading "C. B. Sanchez".

Charuni Patibanda-Sanchez, Secretary of State

Authentication: 204623735
Date: 09-02-25

State of Delaware
Secretary of State
Division of Corporations
Delivered 09:11 PM 08/29/2025
FILED 09:14 PM 08/29/2025
SR 20253839085 - File Number 7877090

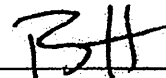
STATE OF DELAWARE CERTIFICATE OF AMENDMENT

1. Name of Limited Liability Company: Caerus Uinta LLC
2. The Certificate of Formation of the limited liability company is hereby amended as follows:

The name of the limited liability company is: KODA
GNB, LLC.

IN WITNESS WHEREOF, the undersigned have executed this Certificate on
the 29th day of August, A.D. 2025.

By: _____



Authorized Person(s)

Name: Ryan Midgett

Print or Type