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
Bonanza 1023-6P1S

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

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 38419

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	2060 FSL 958 FEL	NESE	6	10.0 S	23.0 E	S
Top of Uppermost Producing Zone	1070 FSL 125 FEL	SESE	6	10.0 S	23.0 E	S
At Total Depth	1070 FSL 125 FEL	SESE	6	10.0 S	23.0 E	S

21. COUNTY
UINTAH

22. DISTANCE TO NEAREST LEASE LINE (Feet)
125

23. NUMBER OF ACRES IN DRILLING UNIT
516

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
510

26. PROPOSED DEPTH
MD: 8615 TVD: 8300

27. ELEVATION - GROUND LEVEL
5184

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** 06/02/2009	**EMAIL** danielle.piernot@anadarko.com

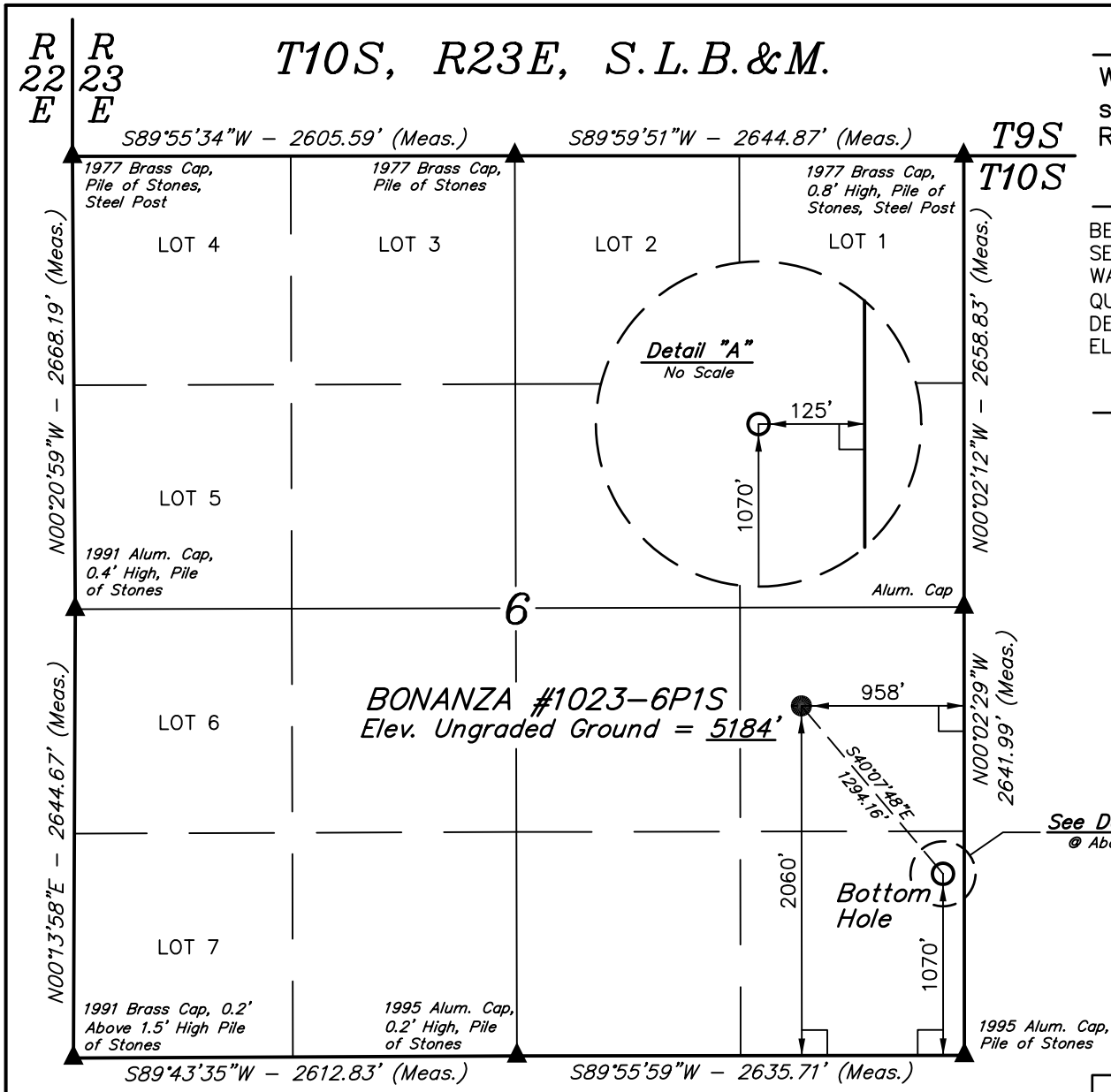
API NUMBER ASSIGNED
43047504600000

APPROVAL

Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	8615		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	8615	11.6			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2100		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2100	36.0			



Kerr–McGee Oil & Gas Onshore LP

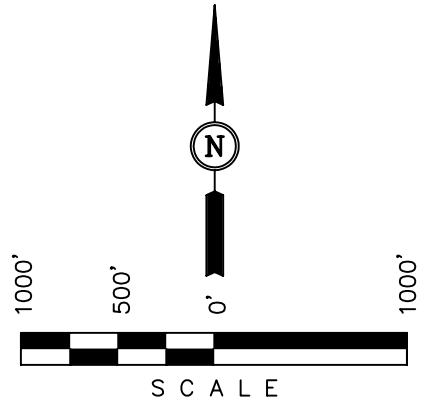
Well location, BONANZA #1023–6P1S, located as shown in the NE 1/4 SE 1/4 of Section 6, T10S, R23E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 58 EAM (1965) LOCATED IN THE NE 1/4 OF SECTION 30, T9S, R23E, S.L.B.&M. TAKEN FROM THE RED WASH SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5132 FEET.

BASIS OF BEARINGS

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



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
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR REGISTRATION NO. 161319 ROBERT L. KAY STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°58'25.07" (39.973631)	LATITUDE = 39°58'34.85" (39.976347)
LONGITUDE = 109°21'38.04" (109.360567)	LONGITUDE = 109°21'48.75" (109.363542)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 39°58'25.19" (39.973664)	LATITUDE = 39°58'34.97" (39.976381)
LONGITUDE = 109°21'35.59" (109.359886)	LONGITUDE = 109°21'46.30" (109.362861)

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

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	10–16–08	10–28–08
PARTY: L.K. C.K. C.C.	REFERENCES: G.L.O. PLAT	
WEATHER: COOL	FILE: Kerr–McGee Oil & Gas Onshore LP	

'API Well No: 43047504600000'

'APIWellNo:43047504600000'

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
Bonanza 1023-6I Pad
Bonanza 1023-6P1S

Bonanza 1023-6P1S

Plan: PLAN #2

Standard Planning Report

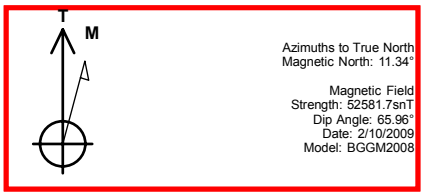
11 February, 2009

'APIWellNo:43047504600000'

Anadarko E&P Company LP

Bonanza 1023-6P1S
UINTAH COUNTY, UTAH (nad 27)
SECTION 6 T10S R23E
2078' FSL, 967' FEL
39° 58' 34.972 N
109° 21' 46.300 W

Weatherford



WELL DETAILS: Bonanza 1023-6P1S

Ground Level: 5181.00

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.00	0.00	14521654.53	2099079.99	39° 58' 34.972 N	109° 21' 46.300 W	

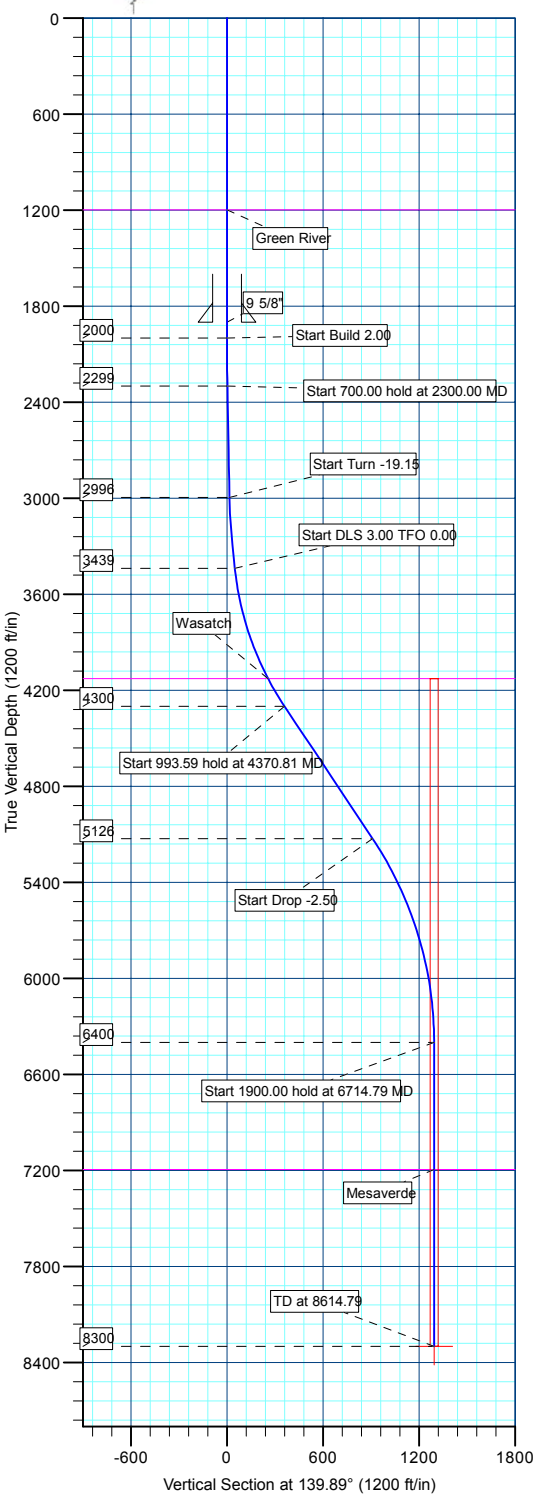
CASING DETAILS

TVD	MD	Name	Size
1900.00	1900.00	9 5/8"	9.62

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
2300.00	6.00	220.00	2299.45	-12.02	-10.09	2.00	220.00	2.69	
3000.00	6.00	220.00	2995.62	-68.07	-57.12	0.00	0.00	15.26	
3445.48	6.00	134.69	3438.66	-110.41	-55.16	2.00	-90.00	48.90	
4370.81	33.76	134.69	4300.35	-329.53	166.37	3.00	0.00	359.20	
5364.40	33.76	134.69	5126.40	-717.81	558.93	0.00	0.00	909.08	
6714.79	0.00	0.00	6400.00	-989.58	833.69	2.50	180.00	1293.95	
8614.79	0.00	0.00	8300.00	-989.58	833.69	0.00	0.00	1293.95	PBHL_Bonanza 1023-6P1S

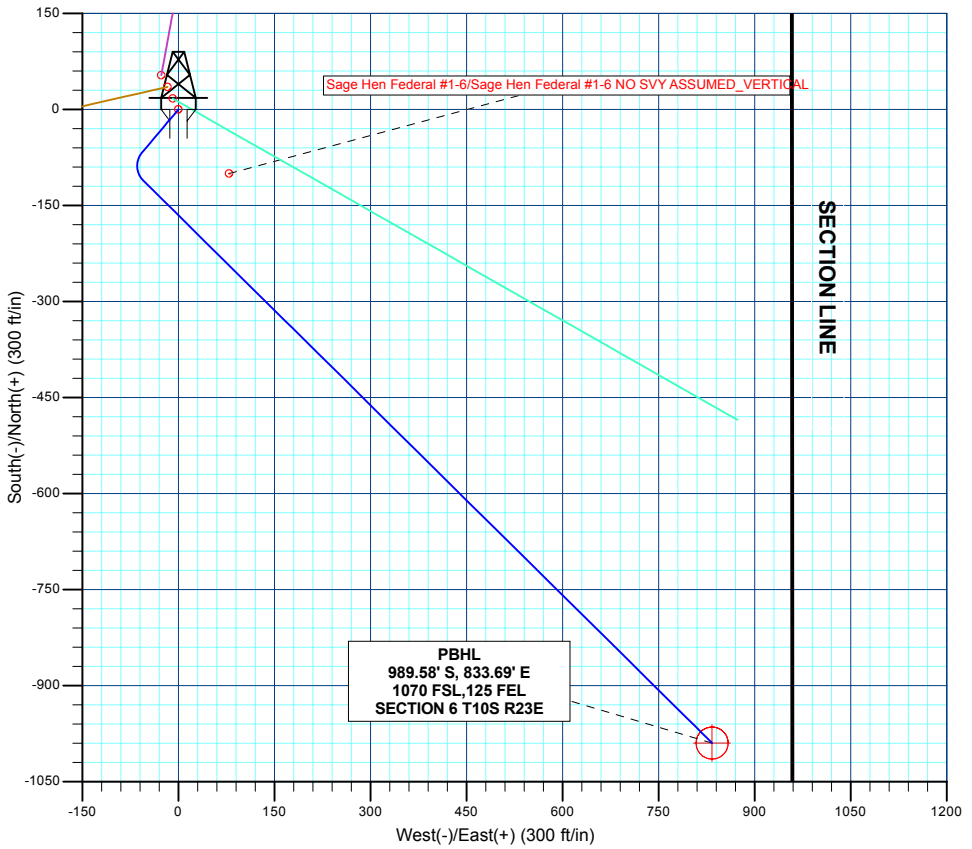
WELL @ 5199.00ft (Original Well Elev)
GRD ELEV: 5181.00



WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8300.00	-989.58	833.69	39° 58' 25.190 N	109° 21' 35.590 W	Circle (Radius: 25.00)

ANTICOLLISION NOTE: DUE TO NOT HAVING ANY SURVEYS FOR THE EXISTING WELL, IT WAS ASSUMED VERTICAL TO 10000' TVD WITH AN UNKNOWN TOOL CODE. PLEASE ADHERE TO PLAN AS THE WELLBORE DIRECTION & INCLINATION ARE UNKNOWN.



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1198.00	1198.00	Green River
4127.00	4169.03	Wasatch
7195.00	7509.79	Mesaverde

Plan: PLAN #2 (Bonanza 1023-6P1S/Bonanza 1023-6P1S)

Created By: Robert H. Scott

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site:	Bonanza 1023-6I Pad	**North Reference:**	True
Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Bonanza 1023-6P1S		
Design:	PLAN #2		

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 Bonanza 1023-6I Pad, SECTION 6 T10S R23E

Site Position:		**Northing:**	14,521,707.57 ft	**Latitude:**	39° 58' 35.501 N
From:	Lat/Long	**Easting:**	2,099,052.39 ft	**Longitude:**	109° 21' 46.642 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.05 °

Well Bonanza 1023-6P1S

Well Position	**+N/-S**	-53.54 ft	**Northing:**	14,521,654.53 ft	**Latitude:**	39° 58' 34.972 N
	+E/-W	26.62 ft	**Easting:**	2,099,079.99 ft	**Longitude:**	109° 21' 46.300 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,181.00 ft

Wellbore Bonanza 1023-6P1S

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2008	2/10/2009	11.34	65.96	52,582

Design PLAN #2

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	139.89

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	6.00	220.00	2,299.45	-12.02	-10.09	2.00	2.00	0.00	220.00	
3,000.00	6.00	220.00	2,995.62	-68.07	-57.12	0.00	0.00	0.00	0.00	
3,445.48	6.00	134.69	3,438.66	-110.41	-55.16	2.00	0.00	-19.15	-90.00	
4,370.81	33.76	134.69	4,300.35	-329.53	166.37	3.00	3.00	0.00	0.00	
5,364.40	33.76	134.69	5,126.40	-717.81	558.93	0.00	0.00	0.00	0.00	
6,714.79	0.00	0.00	6,400.00	-989.58	833.69	2.50	-2.50	0.00	180.00	
8,614.79	0.00	0.00	8,300.00	-989.58	833.69	0.00	0.00	0.00	0.00	PBHL_Bonanza 10

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site:	Bonanza 1023-6I Pad	**North Reference:**	True
Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Bonanza 1023-6P1S		
Design:	PLAN #2		

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 2.00									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	2.00	220.00	2,099.98	-1.34	-1.12	0.30	2.00	2.00	0.00
2,200.00	4.00	220.00	2,199.84	-5.35	-4.49	1.20	2.00	2.00	0.00
Start 700.00 hold at 2300.00 MD									
2,300.00	6.00	220.00	2,299.45	-12.02	-10.09	2.69	2.00	2.00	0.00
2,400.00	6.00	220.00	2,398.90	-20.03	-16.81	4.49	0.00	0.00	0.00
2,500.00	6.00	220.00	2,498.36	-28.04	-23.53	6.28	0.00	0.00	0.00
2,600.00	6.00	220.00	2,597.81	-36.04	-30.24	8.08	0.00	0.00	0.00
2,700.00	6.00	220.00	2,697.26	-44.05	-36.96	9.87	0.00	0.00	0.00
2,800.00	6.00	220.00	2,796.71	-52.06	-43.68	11.67	0.00	0.00	0.00
2,900.00	6.00	220.00	2,896.17	-60.07	-50.40	13.46	0.00	0.00	0.00
Start Turn -19.15									
3,000.00	6.00	220.00	2,995.62	-68.07	-57.12	15.26	0.00	0.00	0.00
3,100.00	6.00	200.85	3,095.07	-77.04	-62.39	18.72	1.99	0.00	-19.15
3,200.00	6.00	181.70	3,194.52	-87.25	-64.42	25.22	1.99	0.00	-19.15
3,300.00	6.00	162.55	3,293.97	-97.55	-63.00	34.02	1.99	0.00	-19.15
3,400.00	6.00	143.40	3,393.43	-106.82	-58.27	44.15	1.99	0.00	-19.15
Start DLS 3.00 TFO 0.00									
3,445.48	6.00	134.69	3,438.66	-110.41	-55.16	48.90	2.00	0.00	-19.15
3,500.00	7.64	134.69	3,492.79	-114.96	-50.56	55.35	3.00	3.00	0.00
3,600.00	10.64	134.69	3,591.51	-126.13	-39.27	71.16	3.00	3.00	0.00
3,700.00	13.64	134.69	3,689.26	-140.91	-24.33	92.09	3.00	3.00	0.00
3,800.00	16.64	134.69	3,785.78	-159.27	-5.76	118.09	3.00	3.00	0.00
3,900.00	19.64	134.69	3,880.81	-181.15	16.36	149.08	3.00	3.00	0.00
4,000.00	22.64	134.69	3,974.07	-206.51	42.00	184.99	3.00	3.00	0.00
4,100.00	25.64	134.69	4,065.32	-235.26	71.06	225.71	3.00	3.00	0.00
Wasatch									
4,169.03	27.71	134.69	4,127.00	-257.05	93.09	256.56	3.00	3.00	0.00
4,200.00	28.64	134.69	4,154.30	-267.33	103.49	271.12	3.00	3.00	0.00
4,300.00	31.64	134.69	4,240.77	-302.63	139.18	321.11	3.00	3.00	0.00
Start 993.59 hold at 4370.81 MD									
4,370.81	33.76	134.69	4,300.35	-329.53	166.37	359.20	3.00	3.00	0.00
4,400.00	33.76	134.69	4,324.63	-340.93	177.90	375.36	0.00	0.00	0.00
4,500.00	33.76	134.69	4,407.76	-380.01	217.41	430.70	0.00	0.00	0.00
4,600.00	33.76	134.69	4,490.90	-419.09	256.92	486.05	0.00	0.00	0.00
4,700.00	33.76	134.69	4,574.04	-458.17	296.43	541.39	0.00	0.00	0.00
4,800.00	33.76	134.69	4,657.18	-497.25	335.94	596.73	0.00	0.00	0.00
4,900.00	33.76	134.69	4,740.31	-536.33	375.45	652.07	0.00	0.00	0.00
5,000.00	33.76	134.69	4,823.45	-575.41	414.96	707.41	0.00	0.00	0.00
5,100.00	33.76	134.69	4,906.59	-614.49	454.47	762.76	0.00	0.00	0.00
5,200.00	33.76	134.69	4,989.73	-653.56	493.98	818.10	0.00	0.00	0.00
5,300.00	33.76	134.69	5,072.86	-692.64	533.49	873.44	0.00	0.00	0.00
Start Drop -2.50									
5,364.40	33.76	134.69	5,126.40	-717.81	558.93	909.08	0.00	0.00	0.00
5,400.00	32.87	134.69	5,156.15	-731.56	572.83	928.55	2.50	-2.50	0.00
5,500.00	30.37	134.69	5,241.30	-768.43	610.11	980.76	2.50	-2.50	0.00
5,600.00	27.87	134.69	5,328.66	-802.64	644.70	1,029.22	2.50	-2.50	0.00
5,700.00	25.37	134.69	5,418.05	-834.15	676.56	1,073.84	2.50	-2.50	0.00
5,800.00	22.87	134.69	5,509.31	-862.88	705.61	1,114.53	2.50	-2.50	0.00
5,900.00	20.37	134.69	5,602.27	-888.79	731.80	1,151.22	2.50	-2.50	0.00
6,000.00	17.87	134.69	5,696.74	-911.82	755.09	1,183.84	2.50	-2.50	0.00
6,100.00	15.37	134.69	5,792.56	-931.94	775.42	1,212.32	2.50	-2.50	0.00

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site:	Bonanza 1023-6I Pad	**North Reference:**	True
Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Bonanza 1023-6P1S		
Design:	PLAN #2		

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)
6,200.00	12.87	134.69	5,889.53	-949.09	792.76	1,236.61	2.50	-2.50	0.00
6,300.00	10.37	134.69	5,987.47	-963.25	807.08	1,256.67	2.50	-2.50	0.00
6,400.00	7.87	134.69	6,086.20	-974.40	818.35	1,272.45	2.50	-2.50	0.00
6,500.00	5.37	134.69	6,185.53	-982.50	826.54	1,283.93	2.50	-2.50	0.00
6,600.00	2.87	134.69	6,285.26	-987.55	831.65	1,291.09	2.50	-2.50	0.00
6,700.00	0.37	134.69	6,385.21	-989.54	833.66	1,293.90	2.50	-2.50	0.00
Start 1900.00 hold at 6714.79 MD									
6,714.79	0.00	0.00	6,400.00	-989.58	833.69	1,293.95	2.50	-2.50	0.00
6,800.00	0.00	0.00	6,485.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
6,900.00	0.00	0.00	6,585.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,000.00	0.00	0.00	6,685.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,100.00	0.00	0.00	6,785.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,200.00	0.00	0.00	6,885.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,300.00	0.00	0.00	6,985.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,400.00	0.00	0.00	7,085.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,500.00	0.00	0.00	7,185.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
Mesaverde									
7,509.79	0.00	0.00	7,195.00	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,600.00	0.00	0.00	7,285.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,700.00	0.00	0.00	7,385.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,800.00	0.00	0.00	7,485.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
7,900.00	0.00	0.00	7,585.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,000.00	0.00	0.00	7,685.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,100.00	0.00	0.00	7,785.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,200.00	0.00	0.00	7,885.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,300.00	0.00	0.00	7,985.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,400.00	0.00	0.00	8,085.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,500.00	0.00	0.00	8,185.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
8,600.00	0.00	0.00	8,285.21	-989.58	833.69	1,293.95	0.00	0.00	0.00
TD at 8614.79 - PBHL_Bonanza 1023-6P1S									
8,614.79	0.00	0.00	8,300.00	-989.58	833.69	1,293.95	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
PBHL_Bonanza 1023 - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,300.00	-989.58	833.69	14,520,680.43	2,099,931.71	39° 58' 25.190 N	109° 21' 35.590 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,900.00	1,900.00	9 5/8"	9.62	12.25

Weatherford International Ltd.

Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site:	Bonanza 1023-6I Pad	**North Reference:**	True
Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Bonanza 1023-6P1S		
Design:	PLAN #2		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,198.00	1,198.00	Green River			
4,169.03	4,127.00	Wasatch			
7,509.79	7,195.00	Mesaverde			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,000.00	2,000.00	0.00	0.00	Start Build 2.00
2,300.00	2,299.45	-12.02	-10.09	Start 700.00 hold at 2300.00 MD
3,000.00	2,995.62	-68.07	-57.12	Start Turn -19.15
3,445.48	3,438.66	-110.41	-55.16	Start DLS 3.00 TFO 0.00
4,370.81	4,300.35	-329.53	166.37	Start 993.59 hold at 4370.81 MD
5,364.40	5,126.40	-717.81	558.93	Start Drop -2.50
6,714.79	6,400.00	-989.58	833.69	Start 1900.00 hold at 6714.79 MD
8,614.79	8,300.00	-989.58	833.69	TD at 8614.79

'APIWellNo:43047504600000'

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
Bonanza 1023-6I Pad
Bonanza 1023-6P1S

Bonanza 1023-6P1S
PLAN #2

Anticollision Report

11 February, 2009

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Reference PLAN #2

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

Survey Tool Program **Date** 2/11/2009

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,614.79	PLAN #2 (Bonanza 1023-6P1S)	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
Bonanza 1023-6I Pad						
Bonanza 1023-6I2S - Bonanza 1023-6I2S - Design #1	2,000.00	2,000.00	59.79	51.07	6.853	CC, ES
Bonanza 1023-6I2S - Bonanza 1023-6I2S - Design #1	2,100.00	2,098.25	61.92	52.77	6.771	SF
Bonanza 1023-6I4S - Bonanza 1023-6I4S - PLAN #2	2,157.81	2,158.63	17.21	7.87	1.843	CC, ES, SF
Bonanza 1023-6J3S - Bonanza 1023-6J3S - Design #1	2,000.00	2,000.00	39.25	30.52	4.498	CC, ES
Bonanza 1023-6J3S - Bonanza 1023-6J3S - Design #1	2,100.00	2,099.50	40.56	31.43	4.441	SF
Sage Hen Federal #1-6 - Sage Hen Federal #1-6_ASSUI	3,862.61	3,845.47	101.84	16.73	1.197	Level 2, CC
Sage Hen Federal #1-6 - Sage Hen Federal #1-6_ASSUI	3,900.00	3,880.81	102.57	16.70	1.195	Level 2, ES, SF

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6I2S - Bonanza 1023-6I2S - 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	-26.44	53.54	-26.62	59.79				
100.00	100.00	100.00	100.00	0.09	0.09	-26.44	53.54	-26.62	59.79	59.61	0.18	324.421	
200.00	200.00	200.00	200.00	0.32	0.32	-26.44	53.54	-26.62	59.79	59.16	0.63	94.335	
300.00	300.00	300.00	300.00	0.54	0.54	-26.44	53.54	-26.62	59.79	58.71	1.08	55.192	
400.00	400.00	400.00	400.00	0.77	0.77	-26.44	53.54	-26.62	59.79	58.26	1.53	39.007	
500.00	500.00	500.00	500.00	0.99	0.99	-26.44	53.54	-26.62	59.79	57.81	1.98	30.162	
600.00	600.00	600.00	600.00	1.22	1.22	-26.44	53.54	-26.62	59.79	57.36	2.43	24.586	
700.00	700.00	700.00	700.00	1.44	1.44	-26.44	53.54	-26.62	59.79	56.91	2.88	20.751	
800.00	800.00	800.00	800.00	1.67	1.67	-26.44	53.54	-26.62	59.79	56.46	3.33	17.950	
900.00	900.00	900.00	900.00	1.89	1.89	-26.44	53.54	-26.62	59.79	56.01	3.78	15.816	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-26.44	53.54	-26.62	59.79	55.56	4.23	14.135	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-26.44	53.54	-26.62	59.79	55.11	4.68	12.777	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-26.44	53.54	-26.62	59.79	54.66	5.13	11.658	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-26.44	53.54	-26.62	59.79	54.21	5.58	10.718	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-26.44	53.54	-26.62	59.79	53.77	6.03	9.919	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	-26.44	53.54	-26.62	59.79	53.32	6.48	9.231	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-26.44	53.54	-26.62	59.79	52.87	6.93	8.632	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	-26.44	53.54	-26.62	59.79	52.42	7.38	8.106	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-26.44	53.54	-26.62	59.79	51.97	7.83	7.640	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	4.14	-26.44	53.54	-26.62	59.79	51.52	8.28	7.225	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	-26.44	53.54	-26.62	59.79	51.07	8.73	6.853	CC, ES

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 Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6I2S - Bonanza 1023-6I2S - 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
2,100.00	2,099.98	2,098.25	2,098.23	4.56	4.58	115.92	55.20	-26.31	61.92	52.77	9.14	6.771	SF
2,200.00	2,199.84	2,195.84	2,195.69	4.74	4.80	122.01	60.12	-25.40	68.85	59.31	9.54	7.217	
2,300.00	2,299.45	2,292.95	2,292.46	4.93	5.02	129.64	68.09	-23.93	81.60	71.67	9.94	8.211	
2,400.00	2,398.90	2,391.16	2,390.25	5.13	5.25	136.23	76.91	-22.30	97.48	87.14	10.35	9.423	
2,500.00	2,498.36	2,489.36	2,488.05	5.33	5.47	140.94	85.74	-20.67	114.28	103.52	10.76	10.623	
2,600.00	2,597.81	2,587.57	2,585.84	5.55	5.70	144.44	94.56	-19.04	131.63	120.45	11.17	11.779	
2,700.00	2,697.26	2,685.77	2,683.64	5.77	5.94	147.12	103.38	-17.40	149.35	137.75	11.59	12.881	
2,800.00	2,796.71	2,783.98	2,781.43	6.00	6.18	149.22	112.20	-15.77	167.31	155.30	12.02	13.922	
2,900.00	2,896.17	2,882.18	2,879.23	6.24	6.42	150.92	121.02	-14.14	185.46	173.01	12.44	14.902	
3,000.00	2,995.62	2,980.39	2,977.02	6.48	6.67	152.32	129.84	-12.51	203.73	190.86	12.87	15.825	
3,100.00	3,095.07	3,078.53	3,074.75	6.72	6.91	172.47	138.66	-10.88	222.70	209.41	13.29	16.760	
3,200.00	3,194.52	3,176.62	3,172.43	6.94	7.16	-168.30	147.47	-9.25	242.13	228.42	13.71	17.662	
3,300.00	3,293.97	3,274.75	3,270.15	7.16	7.41	-149.83	156.29	-7.62	260.90	246.76	14.15	18.443	
3,400.00	3,393.43	3,373.03	3,368.02	7.38	7.66	-131.95	165.11	-5.99	278.08	263.49	14.59	19.054	
3,445.48	3,438.66	3,417.81	3,412.61	7.48	7.77	-123.96	169.14	-5.24	285.16	270.36	14.80	19.266	
3,500.00	3,492.79	3,471.38	3,465.96	7.60	7.91	-124.79	173.95	-4.35	293.81	278.79	15.02	19.564	
3,600.00	3,591.51	3,568.87	3,563.04	7.81	8.16	-126.68	182.71	-2.73	312.29	296.89	15.39	20.288	
3,700.00	3,689.26	3,665.65	3,659.42	8.06	8.41	-128.93	191.39	-1.13	334.44	318.70	15.75	21.236	
3,800.00	3,785.78	3,766.73	3,760.16	8.34	8.63	-131.59	199.45	0.36	359.68	343.63	16.05	22.408	
3,900.00	3,880.81	3,866.85	3,860.08	8.67	8.82	-134.41	205.70	1.52	387.69	371.37	16.32	23.749	
4,000.00	3,974.07	3,965.83	3,958.95	9.08	9.01	-137.28	210.19	2.35	418.85	402.28	16.58	25.267	
4,100.00	4,065.32	4,063.45	4,056.53	9.57	9.19	-140.13	212.98	2.86	453.48	436.67	16.81	26.980	
4,200.00	4,154.30	4,159.53	4,152.60	10.16	9.36	-142.88	214.12	3.08	491.81	474.80	17.02	28.903	
4,300.00	4,240.77	4,247.70	4,240.77	10.87	9.54	-145.26	214.16	3.08	534.41	517.18	17.23	31.017	
4,370.81	4,300.35	4,307.28	4,300.35	11.44	9.66	-146.75	214.16	3.08	567.68	550.30	17.38	32.657	
4,400.00	4,324.63	4,331.55	4,324.63	11.69	9.72	-147.58	214.16	3.08	581.98	564.47	17.51	33.241	
4,500.00	4,407.76	4,414.69	4,407.76	12.60	9.89	-150.18	214.16	3.08	631.65	613.70	17.95	35.194	
4,600.00	4,490.90	4,497.83	4,490.90	13.55	10.07	-152.42	214.16	3.08	682.24	663.83	18.41	37.068	
4,700.00	4,574.04	4,580.97	4,574.04	14.54	10.25	-154.37	214.16	3.08	733.54	714.67	18.88	38.861	
4,800.00	4,657.18	4,664.10	4,657.18	15.57	10.43	-156.08	214.16	3.08	785.43	766.07	19.36	40.574	
4,900.00	4,740.31	4,747.24	4,740.31	16.62	10.61	-157.59	214.16	3.08	837.79	817.94	19.85	42.207	
5,000.00	4,823.45	4,830.38	4,823.45	17.70	10.78	-158.92	214.16	3.08	890.54	870.19	20.35	43.763	
5,100.00	4,906.59	4,913.52	4,906.59	18.79	10.96	-160.12	214.16	3.08	943.61	922.76	20.86	45.245	
5,200.00	4,989.73	4,996.65	4,989.73	19.90	11.14	-161.18	214.16	3.08	996.96	975.59	21.37	46.654	
5,300.00	5,072.86	5,079.79	5,072.86	21.02	11.32	-162.15	214.16	3.08	1,050.54	1,028.65	21.89	47.994	
5,364.40	5,126.40	5,133.33	5,126.40	21.74	11.44	-162.72	214.16	3.08	1,085.15	1,062.92	22.23	48.823	
5,400.00	5,156.15	5,163.08	5,156.15	22.11	11.50	-163.18	214.16	3.08	1,104.09	1,081.59	22.50	49.072	
5,500.00	5,241.30	5,248.23	5,241.30	23.02	11.69	-164.33	214.16	3.08	1,154.97	1,131.72	23.25	49.668	
5,600.00	5,328.66	5,335.58	5,328.66	23.87	11.88	-165.29	214.16	3.08	1,202.32	1,178.32	24.00	50.099	
5,700.00	5,418.05	5,424.98	5,418.05	24.67	12.07	-166.11	214.16	3.08	1,246.00	1,221.28	24.73	50.394	
5,800.00	5,509.31	5,516.24	5,509.31	25.39	12.27	-166.80	214.16	3.08	1,285.91	1,260.49	25.43	50.576	
5,900.00	5,602.27	5,609.20	5,602.27	26.06	12.47	-167.37	214.16	3.08	1,321.94	1,295.85	26.09	50.663	
6,000.00	5,696.74	5,703.67	5,696.74	26.65	12.68	-167.85	214.16	3.08	1,354.01	1,327.29	26.72	50.669	
6,100.00	5,792.56	5,799.49	5,792.56	27.17	12.88	-168.25	214.16	3.08	1,382.04	1,354.73	27.31	50.605	
6,200.00	5,889.53	5,896.46	5,889.53	27.63	13.10	-168.58	214.16	3.08	1,405.97	1,378.12	27.85	50.478	
6,300.00	5,987.47	5,994.40	5,987.47	28.02	13.31	-168.84	214.16	3.08	1,425.73	1,397.39	28.35	50.295	
6,400.00	6,086.20	6,093.13	6,086.20	28.34	13.53	-169.03	214.16	3.08	1,441.29	1,412.50	28.79	50.060	
6,500.00	6,185.53	6,192.45	6,185.53	28.59	13.74	-169.17	214.16	3.08	1,452.62	1,423.43	29.18	49.775	
6,600.00	6,285.26	6,292.19	6,285.26	28.79	13.96	-169.26	214.16	3.08	1,459.67	1,430.15	29.52	49.443	
6,700.00	6,385.21	6,392.14	6,385.21	28.92	14.18	-169.29	214.16	3.08	1,462.45	1,432.64	29.81	49.063	
6,714.79	6,400.00	6,406.93	6,400.00	28.93	14.21	-34.61	214.16	3.08	1,462.50	1,432.65	29.84	49.004	
6,800.00	6,485.21	6,492.14	6,485.21	29.02	14.40	-34.61	214.16	3.08	1,462.50	1,432.32	30.18	48.462	

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 Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6I2S - Bonanza 1023-6I2S - 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
6,900.00	6,585.21	6,592.14	6,585.21	29.12	14.62	-34.61	214.16	3.08	1,462.50	1,431.92	30.58	47.832	
7,000.00	6,685.21	6,692.14	6,685.21	29.22	14.84	-34.61	214.16	3.08	1,462.50	1,431.52	30.97	47.217	
7,100.00	6,785.21	6,792.14	6,785.21	29.32	15.06	-34.61	214.16	3.08	1,462.50	1,431.12	31.37	46.615	
7,200.00	6,885.21	6,892.14	6,885.21	29.43	15.28	-34.61	214.16	3.08	1,462.50	1,430.72	31.78	46.026	
7,300.00	6,985.21	6,992.14	6,985.21	29.53	15.50	-34.61	214.16	3.08	1,462.50	1,430.32	32.18	45.450	
7,400.00	7,085.21	7,092.14	7,085.21	29.64	15.72	-34.61	214.16	3.08	1,462.50	1,429.92	32.58	44.887	
7,500.00	7,185.21	7,192.14	7,185.21	29.75	15.94	-34.61	214.16	3.08	1,462.50	1,429.51	32.99	44.337	
7,600.00	7,285.21	7,292.14	7,285.21	29.86	16.16	-34.61	214.16	3.08	1,462.50	1,429.11	33.39	43.798	
7,700.00	7,385.21	7,392.14	7,385.21	29.97	16.38	-34.61	214.16	3.08	1,462.50	1,428.70	33.80	43.271	
7,800.00	7,485.21	7,492.14	7,485.21	30.08	16.60	-34.61	214.16	3.08	1,462.50	1,428.29	34.21	42.755	
7,900.00	7,585.21	7,592.14	7,585.21	30.19	16.82	-34.61	214.16	3.08	1,462.50	1,427.88	34.62	42.250	
8,000.00	7,685.21	7,692.14	7,685.21	30.31	17.04	-34.61	214.16	3.08	1,462.50	1,427.47	35.02	41.756	
8,100.00	7,785.21	7,792.14	7,785.21	30.42	17.26	-34.61	214.16	3.08	1,462.50	1,427.06	35.44	41.272	
8,200.00	7,885.21	7,892.14	7,885.21	30.54	17.49	-34.61	214.16	3.08	1,462.50	1,426.65	35.85	40.799	
8,300.00	7,985.21	7,992.14	7,985.21	30.66	17.71	-34.61	214.16	3.08	1,462.50	1,426.24	36.26	40.335	
8,400.00	8,085.21	8,092.14	8,085.21	30.78	17.93	-34.61	214.16	3.08	1,462.50	1,425.83	36.67	39.880	
8,500.00	8,185.21	8,192.14	8,185.21	30.90	18.15	-34.61	214.16	3.08	1,462.50	1,425.41	37.09	39.435	
8,600.00	8,285.21	8,292.14	8,285.21	31.02	18.37	-34.61	214.16	3.08	1,462.50	1,425.00	37.50	38.999	
8,614.79	8,300.00	8,306.93	8,300.00	31.04	18.40	-34.61	214.16	3.08	1,462.50	1,424.94	37.56	38.935	

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6I4S - Bonanza 1023-6I4S - PLAN #2

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	-26.91	17.12	-8.69	19.20				
100.00	100.00	100.00	100.00	0.09	0.09	-26.91	17.12	-8.69	19.20	19.01	0.18	104.154	
200.00	200.00	200.00	200.00	0.32	0.32	-26.91	17.12	-8.69	19.20	18.56	0.63	30.286	
300.00	300.00	300.00	300.00	0.54	0.54	-26.91	17.12	-8.69	19.20	18.11	1.08	17.719	
400.00	400.00	400.00	400.00	0.77	0.77	-26.91	17.12	-8.69	19.20	17.66	1.53	12.523	
500.00	500.00	500.00	500.00	0.99	0.99	-26.91	17.12	-8.69	19.20	17.21	1.98	9.683	
600.00	600.00	600.00	600.00	1.22	1.22	-26.91	17.12	-8.69	19.20	16.76	2.43	7.893	
700.00	700.00	700.00	700.00	1.44	1.44	-26.91	17.12	-8.69	19.20	16.31	2.88	6.662	
800.00	800.00	800.00	800.00	1.67	1.67	-26.91	17.12	-8.69	19.20	15.87	3.33	5.763	
900.00	900.00	900.00	900.00	1.89	1.89	-26.91	17.12	-8.69	19.20	15.42	3.78	5.078	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-26.91	17.12	-8.69	19.20	14.97	4.23	4.538	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-26.91	17.12	-8.69	19.20	14.52	4.68	4.102	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-26.91	17.12	-8.69	19.20	14.07	5.13	3.743	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-26.91	17.12	-8.69	19.20	13.62	5.58	3.441	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-26.91	17.12	-8.69	19.20	13.17	6.03	3.184	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	-26.91	17.12	-8.69	19.20	12.72	6.48	2.963	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-26.91	17.12	-8.69	19.20	12.27	6.93	2.771	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	-26.91	17.12	-8.69	19.20	11.82	7.38	2.602	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-26.91	17.12	-8.69	19.20	11.37	7.83	2.453	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	4.14	-26.91	17.12	-8.69	19.20	10.92	8.28	2.320	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	-26.91	17.12	-8.69	19.20	10.47	8.73	2.200	
2,100.00	2,099.98	2,100.72	2,100.67	4.56	4.57	123.00	15.81	-6.38	17.94	8.81	9.13	1.966	
2,157.81	2,157.73	2,158.63	2,158.45	4.67	4.68	139.47	13.86	-2.96	17.21	7.87	9.34	1.843	CC, ES, SF
2,200.00	2,199.84	2,200.65	2,200.28	4.74	4.76	156.00	11.91	0.47	17.96	8.47	9.48	1.893	
2,300.00	2,299.45	2,299.07	2,297.85	4.93	4.96	-168.88	5.56	11.62	27.99	18.15	9.84	2.844	
2,400.00	2,398.90	2,395.53	2,392.71	5.13	5.19	-150.75	-3.06	26.78	47.19	36.95	10.24	4.608	
2,500.00	2,498.36	2,489.80	2,484.45	5.33	5.45	-140.76	-13.77	45.61	71.94	61.29	10.65	6.753	
2,600.00	2,597.81	2,581.52	2,572.57	5.55	5.76	-134.41	-26.32	67.67	101.58	90.50	11.08	9.168	
2,700.00	2,697.26	2,670.38	2,656.70	5.77	6.12	-129.99	-40.47	92.53	135.75	124.23	11.52	11.787	
2,800.00	2,796.71	2,756.14	2,736.54	6.00	6.54	-126.72	-55.94	119.73	174.18	162.21	11.96	14.561	
2,900.00	2,896.17	2,838.65	2,811.96	6.24	7.02	-124.19	-72.48	148.80	216.63	204.21	12.41	17.453	
3,000.00	2,995.62	2,917.79	2,882.87	6.48	7.54	-122.18	-89.85	179.33	262.86	249.99	12.86	20.432	
3,100.00	3,095.07	3,000.00	2,954.93	6.72	8.17	-101.12	-109.41	213.71	311.32	297.97	13.35	23.322	
3,200.00	3,194.52	3,068.89	3,013.95	6.94	8.79	-80.97	-126.97	244.58	360.09	346.28	13.81	26.079	
3,300.00	3,293.97	3,141.71	3,074.92	7.16	9.50	-61.18	-146.67	279.20	409.26	394.98	14.29	28.646	
3,400.00	3,393.43	3,212.53	3,132.70	7.38	10.25	-41.65	-166.91	314.78	459.08	444.31	14.77	31.092	
3,445.48	3,438.66	3,243.98	3,157.87	7.48	10.62	-32.83	-176.23	331.17	482.11	467.12	14.99	32.166	
3,500.00	3,492.79	3,281.23	3,187.27	7.60	11.06	-31.67	-187.54	351.05	509.80	494.60	15.20	33.543	
3,600.00	3,591.51	3,354.35	3,243.76	7.81	11.98	-29.84	-210.50	391.39	559.93	544.32	15.61	35.880	
3,700.00	3,689.26	3,461.34	3,326.60	8.06	13.25	-28.30	-243.97	450.23	606.09	589.97	16.13	37.584	
3,800.00	3,785.78	3,587.32	3,427.90	8.34	14.64	-27.42	-281.00	515.31	643.75	627.01	16.75	38.442	
3,900.00	3,880.81	3,720.40	3,539.20	8.67	16.03	-27.20	-317.06	578.69	671.85	654.39	17.45	38.498	
4,000.00	3,974.07	3,858.42	3,658.90	9.08	17.36	-27.57	-351.01	638.38	689.84	671.60	18.25	37.810	
4,100.00	4,065.32	3,998.86	3,784.72	9.57	18.58	-28.51	-381.85	692.57	697.49	678.36	19.14	36.443	
4,200.00	4,154.30	4,139.00	3,913.84	10.16	19.63	-30.06	-408.76	739.88	694.85	674.70	20.15	34.479	
4,300.00	4,240.77	4,276.13	4,043.17	10.87	20.52	-32.27	-431.27	779.44	682.30	660.95	21.34	31.967	
4,370.81	4,300.35	4,370.05	4,133.21	11.44	21.04	-34.30	-444.46	802.62	667.81	645.47	22.34	29.899	
4,400.00	4,324.63	4,407.89	4,169.79	11.69	21.23	-35.12	-449.25	811.05	660.75	637.95	22.80	28.983	
4,500.00	4,407.76	4,534.32	4,293.06	12.60	21.78	-38.18	-463.10	835.40	634.01	609.53	24.48	25.903	
4,600.00	4,490.90	4,655.45	4,412.45	13.55	22.21	-41.68	-473.20	853.15	603.79	577.46	26.34	22.925	
4,700.00	4,574.04	4,770.99	4,527.17	14.54	22.51	-45.72	-479.91	864.94	570.85	542.45	28.40	20.100	
4,800.00	4,657.18	4,880.76	4,636.67	15.57	22.73	-50.36	-483.63	871.48	536.11	505.43	30.68	17.477	

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 Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6I4S - Bonanza 1023-6I4S - PLAN #2

Survey Program: 0-MWD

Offset Site Error: 0.00 ft

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	4,740.31	4,984.43	4,740.31	16.62	22.86	-55.67	-484.76	873.47	500.68	467.55	33.13	15.111	
5,000.00	4,823.45	5,067.57	4,823.45	17.70	22.93	-60.60	-484.76	873.47	467.38	431.93	35.45	13.183	
5,100.00	4,906.59	5,150.71	4,906.59	18.79	23.02	-66.05	-484.76	873.47	438.62	400.76	37.86	11.585	
5,200.00	4,989.73	5,233.85	4,989.73	19.90	23.10	-72.01	-484.76	873.47	415.34	375.08	40.26	10.316	
5,300.00	5,072.86	5,316.98	5,072.86	21.02	23.18	-78.40	-484.76	873.47	398.50	355.98	42.52	9.372	
5,364.40	5,126.40	5,370.53	5,126.40	21.74	23.24	-82.68	-484.76	873.47	391.46	347.62	43.84	8.929	
5,400.00	5,156.15	5,400.27	5,156.15	22.11	23.27	-85.01	-484.76	873.47	388.96	344.50	44.46	8.748	
5,476.02	5,220.68	5,464.80	5,220.68	22.80	23.33	-90.00	-484.76	873.47	386.88	341.34	45.54	8.496	
5,500.00	5,241.30	5,485.42	5,241.30	23.02	23.36	-91.56	-484.76	873.47	387.07	341.24	45.83	8.446	
5,600.00	5,328.66	5,572.78	5,328.66	23.87	23.45	-97.92	-484.76	873.47	391.64	344.90	46.74	8.378	
5,700.00	5,418.05	5,662.17	5,418.05	24.67	23.54	-103.87	-484.76	873.47	401.06	353.81	47.24	8.489	
5,800.00	5,509.31	5,753.43	5,509.31	25.39	23.64	-109.24	-484.76	873.47	413.71	366.30	47.41	8.726	
5,900.00	5,602.27	5,846.39	5,602.27	26.06	23.74	-113.96	-484.76	873.47	428.15	380.79	47.36	9.040	
6,000.00	5,696.74	5,940.87	5,696.74	26.65	23.85	-118.00	-484.76	873.47	443.17	395.98	47.18	9.393	
6,100.00	5,792.56	6,036.68	5,792.56	27.17	23.96	-121.38	-484.76	873.47	457.80	410.84	46.96	9.749	
6,200.00	5,889.53	6,133.65	5,889.53	27.63	24.07	-124.15	-484.76	873.47	471.29	424.55	46.74	10.083	
6,300.00	5,987.47	6,231.59	5,987.47	28.02	24.18	-126.34	-484.76	873.47	483.07	436.50	46.57	10.373	
6,400.00	6,086.20	6,330.32	6,086.20	28.34	24.30	-128.00	-484.76	873.47	492.73	446.27	46.46	10.606	
6,500.00	6,185.53	6,429.65	6,185.53	28.59	24.41	-129.18	-484.76	873.47	499.95	453.53	46.42	10.771	
6,600.00	6,285.26	6,529.38	6,285.26	28.79	24.53	-129.90	-484.76	873.47	504.53	458.07	46.45	10.861	
6,700.00	6,385.21	6,629.33	6,385.21	28.92	24.65	-130.18	-484.76	873.47	506.35	459.77	46.58	10.871	
6,714.79	6,400.00	6,644.12	6,400.00	28.93	24.67	4.51	-484.76	873.47	506.38	459.77	46.60	10.865	
6,800.00	6,485.21	6,729.33	6,485.21	29.02	24.78	4.51	-484.76	873.47	506.38	459.56	46.81	10.817	
6,900.00	6,585.21	6,829.33	6,585.21	29.12	24.90	4.51	-484.76	873.47	506.38	459.31	47.07	10.758	
7,000.00	6,685.21	6,929.33	6,685.21	29.22	25.03	4.51	-484.76	873.47	506.38	459.05	47.33	10.700	
7,100.00	6,785.21	7,029.33	6,785.21	29.32	25.16	4.51	-484.76	873.47	506.38	458.79	47.59	10.641	
7,200.00	6,885.21	7,129.33	6,885.21	29.43	25.28	4.51	-484.76	873.47	506.38	458.53	47.85	10.582	
7,300.00	6,985.21	7,229.33	6,985.21	29.53	25.41	4.51	-484.76	873.47	506.38	458.26	48.12	10.524	
7,400.00	7,085.21	7,329.33	7,085.21	29.64	25.54	4.51	-484.76	873.47	506.38	457.99	48.39	10.465	
7,500.00	7,185.21	7,429.33	7,185.21	29.75	25.68	4.51	-484.76	873.47	506.38	457.72	48.66	10.407	
7,600.00	7,285.21	7,529.33	7,285.21	29.86	25.81	4.51	-484.76	873.47	506.38	457.45	48.93	10.349	
7,700.00	7,385.21	7,629.33	7,385.21	29.97	25.95	4.51	-484.76	873.47	506.38	457.17	49.21	10.291	
7,800.00	7,485.21	7,729.33	7,485.21	30.08	26.08	4.51	-484.76	873.47	506.38	456.89	49.49	10.233	
7,900.00	7,585.21	7,829.33	7,585.21	30.19	26.22	4.51	-484.76	873.47	506.38	456.61	49.77	10.175	
8,000.00	7,685.21	7,929.33	7,685.21	30.31	26.36	4.51	-484.76	873.47	506.38	456.32	50.05	10.117	
8,100.00	7,785.21	8,029.33	7,785.21	30.42	26.50	4.51	-484.76	873.47	506.38	456.04	50.34	10.059	
8,200.00	7,885.21	8,129.33	7,885.21	30.54	26.64	4.51	-484.76	873.47	506.38	455.75	50.63	10.002	
8,300.00	7,985.21	8,229.33	7,985.21	30.66	26.78	4.51	-484.76	873.47	506.38	455.46	50.92	9.945	
8,400.00	8,085.21	8,329.33	8,085.21	30.78	26.93	4.51	-484.76	873.47	506.38	455.16	51.21	9.888	
8,500.00	8,185.21	8,429.33	8,185.21	30.90	27.07	4.51	-484.76	873.47	506.38	454.87	51.51	9.831	
8,600.00	8,285.21	8,529.33	8,285.21	31.02	27.21	4.51	-484.76	873.47	506.38	454.57	51.81	9.775	
8,614.79	8,300.00	8,544.12	8,300.00	31.04	27.24	4.51	-484.76	873.47	506.38	454.53	51.85	9.766	

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6J3S - Bonanza 1023-6J3S - 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	-25.82	35.33	-17.09	39.25				
100.00	100.00	100.00	100.00	0.09	0.09	-25.82	35.33	-17.09	39.25	39.06	0.18	212.944	
200.00	200.00	200.00	200.00	0.32	0.32	-25.82	35.33	-17.09	39.25	38.61	0.63	61.920	
300.00	300.00	300.00	300.00	0.54	0.54	-25.82	35.33	-17.09	39.25	38.16	1.08	36.227	
400.00	400.00	400.00	400.00	0.77	0.77	-25.82	35.33	-17.09	39.25	37.71	1.53	25.603	
500.00	500.00	500.00	500.00	0.99	0.99	-25.82	35.33	-17.09	39.25	37.26	1.98	19.798	
600.00	600.00	600.00	600.00	1.22	1.22	-25.82	35.33	-17.09	39.25	36.82	2.43	16.138	
700.00	700.00	700.00	700.00	1.44	1.44	-25.82	35.33	-17.09	39.25	36.37	2.88	13.620	
800.00	800.00	800.00	800.00	1.67	1.67	-25.82	35.33	-17.09	39.25	35.92	3.33	11.782	
900.00	900.00	900.00	900.00	1.89	1.89	-25.82	35.33	-17.09	39.25	35.47	3.78	10.381	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	2.12	-25.82	35.33	-17.09	39.25	35.02	4.23	9.278	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	2.34	-25.82	35.33	-17.09	39.25	34.57	4.68	8.387	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-25.82	35.33	-17.09	39.25	34.12	5.13	7.652	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	2.79	-25.82	35.33	-17.09	39.25	33.67	5.58	7.035	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-25.82	35.33	-17.09	39.25	33.22	6.03	6.511	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	3.24	-25.82	35.33	-17.09	39.25	32.77	6.48	6.059	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-25.82	35.33	-17.09	39.25	32.32	6.93	5.666	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	3.69	-25.82	35.33	-17.09	39.25	31.87	7.38	5.320	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-25.82	35.33	-17.09	39.25	31.42	7.83	5.015	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	4.14	-25.82	35.33	-17.09	39.25	30.97	8.28	4.742	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	4.36	-25.82	35.33	-17.09	39.25	30.52	8.73	4.498	CC, ES
2,100.00	2,099.98	2,099.50	2,099.46	4.56	4.57	112.83	34.75	-19.62	40.56	31.43	9.13	4.441	SF
2,200.00	2,199.84	2,198.78	2,198.42	4.74	4.77	109.25	33.03	-27.17	44.60	35.09	9.50	4.692	
2,300.00	2,299.45	2,297.60	2,296.40	4.93	4.98	104.56	30.17	-39.65	51.61	41.71	9.90	5.214	
2,400.00	2,398.90	2,395.68	2,392.85	5.13	5.22	98.44	26.23	-56.91	61.52	51.19	10.32	5.959	
2,500.00	2,498.36	2,492.52	2,487.08	5.33	5.49	90.88	21.26	-78.66	74.81	64.04	10.77	6.945	
2,600.00	2,597.81	2,587.66	2,578.43	5.55	5.82	83.42	15.34	-104.54	92.39	81.15	11.24	8.222	
2,700.00	2,697.26	2,680.69	2,666.37	5.77	6.21	76.88	8.59	-134.10	114.72	103.01	11.71	9.798	
2,800.00	2,796.71	2,771.26	2,750.46	6.00	6.67	71.47	1.10	-166.85	141.90	129.72	12.18	11.648	
2,900.00	2,896.17	2,859.06	2,830.39	6.24	7.19	67.10	-7.00	-202.29	173.82	161.16	12.66	13.733	
3,000.00	2,995.62	2,943.88	2,905.92	6.48	7.78	63.60	-15.59	-239.88	210.24	197.11	13.13	16.013	
3,100.00	3,095.07	3,030.85	2,981.90	6.72	8.47	79.60	-25.02	-281.13	251.72	238.12	13.60	18.508	
3,200.00	3,194.52	3,119.66	3,059.35	6.94	9.23	96.67	-34.71	-323.50	296.91	282.85	14.06	21.115	
3,300.00	3,293.97	3,206.83	3,135.36	7.16	10.00	114.51	-44.21	-365.09	345.35	330.83	14.52	23.785	
3,400.00	3,393.43	3,292.31	3,209.91	7.38	10.78	132.86	-53.53	-405.88	396.67	381.70	14.98	26.488	
3,445.48	3,438.66	3,330.66	3,243.36	7.48	11.14	141.32	-57.72	-424.18	420.83	405.64	15.19	27.713	
3,500.00	3,492.79	3,376.17	3,283.04	7.60	11.57	140.01	-62.68	-445.89	450.57	435.22	15.35	29.348	
3,600.00	3,591.51	3,458.09	3,354.48	7.81	12.35	138.03	-71.61	-484.97	507.75	492.09	15.65	32.441	
3,700.00	3,689.26	3,537.82	3,424.01	8.06	13.13	136.44	-80.31	-523.01	568.09	552.14	15.95	35.617	
3,800.00	3,785.78	3,615.14	3,491.43	8.34	13.88	135.10	-88.74	-559.90	631.41	615.16	16.25	38.850	
3,900.00	3,880.81	3,689.83	3,556.57	8.67	14.63	133.91	-96.89	-595.54	697.61	681.04	16.57	42.100	
4,000.00	3,974.07	3,761.69	3,619.24	9.08	15.34	132.79	-104.72	-629.82	766.56	749.64	16.92	45.316	
4,100.00	4,065.32	3,830.53	3,679.27	9.57	16.04	131.66	-112.23	-662.67	838.17	820.86	17.31	48.429	
4,200.00	4,154.30	3,896.16	3,736.50	10.16	16.70	130.47	-119.39	-693.98	912.36	894.59	17.77	51.341	
4,300.00	4,240.77	3,958.39	3,790.77	10.87	17.33	129.15	-126.17	-723.67	989.01	970.67	18.34	53.925	
4,370.81	4,300.35	4,000.31	3,827.32	11.44	17.76	128.12	-130.74	-743.67	1,044.72	1,025.89	18.83	55.487	
4,400.00	4,324.63	4,017.22	3,842.06	11.69	17.93	128.57	-132.59	-751.74	1,067.94	1,048.90	19.04	56.076	
4,500.00	4,407.76	4,075.13	3,892.57	12.60	18.53	129.97	-138.90	-779.37	1,147.66	1,127.85	19.81	57.929	
4,600.00	4,490.90	4,133.04	3,943.07	13.55	19.12	131.20	-145.22	-807.00	1,227.62	1,207.01	20.61	59.553	
4,700.00	4,574.04	4,190.95	3,993.57	14.54	19.72	132.29	-151.53	-834.63	1,307.77	1,286.33	21.44	60.986	
4,800.00	4,657.18	4,248.86	4,044.07	15.57	20.32	133.27	-157.85	-862.26	1,388.08	1,365.78	22.30	62.257	
4,900.00	4,740.31	4,306.77	4,094.57	16.62	20.91	134.14	-164.16	-889.89	1,468.52	1,445.36	23.16	63.395	

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 Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Bonanza 1023-6J3S - Bonanza 1023-6J3S - 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
5,000.00	4,823.45	4,364.69	4,145.08	17.70	21.51	134.92	-170.48	-917.52	1,549.08	1,525.03	24.05	64.414	
5,100.00	4,906.59	4,422.60	4,195.58	18.79	22.12	135.63	-176.80	-945.15	1,629.74	1,604.79	24.94	65.336	
5,200.00	4,989.73	4,480.51	4,246.08	19.90	22.72	136.28	-183.11	-972.78	1,710.47	1,684.62	25.85	66.172	
5,300.00	5,072.86	4,538.42	4,296.58	21.02	23.32	136.87	-189.43	-1,000.41	1,791.28	1,764.52	26.76	66.933	
5,364.40	5,126.40	4,575.72	4,329.10	21.74	23.71	137.22	-193.49	-1,018.20	1,843.35	1,816.00	27.35	67.389	
5,400.00	5,156.15	4,596.53	4,347.25	22.11	23.93	138.21	-195.76	-1,028.13	1,872.03	1,844.31	27.71	67.547	
5,500.00	5,241.30	4,657.02	4,400.00	23.02	24.56	140.70	-202.36	-1,056.99	1,951.26	1,922.50	28.76	67.850	
5,600.00	5,328.66	4,720.42	4,455.29	23.87	25.22	142.81	-209.27	-1,087.24	2,028.42	1,998.53	29.89	67.867	
5,700.00	5,418.05	4,952.17	4,661.65	24.67	27.16	144.86	-232.73	-1,189.87	2,101.76	2,070.17	31.59	66.543	
5,800.00	5,509.31	5,386.78	5,072.61	25.39	29.63	147.09	-263.79	-1,325.76	2,162.42	2,128.61	33.81	63.954	
5,900.00	5,602.27	5,921.20	5,602.27	26.06	30.90	149.84	-277.50	-1,385.72	2,203.99	2,168.18	35.81	61.553	
6,000.00	5,696.74	6,015.68	5,696.74	26.65	30.97	150.62	-277.50	-1,385.72	2,232.80	2,196.02	36.78	60.712	
6,100.00	5,792.56	6,111.49	5,792.56	27.17	31.06	151.29	-277.50	-1,385.72	2,258.05	2,220.39	37.66	59.954	
6,200.00	5,889.53	6,208.47	5,889.53	27.63	31.14	151.85	-277.50	-1,385.72	2,279.65	2,241.19	38.46	59.276	
6,300.00	5,987.47	6,306.41	5,987.47	28.02	31.23	152.29	-277.50	-1,385.72	2,297.52	2,258.36	39.16	58.668	
6,400.00	6,086.20	6,405.14	6,086.20	28.34	31.32	152.64	-277.50	-1,385.72	2,311.62	2,271.84	39.77	58.121	
6,500.00	6,185.53	6,504.46	6,185.53	28.59	31.41	152.89	-277.50	-1,385.72	2,321.88	2,281.59	40.29	57.627	
6,600.00	6,285.26	6,604.20	6,285.26	28.79	31.50	153.04	-277.50	-1,385.72	2,328.28	2,287.56	40.72	57.178	
6,700.00	6,385.21	6,704.15	6,385.21	28.92	31.60	153.10	-277.50	-1,385.72	2,330.80	2,289.74	41.06	56.767	
6,714.79	6,400.00	6,718.94	6,400.00	28.93	31.61	-72.21	-277.50	-1,385.72	2,330.85	2,289.74	41.10	56.709	
6,800.00	6,485.21	6,804.15	6,485.21	29.02	31.70	-72.21	-277.50	-1,385.72	2,330.85	2,289.51	41.33	56.393	
6,900.00	6,585.21	6,904.15	6,585.21	29.12	31.79	-72.21	-277.50	-1,385.72	2,330.85	2,289.24	41.61	56.021	
7,000.00	6,685.21	7,004.15	6,685.21	29.22	31.89	-72.21	-277.50	-1,385.72	2,330.85	2,288.96	41.88	55.651	
7,100.00	6,785.21	7,104.15	6,785.21	29.32	31.99	-72.21	-277.50	-1,385.72	2,330.85	2,288.68	42.16	55.281	
7,200.00	6,885.21	7,204.15	6,885.21	29.43	32.09	-72.21	-277.50	-1,385.72	2,330.85	2,288.40	42.45	54.912	
7,300.00	6,985.21	7,304.15	6,985.21	29.53	32.20	-72.21	-277.50	-1,385.72	2,330.85	2,288.11	42.73	54.544	
7,400.00	7,085.21	7,404.15	7,085.21	29.64	32.30	-72.21	-277.50	-1,385.72	2,330.85	2,287.82	43.02	54.178	
7,500.00	7,185.21	7,504.15	7,185.21	29.75	32.40	-72.21	-277.50	-1,385.72	2,330.85	2,287.53	43.31	53.813	
7,600.00	7,285.21	7,604.15	7,285.21	29.86	32.51	-72.21	-277.50	-1,385.72	2,330.85	2,287.24	43.61	53.450	
7,700.00	7,385.21	7,704.15	7,385.21	29.97	32.62	-72.21	-277.50	-1,385.72	2,330.85	2,286.94	43.90	53.089	
7,800.00	7,485.21	7,804.15	7,485.21	30.08	32.73	-72.21	-277.50	-1,385.72	2,330.85	2,286.64	44.20	52.729	
7,900.00	7,585.21	7,904.15	7,585.21	30.19	32.84	-72.21	-277.50	-1,385.72	2,330.85	2,286.34	44.51	52.371	
8,000.00	7,685.21	8,004.15	7,685.21	30.31	32.95	-72.21	-277.50	-1,385.72	2,330.85	2,286.03	44.81	52.015	
8,100.00	7,785.21	8,104.15	7,785.21	30.42	33.06	-72.21	-277.50	-1,385.72	2,330.85	2,285.73	45.12	51.661	
8,200.00	7,885.21	8,204.15	7,885.21	30.54	33.17	-72.21	-277.50	-1,385.72	2,330.85	2,285.42	45.43	51.310	
8,300.00	7,985.21	8,304.15	7,985.21	30.66	33.29	-72.21	-277.50	-1,385.72	2,330.85	2,285.11	45.74	50.960	
8,400.00	8,085.21	8,404.15	8,085.21	30.78	33.40	-72.21	-277.50	-1,385.72	2,330.85	2,284.79	46.05	50.613	
8,500.00	8,185.21	8,504.15	8,185.21	30.90	33.52	-72.21	-277.50	-1,385.72	2,330.85	2,284.48	46.37	50.268	
8,600.00	8,285.21	8,604.15	8,285.21	31.02	33.64	-72.21	-277.50	-1,385.72	2,330.85	2,284.16	46.69	49.925	
8,614.79	8,300.00	8,618.94	8,300.00	31.04	33.65	-72.21	-277.50	-1,385.72	2,330.85	2,284.11	46.73	49.874	

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Sage Hen Federal #1-6 - Sage Hen Federal #1-6_ASSUMED VERTICAL - Sage

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

Survey Program: 10000-UNKNOWN

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	141.63	-100.16	79.30	127.75				
100.00	100.00	100.00	100.00	0.09	2.00	141.63	-100.16	79.30	127.75	125.67	2.09	61.169	
200.00	200.00	200.00	200.00	0.32	3.99	141.63	-100.16	79.30	127.75	123.44	4.31	29.643	
300.00	300.00	300.00	300.00	0.54	5.99	141.63	-100.16	79.30	127.75	121.22	6.53	19.562	
400.00	400.00	400.00	400.00	0.77	7.99	141.63	-100.16	79.30	127.75	119.00	8.75	14.597	
500.00	500.00	500.00	500.00	0.99	9.98	141.63	-100.16	79.30	127.75	116.78	10.97	11.642	
600.00	600.00	600.00	600.00	1.22	11.98	141.63	-100.16	79.30	127.75	114.56	13.19	9.682	
700.00	700.00	700.00	700.00	1.44	13.97	141.63	-100.16	79.30	127.75	112.34	15.42	8.287	
800.00	800.00	800.00	800.00	1.67	15.97	141.63	-100.16	79.30	127.75	110.12	17.64	7.244	
900.00	900.00	900.00	900.00	1.89	17.97	141.63	-100.16	79.30	127.75	107.90	19.86	6.433	
1,000.00	1,000.00	1,000.00	1,000.00	2.12	19.96	141.63	-100.16	79.30	127.75	105.68	22.08	5.786	
1,100.00	1,100.00	1,100.00	1,100.00	2.34	21.96	141.63	-100.16	79.30	127.75	103.45	24.30	5.257	
1,200.00	1,200.00	1,200.00	1,200.00	2.56	23.96	141.63	-100.16	79.30	127.75	101.23	26.52	4.817	
1,300.00	1,300.00	1,300.00	1,300.00	2.79	25.95	141.63	-100.16	79.30	127.75	99.01	28.74	4.445	
1,400.00	1,400.00	1,400.00	1,400.00	3.01	27.95	141.63	-100.16	79.30	127.75	96.79	30.96	4.126	
1,500.00	1,500.00	1,500.00	1,500.00	3.24	29.95	141.63	-100.16	79.30	127.75	94.57	33.18	3.850	
1,600.00	1,600.00	1,600.00	1,600.00	3.46	31.94	141.63	-100.16	79.30	127.75	92.35	35.41	3.608	
1,700.00	1,700.00	1,700.00	1,700.00	3.69	33.94	141.63	-100.16	79.30	127.75	90.13	37.63	3.395	
1,800.00	1,800.00	1,800.00	1,800.00	3.91	35.94	141.63	-100.16	79.30	127.75	87.91	39.85	3.206	
1,900.00	1,900.00	1,900.00	1,900.00	4.14	37.93	141.63	-100.16	79.30	127.75	85.68	42.07	3.037	
2,000.00	2,000.00	2,000.00	2,000.00	4.36	39.93	141.63	-100.16	79.30	127.75	83.46	44.29	2.884	
2,100.00	2,099.98	2,099.98	2,099.98	4.56	41.92	-79.15	-100.16	79.30	127.41	80.93	46.48	2.741	
2,200.00	2,199.84	2,199.84	2,199.84	4.74	43.92	-81.49	-100.16	79.30	126.53	77.88	48.65	2.601	
2,300.00	2,299.45	2,299.45	2,299.45	4.93	45.91	-85.43	-100.16	79.30	125.54	74.71	50.83	2.470	
2,396.23	2,395.15	2,395.15	2,395.15	5.12	47.82	-90.00	-100.16	79.30	125.13	72.20	52.93	2.364	
2,400.00	2,398.90	2,398.90	2,398.90	5.13	47.89	-90.18	-100.16	79.30	125.13	72.12	53.01	2.360	
2,500.00	2,498.36	2,498.36	2,498.36	5.33	49.88	-94.93	-100.16	79.30	125.60	70.40	55.20	2.275	
2,600.00	2,597.81	2,597.81	2,597.81	5.55	51.86	-99.61	-100.16	79.30	126.93	69.54	57.39	2.212	
2,700.00	2,697.26	2,697.26	2,697.26	5.77	53.85	-104.16	-100.16	79.30	129.10	69.51	59.59	2.166	
2,800.00	2,796.71	2,796.71	2,796.71	6.00	55.83	-108.54	-100.16	79.30	132.06	70.28	61.78	2.137	
2,900.00	2,896.17	2,896.17	2,896.17	6.24	57.82	-112.71	-100.16	79.30	135.76	71.79	63.97	2.122	
3,000.00	2,995.62	2,995.62	2,995.62	6.48	59.80	-116.64	-100.16	79.30	140.15	73.98	66.17	2.118	
3,100.00	3,095.07	3,095.07	3,095.07	6.72	61.79	-101.52	-100.16	79.30	143.57	75.14	68.42	2.098	
3,200.00	3,194.52	3,194.52	3,194.52	6.94	63.78	-86.59	-100.16	79.30	144.31	73.67	70.63	2.043	
3,300.00	3,293.97	3,293.97	3,293.97	7.16	65.76	-71.60	-100.16	79.30	142.33	69.53	72.79	1.955	
3,400.00	3,393.43	3,393.43	3,393.43	7.38	67.75	-56.32	-100.16	79.30	137.73	62.83	74.91	1.839	
3,445.48	3,438.66	3,438.66	3,438.66	7.48	68.65	-49.20	-100.16	79.30	134.85	58.99	75.86	1.778	
3,500.00	3,492.79	3,492.79	3,492.79	7.60	69.73	-51.44	-100.16	79.30	130.70	53.73	76.97	1.698	
3,600.00	3,591.51	3,591.51	3,591.51	7.81	71.70	-57.49	-100.16	79.30	121.38	42.35	79.03	1.536	
3,700.00	3,689.26	3,689.26	3,689.26	8.06	73.65	-66.75	-100.16	79.30	111.35	30.10	81.25	1.371	Level 3
3,800.00	3,785.78	3,785.78	3,785.78	8.34	75.58	-79.91	-100.16	79.30	103.59	19.92	83.67	1.238	Level 2
3,862.61	3,845.47	3,845.47	3,845.47	8.54	76.77	-89.99	-100.16	79.30	101.84	16.73	85.11	1.197	Level 2, CC
3,900.00	3,880.81	3,880.81	3,880.81	8.67	77.48	-96.44	-100.16	79.30	102.57	16.70	85.87	1.195	Level 2, ES, SF
4,000.00	3,974.07	3,974.07	3,974.07	9.08	79.34	-113.62	-100.16	79.30	112.70	25.68	87.02	1.295	Level 3
4,100.00	4,065.32	4,065.32	4,065.32	9.57	81.16	-128.28	-100.16	79.30	135.35	48.44	86.91	1.557	
4,200.00	4,154.30	4,154.30	4,154.30	10.16	82.94	-139.27	-100.16	79.30	168.91	82.88	86.03	1.963	
4,300.00	4,240.77	4,240.77	4,240.77	10.87	84.66	-147.11	-100.16	79.30	211.14	126.33	84.80	2.490	
4,370.81	4,300.35	4,300.35	4,300.35	11.44	85.85	-151.24	-100.16	79.30	245.33	161.52	83.81	2.927	
4,400.00	4,324.63	4,324.63	4,324.63	11.69	86.34	-152.90	-100.16	79.30	260.18	176.27	83.91	3.101	
4,500.00	4,407.76	4,407.76	4,407.76	12.60	88.00	-157.45	-100.16	79.30	312.08	227.47	84.61	3.688	
4,600.00	4,490.90	4,490.90	4,490.90	13.55	89.66	-160.74	-100.16	79.30	365.06	279.40	85.66	4.262	
4,700.00	4,574.04	4,574.04	4,574.04	14.54	91.32	-163.22	-100.16	79.30	418.71	331.79	86.92	4.817	

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 Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Offset Design Bonanza 1023-6I Pad - Sage Hen Federal #1-6 - Sage Hen Federal #1-6_ASSUMED VERTICAL - Sage

Offset Site Error: 0.00 ft

Survey Program: 10000-UNKNOWN

Offset Well Error: 0.00 ft

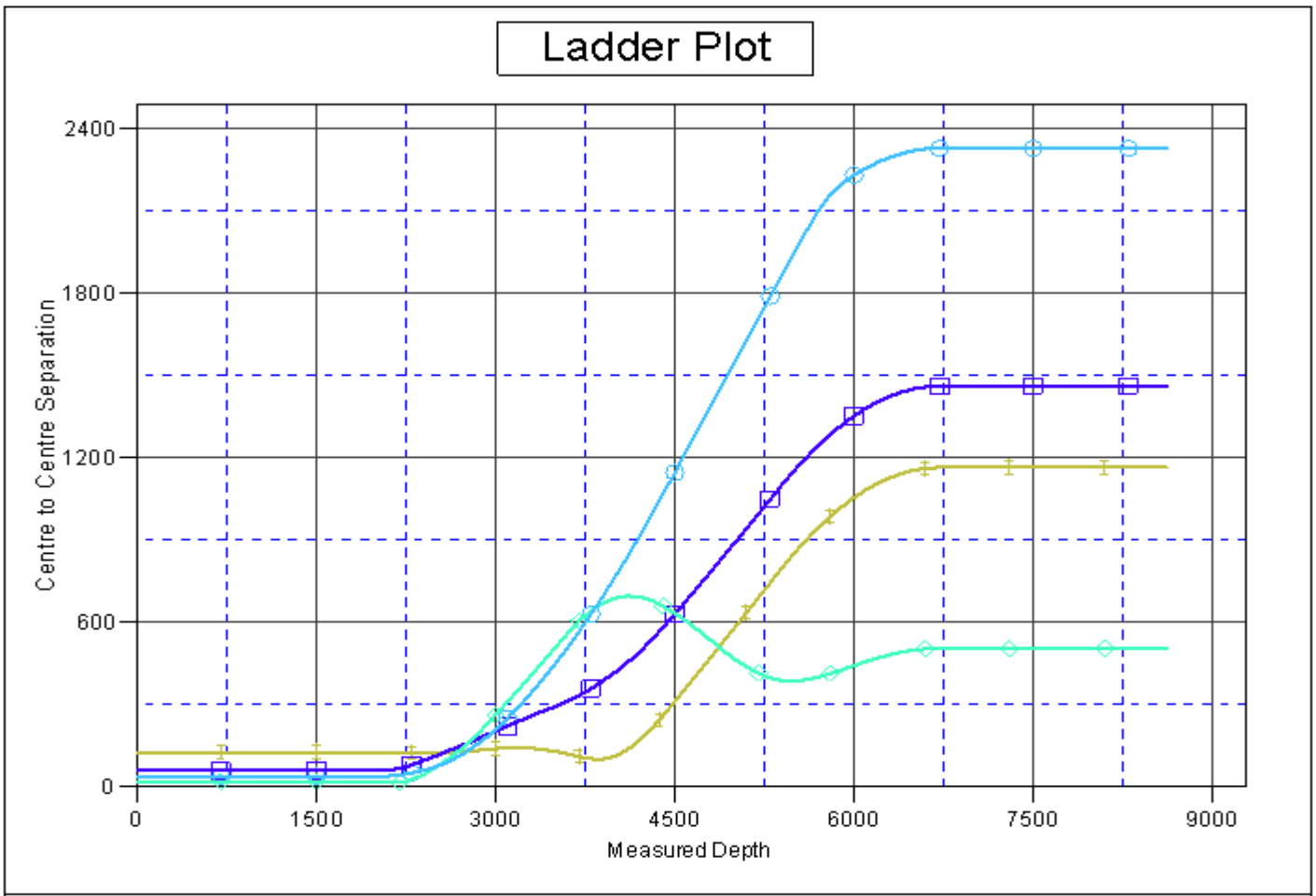
Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,800.00	4,657.18	4,657.18	4,657.18	15.57	92.98	-165.14	-100.16	79.30	472.80	384.48	88.32	5.353	
4,900.00	4,740.31	4,740.31	4,740.31	16.62	94.64	-166.68	-100.16	79.30	527.21	437.39	89.82	5.870	
5,000.00	4,823.45	4,823.45	4,823.45	17.70	96.30	-167.93	-100.16	79.30	581.83	490.45	91.38	6.367	
5,100.00	4,906.59	4,906.59	4,906.59	18.79	97.96	-168.97	-100.16	79.30	636.62	543.64	92.98	6.847	
5,200.00	4,989.73	4,989.73	4,989.73	19.90	99.61	-169.85	-100.16	79.30	691.53	596.91	94.62	7.309	
5,300.00	5,072.86	5,072.86	5,072.86	21.02	101.27	-170.59	-100.16	79.30	746.54	650.25	96.28	7.753	
5,364.40	5,126.40	5,126.40	5,126.40	21.74	102.34	-171.02	-100.16	79.30	782.01	684.64	97.37	8.031	
5,400.00	5,156.15	5,156.15	5,156.15	22.11	102.94	-171.33	-100.16	79.30	801.40	702.54	98.86	8.106	
5,500.00	5,241.30	5,241.30	5,241.30	23.02	104.64	-172.07	-100.16	79.30	853.42	750.39	103.03	8.283	
5,600.00	5,328.66	5,328.66	5,328.66	23.87	106.38	-172.67	-100.16	79.30	901.75	794.60	107.15	8.416	
5,700.00	5,418.05	5,418.05	5,418.05	24.67	108.17	-173.17	-100.16	79.30	946.28	835.09	111.20	8.510	
5,800.00	5,509.31	5,509.31	5,509.31	25.39	109.99	-173.58	-100.16	79.30	986.92	871.77	115.14	8.571	
5,900.00	5,602.27	5,602.27	5,602.27	26.06	111.84	-173.91	-100.16	79.30	1,023.57	904.60	118.97	8.604	
6,000.00	5,696.74	5,696.74	5,696.74	26.65	113.73	-174.19	-100.16	79.30	1,056.16	933.51	122.65	8.611	
6,100.00	5,792.56	5,792.56	5,792.56	27.17	115.64	-174.41	-100.16	79.30	1,084.63	958.46	126.17	8.597	
6,200.00	5,889.53	5,889.53	5,889.53	27.63	117.58	-174.60	-100.16	79.30	1,108.92	979.41	129.51	8.562	
6,300.00	5,987.47	5,987.47	5,987.47	28.02	119.53	-174.74	-100.16	79.30	1,128.98	996.32	132.66	8.511	
6,400.00	6,086.20	6,086.20	6,086.20	28.34	121.50	-174.85	-100.16	79.30	1,144.76	1,009.18	135.59	8.443	
6,500.00	6,185.53	6,185.53	6,185.53	28.59	123.49	-174.92	-100.16	79.30	1,156.24	1,017.96	138.28	8.361	
6,600.00	6,285.26	6,285.26	6,285.26	28.79	125.48	-174.97	-100.16	79.30	1,163.40	1,022.66	140.74	8.266	
6,700.00	6,385.21	6,385.21	6,385.21	28.92	127.47	-174.99	-100.16	79.30	1,166.21	1,023.29	142.93	8.159	
6,714.79	6,400.00	6,400.00	6,400.00	28.93	127.77	-40.30	-100.16	79.30	1,166.26	1,023.03	143.23	8.143	
6,800.00	6,485.21	6,485.21	6,485.21	29.02	129.47	-40.30	-100.16	79.30	1,166.26	1,021.19	145.08	8.039	
6,900.00	6,585.21	6,585.21	6,585.21	29.12	131.47	-40.30	-100.16	79.30	1,166.26	1,019.01	147.25	7.920	
7,000.00	6,685.21	6,685.21	6,685.21	29.22	133.46	-40.30	-100.16	79.30	1,166.26	1,016.84	149.43	7.805	
7,100.00	6,785.21	6,785.21	6,785.21	29.32	135.46	-40.30	-100.16	79.30	1,166.26	1,014.66	151.60	7.693	
7,200.00	6,885.21	6,885.21	6,885.21	29.43	137.46	-40.30	-100.16	79.30	1,166.26	1,012.48	153.78	7.584	
7,300.00	6,985.21	6,985.21	6,985.21	29.53	139.45	-40.30	-100.16	79.30	1,166.26	1,010.30	155.96	7.478	
7,400.00	7,085.21	7,085.21	7,085.21	29.64	141.45	-40.30	-100.16	79.30	1,166.26	1,008.12	158.14	7.375	
7,500.00	7,185.21	7,185.21	7,185.21	29.75	143.45	-40.30	-100.16	79.30	1,166.26	1,005.94	160.32	7.275	
7,600.00	7,285.21	7,285.21	7,285.21	29.86	145.44	-40.30	-100.16	79.30	1,166.26	1,003.76	162.50	7.177	
7,700.00	7,385.21	7,385.21	7,385.21	29.97	147.44	-40.30	-100.16	79.30	1,166.26	1,001.57	164.69	7.082	
7,800.00	7,485.21	7,485.21	7,485.21	30.08	149.43	-40.30	-100.16	79.30	1,166.26	999.39	166.87	6.989	
7,900.00	7,585.21	7,585.21	7,585.21	30.19	151.43	-40.30	-100.16	79.30	1,166.26	997.21	169.05	6.899	
8,000.00	7,685.21	7,685.21	7,685.21	30.31	153.43	-40.30	-100.16	79.30	1,166.26	995.02	171.24	6.811	
8,100.00	7,785.21	7,785.21	7,785.21	30.42	155.42	-40.30	-100.16	79.30	1,166.26	992.83	173.43	6.725	
8,200.00	7,885.21	7,885.21	7,885.21	30.54	157.42	-40.30	-100.16	79.30	1,166.26	990.65	175.61	6.641	
8,300.00	7,985.21	7,985.21	7,985.21	30.66	159.42	-40.30	-100.16	79.30	1,166.26	988.46	177.80	6.559	
8,400.00	8,085.21	8,085.21	8,085.21	30.78	161.41	-40.30	-100.16	79.30	1,166.26	986.27	179.99	6.480	
8,500.00	8,185.21	8,185.21	8,185.21	30.90	163.41	-40.30	-100.16	79.30	1,166.26	984.08	182.18	6.402	
8,600.00	8,285.21	8,285.21	8,285.21	31.02	165.41	-40.30	-100.16	79.30	1,166.26	981.89	184.37	6.326	
8,614.79	8,300.00	8,300.00	8,300.00	31.04	165.70	-40.30	-100.16	79.30	1,166.26	981.57	184.69	6.315	

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5199.00ft (Original Well Ele\Coordinates are relative to: Bonanza 1023-6P1S
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: 1.05°



LEGEND

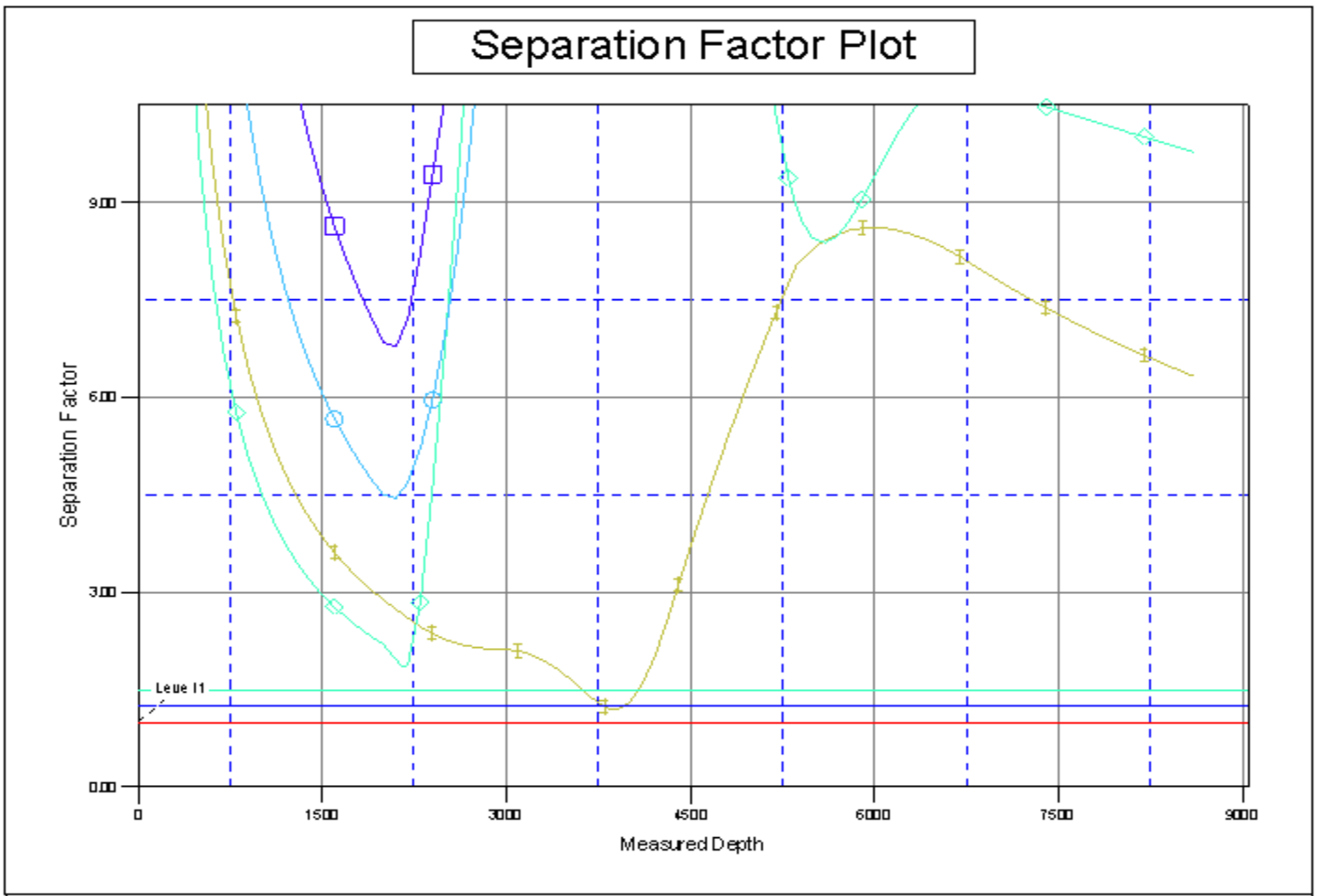
UMED_VERTICAL\0 — Bonanza 1023-6HS, Bonanza 1023-6HS, PLAN #2 \0
Bonanza 1023-6JS, Bonanza 1023-6JS, Design #1 \0

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Reference Site:	Bonanza 1023-6I Pad	**MD Reference:**	WELL @ 5199.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Bonanza 1023-6P1S	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5199.00ft (Original Well Ele\Coordinates are relative to: Bonanza 1023-6P1S
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: 1.05°



LEGEND

UMED_VERTICAL\0
Bonanza 1023-6HS, Bonanza 1023-6HS, PLAN #2 \0
Bonanza 1023-6JS, Bonanza 1023-6JS, Design #1 \0

Weatherford International, Ltd
2000 Oil Field Drive
Casper, Wyoming 82604 USA
+1.307.268-7900 Main
+1.307.235.3958 Fax
www.weatherford.com

Contact Information

District Manager: Pat Rasmussen
+1.307.268-7900 Casper, Wyoming
Email: pat.rasmussen@weatherford.com

Directional Drilling Coordinator:
Larren Holdren
+1.307.268-7900 Casper, Wyoming
Email: larren.holdren@weatherford.com

Bret Wolford
Email: bret.wolford@weatherford.com

MWD Coordinators:
+1.307.268-7900 Casper, Wyoming

Adam Rinker
Email: adam.rinker@weatherford.com

Matthew Heaton
Email: matthew.heaton@weatherford.com

Directional Drilling Sales Casper: Dean Reed
1.307.268-7900 Casper, Wyoming
Email: dean.reed@weatherford.com

Directional Drilling Sales Denver: Linda Smith
+1.303.825.6558 Denver, Colorado
Email: linda.smith@weatherford.com

Well Planning Casper Office:
+1.307.268-7900 Casper, Wyoming

Tracy Williams
Email: tracy.williams@weatherford.com

Well Planning Denver Office:
+1.303.825.6558 Denver, Colorado

Robert Scott
Email: robert.scott@weatherford.com

Bonanza 1023-6P1S

Pad: Bonanza 1023-6I
Surface: 2,060’ FSL, 958’ FEL (NE/4SE/4)
BHL: 1,070’ FSL 125’ FEL (SE/4SE/4)
Sec. 6 T10S R23E

Uintah, Utah
Mineral Lease: UTU 38419

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	1,198’	
Birds Nest	1,404’	Water
Mahogany	1,898’	Water
Wasatch	4,127’	Gas
Mesaverde	6,248’	Gas
MVU2	7,195’	Gas
MVL1	7,729’	Gas
TVD	8,300’	
TD	8,615’	

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 8,615' TD, approximately equals 4,913 psi (calculated at 0.59 psi/foot).

Maximum anticipated surface pressure equals approximately 3,087 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

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

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

10. Other Information:

Please refer to the attached Drilling Program.

’APIWellNo:43047504600000’

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	June 1, 2009
WELL NAME	**Bonanza 1023-6P1S**	TD	8,300' TVD 8,615' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah ELEVATION 5,184' GL KB 5,199'
SURFACE LOCATION	NE/4 SE/4 2,060' FSL 958' FEL	Sec 6 T 10S R 23E	
	Latitude: 39.976347	Longitude: -109.363542	NAD 83
BTM HOLE LOCATION	SE/4 SE/4 1,070' FSL 125' FEL	Sec 6 T 10S R 23E	
	Latitude: 39.973631	Longitude: -109.360567	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
			7-7/8"	4-1/2" 11.6# I-80 or equivalent LTC csg	Water / Fresh Water Mud 8.3-11.6 ppg

All water flows encountered while drilling will be reported to the appropriate agencies.

Green River @ 1,198'

Top of Birds Nest @ 1,404

Mahogany @ 1,898

Preset f/ GL @ 2,100' 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 @ 4,127'

Mud logging program TBD

Cased hole logging program from TD - surf csg

Mverde @ 6,248' TVD

MVU2 @ 7,195' TVD

MVU1 @ 7,729' TVD

Max anticipated Mud required 11.6 ppg

TD @ 8,300' TVD 8,615' MD

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,100	36.00	J-55	LTC	1.07	2.06	7.63
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	8,615	11.60	I-80	LTC	2.45	1.27	2.30

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

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)
(Burst Assumptions: TD = 11.6 ppg) 0.22 psi/ft = gradient for partially evac wellbore
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MASP 3,087 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD
(Burst Assumptions: TD = 11.6 ppg) 0.59 psi/ft = bottomhole gradient
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)
MABHP 4,913 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 (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + 0.25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
			+.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	3,625'	Premium Lite II + 3% KCl + 0.25 pps	350	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	4,990'	50/50 Poz/G + 10% salt + 2% gel	1220	40%	14.30	1.31
			+.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.

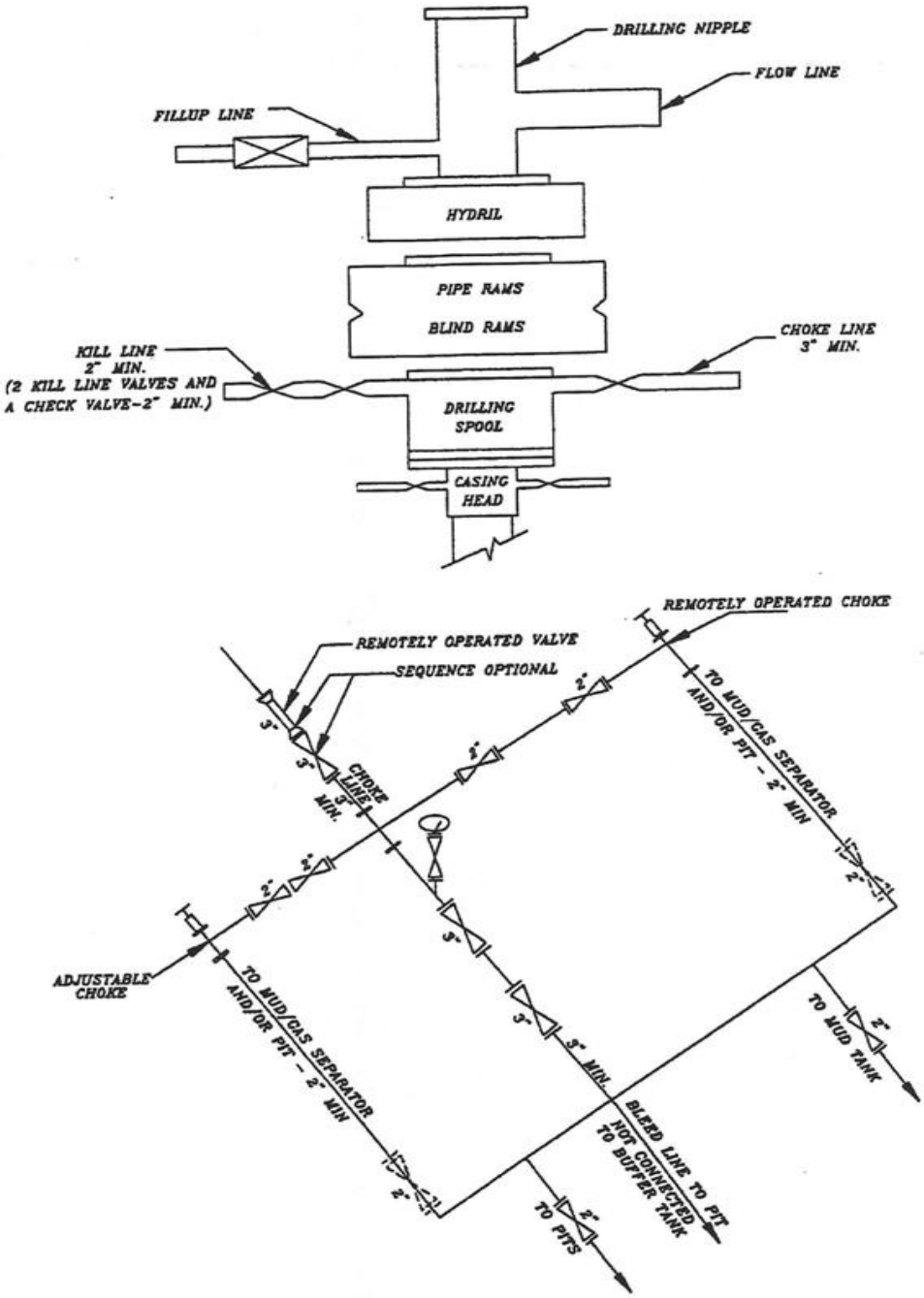
Surveys will be taken at 1,000' minimum intervals.

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

DRILLING ENGINEER: _____ **DATE:** _____
John Huycke / Grant Schluender

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

EXHIBIT A
Bonanza 1023-6P1S



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr-McGee Oil & Gas Onshore LP

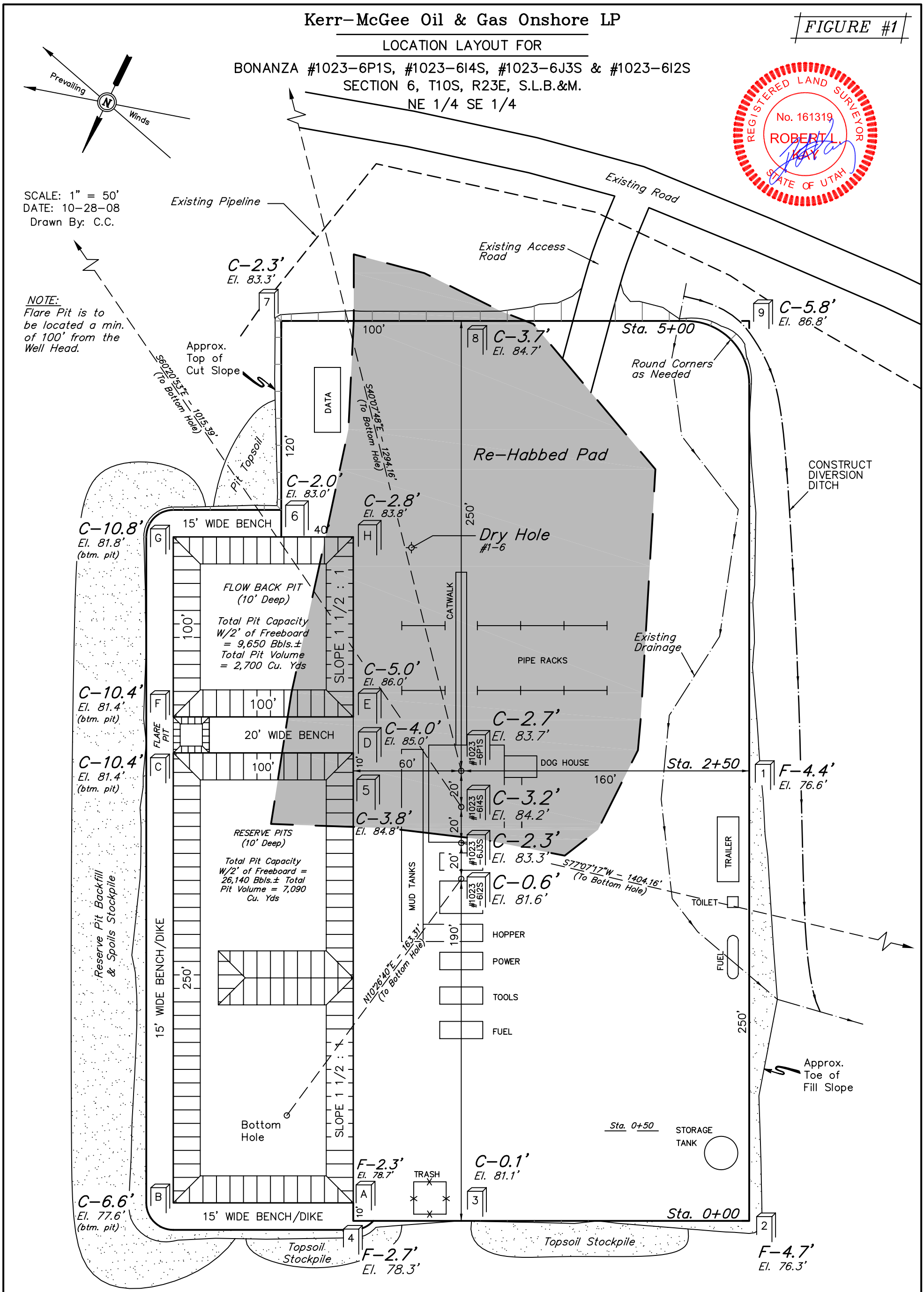
FIGURE #1

LOCATION LAYOUT FOR

BONANZA #1023-6P1S, #1023-6I4S, #1023-6J3S & #1023-6I2S

SECTION 6, T10S, R23E, S.L.B.&M.

NE 1/4 SE 1/4



NAD 83 (#1-6 DRY HOLE)	
LATITUDE =	39°58'33.86" (39.976072)
LONGITUDE =	109°21'47.73" (109.363258)
NAD 27 (#1-6 DRY HOLE)	
LATITUDE =	39°58'33.98" (39.976106)
LONGITUDE =	109°21'45.28" (109.362578)

Elev. Ungraded Ground at #1023-6P1S Location Stake = 5183.7'

Elev. Graded Ground at #1023-6P1S Location Stake = 5181.0'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

Kerr-McGee Oil & Gas Onshore LP

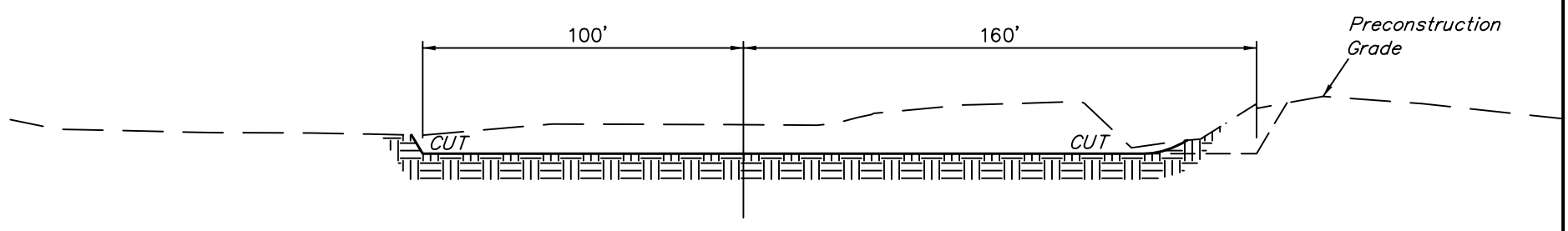
FIGURE #2

TYPICAL CROSS SECTIONS FOR

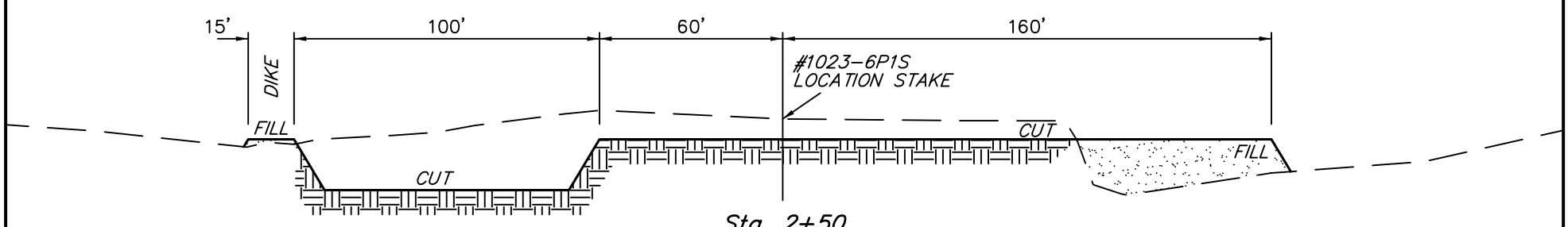
BONANZA #1023-6P1S, #1023-6I4S, #1023-6J3S & #1023-6I2S
SECTION 6, T10S, R23E, S.L.B.&M.
NE 1/4 SE 1/4

1" = 20'
X-Section Scale
1" = 50'
DATE: 10-27-08
Drawn By: C.C.

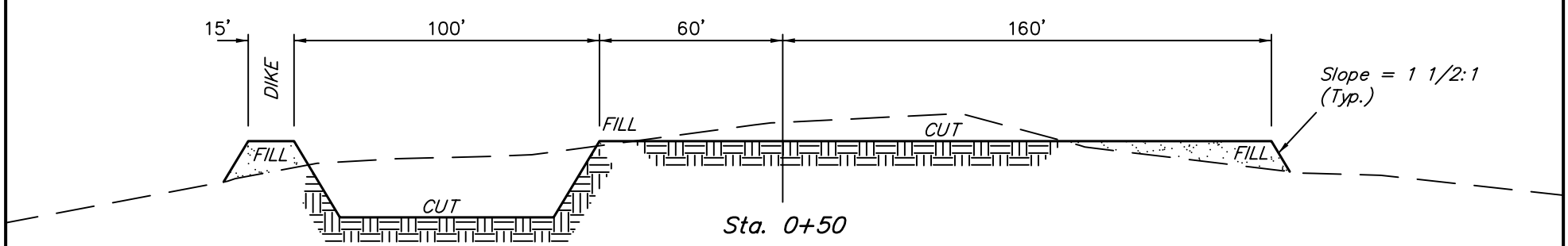
REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH



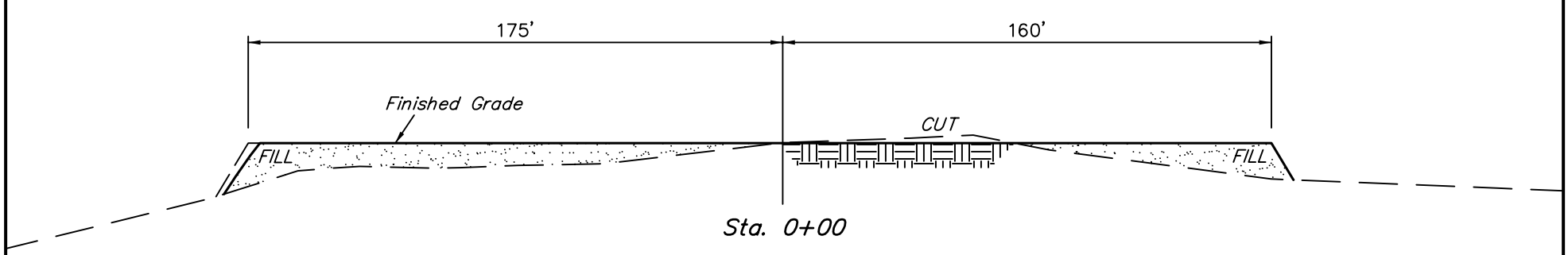
Sta. 5+00



Sta. 2+50



Sta. 0+50



Sta. 0+00

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

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ±4.375 ACRES
PIPELINE DISTURBANCE = ±0.011 ACRES
TOTAL = ±4.386 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping = 3,210 Cu. Yds.
Remaining Location = 15,460 Cu. Yds.

TOTAL CUT = 18,670 CU.YDS.
FILL = 6,610 CU.YDS.

EXCESS MATERIAL = 12,060 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.) = 8,110 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation) = 3,950 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-6P1S, #1023-6I4S, #1023-6J3S & #1023-6I2S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 6, T10S, R23E, S.L.B.&M.

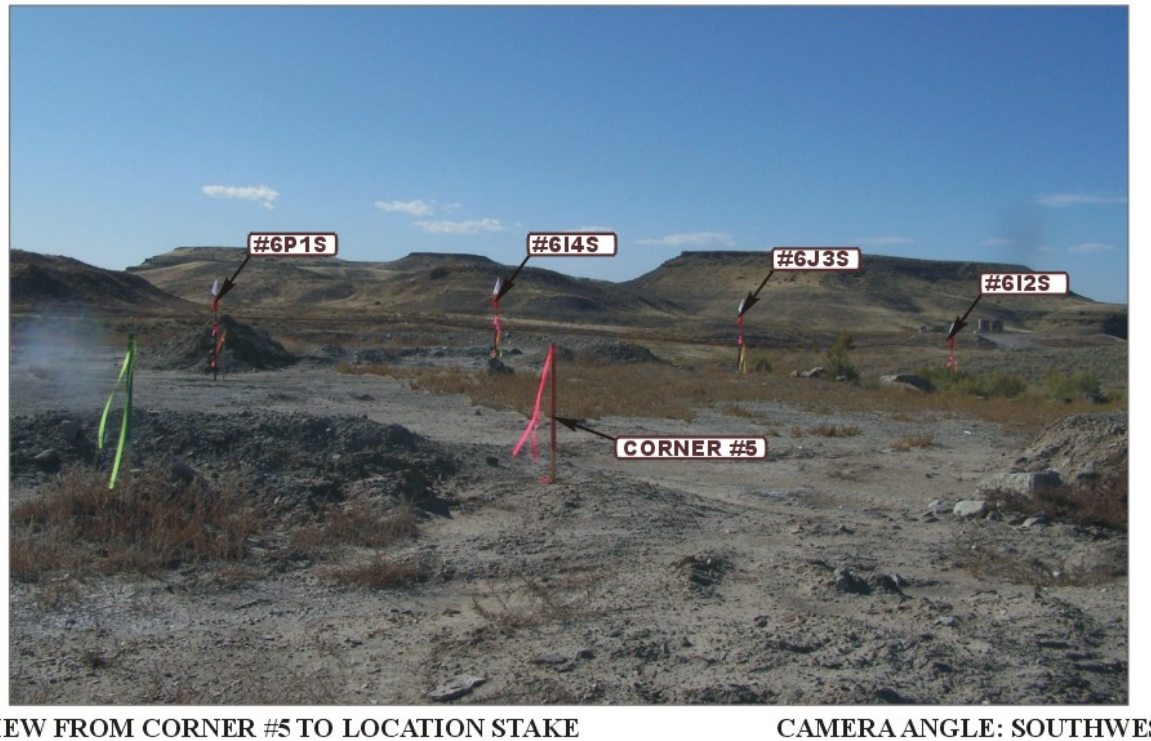


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE — CAMERA ANGLE: SOUTHWESTERLY

PHOTO: VIEW OF OF EXISTING ACCESS — CAMERA ANGLE: NORTHWESTERLY

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813
- Since 1964 -

LOCATION PHOTOS	10 MONTH	29 DAY	08 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: J.H.	REVISED: 00-00-00		

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-6P1S, #1023-6I4S, #1023-6J3S & #1023-6I2S

LOCATED IN UINTAH COUNTY, UTAH
SECTION 6, T10S, R23E, S.L.B.&M.

PIPELINE ALIGNMENT

PHOTO: VIEW OF PIPELINE TIE IN POINT **CAMERA ANGLE: NORTHERLY**

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	10 MONTH	29 DAY	08 YEAR	PHOTO
TAKEN BY: L.K.	DRAWN BY: J.H.	REVISED: 00-00-00		

Kerr-McGee Oil & Gas Onshore LP
BONANZA #1023-6P1S, #1023-6I4S, #1023-6J3S & 1023-6I2S
SECTION 6, T10S, R23E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 3.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 1.9 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 1.2 MILE TO THE EXISTING ACCESS TO THE NORTH; FOLLOW ROAD IN A NORTHERLY DIRECTION APPROXIMATELY 75’ TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 54.8 MILES.

Bonanza 1023-6I2S
Surface: 2,114’ FSL 985’ FEL (NE/4 SE/4)
BHL: 2,275’ FSL 955’ FEL (NE/4 SE/4)

Bonanza 1023-6I4S
Surface: 2,078’ FSL 967’ FEL (NE/4 SE/4)
BHL: 1,575’ FSL 85’ FEL (NE/4 SE/4)

Bonanza 1023-6J3S
Surface: 2,096’ FSL 976’ FEL (NE/4 SE/4)
BHL: 1,785’ FSL 2,345’ FEL (NW/4 SE/4)

Bonanza 1023-6P1S
Surface: 2,060’ FSL 958’ FEL (NE/4 SE/4)
BHL: 1,070’ FSL 125’ FEL (SE/4 SE/4)

Pad: Bonanza 1023-6I
Sec. 6 T10S R23E

Uintah, Utah
Mineral Lease: UTU 38419

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

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 in December 2008 showing the surface locations in NE/4 SE/4 of Section 6 T10S R23E.

This Surface Use Plan of Operations (SUPO) or 13-point plan is submitted under the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) and provides details specific to this pad. General information is provided in the MDP, which is available upon request and at the BLM-Vernal Field Office.

An on-site meeting was held on February 3, 2009. Present were:

- Verlyn Pindell, Dave Gordon, Scott Ackerman, Karl Wright – BLM;
- David Kay – Uintah Engineering & Land Surveying;
- 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.

This pad will be expanding the previously drilled dry-hole Bonanza 1-6 well pad (See Figure 1).

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.
C) 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.

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet. There will be no turn outs.

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.

Surfacing material may be necessary, depending upon weather conditions.

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.

The following guidelines will apply if the well is productive.

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

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

KMG will construct a second pit during completion operations due to the volume of fluids used with a 4-well frac. The pit will be lined and fenced per BLM requirements. KMG is also requesting the pit stay open for 1 year to utilize for additional 4 well completions in the area. If determined that the pit is not needed within the 1 year; the fluids will be removed and pit reclaimed.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee. All facilities will be painted within six months of installation. The required color is Shadow Gray, a non-reflective earthtone, or as specified by BLM. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.

Approximately ±3,743' of 4" pipeline will be upgraded to 8" pipeline. Approximately ±1,146' of 8" pipeline will be re-routed. Approximately ±16' of new pipeline will be constructed. Refer to Topo D for the existing pipeline. Pipeline segments will be welded or zaplocked together on disturbed areas in or near the location, whenever possible, and dragged into place

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 Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim #43-8496, Application #53617.

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

No water well is to be drilled on this lease.

6. Source of Construction Materials:
See MDP for additional details on Source of Construction Materials.

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

If needed, gravel will be obtained from a commercial source.

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.

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

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

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

- 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.

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

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

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:

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

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

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. Within five (5) working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and,
- a timeframe for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the finds of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of the mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible fro mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed the operator will then be allowed to resume construction.

"The holder of this authorization shall immediately bring any paleontological resources or fossils discovered as a result of operations under this authorization to the attention of the authorized officer. The holder shall suspend all activities in the vicinity of such discovery until notified to proceed by the authorized officer. The authorized officer will evaluate, or will have evaluated, such discoveries not later than five (5) working days after being notified, and will determine what action shall be taken with respect to such discoveries. The decision as to the appropriate measures to mitigate adverse effects to significant paleontological resources will be made by the authorized officer after consulting with the holder. The holder may be responsible for the cost of any investigations necessary for the evaluation, and for any mitigative measures."

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

June 1, 2009
Date

'APIWellNo:43047504600000'

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

April 6, 2009

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

Re: Exception Location R649-3-3 and Directional Drilling R649-3-11
Bonanza 1023-6P1S
T10S- R23E
Section 6: NESE/SESE
2060' FSL, 958' FEL (surface)
1070' FSL, 125' FEL (bottom hole)
Uintah County, Utah

Dear Ms. Mason:

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

- Kerr-McGee's Bonanza 1023-6P1S is located within the area covered by Docket No. 2008-011 authorizing the equivalent of an approximate 10-acre well density pattern, and requiring approval for wells drilled at an exception location and wells drilled directionally in accordance with the referenced rules.

- Kerr-McGee is permitting this well at this location and 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 roads 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 Rule R6493-3 and Rule R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jessy Pink

Jessy Pink
Landman

'APIWellNo:43047504600000'

’APIWellNo:43047504600000’

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP’S FOUR PROPOSED WELL LOCATIONS: BONANZA 1023-6I2S, 1023-6I4S, 1023-6J3S, AND 1023-6P1S (T10S, R23E, SECTION 6) UINTAH COUNTY, UTAH

'APIWellNo:43047504600000'

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP'S FOUR PROPOSED WELL LOCATIONS: BONANZA 1023-6I2S, 1023-6I4S, 1023-6J3S, AND 1023-6P1S (T10S, R23E, SECTION 6) UINTAH COUNTY, UTAH

By:

Nicole Shelnut

Prepared For:

Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

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

Prepared By:

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

MOAC Report No. 09-020

April 29, 2009

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

INTRODUCTION

A Class I literature review was completed by Montgomery Archaeological Consultants, Inc. (MOAC) in April 2009 of Kerr-McGee Onshore's four proposed well locations and associated pipeline corridor in Township 10S, Range 23E, Section 6. The project area is situated north of the White River and south of the town of Bonanza, Uintah County, Utah. The wells are designated Bonanza 1023-6I Directional Pad, Bonanza 1023-6I2S, Bonanza 1023-6I4S, Bonanza 1023-6J3S, and Bonanza 1023-6P1S. This document was implemented at the request of Ms. Raleen White, Kerr-McGee Oil and Gas Onshore LP, Denver, Colorado. Land status is public land administered by the Bureau of Land Management (BLM) Vernal Field Office.

The purpose of this Class I review is to identify, classify, and evaluate the previously conducted cultural resource inventories and archaeological sites in the project area in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act of 1966 (as amended). Also, the inventory was implemented to attain compliance with a number of federal and state mandates, including the National Environmental Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and the Utah State Antiquities Act of 1973 (amended 1990).

The project area in which Kerr-McGee Oil and Gas Onshore's four proposed Bonanza well locations occur was previously inventoried by MOAC in 2003 for Westport Oil and Gas Company's block inventory of Sections 4, 5, 6, 7, and 8 in Township 10 South, Range 23 East (Elkins and Montgomery 2003; U-03-MQ-0882). A file search was completed by consulting MOAC's Class I existing data review of 459 square miles (293,805 acres) covering the Greater NBU study area between Bonanza and Ouray in Uintah County, northeastern Utah (Patterson et al. 2008). Kerr-McGee Oil and Gas Onshore LP proposes to explore and develop oil and natural gas resources throughout the area. Record searches were performed for this Class I project by Marty Thomas at the Utah State Historic Preservation Office (SHPO) on various dates between June 14, 2006 and January 27, 2007. The results of this Class I data review and Class III inventory indicated that two previously recorded sites (42Un3413 and 42Un3499) occur near the current project area.

DESCRIPTION OF THE PROJECT AREA

The project area is situated east of the White River and south of the town of Bonanza, Uintah County, Utah. The legal description is Township 10S, Range 23E, Sections 5 and 6 (Figure 1, Table 1). Land status is public land administered by the Bureau of Land Management (BLM) Vernal Field Office.

Table 1. Kerr-McGee Onshore's Four Proposed Well Locations.

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
Bonanza 1023-6I Directional Pad Bonanza 1023-6I2S Bonanza 1023-6I4S Bonanza 1023-6J3S Bonanza 1023-6P1S	NE/SE Sec. 6, T10S, R23E	Pipeline: 5198 ft	42Un3499 42Un3413

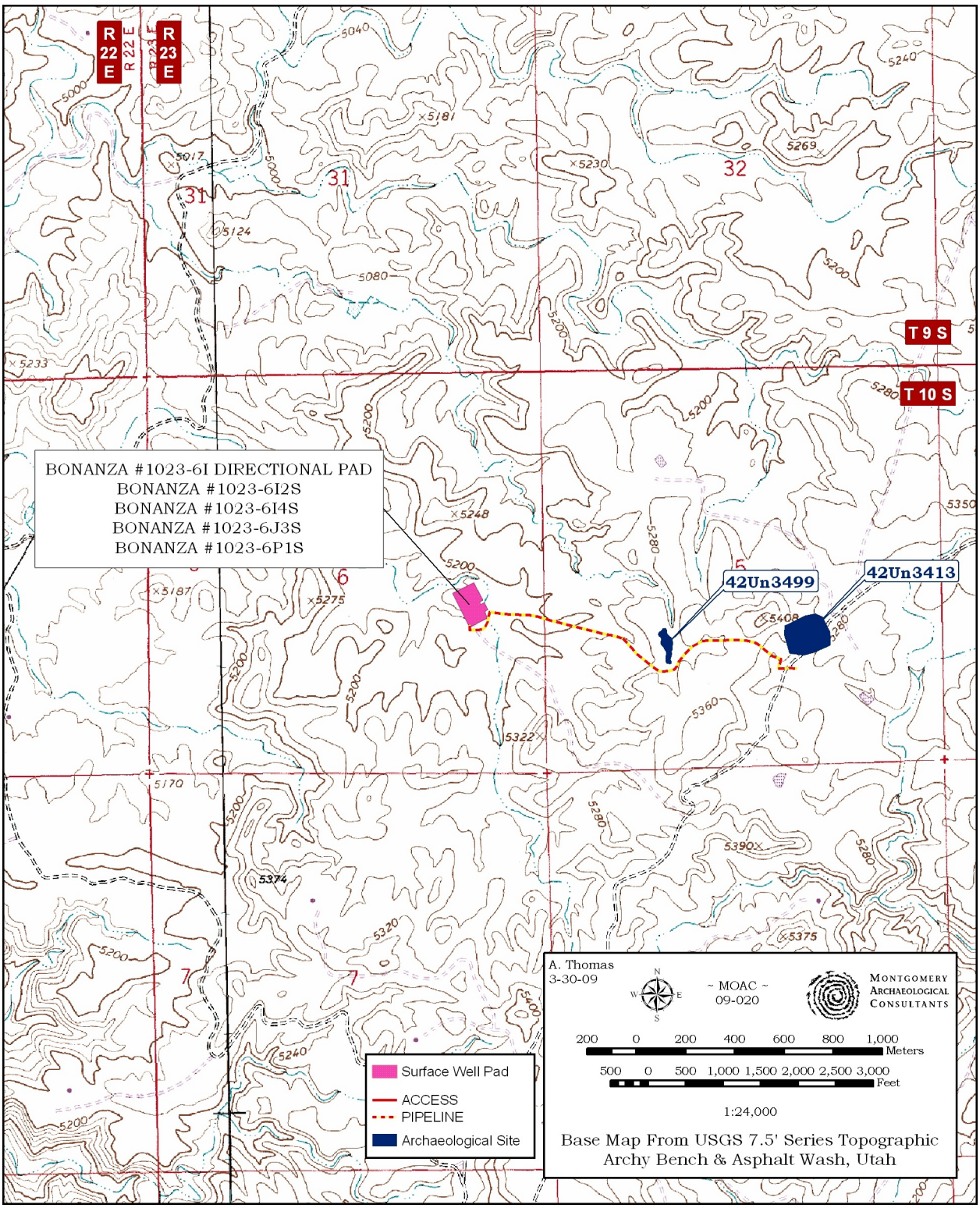


Figure 1. Kerr-McGee Oil and Gas Onshore LP's Proposed Bonanza Well Locations in Uintah County, Utah.

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. The geology is comprised of Tertiary age deposits, which include Paleocene age deposits and Eocene age fluvial and lacustrine sedimentary rocks. The Uinta Formation, which is predominate in the project area, occurs as eroded outcrops (formed by fluvial deposited, stream laid interbedded sandstone and mudstone), and is known for its prolific paleontological localities. Specifically, the inventory area is situated east of the White River and southeast of the town of Ouray, Uintah County, Utah. Elevation ranges from 5200 to 5400 ft asl. The project occurs within the Upper Sonoran Desert Shrub Association which includes sagebrush, shadscale, greasewood, mat saltbush, snakeweed, rabbitbrush, and prickly pear cactus. Modern disturbances include livestock grazing, roads, and oil/gas development.

CLASS I RESULTS

The Class I literature review of Kerr-McGee Onshore’s four proposed well locations and associated pipeline corridor resulted in the location of two previously documented sites (42Un3413 and 42Un3499).

Smithsonian Site No.: 42Un3413
Site Type: Temporary Camp
NRHP Eligibility: Eligible
Description: The site is a very large multicomponent prehistoric and historic temporary camp situated over varied topography including ridgetops, benches, slopes, and drainages. The prehistoric component of the site was divided into two loci (Locus A and Locus B). Between the two loci, a total of 36 tools were recorded. Lithic debitage was most dense in Locus B, therefore a tally of lithic flakes was done only for Locus B. This tally resulted in 32 lithic flakes dominated by the tertiary stage of reduction, with secondary flakes, angular debris, and flake fragments also present. No prehistoric cultural features were observed. The historic component likely dates between 1904 and 1985 based on diagnostic artifacts. It consists of three historic trash concentrations, and two hearths (Features 1 and 2). Feature 1 is a hearth consisting of a semi-circular ring of thermally altered siltstone and sandstone which measures 1 m in diameter (exterior) and 40 cm diameter (interior). There are ten rocks ranging in size between 10 x 3 cm to 30 x 20 cm. The hearth opens to the SW, and is located within Trash Concentration 1. Wood pieces (n=5) were observed 10-20 m to the northeast. Feature 2 is a hearth consisting of a semi-circular ring of thermally altered rock measuring 1 m diameter (exterior) and 25 cm diameter (interior). There are only three sandstone rocks ranging in size from 60 x 20 x 10 cm to 25 x 15 x 5 cm. Two nails (1 3/16" and 1 11/16" in length) were observed next to the hearth. Feature 2 is located within Trash Concentration 2. Trash Concentration 1 consists of a hole-in-top evaporated milk can dating from 1915-1930, hole-in-top evaporated milk cans dating from 1975-1985 (n=2) , hole-in-cap milk and food cans (n=6), sanitary food cans, a sanitary cocoa can, a sanitary lard can embossed with CANCO (post-1910), sanitary cut-around food cans (n=3), hay bale wire, a wire handle, and very light blue thin glass fragments of unknown function (n=15). Feature 1, a hearth, is located within this trash concentration. Trash Concentration 2 consists of one hole-in-top evaporated milk can dating from 1915-1930, sanitary cut-around food cans (n=3), a sanitary lard can embossed with “CANCO” (post-1910), tobacco tins (post-1910, n=4), one sanitary cut-around food can lid, two wire nails measuring 1 3/16" and 1 11/16" long, one hay bale wire piece, and one rifle cartridge with the mark, “W.R.A. Co. 25-30 W.C.F.” dating pre-1932. Trash Concentration 3 consists of one hole-in-

top evaporated milk cans dating from 1915-1930, sanitary knife-cut and church key opened juice or beverage cans (n=2), a sanitary lard can embossed with "CANCO" (post-1910), and a sanitary cut-around food can embossed with "SANITARY" (1904-1908).

Avoidance: The site is outside of the undertaking; its boundary was flagged with blue surveyors ribbon to facilitate avoidance.

Smithsonian Site No.: 42Un3499
Site Type: Temporary Camp
NRHP Eligibility: Eligible
Description: This site is a prehistoric temporary camp located on the east-facing slope of a low ridge and running north to south. The artifact assemblage consists of 22 tools and 37 pieces of debitage. Test cores are the dominant tool (n=11). The second largest artifact type are single-handed manos (n=4) with ground surfaces ranging from lightly used to heavily used and none exhibiting signs of pecking. Other lithic tools include three bifaces from Stage III to V, one utilized flake that may have been used as an expedient scraper, one unknown projectile point fragment, one portable slab milling stone with a slightly ground use surface, and one uniface. The debitage at the site is dominated by core reduction flakes and shatter. The material types present include white opaque chert, grey/tan opaque chert, brown/red opaque chert, grey fine-grained siltstone, black opaque chert, orange opaque chert with black striations, white/yellow coarse-grained quartzite, yellow fine-grained siltstone, and pink coarse-grained quartzite. There are four features at the site which include storage cists with upright slabs (some of which are buried) (Features 1 through 3), and a linear rock alignment (Feature 4). No soil staining or charcoal was observed at any of the features. Feature 1 is a slab-lined cist consisting of a circular alignment of upright embedded sandstone rocks. Five of these rocks form the outside ring with a diameter of 1.3 m. There is a collapsed vertical slab laying outward that measures 17 x 25 cm on the south side of the cist. On the north side, there are two slabs adjacent to each other measuring 50 cm long and 30 cm long with a visible width of about 10-15 cm. The east side of the cist consists of one tabular vertical buried slab that is obscured by sagebrush. The west side consists of one tabular vertical slab measuring 40 cm long north-south and 10 cm wide at the visible portion. There are 16-18 smaller rocks on the interior surface that are naturally occurring and not associated with the feature. No charcoal or stained soil is associated with this feature and the nearest tools are 10 m away either north or south. Feature 2 is a collapsed cist in an 80 cm circular area with fire-cracked rock and two buried upright slabs. There are two upright small slabs on the north side measuring 18 x 8 cm and 10 x 8 cm. Eight other rocks are lying on the ground in and around the feature, two of which appear oxidized. One of these rocks is a flat thin slab of quartzitic sandstone measuring 15 x 20 cm. There is no soil staining or charcoal associated with Feature 2 and Tool 6 is located about 8 m to the northeast. Feature 3 is a buried cist consisting of 10 rocks in a circular alignment with a diameter of 1 m. Six of the rocks appear to be upright but are significantly buried. The largest visible rock measures 28 x 18 cm and the largest embedded rock measures 30 x 4 cm (IC). There is no charcoal or soil staining present within the cist. The feature sits on a 3 degree slope and Tools 9 and 6 are within 5 m of the feature to the north and southeast. Feature 4 is a linear rock alignment of four rocks measuring 80 cm long east-west and 30 cm wide north-south. The rocks range in size from 10-28 cm long and 12-20 cm wide and are partially buried. The feature is on a northeast-facing 3 degree slope. Tool 19 is less than 1 m away to the northwest. Tools 18 and 20 are within 5 m east of this alignment. There were no diagnostic artifacts present to accurately date the site or assign a cultural affiliation.

Avoidance: The site is outside of the undertaking.

CLASS I MANAGEMENT RECOMMENDATIONS

In conclusion the Class I literature review of Kerr-McGee Oil & Gas Onshore LP's four proposed well locations with associated pipeline corridor resulted in the location of two previously recorded sites (42Un3413 and 42Un3499). It is recommended that both sites be avoided by the undertaking. Furthermore, it is recommended site 42Un3499 be monitored by a qualified archaeologist if the existing pipeline through the site is removed. Based on adherence to the above recommendations, a determination of "no adverse impact" is recommended for the undertaking pursuant to Section 106, CFR 800.

REFERENCES CITED

Elkins, M and K. Montgomery
2003 Cultural Resource Block Inventory of Sections 4, 5, 6, 7, and 8, Township 10 South, Range 23 East for Westport Oil & Gas Company, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-03-MQ-0882.

Patterson, J. J., J. Fritz, K. Lower-Eskelson, R. Stash and A. Thomas
2008 NBU Class I Existing Data Review for Kerr-McGee Oil & Gas Onshore LP, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Stokes, W. L.
1986 *Geology of Utah*. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

’APIWellNo:43047504600000’

IPC #09-01

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee’s Proposed Multi-Well Pads, Access Roads, Pipelines, and Pipeline Upgrades for “Bonanza #1023-6P1S, 6I4S, 6J3S, & 6I2S; #1023-07L3DS, M2AS, N2AS, & N2DS; #1023-8B2AS, 8B1AS, 8A4BS & 8A1DS; & #1023-10B4BS, B4AS, H2CS, & H1BS” (Sec. 6-8, 10, & 11, T 10 S, R 23 E)

Archy Bench & Asphalt Wash
Topographic Quadrangles
Uintah County, Utah

March 6, 2009

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

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by the BLM Vernal Field Office and James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Kerr McGee's proposed multi-well pads, access roads, pipelines, and pipeline upgrades for "Bonanza #1023-6P1S, 6I4S, 6J3S, & 6I2S; #1023-07L3DS, M2AS, N2AS, & N2DS; #1023-8B2AS, 8B1AS, 8A4BS & 8A1DS; & #1023-10B4BS, B4AS, H2CS, & H1BS" (Sec. 6-8, 10, & 11, T 10 S, R 23 E) was conducted by Simon Masters and Amanda Dopheide on February 24, 2009. The reconnaissance survey was conducted under the Utah BLM Paleontological Resources Use Permit #UT08-006C and Utah Paleontological Investigations Permit #07-356. This survey to locate, identify and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

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

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

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

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

- ***Class 3a* – Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.
- ***Class 3b* – Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.

- ***Class 4* – High.** Geologic units containing a high occurrence of vertebrate fossils or scientifically significant invertebrate or plant fossils, but may vary in abundance and predictability.
  - ***Class 4a* –** Outcrop areas with high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
  - ***Class 4b* –** Areas underlain by geologic units with high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.
- ***Class 5* – Very High.** Highly fossiliferous geologic units that consistently and predictably produce vertebrate fossils or scientifically significant invertebrate or plant fossils.
  - ***Class 5a* -** Outcrop areas with very high potential are extensive (greater than two acres) and paleontological resources may be susceptible to adverse impacts from surface disturbing actions.
  - ***Class 5b* -** Areas underlain by geologic units with very high potential but have lowered risks of disturbance due to moderating circumstances such as a protective layer of soil or alluvial material; or outcrop areas are smaller than two contiguous acres.

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

LOCATION

Kerr McGee’s proposed multi-well pads, access roads, pipelines, and pipeline upgrades for “Bonanza #1023-6P1S, 6I4S, 6J3S, & 6I2S; #1023-07L3DS, M2AS, N2AS, & N2DS; #1023-8B2AS, 8B1AS, 8A4BS & 8A1DS; & #1023-10B4BS, B4AS, H2CS, & H1BS” (Sec. 6-8, 10, & 11, T 10 S, R 23 E) are on lands managed by the BLM and the State of Utah Trust Lands Administration (SITLA), about 1-5 miles east of the White River as well as 1-3 miles north of the White River, 1-3 miles north of Saddletree Draw and Asphalt Wash, and about 9-15 miles southwest of Bonanza, UT. The project area can be found on the Archy Bench and Asphalt Wash 7.5 minute U. S. Geological Survey Quadrangle Maps, Uintah County, Utah.

PREVIOUS WORK

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

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

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

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

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

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

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

FIELD METHODS

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

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

PROJECT AREA

The project area is situated in the Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description of the individual multi-well pads and their associated pipelines, pipeline upgrades, and access roads.

Bonanza #1023-6P1S, 6I4S, 6J3S, & 6I2S
The multi-well pad is located in the NE/SE quarter-quarter section of Sec. 6, T 10 S, R 23 E (Figure 1). The well pad is staked on previously disturbed soil and colluvium and gravel to cobble sized pieces of purple varnished, tan sandstone. An outcrop of massive, subangular, coarse-grained, purple varnished, tan sandstone was observed approximately 20 feet east of the center stakes. No fossils were found.

Bonanza #1023-07L3DS, M2AS, N2AS, & N2DS
The proposed pipeline diverges from an existing pipeline and travels approximately 150 feet southwest where it ties into the proposed multi-well pad is located on the "Bonanza #1023-7L" well pad in the NW/SW quarter-quarter section for Sec. 7, T 10 S, R 23 E (Figure 1). The proposed pipeline was staked on relatively flat ground covered by colluvium and gravel to cobble sized pieces of purple siltstone. The well pad is staked on previously disturbed soil. No fossils were found.

Bonanza #1023-8B2AS, 8B1AS, 8A4BS & 8A1DS
The proposed multi-well pad is located in the NE/NE quarter-quarter section of Sec. 8, T 10 S, R 23 E (Figure 1). A portion of the well pad is staked on previously disturbed soil. The pad extension is staked primarily on colluvium that is covered with grass, sage, and gravel to cobble sized pieces of green-gray mudstone; purple siltstone; and tan, medium-grained sandstone. A small outcrop of tan, sub-rounded, medium-grained sandstone was observed approximately 8 feet southeast of the existing pad. No fossils were found.

Bonanza #1023-10B4BS, B4AS, H2CS, & H1BS
The proposed multi well pad is located on the existing well pad for "Bonanza #1023-10A" in the NE/NE quarter-quarter section of Sec. 10, T 10 S, R 23 (Figure 2). The well pad is staked on previously disturbed soil. No fossils were found.

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
"Bonanza #1023-6P1S, 6I4S, 6J3S, & 6I2S" (Sec. 6, T 10 S, R 23 E)	The well pad is staked on previously disturbed soil and colluvium and gravel to cobble sized pieces of purple varnished, tan sandstone. An outcrop of massive, subangular, coarse-grained, purple varnished, tan sandstone was observed approximately 20 feet east of the center stakes.	No fossils were found. **Class 3a**
"Bonanza #1023-07L3DS, M2AS, N2AS, & N2DS" (Sec. 7, T 10 S, R 23 E)	The proposed pipeline was staked on relatively flat ground covered by colluvium and gravel to cobble sized pieces of purple siltstone. The well pad is staked on previously disturbed soil.	No fossils were found. **Class 3a**
"Bonanza #1023-8B2AS, 8B1AS, 8A4BS & 8A1DS" (Sec. 8, T 10 S, R 23 E)	A portion of the well pad is staked on previously disturbed soil. The pad extension is staked primarily on colluvium that is covered with grass, sage, and gravel to cobble sized pieces of green-gray mudstone; purple siltstone; and tan, medium-grained sandstone. A small outcrop of tan, sub-rounded, medium-grained sandstone was observed approximately 8 feet southeast of the existing pad.	No fossils were found. **Class 3a**

“Bonanza #1023-10B4BS, B4AS, H2CS, & H1BS” (Sec. 10 & 11, T 10 S, R 23 E)	The well pad is staked on previously disturbed soil.	No fossils were found. **Class 3a**

RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee’s proposed multi-well pads, access roads, pipelines, and pipeline upgrades for “Bonanza #1023-6P1S, 6I4S, 6J3S, & 6I2S; #1023-07L3DS, M2AS, N2AS, & N2DS; #1023-8B2AS, 8B1AS, 8A4BS & 8A1DS; & #1023-10B4BS, B4AS, H2CS, & H1BS” (Sec. 6-8,10, & 11 , T 10 S, R 23 E). The well pads and the associated access roads, pipeline upgrades, and pipelines covered in this report showed no signs of vertebrate fossils. Therefore, we recommend that no paleontological restrictions should be placed on the development of the projects included in this report.

Buried pipeline will encounter Uinta formational sediments along most of the staked pipeline corridors yet indications from surface fossils predict that little if any vertebrate fossils will be disturbed.

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

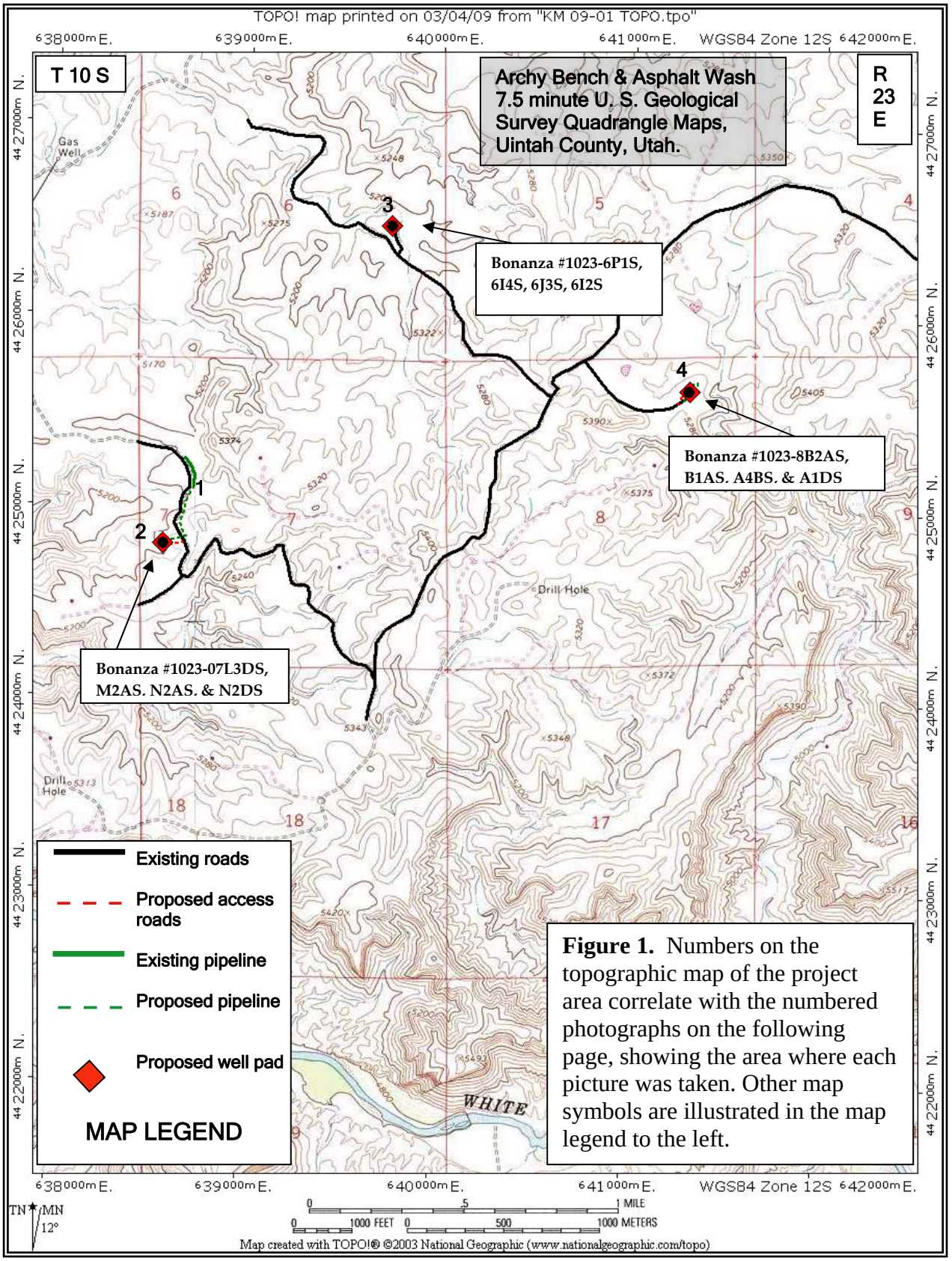


Figure 1. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.

Figure 1. *continued…*

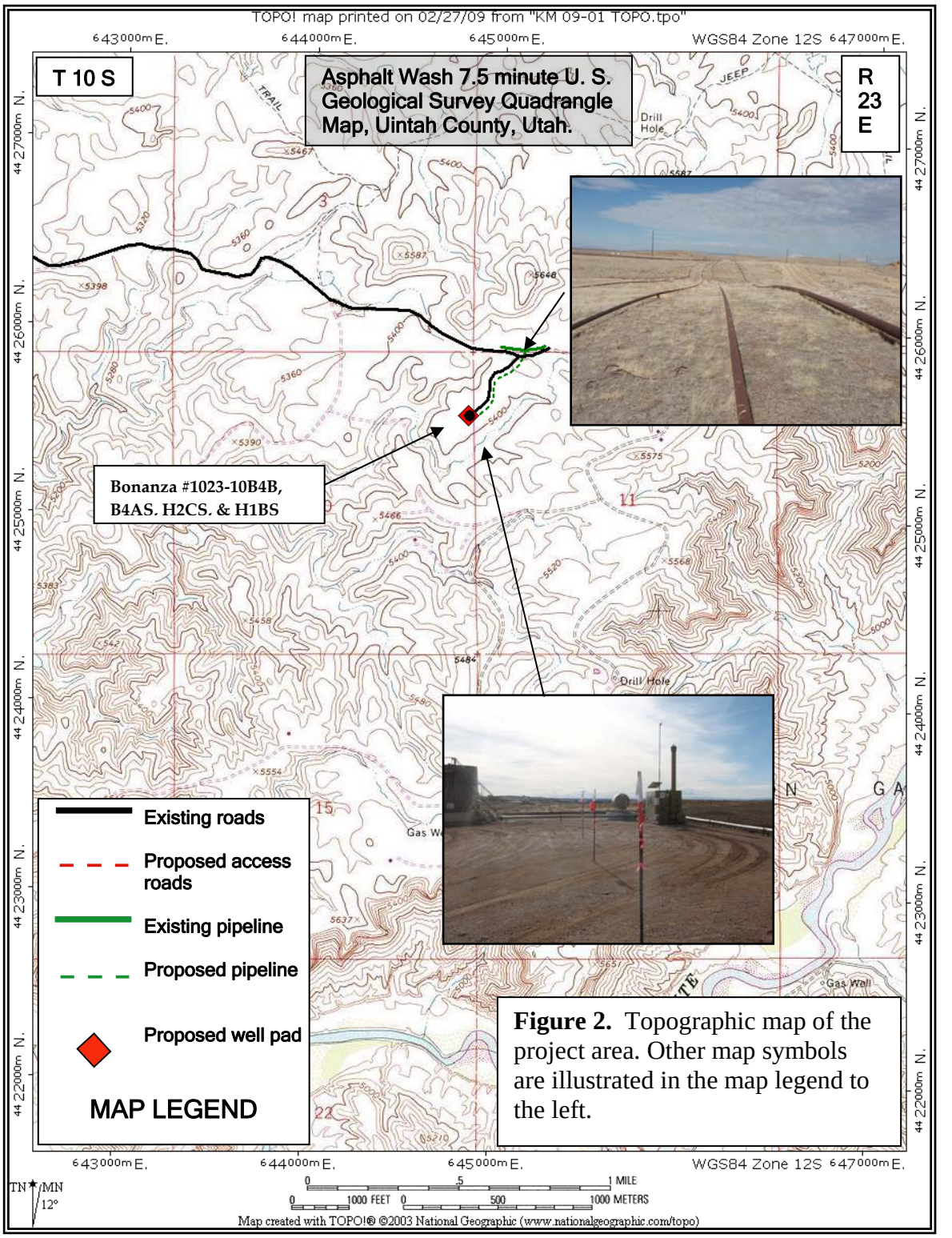


Figure 2. Topographic map of the project area. Other map symbols are illustrated in the map legend to the left.

REFERENCES CITED

Abbott, W., 1957, Tertiary of the Uinta Basin: Intermountain Assoc. Petroleum Geologists Guidebook, Eighth Ann. Field Conf., p. 102-109.

Anderson, D. W., and Picard, M. D., 1972, Stratigraphy of the Duchesne River Formation (Eocene-Oligocene?), northern Uinta Basin, northeastern Utah: Utah Geological and Mineralogical Survey Bulletin 97, p. 1-28.

Betts, C. W., 1871, The Yale College expedition of 1870: Harper’s New Monthly Magazine, v. 43, p. 663-671.

Black, C. C. and Dawson, M. R., 1966, A Review of Late Eocene Mammalian Faunas from North America: American Journal of Science, v. 264, p. 321-349.

Bryant, B., Naeser C. W., Marvin R. F., Mahnert H. H., 1989, Cretaceous and Paleogene Sedimentary Rocks and Isotopic Ages of Paleogene Tuffs,Uinta basin, Utah. And Ages of Late Paleogene and Neogene Tuffs and the Beginning of Rapid Regional Extension, Eastern Boundary of the Basin and Range Province near Salt lake City, Utah: In: Evolution of Sedimentary basins-Uinta and Piceance Basins. U. S. Geological Survey Bulletin 1787-J, K.

Flynn, J. J., 1986, Correlation and geochronology of middle Eocene strata from the western United States: Palaeogeographic, Palaeoclimatology, Palaeoecology, v. 55, p. 335-406.

Hamblin, A. H. and Miller, W. E., 1987, Paleogeography and Paleoecology of the Myton Pocket, Uinta Basin, Utah (Uinta Formation-Upper Eocene): Brigham Young University Geology Studies, v. 34, p 33-60.

Kay, J. L., 1934, Tertiary formations of the Uinta Basin, Utah: Annals of Carnegie Museum, v. 23, p. 357-371.

Marsell, R. E., 1964, Geomorphology of the Uinta Basin-A Brief Sketch: Thirteenth annual Field Conference. Association of Petroleum Geologists, p. 34-46.

Marsh, O. C., 1871, on the geology of the Eastern Uintah Mountains: American Journal of Science and Arts, v. 1, p. 1-8.

_____ 1875a, Ancient lake basins of the Rocky Mountain region: American Journal of Science and Arts, v. 9, p. 49-52.

_____ 1875b, Notice of new Tertiary mammals, IV: American Journal of Science and Arts, Third Series, v. 9, p. 239-250.

Osborn, H. F., 1895, Fossil mammals of the Uinta beds, expedition of 1894: American Museum of Natural History Bulletin, v. 7, p. 71-106.

_____ 1929, The Titanotheres of Ancient Wyoming, Dakota and Nebraska: Monograph of the U. S. Geological Survey, v. 55, p. 1-953.

Peterson, O. A., 1931c, new species from the Oligocene of the Uinta: Annals of Carnegie Museum, v. 21, p. 61-78.

Peterson, O. A. and Kay, J. L., 1931, The Upper Uinta Formation of Northeastern Utah: Annals of the Carnegie Museum, v. 20, p. 293-306.

Prothero, D. R., 1996, Magnetic Stratigraphy and biostratigraphy of the middle Eocene Uinta Formation, Uinta Basin, Utah, *in* Prothero, D. R., and Emry, R. J. editors, The Terrestrial Eocene-Oligocene Transition in North America, p. 3-24.

Rasmussen, D. T., Conroy, G. C., Friscia, A. R., Townsend, K. E. and Kinkel, M. D., 1999, Mammals of the middle Eocene Uinta Formation: Vertebrate Paleontology of Utah, p. 401-420.

Riggs, E. S., 1912. New or Little Known Titanotheres from the Lower Uintah Formations: Field Museum of Natural History Geological Series, v. 159, p. 17-41.

Ryder, R. T., Fouch, T. D., Elison, J. H., 1976, Early Tertiary sedimentation in the western Uinta Basin, Utah: Geological Society of America Bulletin v. 87, p. 496-512.

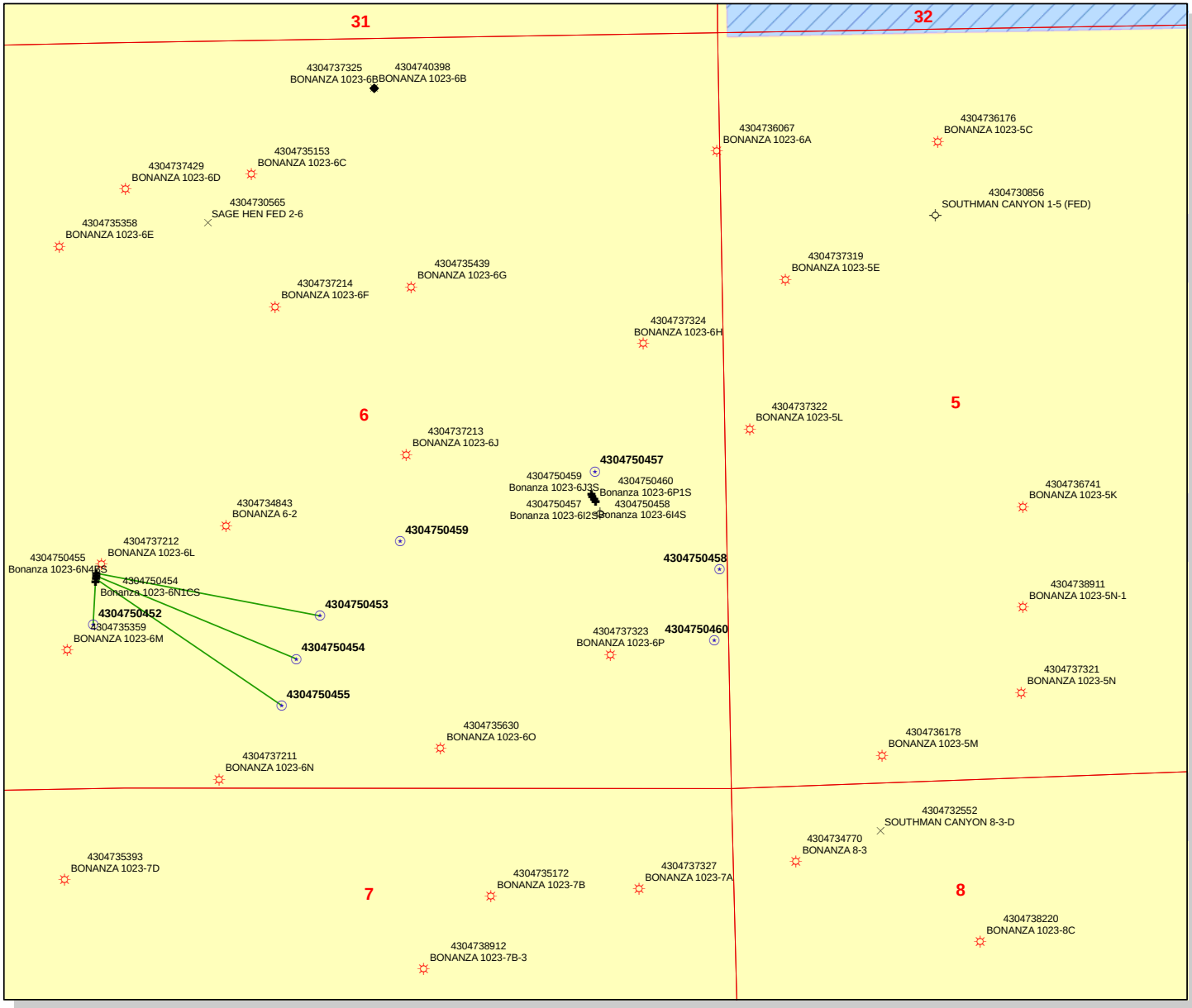
Scott, W. B., 1945, The Mammalia of the Duchesne River Oligocene: Transactions of the American Philosophical Society, v. 34, p. 209-253.

Stucky, R. K., 1992, Mammalian faunas in North America of Bridgerian to early Arikareean “age” (Eocene and Oligocene), in Prothero, D. R., and Berggren, W. A., eds., Eocene-Oligocene climatic and biotic evolution: Princeton University Press, p. 464-493.

Wood, H. E., 1934, Revision of the Hyrachyidaes: American Museum of Natural History Bulletin, v. 67, p. 181-295.

_____ and others, 1941, Nomenclature and Correlation of the North America Continental Tertiary: Geol. Soc. Amer. Bull., v. 52, no. 1, Jan. 1, p. 1-48. 52, no. 1, Jan. 1, p. 1-48.

’APIWellNo:4304750460000’



API Number: 4304750460

Well Name: Bonanza 1023-6P1S

Township 10.0 S Range 23.0 E Section 6

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
- 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

860 430 0 860 Feet

1:8,743

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/2/2009
API NO. ASSIGNED: 43047504600000
WELL NAME: Bonanza 1023-6P1S
OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)
PHONE NUMBER: 720 929-6156
CONTACT: Danielle Piernot

PROPOSED LOCATION: NESE 6 100S 230E
Permit Tech Review: ✔

SURFACE: 2060 FSL 0958 FEL
Engineering Review: ✔

BOTTOM: 1070 FSL 0125 FEL
Geology Review: ✔

COUNTY: UINTAH
LATITUDE: 39.97625
LONGITUDE: -109.36298
UTM SURF EASTINGS: 639791.00
NORTHINGS: 4426194.00
FIELD NAME: NATURAL BUTTES
LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU 38419
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:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ✔ **Drilling Unit**

Board Cause No: CAUSE 179-14
Effective Date: 6/12/2008
Siting: 460' fr ext. drilling unit boundary

- ✔ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
3 - Commingling - ddoucet
4 - Federal Approval - dmason
15 - Directional - 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: Bonanza 1023-6P1S
API Well Number: 43047504600000
Lease Number: UTU 38419
Surface Owner: FEDERAL
Approval Date: 6/18/2009

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 179-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

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

Commingle:
In accordance with Board Cause No. 179-14, completion into and commingling of production from the Wasatch and Mesaverde formations is allowed.

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

Conditions of Approval:
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.

Notification Requirements:
Notify the Division within 24 hours of spudding the well.

API Well No: 43047504600000

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.
- Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

Reporting Requirements:
All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:

Gil Hunt
Associate Director, Oil & Gas

API Well No: 43047504600000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
Bonanza 1023-6P1S

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

9. API NUMBER:
43047504600000

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:
2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 6 Township: 10.0S Range: 23.0E 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: 6/18/2010	☐ 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: June 23, 2010

By:

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

SIGNATURE	DATE
N/A	6/17/2010

RECEIVED June 17, 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 43047504600000

API: 43047504600000
Well Name: Bonanza 1023-6P1S
Location: 2060 FSL 0958 FEL QTR NESE SEC 6 TWNP 100S RNG 230E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 6/18/2009

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:** 6/17/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: June 23, 2010

By: Dark Hill

RECEIVED June 17, 2010

API Well No: 43047504600000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
Bonanza 1023-6P1S

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

9. API NUMBER:
43047504600000

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:
2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 6 Township: 10.0S Range: 23.0E 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: 6/18/2010	☐ 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: June 23, 2010

By:

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

SIGNATURE	DATE
N/A	6/17/2010

RECEIVED June 17, 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 43047504600000

API: 43047504600000
Well Name: Bonanza 1023-6P1S
Location: 2060 FSL 0958 FEL QTR NESE SEC 6 TWNP 100S RNG 230E MER S
Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.
Date Original Permit Issued: 6/18/2009

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:** 6/17/2010
Title: Regulatory Analyst **Representing:** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date: June 23, 2010

By: Dark Hill

RECEIVED June 17, 2010

Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JUN 08 2009
BLM

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
UTU38419

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
UTU60768

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

8. Lease Name and Well No.
BONANZA 1023-6P1S

2. Name of Operator
KERR MCGEE OIL & GAS ONSHORE LL
Contact: KATHY SCHNEEBECK DULNOAN
E-Mail: kathy.schneebeckdulnoan@anadarko.com

9. API Well No.
43-047-50460

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

3b. Phone No. (include area code)
Ph: 720-929-6007
Fx: 720-929-7007

10. Field and Pool, or Exploratory
NATURAL BUTTES

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

At surface NESE 2060FSL 958FEL 39.97635 N Lat, 109.39354 W Lon

At proposed prod. zone SESE 1070FSL 125FEL 39.97363 N Lat, 109.36057 W Lon

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 6 T10S R23E Mer SLB
SME: BLM

14. Distance in miles and direction from nearest town or post office*
APPROXIMATELY 24 MILES SOUTHEAST OF OURAY, UT

12. County or Parish
UINTAH

13. State
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)
APPROXIMATELY 125' TO LEASE LINE

16. No. of Acres in Lease
516.80

17. Spacing Unit dedicated to this well
321.10

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
APPROXIMATELY 510'

19. Proposed Depth
8615 MD
8300 TVD

20. BLM/BIA Bond No. on file
WYB000291

21. Elevations (Show whether DF, KB, RT, GL, etc.
5184 GL

22. Approximate date work will start
07/06/2009

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)
KATHY SCHNEEBECK DULNOAN Ph: 720-929-6007

Date
06/03/2009

Title
STAFF REGULATORY ANALYST

Approved by (Signature)

Name (Printed/Typed)
James H. Sparger

Date
JUN 17 201

Title
ACTING 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 #70492 verified by the BLM Well Information System
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal
Committed to AFMSS for processing by GAIL JENKINS on 06/04/2009 (09GXJ4706AE)

NOTICE OF APPROVAL

RECEIVED
JUN 28 2010
DIV. OF OIL, GAS & MINING

UDOGM

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

09SXS0326A NOS: 19-08-2008

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**	**Location:**	**NESE, Sec. 6, T10S, R23E**
Well No:	**Bonanza 1023-6P1S**	**Lease No:**	**UTU-68419**
API No:	**43-047-50460**	**Agreement:**	**CR-3**

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 was processed using a 390 CX tied to NEPA approved 2/5/2007. Therefore, this permit is approved for a two (2) year period OR until lease expiration OR the well must be spud by 2/5/2012 (5 years from the NEPA approval date), 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.

- The following seed mix will be used for Interim Reclamation

  Interim Reclamation seed mix

Ephraim crested wheatgrass	*Agropyron cristatum v. Epharim*	1 lbs. /acre
bottlebrush squirreltail	*Elymus elymoides*	1 lbs. /acre
Siberian wheatgrass	*Agropyron fragile*	1 lbs. /acre
western wheatgrass	*Agropyron smithii*	1 lbs. /acre
scarlet globemallow	*Spaeralcea coccinea*	1 lbs. /acre
shadscale	*Atriplex confertifolia*	2 lbs. /acre
fourwing saltbush	*Atriplex canescens*	2 lbs. /acre

  Seed shall be applied with a rangeland drill, unless topography and /or rockiness precludes the use of equipment. See shall be applied between August 15 and ground freezing. All see rates are in terms of Pure Live Seed. Operator shall notify the Authorized Officer when seeding has commenced, and shall retain all seed tags.

- In order to protect the edge of the pad rip-rap will be placed along corner 9 and along the side of the pad until the constructed diversion ditch meets the undisturbed drainage.

- 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.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A formation integrity test shall be performed at the surface casing shoe.
- 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.

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

- 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 **<u>NOT</u>** 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 <u>top of cement</u> 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.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.

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

    - Operator name, address, and telephone number.

    - Well name and number.

    - Well location (¼¼, Sec., Twn, Rng, and P.M.).

    - Date well was placed in a producing status (date of first production for which royalty will be paid).

    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

    - Unit agreement and/or participating area name and number, if applicable.

    - Communitization agreement number, if applicable.

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

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

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4.

Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

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

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

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

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

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

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

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

SUBMIT AS EMAIL | Print Form

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By ANDY LYTLE Phone Number 720.929.6100
Well Name/Number BONANZA 1023-6P1S
Qtr/Qtr NESE Section 6 Township 10S Range 23E
Lease Serial Number UTU-38419
API Number 4304750460

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

Date/Time 09/18/2010 14:00 HRS AM ☐ PM ☐

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

- ☑ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

RECEIVED
SEP 16 2010
DIV. OF OIL, GAS & MINING

Date/Time 09/29/2010 14:00 HRS AM ☐ PM ☐

BOPE

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

Date/Time _____ _____ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.828.0986 OR LOVEL YOUNG AT 435.781.7051

API Well No: 43047504600000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
Bonanza 1023-6P1S

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

9. API NUMBER:
43047504600000

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:
2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 23.0E 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:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT Date of Spud: 9/18/2010	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ 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.

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'.
RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/ 28 SX READY MIX.
SPUD WELL LOCATION ON SEPTEMBER 18, 2010 AT 12:15 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
September 22, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II

SIGNATURE	DATE
N/A	9/22/2010

RECEIVED September 22, 2010

FORM 6

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

ENTITY ACTION FORM

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

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750460	BONANZA 1023-6P1S		NESE	6	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17793	9/18/2010			10/11/10	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 9/18/2010 AT 12:15 HRS. BHL=SESE

Well 2

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

Comments:

Well 3

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

Comments:

ACTION CODES:

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

ANDY LYTLE
Name (Please Print)

Signature

REGULATORY ANALYST
Title

9/22/2010
Date

RECEIVED
SEP 23 2010
DIV. OF OIL, GAS & MINING

(5/2000)

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
UTU38419

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
BONANZA 1023-6P1S

2. Name of Operator
KERR-MCGEE OIL & GAS ONSHORE L
Contact: DANIELLE E PIERNOT
EMail: danielle.piernot@anadarko.com

9. API Well No.
43-047-50460

3a. Address
PO BOX 173779
DENVER, CO 80202

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 *(Footage, Sec., T., R., M., or Survey Description)*
Sec 6 T10S R23E NESE 2060FSL 958FEL

11. County or Parish, and State
UINTAH COUNTY, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☒ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to run 9 5/8" 40# casing for this well location instead of the originally permitted 36# surface casing (remains 9 5/8"). Please contact the undersigned with any questions and/or comments. Thank you.

COPY SENT TO OPERATOR
Date: 1-6-2011
Initials: KS

Accepted by the
Utah Division of
Oil, Gas and Mining
1/3/2011

Federal Approval Of This
Action Is Necessary

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #98253 verified by the BLM Well Information System
For KERR-MCGEE OIL & GAS ONSHORE L, sent to the Vernal

Name *(Printed/Typed)* DANIELLE E PIERNOT — Title REGULATORY ANALYST I

Signature (Electronic Submission) — Date 11/29/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date _____

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

Office

Title 18 U.S.C. Section 1001 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.

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

RECEIVED
DEC 14 2010
DIV. OF OIL, GAS & MINING

API Well No: 43047504600000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-6P1S

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

9. API NUMBER: 43047504600000

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: 2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 23.0E 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:	☐ 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
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 12/15/2010	☐ 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.

MIRU PROPETRO AIR RIG ON DECEMBER 13, 2010. DRILLED 12 1/4" SURFACE HOLE TO 2130'. RAN 9 5/8" 40# J-55 SURFACE CSG. PUMP 100 BBLS FRESH WATER. PUMP 20 BBLS GEL WATER. PUMP 250 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. NO CIRC. DROP PLUG ON THE FLY, DISPLACED W/ 156 BBLS WATER. PARTIAL RETURNS. BUMP PLUG & HOLD 600 PSI FOR 5 MIN. FLOAT HELD. TOP OUT W/ 100 SX CLASS G PREM @ 15.8 PPG, 1.15 YD. WAITED 2 HR INTERVALS TO PUMP TOP OUTS W/ ADDITIONAL 550 SX SAME CEMENT. WORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
12/20/2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II

SIGNATURE	DATE
N/A	12/16/2010

RECEIVED December 16, 2010

API Well No: 43047504600000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-6P1S

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

9. API NUMBER:
43047504600000

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:
2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 23.0E 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:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 2/11/2011	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: RIG REL. - ACTS PIT

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

FINISHED DRILLING FROM 2130' TO 8600' ON FEBRUARY 3, 2011. RAN 4 ½" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 420 SX CLASS G PREM LITE @ 11.6 PPG, 2.62 YD. TAILED CEMENT W/ 935 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YD. DISPLACED W/ 133 BBLS WATER W/ CLAYFIX & ALDACIDE G @ 2022 PSI. BUMPED PLUG @ 2600 PSI. FLOATS HELD W/ 1.0 BBLS RETURNED. GOOD RETURNS DURING CMT JOB W/ 5 BBLS CEMENT TO SURFACE. RD CEMENTERS AND CLEANED PITS. RELEASED ENSIGN RIG #146 ON FEBRUARY 5, 2011 @ 00:00 HRS. THE PIT ON THIS LOCATION WILL BE REFURBISHED AND UTILIZED AS PART OF THE ACTS SYSTEM.

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

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Gina Becker	720 929-6086	Regulatory Analyst II
SIGNATURE		**DATE**
N/A		2/7/2011

RECEIVED February 07, 2011

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-6P1S

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

9. API NUMBER:
43047504600000

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:
2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 23.0E 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:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 4/8/2011	☐ 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.

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 04/08/2011 AT 3:15 PM. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

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

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Sheila Wopsock	435 781-7024	Regulatory Analyst

SIGNATURE	DATE
N/A	4/11/2011

RECEIVED Apr. 11, 2011

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU38419

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU60768

2. Name of Operator KERR MCGEE OIL & GAS ONSHORE LP Contact: GINA T. BECKER E-Mail: gina.becker@anadarko.com

8. Lease Name and Well No. BONANZA 1023-6P1S

3. Address POBOX 173779 DENVER, CO 80217

3a. Phone No. (include area code) Ph: 720-929-6086

9. API Well No. 43-047-50460

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface NESE 2060FSL 958FEL 39.976381 N Lat, 109.362861 W Lon
At top prod interval reported below SESE 1083FSL 134FEL
At total depth SESE 1052FSL 113FEL

BHL reviewed by HSM

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 6 T10S R23E Mer SLB

12. County or Parish UINTAH

13. State UT

14. Date Spudded 09/18/2010

15. Date T.D. Reached 02/03/2011

16. Date Completed ☐ D & A ☒ Ready to Prod. 04/08/2011

17. Elevations (DF, KB, RT, GL)* 5184 GL

18. Total Depth: MD 8600 TVD 8402

19. Plug Back T.D.: MD 8547 TVD 8349

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) ACBL-CCL-GR-CHI

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7		40		28			
12.250	9.625 J-55	40.0		2122		900		0	
7.875	4.500 I-80	11.6		8591		1355		860	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	8114							

25. Producing Intervals

	Formation	Top	Bottom
A)	WASATCH	5536	5854
B)	MESAVERDE	6802	8415
C)			
D)			

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
5536 TO 5854	0.360	24	OPEN
6802 TO 8415	0.360	141	OPEN

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

Depth Interval	Amount and Type of Material
5536 TO 8415	PUMP 7,280 BBLS SLICK H20 & 270,768 LBS SAND

RECEIVED
MAY 19 2011
DIV. OF OIL, GAS & MINING

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
04/08/2011	04/12/2011	24	→	0.0	2303.0	368.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	1655	2312.0	→	0	2303	368		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #107946 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas*(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
GREEN RIVER	1150				
BIRD'S NEST	1410				
MAHOGANY	1762				
WASATCH	4285	6383			
MESAVERDE	6383	8600			

32. Additional remarks (include plugging procedure):
Attached is the chronological well history & final survey. Completion chrono details individual frac stages.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #107946 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE,L, sent to the Vernal

Name *(please print)* GINA T. BECKER Title REGULATORY ANALYST

Signature (Electronic Submission) Date 05/10/2011

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 fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 9/16/2010	End Date: 2/5/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/13/2010	9:00 - 13:30	4.50	MIRU	01	B	P		DRESS TOP OF CONDUCTOR. INSTALL DIVERTER HEAD AND BOWIE LINE. BUILD DITCH. MOVE RIG OVER HOLE AND RIG UP.. SET CATWALK AND PIPE RACKS. RIG UP AND PRIME PIT PUMP AND MUD PUMP
	13:30 - 14:00	0.50	PRPSPD	01	B	P		P/U 1.83 DEG BENT HOUSING HUNTING MTR SN 8065 . 7/8 LOBE .17 RPM. M/U QD507Z SN 7017970 2ND RUN, W/ 7-18'S. INSTALL RUBBER.
	14:00 - 16:00	2.00	DRLSUR	02	A	P		SPUD SURFACE 12-13-2010 @ 14:00 HRS. DRILL 12 1/4" SURFACE HOLE F/40'-210' (170' @ 85'/HR) PSI ON/ OFF 790/650, UP/ DOWN/ ROT 34/26/30. 550 GPM, 45 RPM ON TOP DRIVE, 15-20K WOB
	16:00 - 18:30	2.50	DRLSUR	06	A	P		TOOH, PU AND ORIENT DIR TOOLS, TIH T/210'
	18:30 - 0:00	5.50	DRLSUR	02	C	P		DRILL/ SLIDE 12 1/4" SURFACE HOLE F/210'-780' (570' 180'/HR) PSI ON/ OFF 1070/800, UP/ DOWN/ ROT 58/49/54,134 SPM 18-22K WOB,550 GPM, 45 RPM ON TOP DRIVE.MM 85 RPM,CIRC. RESERVE PIT
12/14/2010	0:00 - 23:30	23.50	DRLSUR	02	C	P		DRILL/ SLIDE 12 1/4" SURFACE HOLE F/780'-2130' (1350' 57'/HR) PSI ON/ OFF 1270/1070, UP/ DOWN/ ROT 66/76/72,134 SPM 18-22K WOB,550 GPM, 45 RPM ON TOP DRIVE.MM 88 RPM,CIRC. RESERVE PIT
	23:30 - 0:00	0.50	DRLSUR	05	A	P		CIRC AND COND HOLE CLEAN
12/15/2010	0:00 - 1:30	1.50	DRLSUR	05	A	P		CIRC AND COND HOLE CLEAN
	1:30 - 5:00	3.50	DRLSUR	06	A	P		TOOH, LDDS AND DIR BHA, WORK TIGHT HOLE, PACKING OFF
	5:00 - 8:00	3.00	DRLSUR	06	E	P		MAKE WIPER TRIP BACK TO BTM, REAM TIGHT HOLE
	8:00 - 12:00	4.00	DRLSUR	06	A	P		TOOH, LDDS AND DIR BHA
	12:00 - 13:00	1.00	CSG	12	A	P		RU TO RUN CSG, MOVE PIPE RACKS AND CATWALK, MOVE CSG OVER TO WORK AREA
	13:00 - 16:00	3.00	CSG	12	C	P		RIG UP AND RUN 49JTS OF 9-5/8", 40#, J-55, 8 RND CSG W/ LTC THREADS. LANDED FLOAT SHOE @ 2107.79' KB. RAN BAFFLE PLATE IN TOP OF SHOE JT LANDED 2060.85' KB. HAD TO WASH DOWN LAST TWO JTS, FILL CSG @ 500', 1500', AND 2100'.
	16:00 - 16:30	0.50	RDMO	01	E	P		RIG DOWN RIG, MOVE OUT, RELEASE RIG 12-15-2010 @ 16:30.

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 9/16/2010	End Date: 2/5/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:30 - 0:00	7.50	RDMO					HOLD SAFETY MEETING. INSTALL CEMENT HEAD. PSI TEST TO 2000 PSI. PUMP 100 BBLS OF 8.3# H20 AHEAD. NO CIRC. PUMP 20 BBLS OF 8.4# GEL WATER AHEAD. NO CIRC. PUMP 250 SX (51.2 BBLS) OF 15.8# 1.15 YIELD TAIL(2% CALC, 1/4# /SK OF FLOCELE). NO CIRC. DROP PLUG ON FLY AND DISPLACE W/156 BBLS OF 8.3# H20. PARTIAL RETURNS, BUMP PLUG AND HOLD 600 PSI FOR 5 MIN. FLOAT HELD. TOP OUT, PUMP 100 SX (40.9 BBLS) OF 15.8# 1.15 YIELD TAIL(4 % CALC, 1/4# /SK OF FLOCELE). WAITED 2 HRS INTERVALS TO PUMP TOP OUTS, TOTAL TOP OUT WAS 650 SX, RIG DOWN CEMENTERS AND RELEASE CEMENTERS 05:30 12/16/2010. CONDUCTOR CASING: Cond. Depth set: 40' Cement sx used: 28 SPUD DATE/TIME: 12-13-2010 @ 14:00 SURFACE HOLE: Surface From depth: 40' Surface To depth: 2,127 Total SURFACE hours: 31 Surface Casing size: 9.625" # of casing joints ran: 49 Casing set MD: 2,107.79' # sx of cement: 250 SKS, (51.2BBLS)TAIL, 650 SKS (127.9 BBLS)TOP OUT Cement blend (ppg:) 15.8# ON TAIL CMTS Cement yield (ft3/sk): # of bbls to surface:0 BBL Describe cement issues: NO CIRC DURING CMT JOB Describe hole issues: LOST TOTAL CIRC @ 1500'
1/30/2011	12:00 - 14:30	2.50	MIRU	01	C	P		SKID RIG OVER WELL
	14:30 - 15:30	1.00	MIRU	14	A	P		NIPPLE UP BOP
	15:30 - 23:00	7.50	MIRU	15	A	P		TEST BOP RAMS, CHOKE, HCR, KILLINE TO 250 LOW 5000 HIGH, ANNULAR 250 LOW 5000 HIGH - HAD TROUBLE W/ SUPER CHOKE & INSIDE VALVE
	23:00 - 23:30	0.50	DRLPRO	06	J	P		INSTALL WEAR BUSHING
	23:30 - 0:00	0.50	DRLPRO	09	A	P		CUT & SLIP DRILLINE
1/31/2011	0:00 - 2:00	2.00	DRLPRO	09	A	P		FINISH CUTTING 100 FT. OF DRILLINE
	2:00 - 5:00	3.00	DRLPRO	06	A	P		P/U BIT & BHA, RIH, TAG CMT @ 2007 FT.
	5:00 - 6:00	1.00	DRLPRO	07	B	P		LEVEL DERRICK, INSTALL ROTATINGHEAD
	6:00 - 7:30	1.50	DRLPRO	02	F	P		DRILL CMT, FLOAT & SHOE
	7:30 - 14:00	6.50	DRLPRO	02	D	P		DRILL & SLIDE F/ 2140 TO 2773 - 633 FT. 97 FT. PER/HR. MW 8.4, VIS 27, WOB 22, RPM 45, MMRPM. 148, GPM 509, TQ. 9/3, PSI ON/OFF BTM. 1850/1450 - ROT. 77% SLIDE 23%
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SERVICE

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 9/16/2010	End Date: 2/5/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL & SLIDE F/ 2773 TO 3861- 1088 FT. 115 FT. PER/HR. MW 8.4, VIS 28, WOB 22, RPM 45, MMRPM 148, GPM 509, TQ. 10/6, PSI ON/OFF BTM. 1700/1300 - ROT 74% SLIDE 26%
2/1/2011	0:00 - 13:30	13.50	DRLPRO	02	D	P		DRILL & SLIDE F/ 3861TO 5584 - 1723 FT. 128 FT PER/HR. MW. 9, VIS 29, WOB 22, RPM 45, MMRPM. 148, TQ. 13/9 PSI ON/OFF BTM. 2300/1900 - ROT 84% SLIDE 16%
	13:30 - 14:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:00 - 16:00	2.00	DRLPRO	02	D	P		DRILL/SLIDE F/5584' TO 5765' (181' @ 90fph) MW 10.3, VIS 38, WOB 22, RPM 45, MM RPM 145, TQ 13/19, GPM 500 (ROT 100%)
	16:00 - 19:00	3.00	DRLPRO	08	A	Z		REPAIR IRON DERRICKHAND - REPLACED HYD VALVE
	19:00 - 0:00	5.00	DRLPRO	02	D			DRILL/SLIDE F/5765' TO 6270' (505' @ 101fph) MW 10.6, VIS 38, WOB 22, RPM 45, MM RPM 145, GPM 500, PSI OFF ON 2040/2260
2/2/2011	0:00 - 12:30	12.50	DRLPRO	02	D	P		DRILL/SLIDE F/6270' TO 7124' (854' @ 69fph) MW 11.0, VIS 40, WOB 22, RPM 40, MM RPM 145, GPM 500, PSI OFF/ON 2050/2375, SLIDE6308 6316, 6490 6504, 6580 6594, 6671 6681, 6762 6775, 6852 6870, 6943 6955, 7124 7134 (SLIDE 89'/4.25 hrs 34% - ROT 765'/8.25 hrs 66%)
	12:30 - 13:00	0.50	DRLPRO	07	A	P		RIG SER
	13:00 - 0:00	11.00	DRLPRO	02	D	P		DRILL/SLIDE F/7124' TO 7940' (816' @ 75fph) MW 11.5, VIS 40, WOB 22, RPM 40, MM RPM 145, TQ 8/13, GPM 500, SPI OFF ON 2150/2450, SLIDE 7305 7317, 7396 7406, 7030 8040 (SLIDE 32'/1 hr 9% - ROT 784'/10 hrs 91%)
2/3/2011	0:00 - 9:30	9.50	DRLPRO	02	D	P		DRILL/SLIDE F/79740' TO 8600' (660' @ 70fph) MW 11.6, VIS 42, WOB 22, RPM 40, MM RPM 145, GPM 500, PSI OFF ON 2150/2450 (ROT 100%)
	9:30 - 11:00	1.50	DRLPRO	05	C	P		CIRC
	11:00 - 0:00	13.00	DRLPRO	06	D	P		POOH LDDP - BACK REAM 38 STDS TO 5180' 100K O/PULL RACK VBACK- CONTINUE POOH LDDP
2/4/2011	0:00 - 4:00	4.00	DRLPRO	06	A	P		POOH LDDP/BHA
	4:00 - 4:30	0.50	DRLPRO	14	B	P		RETRIEVE WEARBUSHING
	4:30 - 13:30	9.00	CSG	12	C	P		HPJSM, R/UP FRANKS & RUN 203 JTS & 2 MARKER JTS 4.5" 11.60, I-80 BTC PROD CASING - FLOAT SHOE @ 8590', FLOAT COLLAR @ 8545', MESE VERDE MKR 6422', WASATCH MKR @ 4296'
	13:30 - 14:30	1.00	CSG	05	A	P		CIRC
	14:30 - 17:30	3.00	CSG	12	E	P		HPJSM, R/UP BJ & CEMENT 4.5" PROD CASING, TEST LINES 5000 PSI, PUMP 40 BBLS FRESH WATER, 420 SKS LEAD 11.6 PPG 2.62 YIELD, TAIL 935 SKS 14.3 PPG, 1.31 YIELD, DROPPED PLUG & DISPLACED W/133 BBLS FRESH WATER W/0.1 gal/bbl CLAYFIX II & 0.01 gal/bbl ALDACIDE G @ 2022 PSI, BUMPED PLUG @ 2690 PSI - FLOATS HELD W/1.0 BBLS RETURN, GOOD RETURNS DURING CMT JOB W/5 BBLS CEMENT TO SURFACE - R/DN BJ
	17:30 - 18:00	0.50	CSG	12	C	P		FLUSH BOP - SET C-22 SLIPS ON 4.5" PROD CASING W/100K STRING WGT - LOUIS ORTIZ WEATHERFORD REP
	18:00 - 23:59	5.98	CSG	14	A	P		N/DN BOPE - MAKE ROUGH CUT 4.5" CASING - L/OUT SAME - CLEAN RIG TANKS - WINTERIZE RIG FOR MOVE - RELEASE RIG @ 00:00

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 9/16/2010	End Date: 2/5/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	23:59 - 0:00	0.02	CSG					SPUD DATE/TIME: 12-13-10 @ 14:00 SURFACE HOLE: Surface From depth: 40 Surface To depth: 2,127 Total SURFACE hours: 31.00 Surface Casing size: 9 5/8 # of casing joints ran: 49 Casing set MD: 2,107.8 # sx of cement: 250 TAIL 650 TOP OUT Cement blend (ppg:) 15.8 Cement yield (ft3/sk): # of bbls to surface: Describe cement issues: NO CIRC. DURING CMT. JOB Describe hole issues: LOST TOTAL CIRC. @ 1500 FT. PRODUCTION: Rig Move/Skid start date/time: 1/30/2011 12:00 Rig Move/Skid finish date/time: 1/30/2011 13:30 Total MOVE hours: 1.5 Prod Rig Spud date/time: 1/31/2011 6:00 Rig Release date/time: 2/5/2011 0:00 Total SPUD to RR hours: 114.0 Planned depth MD 8,585 Planned depth TVD 8,385 Actual MD: 8,600 Actual TVD: 8,403 Open Wells $: $624,384 AFE $: $683,573 Open wells $/ft: $72.60 PRODUCTION HOLE: Prod. From depth: 2,140 Prod. To depth: 8,600 Total PROD hours: 69.5 Log Depth: NO LOGS REQUIRED Float Collar Top Depth: 8545 Production Casing size: 4 1/2 # of casing joints ran: 205 Casing set MD: 8,590.0 Stage 1 # sx of cement: LEAD 420, TAIL 935 - TOT 1355 Cement density (ppg:) LEAD 11.6, TAIL 14.3 Cement yield (ft3/sk): LEAD 2.62, TAIL 1.31 Stage 2 # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Top Out Cmt # sx of cement: Cement density (ppg:) Cement yield (ft3/sk): Est. TOC (Lead & Tail) or 2 Stage : Describe cement issues: 5 BBLS CEMENT TO SURFACE Describe hole issues: NO LOSSES DIRECTIONAL INFO: KOP: 150 Max angle: 19.67 Departure: 1311.55 Max dogleg MD: 3.38

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 4/1/2011	End Date: 4/8/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/1/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, REVIEW PRESSURE TEST PROCEDURES
	7:15 - 16:00	8.75	COMP	47	B	P		MIRU B&C TESTER, PRESSURE TEST FRAC VALVES TO 500# FOR 15 MIN. 3,500# FOR 15 MIN, 7,000# FOR 30 MIN W/ NO LESS THAN 100# BLEED OFF. W/ SURFACE CSG LOCKED OPEN, NO COMUNICATION MIRU CUTTERS WIRE LINE 1ST SHOOT MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,412'-8,415' 3 SPF, 120* PH, 9 HOLES. 8,368'-8,370' 3 SPF, 120* PH, 6 HOLES. 8,332'-8,334' 3 SPF, 120* PH, 6 HOLES. 8,312'-8,313' 3 SPF, 120* PH, 3 HOLES. [24 HOLES]
4/4/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, REVIEW PRE FRAC INSTRUCTIONS

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 4/1/2011	End Date: 4/8/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 18:00	10.75	COMP	36	E	P		FRAC STG #1 MESAVERDE 8,312'-8,415' [24 HOLES] FRAC STG #1] WHP=1,744#, BRK DN PERFS=3,774#, @=4.6 BPM, INJ RT=45.6, INJ PSI=4,824#, ISIP=2,551#, FG=.74, PUMP'D 1,201 BBLS SLK WTR W/ 36,609# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL W/ 41,609# TOTAL PROP PUMP'D, ISIP=2,593#, FG=.74, AR=50.3, AP=4,700#, MR=51.6, MP=6,610#, NPI=42#, 24/24 CALC PERFS OPEN. 100% PERF STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,258', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,226'-8,228' 3 SPF, 120* PH, 6 HOLES. 8,190'-8,192' 3 SPF, 120* PH, 6 HOLES. 8,167'-8,168' 3 SPF, 120* PH, 3 HOLES. 8,148'-8,150' 3 SPF, 120* PH, 6 HOLES. 8,135'-8,136' 3 SPF, 120* PH, 3 HOLES. [24 HOLES] FRAC STG #2] WHP=2,320#, BRK DN PERFS=4,797#, @=5.8 BPM, INJ RT=33.3, INJ PSI=3,880#, ISIP=2,807#, FG=.78, PUMP'D 1,088 BBLS SLK WTR W/ 37,095# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL W/ 42,095# TOTAL PROP PUMP'D, ISIP=2,818#, FG=.78, AR=51.3, AP=4,550#, MR=52.1, MP=6,413#, NPI=11#, 24/24 CALC PERFS OPEN. 100% PERF STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=8,070', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 8,027'-8,030' 3 SPF, 120* PH, 9 HOLES. 7,932'-7,934' 3 SPF, 120* PH, 6 HOLES. 7,864'-7,866' 3 SPF, 120* PH, 6 HOLES. 7,842'-7,843' 3 SPF, 120* PH, 3 HOLES. [24 HOLES] FRAC STG #3] WHP=2,292#, BRK DN PERFS=4,223#, @=4.2 BPM, INJ RT=51, INJ PSI=5,225#, ISIP=2,712#, FG=.77, PUMP'D 2,123 BBLS SLK WTR W/ 78,843# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL W/ 83,843# TOTAL PROP PUMP'D, ISIP=2,771#, FG=.78, AR=51.8, AP=4,700#, MR=53.4, MP=6,368#, NPI=59#, 24/24 CALC PERFS OPEN. 100% PERF STG #4] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,738', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 7,706'-7,708' 3 SPF, 120* PH, 6 HOLES. 7,679'-7,680' 3 SPF, 120* PH, 3 HOLES. 7,628'-7,629' 3 SPF, 120* PH, 3 HOLES. 7,603'-7,604' 3 SPF, 120* PH, 3 HOLES. 7,540'-7,541' 3 SPF, 120* PH, 3 HOLES. 7,496'-7,498' 3 SPF, 120* PH, 6 HOLES. [24 HOLES] SWIFN.
4/5/2011	7:00 - 7:15	0.25	COMP	48		P		HSM,

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 4/1/2011	End Date: 4/8/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 18:00	10.75	COMP	36	E	P		FRAC STG #4 MESAVERDE 7,496'-7,708' 24 HOLES] FRAC STG #4] WHP=1,578#, BRK DN PERFS=4,972#, @=4.7 BPM, INJ RT=51.2, INJ PSI=4,551#, ISIP=2,053#, FG=.70, PUMP'D 1,050 BBLS SLK WTR W/ 35,993# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL W/ 40,993# TOTAL PROP PUMP'D, ISIP=1,709#, FG=.66, AR=50.5, AP=3,725#, MR=52.1, MP=5,631#, NPI=-344#, 24/24 CALC PERFS OPEN. 100% PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=7,455', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 7,424'-7,425' 3 SPF, 120* PH, 3 HOLES. 7,406'-7,407' 3 SPF, 120* PH, 3 HOLES. 7,360'-7,361' 3 SPF, 120* PH, 3 HOLES. 7,342'-7,343' 3 SPF, 120* PH, 3 HOLES. 7,185'-7,186' 3 SPF, 120* PH, 3 HOLES. 7,159'-7,160' 3 SPF, 120* PH, 3 HOLES. 7,131'-7,132' 3 SPF, 120* PH, 3 HOLES. [21 HOLES] FRAC STG #5] WHP=1,477#, BRK DN PERFS=3,679#, @=4.9 BPM, INJ RT=42.7, INJ PSI=5,767#, ISIP=1,650#, FG=.66, PUMP'D 1,136 BBLS SLK WTR W/ 40,230# 30/50 MESH W/ 5,000# RESIN COAT IN TAIL W/ 45,230# TOTAL PROP PUMP'D, ISIP=1,744#, FG=.67, AR=38.5, AP=5,650#, MR=51, MP=6,883#, NPI=94#, 15/21 CALC PERFS OPEN. 71% PERF STG #6] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=6,916', PERF MESAVERDE USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 6,883'-6,886' 4 SPF, 90* PH, 12 HOLES. 6,802'-6,805' 4 SPF, 90* PH, 12 HOLES. [24 HOLES] FRAC STG #6] WHP=570#, BRK DN PERFS=4,875#, @=4.5 BPM, INJ RT=30.4, INJ PSI=4,830#, ISIP=2,617#, FG=.82, PUMP'D 322 BBLS SLK WTR W/ 4,569# 30/50 MESH W/ 3,700# RESIN COAT IN TAIL W/ 8,269# TOTAL PROP PUMP'D, ISIP=2,391#, FG=.78, AR=46.5, AP=5,150#, MR=50.4, MP=7,144#, NPI=-226# 15/24 CALC PERFS OPEN. 63% PERF STG #7] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @=5,884', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. 5,852'-5,854' 3 SPF, 120* PH, 6 HOLES. 5,747'-5,749' 3 SPF, 120* PH, 6 HOLES. 5,725'-5,726' 3 SPF, 120* PH, 3 HOLES. 5,595'-5,597' 3 SPF, 120* PH, 6 HOLES. 5,536'-5,537' 3 SPF 120* PH, 3 HOLES. [24 HOLES] FRAC STG #7] WHP=581#, BRK DN PERFS=2,860#, @=4.6 BPM, INJ RT=41.7, INJ PSI=3,578#, ISIP=1,365#, FG=.67, PUMP'D 360 BBLS SLK WTR W/ 3,729# 30/50 MESH W/ 5000# RESIN COAT IN TAIL W/ 8,729# TOTAL PROP PUMP'D, ISIP=1,436#, FG=.69, AR=49.2, AP=5,500#, MR=50.4, MP=5,916#, NPI=71#, 22/24

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 4/1/2011	End Date: 4/8/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								CALC PERFS OPEN. 92% P/U RIH W/ HALIBURTON 8K CBP, SET FOR TOP KILL @=5,486' 7,280 TOTAL BBLS 270,768# TOTAL SAND 689 GALS SCALE INHIB 157 GALS BIOCIDE
4/7/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, SLIPS, TRIPS & FALLS, MOVING RIG FROM LOCATION TO LOCATION.
	7:15 - 17:30	10.25	COMP	31	I	P		ROAD RIG FROM NBU 922-31P1, MIRU, ND WH, NU BOP, RU FLOOR & TBG EQUIP, SPOT TBG TRAILER, TALLY & PU TBG TO KILL PLUG @ 5,506', RU POWER SWIVEL, LAY HARD LINES FROM PUMP, FILL TBG BREAK CIRC, PRESS TEST BOP TO 3,000 PSI FOR 15 MIN HELD OK, READY FOR D/O IN AM, SWI SDFN. CALLED CDC TALKED TO SONNY FOR START UP TOMORROW.
4/8/2011	7:00 - 7:15	0.25	COMP	48		P		HSM, SLIPS, TRIPS & FALLS, D/O PLUGS LOOSE CLOTHING AROUND POWER SWIVEL.

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 4/1/2011	End Date: 4/8/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 15:30	8.25	COMP	44	C	P		SICP 0 PSI, OPEN WELL START DRLG PLUGS, ALL SURFACE CSG VAVLES OPEN TO ATMOSPHERE W/ LOCKS ON THEM. C/O 25' SAND, TAG 1ST PLUG @ 5,506' DRL PLUG IN 7 MIN. 250 PSI INCREASE RIH, CSG PRESS 0 PSI. C/O 60' SAND, TAG 2ND PLUG @ 5,884' DRL PLUG IN 6 MIN. 100 PSI INCREASE RIH, CSG PRESS 25 PSI. C/O 40' SAND, TAG 3RD PLUG @ 6,916' DRL PLUG IN 7 MIN. 600 PSI INCREASE RIH, CSG PRESS 250 PSI. C/O 25' SAND, TAG 4TH PLUG @ 7,455' DRL PLUG IN 10 MIN. 100 PSI INCREASE RIH, CSG PRESS 150 PSI. C/O 30' SAND, TAG 5TH PLUG @ 7,738' DRL PLUG IN 9 MIN. 650 PSI INCREASE RIH, CSG PRESS 250 PSI. C/O 30' SAND, TAG 6TH PLUG @ 8,070' DRL PLUG IN 10 MIN. 400 PSI INCREASE RIH, CSG PRESS 400 PSI. C/O 25' SAND, TAG 7TH PLUG @ 8,258' DRL PLUG IN 8 MIN. 200 PSI INCREASE RIH, CSG PRESS 300 PSI. PBTD 8,546', BTM PERF @ 8,415', TAGGED @ 8,450', C/O TO 8,526', 111' PAST BTM PERF W/ 268 JTS 2 3/8" L-80 TBG, CIRC FOR 10 MINUTES, SET POWER SWIVEL BACK, LD 13 JTS, PU & STRIP IN TBG HANGER & LAND TBG W/ 255 JTS 2 3/8" L-80, EOT 8,113.98'. RD POWER SWIVEL, FLOOR & TBG EQUIP, ND BOPS, NU WH, DROP BALL TO SHEAR OFF BIT PUMPED 35 BBLS NEVER SEEN BIT GO, LET BIT FALL FOR 20 MIN. TURN OVER TO FLOW BACK CREW. WIND GUSTING TO HARD TO RD, SDFWE. KB= 15' 4 1/16" WEATHERFORD HANGER= .83' TBG DELIVERED 315 JTS 255 JTS 2 3/8" L-80 = 8,095.95' TBG USED 255 JTS POBS= 2.20' TBG RETURNED 60 JTS EOT @ 8,113.98' 2 W/ BAD THREADS SN @ 8,111.78' TWTR= 7,280 BBLS TWR= 1,000 BBLS TWLTR= 6,280 BBLS CALLED CDC TALKED TO SONNY
	15:15 - 15:15	0.00	PROD	50				WELL TURNED TO SALES @ 1515 HR ON 4/8/11 - 1000 MCFD, 1920 BWPD, FTP 650#, CP 1950#, CK 20/64"

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: GWS 1/1
Event: COMPLETION	Start Date: 4/1/2011	End Date: 4/8/2011
Active Datum: RKB @5,195.00ft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/9/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2925#, TP 2000#, 20/64" CK, 37 BWPH, LIGHT SAND, 1.8 GAS TTL BBLS RECOVERED: 1721 BBLS LEFT TO RECOVER: 5559
4/10/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2675#, TP 1900#, 20/64" CK, 23 BWPH, LIGHT SAND, 2.3 GAS TTL BBLS RECOVERED: 2393 BBLS LEFT TO RECOVER: 4887
4/11/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2425#, TP 1700#, 20/64" CK, 18 BWPH, LIGHT SAND, 2.4 GAS TTL BBLS RECOVERED: 2858 BBLS LEFT TO RECOVER: 4422
4/12/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2300#, TP 1675#, 20/64" CK, 13 BWPH, LIGHT SAND, 2.1 GAS TTL BBLS RECOVERED: 3220 BBLS LEFT TO RECOVER: 4060
4/13/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 2325#, TP 1800#, 20/64" CK, 9 BWPH, LIGHT SAND, 1.6 GAS TTL BBLS RECOVERED: 3465 BBLS LEFT TO RECOVER: 3815

Site: UINTAH_BONANZA 1023-6I PAD
Well: Bonanza 1023-6P1S
Wellbore: Bonanza 1023-6P1S
Section:
SHL:
Design: Bonanza 1023-6P1S (wp01)
Latitude: 39.976381
Longitude: -109.362861
GL: 5181.00
KB: (14' RKB + 5181' GL) @ 5195.00ft (ENSIGN 146)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4132.00	4309.81	Top Wasatch
6258.00	6457.78	Top Mesaverde

Weatherford

T M

Azimuths to True North
Magnetic North: 11.08°

Magnetic Field
Strength: 52383.1snT
Dip Angle: 65.89°
Date: 12/16/2010
Model: IGRF2010

WELL DETAILS: Bonanza 1023-6P1S

Ground Level: 5181.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	14521654.53	2099079.99	39.976381	-109.362861	

CASING DETAILS

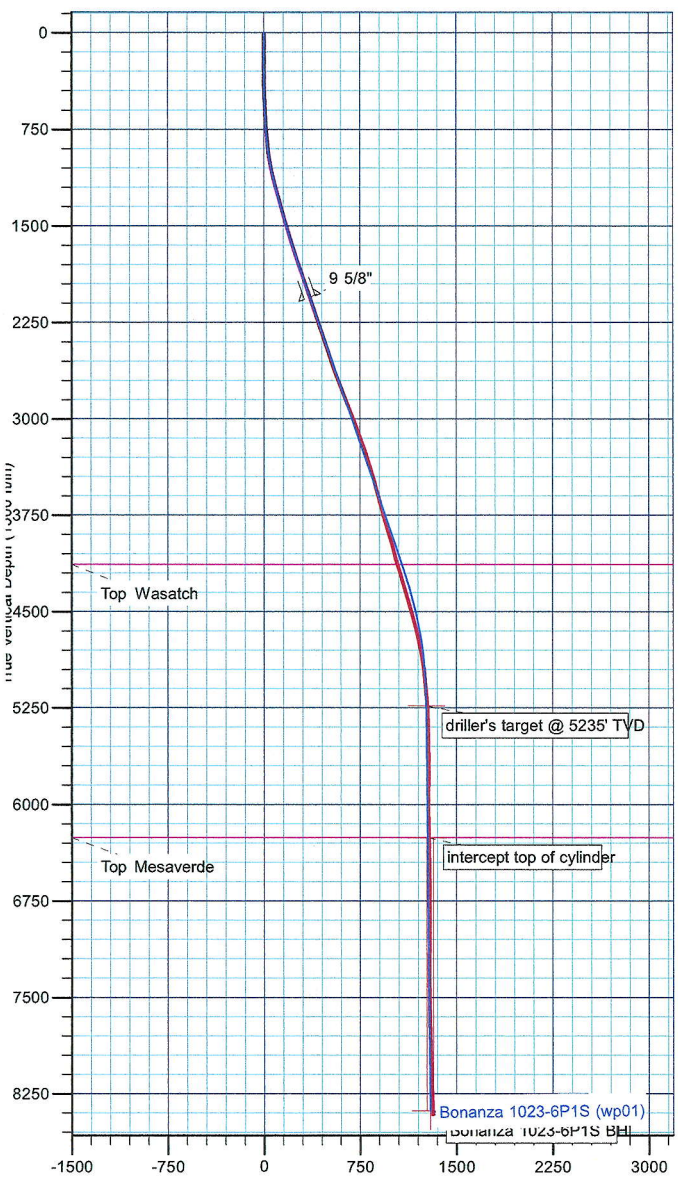
TVD	MD	Name	Size
2054.63	2111.79	9 5/8"	9-5/8

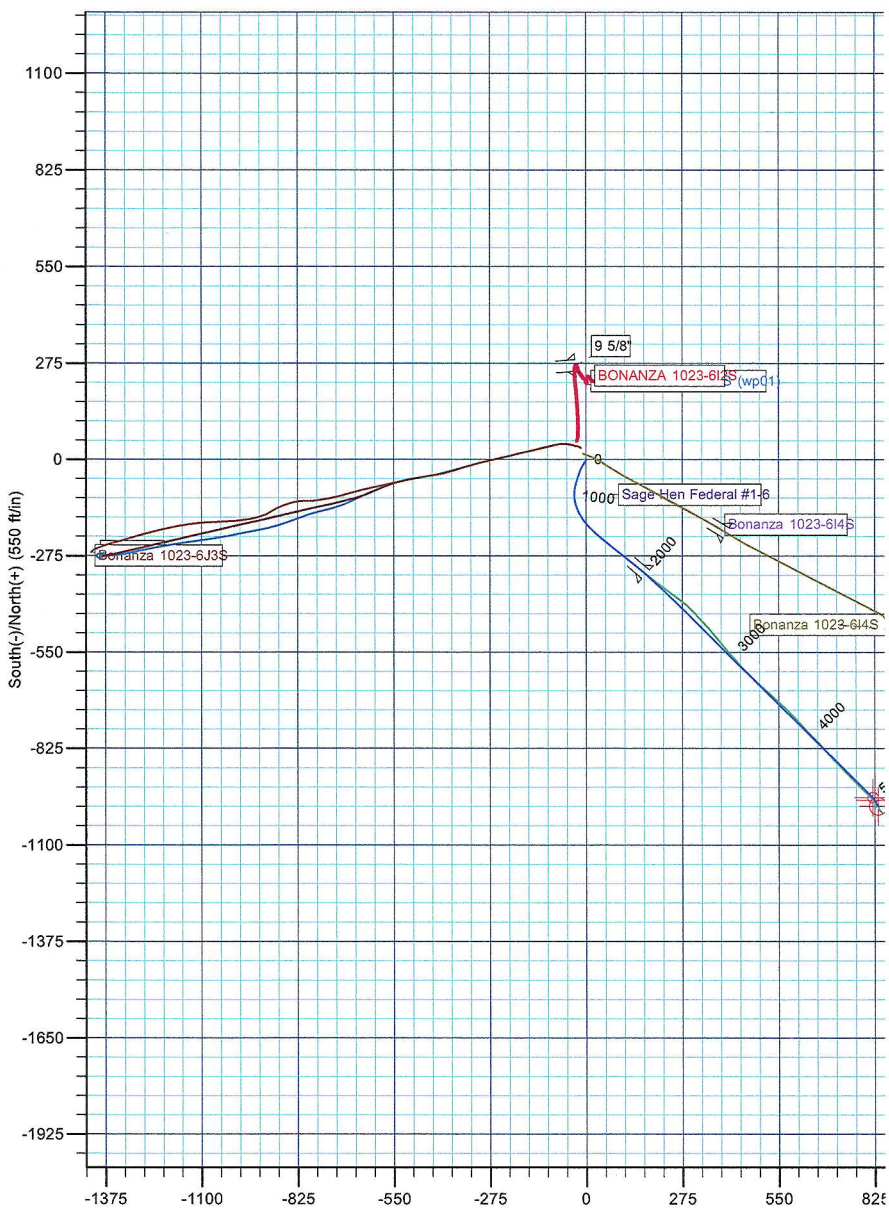
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
driller's target @ 5235' TVD	5235.00	-964.57	818.69	14520705.15	2099916.25	39.973733	-109.359940	Circle (Radius: 15.00)
intercept top of cylinder	6258.00	-972.19	823.26	14520697.62	2099920.96	39.973712	-109.359923	Point
Bonanza 1023-6P1S BHL	8385.00	-989.57	833.69	14520680.43	2099931.71	39.973664	-109.359886	Circle (Radius: 25.00)

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
2070.00	19.65	130.58	2015.27	-318.41	159.23	0.00	0.00	346.10
2111.79	19.65	130.58	2054.63	-327.55	169.90	0.00	0.00	359.97
2211.79	19.65	130.58	2148.80	-349.43	195.45	0.00	0.00	393.16
2297.32	19.03	134.69	2229.51	-368.60	216.29	1.75	116.48	421.24
4347.26	19.03	134.69	4167.40	-838.71	691.48	0.00	0.00	1086.94
5434.74	0.00	134.70	5235.00	-964.57	818.69	1.75	180.00	1265.16
5616.79	0.55	149.04	5417.05	-965.31	819.14	0.30	149.04	1266.02
8584.88	0.55	149.04	8385.00	-989.57	833.69	0.00	0.00	1293.95





APC
Survey Report

Weatherford

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Project UTAH - UTM (feet), NAD27, Zone 12N

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

Site UINTAH_BONANZA 1023-6I PAD

Site Position:		**Northing:**	14,521,707.58 ft	**Latitude:**	39.976528
From:	Lat/Long	**Easting:**	2,099,052.39 ft	**Longitude:**	-109.362956
Position Uncertainty:	0.00 ft	**Slot Radius:**	0 "	**Grid Convergence:**	1.05 °

Well Bonanza 1023-6P1S

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,521,654.53 ft	**Latitude:**	39.976381
	+E/-W	0.00 ft	**Easting:**	2,099,079.99 ft	**Longitude:**	-109.362861
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,181.00 ft

Wellbore Bonanza 1023-6P1S

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	12/16/2010	11.08	65.89	52,383

Design Bonanza 1023-6P1S

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	153.22

Survey Program **Date** 2/7/2011

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
135.00	2,070.00	Survey #1 (Bonanza 1023-6P1S)	MWD	MWD - Standard
2,070.00	8,600.00	Survey #2 (Bonanza 1023-6P1S)	MWD	MWD - Standard

Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Vertical Section (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.00	1.09	173.54	134.99	-1.28	0.14	1.20	0.81	0.81	0.00
220.00	1.41	218.83	219.97	-2.89	-0.42	2.39	1.18	0.38	53.28
303.00	2.36	219.63	302.93	-5.01	-2.15	3.50	1.14	1.14	0.96
390.00	3.18	211.57	389.83	-8.44	-4.56	5.48	1.04	0.94	-9.26
480.00	4.19	210.94	479.64	-13.39	-7.55	8.55	1.12	1.12	-0.70
570.00	5.19	207.36	569.34	-19.82	-11.12	12.69	1.16	1.11	-3.98
660.00	7.06	204.51	658.82	-28.47	-15.28	18.54	2.10	2.08	-3.17
750.00	9.21	201.05	747.91	-40.23	-20.16	26.83	2.45	2.39	-3.84
840.00	11.24	197.33	836.48	-55.32	-25.36	37.97	2.37	2.26	-4.13

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

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)
930.00	13.09	193.19	924.45	-73.62	-30.30	52.08	2.27	2.06	-4.60
1,020.00	14.06	184.19	1,011.95	-94.45	-33.43	69.26	2.58	1.08	-10.00
1,110.00	15.04	171.51	1,099.08	-116.91	-32.50	89.73	3.69	1.09	-14.09
1,200.00	15.42	159.11	1,185.94	-139.64	-26.51	112.73	3.64	0.42	-13.78
1,290.00	15.49	148.22	1,272.71	-161.04	-15.91	136.61	3.22	0.08	-12.10
1,380.00	16.22	141.70	1,359.29	-181.13	-1.79	160.90	2.14	0.81	-7.24
1,470.00	16.43	133.37	1,445.67	-199.73	15.26	185.19	2.61	0.23	-9.26
1,560.00	16.85	130.95	1,531.91	-217.02	34.36	209.23	0.90	0.47	-2.69
1,650.00	18.02	129.21	1,617.77	-234.37	55.00	234.02	1.42	1.30	-1.93
1,740.00	18.60	128.48	1,703.21	-252.10	77.02	259.77	0.69	0.64	-0.81
1,830.00	18.88	127.85	1,788.44	-269.97	99.76	285.96	0.38	0.31	-0.70
1,920.00	19.67	128.92	1,873.40	-288.42	123.04	312.93	0.96	0.88	1.19
2,010.00	19.57	129.78	1,958.17	-307.58	146.41	340.56	0.34	-0.11	0.96
2,070.00	19.67	130.74	2,014.69	-320.60	161.78	359.11	0.56	0.17	1.60
tie on point									
2,172.00	18.70	126.68	2,111.03	-341.57	187.90	389.60	1.62	-0.95	-3.98
2,262.00	18.58	125.06	2,196.31	-358.43	211.21	415.15	0.59	-0.13	-1.80
2,353.00	19.11	127.00	2,282.43	-375.72	234.97	441.29	0.90	0.58	2.13
2,444.00	18.93	128.17	2,368.46	-393.81	258.48	468.03	0.46	-0.20	1.29
2,535.00	19.38	130.60	2,454.42	-412.76	281.54	495.34	1.01	0.49	2.67
2,625.00	19.06	132.98	2,539.41	-432.49	303.63	522.91	0.94	-0.36	2.64
2,716.00	19.38	136.85	2,625.34	-453.64	324.83	551.34	1.44	0.35	4.25
2,806.00	21.00	140.23	2,709.81	-476.93	345.36	581.38	2.22	1.80	3.76
2,897.00	21.56	141.10	2,794.60	-502.48	366.29	613.61	0.71	0.62	0.96
2,988.00	21.75	138.73	2,879.18	-528.16	387.91	646.29	0.98	0.21	-2.60
3,079.00	20.19	137.98	2,964.15	-552.50	409.55	677.76	1.74	-1.71	-0.82
3,170.00	20.06	138.73	3,049.60	-575.90	430.35	708.02	0.32	-0.14	0.82
3,260.00	20.50	137.35	3,134.02	-599.09	451.21	738.13	0.72	0.49	-1.53
3,351.00	18.69	133.23	3,219.75	-620.80	472.63	767.16	2.50	-1.99	-4.53
3,442.00	19.19	134.85	3,305.82	-641.33	493.86	795.05	0.80	0.55	1.78
3,532.00	17.50	131.73	3,391.25	-660.78	514.45	821.69	2.17	-1.88	-3.47
3,623.00	15.50	130.10	3,478.50	-677.72	533.96	845.60	2.26	-2.20	-1.79
3,713.00	15.13	134.23	3,565.30	-693.66	551.58	867.77	1.28	-0.41	4.59
3,804.00	14.56	133.98	3,653.27	-709.88	568.32	889.80	0.63	-0.63	-0.27
3,895.00	14.88	134.10	3,741.28	-725.96	584.94	911.63	0.35	0.35	0.13
3,986.00	16.44	137.85	3,828.90	-743.64	601.97	935.09	2.04	1.71	4.12
4,076.00	16.81	139.23	3,915.14	-762.93	619.02	960.00	0.60	0.41	1.53
4,167.00	14.88	133.98	4,002.68	-781.02	636.02	983.80	2.64	-2.12	-5.77
4,258.00	15.56	134.98	4,090.49	-797.76	653.06	1,006.43	0.80	0.75	1.10
4,349.00	16.50	138.60	4,177.95	-816.08	670.24	1,030.52	1.51	1.03	3.98
4,439.00	17.25	138.73	4,264.08	-835.70	687.50	1,055.81	0.83	0.83	0.14
4,530.00	17.44	135.72	4,350.94	-855.60	705.92	1,081.88	1.01	0.21	-3.31
4,620.00	15.94	136.35	4,437.15	-874.20	723.87	1,106.57	1.68	-1.67	0.70

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,711.00	14.88	136.10	4,524.87	-891.66	740.59	1,129.69	1.17	-1.16	-0.27
4,801.00	13.88	136.60	4,612.05	-907.83	756.02	1,151.08	1.12	-1.11	0.56
4,892.00	13.06	134.35	4,700.55	-922.95	770.88	1,171.27	1.07	-0.90	-2.47
4,983.00	10.88	133.85	4,789.56	-936.09	784.42	1,189.10	2.40	-2.40	-0.55
5,074.00	8.69	133.60	4,879.24	-946.78	795.60	1,203.68	2.41	-2.41	-0.27
5,164.00	7.31	137.10	4,968.36	-955.66	804.42	1,215.59	1.63	-1.53	3.89
5,255.00	5.13	139.10	5,058.82	-962.98	811.02	1,225.10	2.41	-2.40	2.20
5,345.00	5.44	135.60	5,148.43	-969.07	816.64	1,233.06	0.50	0.34	-3.89
5,421.20	3.60	140.13	5,224.40	-973.49	820.71	1,238.84	2.45	-2.41	5.94
driller's target @ 5235' TVD									
5,436.00	3.25	141.60	5,239.17	-974.17	821.26	1,239.70	2.45	-2.38	9.93
5,527.00	1.88	130.48	5,330.08	-977.16	824.00	1,243.61	1.59	-1.51	-12.22
5,617.00	1.94	133.98	5,420.03	-979.18	826.22	1,246.40	0.15	0.07	3.89
5,708.00	0.57	169.75	5,511.00	-980.70	827.41	1,248.29	1.66	-1.51	39.31
5,798.00	0.75	167.72	5,601.00	-981.71	827.62	1,249.29	0.20	0.20	-2.26
5,889.00	0.75	302.23	5,691.99	-981.98	827.24	1,249.36	1.52	0.00	147.81
5,980.00	0.50	272.85	5,782.99	-981.64	826.34	1,248.65	0.44	-0.27	-32.29
6,070.00	0.38	220.73	5,872.99	-981.85	825.75	1,248.57	0.45	-0.13	-57.91
6,161.00	0.38	207.48	5,963.98	-982.34	825.41	1,248.86	0.10	0.00	-14.56
6,251.00	0.50	216.98	6,053.98	-982.92	825.04	1,249.21	0.16	0.13	10.56
6,342.00	0.69	168.10	6,144.98	-983.77	824.91	1,249.92	0.57	0.21	-53.71
6,433.00	0.94	164.23	6,235.97	-985.03	825.23	1,251.18	0.28	0.27	-4.25
6,444.79	1.00	157.97	6,247.75	-985.22	825.30	1,251.38	1.01	0.47	-53.14
intercept top of cylinder									
6,523.00	1.56	132.10	6,325.95	-986.56	826.34	1,253.05	1.01	0.72	-33.07
6,614.00	0.44	171.73	6,416.93	-987.74	827.31	1,254.53	1.38	-1.23	43.55
6,705.00	1.44	201.47	6,507.92	-989.15	826.94	1,255.63	1.19	1.10	32.68
6,795.00	1.69	200.10	6,597.88	-991.45	826.07	1,257.29	0.28	0.28	-1.52
6,886.00	0.69	295.10	6,688.87	-992.47	825.11	1,257.77	2.07	-1.10	104.40
6,977.00	1.00	23.10	6,779.86	-991.51	824.93	1,256.83	1.31	0.34	96.70
7,067.00	1.00	39.48	6,869.85	-990.18	825.74	1,256.01	0.32	0.00	18.20
7,158.00	1.00	14.35	6,960.84	-988.80	826.44	1,255.09	0.48	0.00	-27.62
7,248.00	0.75	46.60	7,050.83	-987.63	827.06	1,254.33	0.60	-0.28	35.83
7,339.00	0.81	48.10	7,141.82	-986.79	827.97	1,253.99	0.07	0.07	1.65
7,429.00	0.69	47.23	7,231.81	-986.00	828.84	1,253.68	0.13	-0.13	-0.97
7,520.00	0.69	61.48	7,322.80	-985.37	829.73	1,253.51	0.19	0.00	15.66
7,611.00	0.56	86.10	7,413.80	-985.08	830.65	1,253.66	0.32	-0.14	27.05
7,701.00	0.50	147.10	7,503.79	-985.38	831.30	1,254.23	0.60	-0.07	67.78
7,792.00	0.88	156.60	7,594.79	-986.35	831.80	1,255.32	0.43	0.42	10.44
7,883.00	1.38	146.23	7,685.77	-987.90	832.68	1,257.10	0.59	0.55	-11.40
7,973.00	2.00	156.98	7,775.73	-990.25	833.90	1,259.75	0.77	0.69	11.94
8,064.00	1.94	169.85	7,866.68	-993.23	834.79	1,262.81	0.49	-0.07	14.14
8,154.00	1.94	165.10	7,956.63	-996.20	835.45	1,265.76	0.18	0.00	-5.28
8,245.00	1.88	151.10	8,047.58	-998.99	836.57	1,268.76	0.52	-0.07	-15.38

APC
Survey Report

Weatherford

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,336.00	1.81	142.35	8,138.53	-1,001.44	838.17	1,271.66	0.32	-0.08	-9.62
8,427.00	2.19	127.60	8,229.47	-1,003.64	840.43	1,274.64	0.70	0.42	-16.21
8,517.00	1.88	150.98	8,319.42	-1,005.98	842.50	1,277.66	0.98	-0.34	25.98
8,543.00	1.86	123.84	8,345.41	-1,006.59	843.06	1,278.46	3.38	-0.08	-104.38
last mwd survey									
8,600.00	1.86	123.84	8,402.38	-1,007.62	844.60	1,280.07	0.00	0.00	0.00
projection									

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
BONANZA 1023-6P1S	0.00	0.00	8,375.00	-989.57	833.69	14,520,680.43	2,099,931.71	39.973664	-109.359886
- actual wellpath misses target center by 20.27ft at 8572.02ft MD (8374.41 TVD, -1007.11 N, 843.84 E)									
- Point									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,070.00	2,014.69	-320.60	161.78	tie on point
8,543.00	8,345.41	-1,006.59	843.06	last mwd survey
8,600.00	8,402.38	-1,007.62	844.60	projection

Checked By: _____ Approved By: _____ Date: _____

US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_BONANZA 1023-6I PAD
Bonanza 1023-6P1S

Bonanza 1023-6P1S

Design: Bonanza 1023-6P1S

Survey Report - Geographic

07 February, 2011

Weatherford®

APC

Survey Report - Geographic

Weatherford

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Project UTAH - UTM (feet), NAD27, Zone 12N

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

Site UINTAH_BONANZA 1023-6I PAD

Site Position:		**Northing:**	14,521,707.58 ft	**Latitude:**	39.976528
From:	Lat/Long	**Easting:**	2,099,052.39 ft	**Longitude:**	-109.362956
Position Uncertainty:	0.00 ft	**Slot Radius:**	0 "	**Grid Convergence:**	1.05 °

Well Bonanza 1023-6P1S

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,521,654.53 ft	**Latitude:**	39.976381
	+E/-W	0.00 ft	**Easting:**	2,099,079.99 ft	**Longitude:**	-109.362861
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,181.00 ft

Wellbore Bonanza 1023-6P1S

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	12/16/2010	11.08	65.89	52,383

Design Bonanza 1023-6P1S

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	153.22

Survey Program **Date** 2/7/2011

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
135.00	2,070.00	Survey #1 (Bonanza 1023-6P1S)	MWD	MWD - Standard
2,070.00	8,600.00	Survey #2 (Bonanza 1023-6P1S)	MWD	MWD - Standard

Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Map Northing (ft)**	**Map Easting (ft)**	**Latitude**	**Longitude**
0.00	0.00	0.00	0.00	0.00	0.00	14,521,654.53	2,099,079.99	39.976381	-109.362861
135.00	1.09	173.54	134.99	-1.28	0.14	14,521,653.26	2,099,080.15	39.976378	-109.362861
220.00	1.41	218.83	219.97	-2.89	-0.42	14,521,651.63	2,099,079.62	39.976373	-109.362863
303.00	2.36	219.63	302.93	-5.01	-2.15	14,521,649.49	2,099,077.93	39.976367	-109.362869
390.00	3.18	211.57	389.83	-8.44	-4.56	14,521,646.01	2,099,075.59	39.976358	-109.362878
480.00	4.19	210.94	479.64	-13.39	-7.55	14,521,641.01	2,099,072.68	39.976344	-109.362888
570.00	5.19	207.36	569.34	-19.82	-11.12	14,521,634.51	2,099,069.24	39.976327	-109.362901
660.00	7.06	204.51	658.82	-28.47	-15.28	14,521,625.79	2,099,065.23	39.976303	-109.362916
750.00	9.21	201.05	747.91	-40.23	-20.16	14,521,613.94	2,099,060.57	39.976271	-109.362933
840.00	11.24	197.33	836.48	-55.32	-25.36	14,521,598.75	2,099,055.64	39.976229	-109.362952
930.00	13.09	193.19	924.45	-73.62	-30.30	14,521,580.37	2,099,051.04	39.976179	-109.362969

APC

Survey Report - Geographic

Weatherford

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
1,020.00	14.06	184.19	1,011.95	-94.45	-33.43	14,521,559.48	2,099,048.30	39.976122	-109.362981
1,110.00	15.04	171.51	1,099.08	-116.91	-32.50	14,521,537.05	2,099,049.64	39.976060	-109.362977
1,200.00	15.42	159.11	1,185.94	-139.64	-26.51	14,521,514.43	2,099,056.05	39.975998	-109.362956
1,290.00	15.49	148.22	1,272.71	-161.04	-15.91	14,521,493.23	2,099,067.03	39.975939	-109.362918
1,380.00	16.22	141.70	1,359.29	-181.13	-1.79	14,521,473.41	2,099,081.52	39.975884	-109.362868
1,470.00	16.43	133.37	1,445.67	-199.73	15.26	14,521,455.11	2,099,098.91	39.975833	-109.362807
1,560.00	16.85	130.95	1,531.91	-217.02	34.36	14,521,438.18	2,099,118.33	39.975785	-109.362739
1,650.00	18.02	129.21	1,617.77	-234.37	55.00	14,521,421.21	2,099,139.28	39.975738	-109.362665
1,740.00	18.60	128.48	1,703.21	-252.10	77.02	14,521,403.89	2,099,161.62	39.975689	-109.362586
1,830.00	18.88	127.85	1,788.44	-269.97	99.76	14,521,386.44	2,099,184.68	39.975640	-109.362505
1,920.00	19.67	128.92	1,873.40	-288.42	123.04	14,521,368.42	2,099,208.30	39.975589	-109.362422
2,010.00	19.57	129.78	1,958.17	-307.58	146.41	14,521,349.69	2,099,232.02	39.975537	-109.362339
2,070.00	19.67	130.74	2,014.69	-320.60	161.78	14,521,336.96	2,099,247.63	39.975501	-109.362284
tie on point									
2,172.00	18.70	126.68	2,111.03	-341.57	187.90	14,521,316.47	2,099,274.13	39.975443	-109.362191
2,262.00	18.58	125.06	2,196.31	-358.43	211.21	14,521,300.04	2,099,297.74	39.975397	-109.362108
2,353.00	19.11	127.00	2,282.43	-375.72	234.97	14,521,283.19	2,099,321.82	39.975350	-109.362023
2,444.00	18.93	128.17	2,368.46	-393.81	258.48	14,521,265.54	2,099,345.65	39.975300	-109.361939
2,535.00	19.38	130.60	2,454.42	-412.76	281.54	14,521,247.02	2,099,369.06	39.975248	-109.361857
2,625.00	19.06	132.98	2,539.41	-432.49	303.63	14,521,227.69	2,099,391.51	39.975194	-109.361778
2,716.00	19.38	136.85	2,625.34	-453.64	324.83	14,521,206.94	2,099,413.09	39.975136	-109.361702
2,806.00	21.00	140.23	2,709.81	-476.93	345.36	14,521,184.02	2,099,434.05	39.975072	-109.361629
2,897.00	21.56	141.10	2,794.60	-502.48	366.29	14,521,158.87	2,099,455.44	39.975002	-109.361554
2,988.00	21.75	138.73	2,879.18	-528.16	387.91	14,521,133.58	2,099,477.53	39.974931	-109.361477
3,079.00	20.19	137.98	2,964.15	-552.50	409.55	14,521,109.64	2,099,499.61	39.974864	-109.361400
3,170.00	20.06	138.73	3,049.60	-575.90	430.35	14,521,086.63	2,099,520.84	39.974800	-109.361326
3,260.00	20.50	137.35	3,134.02	-599.09	451.21	14,521,063.83	2,099,542.12	39.974736	-109.361251
3,351.00	18.69	133.23	3,219.75	-620.80	472.63	14,521,042.52	2,099,563.94	39.974677	-109.361175
3,442.00	19.19	134.85	3,305.82	-641.33	493.86	14,521,022.37	2,099,585.54	39.974620	-109.361099
3,532.00	17.50	131.73	3,391.25	-660.78	514.45	14,521,003.32	2,099,606.48	39.974567	-109.361025
3,623.00	15.50	130.10	3,478.50	-677.72	533.96	14,520,986.74	2,099,626.30	39.974520	-109.360956
3,713.00	15.13	134.23	3,565.30	-693.66	551.58	14,520,971.12	2,099,644.21	39.974477	-109.360893
3,804.00	14.56	133.98	3,653.27	-709.88	568.32	14,520,955.21	2,099,661.24	39.974432	-109.360833
3,895.00	14.88	134.10	3,741.28	-725.96	584.94	14,520,939.44	2,099,678.16	39.974388	-109.360774
3,986.00	16.44	137.85	3,828.90	-743.64	601.97	14,520,922.08	2,099,695.51	39.974339	-109.360713
4,076.00	16.81	139.23	3,915.14	-762.93	619.02	14,520,903.09	2,099,712.91	39.974286	-109.360652
4,167.00	14.88	133.98	4,002.68	-781.02	636.02	14,520,885.33	2,099,730.24	39.974237	-109.360592
4,258.00	15.56	134.98	4,090.49	-797.76	653.06	14,520,868.90	2,099,747.59	39.974191	-109.360531
4,349.00	16.50	138.60	4,177.95	-816.08	670.24	14,520,850.90	2,099,765.10	39.974140	-109.360470
4,439.00	17.25	138.73	4,264.08	-835.70	687.50	14,520,831.60	2,099,782.71	39.974087	-109.360408
4,530.00	17.44	135.72	4,350.94	-855.60	705.92	14,520,812.04	2,099,801.50	39.974032	-109.360342
4,620.00	15.94	136.35	4,437.15	-874.20	723.87	14,520,793.77	2,099,819.78	39.973981	-109.360278
4,711.00	14.88	136.10	4,524.87	-891.66	740.59	14,520,776.62	2,099,836.83	39.973933	-109.360218
4,801.00	13.88	136.60	4,612.05	-907.83	756.02	14,520,760.74	2,099,852.55	39.973889	-109.360163
4,892.00	13.06	134.35	4,700.55	-922.95	770.88	14,520,745.89	2,099,867.68	39.973847	-109.360110
4,983.00	10.88	133.85	4,789.56	-936.09	784.42	14,520,733.01	2,099,881.47	39.973811	-109.360062
5,074.00	8.69	133.60	4,879.24	-946.78	795.60	14,520,722.52	2,099,892.83	39.973782	-109.360022
5,164.00	7.31	137.10	4,968.36	-955.66	804.42	14,520,713.80	2,099,901.82	39.973757	-109.359991
5,255.00	5.13	139.10	5,058.82	-962.98	811.02	14,520,706.61	2,099,908.55	39.973737	-109.359967
5,345.00	5.44	135.60	5,148.43	-969.07	816.64	14,520,700.62	2,099,914.29	39.973720	-109.359947
5,421.20	3.60	140.13	5,224.40	-973.49	820.71	14,520,696.28	2,099,918.43	39.973708	-109.359933
driller's target @ 5235' TVD									
5,436.00	3.25	141.60	5,239.17	-974.17	821.26	14,520,695.60	2,099,919.00	39.973706	-109.359931
5,527.00	1.88	130.48	5,330.08	-977.16	824.00	14,520,692.66	2,099,921.79	39.973698	-109.359921
5,617.00	1.94	133.98	5,420.03	-979.18	826.22	14,520,690.69	2,099,924.05	39.973693	-109.359913

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
5,708.00	0.57	169.75	5,511.00	-980.70	827.41	14,520,689.19	2,099,925.26	39.973688	-109.359909
5,798.00	0.75	167.72	5,601.00	-981.71	827.62	14,520,688.18	2,099,925.49	39.973686	-109.359908
5,889.00	0.75	302.23	5,691.99	-981.98	827.24	14,520,687.91	2,099,925.11	39.973685	-109.359909
5,980.00	0.50	272.85	5,782.99	-981.64	826.34	14,520,688.23	2,099,924.21	39.973686	-109.359913
6,070.00	0.38	220.73	5,872.99	-981.85	825.75	14,520,688.01	2,099,923.63	39.973685	-109.359915
6,161.00	0.38	207.48	5,963.98	-982.34	825.41	14,520,687.51	2,099,923.30	39.973684	-109.359916
6,251.00	0.50	216.98	6,053.98	-982.92	825.04	14,520,686.93	2,099,922.94	39.973682	-109.359917
6,342.00	0.69	168.10	6,144.98	-983.77	824.91	14,520,686.07	2,099,922.82	39.973680	-109.359918
6,433.00	0.94	164.23	6,235.97	-985.03	825.23	14,520,684.82	2,099,923.16	39.973677	-109.359916
6,444.79	1.00	157.97	6,247.75	-985.22	825.30	14,520,684.64	2,099,923.23	39.973676	-109.359916
intercept top of cylinder									
6,523.00	1.56	132.10	6,325.95	-986.56	826.34	14,520,683.31	2,099,924.30	39.973672	-109.359913
6,614.00	0.44	171.73	6,416.93	-987.74	827.31	14,520,682.15	2,099,925.29	39.973669	-109.359909
6,705.00	1.44	201.47	6,507.92	-989.15	826.94	14,520,680.74	2,099,924.95	39.973665	-109.359910
6,795.00	1.69	200.10	6,597.88	-991.45	826.07	14,520,678.42	2,099,924.12	39.973659	-109.359913
6,886.00	0.69	295.10	6,688.87	-992.47	825.11	14,520,677.38	2,099,923.18	39.973656	-109.359917
6,977.00	1.00	23.10	6,779.86	-991.51	824.93	14,520,678.34	2,099,922.98	39.973659	-109.359918
7,067.00	1.00	39.48	6,869.85	-990.18	825.74	14,520,679.68	2,099,923.76	39.973662	-109.359915
7,158.00	1.00	14.35	6,960.84	-988.80	826.44	14,520,681.08	2,099,924.44	39.973666	-109.359912
7,248.00	0.75	46.60	7,050.83	-987.63	827.06	14,520,682.25	2,099,925.04	39.973669	-109.359910
7,339.00	0.81	48.10	7,141.82	-986.79	827.97	14,520,683.11	2,099,925.94	39.973672	-109.359907
7,429.00	0.69	47.23	7,231.81	-986.00	828.84	14,520,683.92	2,099,926.79	39.973674	-109.359904
7,520.00	0.69	61.48	7,322.80	-985.37	829.73	14,520,684.57	2,099,927.67	39.973676	-109.359900
7,611.00	0.56	86.10	7,413.80	-985.08	830.65	14,520,684.87	2,099,928.59	39.973676	-109.359897
7,701.00	0.50	147.10	7,503.79	-985.38	831.30	14,520,684.59	2,099,929.24	39.973676	-109.359895
7,792.00	0.88	156.60	7,594.79	-986.35	831.80	14,520,683.62	2,099,929.75	39.973673	-109.359893
7,883.00	1.38	146.23	7,685.77	-987.90	832.68	14,520,682.09	2,099,930.67	39.973669	-109.359890
7,973.00	2.00	156.98	7,775.73	-990.25	833.90	14,520,679.76	2,099,931.93	39.973662	-109.359886
8,064.00	1.94	169.85	7,866.68	-993.23	834.79	14,520,676.80	2,099,932.88	39.973654	-109.359882
8,154.00	1.94	165.10	7,956.63	-996.20	835.45	14,520,673.84	2,099,933.59	39.973646	-109.359880
8,245.00	1.88	151.10	8,047.58	-998.99	836.57	14,520,671.07	2,099,934.76	39.973638	-109.359876
8,336.00	1.81	142.35	8,138.53	-1,001.44	838.17	14,520,668.65	2,099,936.40	39.973632	-109.359870
8,427.00	2.19	127.60	8,229.47	-1,003.64	840.43	14,520,666.50	2,099,938.70	39.973625	-109.359862
8,517.00	1.88	150.98	8,319.42	-1,005.98	842.50	14,520,664.19	2,099,940.82	39.973619	-109.359855
8,543.00	1.86	123.84	8,345.41	-1,006.59	843.06	14,520,663.60	2,099,941.39	39.973617	-109.359853
last mwd survey									
8,600.00	1.86	123.84	8,402.38	-1,007.62	844.60	14,520,662.59	2,099,942.94	39.973615	-109.359847
projection									

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
BONANZA 1023-6P1S	0.00	0.00	8,375.00	-989.57	833.69	14,520,680.43	2,099,931.71	39.973664	-109.359886
- actual wellpath misses target center by 20.27ft at 8572.02ft MD (8374.41 TVD, -1007.11 N, 843.84 E)									
- Point									

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well Bonanza 1023-6P1S
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Site:	UINTAH_BONANZA 1023-6I PAD	**MD Reference:**	(4' RKB + 5181' GL) @ 5185.00ft
Well:	Bonanza 1023-6P1S	**North Reference:**	True
Wellbore:	Bonanza 1023-6P1S	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-6P1S	**Database:**	edm5000p

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,070.00	2,014.69	-320.60	161.78	tie on point
8,543.00	8,345.41	-1,006.59	843.06	last mwd survey
8,600.00	8,402.38	-1,007.62	844.60	projection

Checked By: _____ Approved By: _____ Date: _____

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

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address: P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: (720) 929-6029

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
See Atchmt	See Atchmt						
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
	99999	18519				5/1/2012	

Comments: Please see attachment with list of Wells in the Ponderosa Unit. 5/30/2012

WSMVD

Well 2

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

Comments:

Well 3

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

Comments:

ACTION CODES:

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

Cara Mahler
Name (Please Print)

Signature

REGULATORY ANALYST
Title

5/21/2012
Date

RECEIVED
MAY 21 2012
Div. of Oil, Gas & Mining

(5/2000)

well_name	sec	twp	rng	api	entity		lease	well	stat	qtr_qtr	bhl	surf	zone	a_stat	l_num	op_no
SOUTHMAN CANYON 31-3	31	090S	230E	4304734726	13717		1	GW	P	SENW		1	WSMVD	P	U-33433	N2995
SOUTHMAN CANYON 31-4	31	090S	230E	4304734727	13742		1	GW	S	SESW		1	WSMVD	S	UTU-33433	N2995
SOUTHMAN CYN 31-2X (RIG SKID)	31	090S	230E	4304734898	13755		1	GW	P	NWNW		1	WSMVD	P	U-33433	N2995
SOUTHMAN CYN 923-31J	31	090S	230E	4304735149	13994		1	GW	P	NWSE		1	MVRD	P	U-33433	N2995
SOUTHMAN CYN 923-31B	31	090S	230E	4304735150	13953		1	GW	P	NWNE		1	MVRD	P	U-33433	N2995
SOUTHMAN CYN 923-31P	31	090S	230E	4304735288	14037		1	GW	P	SESE		1	WSMVD	P	UTU-33433	N2995
SOUTHMAN CYN 923-31H	31	090S	230E	4304735336	14157		1	GW	P	SENE		1	WSMVD	P	U-33433	N2995
SOUTHMAN CYN 923-31O	31	090S	230E	4304737205	16827		1	GW	P	SWSE		1	MVRD	P	UTU-33433	N2995
SOUTHMAN CYN 923-31K	31	090S	230E	4304737206	16503		1	GW	P	NESW		1	WSMVD	P	UTU-33433	N2995
SOUTHMAN CYN 923-31G	31	090S	230E	4304737208	16313		1	GW	P	SWNE		1	WSMVD	P	UTU-33433	N2995
SOUTHMAN CYN 923-31E	31	090S	230E	4304737209	16521		1	GW	P	SWNW		1	WSMVD	P	UTU-33433	N2995
SOUTHMAN CYN 923-31A	31	090S	230E	4304737210	16472		1	GW	P	NENE		1	WSMVD	P	UTU-33433	N2995
SOUTHMAN CYN 923-31C	31	090S	230E	4304737227	16522		1	GW	P	NENW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-1G	01	100S	230E	4304735512	14458		1	GW	P	SWNE		1	WSMVD	P	U-40736	N2995
BONANZA 1023-1A	01	100S	230E	4304735717	14526		1	GW	P	NENE		1	WSMVD	P	U-40736	N2995
BONANZA 1023-1E	01	100S	230E	4304735745	14524		1	GW	P	SWNW		1	WSMVD	P	U-40736	N2995
BONANZA 1023-1C	01	100S	230E	4304735754	14684		1	GW	P	NENW		1	MVRD	P	U-40736	N2995
BONANZA 1023-1K	01	100S	230E	4304735755	15403		1	GW	P	NESW		1	MVRD	P	U-38423	N2995
BONANZA 1023-1F	01	100S	230E	4304737379	16872		1	GW	P	SENW		1	MVRD	P	UTU-40736	N2995
BONANZA 1023-1B	01	100S	230E	4304737380	16733		1	GW	P	NWNE		1	MVRD	P	UTU-40736	N2995
BONANZA 1023-1D	01	100S	230E	4304737381	16873		1	GW	P	NWNW		1	MVRD	P	UTU-40736	N2995
BONANZA 1023-1H	01	100S	230E	4304737430	16901		1	GW	P	SENE		1	MVRD	P	UTU-40736	N2995
BONANZA 1023-1L	01	100S	230E	4304738300	16735		1	GW	P	NWSW		1	MVRD	P	UTU-38423	N2995
BONANZA 1023-1J	01	100S	230E	4304738302	16871		1	GW	P	NWSE		1	MVRD	P	UTU-40736	N2995
BONANZA 1023-1I	01	100S	230E	4304738810	16750		1	GW	P	NESE		1	MVRD	P	UTU-40736	N2995
BONANZA 1023-2E	02	100S	230E	4304735345	14085		3	GW	P	SWNW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2C	02	100S	230E	4304735346	14084		3	GW	P	NENW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2A	02	100S	230E	4304735347	14068		3	GW	P	NENE		3	MVRD	P	ML-47062	N2995
BONANZA 1023-2G	02	100S	230E	4304735661	14291		3	GW	P	SWNE		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2O	02	100S	230E	4304735662	14289		3	GW	P	SWSE		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2I	02	100S	230E	4304735663	14290		3	GW	S	NESE		3	WSMVD	S	ML-47062	N2995
BONANZA 1023-2MX	02	100S	230E	4304736092	14730		3	GW	P	SWSW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2H	02	100S	230E	4304737093	16004		3	GW	P	SENE		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2D	02	100S	230E	4304737094	15460		3	GW	P	NWNW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2B	02	100S	230E	4304737095	15783		3	GW	P	NWNE		3	MVRD	P	ML-47062	N2995
BONANZA 1023-2P	02	100S	230E	4304737223	15970		3	GW	P	SESE		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2N	02	100S	230E	4304737224	15887		3	GW	P	SESW		3	MVRD	P	ML-47062	N2995
BONANZA 1023-2L	02	100S	230E	4304737225	15833		3	GW	P	NWSW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2F	02	100S	230E	4304737226	15386		3	GW	P	SENW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2D-4	02	100S	230E	4304738761	16033		3	GW	P	NWNW		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2O-1	02	100S	230E	4304738762	16013		3	GW	P	SWSE		3	WSMVD	P	ML-47062	N2995
BONANZA 1023-2H3CS	02	100S	230E	4304750344	17426		3	GW	P	NWNE	D	3	MVRD	P	ML 47062	N2995
BONANZA 1023-2G3BS	02	100S	230E	4304750345	17428		3	GW	P	NWNE	D	3	MVRD	P	ML 47062	N2995
BONANZA 1023-2G2CS	02	100S	230E	4304750346	17429		3	GW	P	NWNE	D	3	MVRD	P	ML 47062	N2995
BONANZA 1023-2G1BS	02	100S	230E	4304750347	17427		3	GW	P	NWNE	D	3	MVRD	P	ML 47062	N2995

BONANZA 1023-2M1S	02	100S	230E	4304750379	17443	3	GW	P	SENW	D	3	MVRD	P	ML 47062	N2995
BONANZA 1023-2L2S	02	100S	230E	4304750380	17444	3	GW	P	SENW	D	3	MVRD	P	ML 47062	N2995
BONANZA 1023-2K4S	02	100S	230E	4304750381	17446	3	GW	P	SENW	D	3	MVRD	P	ML 47062	N2995
BONANZA 1023-2K1S	02	100S	230E	4304750382	17445	3	GW	P	SENW	D	3	WSMVD	P	ML 47062	N2995
BONANZA 4-6 *	04	100S	230E	4304734751	13841	1	GW	P	NESW		1	MNCS	P	UTU-33433	N2995
BONANZA 1023-4A	04	100S	230E	4304735360	14261	1	GW	P	NENE		1	WSMVD	P	U-33433	N2995
BONANZA 1023-4E	04	100S	230E	4304735392	14155	1	GW	P	SWNW		1	WSMVD	P	U-33433	N2995
BONANZA 1023-4C	04	100S	230E	4304735437	14252	1	GW	P	NENW		1	WSMVD	P	U-33433	N2995
BONANZA 1023-4M	04	100S	230E	4304735629	14930	1	GW	P	SWSW		1	WSMVD	P	U-33433	N2995
BONANZA 1023-4O	04	100S	230E	4304735688	15111	1	GW	P	SWSE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-4I	04	100S	230E	4304735689	14446	1	GW	P	NESE		1	MVRD	P	UTU-33433	N2995
BONANZA 1023-4G	04	100S	230E	4304735746	14445	1	GW	P	SWNE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-4D	04	100S	230E	4304737315	16352	1	GW	P	NWNW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-4H	04	100S	230E	4304737317	16318	1	GW	P	SENE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-4B	04	100S	230E	4304737328	16351	1	GW	P	NWNE		1	MVRD	P	UTU-33433	N2995
BONANZA 1023-4L	04	100S	230E	4304738211	16393	1	GW	P	NWSW		1	MVRD	P	UTU-33433	N2995
BONANZA 1023-4P	04	100S	230E	4304738212	16442	1	GW	P	SESE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-4N	04	100S	230E	4304738303	16395	1	GW	P	SESW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-4FX (RIGSKID)	04	100S	230E	4304739918	16356	1	GW	P	SENW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5O	05	100S	230E	4304735438	14297	1	GW	P	SWSE		1	WSMVD	P	U-33433	N2995
BONANZA 1023-5AX (RIGSKID)	05	100S	230E	4304735809	14243	1	GW	P	NENE		1	WSMVD	P	U-33433	N2995
BONANZA 1023-5C	05	100S	230E	4304736176	14729	1	GW	P	NENW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5G	05	100S	230E	4304736177	14700	1	GW	P	SWNE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5M	05	100S	230E	4304736178	14699	1	GW	P	SWSW		1	WSMVD	P	UTU-73450	N2995
BONANZA 1023-5K	05	100S	230E	4304736741	15922	1	GW	P	NESW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5B	05	100S	230E	4304737318	16904	1	GW	P	NWNE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5E	05	100S	230E	4304737319	16824	1	GW	P	SWNW		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5H	05	100S	230E	4304737320	16793	1	GW	P	SENE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5N	05	100S	230E	4304737321	16732	1	GW	P	SESW		1	WSMVD	P	UTU-73450	N2995
BONANZA 1023-5L	05	100S	230E	4304737322	16825	1	GW	P	NWSW		1	MVRD	P	UTU-33433	N2995
BONANZA 1023-5J	05	100S	230E	4304737428	17055	1	GW	P	NWSE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5P	05	100S	230E	4304738213	16795	1	GW	P	SESE		1	MVRD	P	UTU-33433	N2995
BONANZA 1023-5N-1	05	100S	230E	4304738911	17060	1	GW	P	SESW		1	WSMVD	P	UTU-73450	N2995
BONANZA 1023-5PS	05	100S	230E	4304750169	17323	1	GW	P	NESE	D	1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-5G2AS	05	100S	230E	4304750486	17459	1	GW	P	SWNE	D	1	MVRD	P	UTU 33433	N2995
BONANZA 1023-5G2CS	05	100S	230E	4304750487	17462	1	GW	P	SWNE	D	1	MVRD	P	UTU 33433	N2995
BONANZA 1023-5G3BS	05	100S	230E	4304750488	17461	1	GW	P	SWNE	D	1	MVRD	P	UTU 33433	N2995
BONANZA 1023-5G3CS	05	100S	230E	4304750489	17460	1	GW	P	SWNE	D	1	MVRD	P	UTU 33433	N2995
BONANZA 1023-5N4AS	05	100S	230E	4304752080	18484	1	GW	DRL	SWSW	D	1	WSMVD	DRL	UTU73450	N2995
BONANZA 1023-8C2DS	05	100S	230E	4304752081	18507	1	GW	DRL	SWSW	D	1	WSMVD	DRL	UTU37355	N2995
BONANZA 6-2	06	100S	230E	4304734843	13796	1	GW	TA	NESW		1	WSMVD	TA	UTU-38419	N2995
BONANZA 1023-6C	06	100S	230E	4304735153	13951	1	GW	P	NENW		1	MVRD	P	U-38419	N2995
BONANZA 1023-6E	06	100S	230E	4304735358	14170	1	GW	P	SWNW		1	MVRD	P	U-38419	N2995
BONANZA 1023-6M	06	100S	230E	4304735359	14233	1	GW	P	SWSW		1	WSMVD	P	U-38419	N2995
BONANZA 1023-6G	06	100S	230E	4304735439	14221	1	GW	P	SWNE		1	WSMVD	P	UTU-38419	N2995
BONANZA 1023-6O	06	100S	230E	4304735630	14425	1	GW	TA	SWSE		1	WSMVD	TA	U-38419	N2995

* not moved in unit

BONANZA 1023-6A	06	100S	230E	4304736067	14775		1	GW	P	NENE		1	WSMVD	P	U-33433	N2995
BONANZA 1023-6N	06	100S	230E	4304737211	15672		1	GW	P	SESW		1	WSMVD	P	UTU-38419	N2995
BONANZA 1023-6L	06	100S	230E	4304737212	15673		1	GW	P	NWSW		1	WSMVD	P	UTU-38419	N2995
BONANZA 1023-6J	06	100S	230E	4304737213	15620		1	GW	P	NWSE		1	WSMVD	P	UTU-38419	N2995
BONANZA 1023-6F	06	100S	230E	4304737214	15576		1	GW	TA	SENW		1	WSMVD	TA	UTU-38419	N2995
BONANZA 1023-6P	06	100S	230E	4304737323	16794		1	GW	P	SESE		1	WSMVD	P	UTU-38419	N2995
BONANZA 1023-6H	06	100S	230E	4304737324	16798		1	GW	S	SENE		1	WSMVD	S	UTU-33433	N2995
BONANZA 1023-6D	06	100S	230E	4304737429	17020		1	GW	P	NWNW		1	WSMVD	P	UTU-38419	N2995
BONANZA 1023-6B	06	100S	230E	4304740398	18291		1	GW	P	NWNE		1	WSMVD	P	UTU-33433	N2995
BONANZA 1023-6M1BS	06	100S	230E	4304750452	17578		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6N1AS	06	100S	230E	4304750453	17581		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6N1CS	06	100S	230E	4304750454	17580		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6N4BS	06	100S	230E	4304750455	17579		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6I2S	06	100S	230E	4304750457	17790		1	GW	P	NESE	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6I4S	06	100S	230E	4304750458	17792		1	GW	P	NESE	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6J3S	06	100S	230E	4304750459	17791		1	GW	P	NESE	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6P1S	06	100S	230E	4304750460	17793		1	GW	P	NESE	D	1	WSMVD	P	UTU 38419	N2995
BONANZA 1023-6A2CS	06	100S	230E	4304751430	18292		1	GW	P	NWNE	D	1	WSMVD	P	UTU33433	N2995
BONANZA 1023-6B4BS	06	100S	230E	4304751431	18293		1	GW	P	NWNE	D	1	WSMVD	P	UTU33433	N2995
BONANZA 1023-6B4CS	06	100S	230E	4304751432	18294		1	GW	P	NWNE	D	1	WSMVD	P	UTU33433	N2995
BONANZA 1023-6C4BS	06	100S	230E	4304751449	18318		1	GW	P	NENW	D	1	WSMVD	P	UTU38419	N2995
BONANZA 1023-6D1DS	06	100S	230E	4304751451	18316		1	GW	P	NENW	D	1	WSMVD	P	UTU38419	N2995
FLAT MESA FEDERAL 2-7	07	100S	230E	4304730545	18244		1	GW	S	NENW		1	WSMVD	S	U-38420	N2995
BONANZA 1023-7B	07	100S	230E	4304735172	13943		1	GW	P	NWNE		1	MVRD	P	U-38420	N2995
BONANZA 1023-7L	07	100S	230E	4304735289	14054		1	GW	P	NWSW		1	WSMVD	P	U-38420	N2995
BONANZA 1023-7D	07	100S	230E	4304735393	14171		1	GW	P	NWNW		1	WSMVD	P	U-38420	N2995
BONANZA 1023-7P	07	100S	230E	4304735510	14296		1	GW	P	SESE		1	WSMVD	P	U-38420	N2995
BONANZA 1023-7H	07	100S	230E	4304736742	15921		1	GW	P	SENE		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7NX (RIGSKID)	07	100S	230E	4304736932	15923		1	GW	P	SESW		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7M	07	100S	230E	4304737215	16715		1	GW	P	SWSW		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7K	07	100S	230E	4304737216	16714		1	GW	P	NESW		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7E	07	100S	230E	4304737217	16870		1	GW	P	SWNW		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7G	07	100S	230E	4304737326	16765		1	GW	P	SWNE		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7A	07	100S	230E	4304737327	16796		1	GW	P	NENE		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7O	07	100S	230E	4304738304	16713		1	GW	P	SWSE		1	MVRD	P	UTU-38420	N2995
BONANZA 1023-7B-3	07	100S	230E	4304738912	17016		1	GW	P	NWNE		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-07JT	07	100S	230E	4304739390	16869		1	GW	P	NWSE		1	WSMVD	P	UTU-38420	N2995
BONANZA 1023-7J2AS	07	100S	230E	4304750474	17494		1	GW	P	NWSE	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7J2DS	07	100S	230E	4304750475	17495		1	GW	P	NWSE	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7L3DS	07	100S	230E	4304750476	17939		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7M2AS	07	100S	230E	4304750477	17942		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7N2AS	07	100S	230E	4304750478	17940		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7N2DS	07	100S	230E	4304750479	17941		1	GW	P	NWSW	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7O4S	07	100S	230E	4304750480	17918		1	GW	P	SESE	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 1023-7P2S	07	100S	230E	4304750482	17919		1	GW	P	SESE	D	1	WSMVD	P	UTU 38420	N2995
BONANZA 8-2	08	100S	230E	4304734087	13851		1	GW	P	SESE		1	MVRD	P	U-37355	N2995

BONANZA 8-3	08	100S	230E	4304734770	13843	1	GW	P	NWNW		1	MVRD	P	U-37355	N2995
BONANZA 1023-8A	08	100S	230E	4304735718	14932	1	GW	P	NENE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8L	08	100S	230E	4304735719	14876	1	GW	P	NWSW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8N	08	100S	230E	4304735720	15104	1	GW	P	SESW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8F	08	100S	230E	4304735989	14877	1	GW	S	SENW		1	WSMVD	S	UTU-37355	N2995
BONANZA 1023-8I	08	100S	230E	4304738215	16358	1	GW	P	NESE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8K	08	100S	230E	4304738216	16354	1	GW	P	NESW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8M	08	100S	230E	4304738217	16564	1	GW	P	SWSW		1	MVRD	P	UTU-37355	N2995
BONANZA 1023-8G	08	100S	230E	4304738218	16903	1	GW	P	SWNE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8E	08	100S	230E	4304738219	16397	1	GW	P	SWNW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8C	08	100S	230E	4304738220	16355	1	GW	P	NENW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8B	08	100S	230E	4304738221	16292	1	GW	P	NWNE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8H	08	100S	230E	4304738222	16353	1	GW	P	SENE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8O	08	100S	230E	4304738305	16392	1	GW	P	SWSE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8B-4	08	100S	230E	4304738914	17019	1	GW	P	NWNE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-8A1DS	08	100S	230E	4304750481	17518	1	GW	P	NENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8A4BS	08	100S	230E	4304750483	17519	1	GW	P	NENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8B1AS	08	100S	230E	4304750484	17520	1	GW	P	NENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8B2AS	08	100S	230E	4304750485	17521	1	GW	P	NENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8O2S	08	100S	230E	4304750495	17511	1	GW	P	NWSE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8J1S	08	100S	230E	4304750496	17509	1	GW	P	NWSE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8O3S	08	100S	230E	4304750497	17512	1	GW	P	NWSE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8J3	08	100S	230E	4304750498	17510	1	GW	P	NWSE		1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8C4CS	08	100S	230E	4304750499	17544	1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8D2DS	08	100S	230E	4304750500	17546	1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8D3DS	08	100S	230E	4304750501	17545	1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F3DS	08	100S	230E	4304750502	17543	1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8A4CS	08	100S	230E	4304751131	18169	1	GW	P	NWNE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8B3BS	08	100S	230E	4304751132	18167	1	GW	P	NWNE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8C1AS	08	100S	230E	4304751133	18166	1	GW	P	NWNE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8G3AS	08	100S	230E	4304751134	18168	1	GW	P	NWNE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8E2AS	08	100S	230E	4304751135	18227	1	GW	P	SENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F3BS	08	100S	230E	4304751136	18227	1	GW	P	SENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F4AS	08	100S	230E	4304751137	18224	1	GW	P	SENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F4DS	08	100S	230E	4304751138	18225	1	GW	P	SENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8J2CS	08	100S	230E	4304751139	18226	1	GW	P	SENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8G4DS	08	100S	230E	4304751140	18144	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8H2DS	08	100S	230E	4304751141	18142	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8H3DS	08	100S	230E	4304751142	18143	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8H4DS	08	100S	230E	4304751143	18141	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8I4BS	08	100S	230E	4304751144	18155	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8J4BS	08	100S	230E	4304751145	18154	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8P1AS	08	100S	230E	4304751146	18156	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8P2BS	08	100S	230E	4304751147	18153	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8P4AS	08	100S	230E	4304751148	18157	1	GW	P	NESE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8E2DS	08	100S	230E	4304751149	18201	1	GW	P	NWSW	D	1	WSMVD	P	UTU 37355	N2995

BONANZA 1023-8E3DS	08	100S	230E	4304751150	18200		1	GW	P	NWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8K1CS	08	100S	230E	4304751151	18199		1	GW	P	NWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8K4CS	08	100S	230E	4304751152	18198		1	GW	P	NWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8L3DS	08	100S	230E	4304751153	18197		1	GW	P	NWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8M2AS	08	100S	230E	4304751154	18217		1	GW	P	SWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8M2DS	08	100S	230E	4304751155	18216		1	GW	P	SWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8N2BS	08	100S	230E	4304751156	18218		1	GW	P	SWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8O3CS	08	100S	230E	4304751157	18254		1	GW	P	SWSE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8N3DS	08	100S	230E	4304751158	18215		1	GW	P	SWSW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8O4AS	08	100S	230E	4304751159	18252		1	GW	P	SWSE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8P2CS	08	100S	230E	4304751160	18251		1	GW	P	SWSE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8P3CS	08	100S	230E	4304751161	18253		1	GW	P	SWSE	D	1	WSMVD	P	UTU 37355	N2995
CANYON FEDERAL 2-9	09	100S	230E	4304731504	1468		1	GW	P	NENW		1	MVRD	P	U-37355	N2995
SOUTHMAN CANYON 9-3-M	09	100S	230E	4304732540	11767		1	GW	S	SWSW		1	MVRD	S	UTU-37355	N2995
SOUTHMAN CANYON 9-4-J	09	100S	230E	4304732541	11685		1	GW	S	NWSE		1	MVRD	S	UTU-37355	N2995
BONANZA 9-6	09	100S	230E	4304734771	13852		1	GW	P	NWNE		1	MVRD	P	U-37355	N2995
BONANZA 9-5	09	100S	230E	4304734866	13892		1	GW	P	SESW		1	MVRD	P	U-37355	N2995
BONANZA 1023-9E	09	100S	230E	4304735620	14931		1	GW	P	SWNW		1	WSMVD	P	U-37355	N2995
BONANZA 1023-9I	09	100S	230E	4304738223	16766		1	GW	P	NESE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-9D	09	100S	230E	4304738306	16398		1	GW	P	NWNW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-9J	09	100S	230E	4304738811	16989		1	GW	P	NWSE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-9B3BS	09	100S	230E	4304750503	17965		1	GW	P	SENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-9B3CS	09	100S	230E	4304750504	17968		1	GW	P	SENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-9H2BS	09	100S	230E	4304750505	17966		1	GW	P	SENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-9H2CS	09	100S	230E	4304750506	17967		1	GW	P	SENE	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 10-2	10	100S	230E	4304734704	13782		1	GW	P	NWNW		1	MVRD	P	U-72028	N2995
BONANZA 1023-10L	10	100S	230E	4304735660	15164		1	GW	P	NWSW		1	WSMVD	P	U-38261	N2995
BONANZA 1023-10E	10	100S	230E	4304738224	16501		1	GW	P	SWNW		1	MVRD	P	UTU-72028	N2995
BONANZA 1023-10C	10	100S	230E	4304738228	16500		1	GW	P	NENW		1	MVRD	P	UTU-72028	N2995
BONANZA 1023-10C-4	10	100S	230E	4304738915	17015		1	GW	P	NENW		1	MVRD	P	UTU-72028	N2995
BONANZA 11-2 *	11	100S	230E	4304734773	13768		1	GW	P	SWNW		1	MVMCS	P	UTU-38425	N2995
BONANZA 1023-11K	11	100S	230E	4304735631	15132		1	GW	P	NESW		1	WSMVD	P	UTU-38425	N2995
BONANZA 1023-11B	11	100S	230E	4304738230	16764		1	GW	P	NWNE		1	MVRD	P	UTU-38425	N2995
BONANZA 1023-11F	11	100S	230E	4304738232	16797		1	GW	P	SENW		1	MVRD	P	UTU-38425	N2995
BONANZA 1023-11D	11	100S	230E	4304738233	16711		1	GW	P	NWNW		1	MVRD	P	UTU-38425	N2995
BONANZA 1023-11G	11	100S	230E	4304738235	16826		1	GW	P	SWNE		1	MVRD	P	UTU-38425	N2995
BONANZA 1023-11C	11	100S	230E	4304738309	16736		1	GW	P	NENW		1	MVRD	P	UTU-38425	N2995
BONANZA 1023-11J	11	100S	230E	4304738310	16839		1	GW	P	NWSE		1	WSMVD	P	UTU-38424	N2995
BONANZA 1023-11N	11	100S	230E	4304738311	16646		1	GW	P	SESW		1	MVRD	P	UTU-38424	N2995
BONANZA 1023-11M	11	100S	230E	4304738312	16687		1	GW	P	SWSW		1	MVRD	P	UTU-38424	N2995
BONANZA 1023-11L	11	100S	230E	4304738812	16987		1	GW	P	NWSW		1	WSMVD	P	UTU-38424	N2995
NSO FEDERAL 1-12	12	100S	230E	4304730560	1480		1	GW	P	NENW		1	MVRD	P	UTU-38423	N2995
WHITE RIVER 1-14	14	100S	230E	4304730481	1500		1	GW	S	NENW		1	MVRD	S	U-38427	N2995
BONANZA 1023-14D	14	100S	230E	4304737030	16799		1	GW	P	NWNW		1	MVRD	P	UTU-38427	N2995
BONANZA 1023-14C	14	100S	230E	4304738299	16623		1	GW	P	NENW		1	MVRD	P	UTU-38427	N2995
BONANZA FEDERAL 3-15	15	100S	230E	4304731278	8406		1	GW	P	NENW		1	MVRD	P	U-38428	N2995

* not moved into unit

BONANZA 1023-15H	15	100S	230E	4304738316	16688		1	GW	P	SENE		1	MVRD	P	UTU-38427	N2995
BONANZA 1023-15J	15	100S	230E	4304738817	16988		1	GW	P	NWSE		1	MVRD	P	UTU-38427	N2995
BONANZA 1023-15H4CS	15	100S	230E	4304750741	17492		1	GW	P	NESE	D	1	MVRD	P	UTU 38427	N2995
BONANZA 1023-15I2AS	15	100S	230E	4304750742	17493		1	GW	P	NESE	D	1	WSMVD	P	UTU 38427	N2995
BONANZA 1023-15I4BS	15	100S	230E	4304750743	17490		1	GW	P	NESE	D	1	WSMVD	P	UTU 38427	N2995
BONANZA 1023-15P1BS	15	100S	230E	4304750744	17491		1	GW	P	NESE	D	1	WSMVD	P	UTU 38427	N2995
LOOKOUT POINT STATE 1-16	16	100S	230E	4304730544	1495		3	GW	P	NESE		3	WSMVD	P	ML-22186-A	N2995
BONANZA 1023-16J	16	100S	230E	4304737092	15987		3	GW	OPS	NWSE		3	WSMVD	OPS	ML-22186-A	N2995
BONANZA 1023-17B	17	100S	230E	4304735747	15165		1	GW	P	NWNE		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-17C	17	100S	230E	4304738237	16585		1	GW	P	NENW		1	WSMVD	P	UTU-37355	N2995
BONANZA 1023-17D3S	17	100S	230E	4304750511	17943		1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-17E2S	17	100S	230E	4304750512	17944		1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-17E3AS	17	100S	230E	4304750513	17945		1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-17E3CS	17	100S	230E	4304750514	17946		1	GW	P	NENW	D	1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-18G	18	100S	230E	4304735621	14410		1	GW	P	SWNE		1	WSMVD	P	U-38241	N2995
BONANZA 1023-18B	18	100S	230E	4304735721	14395		1	GW	P	NWNE		1	WSMVD	P	U-38421	N2995
BONANZA 1023-18DX (RIGSKID)	18	100S	230E	4304736218	14668		1	GW	P	NWNW		1	WSMVD	P	U-38241	N2995
BONANZA 1023-18A	18	100S	230E	4304738243	16625		1	GW	P	NENE		1	WSMVD	P	UTU-38421	N2995
BONANZA 1023-18F	18	100S	230E	4304738244	16624		1	GW	P	SENW		1	WSMVD	P	UTU-38421	N2995
BONANZA 1023-18E	18	100S	230E	4304738245	16645		1	GW	P	SWNW		1	MVRD	P	UTU-38421	N2995
BONANZA 1023-18C	18	100S	230E	4304738246	16734		1	GW	P	NENW		1	MVRD	P	UTU-38421	N2995
BONANZA 1023-18G-1	18	100S	230E	4304738916	17135		1	GW	P	SWNE		1	WSMVD	P	UTU-38421	N2995
BONANZA 1023-18D3AS	18	100S	230E	4304750448	17498		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18D3DS	18	100S	230E	4304750449	17499		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18E2DS	18	100S	230E	4304750450	17497		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18E3AS	18	100S	230E	4304750451	17496		1	GW	P	SENW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18L2S	18	100S	230E	4304750520	18111		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18L3S	18	100S	230E	4304750521	18110		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18K3AS	18	100S	230E	4304751061	18112		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18K3BS	18	100S	230E	4304751063	18113		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18M2AS	18	100S	230E	4304751064	18117		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18M2DS	18	100S	230E	4304751065	18116		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18N2AS	18	100S	230E	4304751066	18114		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-18N2DS	18	100S	230E	4304751067	18115		1	GW	P	SWNW	D	1	WSMVD	P	UTU 38421	N2995
BONANZA 1023-10F	10	100S	230E	4304738225	16565			GW	P	SENW			MVRD	P	UTU 72028	N2995
BONANZA 1023-6D1AS	6	100S	230E	4304751450	18320			GW	P	NENW	D		WSMVD	P	UTU 38419	N2995
BONANZA 1023-6C1CS	6	100S	230E	4304751448	18319			GW		NENW	D				UTU 38419	N2995
BONANZA 1023-6D3AS	6	100S	230E	4304751452	18317			GW	P	NENW	D		WSMVD	P	UTU 38419	N2995

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-6P1S

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

9. API NUMBER: 43047504600000

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

PHONE NUMBER: 720 929-6582

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT — Approximate date work will start:
- ✓ SUBSEQUENT REPORT — Date of Work Completion: 8/7/2013
- ☐ SPUD REPORT — Date of Spud:
- ☐ DRILLING REPORT — Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: PRODUCTION ENHANCEMENT

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

THE OPERATOR CONDUCTED THE FOLLOWING WORKOVER/WELLBORE CLEANOUT ON THE SUBJECT WELL ON 08/07/2013. PLEASE SEE THE ATTACHED CHRONOLOGICAL WELL HISTORY FOR DETAILS. THANK YOU.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
January 24, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Kay E. Kelly	720 929 6582	Regulatory Analyst

SIGNATURE	DATE
N/A	1/23/2014

RECEIVED: Jan. 23, 2014

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No:
Event: WELL WORK EXPENSE	Start Date: 8/7/2013	End Date: 8/7/2013
Active Datum: RKB @5,195.00usft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/7/2013	7:00 - 14:30	7.50	MAINT	42				FLUID LEVEL 2500. MADE 2 SWAB RUNS AND GOT BACK 32 BBLS. UNLOADED WELL FOR 3 HRS AND WATCHED 1 CYCLE BUT THE PLUNGER IS STUCK . CALLED OPERATOR.

RECEIVED: Jan. 23, 2014

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU 38419

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: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-6P1S

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

9. API NUMBER: 43047504600000

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

PHONE NUMBER: 720 929-6100

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2060 FSL 0958 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESE Section: 06 Township: 10.0S Range: 23.0E 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:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
✓ SUBSEQUENT REPORT Date of Work Completion: 11/15/2013	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Production Enhancement

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

THE OPERATOR CONDUCTED THE FOLLOWING WORKOVER/WELLBORE CLEANOUT ON THE SUBJECT WELL ON 11/15/2013. PLEASE SEE THE ATTACHED CHRONOLOGICAL WELL HISTORY FOR DETAILS. THANK YOU.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
March 13, 2014

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Teena Paulo	720 929-6236	Staff Regulatory Specialist
SIGNATURE N/A		**DATE** 3/13/2014

RECEIVED: Mar. 13, 2014

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: WELL WORK EXPENSE	Start Date: 11/11/2013	End Date: 11/15/2013
Active Datum: RKB @5,195.00usft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/11/2013	10:00 - 11:00	1.00	MAINT	30	A	P		MIRU.
	11:00 - 11:15	0.25	MAINT	48		P		HSM REVIEW STUCK TBG & PLUGGED TBG.
	11:15 - 13:45	2.50	MAINT	31	I	P		SICP 350 PSI. TP.100 PSI.TBG BLEW DWN, PUMP 11 BBLS, TBG PRESSURE UP TO 1000 PSI. TBG PLUGGED, CONTROL CSG W/ 35 BBLS, PU ON TBG, TBG STUCK, REMOVE HANGER, NU BOP'S, RU FLOOR & TBG EQUIPMENT, DONE A STRETCH TEST, HAVE 30" OF STRETCH, STUCK @ APPROX 8515' CONTINUE WORKING TBG TO 75K, TBG CAME FREE.
	13:45 - 15:00	1.25	MAINT	34	H	P		RU CUTTERS, RIH 1-11/16 TBG PUNCHER, PUNCHER TBG @ 6474', POOH TOOLS, RD CUTTERS.
	15:00 - 17:00	2.00	MAINT	45	A	P		RU SCAN TECH, POOH & SCAN 118 JTS. 2-3/8" L-80 TBG, EOT @ 4348', SWI, SDFN.
11/12/2013	7:00 - 7:15	0.25	MAINT	48		P		HSM, REVIEW SCANNING TBG.
	7:15 - 10:30	3.25	MAINT	45	A	P		SICP. 775 PSI. SITP. 620 PSI. BLEW TBG DWN, CONTROL TBG W/ 20 BBLS, FINISH SCANNING 137 JTS. SCAN TOTAL OF 255 JTS., LD 102 JTS. DUE TO INTERNAL & EXTERNAL SCALE W/ INTERNAL PITTING, RD SCAN TECH.
	10:30 - 14:15	3.75	MAINT	31	I	P		PU 3-7/8" SLAUGH LONG-NECK MILL, FLOAT SUB, TALLY & RIH 256 JTS.TAG SCALE @ 8062'
	14:15 - 14:30	0.25	MAINT	47	A	P		NU PWR SWVL, INSTALL TSF, RU TECH FOAM
	14:30 - 15:30	1.00	MAINT	31	H	P		BEGAN TO EST CIRC & TBG PRESSURE UP TO 2000 PSI. LD PWR SWVL,
	15:30 - 16:10	0.67	MAINT	31	F	P		WORKED TBG TO UNPLUG MILL, UNSUCCESSFUL, BLEED TBG OFF TO TANK, REMOVE TSF.
	16:10 - 17:00	0.83	MAINT	31	I	P		LD 1 JNT, POOH 60 JTS. TBG, EOT @ 6205', SWI, SDFN.
11/13/2013	7:00 - 7:15	0.25	MAINT	48		P		HSM, REVIEW TRIPPING TBG.
	7:15 - 17:00	9.75	MAINT	31	I	P		SICP. 700 PSI. TP. O PSI. FINISH POOH TBG, CHECK MILL, MILL NOT PLUGGED, RIH 3-7/8" SLAUGH LONG-NECK MILL W/ NEW FLOAT SUB & TBG, STOP @ 8031', NU PWR SWVL, BEGAN TO EST CIRC & TBG PRESSURE UP TO 2000 PSI., BLEED TBG DWN RU SWAB EQUIPMENT, RIH W/ SINKER BAR & TAG @ 8031', NO TBG OBSTRUCTION, POOH SWAB EQUIPMENT, POOH TBG, LD MILL, FLOAT SUB PLUGGED W/ SCALE, PU SLAUGH 3-7/8 SHOE, BIT SUB, RIH 100 JTS., EOT @ 3195' SWI, SDFN.
11/14/2013	7:00 - 7:15	0.25	MAINT	48		P		JSA= WELL CONTROL
	7:15 - 17:00	9.75	MAINT	30		P		SIWP= 375 PSI OPEN WELL TO FBT NU & PUMP 10 BBLS TMAC TO CONTROL WELL CONTINUE TO RIH TAG @ 8031' RU DRLG EQUIP EST CIRC W/ FOAM AIR UNIT C/O & DRILL W/ 3-7/8" SHOE TO PBTD @ 8545' CIRC CLEAN RD DRLG EQUIP LD 17 JNTS POOH TO BHA LD BHA SIW SDFN
11/15/2013	7:00 - 7:15	0.25	MAINT	48		P		JSA= BROACH TUBING

RECEIVED: Mar. 13, 2014

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6P1S [GREEN]	Spud Conductor: 9/18/2010	Spud Date: 12/13/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6I PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: WELL WORK EXPENSE	Start Date: 11/11/2013	End Date: 11/15/2013
Active Datum: RKB @5,195.00usft (above Mean Sea Level)	UWI: NE/SE/0/10/S/23/E/6/0/0/26/PM/S/2060/E/0/958/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 15:00	7.75	MAINT	30		P		SIWP= 550 PSI, OPEN WELL TO FBT CONTROL W/ 20 BBLS TMAC PU LANEY NPL RIH BROACHING LAND TUB ON HNGR W/ 257 JNTS 2-3/8" L-80 EOT @ 8093.18' RD FLOOR & TUBING EQUIP ND BOPS NU W/H SIW RD RIG MOVE TO 6J3S RU SDFW

RECEIVED: Mar. 13, 2014