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 1022-7N4S
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** 720 929-6587
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217	**9. OPERATOR E-MAIL** mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU 0466 / **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	97 FSL 1938 FEL	SWSE	7	10.0 S	22.0 E	S
Top of Uppermost Producing Zone	595 FSL 1740 FWL	SESW	7	10.0 S	22.0 E	S
At Total Depth	595 FSL 1740 FWL	SESW	7	10.0 S	22.0 E	S

21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 595	**23. NUMBER OF ACRES IN DRILLING UNIT** 454
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 330	**26. PROPOSED DEPTH** MD: 9519 TVD: 9200
27. ELEVATION - GROUND LEVEL 5335	**28. BOND NUMBER** WYB000291	**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

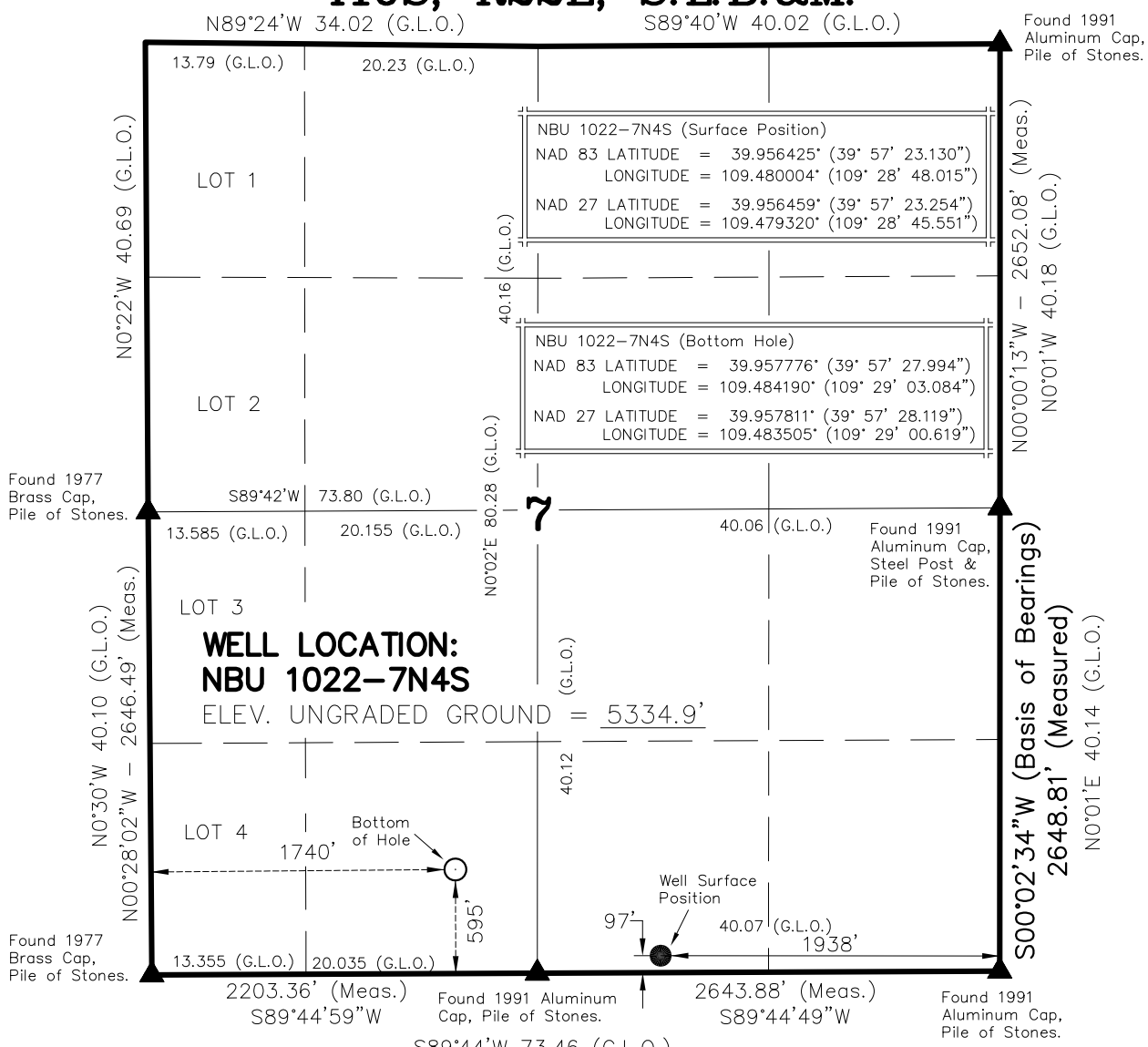
☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**	☑ **COMPLETE DRILLING PLAN**
☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**	☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**
☑ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**	☑ **TOPOGRAPHICAL MAP**

NAME Danielle Piernot	**TITLE** Regulatory Analyst	**PHONE** 720 929-6156
SIGNATURE	**DATE** 08/14/2009	**EMAIL** danielle.piernot@anadarko.com
API NUMBER ASSIGNED 43047506510000	**APPROVAL**	Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	9519		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 Buttress	9519	11.6			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2305		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2305	36.0			

T10S, R22E, S.L.B.&M.



NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears N67°13'48"W 1272.85' 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'.

N

1000' 500' 0' 1000'

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.

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

REGISTERED LAND SURVEYOR
REGISTRATION No. 362251
STATE OF UTAH

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

NBU 1022-7N4S
WELL PLAT
595' FSL, 1740' FWL (Bottom Hole)
SE $\frac{1}{4}$ SW $\frac{1}{4}$ OF SECTION 7, T10S, R22E,
S.L.B.&M. UINTAH COUNTY, UTAH.

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

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

DATE SURVEYED: 10-01-08	SURVEYED BY: M.S.B.	SHEET
DATE DRAWN: 10-08-08	DRAWN BY: E.M.S.	4
SCALE: 1" = 1000'	Date Last Revised: 01-26-09	OF 13

'APIWellNo:43047506510000'

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
NBU 1022-7O Pad
NBU 1022-7N4S

NBU 1022-7N4S

Plan: Design #1

Standard Planning Report

11 March, 2009

'APIWellNo:43047506510000'

Anadarko Petroleum Corporation

Weatherford®

Project:	UINTAH COUNTY, UTAH (nad 27)
Site:	NBU 1022-7O Pad
Well:	NBU 1022-7N4S
Wellbore:	NBU 1022-7N4S
Design:	Design #1
Latitude:	39° 57' 23.256 N
Longitude:	109° 28' 45.552 W
GL:	5334.00
KB:	WELL @ 5354.00ft (Original Well Elev)

WELL DETAILS: NBU 1022-7N4S

Ground Level: 5334.00

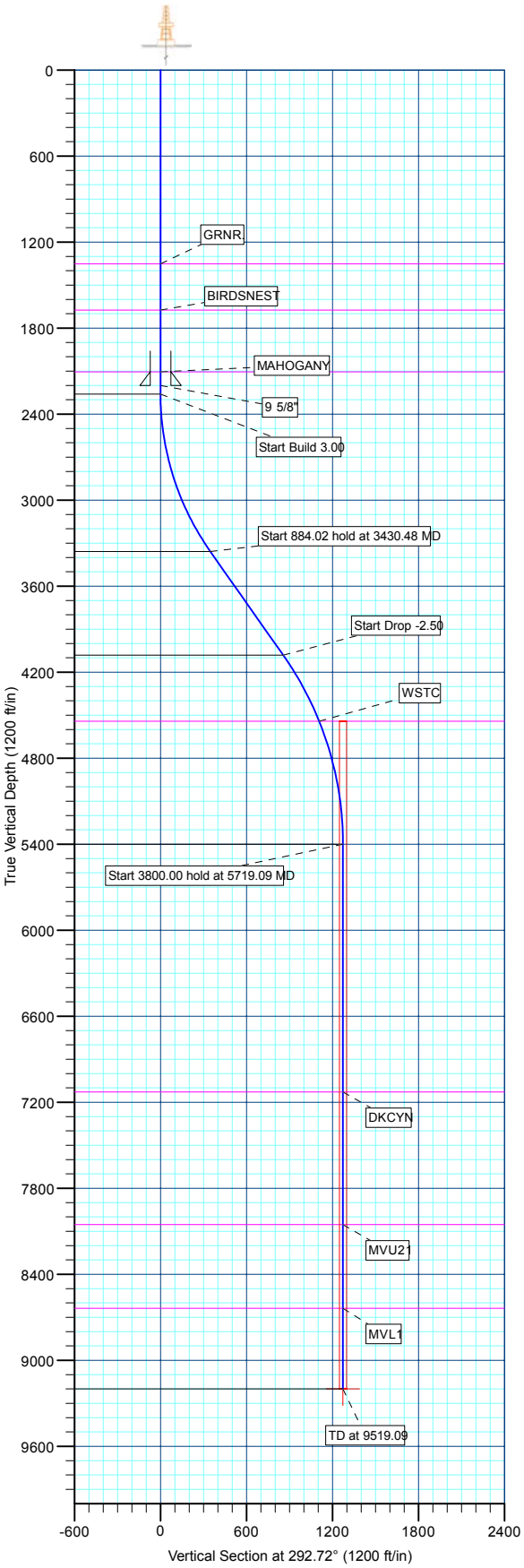
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	14513822.38	2066574.96	39° 57' 23.256 N	109° 28' 45.552 W	

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
NBU 1022-7N4S	9200.00	491.71	-1174.41	39° 57' 28.116 N	109° 29' 0.636 W	Circle (Radius: 25.00)

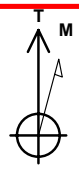
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2260.00	0.00	0.00	2260.00	0.00	0.00	0.00	0.00	0.00	
3	3430.48	35.11	292.72	3358.58	134.24	-320.62	3.00	292.72	347.59	
4	4314.51	35.11	292.72	4081.71	330.62	-789.67	0.00	0.00	856.09	
5	5719.09	0.00	0.00	5400.00	491.71	-1174.41	2.50	180.00	1273.19	
6	9519.09	0.00	0.00	9200.00	491.71	-1174.41	0.00	0.00	1273.19	NBU 1022-7N4S



LEGEND

- NBU 1022-7N1S, NBU 1022-7N1S, Design #1 V0
- NBU 1022-7O4AS, NBU 1022-7O4AS, Design #1 V0
- NBU 1022-7O4DS, NBU 1022-7O4DS, Design #1 V0
- NBU470 ACTUAL, NBU470 ACTUAL, NBU470 ACTUAL V0
- Design #1



Azimuths to True North
Magnetic North: 11.41°

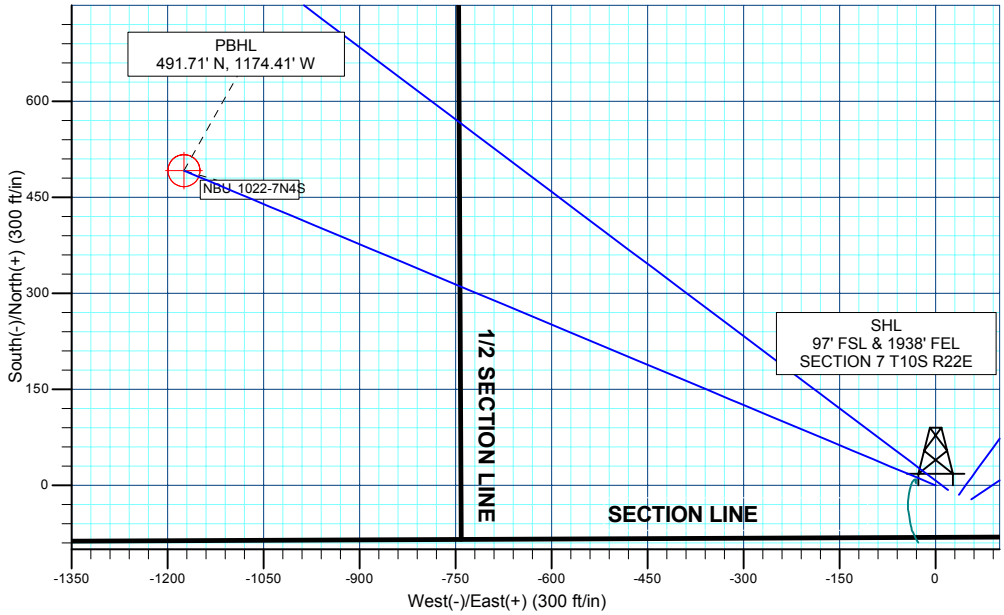
Magnetic Field
Strength: 52568.7snT
Dip Angle: 65.93°
Date: 12/12/2008
Model: BGGM2008

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1352.00	1352.00	GRNR.
1675.00	1675.00	BIRDSNEST
2105.00	2105.00	MAHOGANY
4543.00	4840.74	WSTC
7128.00	7447.09	DKCYN
8054.00	8373.09	MVU21
8637.00	8956.09	MVL1

CASING DETAILS

TVD	MD	Name	Size
2200.00	2200.00	9 5/8"	9.62



Plan: Design #1 (NBU 1022-7N4S/NBU 1022-7N4S)

Created By: ROBERT SCOTT Date: 15:25, March 11 2009

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site:	NBU 1022-7O Pad	**North Reference:**	True
Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	NBU 1022-7N4S		
Design:	Design #1		

Project UINTAH COUNTY, UTAH (nad 27),

Map System:	Universal Transverse Mercator (US Survey Fee	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site NBU 1022-7O Pad, SECTION 7 T10S R22E

Site Position:		**Northing:**	14,513,801.48 ft	**Latitude:**	39° 57' 23.040 N
From:	Lat/Long	**Easting:**	2,066,631.38 ft	**Longitude:**	109° 28' 44.832 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	0.98 °

Well NBU 1022-7N4S

Well Position	**+N/-S**	21.85 ft	**Northing:**	14,513,822.38 ft	**Latitude:**	39° 57' 23.256 N
	+E/-W	-56.06 ft	**Easting:**	2,066,574.96 ft	**Longitude:**	109° 28' 45.552 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,334.00 ft

Wellbore NBU 1022-7N4S

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2008	12/12/2008	11.41	65.93	52,569

Design Design #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	292.72

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,260.00	0.00	0.00	2,260.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,430.48	35.11	292.72	3,358.58	134.24	-320.62	3.00	3.00	0.00	292.72	
4,314.51	35.11	292.72	4,081.71	330.62	-789.67	0.00	0.00	0.00	0.00	
5,719.09	0.00	0.00	5,400.00	491.71	-1,174.41	2.50	-2.50	0.00	180.00	
9,519.09	0.00	0.00	9,200.00	491.71	-1,174.41	0.00	0.00	0.00	0.00	NBU 1022-7N4S

Weatherford International Ltd.

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Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site:	NBU 1022-7O Pad	**North Reference:**	True
Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	NBU 1022-7N4S		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 3.00									
2,260.00	0.00	0.00	2,260.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	1.20	292.72	2,300.00	0.16	-0.39	0.42	3.00	3.00	0.00
2,400.00	4.20	292.72	2,399.87	1.98	-4.73	5.13	3.00	3.00	0.00
2,500.00	7.20	292.72	2,499.37	5.82	-13.89	15.06	3.00	3.00	0.00
2,600.00	10.20	292.72	2,598.21	11.66	-27.84	30.18	3.00	3.00	0.00
2,700.00	13.20	292.72	2,696.12	19.49	-46.55	50.46	3.00	3.00	0.00
2,800.00	16.20	292.72	2,792.83	29.29	-69.95	75.83	3.00	3.00	0.00
2,900.00	19.20	292.72	2,888.09	41.03	-97.99	106.23	3.00	3.00	0.00
3,000.00	22.20	292.72	2,981.62	54.68	-130.59	141.58	3.00	3.00	0.00
3,100.00	25.20	292.72	3,073.18	70.20	-167.66	181.77	3.00	3.00	0.00
3,200.00	28.20	292.72	3,162.51	87.55	-209.11	226.69	3.00	3.00	0.00
3,300.00	31.20	292.72	3,249.36	106.68	-254.80	276.23	3.00	3.00	0.00
3,400.00	34.20	292.72	3,333.50	127.54	-304.63	330.25	3.00	3.00	0.00
Start 884.02 hold at 3430.48 MD									
3,430.48	35.11	292.72	3,358.58	134.24	-320.62	347.59	3.00	3.00	0.00
3,500.00	35.11	292.72	3,415.44	149.68	-357.50	387.57	0.00	0.00	0.00
3,600.00	35.11	292.72	3,497.24	171.90	-410.56	445.09	0.00	0.00	0.00
3,700.00	35.11	292.72	3,579.04	194.11	-463.62	502.62	0.00	0.00	0.00
3,800.00	35.11	292.72	3,660.84	216.33	-516.68	560.14	0.00	0.00	0.00
3,900.00	35.11	292.72	3,742.64	238.54	-569.74	617.66	0.00	0.00	0.00
4,000.00	35.11	292.72	3,824.44	260.76	-622.80	675.18	0.00	0.00	0.00
4,100.00	35.11	292.72	3,906.24	282.97	-675.85	732.70	0.00	0.00	0.00
4,200.00	35.11	292.72	3,988.04	305.18	-728.91	790.22	0.00	0.00	0.00
4,300.00	35.11	292.72	4,069.84	327.40	-781.97	847.74	0.00	0.00	0.00
Start Drop -2.50									
4,314.51	35.11	292.72	4,081.71	330.62	-789.67	856.09	0.00	0.00	0.00
4,400.00	32.98	292.72	4,152.54	349.11	-833.82	903.95	2.50	-2.50	0.00
4,500.00	30.48	292.72	4,237.59	369.41	-882.32	956.53	2.50	-2.50	0.00
4,600.00	27.98	292.72	4,324.86	388.27	-927.36	1,005.36	2.50	-2.50	0.00
4,700.00	25.48	292.72	4,414.16	405.64	-968.84	1,050.33	2.50	-2.50	0.00
4,800.00	22.98	292.72	4,505.35	421.48	-1,006.69	1,091.36	2.50	-2.50	0.00
WSTC									
4,840.74	21.96	292.72	4,543.00	427.50	-1,021.05	1,106.93	2.50	-2.50	0.00
4,900.00	20.48	292.72	4,598.24	435.78	-1,040.83	1,128.38	2.50	-2.50	0.00
5,000.00	17.98	292.72	4,692.65	448.50	-1,071.20	1,161.30	2.50	-2.50	0.00
5,100.00	15.48	292.72	4,788.41	459.61	-1,097.75	1,190.08	2.50	-2.50	0.00
5,200.00	12.98	292.72	4,885.34	469.10	-1,120.42	1,214.66	2.50	-2.50	0.00
5,300.00	10.48	292.72	4,983.24	476.95	-1,139.17	1,234.98	2.50	-2.50	0.00
5,400.00	7.98	292.72	5,081.94	483.14	-1,153.95	1,251.02	2.50	-2.50	0.00
5,500.00	5.48	292.72	5,181.25	487.67	-1,164.76	1,262.73	2.50	-2.50	0.00
5,600.00	2.98	292.72	5,280.97	490.51	-1,171.56	1,270.10	2.50	-2.50	0.00
5,700.00	0.48	292.72	5,380.91	491.68	-1,174.34	1,273.11	2.50	-2.50	0.00
Start 3800.00 hold at 5719.09 MD									
5,719.09	0.00	0.00	5,400.00	491.71	-1,174.41	1,273.19	2.50	-2.50	0.00
5,800.00	0.00	0.00	5,480.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
5,900.00	0.00	0.00	5,580.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,000.00	0.00	0.00	5,680.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,100.00	0.00	0.00	5,780.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,200.00	0.00	0.00	5,880.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,300.00	0.00	0.00	5,980.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,400.00	0.00	0.00	6,080.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,500.00	0.00	0.00	6,180.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,600.00	0.00	0.00	6,280.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site:	NBU 1022-7O Pad	**North Reference:**	True
Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	NBU 1022-7N4S		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,700.00	0.00	0.00	6,380.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,800.00	0.00	0.00	6,480.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
6,900.00	0.00	0.00	6,580.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,000.00	0.00	0.00	6,680.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,100.00	0.00	0.00	6,780.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,200.00	0.00	0.00	6,880.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,300.00	0.00	0.00	6,980.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,400.00	0.00	0.00	7,080.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
DKCYN									
7,447.09	0.00	0.00	7,128.00	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,500.00	0.00	0.00	7,180.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,600.00	0.00	0.00	7,280.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,700.00	0.00	0.00	7,380.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,800.00	0.00	0.00	7,480.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
7,900.00	0.00	0.00	7,580.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,000.00	0.00	0.00	7,680.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,100.00	0.00	0.00	7,780.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,200.00	0.00	0.00	7,880.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,300.00	0.00	0.00	7,980.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
MVU21									
8,373.09	0.00	0.00	8,054.00	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,400.00	0.00	0.00	8,080.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,500.00	0.00	0.00	8,180.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,600.00	0.00	0.00	8,280.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,700.00	0.00	0.00	8,380.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,800.00	0.00	0.00	8,480.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
8,900.00	0.00	0.00	8,580.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
MVL1									
8,956.09	0.00	0.00	8,637.00	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
9,000.00	0.00	0.00	8,680.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
9,100.00	0.00	0.00	8,780.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
9,200.00	0.00	0.00	8,880.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
9,300.00	0.00	0.00	8,980.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
9,400.00	0.00	0.00	9,080.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
9,500.00	0.00	0.00	9,180.91	491.71	-1,174.41	1,273.19	0.00	0.00	0.00
NBU 1022-7N4S									
9,519.09	0.00	0.00	9,200.00	491.71	-1,174.41	1,273.19	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
NBU 1022-7N4S - plan hits target center - Circle (radius 25.00)	0.00	0.00	9,200.00	491.71	-1,174.41	14,514,293.99	2,065,392.34	39° 57' 28.116 N	109° 29' 0.636 W

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site:	NBU 1022-7O Pad	**North Reference:**	True
Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	NBU 1022-7N4S		
Design:	Design #1		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,200.00	2,200.00	9 5/8"	9.62	12.25

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,352.00	1,352.00	GRNR.		0.00	
1,675.00	1,675.00	BIRDSNEST		0.00	
2,105.00	2,105.00	MAHOGANY		0.00	
4,840.74	4,543.00	WSTC		0.00	
7,447.09	7,128.00	DKCYN		0.00	
8,373.09	8,054.00	MVU21		0.00	
8,956.09	8,637.00	MVL1		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,260.00	2,260.00	0.00	0.00	Start Build 3.00
3,430.48	3,358.58	134.24	-320.62	Start 884.02 hold at 3430.48 MD
4,314.51	4,081.71	330.62	-789.67	Start Drop -2.50
5,719.09	5,400.00	491.71	-1,174.41	Start 3800.00 hold at 5719.09 MD
9,519.09	9,200.00	491.71	-1,174.41	TD at 9519.09

'APIWellNo:43047506510000'

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
NBU 1022-7O Pad
NBU 1022-7N4S

NBU 1022-7N4S
Design #1

Anticollision Report

11 March, 2009

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Design #1

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** 12/12/2008

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	9,519.09	Design #1 (NBU 1022-7N4S)	MWD	MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
NBU 1022-7O Pad						
NBU 1022-7N1S - NBU 1022-7N1S - Design #1	2,260.00	2,260.00	20.93	11.04	2.116	CC
NBU 1022-7N1S - NBU 1022-7N1S - Design #1	2,400.00	2,401.47	21.12	10.66	2.019	ES
NBU 1022-7N1S - NBU 1022-7N1S - Design #1	2,500.00	2,502.48	21.72	10.87	2.003	SF
NBU 1022-7O4AS - NBU 1022-7O4AS - Design #1	2,260.00	2,260.00	39.24	29.35	3.968	CC, ES
NBU 1022-7O4AS - NBU 1022-7O4AS - Design #1	2,300.00	2,299.86	39.73	29.67	3.948	SF
NBU 1022-7O4DS - NBU 1022-7O4DS - Design #1	2,260.00	2,260.00	60.17	50.28	6.084	CC, ES
NBU 1022-7O4DS - NBU 1022-7O4DS - Design #1	2,300.00	2,299.52	60.74	50.68	6.038	SF
NBU470 ACTUAL - NBU470 ACTUAL - NBU470 ACTUA	2,615.98	2,593.71	17.49	6.86	1.645	CC, ES, SF

Offset Design NBU 1022-7O Pad - NBU 1022-7N1S - NBU 1022-7N1S - Design #1

Offset Site Error: 0.00 ft
Offset Well Error: 0.00 ft

Survey Program: 0-MWD

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	110.37	-7.28	19.62	20.93				
100.00	100.00	100.00	100.00	0.09	0.09	110.37	-7.28	19.62	20.93	20.75	0.18	116.394	
200.00	200.00	200.00	200.00	0.31	0.31	110.37	-7.28	19.62	20.93	20.30	0.63	33.255	
300.00	300.00	300.00	300.00	0.54	0.54	110.37	-7.28	19.62	20.93	19.85	1.08	19.399	
400.00	400.00	400.00	400.00	0.76	0.76	110.37	-7.28	19.62	20.93	19.40	1.53	13.693	
500.00	500.00	500.00	500.00	0.99	0.99	110.37	-7.28	19.62	20.93	18.95	1.98	10.581	
600.00	600.00	600.00	600.00	1.21	1.21	110.37	-7.28	19.62	20.93	18.50	2.43	8.622	
700.00	700.00	700.00	700.00	1.44	1.44	110.37	-7.28	19.62	20.93	18.05	2.88	7.275	
800.00	800.00	800.00	800.00	1.66	1.66	110.37	-7.28	19.62	20.93	17.60	3.33	6.292	
900.00	900.00	900.00	900.00	1.89	1.89	110.37	-7.28	19.62	20.93	17.15	3.78	5.543	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	110.37	-7.28	19.62	20.93	16.70	4.23	4.953	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	110.37	-7.28	19.62	20.93	16.25	4.68	4.477	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	110.37	-7.28	19.62	20.93	15.80	5.12	4.084	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	110.37	-7.28	19.62	20.93	15.35	5.57	3.755	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	110.37	-7.28	19.62	20.93	14.91	6.02	3.474	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	110.37	-7.28	19.62	20.93	14.46	6.47	3.233	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	110.37	-7.28	19.62	20.93	14.01	6.92	3.023	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	110.37	-7.28	19.62	20.93	13.56	7.37	2.839	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	110.37	-7.28	19.62	20.93	13.11	7.82	2.676	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	4.14	110.37	-7.28	19.62	20.93	12.66	8.27	2.530	

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

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU 1022-7N1S - NBU 1022-7N1S - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	110.37	-7.28	19.62	20.93	12.21	8.72	2.400	
2,100.00	2,100.00	2,100.00	2,100.00	4.59	4.59	110.37	-7.28	19.62	20.93	11.76	9.17	2.282	
2,200.00	2,200.00	2,200.00	2,200.00	4.81	4.81	110.37	-7.28	19.62	20.93	11.31	9.62	2.176	
2,260.00	2,260.00	2,260.00	2,260.00	4.94	4.94	110.37	-7.28	19.62	20.93	11.04	9.89	2.116	CC
2,300.00	2,300.00	2,300.42	2,300.42	5.03	5.03	177.36	-7.03	19.28	20.94	10.88	10.06	2.081	
2,400.00	2,399.87	2,401.47	2,401.34	5.24	5.25	174.17	-4.14	15.44	21.12	10.66	10.46	2.019	ES
2,500.00	2,499.37	2,502.48	2,501.83	5.46	5.48	167.66	1.96	7.34	21.72	10.87	10.84	2.003	SF
2,600.00	2,598.21	2,603.42	2,601.57	5.70	5.72	158.60	11.23	-4.99	23.11	11.89	11.22	2.060	
2,700.00	2,696.12	2,704.27	2,700.27	5.96	5.99	148.32	23.64	-21.49	25.74	14.10	11.64	2.212	
2,800.00	2,792.83	2,804.99	2,797.62	6.27	6.30	138.39	39.15	-42.10	29.93	17.77	12.16	2.461	
2,900.00	2,888.09	2,905.57	2,893.35	6.64	6.67	129.82	57.69	-66.74	35.80	22.95	12.85	2.786	
3,000.00	2,981.62	3,005.98	2,987.16	7.09	7.12	122.90	79.19	-95.33	43.30	29.58	13.73	3.154	
3,100.00	3,073.18	3,106.21	3,078.79	7.63	7.66	117.48	103.59	-127.75	52.34	37.52	14.82	3.531	
3,200.00	3,162.51	3,206.23	3,167.99	8.29	8.31	113.25	130.77	-163.89	62.79	46.65	16.14	3.890	
3,300.00	3,249.36	3,305.77	3,254.61	9.07	9.06	110.42	160.25	-203.08	74.65	56.97	17.68	4.222	
3,400.00	3,333.50	3,404.81	3,340.47	9.99	9.88	111.04	189.93	-242.52	88.31	69.04	19.26	4.584	
3,430.48	3,358.58	3,434.92	3,366.58	10.30	10.14	111.77	198.96	-254.52	92.85	73.10	19.75	4.702	
3,500.00	3,415.44	3,503.54	3,426.06	11.03	10.74	113.72	219.52	-281.85	103.50	82.64	20.86	4.961	
3,600.00	3,497.24	3,602.24	3,511.63	12.12	11.64	115.90	249.09	-321.16	118.99	96.46	22.53	5.281	
3,700.00	3,579.04	3,700.95	3,597.20	13.26	12.56	117.58	278.67	-360.48	134.60	110.36	24.25	5.552	
3,800.00	3,660.84	3,799.65	3,682.77	14.42	13.50	118.92	308.25	-399.79	150.31	124.31	26.00	5.781	
3,900.00	3,742.64	3,898.36	3,768.34	15.61	14.46	120.00	337.82	-439.11	166.08	138.29	27.79	5.976	
4,000.00	3,824.44	3,997.06	3,853.91	16.82	15.43	120.89	367.40	-478.42	181.90	152.29	29.61	6.144	
4,100.00	3,906.24	4,095.77	3,939.48	18.04	16.41	121.64	396.98	-517.73	197.75	166.30	31.44	6.289	
4,200.00	3,988.04	4,194.47	4,025.05	19.28	17.41	122.28	426.55	-557.05	213.63	180.33	33.30	6.415	
4,300.00	4,069.84	4,293.18	4,110.62	20.52	18.41	122.83	456.13	-596.36	229.53	194.36	35.17	6.527	
4,314.51	4,081.71	4,307.50	4,123.04	20.71	18.56	122.90	460.42	-602.07	231.84	196.40	35.44	6.542	
4,400.00	4,152.54	4,392.03	4,196.32	21.67	19.42	123.26	485.75	-635.73	244.59	207.53	37.06	6.600	
4,500.00	4,237.59	4,491.16	4,282.26	22.65	20.44	122.86	515.45	-675.22	257.32	218.28	39.04	6.591	
4,600.00	4,324.86	4,590.40	4,368.30	23.57	21.46	121.69	545.19	-714.75	267.79	226.62	41.17	6.504	
4,700.00	4,414.16	4,689.55	4,454.25	24.40	22.49	119.81	574.90	-754.24	276.24	232.81	43.43	6.361	
4,800.00	4,505.35	4,788.43	4,539.97	25.16	23.52	117.26	604.53	-793.62	283.02	237.25	45.77	6.183	
4,900.00	4,598.24	4,885.01	4,624.32	25.84	24.44	114.37	632.80	-831.21	288.86	240.89	47.97	6.021	
5,000.00	4,692.65	4,981.63	4,710.57	26.45	25.21	111.60	658.98	-866.00	294.51	244.63	49.88	5.905	
5,100.00	4,788.41	5,078.92	4,799.19	26.97	25.91	108.94	683.10	-898.06	299.90	248.35	51.55	5.818	
5,200.00	4,885.34	5,176.87	4,890.05	27.42	26.55	106.37	705.08	-927.28	304.98	251.98	53.00	5.754	
5,300.00	4,983.24	5,275.48	4,983.02	27.80	27.12	103.88	724.84	-953.54	309.69	255.45	54.23	5.710	
5,400.00	5,081.94	5,374.75	5,077.95	28.11	27.63	101.44	742.27	-976.72	313.97	258.72	55.25	5.683	
5,500.00	5,181.25	5,474.69	5,174.70	28.35	28.08	99.06	757.31	-996.71	317.80	261.74	56.05	5.669	
5,600.00	5,280.97	5,575.28	5,273.08	28.53	28.46	96.71	769.88	-1,013.41	321.12	264.47	56.65	5.668	
5,700.00	5,380.91	5,676.52	5,372.94	28.65	28.77	94.39	779.89	-1,026.72	323.92	266.87	57.05	5.678	
5,719.09	5,400.00	5,695.92	5,392.15	28.66	28.82	26.67	781.51	-1,028.87	324.39	267.28	57.11	5.680	
5,800.00	5,480.91	5,778.56	5,474.23	28.73	29.02	25.00	787.29	-1,036.56	326.22	268.93	57.29	5.694	
5,900.00	5,580.91	5,881.50	5,576.86	28.82	29.20	23.66	792.01	-1,042.82	327.89	270.42	57.47	5.705	
6,000.00	5,680.91	5,984.94	5,680.23	28.91	29.33	23.12	793.94	-1,045.40	328.62	270.98	57.64	5.701	
6,100.00	5,780.91	6,085.62	5,780.91	29.00	29.42	23.10	794.00	-1,045.47	328.64	270.81	57.83	5.683	
6,200.00	5,880.91	6,185.62	5,880.91	29.10	29.51	23.10	794.00	-1,045.47	328.64	270.62	58.02	5.665	
6,300.00	5,980.91	6,285.62	5,980.91	29.20	29.60	23.10	794.00	-1,045.47	328.64	270.43	58.21	5.646	
6,400.00	6,080.91	6,385.62	6,080.91	29.29	29.70	23.10	794.00	-1,045.47	328.64	270.23	58.41	5.627	
6,500.00	6,180.91	6,485.62	6,180.91	29.39	29.80	23.10	794.00	-1,045.47	328.64	270.03	58.61	5.607	
6,600.00	6,280.91	6,585.62	6,280.91	29.49	29.90	23.10	794.00	-1,045.47	328.64	269.83	58.81	5.588	
6,700.00	6,380.91	6,685.62	6,380.91	29.60	30.00	23.10	794.00	-1,045.47	328.64	269.62	59.02	5.569	

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

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU 1022-7N1S - NBU 1022-7N1S - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,800.00	6,480.91	6,785.62	6,480.91	29.70	30.10	23.10	794.00	-1,045.47	328.64	269.42	59.22	5.549	
6,900.00	6,580.91	6,885.62	6,580.91	29.80	30.21	23.10	794.00	-1,045.47	328.64	269.21	59.44	5.529	
7,000.00	6,680.91	6,985.62	6,680.91	29.91	30.31	23.10	794.00	-1,045.47	328.64	268.99	59.65	5.510	
7,100.00	6,780.91	7,085.62	6,780.91	30.02	30.42	23.10	794.00	-1,045.47	328.64	268.78	59.86	5.490	
7,200.00	6,880.91	7,185.62	6,880.91	30.13	30.52	23.10	794.00	-1,045.47	328.64	268.56	60.08	5.470	
7,300.00	6,980.91	7,285.62	6,980.91	30.24	30.63	23.10	794.00	-1,045.47	328.64	268.34	60.30	5.450	
7,400.00	7,080.91	7,385.62	7,080.91	30.35	30.74	23.10	794.00	-1,045.47	328.64	268.11	60.53	5.430	
7,500.00	7,180.91	7,485.62	7,180.91	30.46	30.85	23.10	794.00	-1,045.47	328.64	267.89	60.75	5.409	
7,600.00	7,280.91	7,585.62	7,280.91	30.57	30.97	23.10	794.00	-1,045.47	328.64	267.66	60.98	5.389	
7,700.00	7,380.91	7,685.62	7,380.91	30.69	31.08	23.10	794.00	-1,045.47	328.64	267.43	61.21	5.369	
7,800.00	7,480.91	7,785.62	7,480.91	30.81	31.20	23.10	794.00	-1,045.47	328.64	267.19	61.45	5.348	
7,900.00	7,580.91	7,885.62	7,580.91	30.92	31.31	23.10	794.00	-1,045.47	328.64	266.96	61.68	5.328	
8,000.00	7,680.91	7,985.62	7,680.91	31.04	31.43	23.10	794.00	-1,045.47	328.64	266.72	61.92	5.307	
8,100.00	7,780.91	8,085.62	7,780.91	31.16	31.55	23.10	794.00	-1,045.47	328.64	266.48	62.16	5.287	
8,200.00	7,880.91	8,185.62	7,880.91	31.28	31.67	23.10	794.00	-1,045.47	328.64	266.24	62.40	5.266	
8,300.00	7,980.91	8,285.62	7,980.91	31.40	31.79	23.10	794.00	-1,045.47	328.64	265.99	62.65	5.246	
8,400.00	8,080.91	8,385.62	8,080.91	31.53	31.91	23.10	794.00	-1,045.47	328.64	265.74	62.90	5.225	
8,500.00	8,180.91	8,485.62	8,180.91	31.65	32.03	23.10	794.00	-1,045.47	328.64	265.49	63.15	5.204	
8,600.00	8,280.91	8,585.62	8,280.91	31.78	32.16	23.10	794.00	-1,045.47	328.64	265.24	63.40	5.184	
8,700.00	8,380.91	8,685.62	8,380.91	31.90	32.28	23.10	794.00	-1,045.47	328.64	264.99	63.65	5.163	
8,800.00	8,480.91	8,785.62	8,480.91	32.03	32.41	23.10	794.00	-1,045.47	328.64	264.73	63.91	5.142	
8,900.00	8,580.91	8,885.62	8,580.91	32.16	32.54	23.10	794.00	-1,045.47	328.64	264.47	64.17	5.122	
9,000.00	8,680.91	8,985.62	8,680.91	32.29	32.66	23.10	794.00	-1,045.47	328.64	264.21	64.43	5.101	
9,100.00	8,780.91	9,085.62	8,780.91	32.42	32.79	23.10	794.00	-1,045.47	328.64	263.95	64.69	5.080	
9,200.00	8,880.91	9,185.62	8,880.91	32.55	32.92	23.10	794.00	-1,045.47	328.64	263.69	64.95	5.060	
9,300.00	8,980.91	9,285.62	8,980.91	32.68	33.06	23.10	794.00	-1,045.47	328.64	263.42	65.22	5.039	
9,400.00	9,080.91	9,385.62	9,080.91	32.82	33.19	23.10	794.00	-1,045.47	328.64	263.15	65.49	5.018	
9,500.00	9,180.91	9,485.62	9,180.91	32.95	33.32	23.10	794.00	-1,045.47	328.64	262.88	65.76	4.998	
9,519.09	9,200.00	9,504.70	9,200.00	32.98	33.35	23.10	794.00	-1,045.47	328.64	262.83	65.81	4.994	

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Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU 1022-7O4AS - NBU 1022-7O4AS - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	111.79	-14.57	36.44	39.24				
100.00	100.00	100.00	100.00	0.09	0.09	111.79	-14.57	36.44	39.24	39.06	0.18	218.242	
200.00	200.00	200.00	200.00	0.31	0.31	111.79	-14.57	36.44	39.24	38.61	0.63	62.355	
300.00	300.00	300.00	300.00	0.54	0.54	111.79	-14.57	36.44	39.24	38.16	1.08	36.374	
400.00	400.00	400.00	400.00	0.76	0.76	111.79	-14.57	36.44	39.24	37.71	1.53	25.676	
500.00	500.00	500.00	500.00	0.99	0.99	111.79	-14.57	36.44	39.24	37.26	1.98	19.840	
600.00	600.00	600.00	600.00	1.21	1.21	111.79	-14.57	36.44	39.24	36.82	2.43	16.166	
700.00	700.00	700.00	700.00	1.44	1.44	111.79	-14.57	36.44	39.24	36.37	2.88	13.640	
800.00	800.00	800.00	800.00	1.66	1.66	111.79	-14.57	36.44	39.24	35.92	3.33	11.797	
900.00	900.00	900.00	900.00	1.89	1.89	111.79	-14.57	36.44	39.24	35.47	3.78	10.392	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	111.79	-14.57	36.44	39.24	35.02	4.23	9.287	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	111.79	-14.57	36.44	39.24	34.57	4.68	8.394	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	111.79	-14.57	36.44	39.24	34.12	5.12	7.658	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	111.79	-14.57	36.44	39.24	33.67	5.57	7.040	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	111.79	-14.57	36.44	39.24	33.22	6.02	6.515	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	111.79	-14.57	36.44	39.24	32.77	6.47	6.062	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	111.79	-14.57	36.44	39.24	32.32	6.92	5.669	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	111.79	-14.57	36.44	39.24	31.87	7.37	5.323	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	111.79	-14.57	36.44	39.24	31.42	7.82	5.017	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	4.14	111.79	-14.57	36.44	39.24	30.97	8.27	4.744	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	111.79	-14.57	36.44	39.24	30.52	8.72	4.500	
2,100.00	2,100.00	2,100.00	2,100.00	4.59	4.59	111.79	-14.57	36.44	39.24	30.07	9.17	4.279	
2,200.00	2,200.00	2,200.00	2,200.00	4.81	4.81	111.79	-14.57	36.44	39.24	29.62	9.62	4.079	
2,260.00	2,260.00	2,260.00	2,260.00	4.94	4.94	111.79	-14.57	36.44	39.24	29.35	9.89	3.968	CC, ES
2,300.00	2,300.00	2,299.86	2,299.86	5.03	5.03	178.70	-14.34	36.60	39.73	29.67	10.06	3.948	SF
2,400.00	2,399.87	2,399.24	2,399.18	5.24	5.25	175.01	-11.83	38.43	45.32	34.85	10.47	4.330	
2,500.00	2,499.37	2,497.73	2,497.46	5.46	5.47	169.63	-6.60	42.24	57.52	46.67	10.85	5.302	
2,600.00	2,598.21	2,594.72	2,593.96	5.70	5.69	164.74	1.22	47.93	76.61	65.40	11.21	6.833	
2,700.00	2,696.12	2,689.65	2,688.04	5.96	5.91	161.00	11.43	55.36	102.54	90.98	11.56	8.870	
2,800.00	2,792.83	2,781.98	2,779.09	6.27	6.14	158.24	23.77	64.34	135.11	123.21	11.90	11.353	
2,900.00	2,888.09	2,871.24	2,866.61	6.64	6.38	156.16	37.95	74.67	174.01	161.77	12.24	14.217	
3,000.00	2,981.62	2,957.03	2,950.18	7.09	6.63	154.51	53.66	86.09	218.96	206.37	12.58	17.399	
3,100.00	3,073.18	3,039.01	3,029.45	7.63	6.90	153.12	70.54	98.38	269.62	256.67	12.95	20.823	
3,200.00	3,162.51	3,116.90	3,104.18	8.29	7.18	151.86	88.28	111.29	325.66	312.33	13.34	24.419	
3,300.00	3,249.36	3,190.50	3,174.22	9.07	7.46	150.66	106.54	124.58	386.76	372.99	13.77	28.088	
3,400.00	3,333.50	3,262.29	3,241.97	9.99	7.77	149.45	125.75	138.57	452.55	438.28	14.27	31.709	
3,430.48	3,358.58	3,281.56	3,260.07	10.30	7.86	149.08	131.09	142.46	473.45	459.01	14.44	32.798	
3,500.00	3,415.44	3,331.82	3,307.29	11.03	8.09	149.27	145.02	152.59	521.46	506.51	14.94	34.892	
3,600.00	3,497.24	3,404.12	3,375.21	12.12	8.44	149.49	165.06	167.18	590.53	574.82	15.70	37.603	
3,700.00	3,579.04	3,476.42	3,443.13	13.26	8.80	149.66	185.10	181.76	659.60	643.10	16.50	39.971	
3,800.00	3,660.84	3,548.72	3,511.05	14.42	9.18	149.80	205.13	196.34	728.67	711.35	17.33	42.053	
3,900.00	3,742.64	3,621.02	3,578.96	15.61	9.56	149.91	225.17	210.93	797.75	779.57	18.18	43.891	
4,000.00	3,824.44	3,693.32	3,646.88	16.82	9.95	150.01	245.21	225.51	866.83	847.78	19.04	45.515	
4,100.00	3,906.24	3,765.62	3,714.80	18.04	10.36	150.09	265.24	240.09	935.91	915.97	19.93	46.954	
4,200.00	3,988.04	3,849.39	3,793.74	19.28	10.76	150.22	287.93	256.60	1,004.63	983.80	20.83	48.230	
4,300.00	4,069.84	3,937.08	3,876.99	20.52	11.15	150.45	310.17	272.79	1,072.39	1,050.67	21.72	49.382	
4,314.51	4,081.71	3,949.97	3,889.29	20.71	11.21	150.49	313.32	275.08	1,082.14	1,060.29	21.84	49.539	
4,400.00	4,152.54	4,028.00	3,963.96	21.67	11.55	151.59	331.61	288.39	1,138.08	1,115.43	22.65	50.255	
4,500.00	4,237.59	4,124.05	4,056.49	22.65	11.96	152.69	352.42	303.54	1,199.73	1,176.17	23.56	50.924	
4,600.00	4,324.86	4,225.11	4,154.52	23.57	12.36	153.62	372.28	318.00	1,257.05	1,232.59	24.46	51.383	
4,700.00	4,414.16	4,330.96	4,257.85	24.40	12.77	154.42	390.83	331.50	1,309.78	1,284.44	25.35	51.675	
4,800.00	4,505.35	4,441.33	4,366.22	25.16	13.16	155.12	407.70	343.78	1,357.68	1,331.49	26.19	51.837	

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

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Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU 1022-7O4AS - NBU 1022-7O4AS - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,598.24	4,555.87	4,479.28	25.84	13.53	155.75	422.52	354.56	1,400.52	1,373.53	26.99	51.897	
5,000.00	4,692.65	4,674.18	4,596.59	26.45	13.87	156.31	434.95	363.61	1,438.09	1,410.37	27.72	51.878	
5,100.00	4,788.41	4,795.78	4,717.59	26.97	14.18	156.82	444.65	370.67	1,470.20	1,441.82	28.38	51.801	
5,200.00	4,885.34	4,920.15	4,841.68	27.42	14.44	157.29	451.34	375.54	1,496.70	1,467.74	28.96	51.686	
5,300.00	4,983.24	5,046.71	4,968.16	27.80	14.67	157.74	454.80	378.06	1,517.46	1,488.02	29.44	51.539	
5,400.00	5,081.94	5,160.49	5,081.94	28.11	14.84	158.13	455.26	378.39	1,532.60	1,502.77	29.83	51.378	
5,500.00	5,181.25	5,259.80	5,181.25	28.35	14.99	158.40	455.26	378.39	1,543.49	1,513.34	30.16	51.185	
5,600.00	5,280.97	5,359.52	5,280.97	28.53	15.15	158.56	455.26	378.39	1,550.35	1,519.91	30.44	50.936	
5,700.00	5,380.91	5,459.46	5,380.91	28.65	15.32	158.62	455.26	378.39	1,553.16	1,522.48	30.67	50.635	
5,719.09	5,400.00	5,478.55	5,400.00	28.66	15.35	91.34	455.26	378.39	1,553.23	1,522.52	30.71	50.572	
5,800.00	5,480.91	5,559.46	5,480.91	28.73	15.48	91.34	455.26	378.39	1,553.23	1,522.27	30.97	50.160	
5,900.00	5,580.91	5,659.46	5,580.91	28.82	15.65	91.34	455.26	378.39	1,553.23	1,521.94	31.29	49.641	
6,000.00	5,680.91	5,759.46	5,680.91	28.91	15.81	91.34	455.26	378.39	1,553.23	1,521.61	31.62	49.127	
6,100.00	5,780.91	5,859.46	5,780.91	29.00	15.98	91.34	455.26	378.39	1,553.23	1,521.29	31.95	48.620	
6,200.00	5,880.91	5,959.46	5,880.91	29.10	16.15	91.34	455.26	378.39	1,553.23	1,520.95	32.28	48.119	
6,300.00	5,980.91	6,059.46	5,980.91	29.20	16.32	91.34	455.26	378.39	1,553.23	1,520.62	32.61	47.624	
6,400.00	6,080.91	6,159.46	6,080.91	29.29	16.49	91.34	455.26	378.39	1,553.23	1,520.28	32.95	47.135	
6,500.00	6,180.91	6,259.46	6,180.91	29.39	16.67	91.34	455.26	378.39	1,553.23	1,519.94	33.29	46.653	
6,600.00	6,280.91	6,359.46	6,280.91	29.49	16.84	91.34	455.26	378.39	1,553.23	1,519.59	33.64	46.177	
6,700.00	6,380.91	6,459.46	6,380.91	29.60	17.02	91.34	455.26	378.39	1,553.23	1,519.25	33.98	45.707	
6,800.00	6,480.91	6,559.46	6,480.91	29.70	17.19	91.34	455.26	378.39	1,553.23	1,518.90	34.33	45.244	
6,900.00	6,580.91	6,659.46	6,580.91	29.80	17.37	91.34	455.26	378.39	1,553.23	1,518.55	34.68	44.787	
7,000.00	6,680.91	6,759.46	6,680.91	29.91	17.55	91.34	455.26	378.39	1,553.23	1,518.20	35.03	44.336	
7,100.00	6,780.91	6,859.46	6,780.91	30.02	17.73	91.34	455.26	378.39	1,553.23	1,517.84	35.39	43.891	
7,200.00	6,880.91	6,959.46	6,880.91	30.13	17.91	91.34	455.26	378.39	1,553.23	1,517.49	35.74	43.453	
7,300.00	6,980.91	7,059.46	6,980.91	30.24	18.10	91.34	455.26	378.39	1,553.23	1,517.13	36.10	43.021	
7,400.00	7,080.91	7,159.46	7,080.91	30.35	18.28	91.34	455.26	378.39	1,553.23	1,516.77	36.46	42.596	
7,500.00	7,180.91	7,259.46	7,180.91	30.46	18.46	91.34	455.26	378.39	1,553.23	1,516.40	36.83	42.176	
7,600.00	7,280.91	7,359.46	7,280.91	30.57	18.65	91.34	455.26	378.39	1,553.23	1,516.04	37.19	41.762	
7,700.00	7,380.91	7,459.46	7,380.91	30.69	18.83	91.34	455.26	378.39	1,553.23	1,515.67	37.56	41.355	
7,800.00	7,480.91	7,559.46	7,480.91	30.81	19.02	91.34	455.26	378.39	1,553.23	1,515.30	37.93	40.953	
7,900.00	7,580.91	7,659.46	7,580.91	30.92	19.21	91.34	455.26	378.39	1,553.23	1,514.93	38.30	40.558	
8,000.00	7,680.91	7,759.46	7,680.91	31.04	19.40	91.34	455.26	378.39	1,553.23	1,514.56	38.67	40.168	
8,100.00	7,780.91	7,859.46	7,780.91	31.16	19.59	91.34	455.26	378.39	1,553.23	1,514.19	39.04	39.784	
8,200.00	7,880.91	7,959.46	7,880.91	31.28	19.78	91.34	455.26	378.39	1,553.23	1,513.81	39.42	39.406	
8,300.00	7,980.91	8,059.46	7,980.91	31.40	19.97	91.34	455.26	378.39	1,553.23	1,513.44	39.79	39.033	
8,400.00	8,080.91	8,159.46	8,080.91	31.53	20.16	91.34	455.26	378.39	1,553.23	1,513.06	40.17	38.666	
8,500.00	8,180.91	8,259.46	8,180.91	31.65	20.35	91.34	455.26	378.39	1,553.23	1,512.68	40.55	38.304	
8,600.00	8,280.91	8,359.46	8,280.91	31.78	20.54	91.34	455.26	378.39	1,553.23	1,512.30	40.93	37.948	
8,700.00	8,380.91	8,459.46	8,380.91	31.90	20.74	91.34	455.26	378.39	1,553.23	1,511.92	41.31	37.597	
8,800.00	8,480.91	8,559.46	8,480.91	32.03	20.93	91.34	455.26	378.39	1,553.23	1,511.54	41.70	37.251	
8,900.00	8,580.91	8,659.46	8,580.91	32.16	21.12	91.34	455.26	378.39	1,553.23	1,511.15	42.08	36.911	
9,000.00	8,680.91	8,759.46	8,680.91	32.29	21.32	91.34	455.26	378.39	1,553.23	1,510.76	42.47	36.575	
9,100.00	8,780.91	8,859.46	8,780.91	32.42	21.51	91.34	455.26	378.39	1,553.23	1,510.38	42.85	36.245	
9,200.00	8,880.91	8,959.46	8,880.91	32.55	21.71	91.34	455.26	378.39	1,553.23	1,509.99	43.24	35.920	
9,300.00	8,980.91	9,059.46	8,980.91	32.68	21.91	91.34	455.26	378.39	1,553.23	1,509.60	43.63	35.599	
9,400.00	9,080.91	9,159.46	9,080.91	32.82	22.10	91.34	455.26	378.39	1,553.23	1,509.21	44.02	35.283	
9,500.00	9,180.91	9,259.46	9,180.91	32.95	22.30	91.34	455.26	378.39	1,553.23	1,508.82	44.41	34.972	
9,519.09	9,200.00	9,278.55	9,200.00	32.98	22.34	91.34	455.26	378.39	1,553.23	1,508.74	44.49	34.913	

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU 1022-7O4DS - NBU 1022-7O4DS - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	111.30	-21.85	56.06	60.17				
100.00	100.00	100.00	100.00	0.09	0.09	111.30	-21.85	56.06	60.17	59.99	0.18	334.612	
200.00	200.00	200.00	200.00	0.31	0.31	111.30	-21.85	56.06	60.17	59.54	0.63	95.604	
300.00	300.00	300.00	300.00	0.54	0.54	111.30	-21.85	56.06	60.17	59.09	1.08	55.769	
400.00	400.00	400.00	400.00	0.76	0.76	111.30	-21.85	56.06	60.17	58.64	1.53	39.366	
500.00	500.00	500.00	500.00	0.99	0.99	111.30	-21.85	56.06	60.17	58.19	1.98	30.419	
600.00	600.00	600.00	600.00	1.21	1.21	111.30	-21.85	56.06	60.17	57.74	2.43	24.786	
700.00	700.00	700.00	700.00	1.44	1.44	111.30	-21.85	56.06	60.17	57.29	2.88	20.913	
800.00	800.00	800.00	800.00	1.66	1.66	111.30	-21.85	56.06	60.17	56.84	3.33	18.087	
900.00	900.00	900.00	900.00	1.89	1.89	111.30	-21.85	56.06	60.17	56.39	3.78	15.934	
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	111.30	-21.85	56.06	60.17	55.94	4.23	14.239	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	111.30	-21.85	56.06	60.17	55.49	4.68	12.870	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	111.30	-21.85	56.06	60.17	55.04	5.12	11.741	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	111.30	-21.85	56.06	60.17	54.59	5.57	10.794	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	111.30	-21.85	56.06	60.17	54.14	6.02	9.988	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	111.30	-21.85	56.06	60.17	53.69	6.47	9.295	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	111.30	-21.85	56.06	60.17	53.24	6.92	8.691	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	111.30	-21.85	56.06	60.17	52.80	7.37	8.161	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	111.30	-21.85	56.06	60.17	52.35	7.82	7.692	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	4.14	111.30	-21.85	56.06	60.17	51.90	8.27	7.274	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	111.30	-21.85	56.06	60.17	51.45	8.72	6.899	
2,100.00	2,100.00	2,100.00	2,100.00	4.59	4.59	111.30	-21.85	56.06	60.17	51.00	9.17	6.561	
2,200.00	2,200.00	2,200.00	2,200.00	4.81	4.81	111.30	-21.85	56.06	60.17	50.55	9.62	6.254	
2,260.00	2,260.00	2,260.00	2,260.00	4.94	4.94	111.30	-21.85	56.06	60.17	50.28	9.89	6.084	CC, ES
2,300.00	2,300.00	2,299.52	2,299.52	5.03	5.03	178.38	-21.70	56.29	60.74	50.68	10.06	6.038	SF
2,400.00	2,399.87	2,397.98	2,397.93	5.24	5.24	176.34	-20.00	58.81	67.27	56.81	10.46	6.432	
2,500.00	2,499.37	2,495.33	2,495.07	5.46	5.45	173.13	-16.46	64.07	81.20	70.37	10.83	7.496	
2,600.00	2,598.21	2,590.83	2,590.09	5.70	5.67	169.89	-11.20	71.89	102.64	91.45	11.18	9.178	
2,700.00	2,696.12	2,685.85	2,684.39	5.96	5.89	167.36	-4.63	81.64	130.96	119.45	11.51	11.375	
2,800.00	2,792.83	2,780.06	2,777.85	6.27	6.11	166.00	1.96	91.44	164.37	152.55	11.82	13.907	
2,900.00	2,888.09	2,872.47	2,869.53	6.64	6.34	165.36	8.43	101.04	202.54	190.44	12.10	16.737	
3,000.00	2,981.62	2,962.83	2,959.18	7.09	6.57	165.11	14.75	110.44	245.34	232.97	12.37	19.839	
3,100.00	3,073.18	3,050.90	3,046.56	7.63	6.80	165.07	20.92	119.59	292.67	280.05	12.61	23.208	
3,200.00	3,162.51	3,136.43	3,131.41	8.29	7.02	165.13	26.90	128.48	344.40	331.56	12.84	26.824	
3,300.00	3,249.36	3,219.19	3,213.52	9.07	7.24	165.23	32.69	137.08	400.42	387.36	13.06	30.669	
3,400.00	3,333.50	3,298.95	3,292.65	9.99	7.45	165.31	38.27	145.37	460.59	447.32	13.27	34.720	
3,430.48	3,358.58	3,322.63	3,316.14	10.30	7.52	165.33	39.93	147.84	479.73	466.41	13.33	35.990	
3,500.00	3,415.44	3,376.29	3,369.38	11.03	7.67	165.77	43.69	153.41	523.83	510.15	13.68	38.290	
3,600.00	3,497.24	3,453.49	3,445.97	12.12	7.88	166.28	49.09	161.44	587.28	573.08	14.20	41.350	
3,700.00	3,579.04	3,530.68	3,522.56	13.26	8.09	166.70	54.49	169.46	650.75	636.01	14.74	44.144	
3,800.00	3,660.84	3,607.88	3,599.14	14.42	8.31	167.04	59.89	177.49	714.24	698.95	15.29	46.698	
3,900.00	3,742.64	3,685.07	3,675.73	15.61	8.53	167.32	65.29	185.51	777.75	761.89	15.86	49.036	
4,000.00	3,824.44	3,762.27	3,752.31	16.82	8.75	167.56	70.69	193.54	841.26	824.83	16.44	51.179	
4,100.00	3,906.24	3,839.46	3,828.90	18.04	8.97	167.77	76.10	201.56	904.78	887.76	17.02	53.149	
4,200.00	3,988.04	3,916.65	3,905.49	19.28	9.19	167.95	81.50	209.59	968.31	950.69	17.62	54.962	
4,300.00	4,069.84	3,993.85	3,982.07	20.52	9.42	168.11	86.90	217.61	1,031.85	1,013.63	18.22	56.635	
4,314.51	4,081.71	4,005.05	3,993.18	20.71	9.45	168.13	87.68	218.77	1,041.06	1,022.76	18.31	56.867	
4,400.00	4,152.54	4,072.03	4,059.64	21.67	9.65	168.57	92.37	225.74	1,094.16	1,075.14	19.02	57.514	
4,500.00	4,237.59	4,152.79	4,139.76	22.65	9.88	168.98	98.02	234.13	1,153.12	1,133.29	19.83	58.136	
4,600.00	4,324.86	4,236.00	4,222.31	23.57	10.13	169.29	103.84	242.78	1,208.57	1,187.94	20.62	58.599	
4,700.00	4,414.16	4,322.23	4,307.87	24.40	10.38	169.52	109.88	251.74	1,260.39	1,239.00	21.39	58.929	
4,800.00	4,505.35	4,425.97	4,410.91	25.16	10.64	169.71	116.57	261.68	1,307.92	1,285.79	22.13	59.107	

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

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU 1022-7O4DS - NBU 1022-7O4DS - Design #1

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Survey Program: 0-MWD

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,598.24	4,533.33	4,517.77	25.84	10.88	169.89	122.39	270.33	1,350.50	1,327.69	22.81	59.206	
5,000.00	4,692.65	4,643.99	4,628.08	26.45	11.12	170.06	127.23	277.51	1,387.96	1,364.51	23.44	59.201	
5,100.00	4,788.41	4,757.53	4,741.42	26.97	11.35	170.24	130.95	283.04	1,420.15	1,396.12	24.03	59.103	
5,200.00	4,885.34	4,873.53	4,857.34	27.42	11.58	170.42	133.45	286.76	1,446.93	1,422.37	24.56	58.924	
5,300.00	4,983.24	4,991.54	4,975.33	27.80	11.79	170.60	134.66	288.55	1,468.20	1,443.17	25.02	58.673	
5,400.00	5,081.94	5,098.16	5,081.94	28.11	11.98	170.77	134.76	288.70	1,484.13	1,458.71	25.42	58.390	
5,500.00	5,181.25	5,197.46	5,181.25	28.35	12.18	170.89	134.76	288.70	1,495.69	1,469.93	25.77	58.045	
5,600.00	5,280.97	5,297.18	5,280.97	28.53	12.38	170.96	134.76	288.70	1,502.97	1,476.91	26.07	57.659	
5,700.00	5,380.91	5,397.13	5,380.91	28.65	12.58	170.99	134.76	288.70	1,505.95	1,479.64	26.31	57.233	
5,719.09	5,400.00	5,416.22	5,400.00	28.66	12.62	103.71	134.76	288.70	1,506.03	1,479.67	26.35	57.148	
5,800.00	5,480.91	5,497.13	5,480.91	28.73	12.79	103.71	134.76	288.70	1,506.03	1,479.38	26.65	56.511	
5,900.00	5,580.91	5,597.13	5,580.91	28.82	12.99	103.71	134.76	288.70	1,506.03	1,479.00	27.03	55.717	
6,000.00	5,680.91	5,697.13	5,680.91	28.91	13.20	103.71	134.76	288.70	1,506.03	1,478.62	27.41	54.942	
6,100.00	5,780.91	5,797.13	5,780.91	29.00	13.40	103.71	134.76	288.70	1,506.03	1,478.23	27.79	54.183	
6,200.00	5,880.91	5,897.13	5,880.91	29.10	13.61	103.71	134.76	288.70	1,506.03	1,477.85	28.18	53.442	
6,300.00	5,980.91	5,997.13	5,980.91	29.20	13.82	103.71	134.76	288.70	1,506.03	1,477.46	28.57	52.718	
6,400.00	6,080.91	6,097.13	6,080.91	29.29	14.02	103.71	134.76	288.70	1,506.03	1,477.07	28.96	52.010	
6,500.00	6,180.91	6,197.13	6,180.91	29.39	14.23	103.71	134.76	288.70	1,506.03	1,476.68	29.35	51.318	
6,600.00	6,280.91	6,297.13	6,280.91	29.49	14.44	103.71	134.76	288.70	1,506.03	1,476.29	29.74	50.642	
6,700.00	6,380.91	6,397.13	6,380.91	29.60	14.65	103.71	134.76	288.70	1,506.03	1,475.89	30.13	49.980	
6,800.00	6,480.91	6,497.13	6,480.91	29.70	14.86	103.71	134.76	288.70	1,506.03	1,475.50	30.53	49.334	
6,900.00	6,580.91	6,597.13	6,580.91	29.80	15.07	103.71	134.76	288.70	1,506.03	1,475.10	30.92	48.701	
7,000.00	6,680.91	6,697.13	6,680.91	29.91	15.28	103.71	134.76	288.70	1,506.03	1,474.71	31.32	48.082	
7,100.00	6,780.91	6,797.13	6,780.91	30.02	15.49	103.71	134.76	288.70	1,506.03	1,474.31	31.72	47.477	
7,200.00	6,880.91	6,897.13	6,880.91	30.13	15.70	103.71	134.76	288.70	1,506.03	1,473.91	32.12	46.886	
7,300.00	6,980.91	6,997.13	6,980.91	30.24	15.91	103.71	134.76	288.70	1,506.03	1,473.50	32.52	46.307	
7,400.00	7,080.91	7,097.13	7,080.91	30.35	16.12	103.71	134.76	288.70	1,506.03	1,473.10	32.93	45.740	
7,500.00	7,180.91	7,197.13	7,180.91	30.46	16.34	103.71	134.76	288.70	1,506.03	1,472.70	33.33	45.186	
7,600.00	7,280.91	7,297.13	7,280.91	30.57	16.55	103.71	134.76	288.70	1,506.03	1,472.29	33.73	44.643	
7,700.00	7,380.91	7,397.13	7,380.91	30.69	16.76	103.71	134.76	288.70	1,506.03	1,471.89	34.14	44.112	
7,800.00	7,480.91	7,497.13	7,480.91	30.81	16.97	103.71	134.76	288.70	1,506.03	1,471.48	34.55	43.592	
7,900.00	7,580.91	7,597.13	7,580.91	30.92	17.19	103.71	134.76	288.70	1,506.03	1,471.07	34.96	43.083	
8,000.00	7,680.91	7,697.13	7,680.91	31.04	17.40	103.71	134.76	288.70	1,506.03	1,470.66	35.37	42.585	
8,100.00	7,780.91	7,797.13	7,780.91	31.16	17.62	103.71	134.76	288.70	1,506.03	1,470.25	35.78	42.097	
8,200.00	7,880.91	7,897.13	7,880.91	31.28	17.83	103.71	134.76	288.70	1,506.03	1,469.84	36.19	41.618	
8,300.00	7,980.91	7,997.13	7,980.91	31.40	18.04	103.71	134.76	288.70	1,506.03	1,469.43	36.60	41.150	
8,400.00	8,080.91	8,097.13	8,080.91	31.53	18.26	103.71	134.76	288.70	1,506.03	1,469.02	37.01	40.691	
8,500.00	8,180.91	8,197.13	8,180.91	31.65	18.47	103.71	134.76	288.70	1,506.03	1,468.60	37.42	40.242	
8,600.00	8,280.91	8,297.13	8,280.91	31.78	18.69	103.71	134.76	288.70	1,506.03	1,468.19	37.84	39.801	
8,700.00	8,380.91	8,397.13	8,380.91	31.90	18.91	103.71	134.76	288.70	1,506.03	1,467.77	38.25	39.369	
8,800.00	8,480.91	8,497.13	8,480.91	32.03	19.12	103.71	134.76	288.70	1,506.03	1,467.36	38.67	38.946	
8,900.00	8,580.91	8,597.13	8,580.91	32.16	19.34	103.71	134.76	288.70	1,506.03	1,466.94	39.09	38.531	
9,000.00	8,680.91	8,697.13	8,680.91	32.29	19.55	103.71	134.76	288.70	1,506.03	1,466.52	39.50	38.124	
9,100.00	8,780.91	8,797.13	8,780.91	32.42	19.77	103.71	134.76	288.70	1,506.03	1,466.11	39.92	37.725	
9,200.00	8,880.91	8,897.13	8,880.91	32.55	19.99	103.71	134.76	288.70	1,506.03	1,465.69	40.34	37.333	
9,300.00	8,980.91	8,997.13	8,980.91	32.68	20.20	103.71	134.76	288.70	1,506.03	1,465.27	40.76	36.949	
9,400.00	9,080.91	9,097.13	9,080.91	32.82	20.42	103.71	134.76	288.70	1,506.03	1,464.85	41.18	36.573	
9,500.00	9,180.91	9,197.13	9,180.91	32.95	20.64	103.71	134.76	288.70	1,506.03	1,464.43	41.60	36.203	
9,519.09	9,200.00	9,216.22	9,200.00	32.98	20.68	103.71	134.76	288.70	1,506.03	1,464.35	41.68	36.133	

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU470 ACTUAL - NBU470 ACTUAL - NBU470 ACTUAL

Offset Site Error: 0.00 ft

Survey Program: 100-NS-GYRO-MS

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-83.47	3.48	-30.42	36.57				
100.00	100.00	79.96	79.96	0.09	0.11	-83.23	3.62	-30.46	30.67	30.47	0.20	156.404	
200.00	200.00	179.93	179.93	0.31	0.34	-82.52	4.02	-30.59	30.86	30.20	0.66	46.810	
300.00	300.00	279.90	279.90	0.54	0.61	-81.88	4.39	-30.81	31.12	29.97	1.15	27.162	
400.00	400.00	379.93	379.93	0.76	0.87	-81.30	4.75	-31.05	31.41	29.78	1.63	19.241	
500.00	500.00	479.93	479.93	0.99	1.13	-80.62	5.16	-31.20	31.63	29.50	2.12	14.907	
600.00	600.00	579.99	579.98	1.21	1.39	-79.90	5.57	-31.29	31.78	29.18	2.60	12.210	
700.00	700.00	680.00	679.99	1.44	1.64	-79.12	6.00	-31.23	31.81	28.73	3.08	10.333	
800.00	800.00	780.07	780.06	1.66	1.87	-78.38	6.40	-31.10	31.75	28.22	3.53	8.989	
900.00	900.00	880.03	880.02	1.89	2.10	-77.67	6.74	-30.86	31.58	27.60	3.98	7.928	
1,000.00	1,000.00	980.09	980.09	2.11	2.31	-76.98	7.09	-30.65	31.46	27.03	4.43	7.107	
1,100.00	1,100.00	1,080.10	1,080.09	2.34	2.52	-76.42	7.31	-30.28	31.15	26.30	4.85	6.417	
1,200.00	1,200.00	1,180.04	1,180.03	2.56	2.75	-75.73	7.63	-30.00	30.96	25.64	5.31	5.828	
1,300.00	1,300.00	1,280.01	1,280.00	2.79	3.01	-75.19	7.90	-29.89	30.92	25.12	5.79	5.336	
1,310.85	1,310.85	1,290.86	1,290.85	2.81	3.04	-75.18	7.91	-29.89	30.92	25.07	5.85	5.288	
1,400.00	1,400.00	1,379.92	1,379.91	3.01	3.25	-75.05	8.01	-29.99	31.04	24.78	6.26	4.957	
1,500.00	1,500.00	1,479.90	1,479.89	3.24	3.48	-74.63	8.32	-30.28	31.40	24.69	6.71	4.677	
1,600.00	1,600.00	1,579.90	1,579.89	3.46	3.71	-74.16	8.67	-30.54	31.75	24.58	7.17	4.426	
1,700.00	1,700.00	1,679.92	1,679.90	3.69	3.96	-73.65	9.03	-30.78	32.08	24.44	7.64	4.197	
1,800.00	1,800.00	1,779.77	1,779.76	3.91	4.17	-73.33	9.34	-31.18	32.55	24.47	8.08	4.027	
1,900.00	1,900.00	1,879.63	1,879.61	4.14	4.31	-74.14	9.16	-32.24	33.52	25.07	8.45	3.968	
2,000.00	2,000.00	1,979.66	1,979.62	4.36	4.40	-76.22	8.27	-33.71	34.71	25.94	8.76	3.960	
2,100.00	2,100.00	2,079.76	2,079.70	4.59	4.48	-78.57	7.07	-34.96	35.67	26.61	9.07	3.935	
2,200.00	2,200.00	2,179.84	2,179.77	4.81	4.55	-81.09	5.64	-35.95	36.39	27.03	9.36	3.888	
2,260.00	2,260.00	2,239.84	2,239.76	4.94	4.59	-82.68	4.68	-36.47	36.77	27.23	9.54	3.855	
2,300.00	2,300.00	2,279.82	2,279.73	5.03	4.62	-16.76	3.97	-36.82	36.64	26.98	9.65	3.796	
2,400.00	2,399.87	2,379.74	2,379.64	5.24	4.70	-22.77	1.98	-37.68	32.95	23.02	9.92	3.320	
2,500.00	2,499.37	2,479.23	2,479.10	5.46	4.79	-36.49	-0.10	-38.32	25.14	14.94	10.19	2.466	
2,600.00	2,598.21	2,578.00	2,577.84	5.70	4.89	-73.96	-2.16	-38.95	17.73	7.16	10.57	1.678	
2,615.98	2,613.93	2,593.71	2,593.55	5.74	4.90	-83.35	-2.48	-39.06	17.49	6.86	10.64	1.645	CC, ES, SF
2,700.00	2,696.12	2,675.84	2,675.66	5.96	4.99	-128.16	-4.19	-39.58	24.69	13.84	10.84	2.277	
2,800.00	2,792.83	2,772.43	2,772.23	6.27	5.11	-151.72	-6.24	-40.07	46.42	35.45	10.97	4.231	
2,900.00	2,888.09	2,867.58	2,867.36	6.64	5.23	-161.04	-8.26	-40.56	75.68	64.55	11.13	6.799	
3,000.00	2,981.62	2,960.82	2,960.57	7.09	5.36	-165.71	-10.24	-41.02	110.62	99.33	11.29	9.796	
3,100.00	3,073.18	3,052.02	3,051.75	7.63	5.49	-168.49	-12.21	-41.30	150.87	139.42	11.45	13.180	
3,200.00	3,162.51	3,141.11	3,140.82	8.29	5.62	-170.29	-14.13	-41.56	196.00	184.41	11.59	16.912	
3,300.00	3,249.36	3,227.67	3,227.36	9.07	5.76	-171.53	-16.01	-41.83	245.79	234.07	11.72	20.969	
3,400.00	3,333.50	3,311.38	3,311.05	9.99	5.90	-172.38	-17.94	-42.14	300.12	288.27	11.85	25.329	
3,430.48	3,358.58	3,336.32	3,335.98	10.30	5.94	-172.59	-18.54	-42.24	317.56	305.67	11.89	26.719	
3,500.00	3,415.44	3,392.85	3,392.49	11.03	6.03	-173.14	-19.96	-42.48	357.80	345.62	12.19	29.359	
3,600.00	3,497.24	3,473.72	3,473.34	12.12	6.17	-173.75	-22.05	-42.79	415.79	403.15	12.64	32.888	
3,700.00	3,579.04	3,554.38	3,553.97	13.26	6.32	-174.21	-24.14	-42.98	473.92	460.81	13.11	36.142	
3,800.00	3,660.84	3,635.05	3,634.61	14.42	6.46	-174.58	-26.27	-43.05	532.18	518.58	13.60	39.138	
3,900.00	3,742.64	3,715.86	3,715.39	15.61	6.61	-174.86	-28.51	-43.10	590.52	576.42	14.10	41.891	
4,000.00	3,824.44	3,796.59	3,796.08	16.82	6.76	-175.08	-30.90	-43.17	648.92	634.31	14.61	44.430	
4,100.00	3,906.24	3,876.86	3,876.32	18.04	6.92	-175.26	-33.35	-43.19	707.40	692.27	15.13	46.766	
4,200.00	3,988.04	3,956.97	3,956.39	19.28	7.07	-175.41	-35.79	-43.10	765.99	750.33	15.65	48.933	
4,300.00	4,069.84	4,036.78	4,036.16	20.52	7.23	-175.55	-38.22	-42.89	824.68	808.49	16.19	50.946	
4,314.51	4,081.71	4,048.32	4,047.70	20.71	7.25	-175.57	-38.56	-42.85	833.21	816.94	16.27	51.227	
4,400.00	4,152.54	4,117.14	4,116.49	21.67	7.39	-175.78	-40.63	-42.53	882.21	865.27	16.94	52.084	
4,500.00	4,237.59	4,200.00	4,199.30	22.65	7.55	-175.98	-43.10	-41.98	936.30	918.62	17.69	52.940	
4,600.00	4,324.86	4,287.35	4,286.61	23.57	7.73	-176.14	-45.70	-41.39	986.71	968.29	18.41	53.583	

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

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design NBU 1022-7O Pad - NBU470 ACTUAL - NBU470 ACTUAL - NBU470 ACTUAL

Offset Site Error: 0.00 ft

Survey Program: 100-NS-GYRO-MS

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,700.00	4,414.16	4,377.32	4,376.54	24.40	7.91	-176.25	-48.40	-40.94	1,033.18	1,014.07	19.11	54.059	
4,800.00	4,505.35	4,469.16	4,468.34	25.16	8.10	-176.34	-51.13	-40.59	1,075.63	1,055.85	19.78	54.380	
4,900.00	4,598.24	4,562.80	4,561.94	25.84	8.30	-176.40	-53.74	-40.28	1,114.00	1,093.59	20.41	54.578	
5,000.00	4,692.65	4,657.69	4,656.80	26.45	8.51	-176.45	-56.18	-39.98	1,148.20	1,127.20	21.00	54.671	
5,100.00	4,788.41	4,753.76	4,752.84	26.97	8.72	-176.49	-58.45	-39.65	1,178.22	1,156.67	21.55	54.676	
5,200.00	4,885.34	4,850.96	4,850.02	27.42	8.93	-176.52	-60.53	-39.27	1,204.01	1,181.96	22.05	54.603	
5,300.00	4,983.24	4,949.10	4,948.14	27.80	9.14	-176.54	-62.40	-38.81	1,225.52	1,203.02	22.50	54.462	
5,400.00	5,081.94	5,049.12	5,048.14	28.11	9.36	-176.55	-64.07	-38.30	1,242.70	1,219.79	22.91	54.248	
5,500.00	5,181.25	5,150.93	5,149.94	28.35	9.59	-176.55	-65.56	-37.90	1,255.39	1,232.12	23.27	53.958	
5,600.00	5,280.97	5,252.33	5,251.33	28.53	9.82	-176.54	-66.89	-37.63	1,263.56	1,239.99	23.57	53.601	
5,700.00	5,380.91	5,353.15	5,352.14	28.65	10.05	-176.50	-68.19	-37.46	1,267.29	1,243.46	23.83	53.182	
5,719.09	5,400.00	5,372.40	5,371.40	28.66	10.10	116.23	-68.45	-37.43	1,267.50	1,243.63	23.87	53.097	
5,800.00	5,480.91	5,452.07	5,451.06	28.73	10.28	116.27	-69.47	-37.32	1,268.07	1,243.89	24.19	52.430	
5,900.00	5,580.91	5,549.30	5,548.28	28.82	10.50	116.31	-70.65	-36.94	1,268.96	1,244.37	24.58	51.620	
6,000.00	5,680.91	5,647.94	5,646.91	28.91	10.72	116.34	-71.76	-36.30	1,270.04	1,245.05	24.98	50.840	
6,100.00	5,780.91	5,748.12	5,747.09	29.00	10.94	116.37	-72.89	-35.64	1,271.13	1,245.75	25.38	50.081	
6,200.00	5,880.91	5,848.15	5,847.11	29.10	11.17	116.41	-74.03	-34.99	1,272.21	1,246.43	25.78	49.339	
6,300.00	5,980.91	5,948.02	5,946.97	29.20	11.39	116.44	-75.16	-34.34	1,273.30	1,247.11	26.19	48.615	
6,400.00	6,080.91	6,048.60	6,047.53	29.29	11.62	116.47	-76.30	-33.69	1,274.39	1,247.79	26.60	47.902	
6,500.00	6,180.91	6,149.95	6,148.88	29.39	11.86	116.51	-77.51	-33.16	1,275.39	1,248.36	27.02	47.194	
6,600.00	6,280.91	6,249.49	6,248.42	29.49	12.09	116.55	-78.78	-32.76	1,276.31	1,248.87	27.45	46.504	
6,700.00	6,380.91	6,347.27	6,346.18	29.60	12.33	116.60	-80.19	-32.30	1,277.38	1,249.51	27.87	45.839	
6,800.00	6,480.91	6,445.34	6,444.23	29.70	12.56	116.65	-81.78	-31.74	1,278.61	1,250.33	28.29	45.199	
6,900.00	6,580.91	6,543.74	6,542.62	29.80	12.79	116.70	-83.32	-31.01	1,279.98	1,251.27	28.71	44.584	
7,000.00	6,680.91	6,642.72	6,641.59	29.91	13.03	116.74	-84.79	-30.11	1,281.46	1,252.33	29.13	43.989	
7,100.00	6,780.91	6,742.50	6,741.35	30.02	13.26	116.78	-86.24	-29.15	1,282.98	1,253.43	29.55	43.412	
7,200.00	6,880.91	6,841.97	6,840.80	30.13	13.49	116.81	-87.66	-28.15	1,284.52	1,254.54	29.97	42.854	
7,300.00	6,980.91	6,941.02	6,939.84	30.24	13.72	116.84	-88.97	-27.04	1,286.12	1,255.73	30.39	42.317	
7,400.00	7,080.91	6,960.00	6,958.82	30.35	13.76	116.85	-89.21	-26.81	1,290.30	1,259.68	30.63	42.129	
7,500.00	7,180.91	6,960.00	6,958.82	30.46	13.76	116.85	-89.21	-26.81	1,302.04	1,271.22	30.82	42.248	
7,600.00	7,280.91	6,960.00	6,958.82	30.57	13.76	116.85	-89.21	-26.81	1,321.26	1,290.25	31.01	42.605	
7,700.00	7,380.91	6,960.00	6,958.82	30.69	13.76	116.85	-89.21	-26.81	1,347.64	1,316.44	31.20	43.187	
7,800.00	7,480.91	6,960.00	6,958.82	30.81	13.76	116.85	-89.21	-26.81	1,380.78	1,349.38	31.40	43.976	
7,900.00	7,580.91	6,960.00	6,958.82	30.92	13.76	116.85	-89.21	-26.81	1,420.20	1,388.61	31.59	44.952	
8,000.00	7,680.91	6,960.00	6,958.82	31.04	13.76	116.85	-89.21	-26.81	1,465.40	1,433.61	31.79	46.098	
8,100.00	7,780.91	6,960.00	6,958.82	31.16	13.76	116.85	-89.21	-26.81	1,515.85	1,483.87	31.98	47.393	
8,200.00	7,880.91	6,960.00	6,958.82	31.28	13.76	116.85	-89.21	-26.81	1,571.06	1,538.88	32.18	48.818	
8,300.00	7,980.91	6,960.00	6,958.82	31.40	13.76	116.85	-89.21	-26.81	1,630.54	1,598.16	32.38	50.358	
8,400.00	8,080.91	6,960.00	6,958.82	31.53	13.76	116.85	-89.21	-26.81	1,693.83	1,661.26	32.58	51.995	
8,500.00	8,180.91	6,960.00	6,958.82	31.65	13.76	116.85	-89.21	-26.81	1,760.54	1,727.76	32.78	53.715	
8,600.00	8,280.91	6,960.00	6,958.82	31.78	13.76	116.85	-89.21	-26.81	1,830.28	1,797.30	32.97	55.505	
8,700.00	8,380.91	6,960.00	6,958.82	31.90	13.76	116.85	-89.21	-26.81	1,902.72	1,869.54	33.17	57.355	
8,800.00	8,480.91	6,960.00	6,958.82	32.03	13.76	116.85	-89.21	-26.81	1,977.56	1,944.19	33.37	59.253	
8,900.00	8,580.91	6,960.00	6,958.82	32.16	13.76	116.85	-89.21	-26.81	2,054.55	2,020.97	33.58	61.192	
9,000.00	8,680.91	6,960.00	6,958.82	32.29	13.76	116.85	-89.21	-26.81	2,133.44	2,099.67	33.78	63.163	
9,100.00	8,780.91	6,960.00	6,958.82	32.42	13.76	116.85	-89.21	-26.81	2,214.05	2,180.07	33.98	65.160	
9,200.00	8,880.91	6,960.00	6,958.82	32.55	13.76	116.85	-89.21	-26.81	2,296.18	2,261.99	34.18	67.177	
9,300.00	8,980.91	6,960.00	6,958.82	32.68	13.76	116.85	-89.21	-26.81	2,379.67	2,345.29	34.38	69.209	
9,400.00	9,080.91	6,960.00	6,958.82	32.82	13.76	116.85	-89.21	-26.81	2,464.40	2,429.81	34.59	71.252	
9,500.00	9,180.91	6,960.00	6,958.82	32.95	13.76	116.85	-89.21	-26.81	2,550.23	2,515.44	34.79	73.302	
9,519.09	9,200.00	6,960.00	6,958.82	32.98	13.76	116.85	-89.21	-26.81	2,566.73	2,531.90	34.83	73.694	

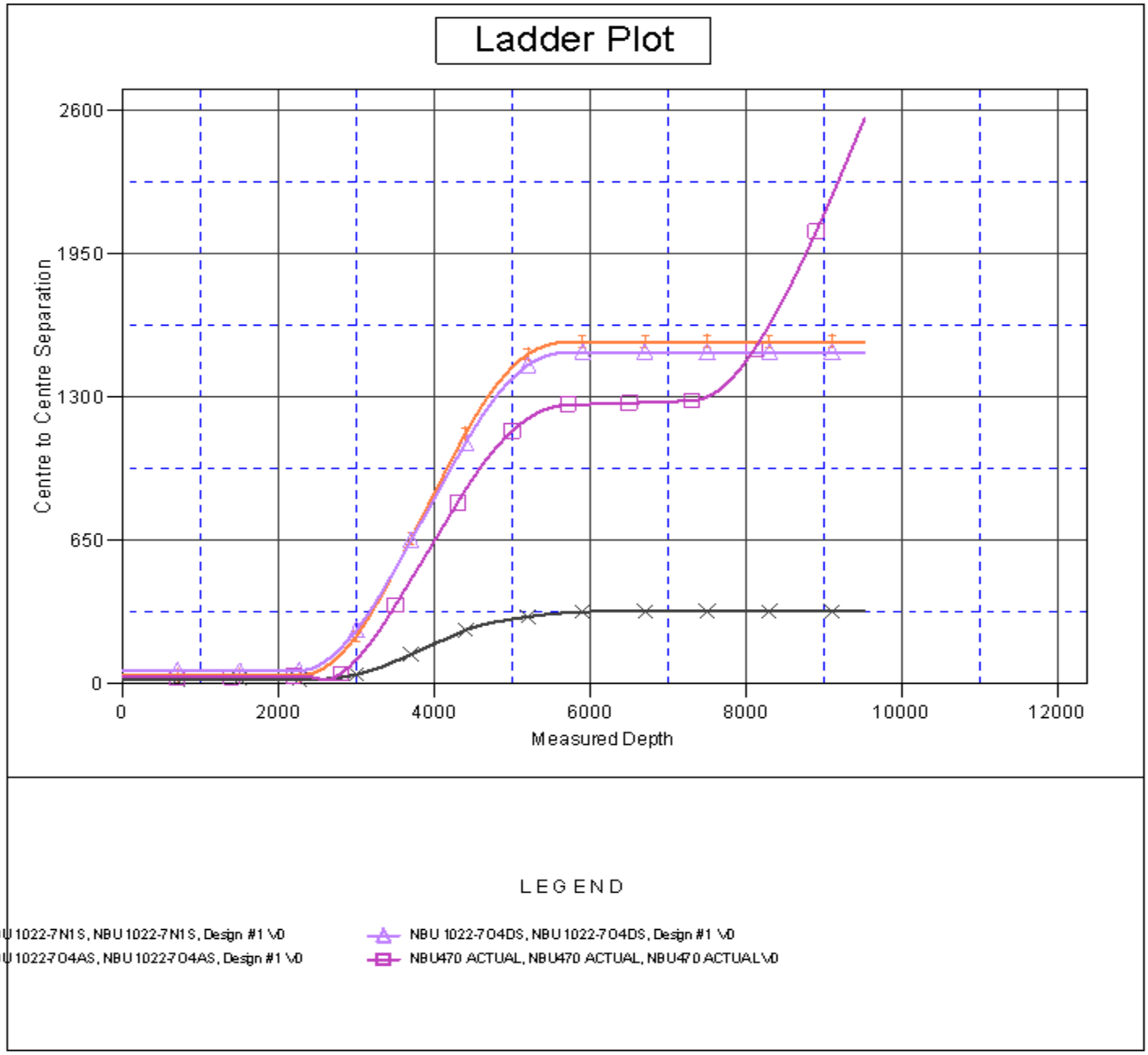
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Reference Site:	NBU 1022-7O Pad	**MD Reference:**	WELL @ 5354.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	NBU 1022-7N4S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	NBU 1022-7N4S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5354.00ft (Original Well Ele\Coordinates are relative to: NBU 1022-7N4S
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: 0.98°



Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well NBU 1022-7N4S
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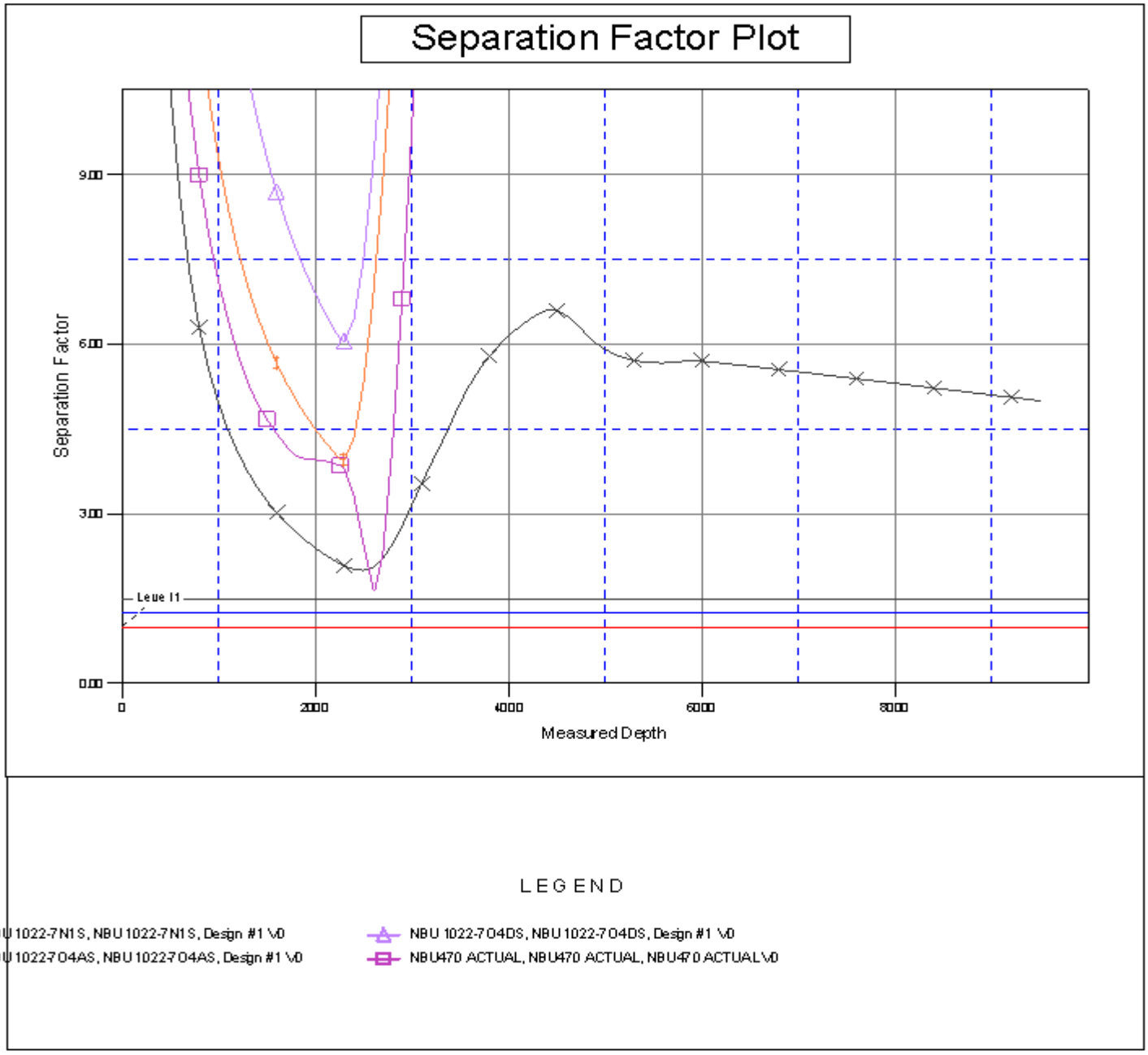
Grid Convergence at Surface is: 0.98°



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www.weatherford.com

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+1.303.825.6558 Denver, Colorado

Robert Scott
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NBU 1022-7N4S

Pad: NBU 1022-7O
Surface: 97’ FSL 1,938’ FEL (SW/4SE/4)
BHL: 595’ FSL 1,740’ FWL (SE/4SW/4)
Sec. 7 T10S R22E

Uintah, Utah
Mineral Lease: UTU 0466

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

Formation	Depth	Resource
Uinta	0 – Surface	
Green River	1,352’	
Birds Nest	1,675’	Water
Mahogany	2,105’	Water
Wasatch	4,543’	Gas
Mesaverde	7,128’	Gas
MVU2	8,054’	Gas
MVL1	8,637’	Gas
TVD	9,200’	
TD	9,519’	

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 9,200' TVD, approximately equals 5,493 psi (calculated at 0.60 psi/foot).

Maximum anticipated surface pressure equals approximately 3,469 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.

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

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.

’APIWellNo:43047506510000’

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	August 14, 2009
WELL NAME	**NBU 1022-7N4S**	TD	9,200' TVD 9,519' MD
FIELD	Natural Buttes	COUNTY Uintah STATE Utah	FINISHED ELEVATION 5,338'
SURFACE LOCATION	SW/4 SE/4 97' FSL 1,938' FEL	Sec 7 T 10S R 22E	
	Latitude: 39.956425	Longitude: -109.480004	NAD 83
BTM HOLE LOCATION	SE/4 SW/4 595' FSL 1,740' FWL	Sec 7 T 10S R 22E	
	Latitude: 39.957776	Longitude: -109.484190	NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), Tri-County Health Dept.		

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		20'		14"	
			12-1/4"	9-5/8", 36#, J-55, LTC	Air mist
All water flows encountered while drilling will be reported to the appropriate agencies.					
	Green River @	**1,352'**			
	Top of Birds Nest @	**1,675'**			
	Mahogany @	**2,105'**			
	Preset f/ GL @	**2,305' MD**			
	Note: 12.25" 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 acutal depth of the loss zone.				
	Wasatch @	**4,543'**			
Mud logging program TBD Cased hole logging program from TD - surf csg			7-7/8"	4-1/2" 11.6# I-80 or equivalent BTC csg	Water / Fresh Water Mud 8.3-11.7 ppg
	Mverde @	**7,128' TVD**			
	MVU2 @	**8,054' TVD**			
	MVU1 @	**8,637' TVD**			
Max anticipated Mud required 11.7 ppg	**TD @**	**9,200' TVD** **9,519' MD**			

’APIWellNo:43047506510000’

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3,520	2,020	453,000
SURFACE	9-5/8"	0	to	2,305	36.00	J-55	LTC	0.95	1.87	6.95
								7,780	6,350	278,000
PRODUCTION	4-1/2"	0	to	9,519	11.60	I-80	BTC	2.18	1.13	2.88

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 11.7 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3,469 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 11.7 ppg) 0.6 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 5,493 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	380	0%	15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
			Premium cmt + 2% CaCl				
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1,805'	65/35 Poz + 6% Gel + 10 pps gilsonite	430	35%	12.60	1.81
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	4,039'	Premium Lite II + 3% KCl + 0.25 pps	380	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	5,480'	50/50 Poz/G + 10% salt + 2% gel	1,340	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.

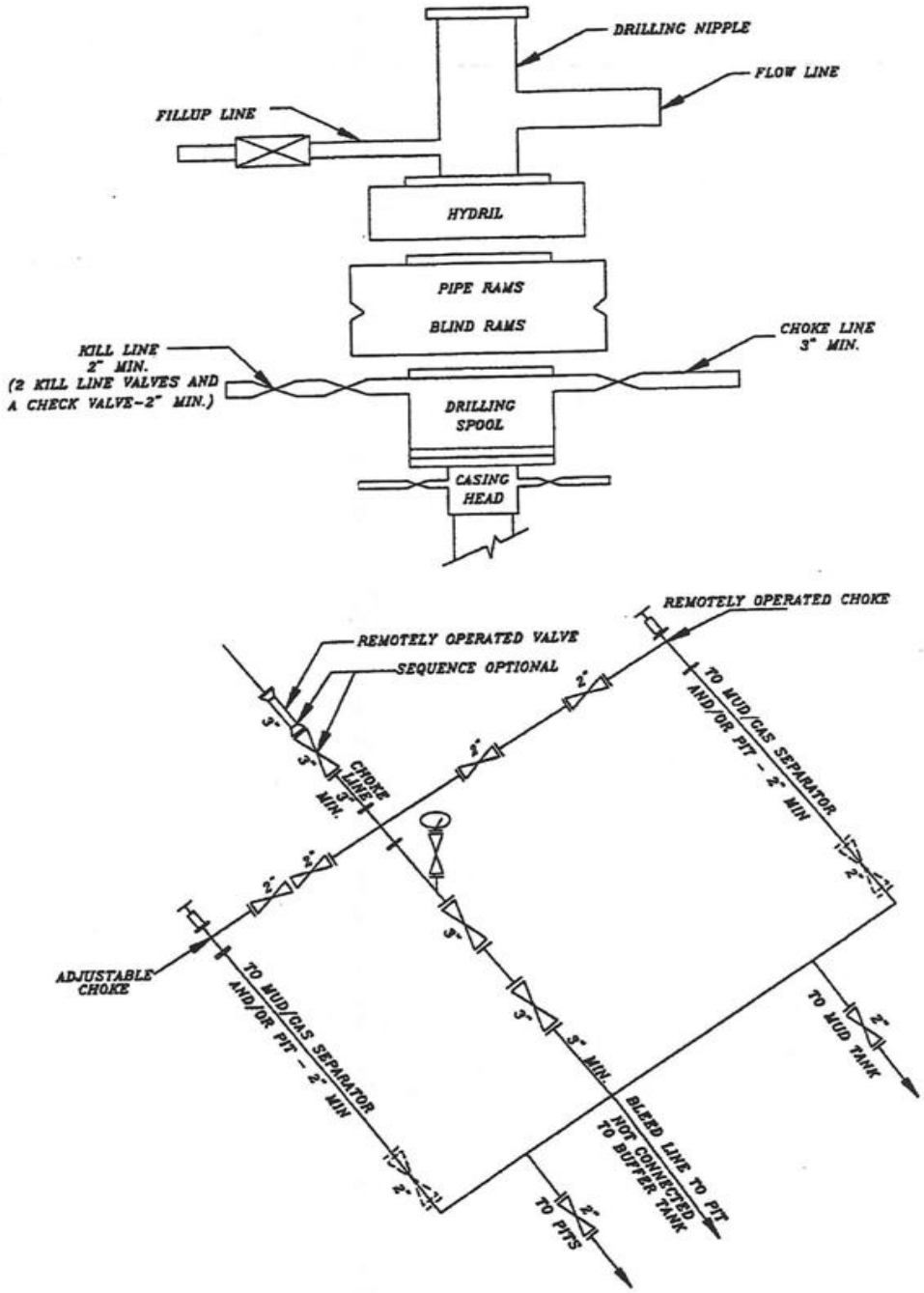
Surveys will be taken at 1,000' minimum intervals.

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

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

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

EXHIBIT A
NBU 1022-7N4S



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

WELL PAD INTERFERENCE PLAT

DIRECTIONAL PAD – NBU 470

SURFACE POSITION FOOTAGES:

1022–7O4AS
81' FSL & 1902' FEL

1022–7O4DS
74' FSL & 1883' FEL

1022–7N1S
89' FSL & 1920' FEL

1022–7N4S
97' FSL & 1938' FEL

NBU 470 (Existing Well Head)
100' FSL & 1970' FEL

BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 7, T10S, R22E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR S00°02'34"W.

N

BOTTOM HOLE FOOTAGES

1022–7O4AS
550' FSL & 1560' FEL

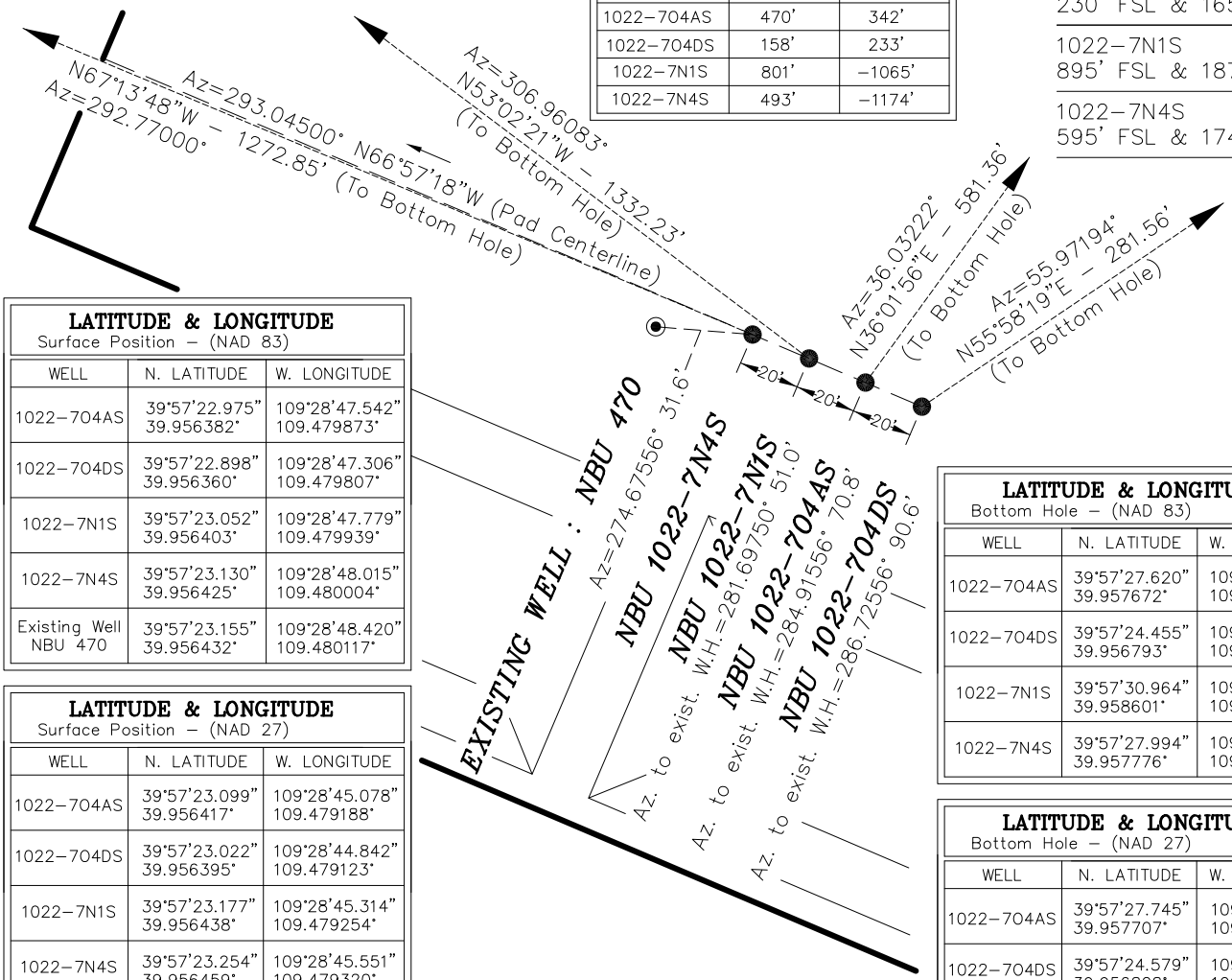
1022–7O4DS
230' FSL & 1650' FEL

1022–7N1S
895' FSL & 1870' FWL

1022–7N4S
595' FSL & 1740' FWL

RELATIVE COORDINATES
From Surface Position to Bottom Hole

WELL	NORTH	EAST
1022–7O4AS	470'	342'
1022–7O4DS	158'	233'
1022–7N1S	801'	–1065'
1022–7N4S	493'	–1174'



LATITUDE & LONGITUDE
Surface Position – (NAD 83)

WELL	N. LATITUDE	W. LONGITUDE
1022–7O4AS	39°57'22.975" 39.956382°	109°28'47.542" 109.479873°
1022–7O4DS	39°57'22.898" 39.956360°	109°28'47.306" 109.479807°
1022–7N1S	39°57'23.052" 39.956403°	109°28'47.779" 109.479939°
1022–7N4S	39°57'23.130" 39.956425°	109°28'48.015" 109.480004°
Existing Well NBU 470	39°57'23.155" 39.956432°	109°28'48.420" 109.480117°

LATITUDE & LONGITUDE
Surface Position – (NAD 27)

WELL	N. LATITUDE	W. LONGITUDE
1022–7O4AS	39°57'23.099" 39.956417°	109°28'45.078" 109.479188°
1022–7O4DS	39°57'23.022" 39.956395°	109°28'44.842" 109.479123°
1022–7N1S	39°57'23.177" 39.956438°	109°28'45.314" 109.479254°
1022–7N4S	39°57'23.254" 39.956459°	109°28'45.551" 109.479320°
Existing Well NBU 470	39°57'23.280" 39.956467°	109°28'45.955" 109.479432°

LATITUDE & LONGITUDE
Bottom Hole – (NAD 83)

WELL	N. LATITUDE	W. LONGITUDE
1022–7O4AS	39°57'27.620" 39.957672°	109°28'43.153" 109.478654°
1022–7O4DS	39°57'24.455" 39.956793°	109°28'44.311" 109.478975°
1022–7N1S	39°57'30.964" 39.958601°	109°29'01.448" 109.483735°
1022–7N4S	39°57'27.994" 39.957776°	109°29'03.084" 109.484190°

LATITUDE & LONGITUDE
Bottom Hole – (NAD 27)

WELL	N. LATITUDE	W. LONGITUDE
1022–7O4AS	39°57'27.745" 39.957707°	109°28'40.689" 109.477969°
1022–7O4DS	39°57'24.579" 39.956828°	109°28'41.846" 109.478291°
1022–7N1S	39°57'31.089" 39.958636°	109°28'58.982" 109.483051°
1022–7N4S	39°57'28.119" 39.957811°	109°29'00.619" 109.483505°

60' 30' 0' 60'
SCALE

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

NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S & NBU 1022-7N4S LOCATED IN SECTION 7, T10S, R22E, S.L.B.&M. UINTAH COUNTY, UTAH.

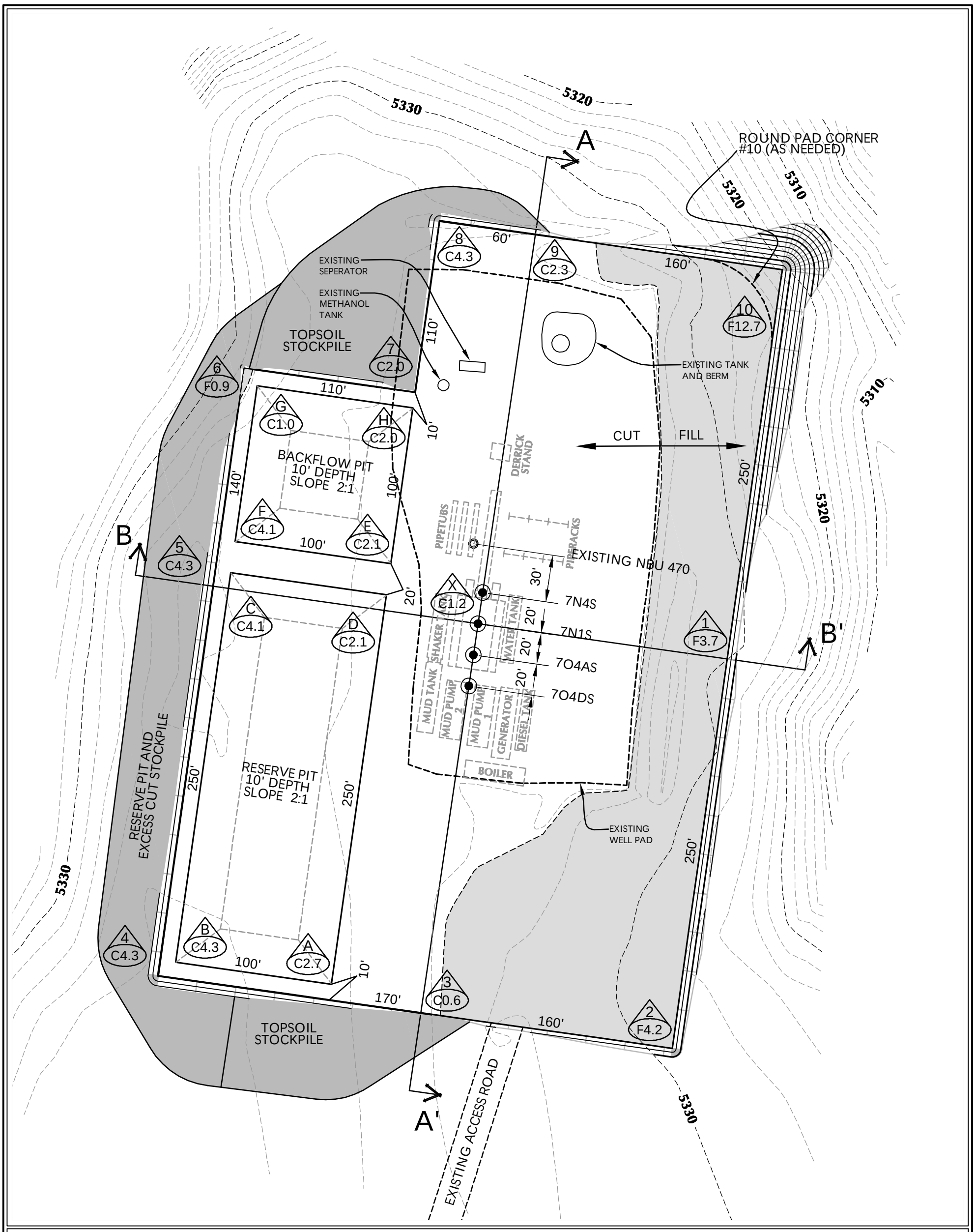
609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

DATE SURVEYED: 10-01-08	SURVEYED BY: M.S.B.
DATE DRAWN: 10-08-08	DRAWN BY: E.M.S.
	REVISED: 01-26-09

Timberline (435) 789–1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

SHEET 5 OF 13

’APIWellNo:43047506510000’



WELL PAD NBU 470 QUANTITIES

EXISTING GRADE @ CENTER OF PAD = 5,334.9'
FINISHED GRADE ELEVATION = 5,333.7'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1

TOTAL CUT FOR WELL PAD = 7,063 C.Y.
TOTAL FILL FOR WELL PAD = 6,868 C.Y.
TOPSOIL @ 6" DEPTH = 2,178 C.Y.
EXCESS MATERIAL = 195 C.Y.
TOTAL DISTURBANCE = 3.79 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 25,880 BARRELS
RESERVE PIT VOLUME
+/- 7,185 CY
BACKFLOW PIT CAPACITY (2' OF FREEBOARD)
+/- 8,780 BARRELS
BACKFLOW PIT VOLUME
+/- 2,520 CY

WELL PAD LEGEND

EXISTING WELL LOCATION
PROPOSED WELL LOCATION
EXISTING CONTOURS (2' INTERVAL)
PROPOSED CONTOURS (2' INTERVAL)

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

KERR-MCGEE OIL & GAS
ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

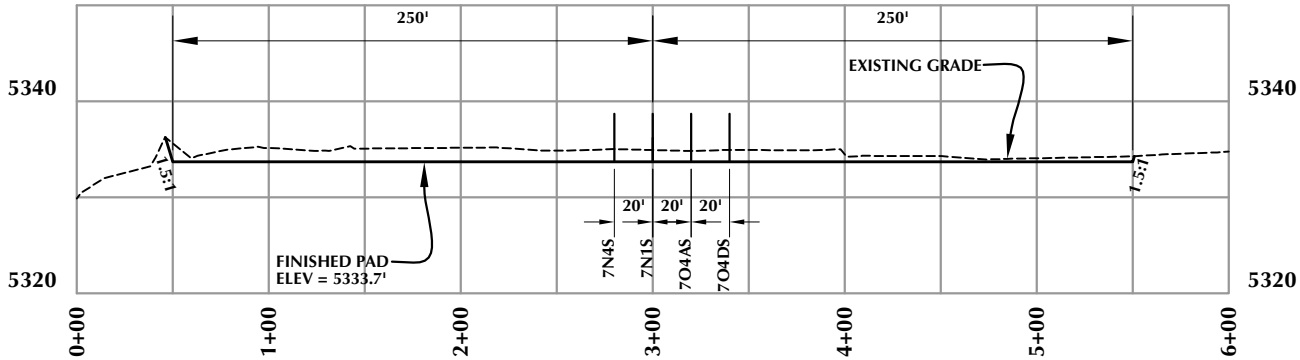
WELL PAD - LOCATION LAYOUT
NBU 1022-7O4AS, NBU 1022-7O4DS,
NBU 1022-7N1S, NBU 1022-7N4S
LOCATED IN SECTION 7, T.10S., R.22E.
S.L.B.&M., UINTAH COUNTY, UTAH

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

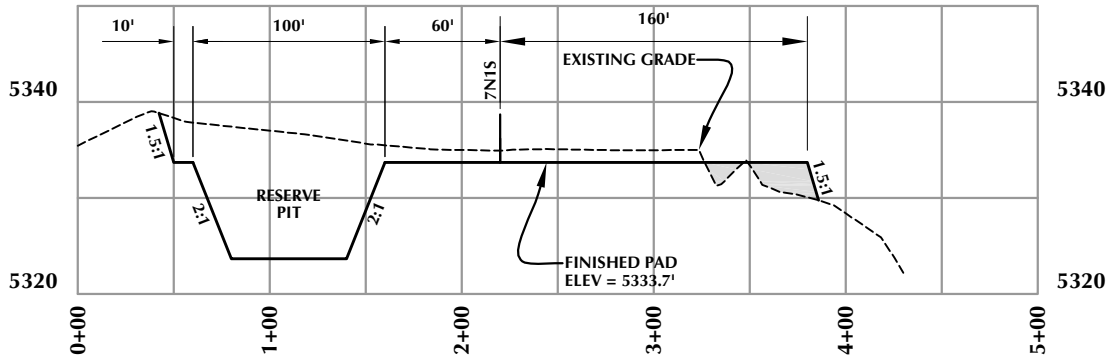
Scale: 1"=60'	Date: 2/3/09	SHEET NO:
REVISED:	GMH 2/20/09	6 — 6 OF 13

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
38 WEST 100 NORTH VERNAL, UTAH 84078

K:\ANADARKO\2008_27_NBU_Directional_Wells\DWGS\NBU_DIRECTIONAL_JAN_FEB_2009_CESI.dwg, 2/20/2009 5:16:10 PM, PDF-XChange for AcroPlot Pro



CROSS SECTION A-A'



CROSS SECTION B-B'

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

KERR-MCGEE OIL & GAS ONSHORE L.P.
1099 18th Street - Denver, Colorado 80202

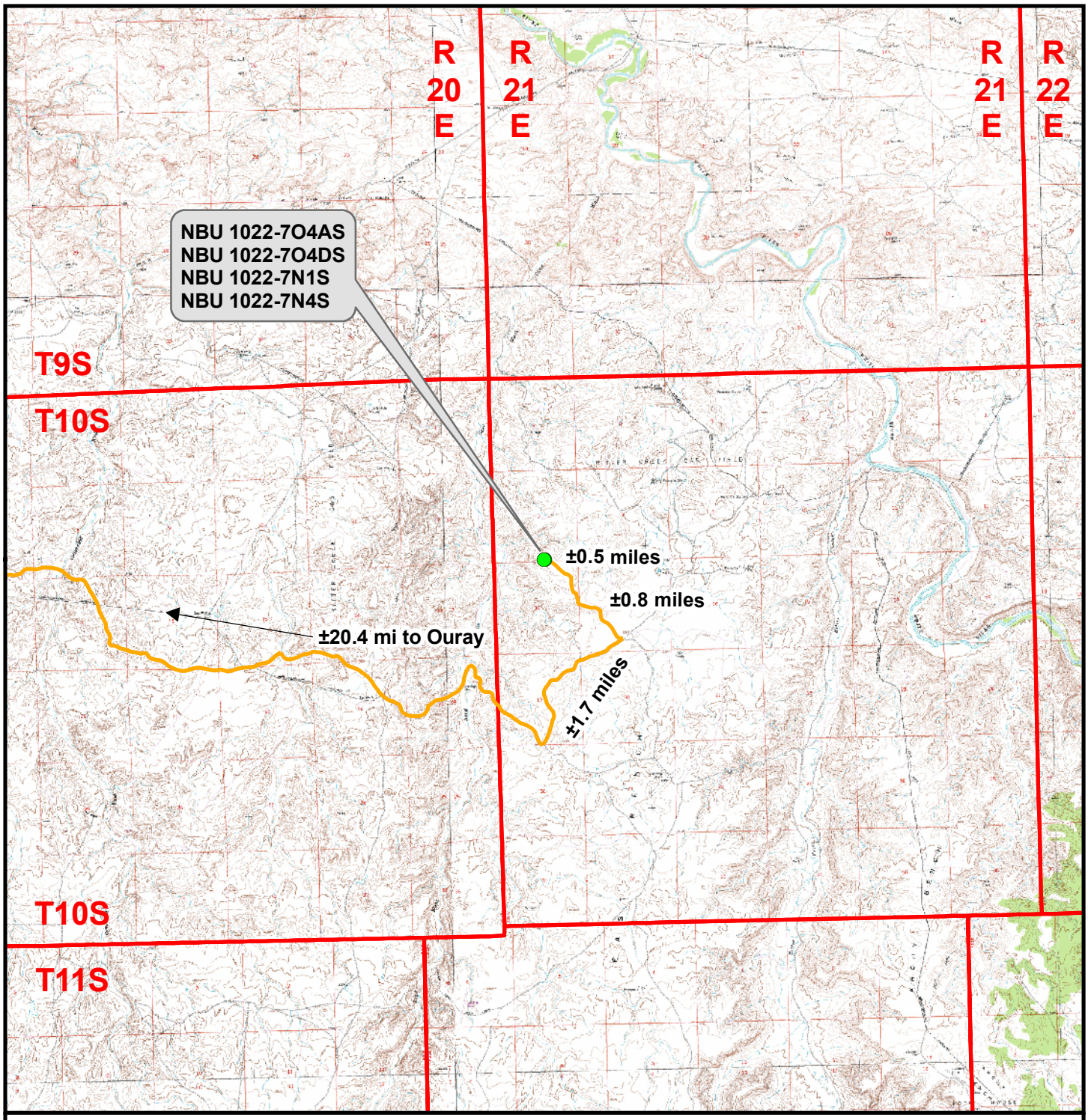
WELL PAD - CROSS SECTIONS
NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S, NBU 1022-7N4S
LOCATED IN SECTION 7, T.10S., R.22E. S.L.B.&M., UINTAH COUNTY, UTAH

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

Scale: 1"=100'	Date: 2/3/09	SHEET NO:
REVISED:	BY DATE	7 — 7 OF 13

HORIZONTAL 0 50 100 1" = 100'
VERTICAL 0 10 20 1" = 20'

Timberline Engineering & Land Surveying, Inc.
(435) 789-1365
38 WEST 100 NORTH VERNAL, UTAH 84078



Legend

- Proposed Well Location
- Access Route - Proposed

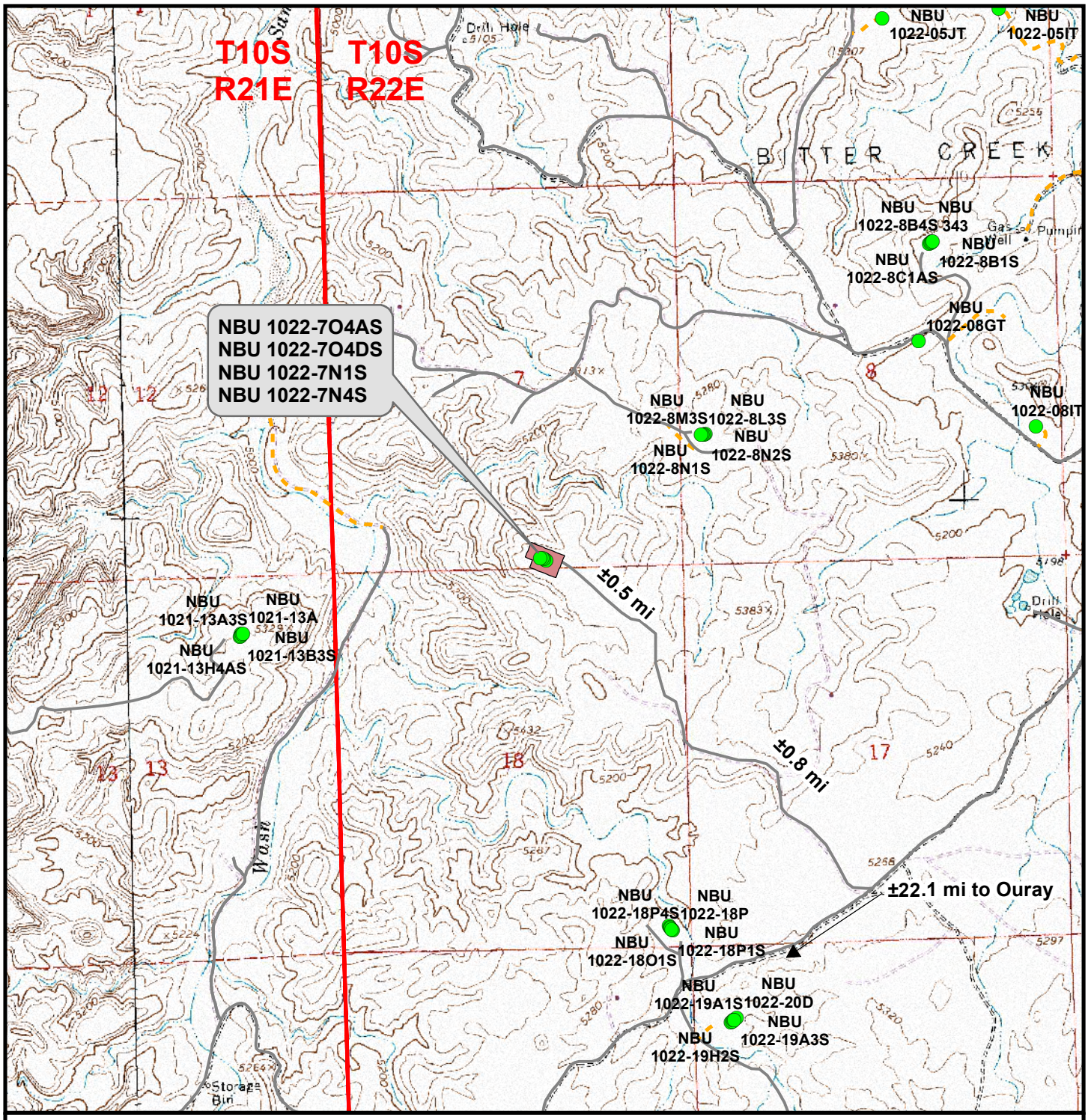
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S & NBU 1022-7N4S
Topo A
Located In Section 7, T10S, 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

N

Scale: 1:100,000	NAD83 USP Central		Sheet No: 9
Drawn: JELo	Date: 2 Feb 2009		9 of 13
Revised:	Date:		



Legend

Total Proposed Road Length: ±0ft

Well - Proposed | Well Pad | Road - Proposed | Road - Existing

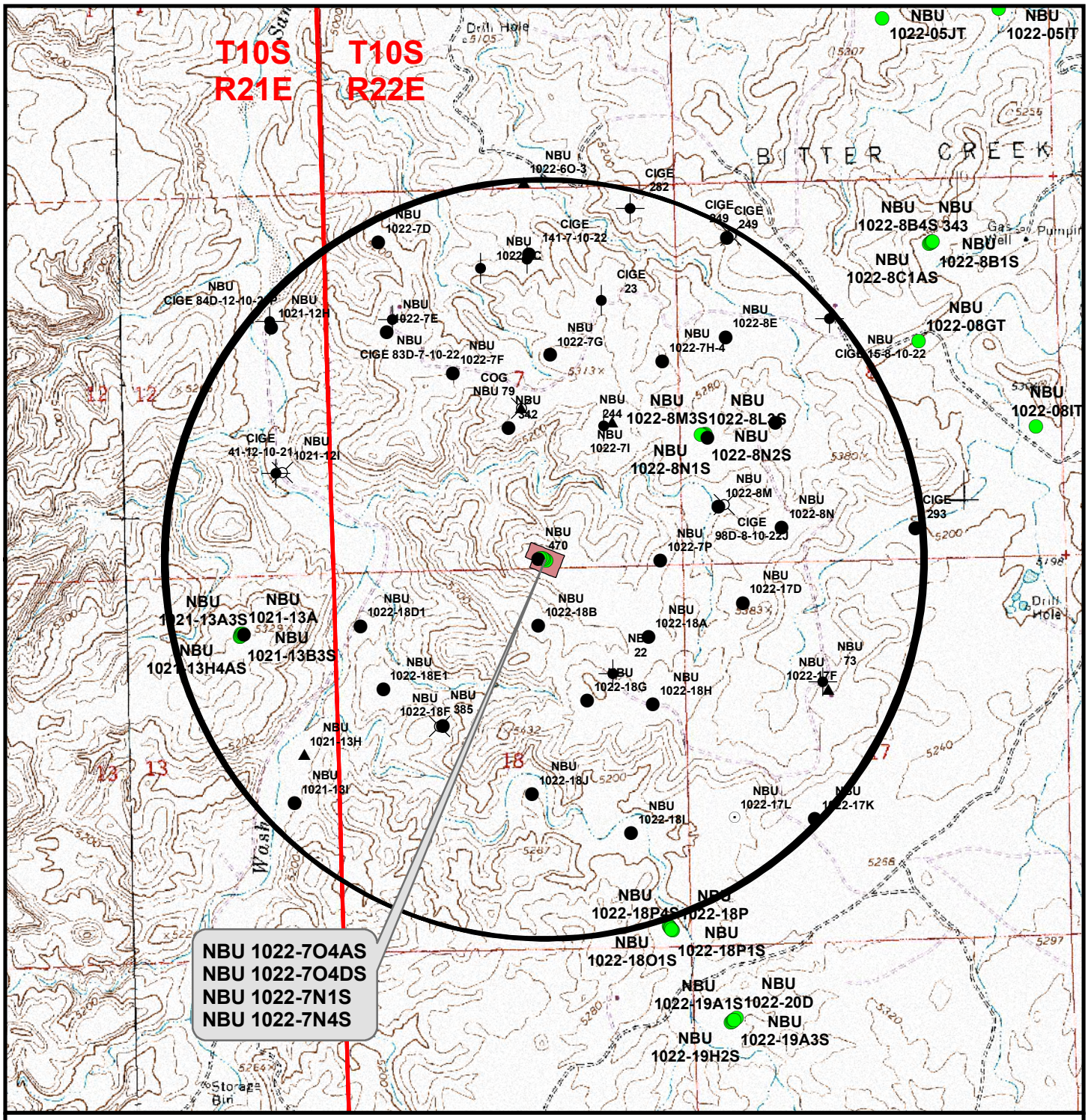
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S & NBU 1022-7N4S
Topo B
Located In Section 7, T10S, 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

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 10
Drawn: JELo	Date: 2 Feb 2009	10 of 13
Revised:	Date:	



Legend

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

- Well - Proposed
- Well - 1 Mile Radius
- Well Pad
- Producing
- Approved permit (APD); not yet spudded
- Spudded (Drilling commenced: Not yet comple
- Location Abandoned
- Temporarily-Abandoned
- Plugged and Abandoned
- Shut-In

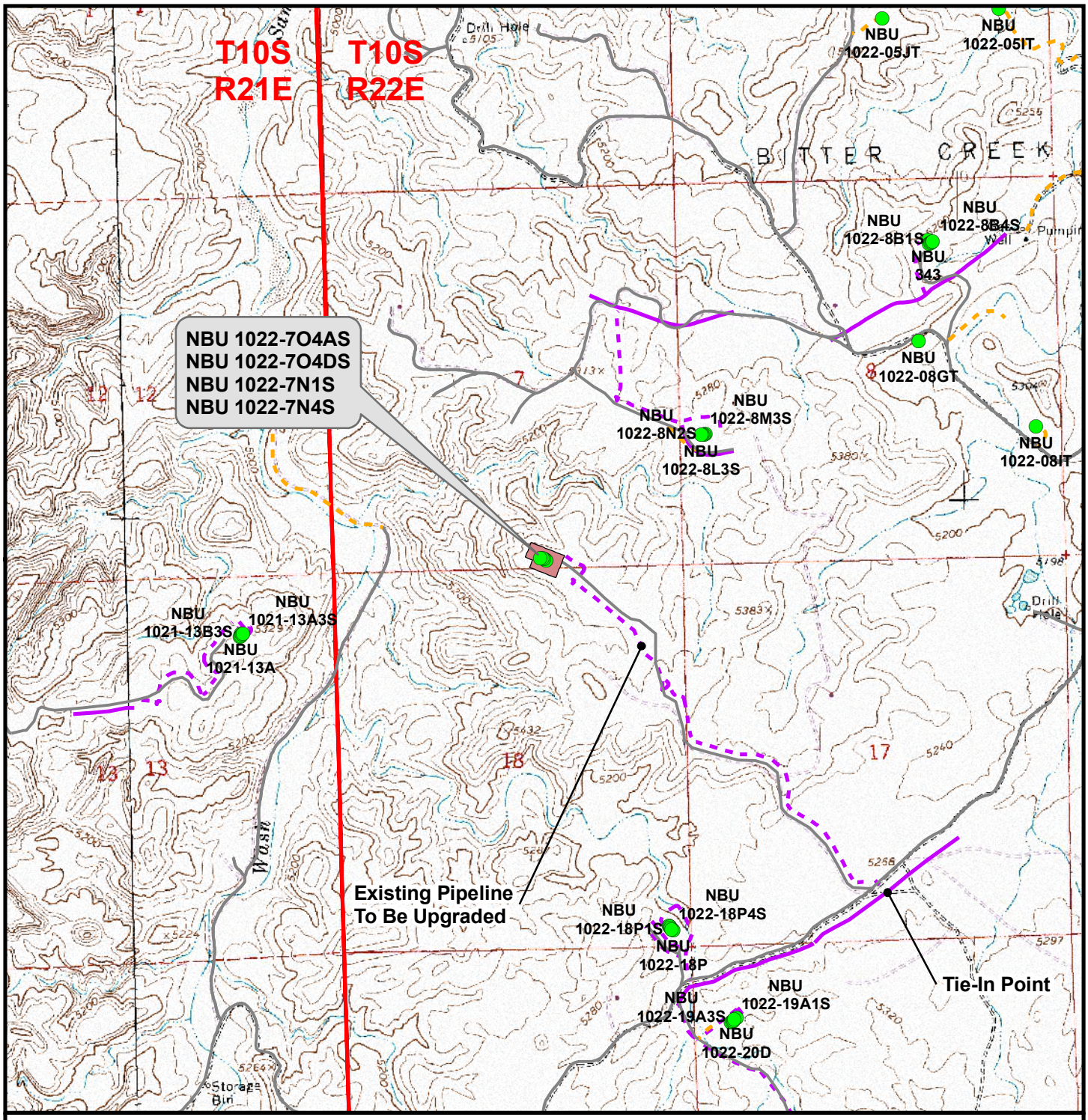
Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S & NBU 1022-7N4S
Topo C
Located In Section 7, T10S, 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

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 11
Drawn: JELo	Date: 2 Feb 2009	11 of 13
Revised:	Date:	



Legend

Proposed Pipeline Length From Tie-In Point To Edge Of Pad: ±7,300ft
Proposed Pipeline Length Around Pad: ±660ft

Well - Proposed | Well Pad | Road - Proposed | Pipeline - Proposed
Road - Existing | Pipeline - Existing

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

NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S & NBU 1022-7N4S
Topo D
Located In Section 7, T10S, 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

N

Scale: 1" = 2000ft	NAD83 USP Central	Sheet No: 12 12 of 13
Drawn: JELo	Date: 2 Feb 2009	
Revised:	Date:	

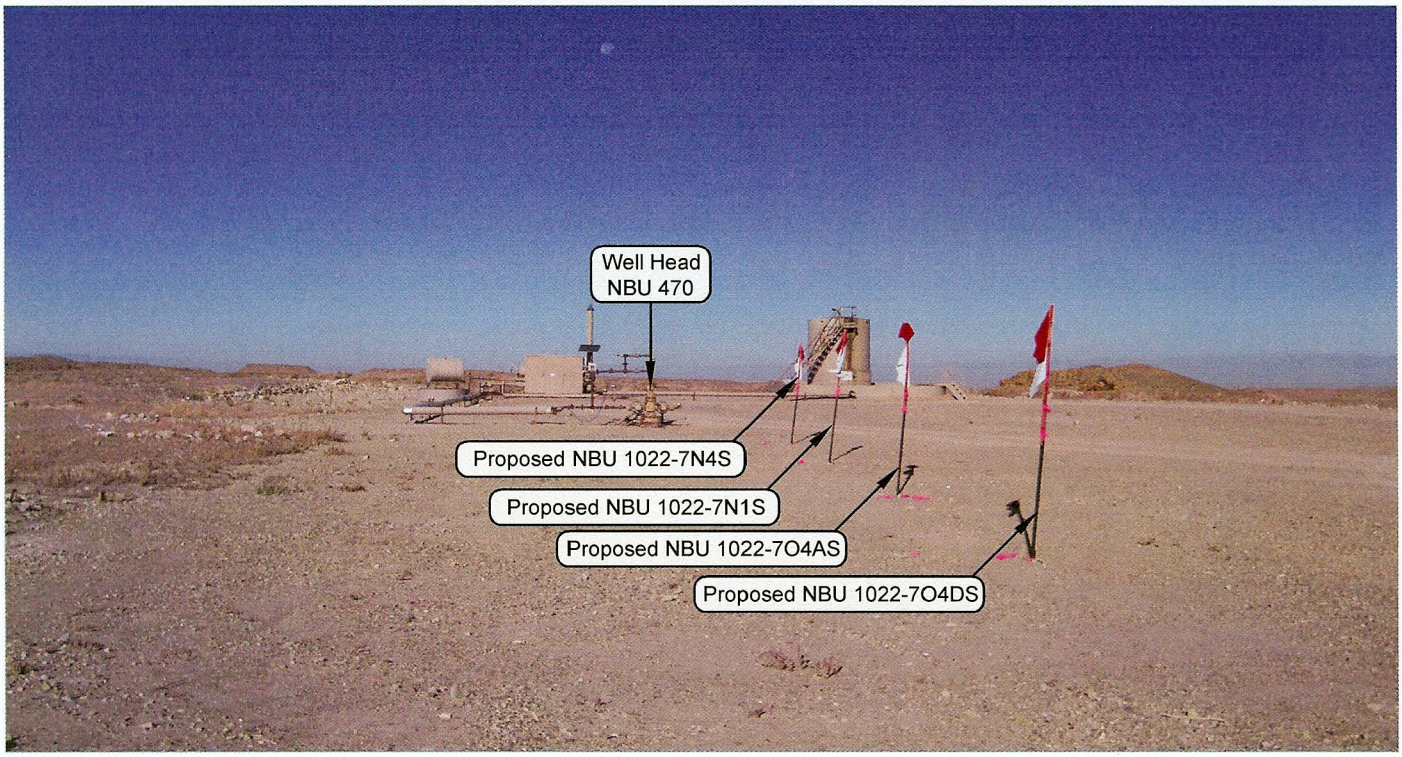


PHOTO VIEW: FROM LOCATION STAKES TO EXISTING WELL HEAD

CAMERA ANGLE: WESTERLY

PHOTO VIEW: FROM EXISTING ROAD

CAMERA ANGLE: NORTHWESTERLY

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

NBU 1022-7O4AS, NBU 1022-7O4DS
NBU 1022-7N1S & NBU 1022-7N4S
LOCATED IN SECTION 7, T10S, 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

LOCATION PHOTOS		DATE TAKEN: 10-17-08
		DATE DRAWN: 10-09-08
TAKEN BY: M.S.B.	DRAWN BY: E.M.S.	REVISED: 01-26-09

Timberline (435) 789-1365
Engineering & Land Surveying, Inc.
209 NORTH 300 WEST VERNAL, UTAH 84078

Kerr-McGee Oil & Gas Onshore, LP
NBU 1022-7O4AS, NBU 1022-7O4DS, NBU 1022-7N1S & NBU 1022-7N4S
Section 7, T10S, 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 DIRECTION ALONG THE GLEN BENCH ROAD APPROXIMATELY 5.2 MILES TO THE INTERSECTION OF THE BITTER CREEK ROAD (COUNTY B ROAD 4120). EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE BITTER CREEK ROAD APPROXIMATELY 4.0 MILES TO A CLASS D COUNTY ROAD RUNNING NORTHEASTERLY. EXIT LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION ALONG THE CLASS D COUNTY ROAD APPROXIMATELY 1.7 MILES TO A SECOND CLASS D COUNTY ROAD RUNNING NORTHWESTERLY. EXIT LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION ALONG THE SECOND CLASS D COUNTY ROAD APPROXIMATELY 0.8 MILES TO AN EXISTING SERVICE ROAD RUNNING NORTHWESTERLY. EXIT RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.5 MILES TO THE EXISTING WELL PAD.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 54.1 MILES IN A SOUTHERLY DIRECTION.

NBU 1022-7N1S
Surface: 89' FSL 1,920' FEL (SW/4SE/4)
BHL: 895' FSL 1,870' FWL (SE/4SW/4)

NBU 1022-7N4S
Surface: 97' FSL 1,938' FEL (SW/4SE/4)
BHL: 595' FSL 1,740' FWL (SE/4SW/4)

NBU 1022-7O4AS
Surface: 81' FSL 1,902' FEL (SW/4SE/4)
BHL: 550' FSL 1,560' FEL (SW/4SE/4)

NBU 1022-7O4DS
Surface: 74' FSL 1,883' FEL (SW/4SE/4)
BHL: 230' FSL 1,650' FEL (SW/4SE/4)

Mineral Lease: UTU 0466

Pad: NBU 1022-7O
Sec. 7 T10S R22E

Uintah, Utah

ONSHORE ORDER NO. 1

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

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 (OSO #1) and supporting Bureau of Land Management (BLM) documents. An NOS was submitted on March 19, 2009 showing the surface locations in SW/4 SE/4 of Section 7 T10S R22E.

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information is to be incorporated by reference into the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee). The MDP is available upon request from the BLM-Vernal Field Office.

An on-site meeting was held on February 5, 2009. Present were:

- Verlyn Pindell, Dave Gordon and Scott Ackerman – BLM;
- Kolby Kay – 609 Consulting, LLC
- Tony Kazeck, Clay Einerson, Raleen White, Ramey Hoopes, Grizz Oleen, Charles Chase and Spencer Biddle – Kerr-McGee.

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.

1. 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.

2. 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.

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

Please refer to Topo Map C.

4. 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 470, 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 ±7,960' (±1.5 miles) of pipeline is proposed. The existing pipeline, as shown on Topo D, will be upgraded to accommodate anticipated production from the proposed wells. The upgraded pipeline will follow the same route as 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.

Per request from the onsite meeting, corner 10 of the well pad will be rounded.

5. 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 one of the following sources:

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

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

No water well is to be drilled on this lease.

6. Source of Construction Materials:

See MDP for additional details on Source of Construction Materials.

7. 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

8. Ancillary Facilities:
See MDP for additional details on Ancillary Facilities.

None are anticipated.

9. 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.

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

11. Surface/Mineral Ownership:
United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

12. Other Information:
See MDP for additional details on Other Information.

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

Kathy Schneebeck Dulnoan
Regulatory Analyst
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6007

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 Bureau of Land Management Nationwide Bond WYB000291.

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

Kathy Schneebeck Dulnoan

Kathy Schneebeck Dulnoan

August 13, 2009
Date

'APIWellNo:43047506510000'

Kerr-McGee Oil & Gas Onshore LP

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

April 8, 2009

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

Re: Directional Drilling R649-3-11
NBU 1022-7N4S (F.K.A. NBU 1022-7N3S)
T10S-R22E
Section 7: SESW
Surface: 97' FSL, 1938' FEL
Bottom Hole: 595' FSL, 1740' FWL
Uintah County, Utah

Dear Mrs. Mason:

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

- Kerr-McGee's NBU 1022-7N4S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

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

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jason K. Rayburn
Landman

'APIWellNo:43047506510000'

’APIWellNo:43047506510000’

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP’S 55 PROPOSED WELL LOCATIONS IN TOWNSHIP 10S, RANGE 22E, SECTIONS 4, 7, 8, 9, 10, 18 AND 20, UINTAH COUNTY, UTAH

By:

Patricia Stavish

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. 08-321

February 20, 2009

United States Department of Interior (FLPMA)
Permit No. 08-UT-60122

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

’APIWellNo:43047506510000’

IPC #08-305

Paleontological Reconnaissance Survey Report

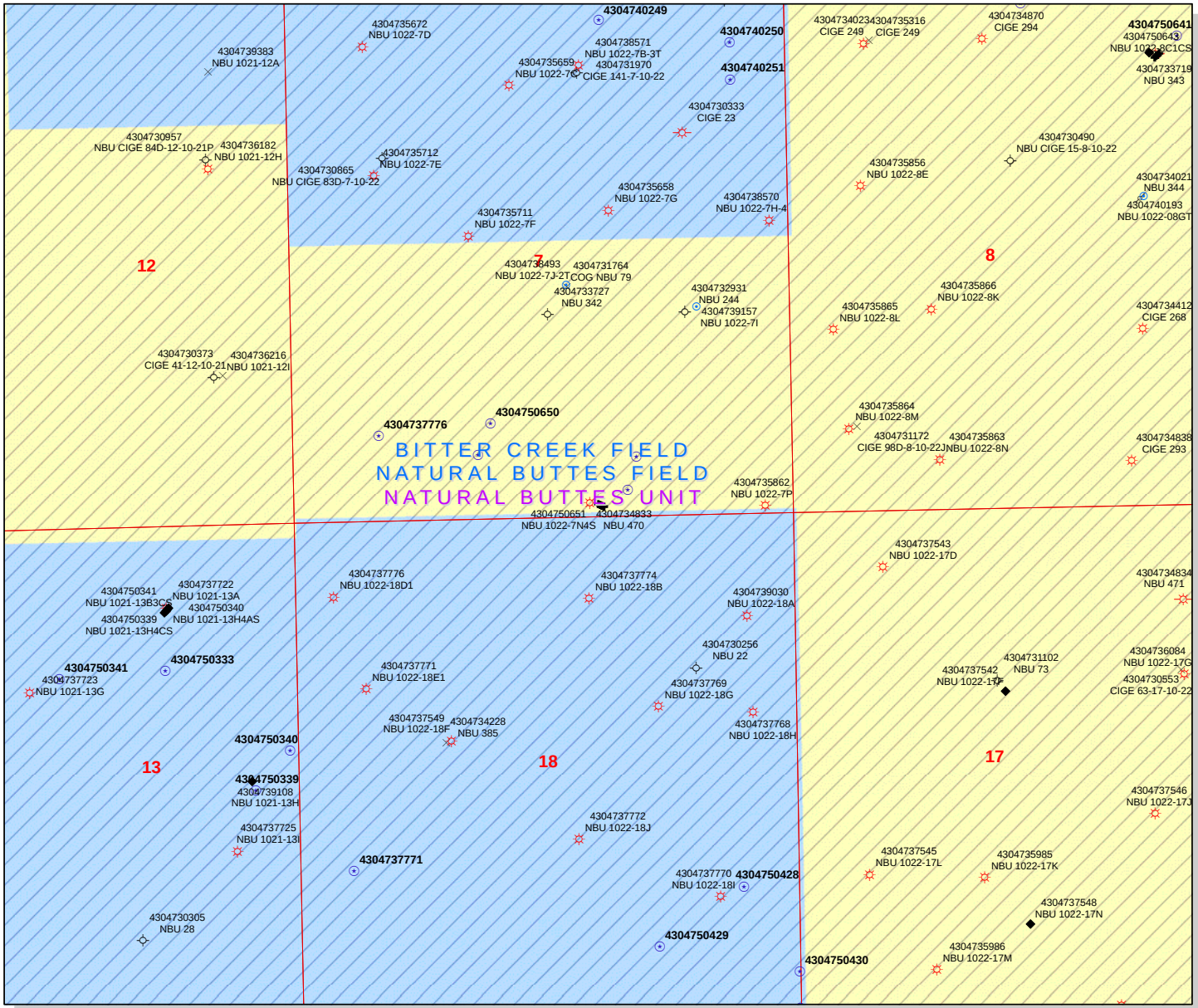
Survey of Kerr McGee’s Proposed Directional & Multi-Well Pads, Access Roads & Pipelines for “NBU #922-31J3AS, 31I3CS, 31O1AS & 31I4AS” (Sec. 31 & 32, T 9 S, R 22 E), “NBU #1022-4E3S, 4E2S, 5I2S & 5H4S” & “NBU #1022-7O4AS, 7O4DS, 7N1S & 7N4S” (Sec. 4, 5, 7, 17 & 18, T 10 S, R 22 E)

Archy Bench
Topographic Quadrangle
Uintah County, Utah

March 6, 2009

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

’APIWellNo:4304750651000’



API Number: 4304750651

Well Name: NBU 1022-7N4S

Township 10.0 S Range 22.0 E Section 7

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields
STATUS
- ACTIVE
- COMBINED
- Sections

Wells Query Events
- <all other values>

GIS_STAT_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS

1,200 600 0 1,200 Feet

1:12,000

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)

August 28, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2009 Plan of Development Natural Buttes Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

```
   API #      WELL NAME                 LOCATION

(Proposed PZ WASATCH-MESA VERDE)

43-047-50640 NBU 1022-8B1DS   Sec 08 T10S R22E 0931 FNL 1709 FEL
                        BHL   Sec 08 T10S R22E 0367 FNL 1518 FEL

43-047-50641 NBU 1022-8B4AS   Sec 08 T10S R22E 0919 FNL 1693 FEL
                        BHL   Sec 08 T10S R22E 0744 FNL 1518 FEL

43-047-50642 NBU 1022-8C1AS   Sec 08 T10S R22E 0943 FNL 1725 FEL
                        BHL   Sec 08 T10S R22E 0102 FNL 2415 FWL

43-047-50643 NBU 1022-8C1CS   Sec 08 T10S R22E 0955 FNL 1742 FEL
                        BHL   Sec 08 T10S R22E 0418 FNL 2252 FWL

43-047-50644 NBU 922-30C3S    Sec 30 T09S R22E 1253 FNL 0663 FWL
                        BHL   Sec 30 T09S R22E 1238 FNL 1154 FWL

43-047-50645 NBU 922-30D3AS   Sec 30 T09S R22E 1232 FNL 0607 FWL
                        BHL   Sec 30 T09S R22E 0680 FNL 0382 FWL

43-047-50646 NBU 921-30C3CS   Sec 30 T09S R21E 0783 FNL 0920 FWL
                        BHL   Sec 30 T09S R21E 0993 FNL 1985 FWL


43-047-50647 NBU 921-30D2DS   Sec 30 T09S R21E 0747 FNL 0871 FWL
                        BHL   Sec 30 T09S R21E 0460 FNL 0665 FWL
```

API # WELL NAME LOCATION

(Proposed PZ WASATCH-MESA VERDE)

43-047-50648 NBU 921-30D3DS Sec 30 T09S R21E 0759 FNL 0887 FWL
BHL Sec 30 T09S R21E 1152 FNL 0665 FWL

43-047-50649 NBU 921-30E2AS Sec 30 T09S R21E 0771 FNL 0903 FWL
BHL Sec 30 T09S R21E 1522 FNL 0665 FWL

43-047-50650 NBU 1022-7N1S Sec 07 T10S R22E 0089 FSL 1920 FEL
BHL Sec 07 T10S R22E 0895 FSL 1870 FWL

43-047-50651 NBU 1022-7N4S Sec 07 T10S R22E 0097 FSL 1938 FEL
BHL Sec 07 T10S R22E 0595 FSL 1740 FWL

43-047-50652 NBU 1022-7O4AS Sec 07 T10S R22E 0081 FSL 1902 FEL
BHL Sec 07 T10S R22E 0550 FSL 1560 FEL

43-047-50653 NBU 1022-7O4DS Sec 07 T10S R22E 0074 FSL 1883 FEL
BHL Sec 07 T10S R22E 0230 FSL 1650 FEL

43-047-50655 NBU 922-30D3DS Sec 30 T09S R22E 1226 FNL 0588 FWL
BHL Sec 30 T09S R22E 1314 FNL 0352 FWL

43-047-50656 NBU 922-30E2AS Sec 30 T09S R22E 1246 FNL 0645 FWL
BHL Sec 30 T09S R22E 1636 FNL 0352 FWL

43-047-50678 NBU 922-31G4BS Sec 31 T09S R22E 2317 FSL 0188 FEL
BHL Sec 31 T09S R22E 1994 FNL 1808 FEL

43-047-50679 NBU 922-31G4CS Sec 31 T09S R22E 2316 FSL 0198 FEL
BHL Sec 31 T09S R22E 2353 FNL 1796 FEL

43-047-50680 NBU 922-31I1AS Sec 31 T09S R22E 2317 FSL 0178 FEL
BHL Sec 31 T09S R22E 2483 FSL 0243 FEL

43-047-50681 NBU 922-31I1DS Sec 31 T09S R22E 2317 FSL 0168 FEL
BHL Sec 31 T09S R22E 2137 FSL 0264 FEL

43-047-50682 NBU 921-12J Sec 12 T09S R21E 1959 FSL 2051 FEL

43-047-50684 NBU 1022-6I3AS Sec 06 T10S R22E 1160 FSL 1584 FEL
BHL Sec 06 T10S R22E 1684 FSL 1167 FEL

43-047-50685 NBU 1022-6J4CS Sec 06 T10S R22E 1178 FSL 1593 FEL
BHL Sec 06 T10S R22E 1535 FSL 1760 FEL

43-047-50686 NBU 1022-6O1BS Sec 06 T10S R22E 1124 FSL 1567 FEL
BHL Sec 06 T10S R22E 1197 FSL 1811 FEL

API #	WELL NAME	LOCATION
(Proposed PZ WASATCH-MESA VERDE)		
43-047-50687	NBU 1022-6P1CS	Sec 06 T10S R22E 1142 FSL 1575 FEL BHL Sec 06 T10S R22E 0989 FSL 0541 FEL
43-047-50691	NBU 921-29A3AS	Sec 29 T09S R21E 0299 FNL 2630 FEL BHL Sec 29 T09S R21E 0700 FNL 0885 FEL
43-047-50692	NBU 921-29A3DS	Sec 29 T09S R21E 0303 FNL 2628 FWL BHL Sec 29 T09S R21E 1193 FNL 0885 FEL
43-047-50694	NBU 921-29A2AS	Sec 29 T09S R21E 0296 FNL 2611 FEL BHL Sec 29 T09S R21E 0209 FNL 0885 FEL
43-047-50693	NBU 921-29B2CS	Sec 29 T09S R21E 0307 FNL 2608 FWL BHL Sec 29 T09S R21E 0443 FNL 2635 FEL
43-047-50695	NBU 921-12N	Sec 12 T09S R21E 0441 FSL 2236 FWL
43-047-50698	NBU 921-19F	Sec 19 T09S R21E 2236 FNL 2285 FWL
43-047-50699	NBU 921-17C	Sec 17 T09S R21E 0656 FNL 2004 FWL
43-047-50700	NBU 921-17D	Sec 17 T09S R21E 0985 FNL 0418 FWL
43-047-50701	NBU 921-17G	Sec 17 T09S R21E 1500 FNL 2262 FEL
43-047-50702	NBU 921-17H	Sec 17 T09S R21E 2100 FNL 0553 FEL
43-047-50703	NBU 921-18P	Sec 18 T09S R21E 1080 FSL 0197 FEL
43-047-50704	NBU 921-19E	Sec 19 T09S R21E 2061 FNL 0842 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:8-28-09

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/14/2009 **API NO. ASSIGNED:** 43047506510000

WELL NAME: NBU 1022-7N4S

OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6156

CONTACT: Danielle Piernot

PROPOSED LOCATION: SWSE 7 100S 220E **Permit Tech Review:** ✔

SURFACE: 0097 FSL 1938 FEL **Engineering Review:** ✔

BOTTOM: 0595 FSL 1740 FWL **Geology Review:** ✔

COUNTY: UINTAH

LATITUDE: 39.95641 **LONGITUDE:** -109.47924

UTM SURF EASTINGS: 629901.00 **NORTHINGS:** 4423816.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU 0466 **PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

SURFACE OWNER: 1 - Federal **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ✔ **PLAT**
- ✔ **Bond:** FEDERAL - WYB000291
- ☐ **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 & uncomm. tract

- ✔ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
1 - Exception Location - dmason
3 - Commingling - ddoucet
4 - Federal Approval - dmason
15 - Directional - dmason
17 - Oil Shale 190-5(b) - dmason

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill
****

Well Name: NBU 1022-7N4S
API Well Number: 43047506510000
Lease Number: UTU 0466
Surface Owner: FEDERAL
Approval Date: 8/31/2009

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

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

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

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

Commingle:
In accordance with Board Cause No. 173-14 commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

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.

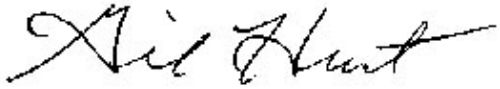
Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

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

API Well No: 43047506510000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

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 1022-7N4S

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

9. API NUMBER: 43047506510000

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: 0097 FSL 1938 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 07 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/31/2010	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: August 31, 2010

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst

SIGNATURE	DATE
N/A	8/31/2010

RECEIVED August 31, 2010

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506510000

API: 43047506510000
Well Name: NBU 1022-7N4S
Location: 0097 FSL 1938 FEL QTR SWSE SEC 07 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Approved by the Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 8/31/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: August 31, 2010

By: [signature]

RECEIVED August 31, 2010

Form 3160-3
(August 2007)

RECEIVED
AUG 25 2009

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU466

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

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

8. Lease Name and Well No.
NBU 1022-7N4S

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator
KERRMCGEE OIL&GAS ONSHORE LP
Contact: DANIELLE E PIERNOT
E-Mail: Danielle.Piernot@anadarko.com

9. API Well No.
43 047 50651

3a. Address
PO BOX 173779
DENVER, CO 80202-3779

3b. Phone No. (include area code)
Ph: 720-929-6156
Fx: 720-929-7156

10. Field and Pool, or Exploratory
NATURAL BUTTES

4. Location of Well (*Report location clearly and in accordance with any State requirements.**)

At surface SWSE 97FSL 1938FEL 39.95643 N Lat, 109.48000 W Lon

At proposed prod. zone SESW Lot 2 595FSL 1740FWL 39.95778 N Lat, 109.48419 W Lon

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 7 T10S R22E Mer SLB

14. Distance in miles and direction from nearest town or post office*
APPROXIMATELY 23 MILES SOUTHEAST OF OURAY, UTAH

12. County or Parish
UINTAH

13. State
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
595 FEET

16. No. of Acres in Lease
454.00

17. Spacing Unit dedicated to this well

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
APPROXIMATELY 330 FEET

19. Proposed Depth
9519 MD
9200 TVD

20. BLM/BIA Bond No. on file
WYB000291

21. Elevations (Show whether DF, KB, RT, GL, etc.
5335 GL

22. Approximate date work will start
08/31/2009

23. Estimated duration
60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
DANIELLE E PIERNOT Ph: 720-929-6156

Date
08/17/2009

Title
REGULATORY ANALYST

Approved by (Signature)

Name (Printed/Typed)
Jerry Kenczka

Date
JUN 09 2011

Title
Assistant Field Manager
Lands & Mineral Resources

Office
VERNAL FIELD OFFICE

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

CONDITIONS OF APPROVAL ATTACHED

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

Additional Operator Remarks (see next page)

Electronic Submission #73308 verified by the BLM Well Information System
For KERRMCGEE OIL&GAS ONSHORE LP, sent to the Vernal
Committed to AFMSS for processing by ROBIN R. HANSEN on 08/18/2009 ()

NOTICE OF APPROVAL

RECEIVED
JUN 14 2011
DIV. OF OIL, GAS & MINING

UDOGM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-440

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr McGee Oil & Gas Onshore, LP**	**Location:**	**SWSE, Sec. 7, T10S, R22E (S)** **SESW, Sec. 7, T10S, R22E (B)**
Well No:	**NBU 1022-7NAS**	**Lease No:**	**UTU-466**
API No:	**43-047-50651**	**Agreement:**	**Natural Buttes Unit**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut_vn_opreport@blm.gov.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.

- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.

- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

SITE SPECIFIC COAs

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.

- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.

- Kerr McGee will adhere to all applicant committed conservation measures and conservation recommendations that are stated in the USFWS's "Final Biological Opinion for the Anadarko Petroleum Corporation Natural Buttes Unit and Bonanza Area Natural Gas Development Project."

- The operator will follow the Green River District Reclamation Guidelines for reclamation.

- The operator will control noxious weeds along the well pad, access road, and the pipeline route by spraying or mechanical removal. On BLM administered land, a Pesticide Use Proposal (PUP) will be submitted and approved prior to the application of herbicides or pesticides or possibly hazardous chemicals.

- A permitted paleontologist is to be present to monitor the construction process.

- Construction of the proposed action is not allowed from January 1 – August 31 to minimize impacts during golden eagle nesting.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A Gama Ray Log shall be run from TD to surface.

Variances Granted:
Air Drilling:

- Properly lubricated and maintained rotating head, variance granted to use a properly maintained and lubricated diverter bowl in place of a rotating head.

- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 45' from the well bore.

- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for two truck/trailer mounted air compressors located within 40 feet from the well bore and 60' from the blooie line.

- In lieu of mud products on location, Kerr McGee will fill the reserve pit with water for kill fluid.

Automatic igniter. Variance granted for igniter due to there being no productive formations while drilling with air.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.

- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.

- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.

- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.

- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order

No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

- No aggressive/fresh hard-banded drill pipe shall be used within casing.

- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

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 1022-7N4S

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

9. API NUMBER: 43047506510000

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

PHONE NUMBER: 720 929-6515 Ext

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0097 FSL 1938 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 07 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/12/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: 07/12/2011

By: [signature]

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst

SIGNATURE	DATE
N/A	7/12/2011

RECEIVED Jul. 12, 2011

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506510000

API: 43047506510000
Well Name: NBU 1022-7N4S
Location: 0097 FSL 1938 FEL QTR SWSE SEC 07 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Andy Lytle **Date:** 7/12/2011
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED Jul. 12, 2011

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

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 1022-7N4S

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

9. API NUMBER: 43047506510000

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

PHONE NUMBER: 720 929-6515 EXT

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0097 FSL 1938 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 07 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/30/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: September 13, 2012

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Danielle Piernot	720 929-6156	Regulatory Analyst

SIGNATURE	DATE
N/A	8/30/2012

RECEIVED: Aug. 30, 2012

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506510000

API: 43047506510000
Well Name: NBU 1022-7N4S
Location: 0097 FSL 1938 FEL QTR SWSE SEC 07 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Danielle Piernot **Date:** 8/30/2012
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED: Aug. 30, 2012

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

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 1022-7N4S

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

9. API NUMBER: 43047506510000

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

PHONE NUMBER: 720 929-6515 EXT

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0097 FSL 1938 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 07 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/31/2013	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: August 15, 2013

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Teena Paulo	720 929-6236	Staff Regulatory Specialist

SIGNATURE	DATE
N/A	8/13/2013

RECEIVED: Aug. 13, 2013

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506510000

API: 43047506510000
Well Name: NBU 1022-7N4S
Location: 0097 FSL 1938 FEL QTR SWSE SEC 07 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Teena Paulo **Date:** 8/13/2013
Title: Staff Regulatory Specialist **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED: Aug. 13, 2013

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 0466

SUNDRY NOTICES AND REPORTS ON WELLS

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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 1022-7N4S

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

9. API NUMBER: 43047506510000

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

PHONE NUMBER: 720 929-6100 EXT

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0097 FSL 1938 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 07 Township: 10.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 8/31/2014	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

Approved by the Utah Division of Oil, Gas and Mining
Date: July 17, 2014
By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Teena Paulo	720 929-6236	Staff Regulatory Specialist
SIGNATURE N/A		**DATE** 7/16/2014

RECEIVED: Jul. 16, 2014

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047506510000

API: 43047506510000
Well Name: NBU 1022-7N4S
Location: 0097 FSL 1938 FEL QTR SWSE SEC 07 TWNP 100S RNG 220E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 8/31/2009

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- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Teena Paulo **Date:** 7/16/2014
Title: Staff Regulatory Specialist **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

RECEIVED: Jul. 16, 2014

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Green River District
Vernal Field Office
170 South 500 East
Vernal, UT 84078
http://www.blm.gov/ut/st/en/fo/vernal.html

JUL 15 2015

IN REPLY REFER TO:
3160 (UTG011)

Ashley Cocciolone
Kerr McGee Oil & Gas Onshore LP
1099 18th Street, Suite 600
Denver, CO 80202

RECEIVED
AUG 03 2015
DIV. OF OIL, GAS & MINING

Dear Ashley:

The referenced Applications for Permit to Drill (APD) have expired. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced applications has expired. If you intend to drill at these locations in the future, a new Application for Permit to Drill must be submitted.

43-047

Lease	Well		Aliquot	Sec., T., R.	Date Rec'd	Date Exp'd
UTU-0144867	NBU 920-20C	40536	NENW	Sec. 20-T9S-R20E	2/17/2009	6/21/2015
UTU-0144867	NBU 920-20F	50188	SENW	Sec. 29-T9S-R20E	2/17/2009	6/21/2015
UTU-466	NBU 1022-7N1S	50650	SWSE	Sec. 7-T10S-R22E	8/14/2009	6/9/2015
UTU-466	NBU 1022-7N4S	50651	SWSE	Sec. 7-T10S-R22E	8/17/2009	6/9/2015
UTU-466	NBU 1022-7O4AS	50652	SWSE	Sec. 7-T10S-R22E	8/17/2009	6/9/2015
UTU-466	NBU 1022-7O4DS	50653	SWSE	Sec. 7-T10S-R22E	8/17/2009	6/9/2015
UTU-60747	Archee 1-228	34737	Lot 1	Sec. 1-T9S-R20E	9/20/2002	2/10/2005

This office requires a letter confirming that no surface disturbance has been made for these drill sites. Any surface disturbance associated with the approved location of these wells is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

If you have any questions regarding this matter, please contact Robin R. Hansen at (435) 781-3428.

Sincerely,

/s/ Jerry Kenczka

Jerry Kenczka
Assistant Field Manager
Lands & Mineral Resources

cc: UDOGM

bcc: Well File
I&E Asst.

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

October 29, 2015

Kerr-McGee Oil & Gas Onshore, LP.
1099 18th Street, Suite 600
Denver, CO 80217

Re: APDs Rescinded for Kerr-McGee Oil & Gas Onshore, LP, Uintah County

Ladies and Gentlemen:

Enclosed find the list of APDs that is being rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded as of October 29, 2015.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal

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

UTAH DNR OIL, GAS & MINING

43-047-50650	NBU 1022-7N1S
43-047-50651	NBU 1022-7N4S
43-047-50652	NBU 1022-7O4AS
43-047-50653	NBU 1022-7O4DS