

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

FORM 3  
AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>				<b>1. WELL NAME and NUMBER</b> Bonanza 1023-6N1AS		
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>				<b>3. FIELD OR WILDCAT</b> NATURAL BUTTES		
<b>4. TYPE OF WELL</b> Gas Well Coalbed Methane Well: NO				<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>		
<b>6. NAME OF OPERATOR</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.				<b>7. OPERATOR PHONE</b> 720 929-6587		
<b>8. ADDRESS OF OPERATOR</b> P.O. Box 173779, Denver, CO, 80217				<b>9. OPERATOR E-MAIL</b> mary.mondragon@anadarko.com		
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU 38419		<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>				<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>		
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>				<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>		
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>		<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>		
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>	<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>
<b>LOCATION AT SURFACE</b>	1570 FSL 742 FWL	NWSW	6	10.0 S	23.0 E	S
<b>Top of Uppermost Producing Zone</b>	1260 FSL 2320 FWL	SESW	6	10.0 S	23.0 E	S
<b>At Total Depth</b>	1260 FSL 2320 FWL	SESW	6	10.0 S	23.0 E	S
<b>21. COUNTY</b> UINTAH		<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1260		<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 516		
		<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 350		<b>26. PROPOSED DEPTH</b> MD: 8870 TVD: 8400		
<b>27. ELEVATION - GROUND LEVEL</b> 5144		<b>28. BOND NUMBER</b> WYB000291		<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Permit #43-8496		

**ATTACHMENTS**

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

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

<b>NAME</b> Danielle Piernot	<b>TITLE</b> Regulatory Analyst	<b>PHONE</b> 720 929-6156
<b>SIGNATURE</b>	<b>DATE</b> 06/01/2009	<b>EMAIL</b> danielle.piernot@anadarko.com
<b>API NUMBER ASSIGNED</b> 43047504530000	<b>APPROVAL</b>   Permit Manager	

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Prod	7.875	4.5	0	8870		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade I-80 LT&C	8870	11.6			

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Surf	12.25	9.625	0	2090		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade J-55 LT&C	2090	36.0			

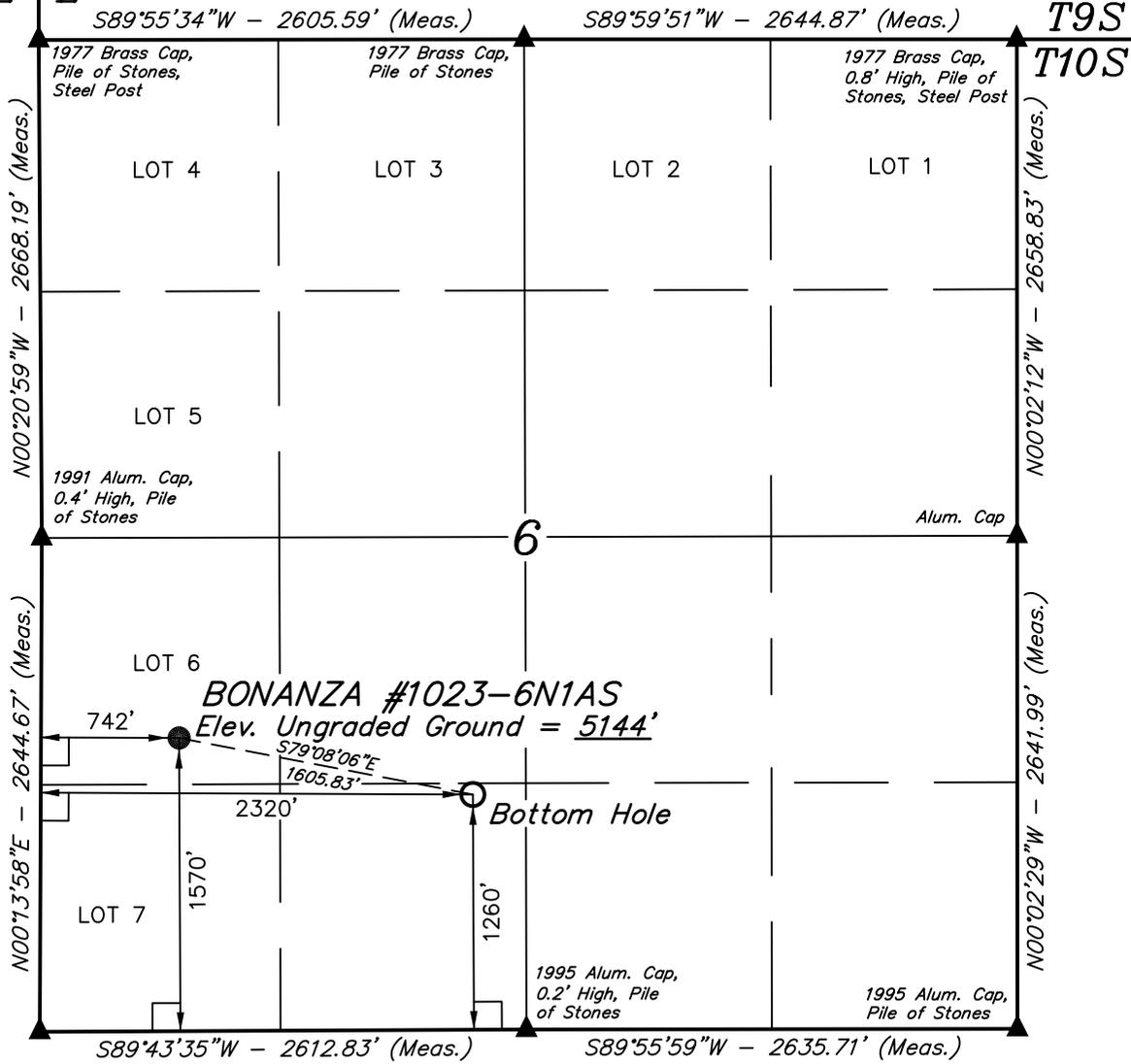
R  
22  
E

R  
23  
E

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

Kerr-McGee Oil & Gas Onshore LP

Well location, BONANZA #1023-6N1AS, located as shown in LOT 6 of Section 6, T10S, R23E, S.L.B.&M., Uintah County, Utah.



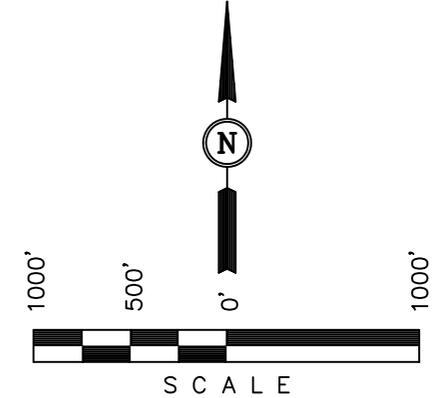
T9S  
T10S

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.

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

REVISED: 12-31-08 L.K.

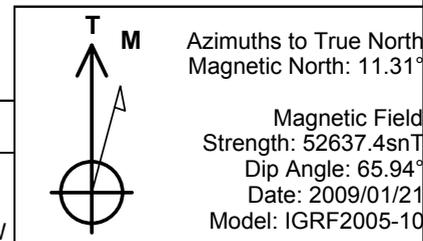
**UINTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

- LEGEND:**
- └─┘ = 90° SYMBOL
  - = PROPOSED WELL HEAD.
  - ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°58'26.90" (39.974139)	LATITUDE = 39°58'29.89" (39.974969)
LONGITUDE = 109°22'13.96" (109.370544)	LONGITUDE = 109°22'34.21" (109.376169)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 39°58'27.02" (39.974172)	LATITUDE = 39°58'30.01" (39.975003)
LONGITUDE = 109°22'11.51" (109.369864)	LONGITUDE = 109°22'31.76" (109.375489)

SCALE 1" = 1000'	DATE SURVEYED: 10-16-08	DATE DRAWN: 10-29-08
PARTY B.B. T.B. C.C.		REFERENCES G.L.O. PLAT
WEATHER COOL	FILE Kerr-McGee Oil & Gas Onshore LP	

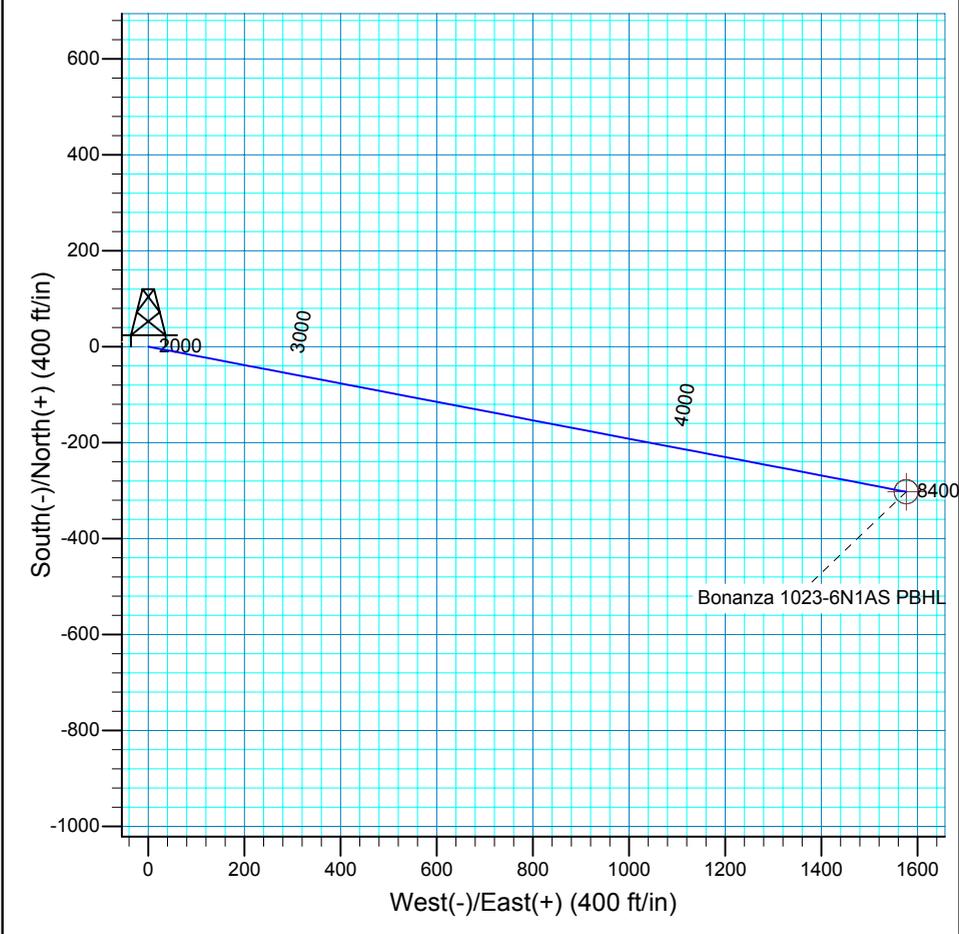
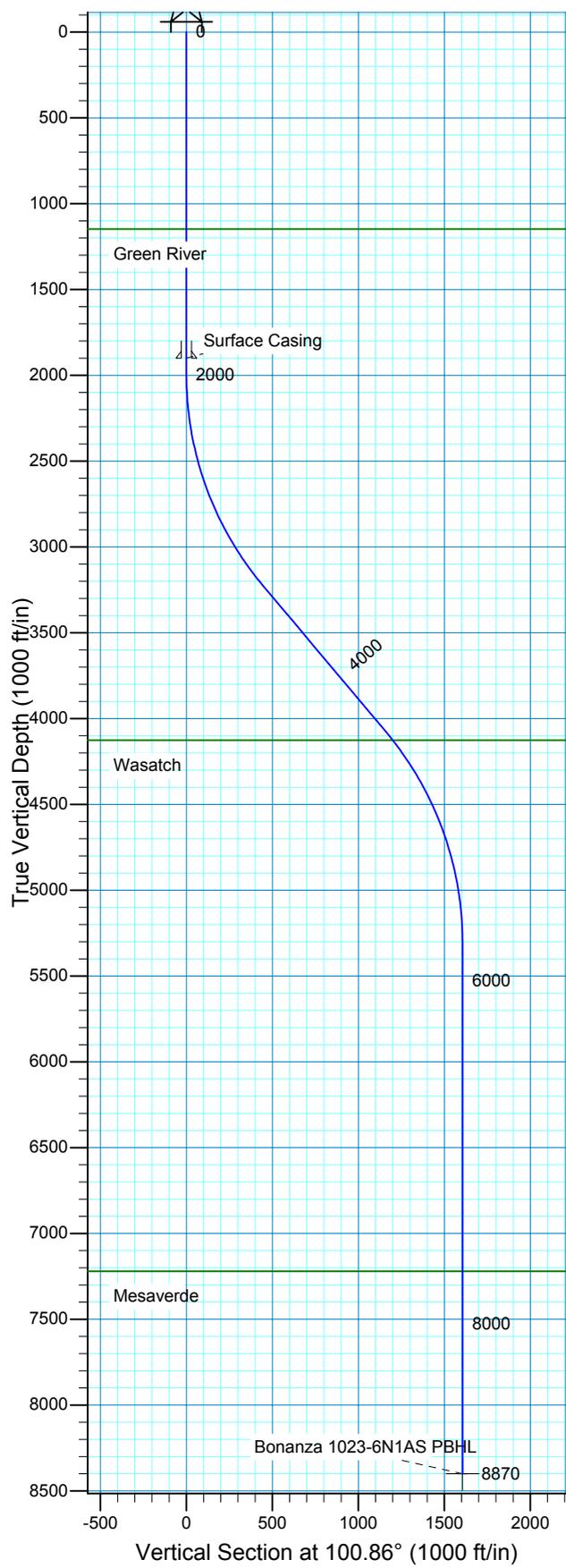
APIWellNo:43047504530000'



WELL DETAILS: Bonanza 1023-6N1AS

GL 5144' & RKB 18' @ 5162.00ft 5144.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	605011.97	2595332.78	39° 58' 30.010 N	109° 22' 31.760 W



Plan: Plan #1 (Bonanza 1023-6N1AS/OH)  
 Created By: Julie Cruse Date: 2009-01-22  
 PROJECT DETAILS: Uintah County, UT NAD27  
 Geodetic System: US State Plane 1927 (Exact solution)  
 Datum: NAD 1927 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Utah Central 4302  
 Location: Sec 6 T10S R23E  
 System Datum: Mean Sea Level  
 Local North: True

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3333.33	40.00	100.86	3227.63	-84.20	438.82	3.00	100.86	446.82	
4440.25	40.00	100.86	4075.58	-218.27	1137.58	0.00	0.001	158.33	
5773.58	0.00	0.00	5303.21	-302.47	1576.40	3.00	180.001	605.16	
8870.37	0.00	0.00	8400.00	-302.47	1576.40	0.00	0.001	605.16	Bonanza 1023-6N1AS PBHL



**Scientific Drilling**  
Rocky Mountain Operations

# **Kerr McGee Oil and Gas Onshore LP**

**Uintah County, UT NAD27  
Bonanza 1023-6L Pad  
Bonanza 1023-6N1AS  
OH**

**Plan: Plan #1**

## **Standard Planning Report**

**22 January, 2009**



## Scientific Drilling Planning Report

<b>Database:</b> EDM 2003.16 Multi User DB	<b>Local Co-ordinate Reference:</b> Well Bonanza 1023-6N1AS
<b>Company:</b> Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b> GL 5144' & RKB 18' @ 5162.00ft
<b>Project:</b> Uintah County, UT NAD27	<b>MD Reference:</b> GL 5144' & RKB 18' @ 5162.00ft
<b>Site:</b> Bonanza 1023-6L Pad	<b>North Reference:</b> True
<b>Well:</b> Bonanza 1023-6N1AS	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> OH	
<b>Design:</b> Plan #1	

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

<b>Site</b> Bonanza 1023-6L Pad, Sec 6 T10S R23E					
<b>Site Position:</b>		<b>Northing:</b>	605,076.57 ft	<b>Latitude:</b>	39° 58' 30.640 N
<b>From:</b> Lat/Long		<b>Easting:</b>	2,595,367.85 ft	<b>Longitude:</b>	109° 22' 31.290 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b>	1.36 °

<b>Well</b> Bonanza 1023-6N1AS, 1570' FSL 742' FWL					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	605,011.97 ft	<b>Latitude:</b> 39° 58' 30.010 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,595,332.78 ft	<b>Longitude:</b> 109° 22' 31.760 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b> 5,144.00 ft

<b>Wellbore</b> OH					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	IGRF2005-10	2009/01/21	11.31	65.94	52,637

<b>Design</b> Plan #1				
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	100.86

<b>Plan Sections</b>										
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	
3,333.33	40.00	100.86	3,227.63	-84.20	438.82	3.00	3.00	0.00	100.86	
4,440.25	40.00	100.86	4,075.58	-218.27	1,137.58	0.00	0.00	0.00	0.00	
5,773.58	0.00	0.00	5,303.21	-302.47	1,576.40	3.00	-3.00	0.00	180.00	
8,870.37	0.00	0.00	8,400.00	-302.47	1,576.40	0.00	0.00	0.00	0.00	Bonanza 1023-6N1AS

# Scientific Drilling

## Planning Report



<b>Database:</b>	EDM 2003.16 Multi User DB	<b>Local Co-ordinate Reference:</b>	Well Bonanza 1023-6N1AS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5144' & RKB 18' @ 5162.00ft
<b>Project:</b>	Uintah County, UT NAD27	<b>MD Reference:</b>	GL 5144' & RKB 18' @ 5162.00ft
<b>Site:</b>	Bonanza 1023-6L Pad	<b>North Reference:</b>	True
<b>Well:</b>	Bonanza 1023-6N1AS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,147.00	0.00	0.00	1,147.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Green River</b>									
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Surface Casing</b>									
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	3.00	100.86	2,099.95	-0.49	2.57	2.62	3.00	3.00	0.00
2,200.00	6.00	100.86	2,199.63	-1.97	10.27	10.46	3.00	3.00	0.00
2,300.00	9.00	100.86	2,298.77	-4.43	23.09	23.51	3.00	3.00	0.00
2,400.00	12.00	100.86	2,397.08	-7.86	40.99	41.74	3.00	3.00	0.00
2,500.00	15.00	100.86	2,494.31	-12.26	63.91	65.08	3.00	3.00	0.00
2,600.00	18.00	100.86	2,590.18	-17.61	91.80	93.48	3.00	3.00	0.00
2,700.00	21.00	100.86	2,684.43	-23.90	124.58	126.85	3.00	3.00	0.00
2,800.00	24.00	100.86	2,776.81	-31.11	162.16	165.12	3.00	3.00	0.00
2,900.00	27.00	100.86	2,867.06	-39.22	204.43	208.16	3.00	3.00	0.00
3,000.00	30.00	100.86	2,954.93	-48.22	251.29	255.87	3.00	3.00	0.00
3,100.00	33.00	100.86	3,040.18	-58.06	302.60	308.12	3.00	3.00	0.00
3,200.00	36.00	100.86	3,122.59	-68.73	358.22	364.75	3.00	3.00	0.00
3,300.00	39.00	100.86	3,201.91	-80.20	418.00	425.62	3.00	3.00	0.00
3,333.33	40.00	100.86	3,227.63	-84.20	438.82	446.82	3.00	3.00	0.00
3,400.00	40.00	100.86	3,278.70	-92.27	480.90	489.67	0.00	0.00	0.00
3,500.00	40.00	100.86	3,355.31	-104.38	544.03	553.95	0.00	0.00	0.00
3,600.00	40.00	100.86	3,431.91	-116.50	607.16	618.23	0.00	0.00	0.00
3,700.00	40.00	100.86	3,508.52	-128.61	670.28	682.51	0.00	0.00	0.00
3,800.00	40.00	100.86	3,585.12	-140.72	733.41	746.79	0.00	0.00	0.00
3,900.00	40.00	100.86	3,661.73	-152.83	796.54	811.07	0.00	0.00	0.00
4,000.00	40.00	100.86	3,738.33	-164.95	859.67	875.35	0.00	0.00	0.00
4,100.00	40.00	100.86	3,814.93	-177.06	922.79	939.63	0.00	0.00	0.00
4,200.00	40.00	100.86	3,891.54	-189.17	985.92	1,003.90	0.00	0.00	0.00
4,300.00	40.00	100.86	3,968.14	-201.28	1,049.05	1,068.18	0.00	0.00	0.00
4,400.00	40.00	100.86	4,044.75	-213.39	1,112.18	1,132.46	0.00	0.00	0.00
4,440.25	40.00	100.86	4,075.58	-218.27	1,137.58	1,158.33	0.00	0.00	0.00
4,500.00	38.21	100.86	4,121.95	-225.37	1,174.59	1,196.02	3.00	-3.00	0.00
4,505.15	38.05	100.86	4,126.00	-225.97	1,177.72	1,199.20	3.00	-3.00	0.00
<b>Wasatch</b>									



## Scientific Drilling Planning Report

<b>Database:</b> EDM 2003.16 Multi User DB	<b>Local Co-ordinate Reference:</b> Well Bonanza 1023-6N1AS
<b>Company:</b> Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b> GL 5144' & RKB 18' @ 5162.00ft
<b>Project:</b> Uintah County, UT NAD27	<b>MD Reference:</b> GL 5144' & RKB 18' @ 5162.00ft
<b>Site:</b> Bonanza 1023-6L Pad	<b>North Reference:</b> True
<b>Well:</b> Bonanza 1023-6N1AS	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> OH	
<b>Design:</b> Plan #1	

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,600.00	35.21	100.86	4,202.11	-236.63	1,233.29	1,255.78	3.00	-3.00	0.00	
4,700.00	32.21	100.86	4,285.29	-247.09	1,287.78	1,311.27	3.00	-3.00	0.00	
4,800.00	29.21	100.86	4,371.25	-256.71	1,337.93	1,362.33	3.00	-3.00	0.00	
4,900.00	26.21	100.86	4,459.78	-265.47	1,383.59	1,408.82	3.00	-3.00	0.00	
5,000.00	23.21	100.86	4,550.61	-273.35	1,424.63	1,450.62	3.00	-3.00	0.00	
5,100.00	20.21	100.86	4,643.51	-280.31	1,460.95	1,487.60	3.00	-3.00	0.00	
5,200.00	17.21	100.86	4,738.22	-286.36	1,492.45	1,519.67	3.00	-3.00	0.00	
5,300.00	14.21	100.86	4,834.47	-291.46	1,519.03	1,546.74	3.00	-3.00	0.00	
5,400.00	11.21	100.86	4,932.01	-295.60	1,540.63	1,568.73	3.00	-3.00	0.00	
5,500.00	8.21	100.86	5,030.57	-298.78	1,557.19	1,585.59	3.00	-3.00	0.00	
5,600.00	5.21	100.86	5,129.87	-300.98	1,568.66	1,597.27	3.00	-3.00	0.00	
5,700.00	2.21	100.86	5,229.65	-302.20	1,575.01	1,603.74	3.00	-3.00	0.00	
5,773.58	0.00	0.00	5,303.21	-302.47	1,576.40	1,605.16	3.00	-3.00	-137.08	
5,800.00	0.00	0.00	5,329.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,429.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,529.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,100.00	0.00	0.00	5,629.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,200.00	0.00	0.00	5,729.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,300.00	0.00	0.00	5,829.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,400.00	0.00	0.00	5,929.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,029.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,129.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,229.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,329.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,429.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,529.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,100.00	0.00	0.00	6,629.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,200.00	0.00	0.00	6,729.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,300.00	0.00	0.00	6,829.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,400.00	0.00	0.00	6,929.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,029.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,129.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,690.37	0.00	0.00	7,220.00	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
<b>Mesaverde</b>										
7,700.00	0.00	0.00	7,229.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,329.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,429.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,529.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,629.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,200.00	0.00	0.00	7,729.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,829.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,400.00	0.00	0.00	7,929.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,029.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,129.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,229.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,329.63	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	
8,870.37	0.00	0.00	8,400.00	-302.47	1,576.40	1,605.16	0.00	0.00	0.00	



**Scientific Drilling**  
Planning Report

<b>Database:</b>	EDM 2003.16 Multi User DB	<b>Local Co-ordinate Reference:</b>	Well Bonanza 1023-6N1AS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5144' & RKB 18' @ 5162.00ft
<b>Project:</b>	Uintah County, UT NAD27	<b>MD Reference:</b>	GL 5144' & RKB 18' @ 5162.00ft
<b>Site:</b>	Bonanza 1023-6L Pad	<b>North Reference:</b>	True
<b>Well:</b>	Bonanza 1023-6N1AS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Bonanza 1023-6N1AS P - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,400.00	-302.47	1,576.40	604,747.03	2,596,915.92	39° 58' 27.020 N	109° 22' 11.510 W

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(in)	(in)	
1,900.00	1,900.00	Surface Casing	9.625	13.500	

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,147.00	1,147.00	Green River		0.00		
4,505.15	4,126.00	Wasatch		0.00		
7,690.37	7,220.00	Mesaverde		0.00		

**Bonanza 1023-6N1AS**

Pad: Bonanza 1023-6L

Surface: 1,570' FSL, 742' FWL (NW/4SW/4) Lot 6

BHL: 1,260' FSL 2,320' FWL (SE/4SW/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:**

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 – Surface	
Green River	1,147'	
Birds Nest	1,389'	Water
Mahogany	1,888'	Water
Wasatch	4,126'	Gas
Mesaverde	6,282'	Gas
MVU2	7,220'	Gas
MVL1	7,780'	Gas
TVD	8,400'	
TD	8,870'	

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 8,870' TD, approximately equals 4,972 psi (calculated at 0.59 psi/foot).

Maximum anticipated surface pressure equals approximately 3,124 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

**8. Anticipated Starting Dates:**

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

**9. Variances:**

*Please refer to the attached Drilling Program.*

*Onshore Order #2 – Air Drilling Variance*

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

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

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

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

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

***Background***

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

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

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

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

#### ***Variance for BOPE Requirements***

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

#### ***Variance for Mud Material Requirements***

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

#### ***Variance for Special Drilling Operation (surface equipment placement) Requirements***

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

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

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

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

***Conclusion***

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

**10. Other Information:**

*Please refer to the attached Drilling Program.*





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

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0 to 2,090	36.00	J-55	LTC	3520	2020	453000
						1.04	2.07	7.66
PRODUCTION	4-1/2"	0 to 8,870	11.60	I-80	LTC	7,780	6,350	201,000
						2.42	1.25	2.24

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 3,124 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 4,972 psi**

**CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE Option 1	LEAD	500	Premium cmt + 2% CaCl + 0.25 pps flocele	215	60%	15.60	1.18
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + 0.25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>							
SURFACE Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite +.25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + 0.25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,620'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	340	40%	11.00	3.38
	TAIL	5,250'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1290	40%	14.30	1.31

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

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

**FLOAT EQUIPMENT & CENTRALIZERS**

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

**ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

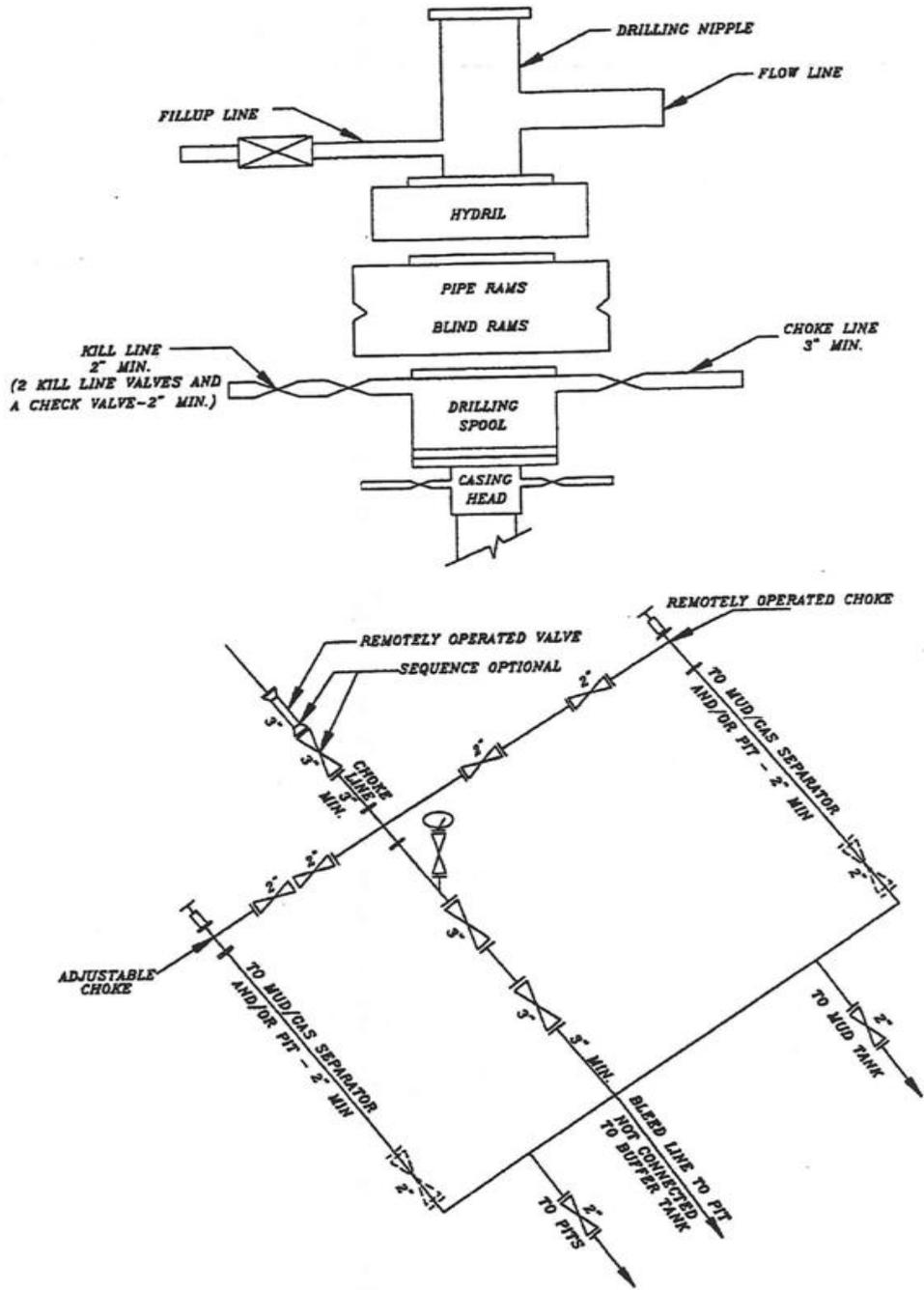
Surveys will be taken at 1,000' minimum intervals.

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

DRILLING ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_  
 John Huycke / Grant Schluender

DRILLING SUPERINTENDENT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 John Merkel / Lovel Young

### EXHIBIT A Bonanza 1023-6N1AS



SCHMATIC DIAGRAM OF 5,000 PSI BOP STACK



**Kerr-McGee Oil & Gas Onshore LP**

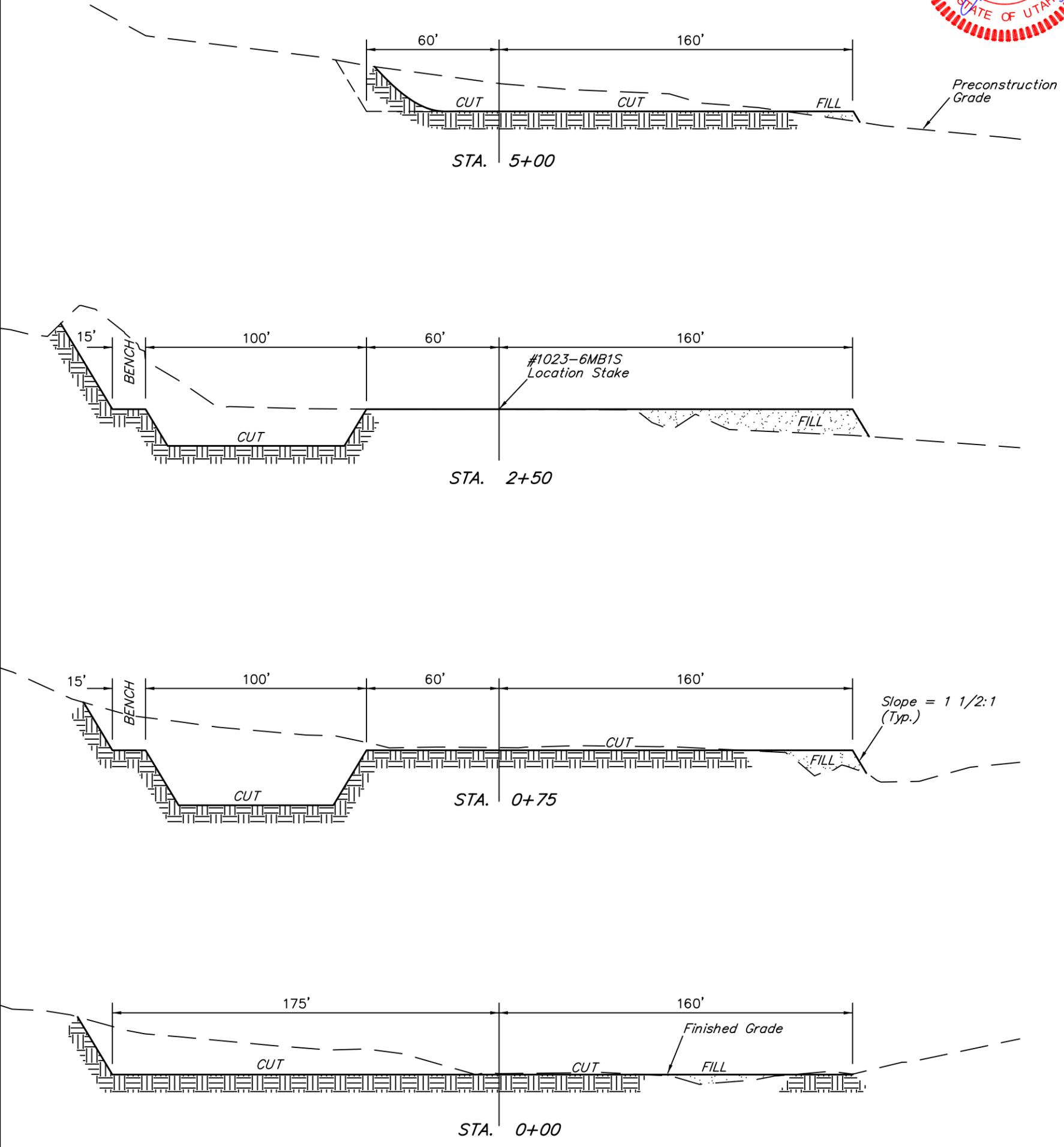
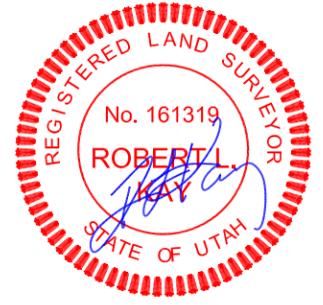
**TYPICAL CROSS SECTIONS FOR**

**BONANZA #1023-6M1BS, #1023-6N4BS, #1023-6N1CS & #1023-6N1AS  
SECTION 6, T10S, R23E, S.L.B.&M.  
LOT 6**

**FIGURE #2**

X-Section Scale  
1" = 20'  
1" = 50'

DATE: 10-29-08  
Drawn By: C.C.  
REVISED: 12-31-08 L.K.



**APPROXIMATE ACREAGES**

EXISTING WELL SITE DISTURBANCE = ±1.252 ACRES  
PROPOSED WELL SITE DISTURBANCE = ±3.587 ACRES

PROPOSED WELL SITE DISTURBANCE = ±4.839 ACRES

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

**APPROXIMATE YARDAGES**

**CUT**  
(6") Topsoil Stripping = 1,880 Cu. Yds.  
(New Construction Only)  
Remaining Location = 16,950 Cu. Yds.  
**TOTAL CUT = 18,830 CU.YDS.**  
**FILL = 3,890 CU.YDS.**

EXCESS MATERIAL = 14,940 Cu. Yds.  
Topsoil & Pit Backfill = 5,430 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 9,510 Cu. Yds.  
(After Interim Rehabilitation)

**Kerr-McGee Oil & Gas Onshore LP**  
**BONANZA #1023-06M1BS, #1023-06N1AS,**  
**#1023-06N1CS & #1023-06N4BS**  
**LOCATED IN UTAH COUNTY, UTAH**  
**SECTION 6, T10S, R23E, S.L.B.&M.**



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: WESTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: NORTHEASTERLY



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

- Since 1964 -

<b>LOCATION PHOTOS</b>	<b>10</b>	<b>28</b>	<b>08</b>	<b>PHOTO</b>
	MONTH	DAY	YEAR	
TAKEN BY: B.B.	DRAWN BY: C.H.		REVISED: 01-02-09 S.P.	

**Kerr-McGee Oil & Gas Onshore LP**  
**BONANZA #1023-06M1BS, #1023-06N1AS, #1023-**  
**06N1CS & #1023-06N4BS**  
**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 SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY, THEN SOUTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE #1023-7D AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE #1023-6M AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 56.3 MILES.

**Bonanza 1023-6M1BS**

Surface: 1,511' FSL 733' FWL (NW/4 SW/4) – Lot 6  
BHL: 1,511' FSL 710' FWL (SW/4 SW/4) – Lot 7

**Bonanza 1023-6N1AS**

Surface: 1,570' FSL 742' FWL (NW/4 SW/4) – Lot 6  
BHL: 1,260' FSL 2,320' FWL (SE/4 SW/4)

**Bonanza 1023-6N1CS**

Surface: 1,550' FSL 739' FWL (NW/4 SW/4) – Lot 6  
BHL: 955' FSL 2,145' FWL (SE/4 SW/4)

**Bonanza 1023-6N4BS**

Surface: 1,531' FSL 736' FWL (NW/4 SW/4) – Lot 6  
BHL: 625' FSL 2,035' FWL (SE/4 SW/4)

Pad: Bonanza 1023-6L  
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 January 2009 showing the surface locations in NW/4 NE/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 existing Bonanza 1023-6L well pad.

**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.

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 ±400' of 4" pipeline will be upgraded to 8" pipeline. 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 for 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

June 1, 2009  
\_\_\_\_\_  
Date

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS  
ONSHORE LP'S 43 PROPOSED WELL LOCATIONS  
(T10S, R23E, SECTIONS 5, 6, 7, 8, AND 10)  
UINTAH COUNTY, UTAH

CLASS I REVIEW OF KERR-MCGEE OIL AND GAS  
ONSHORE LP'S 43 PROPOSED WELL LOCATIONS  
(T10S, R23E, SECTIONS 5, 6, 7, 8, AND 10)  
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. 08-331

February 26, 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 February 2009 of Kerr-McGee Onshore's 43 proposed well locations in Township 10S, Range 23E. 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 1023-05F) Directional Pad, Bonanza 1023-05G2AS, Bonanza 1023-05G3BS, Bonanza 1023-05G2CS, Bonanza 1023-05G3CS, (Bonanza 1023-05I) Directional Pad, Bonanza 1023-05IS, (Bonanza 1023-06L) Directional Pad, Bonanza 1023-06M1BS, Bonanza 1023-06N1AS, Bonanza 1023-06N1CS, Bonanza 1023-06N4BS, Bonanza 1023-07JT, FMF #1-7 Directional Pad, Bonanza 1023-07J2AS, Bonanza 1023-07J2DS, (Bonanza 1023-07L) Directional Pad, Bonanza 1023-07L3DS, Bonanza 1023-07M2AS, Bonanza 1023-07N2AS, Bonanza 1023-07N2DS, Bonanza 1023-07P Directional Pad, Bonanza 1023-07O4S, Bonanza 1023-07P2S, Bonanza 1023-08A Directional Pad, Bonanza 1023-08A1DS, Bonanza 1023-08A4BS, Bonanza 1023-08B1AS, Bonanza 1023-08B2AS, (Bonanza 1023-08D) Directional Pad, Bonanza 1023-08C4CS, Bonanza 1023-08D2DS, Bonanza 1023-08D3DS, Bonanza 1023-08F3DS, (Bonanza 1023-08J) Directional Pad, Bonanza 1023-08J1S, Bonanza 1023-08J3, Bonanza 1023-08O2S, Bonanza 1023-08O3S, Bonanza 1023-10A Directional Pad 1023-10A2DS, 1023-10A4BS, 1023-10H1BS, 1023-10H2DS. This document was implemented at the request of Ms. Raleen White, Kerr-McGee Onshore LP, Denver, Colorado.

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 Onshore's 43 proposed Bonanza well locations occur was previously inventoried by MOAC for two Class III inventories. In 2003, MOAC completed a block inventory of Sections 4, 5, 6, 7, and 8 in Township 10 South, Range 23 East for Westport Oil and Gas Company (Elkins and Montgomery 2003). In 2005, MOAC completed a cultural resource inventory for Westport Oil & Gas Company's eight proposed well locations including Bonanza #1023-10A (Seacat 2005).

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 & 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 inventories indicated that five previously recorded sites (42Un3487, 42Un3490, 42Un3491, 42Un3528, and 42Un3541) occur in the current project area.

DESCRIPTION OF THE PROJECT AREA

The project area is situated north of the White River and south of the town of Bonanza, Uintah County, Utah. The legal description is Township 10S, Range 23E, Sections 5, 6, 7, 8, 10 and 11 (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 43 Bonanza Well Locations.

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
(Bonanza 1023-05F) Directional Pad 1023-05G2AS 1023-05G3BS 1023-05G2CS 1023-05G3CS	SW/NE Sec. 5, T10S, R23	None	42Un3487, 42Un3490, 42Un3491
(Bonanza 1023-05I) Directional Pad 1023-05IS	NE/SE Sec. 5, T10S, R23	None	None
(Bonanza 1023-06L) Directional Pad 1023-06M1BS 1023-06N1AS 1023-06N1CS 1023-06N4BS	NW/SW Sec. 6 T10S, R23	Pipeline: 505 ft	42Un3541
Bonanza 1023-07JT, FMF #1-7 Directional Pad 1023-07J2AS 1023-07J2DS	NW/SE Sec. 7 T10S, R23	Pipeline: 95 ft	None
(Bonanza 1023-07L) Directional Pad 1023-07L3DS 1023-07M2AS 1023-07N2AS 1023-07N2DS	NW/SW Sec. 7 T10S, R23	Pipeline: 1652 ft	None
Bonanza 1023-07P Directional Pad 1023-07O4S 1023-07P2S	SE/SE Sec. 7 T10S, R23	None	42Un3528
Bonanza 1023-08A Directional Pad 1023-08A1DS 1023-08A4BS 1023-08B1AS 1023-08B2AS	NE/NE Sec. 8 T10S, R23	Access: 237 ft Pipeline: 841 ft	None
(Bonanza 1023-08D) Directional Pad 1023-08C4CS 1023-08D2DS 1023-08D3DS 1023-08F3DS	NW/NW Sec. 8 T10S, R23	Access: 379 ft Pipeline: 139 ft	None
(Bonanza 1023-08J) Directional Pad 1023-08J1S 1023-08J3 1023-08O2S 1023-08O3S	NW/SE Sec. 8 T10S, R23	Access: 99 ft Pipeline: 553 ft	None
Bonanza 1023-10A Directional Pad 1023-10A2DS 1023-10A4BS 1023-10H1BS 1023-10H2DS	NE/NE Sec. 10 T10S, R23	Pipeline: 1468 ft	None

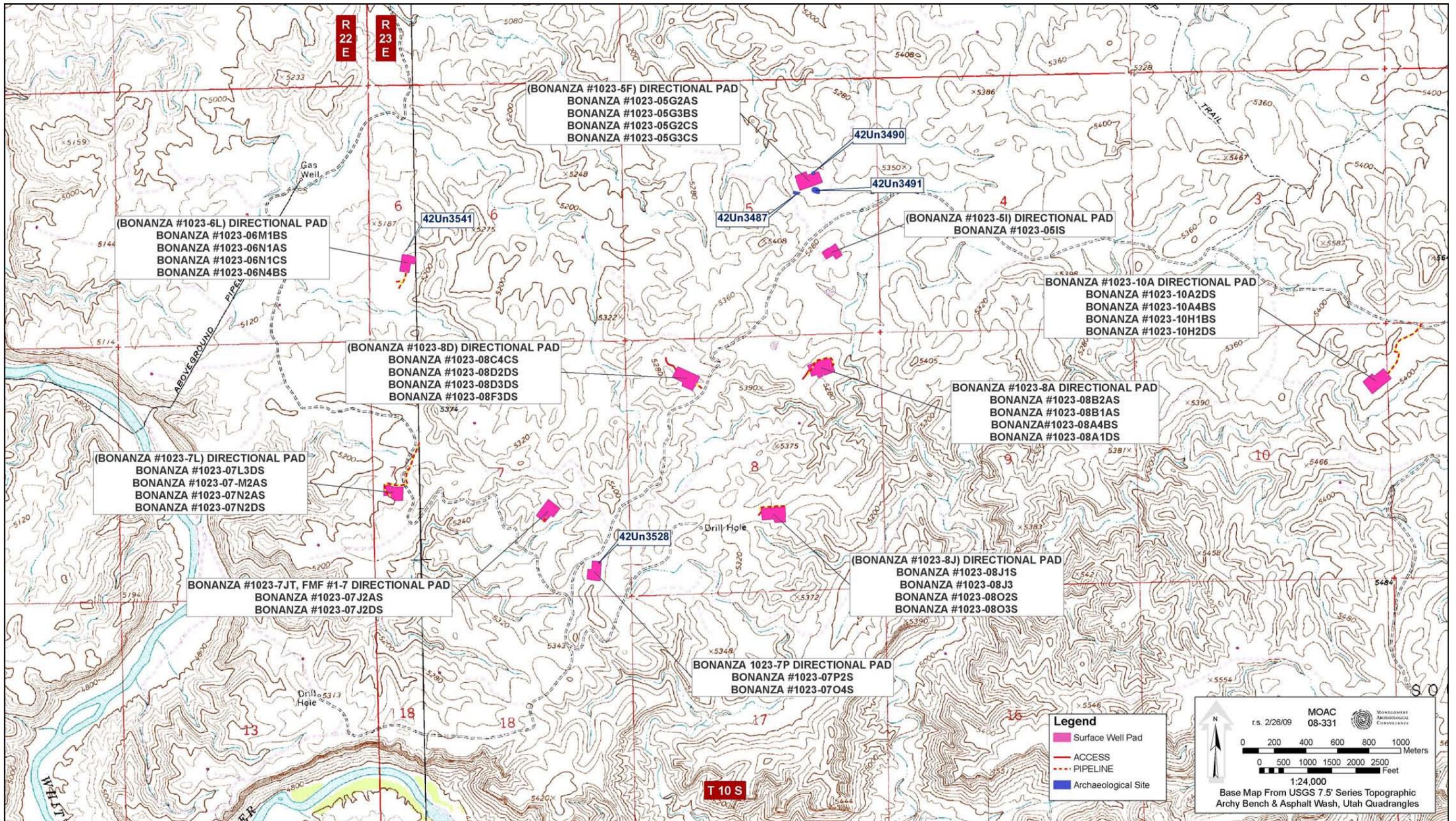


Figure 1. Kerr-McGee Oil and Gas Onshore LP's Proposed Bonanza Well Locations in Uintah County, Utah.

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 5160 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 AND RECOMMENDATIONS

The Class I literature review of Kerr-McGee Onshore's 43 proposed well locations and associated pipeline corridors in Township 10S, Range 23E resulted in the location of five previously documented sites (42Un3487, 42Un3490, 42Un3491, 42Un3528, and 42Un3541). One site (42Un3487) consists of two historic inscriptions, three sites (42Un3490, 42Un3491, and 42Un3528) are historic trash scatters, and one site 42Un3541 is a historic rock cairn; all of these sites are evaluated not eligible to the NRHP. Based on the findings, 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.
- Seacat, T. B.  
2005 Cultural Resource Inventory of Westport Oil & Gas Company's Proposed Bonanza #1023-10A, C, E, F, G, J, O, P Well Locations in Section 10, T10S R23E, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-05-MQ-0351.
- Stokes, W. L.  
1986 *Geology of Utah*. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

## **Paleontological Reconnaissance Survey Report**

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**Survey of Kerr McGee's Proposed Multi-Well Pads, Access Roads,  
and Pipeline Upgrades for "NBU #1022-12P, #1022-24N2,  
Bonanza #1023-06M1BS, N1AS, N1CS, & N4BS,  
#1023-07P2S & O4S, & #1023-07J2AS  
& J2DS" (Sec. 12, T 10 S, R 22 E)  
& (Sec. 6 & 7, T 10 S, R 23 E)**

Archy Bench & Asphalt Wash  
Topographic Quadrangles  
Uintah County, Utah

March 25, 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, and pipeline upgrades for "NBU #1022-12P, #1022-24N2, Bonanza #1023-06M1BS, N1AS, N1CS, & N4BS, #1023-07P2S & O4S, #1023-07J2AS & J2DS" (Sec. 12, T 10 S, R 22 E) & (Sec. 6 & 7, T 10 S, R 23 E) was conducted by Simon Masters, Jason Klimek, and Amanda Dopheide on February 24 and 27, 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, and pipeline upgrades for "NBU #1022-12P, #1022-24N2, Bonanza #1023-06M1BS, N1AS, N1CS, & N4BS, #1023-07P2S & O4S, #1023-07J2AS & J2DS" (Sec. 12, T 10 S, R 22 E) & (Sec. 6 & 7, T 10 S, R 23 E) are on lands managed by the BLM and the State of Utah Trust Lands Administration (SITLA), about 1-1.5 miles east and 1-2 miles north of the White River in the Saddletree Draw and Asphalt Wash area and about 12-15 miles northeast of Bonanza, Utah. The project area can be found on the Archy Bench and Asphalt Wash 7.5 minute U. S. Geological Survey Quadrangle Map, Uintah County, Utah.

## PREVIOUS WORK

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

## GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

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

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

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

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

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

## **FIELD METHODS**

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

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

## **PROJECT AREA**

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

### **Multi-well pad NBU #1022-12P**

The proposed well is located in the SE/SE quarter-quarter section of Sec. 12, T 10 S, R 22 E, and is approached from the east by an existing access road and pipeline (Figure 1). The wells are staked on an existing pad. The geology of the proposed area consists of thin colluvium and small sharp fragments of hard resistant siltstone underlain by a thick paleochannel of tan, fluvial sandstone that is exposed to the west end of the pad. No fossils were discovered.

### **Multi-well pad NBU #1022-24N2**

The proposed well is located in the SW/SE quarter-quarter section of Sec. 12, T 10 S, R 22 E, and is approached from the east by an existing access road and pipeline (Figure 1). The wells are staked on gently sloping ground on the top of a prominent ridge. The northeast corner of the pad

is staked on a reclaimed well pad. The pit of the proposed pad is staked in the southeast corner of the pad. The geology of the proposed area consists of thin colluvium and small, angular fragments of resistant siltstone underlain by a thick paleochannel of tan, fluvial sandstone with fragments of green mudstone evident within the disturbed material of the reclaimed pad. No fossils were discovered.

**Bonanza #1023-06M1BS, N1AS, N1CS, & N4BS**

The proposed well is situated in the NW/SW quarter-quarter section of Sec. 6, T 10 S, R 23 E, and is approached from the south by an existing access road and pipeline. The wells are staked on the existing pad “Bonanza #1023-6L” (Figure 1). The geology of the proposed project area consists of alternating beds of gray mudstone, maroon siltstone, and gray siltstone exhibiting desert varnish. Scattered fragments of turtle (*Echmatemys* sp.) were discovered along the side and base of the hill at the north end of the pad. Ichnofossils consisting of prominent burrows within weathered fragments of gray siltstone were also seen in the project area.

**Bonanza #1023-07P2S & O4S**

The proposed well is situated in the SE/SE quarter-quarter section of Sec. 7, T 10 S, R 23 E, and is approached from the north by an existing access road and pipeline (Figure 1). The wells are staked on an existing pad. The geology of the proposed project area consists of thin colluvium and small angular fragments of hard resistant siltstone underlain by a thick paleochannel of tan fluvial sandstone. No fossils were discovered.

**Bonanza #1023-07J2AS & J2DS**

The proposed pipeline begins in the NE/SE quarter-quarter section and travels approximately 1,000 feet east where it ties-in to the proposed multi-well pad in the NW/ SE quarter-quarter section of Sec. 7 (Figure 1). The project area is staked on relatively flat ground covered by tan colluvium, gravel to cobble sized pieces of purple and orange, medium-grained sandstone, gravel sized pieces of purple siltstone, and previously disturbed soil. An about 1 foot thick outcrop of laminated, tan, medium-grained sandstone was observed approximately 8 feet west of the pad. Another approximately 3 foot thick outcrop of laminated sandstone is situated roughly 6 feet. No fossils were found.

**SURVEY RESULTS**

<b>PROJECT</b>	<b>GEOLOGY</b>	<b>PALEONTOLOGY</b>
<p>“Multi-well pad NBU #1022-12P” (Sec. 12, T 10 S, R 22 E)</p>	<p>The wells are staked on an existing pad. The geology of the proposed area consists of thin colluvium and small sharp fragments of hard resistant siltstone underlain by a thick paleochannel of tan, fluvial sandstone that is exposed to the west end of the pad.</p>	<p>No fossils were discovered. <b>Class 3a</b></p>

<p><b>“Multi-well pad NBU #1022-24N2”</b> (Sec. 12, T 10 S, R 22 E)</p>	<p>The wells are staked on gently sloping ground on the top of a prominent ridge. The northeast corner of the pad is staked on a reclaimed well pad. The pit of the proposed pad is staked in the southeast corner of the pad. The geology of the proposed area consists of thin colluvium and small, angular fragments of resistant siltstone underlain by a thick paleochannel of tan, fluvial sandstone with fragments of green mudstone evident within the disturbed material of the reclaimed pad.</p>	<p>No fossils were discovered. <b>Class 3a</b></p>
<p><b>“Bonanza #1023-06M1BS, N1AS, N1CS, &amp; N4BS”</b> (Sec. 6, T 10 S, R 23 E)</p>	<p>The geology of the proposed project area consists of alternating beds of gray mudstone, maroon siltstone, and gray siltstone exhibiting desert varnish.</p>	<p>Scattered fragments of turtle (<i>Echmatemys</i> sp.) were discovered along the side and base of the hill at the north end of the pad. Ichnofossils consisting of prominent burrows within weathered fragments of gray siltstone were also seen in the project area. <b>Class 3a</b></p>
<p><b>“Bonanza #1023-07P2S &amp; O4S”</b> (Sec. 7, T 10 S, R 23 E)</p>	<p>The geology of the proposed project area consists of thin colluvium and small angular fragments of hard resistant siltstone underlain by a thick paleochannel of tan fluvial sandstone.</p>	<p>No fossils were discovered. <b>Class 3a</b></p>
<p><b>“Bonanza #1023-07J2AS &amp; J2DS”</b> (Sec. 7, T 10 S, R 23 E)</p>	<p>The project area is staked on relatively flat ground covered by tan colluvium, gravel to cobble sized pieces of purple and orange, medium-grained sandstone, gravel sized pieces of purple siltstone, and previously disturbed soil. An about 1 foot thick outcrop of laminated, tan, medium-grained sandstone was observed approximately 8 feet west of the pad. Another approximately 3 foot thick outcrop of laminated sandstone is situated roughly 6 feet.</p>	<p>No fossils were discovered. <b>Class 3a</b></p>

## RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee's proposed multi-well pads, access roads, and pipeline upgrades for "NBU #1022-12P, #1022-24N2, Bonanza #1023-06M1BS, N1AS, N1CS, & N4BS, #1023-07P2S & O4S, #1023-07J2AS & J2DS" (Sec. 12, T 10 S, R 22 E) & (Sec. 6 & 7, T 10 S, R 23 E). The well pads, well pad expansions, and the associated access roads and pipelines covered in this report showed little to 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.**

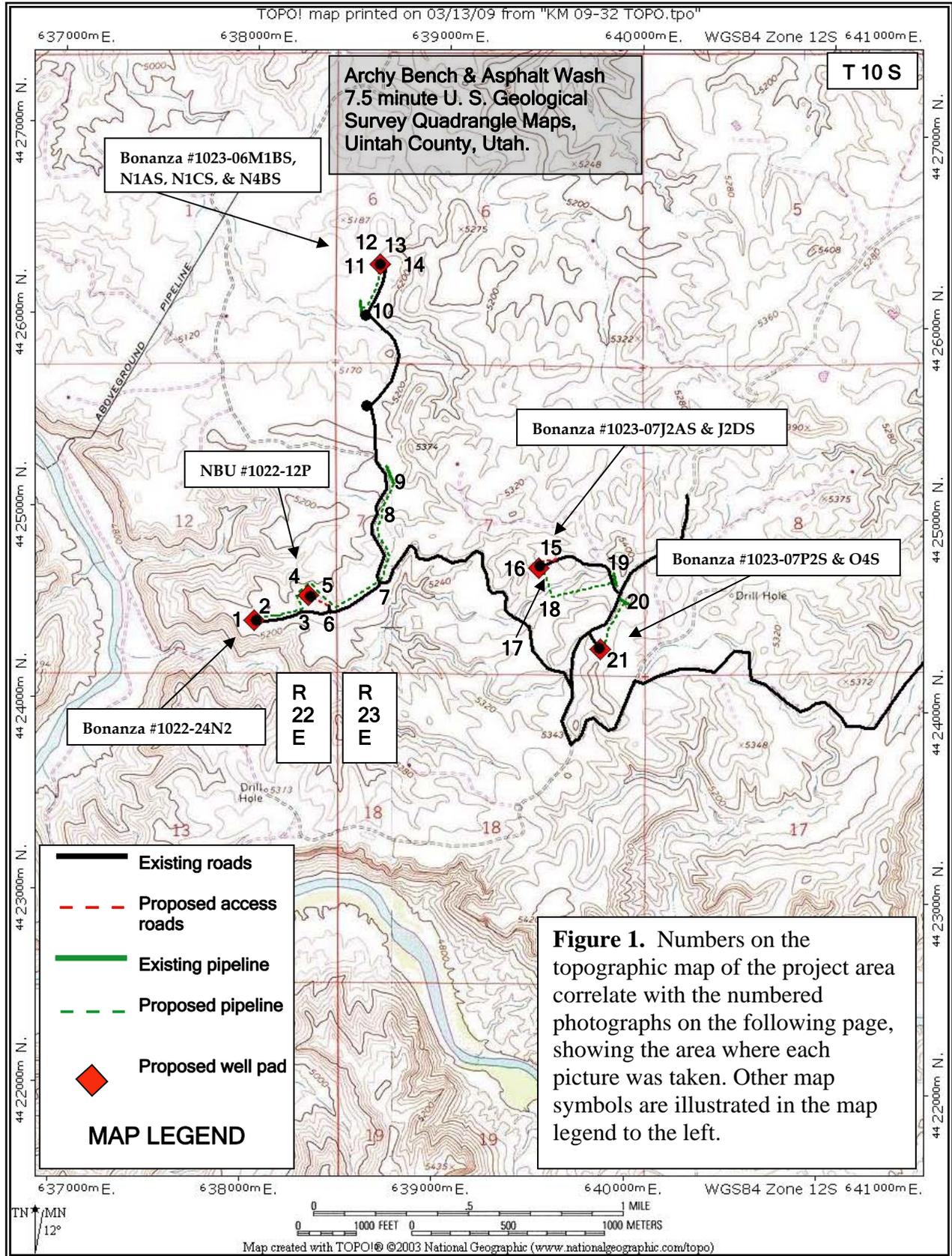


Figure 1. continued...

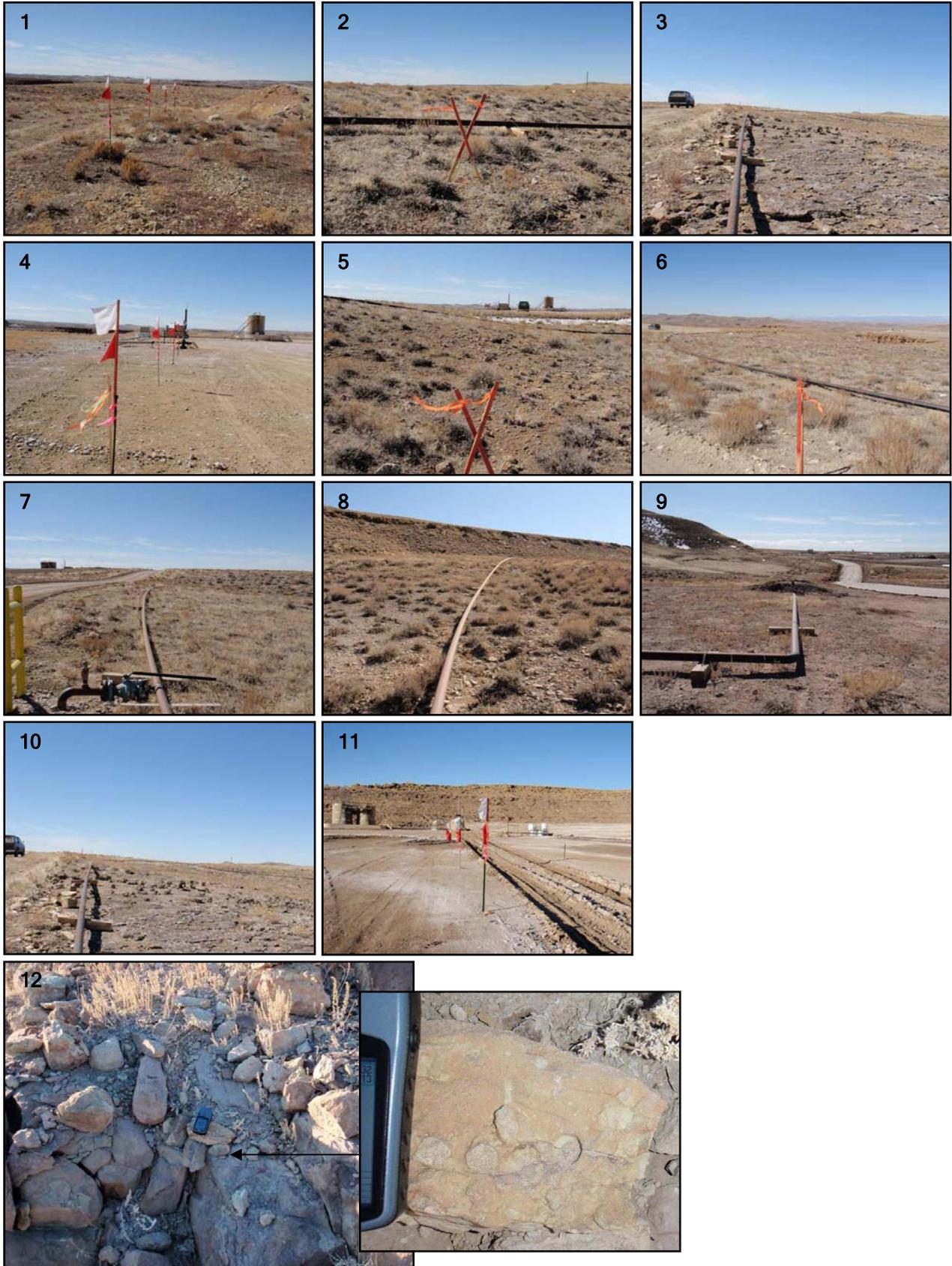
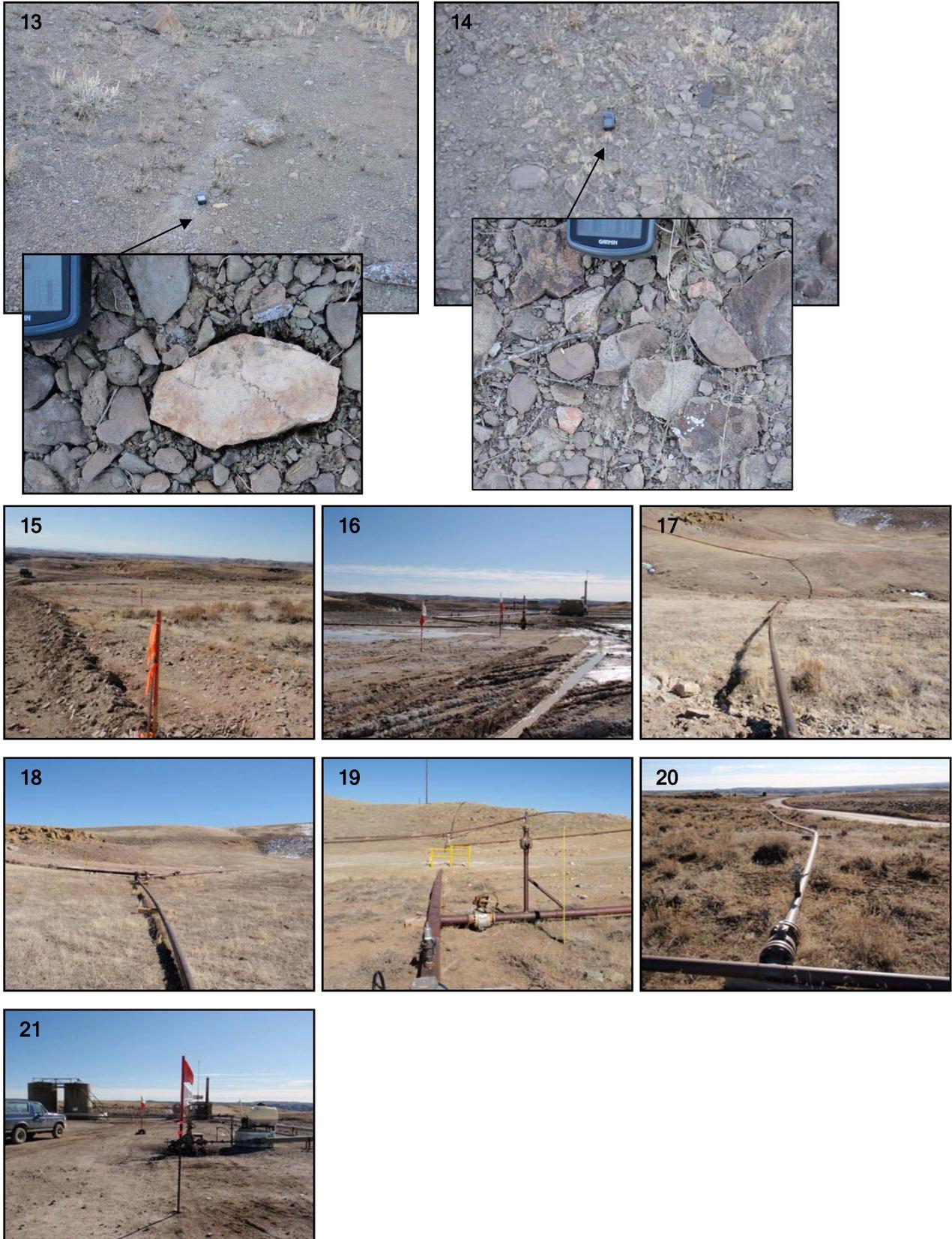


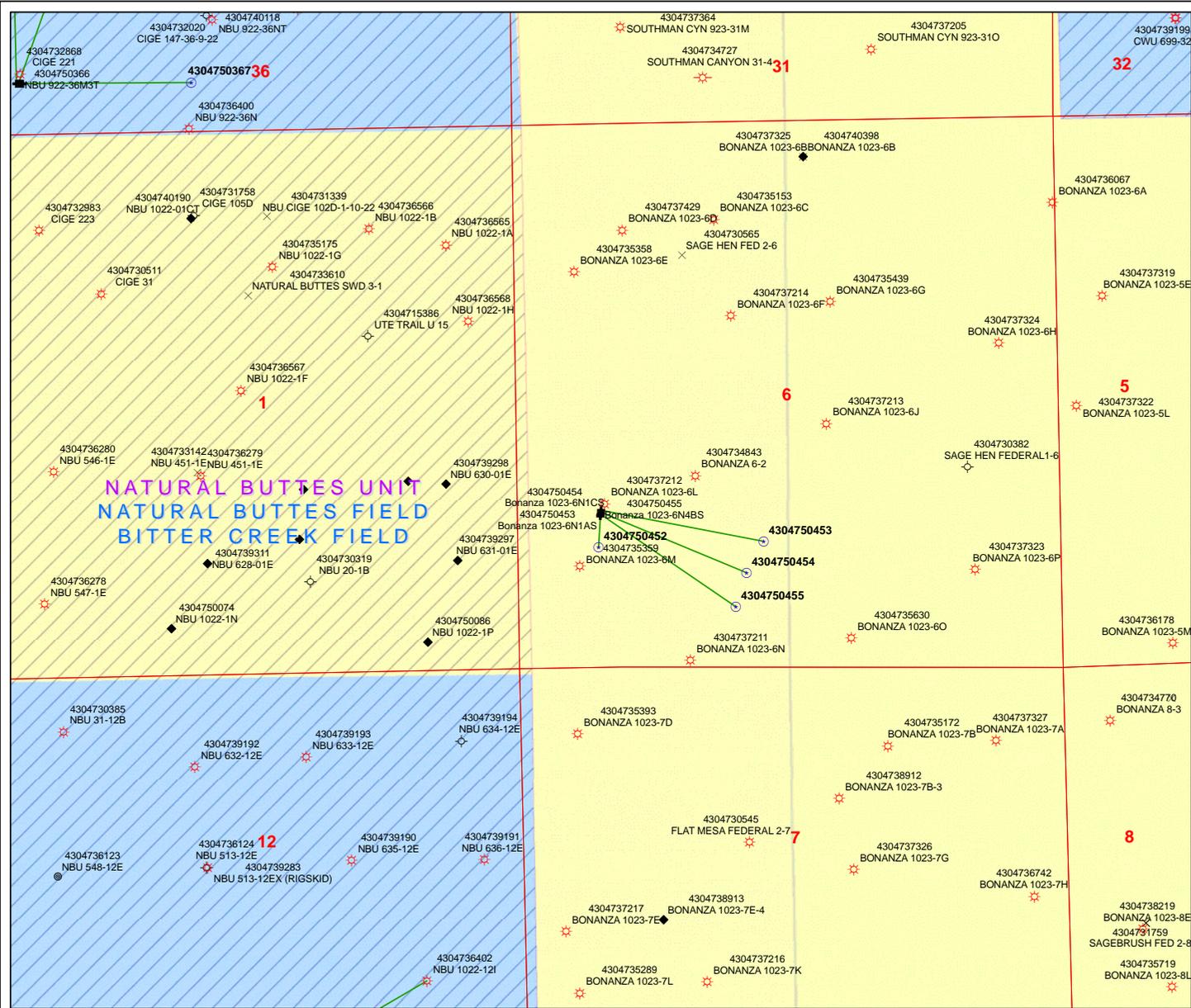
Figure 1. continued...



**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.

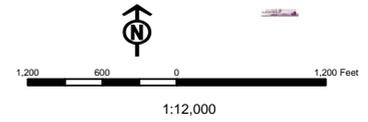
- Osborn, H. F., 1895, Fossil mammals of the Uinta beds, expedition of 1894: American Museum of Natural History Bulletin, v. 7, p. 71-106.
- \_\_\_\_\_ 1929, The Titanotheres of Ancient Wyoming, Dakota and Nebraska: Monograph of the U. S. Geological Survey, v. 55, p. 1-953.
- Peterson, O. A., 1931c, 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 Hyrachyidae: 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.



**API Number: 4304750453**  
**Well Name: Bonanza 1023-6N1AS**  
**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

<b>Units</b>	<b>Wells Query Events</b>
<b>STATUS</b>	<b>GIS_STAT_TYPE</b>
ACTIVE	<Null>
EXPLORATORY	APD
GAS STORAGE	DRL
NF PP OIL	GI
NF SECONDARY	GS
PI OIL	LA
PP GAS	NEW
PP GEOTHERMIL	OPS
PP OIL	PA
SECONDARY	PGW
TERMINATED	POW
<b>Fields</b>	RET
<b>STATUS</b>	SGW
ACTIVE	SOW
COMBINED	TA
Sections	TW
	WD
	WI
	WS



# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 6/1/2009

**API NO. ASSIGNED:** 43047504530000

**WELL NAME:** Bonanza 1023-6N1AS

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

**PHONE NUMBER:** 720 929-6156

**CONTACT:** Danielle Piernot

**PROPOSED LOCATION:** NWSW 6 100S 230E

**Permit Tech Review:**

**SURFACE:** 1570 FSL 0742 FWL

**Engineering Review:**

**BOTTOM:** 1260 FSL 2320 FWL

**Geology Review:**

**COUNTY:** UINTAH

**LATITUDE:** 39.97503

**LONGITUDE:** -109.37563

**UTM SURF EASTINGS:** 638713.00

**NORTHINGS:** 4426039.00

**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

Commingle 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 - Commingle - 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 1023-6N1AS  
**API Well Number:** 43047504530000  
**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: 43047504530000

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

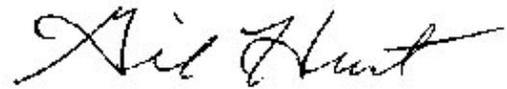
Notify the Division prior to commencing operations to plug and abandon the well.

- 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:**

A handwritten signature in black ink, appearing to read "Gil Hunt". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

Gil Hunt  
Associate Director, Oil & Gas

# DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

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

Well Name: BONANZA 1023-6N1AS

Api No: 43-047-50453 Lease Type: FEDERAL

Section 06 Township 10S Range 23E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

### SPUDDED:

Date 04/07/2010

Time 11:00 AM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by JAMES GOBER

Telephone # (435) 828-7024

Date 04/07/2010 Signed CHD

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

FORM 6

**ENTITY ACTION FORM**

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

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750454	BONANZA 1023-6N1CS		NWSW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<i>A</i>	99999	<i>17580</i>	4/7/2010		<i>4/28/10</i>		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 4/7/2010 AT 8:00 HRS. <i>BHL=SESW —</i>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750453	BONANZA 1023-6N1AS		NWSW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<i>A</i>	99999	<i>17581</i>	4/7/2010		<i>4/28/10</i>		
<b>Comments:</b> MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 4/7/2010 AT 11:00 HRS. <i>BHL=SESW —</i>							

**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		
<b>Comments:</b>							

**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

4/8/2010

Date

**RECEIVED**

**APR 08 2010**

(5/2000)

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
---	--

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
--	--

<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> Bonanza 1023-6N1AS
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
---	---

<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
---	--	--

<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 6 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> Uintah  <b>STATE:</b> Utah
--	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 4/15/2010  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b> <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER:

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

Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the surface casing size for this well from FROM: 9-5/8" TO: 8-5/8". Additionally, Kerr-McGee requests to change the cement program for this well due to a revised drilling procedure. The production casing will still be cemented it's entire length to the surface. Please see the attached drilling program for additional details. All other information remains the same. Please contact the undersigned with any questions and/or comments. Thank you.

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

Date: April 08, 2010

By: *Danielle Piernot*

<b>NAME (PLEASE PRINT)</b> Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/6/2010	





# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

## CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
						3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,040	28.00	IJ-55	LTC	1.00	1.97	6.03
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 8,870	11.60	I-80	BTC	2.42	1.25	3.10

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above. D.F. = 2.64

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 3,124 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 5,250 psi**

## CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD	
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	215	60%	15.60	1.18	
<b>Option 1</b>			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	260	0%	15.60	1.18	
			+ 2% CaCl + 0.25 pps flocele					
			Premium cmt + 2% CaCl					
SURFACE		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>						
<b>Option 2</b>	LEAD	1,540'	65/35 Poz + 6% Gel + 10 pps gilsonite	300	35%	12.60	1.81	
	TAIL	500'	Premium cmt + 2% CaCl	150	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	6,250'	Premium Lite II +0.25 pps	540	40%	11.00	3.38	
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	2,620'	50/50 Poz/G + 10% salt + 2% gel	650	40%	14.30	1.31	
			+ 0.1% R-3					

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

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

## FLOAT EQUIPMENT & CENTRALIZERS

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

## ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

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

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

DRILLING ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_

John Huycke / Emile Goodwin

DRILLING SUPERINTENDENT: \_\_\_\_\_ DATE: \_\_\_\_\_

John Merkel / Lovel Young

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419	

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
--	--

<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> Bonanza 1023-6N1AS
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 6 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
--	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER:
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input checked="" type="checkbox"/> <b>SPUD REPORT</b> Date of Spud: 4/7/2010			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

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" SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL LOCATION ON 4/7/2010 AT 11:00 HRS.

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

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/8/2010	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
---	--

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
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<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> Bonanza 1023-6N1AS
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
---	---

<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 6 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 4/11/2010	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

MIRU CAPSTAR 310 ON 4/9/2010. DRILLED 11" SURFACE HOLE TO 1950'. RAN 8-5/8' 28# J55 SURFACE CSG. PUMP 50 BBLS AHEAD, PUMP 20 BBLS GEL WATER FOR SPACER. PUMP 225 SX CLASS G PREM LITE TAIL CMT @ 15.8 PPG, 1.15 YD. DISPLACE W/117 BBLS OF H2O W/ 150 PSI LIFT @ 1.0 BBLS A MINUTE. BUMP PLUG 500 PSI. FLOAT HELD. NO CIRC THROUGHOUT JOB. TOP OUT W/100 SX CLASS G PREM LITE TAIL CMT @ 15.8 PPG, 1.15 YD. RIG DOWN HEAD. TOP OUT 100 SX SAME CMT. NO CEMENT TO SURFACE. WILL TOP OUT ON NEXT JOB. WORT.

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

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 4/13/2010

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
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<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
--	--

<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> Bonanza 1023-6N1AS
------------------------------------	---

<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 6 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
--	---

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 5/31/2010	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

FINISHED DRILLING FROM 1950' TO 8790' ON MAY 29, 2010. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 540 SX CLASS G PREM LITE @ 11.6 PPG, 2.62 YD. TAILED CEMENT W/ 483 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YD. DISPLACED W/ 136 BBLS WATER @ 2100 PSI, BUMPED PLUG @ 2700 PSI, FLOATS HELD W/ 1000 LBS RETURN. GOOD CIRC DURING CEMENT JOB W/ 30 BBLS WATER TO SURFACE - NO CEMENT TO SURFACE. RD CEMENTERS AND CLEANED PITS. RELEASED ENSIGN RIG #146 ON MAY 31, 2010 @ 03:00 HRS.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 June 07, 2010

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 6/1/2010

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> Bonanza 1023-6N1AS
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 7/20/2010	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER:

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON JULY 20, 2010 AT 3:00 P.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

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

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/21/2010	



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	1125				
BIRD'S NEST	1386				
MAHOGANY	1753				
WASATCH	4174	6282			
MESAVERDE	6282	8790	TD		

32. Additional remarks (include plugging procedure):

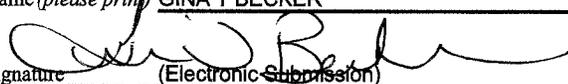
CHRONO DRILLING AND COMPLETION HISTORY AND DIRECTIONAL SURVEY ATTACHED.

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 #92508 Verified by the BLM Well Information System.**  
For KERR-MCGEE OIL & GAS ONSHORE, L.P. sent to the Vernal

Name (please print) GINA T BECKER Title REGULATORY ANALYST II  
  
 Signature (Electronic Submission) Date 09/09/2010

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.

Project: UINTAH COUNTY, UTAH (nad 27)  
 Site: Bonanza 1023-6L Pad  
 Well: BONANZA 1023-6N1AS  
 Wellbore: BONANZA 1023-6N1AS  
 Section: SECTION 6 T10S R22E  
 SHL: 1570 FSL 742 FWL  
 Design: BONANZA 1023-6N1AS  
 Latitude: 39° 58' 30.011 N  
 Longitude: 109° 22' 31.760 W  
 GL: 5144.00  
 KB: WELL @ 5158.00ft (Original Well Elev)



Azimuths to True North  
 Magnetic North: 11.18°  
 Magnetic Field  
 Strength: 52454.0snT  
 Dip Angle: 65.92°  
 Date: 5/21/2010  
 Model: BGGM2009

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4130.00	4303.64	WASATCH
7218.00	7529.98	MESAVERDE

CASING DETAILS				
TVD	MD	Name	Size	
1921.26	1922.50	8 5/8"	8.62	

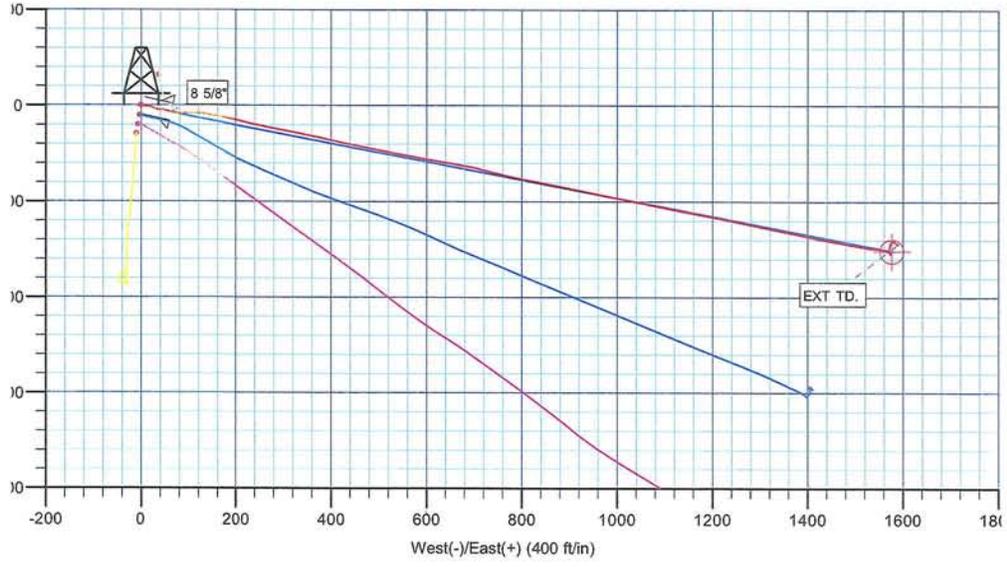
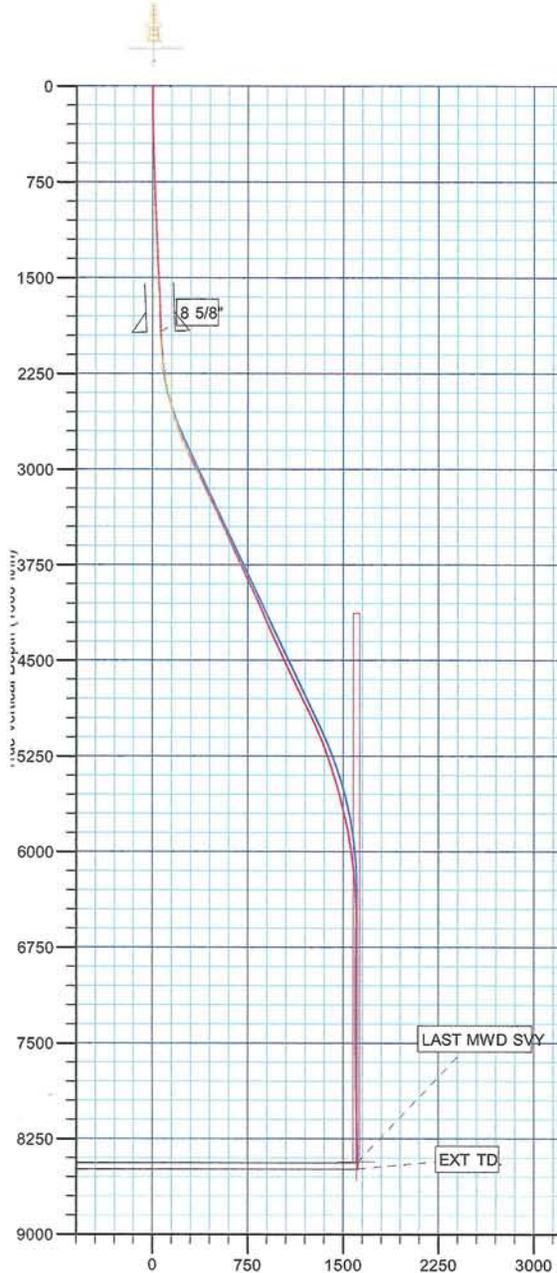
**LEGEND**

- Bonanza 1023-6L EXISTING, Bonanza 1023-6L EXISTING, Bonanza 1023-6L EXISTING V0
- BONANZA 1023-6M1BS, BONANZA 1023-6M1BS, BONANZA 1023-6M1BS V0
- BONANZA 1023-6N1AS, BONANZA 1023-6N1AS, PLAN #1 3-15-10 RHS V0
- BONANZA 1023-6N1CS, BONANZA 1023-6N1CS, BONANZA 1023-6N1CS V0
- BONANZA 1023-6N4BS, BONANZA 1023-6N4BS, BONANZA 1023-6N4BS V0
- BONANZA 1023-6N1AS
- WEATHERFORD MWD SVY

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation	
1901.00	2.19	102.58	1899.78	-13.80	61.79	0.00	0.00	63.28	Start 122.00 hold at 1901.00 MD	
2023.00	2.19	102.58	2021.69	-14.82	66.34	0.00	0.00	67.94	Start DLS 3.00 TFO -1.97	
2794.40	25.33	100.77	2765.86	-49.35	245.27	3.00	-1.97	250.18	Start 2523.04 hold at 2794.40 MD	
5317.44	25.33	100.77	5046.32	-251.13	1305.71	0.00	0.00	1329.64	Start Drop -2.00	
6583.98	0.00	0.00	6272.00	-302.62	1576.30	2.00	180.00	1605.08	Start 2162.00 hold at 6583.98 MD	
8745.98	0.00	0.00	8434.00	-302.62	1576.30	0.00	0.00	1605.08	TD at 8745.98	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8434.00	-302.62	1576.30	39° 58' 27.019 N	109° 22' 11.510 W	Circle (Radius: 25.00)

WELL DETAILS: BONANZA 1023-6N1AS						
+N/-S	+E/-W	Northing	Ground Level:	5144.00	Longitude	Slot
0.00	0.00	14521088.00	Easting	2095551.09	39° 58' 30.011 N	109° 22' 31.760 W



**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** Bonanza 1023-6L Pad  
**Well:** BONANZA 1023-6N1AS  
**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

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

**Site** Bonanza 1023-6L Pad, SECTION 6 T10S R22E

<b>Site Position:</b>		<b>Northing:</b>	14,521,029.19ft	<b>Latitude:</b>	39° 58' 29.431 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,095,542.07ft	<b>Longitude:</b>	109° 22' 31.890 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b>	1.04 °

**Well** BONANZA 1023-6N1AS

<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,521,088.00 ft	<b>Latitude:</b>	39° 58' 30.011 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,095,551.09 ft	<b>Longitude:</b>	109° 22' 31.760 W
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	5,144.00ft

**Wellbore** BONANZA 1023-6N1AS

<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2009	5/21/2010	11.18	65.92	52,454

**Design** BONANZA 1023-6N1AS

**Audit Notes:**

<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	100.87	

<b>Survey Program</b>		<b>Date</b>			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
172.00	8,790.00	WEATHERFORD MWD SVY (BONANZA	MWD	MWD - Standard	

**Survey**

<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.00	0.81	116.45	171.99	-0.54	1.09	1.17	0.47	0.47	0.00
268.00	0.63	101.20	267.99	-0.95	2.21	2.35	0.27	-0.19	-15.89
364.00	1.50	96.08	363.97	-1.18	3.98	4.13	0.91	0.91	-5.33
459.00	1.75	92.70	458.93	-1.38	6.67	6.81	0.28	0.26	-3.56
554.00	1.69	89.83	553.89	-1.45	9.52	9.62	0.11	-0.06	-3.02
650.00	1.75	86.58	649.84	-1.35	12.39	12.43	0.12	0.06	-3.39
745.00	2.25	107.70	744.79	-1.83	15.62	15.69	0.93	0.53	22.23
937.00	2.38	108.83	936.63	-4.27	22.98	23.38	0.07	0.07	0.59
1,128.00	2.06	119.08	1,127.49	-7.22	29.74	30.56	0.27	-0.17	5.37
1,223.00	2.31	99.83	1,222.42	-8.37	33.12	34.10	0.81	0.26	-20.26
1,319.00	2.50	97.33	1,318.34	-8.97	37.10	38.12	0.23	0.20	-2.60
1,415.00	2.69	84.20	1,414.24	-9.01	41.42	42.37	0.65	0.20	-13.68

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** Bonanza 1023-6L Pad  
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**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**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)
1,511.00	2.88	95.70	1,510.13	-9.02	46.06	46.93	0.61	0.20	11.98
1,606.00	2.44	108.33	1,605.02	-9.89	50.35	51.31	0.77	-0.46	13.29
1,702.00	2.50	109.95	1,700.93	-11.25	54.26	55.41	0.10	0.06	1.69
1,797.00	2.25	111.20	1,795.85	-12.63	57.95	59.29	0.27	-0.26	1.32
1,901.00	2.19	102.58	1,899.78	-13.80	61.79	63.28	0.33	-0.06	-8.29
1,960.00	2.00	101.58	1,958.74	-14.26	63.90	65.44	0.33	-0.32	-1.69
2,051.00	4.00	105.58	2,049.61	-15.43	68.51	70.19	2.21	2.20	4.40
2,141.00	7.13	93.95	2,139.17	-16.66	77.11	78.87	3.68	3.48	-12.92
2,232.00	9.44	89.83	2,229.22	-17.02	90.21	91.80	2.62	2.54	-4.53
2,323.00	11.81	87.45	2,318.65	-16.59	106.98	108.18	2.65	2.60	-2.62
2,413.00	12.69	95.17	2,406.61	-17.07	126.02	126.98	2.06	0.98	8.58
2,504.00	13.63	98.58	2,495.22	-19.57	146.58	147.64	1.34	1.03	3.75
2,595.00	16.06	100.70	2,583.18	-23.50	169.56	170.95	2.74	2.67	2.33
2,686.00	18.63	102.70	2,670.03	-29.04	196.11	198.07	2.90	2.82	2.20
2,776.00	22.50	102.08	2,754.28	-35.81	226.98	229.66	4.31	4.30	-0.69
2,867.00	25.00	102.58	2,837.57	-43.64	262.78	266.30	2.76	2.75	0.55
2,958.00	26.30	101.54	2,919.60	-51.86	301.30	305.68	1.51	1.43	-1.14
3,048.00	25.38	100.58	3,000.60	-59.39	339.80	344.90	1.12	-1.02	-1.07
3,139.00	25.81	102.33	3,082.67	-67.20	378.33	384.21	0.96	0.47	1.92
3,230.00	25.38	101.45	3,164.74	-75.30	416.79	423.52	0.63	-0.47	-0.97
3,320.00	26.00	101.45	3,245.84	-83.05	455.03	462.53	0.69	0.69	0.00
3,411.00	26.75	102.08	3,327.37	-91.29	494.61	502.95	0.88	0.82	0.69
3,502.00	24.86	101.69	3,409.29	-99.46	533.37	542.55	2.09	-2.08	-0.43
3,592.00	24.63	100.58	3,491.03	-106.73	570.33	580.22	0.58	-0.26	-1.23
3,683.00	24.56	98.70	3,573.77	-113.08	607.66	618.09	0.86	-0.08	-2.07
3,773.00	24.56	98.45	3,655.63	-118.65	644.65	655.46	0.12	0.00	-0.28
3,864.00	24.00	101.58	3,738.59	-125.15	681.49	692.87	1.54	-0.62	3.44
3,954.00	25.38	103.95	3,820.36	-133.47	718.14	730.43	1.89	1.53	2.63
4,045.00	25.47	103.88	3,902.54	-142.87	756.07	769.44	0.10	0.10	-0.08
4,136.00	24.81	102.08	3,984.92	-151.56	793.73	808.07	1.11	-0.73	-1.98
4,226.00	22.63	99.83	4,067.32	-158.47	829.26	844.27	2.62	-2.42	-2.50
4,317.00	22.56	100.70	4,151.33	-164.70	863.67	879.23	0.38	-0.08	0.96
4,408.00	24.38	102.08	4,234.80	-171.87	899.19	915.47	2.09	2.00	1.52
4,498.00	25.00	101.33	4,316.57	-179.49	936.00	953.05	0.77	0.69	-0.83
4,589.00	25.50	101.83	4,398.88	-187.29	974.03	991.87	0.60	0.55	0.55
4,679.00	24.63	102.08	4,480.40	-195.18	1,011.33	1,029.99	0.97	-0.97	0.28
4,770.00	24.38	101.08	4,563.21	-202.76	1,048.30	1,067.73	0.53	-0.27	-1.10
4,861.00	25.13	100.70	4,645.84	-209.96	1,085.72	1,105.83	0.84	0.82	-0.42
4,951.00	26.06	101.70	4,727.01	-217.51	1,123.86	1,144.71	1.14	1.03	1.11
5,042.00	26.50	101.20	4,808.61	-225.51	1,163.35	1,185.00	0.54	0.48	-0.55
5,133.00	25.56	100.33	4,890.38	-232.97	1,202.58	1,224.93	1.11	-1.03	-0.96
5,223.00	25.19	100.83	4,971.69	-240.06	1,240.49	1,263.50	0.48	-0.41	0.56
5,314.00	23.69	101.20	5,054.54	-247.25	1,277.45	1,301.15	1.66	-1.65	0.41
5,405.00	21.75	101.33	5,138.47	-254.11	1,311.91	1,336.30	2.13	-2.13	0.14
5,495.00	19.56	101.58	5,222.68	-260.41	1,343.03	1,368.04	2.44	-2.43	0.28
5,586.00	19.06	102.20	5,308.56	-266.61	1,372.47	1,398.13	0.59	-0.55	0.68
5,677.00	17.44	102.20	5,394.98	-272.63	1,400.33	1,426.61	1.78	-1.78	0.00
5,767.00	15.44	101.70	5,481.30	-277.91	1,425.24	1,452.08	2.23	-2.22	-0.56
5,858.00	14.94	99.45	5,569.12	-282.29	1,448.68	1,475.92	0.85	-0.55	-2.47
5,949.00	13.35	99.62	5,657.36	-285.97	1,470.61	1,498.15	1.75	-1.75	0.19
6,040.00	12.38	100.70	5,746.07	-289.54	1,490.55	1,518.41	1.10	-1.07	1.19
6,130.00	11.06	102.45	5,834.19	-293.19	1,508.46	1,536.69	1.52	-1.47	1.94
6,221.00	9.50	96.83	5,923.73	-295.97	1,524.44	1,552.90	2.04	-1.71	-6.18
6,311.00	7.25	94.33	6,012.77	-297.28	1,537.48	1,565.96	2.53	-2.50	-2.78

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
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**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

### 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)
6,402.00	6.81	95.70	6,103.08	-298.25	1,548.58	1,577.03	0.52	-0.48	1.51
6,493.00	6.06	100.20	6,193.51	-299.64	1,558.67	1,587.21	0.99	-0.82	4.95
6,583.00	4.31	113.20	6,283.14	-301.81	1,566.46	1,595.27	2.33	-1.94	14.44
6,674.00	3.00	127.08	6,373.95	-304.59	1,571.50	1,600.74	1.73	-1.44	15.25
6,764.00	1.56	149.08	6,463.88	-307.06	1,574.01	1,603.67	1.84	-1.60	24.44
6,855.00	0.69	209.08	6,554.87	-308.61	1,574.38	1,604.33	1.49	-0.96	65.93
6,946.00	0.63	288.83	6,645.86	-308.92	1,573.64	1,603.66	0.93	-0.07	87.64
7,036.00	1.56	343.70	6,735.85	-307.59	1,572.83	1,602.61	1.45	1.03	60.97
7,127.00	1.00	331.95	6,826.82	-305.70	1,572.11	1,601.55	0.68	-0.62	-12.91
7,218.00	1.31	335.58	6,917.81	-304.05	1,571.30	1,600.45	0.35	0.34	3.99
7,308.00	2.68	0.19	7,007.75	-301.01	1,570.88	1,599.46	1.76	1.52	27.34
7,399.00	2.50	5.83	7,098.66	-296.91	1,571.09	1,598.89	0.34	-0.20	6.20
7,490.00	1.94	13.70	7,189.59	-293.44	1,571.66	1,598.80	0.70	-0.62	8.65
7,580.00	1.81	11.70	7,279.54	-290.56	1,572.31	1,598.89	0.16	-0.14	-2.22
7,671.00	1.44	12.45	7,370.50	-288.04	1,572.85	1,598.94	0.41	-0.41	0.82
7,762.00	1.13	11.08	7,461.48	-286.04	1,573.26	1,598.98	0.34	-0.34	-1.51
7,853.00	1.19	24.20	7,552.46	-284.30	1,573.82	1,599.20	0.30	0.07	14.42
7,943.00	1.00	38.70	7,642.45	-282.84	1,574.70	1,599.78	0.37	-0.21	16.11
8,034.00	0.50	64.33	7,733.44	-282.04	1,575.55	1,600.47	0.65	-0.55	28.16
8,125.00	0.75	91.45	7,824.43	-281.89	1,576.51	1,601.38	0.42	0.27	29.80
8,216.00	1.19	104.58	7,915.42	-282.14	1,578.02	1,602.91	0.54	0.48	14.43
8,306.00	1.31	113.33	8,005.40	-282.78	1,579.87	1,604.85	0.25	0.13	9.72
8,397.00	1.19	113.08	8,096.38	-283.57	1,581.69	1,606.79	0.13	-0.13	-0.27
8,488.00	1.19	116.83	8,187.36	-284.36	1,583.40	1,608.62	0.09	0.00	4.12
8,578.00	1.06	116.70	8,277.34	-285.16	1,584.98	1,610.32	0.14	-0.14	-0.14
8,669.00	1.50	123.70	8,368.32	-286.20	1,586.72	1,612.22	0.51	0.48	7.69
<b>LAST MWD SVY</b>									
8,740.00	1.78	125.14	8,439.29	-287.35	1,588.40	1,614.09	0.40	0.39	2.03
<b>EXT TD.</b>									
8,790.00	1.78	124.14	8,489.26	-288.23	1,589.68	1,615.51	0.06	0.00	-2.00

### Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,740.00	8,439.29	-287.35	1,588.40	LAST MWD SVY
8,790.00	8,489.26	-288.23	1,589.68	EXT TD.

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



# **ANADARKO PETROLEUM CORP.**

**UINTAH COUNTY, UTAH (nad 27)**

**Bonanza 1023-6L Pad**

**BONANZA 1023-6N1AS**

**BONANZA 1023-6N1AS**

**Survey: WEATHERFORD MWD SVY**

## **Survey Report - Geographic**

**07 June, 2010**



**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** Bonanza 1023-6L Pad  
**Well:** BONANZA 1023-6N1AS  
**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

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

<b>Site</b>	Bonanza 1023-6L Pad, SECTION 6 T10S R22E				
<b>Site Position:</b>		<b>Northing:</b>	14,521,029.19ft	<b>Latitude:</b>	39° 58' 29.431 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,095,542.07ft	<b>Longitude:</b>	109° 22' 31.890 W
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in	<b>Grid Convergence:</b>	1.04 °

<b>Well</b>	BONANZA 1023-6N1AS					
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>	14,521,088.00 ft	<b>Latitude:</b>	39° 58' 30.011 N
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>	2,095,551.09 ft	<b>Longitude:</b>	109° 22' 31.760 W
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	5,144.00 ft	

<b>Wellbore</b>	BONANZA 1023-6N1AS				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	BGGM2009	5/21/2010	(°) 11.18	(°) 65.92	(nT) 52,454

<b>Design</b>	BONANZA 1023-6N1AS				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	100.87	

<b>Survey Program</b>	<b>Date</b>	6/7/2010			
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
(ft)	(ft)				
172.00	8,790.00	WEATHERFORD MWD SVY (BONANZA	MWD	MWD - Standard	

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** Bonanza 1023-6L Pad  
**Well:** BONANZA 1023-6N1AS  
**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**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	14,521,088.00	2,095,551.09	39° 58' 30.011 N	109° 22' 31.760 W
172.00	0.81	116.45	171.99	-0.54	1.09	14,521,087.48	2,095,552.18	39° 58' 30.005 N	109° 22' 31.746 W
268.00	0.63	101.20	267.99	-0.95	2.21	14,521,087.10	2,095,553.32	39° 58' 30.001 N	109° 22' 31.732 W
364.00	1.50	96.08	363.97	-1.18	3.98	14,521,086.89	2,095,555.09	39° 58' 29.999 N	109° 22' 31.709 W
459.00	1.75	92.70	458.93	-1.38	6.67	14,521,086.74	2,095,557.78	39° 58' 29.997 N	109° 22' 31.675 W
554.00	1.69	89.83	553.89	-1.45	9.52	14,521,086.73	2,095,560.63	39° 58' 29.997 N	109° 22' 31.638 W
650.00	1.75	86.58	649.84	-1.35	12.39	14,521,086.87	2,095,563.50	39° 58' 29.997 N	109° 22' 31.601 W
745.00	2.25	107.70	744.79	-1.83	15.62	14,521,086.45	2,095,566.74	39° 58' 29.993 N	109° 22' 31.560 W
937.00	2.38	108.83	936.63	-4.27	22.98	14,521,084.15	2,095,574.14	39° 58' 29.969 N	109° 22' 31.465 W
1,128.00	2.06	119.08	1,127.49	-7.22	29.74	14,521,081.33	2,095,580.95	39° 58' 29.939 N	109° 22' 31.378 W
1,223.00	2.31	99.83	1,222.42	-8.37	33.12	14,521,080.23	2,095,584.35	39° 58' 29.928 N	109° 22' 31.335 W
1,319.00	2.50	97.33	1,318.34	-8.97	37.10	14,521,079.71	2,095,588.34	39° 58' 29.922 N	109° 22' 31.284 W
1,415.00	2.69	84.20	1,414.24	-9.01	41.42	14,521,079.75	2,095,592.66	39° 58' 29.922 N	109° 22' 31.228 W
1,511.00	2.88	95.70	1,510.13	-9.02	46.06	14,521,079.82	2,095,597.30	39° 58' 29.922 N	109° 22' 31.169 W
1,606.00	2.44	108.33	1,605.02	-9.89	50.35	14,521,079.03	2,095,601.61	39° 58' 29.913 N	109° 22' 31.114 W
1,702.00	2.50	109.95	1,700.93	-11.25	54.26	14,521,077.74	2,095,605.54	39° 58' 29.900 N	109° 22' 31.063 W
1,797.00	2.25	111.20	1,795.85	-12.63	57.95	14,521,076.43	2,095,609.25	39° 58' 29.886 N	109° 22' 31.016 W
1,901.00	2.19	102.58	1,899.78	-13.80	61.79	14,521,075.33	2,095,613.12	39° 58' 29.874 N	109° 22' 30.967 W
1,960.00	2.00	101.58	1,958.74	-14.26	63.90	14,521,074.91	2,095,615.23	39° 58' 29.870 N	109° 22' 30.940 W
2,051.00	4.00	105.58	2,049.61	-15.43	68.51	14,521,073.83	2,095,619.87	39° 58' 29.858 N	109° 22' 30.880 W
2,141.00	7.13	93.95	2,139.17	-16.66	77.11	14,521,072.75	2,095,628.49	39° 58' 29.846 N	109° 22' 30.770 W
2,232.00	9.44	89.83	2,229.22	-17.02	90.21	14,521,072.63	2,095,641.59	39° 58' 29.843 N	109° 22' 30.602 W
2,323.00	11.81	87.45	2,318.65	-16.59	106.98	14,521,073.37	2,095,658.35	39° 58' 29.847 N	109° 22' 30.386 W
2,413.00	12.69	95.17	2,406.61	-17.07	126.02	14,521,073.23	2,095,677.40	39° 58' 29.842 N	109° 22' 30.141 W
2,504.00	13.63	98.58	2,495.22	-19.57	146.58	14,521,071.11	2,095,698.00	39° 58' 29.817 N	109° 22' 29.877 W
2,595.00	16.06	100.70	2,583.18	-23.50	169.56	14,521,067.59	2,095,721.04	39° 58' 29.778 N	109° 22' 29.582 W
2,686.00	18.63	102.70	2,670.03	-29.04	196.11	14,521,062.54	2,095,747.69	39° 58' 29.724 N	109° 22' 29.241 W
2,776.00	22.50	102.08	2,754.28	-35.81	226.98	14,521,056.34	2,095,778.68	39° 58' 29.657 N	109° 22' 28.844 W
2,867.00	25.00	102.58	2,837.57	-43.64	262.78	14,521,049.16	2,095,814.62	39° 58' 29.579 N	109° 22' 28.385 W
2,958.00	26.30	101.54	2,919.60	-51.86	301.30	14,521,041.64	2,095,853.28	39° 58' 29.498 N	109° 22' 27.890 W
3,048.00	25.38	100.58	3,000.60	-59.39	339.80	14,521,034.81	2,095,891.91	39° 58' 29.424 N	109° 22' 27.395 W
3,139.00	25.81	102.33	3,082.67	-67.20	378.33	14,521,027.70	2,095,930.57	39° 58' 29.347 N	109° 22' 26.900 W
3,230.00	25.38	101.45	3,164.74	-75.30	416.79	14,521,020.30	2,095,969.18	39° 58' 29.266 N	109° 22' 26.406 W
3,320.00	26.00	101.45	3,245.84	-83.05	455.03	14,521,013.26	2,096,007.55	39° 58' 29.190 N	109° 22' 25.915 W
3,411.00	26.75	102.08	3,327.37	-91.29	494.61	14,521,005.73	2,096,047.27	39° 58' 29.108 N	109° 22' 25.406 W
3,502.00	24.86	101.69	3,409.29	-99.46	533.37	14,520,998.28	2,096,086.18	39° 58' 29.028 N	109° 22' 24.908 W
3,592.00	24.63	100.58	3,491.03	-106.73	570.33	14,520,991.68	2,096,123.26	39° 58' 28.956 N	109° 22' 24.434 W
3,683.00	24.56	98.70	3,573.77	-113.08	607.66	14,520,986.02	2,096,160.71	39° 58' 28.893 N	109° 22' 23.954 W
3,773.00	24.56	98.45	3,655.63	-118.65	644.65	14,520,981.11	2,096,197.79	39° 58' 28.838 N	109° 22' 23.479 W
3,864.00	24.00	101.58	3,738.59	-125.15	681.49	14,520,975.29	2,096,234.74	39° 58' 28.774 N	109° 22' 23.006 W
3,954.00	25.38	103.95	3,820.36	-133.47	718.14	14,520,967.64	2,096,271.54	39° 58' 28.691 N	109° 22' 22.535 W
4,045.00	25.47	103.88	3,902.54	-142.87	756.07	14,520,958.93	2,096,309.63	39° 58' 28.599 N	109° 22' 22.047 W
4,136.00	24.81	102.08	3,984.92	-151.56	793.73	14,520,950.93	2,096,347.45	39° 58' 28.513 N	109° 22' 21.564 W
4,226.00	22.63	99.83	4,067.32	-158.47	829.26	14,520,944.67	2,096,383.10	39° 58' 28.444 N	109° 22' 21.107 W
4,317.00	22.56	100.70	4,151.33	-164.70	863.67	14,520,939.07	2,096,417.61	39° 58' 28.383 N	109° 22' 20.665 W
4,408.00	24.38	102.08	4,234.80	-171.87	899.19	14,520,932.54	2,096,453.25	39° 58' 28.312 N	109° 22' 20.209 W
4,498.00	25.00	101.33	4,316.57	-179.49	936.00	14,520,925.59	2,096,490.20	39° 58' 28.237 N	109° 22' 19.736 W
4,589.00	25.50	101.83	4,398.88	-187.29	974.03	14,520,918.49	2,096,528.36	39° 58' 28.159 N	109° 22' 19.247 W
4,679.00	24.63	102.08	4,480.40	-195.18	1,011.33	14,520,911.28	2,096,565.80	39° 58' 28.081 N	109° 22' 18.768 W
4,770.00	24.38	101.08	4,563.21	-202.76	1,048.30	14,520,904.37	2,096,602.91	39° 58' 28.006 N	109° 22' 18.293 W
4,861.00	25.13	100.70	4,645.84	-209.96	1,085.72	14,520,897.86	2,096,640.45	39° 58' 27.935 N	109° 22' 17.813 W
4,951.00	26.06	101.70	4,727.01	-217.51	1,123.86	14,520,891.00	2,096,678.72	39° 58' 27.861 N	109° 22' 17.323 W
5,042.00	26.50	101.20	4,808.61	-225.51	1,163.35	14,520,883.72	2,096,718.35	39° 58' 27.782 N	109° 22' 16.815 W
5,133.00	25.56	100.33	4,890.38	-232.97	1,202.58	14,520,876.98	2,096,757.70	39° 58' 27.708 N	109° 22' 16.311 W
5,223.00	25.19	100.83	4,971.69	-240.06	1,240.49	14,520,870.59	2,096,795.74	39° 58' 27.638 N	109° 22' 15.824 W

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** Bonanza 1023-6L Pad  
**Well:** BONANZA 1023-6N1AS  
**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
5,314.00	23.69	101.20	5,054.54	-247.25	1,277.45	14,520,864.07	2,096,832.82	39° 58' 27.567 N	109° 22' 15.350 W
5,405.00	21.75	101.33	5,138.47	-254.11	1,311.91	14,520,857.84	2,096,867.41	39° 58' 27.499 N	109° 22' 14.907 W
5,495.00	19.56	101.58	5,222.68	-260.41	1,343.03	14,520,852.10	2,096,898.63	39° 58' 27.437 N	109° 22' 14.507 W
5,586.00	19.06	102.20	5,308.56	-266.61	1,372.47	14,520,846.44	2,096,928.19	39° 58' 27.375 N	109° 22' 14.129 W
5,677.00	17.44	102.20	5,394.98	-272.63	1,400.33	14,520,840.93	2,096,956.14	39° 58' 27.316 N	109° 22' 13.771 W
5,767.00	15.44	101.70	5,481.30	-277.91	1,425.24	14,520,836.10	2,096,981.15	39° 58' 27.264 N	109° 22' 13.451 W
5,858.00	14.94	99.45	5,569.12	-282.29	1,448.68	14,520,832.15	2,097,004.66	39° 58' 27.220 N	109° 22' 13.150 W
5,949.00	13.35	99.62	5,657.36	-285.97	1,470.61	14,520,828.87	2,097,026.65	39° 58' 27.184 N	109° 22' 12.868 W
6,040.00	12.38	100.70	5,746.07	-289.54	1,490.55	14,520,825.66	2,097,046.66	39° 58' 27.149 N	109° 22' 12.612 W
6,130.00	11.06	102.45	5,834.19	-293.19	1,508.46	14,520,822.34	2,097,064.63	39° 58' 27.112 N	109° 22' 12.382 W
6,221.00	9.50	96.83	5,923.73	-295.97	1,524.44	14,520,819.86	2,097,080.66	39° 58' 27.085 N	109° 22' 12.177 W
6,311.00	7.25	94.33	6,012.77	-297.28	1,537.48	14,520,818.78	2,097,093.72	39° 58' 27.072 N	109° 22' 12.009 W
6,402.00	6.81	95.70	6,103.08	-298.25	1,548.58	14,520,818.01	2,097,104.83	39° 58' 27.062 N	109° 22' 11.867 W
6,493.00	6.06	100.20	6,193.51	-299.64	1,558.67	14,520,816.81	2,097,114.95	39° 58' 27.049 N	109° 22' 11.737 W
6,583.00	4.31	113.20	6,283.14	-301.81	1,566.46	14,520,814.78	2,097,122.78	39° 58' 27.027 N	109° 22' 11.637 W
6,674.00	3.00	127.08	6,373.95	-304.59	1,571.50	14,520,812.09	2,097,127.87	39° 58' 27.000 N	109° 22' 11.572 W
6,764.00	1.56	149.08	6,463.88	-307.06	1,574.01	14,520,809.66	2,097,130.42	39° 58' 26.975 N	109° 22' 11.540 W
6,855.00	0.69	209.08	6,554.87	-308.61	1,574.38	14,520,808.13	2,097,130.82	39° 58' 26.960 N	109° 22' 11.535 W
6,946.00	0.63	288.83	6,645.86	-308.92	1,573.64	14,520,807.80	2,097,130.09	39° 58' 26.957 N	109° 22' 11.545 W
7,036.00	1.56	343.70	6,735.85	-307.59	1,572.83	14,520,809.12	2,097,129.25	39° 58' 26.970 N	109° 22' 11.555 W
7,127.00	1.00	331.95	6,826.82	-305.70	1,572.11	14,520,811.00	2,097,128.50	39° 58' 26.989 N	109° 22' 11.564 W
7,218.00	1.31	335.58	6,917.81	-304.05	1,571.30	14,520,812.63	2,097,127.66	39° 58' 27.005 N	109° 22' 11.575 W
7,308.00	2.68	0.19	7,007.75	-301.01	1,570.88	14,520,815.66	2,097,127.19	39° 58' 27.035 N	109° 22' 11.580 W
7,399.00	2.50	5.83	7,098.66	-296.91	1,571.09	14,520,819.77	2,097,127.32	39° 58' 27.076 N	109° 22' 11.577 W
7,490.00	1.94	13.70	7,189.59	-293.44	1,571.66	14,520,823.25	2,097,127.83	39° 58' 27.110 N	109° 22' 11.570 W
7,580.00	1.81	11.70	7,279.54	-290.56	1,572.31	14,520,826.13	2,097,128.42	39° 58' 27.138 N	109° 22' 11.562 W
7,671.00	1.44	12.45	7,370.50	-288.04	1,572.85	14,520,828.66	2,097,128.91	39° 58' 27.163 N	109° 22' 11.555 W
7,762.00	1.13	11.08	7,461.48	-286.04	1,573.26	14,520,830.67	2,097,129.30	39° 58' 27.183 N	109° 22' 11.549 W
7,853.00	1.19	24.20	7,552.46	-284.30	1,573.82	14,520,832.42	2,097,129.82	39° 58' 27.200 N	109° 22' 11.542 W
7,943.00	1.00	38.70	7,642.45	-282.84	1,574.70	14,520,833.90	2,097,130.67	39° 58' 27.215 N	109° 22' 11.531 W
8,034.00	0.50	64.33	7,733.44	-282.04	1,575.55	14,520,834.71	2,097,131.51	39° 58' 27.223 N	109° 22' 11.520 W
8,125.00	0.75	91.45	7,824.43	-281.89	1,576.51	14,520,834.88	2,097,132.46	39° 58' 27.224 N	109° 22' 11.508 W
8,216.00	1.19	104.58	7,915.42	-282.14	1,578.02	14,520,834.66	2,097,133.98	39° 58' 27.222 N	109° 22' 11.488 W
8,306.00	1.31	113.33	8,005.40	-282.78	1,579.87	14,520,834.05	2,097,135.84	39° 58' 27.215 N	109° 22' 11.465 W
8,397.00	1.19	113.08	8,096.38	-283.57	1,581.69	14,520,833.30	2,097,137.68	39° 58' 27.208 N	109° 22' 11.441 W
8,488.00	1.19	116.83	8,187.36	-284.36	1,583.40	14,520,832.53	2,097,139.40	39° 58' 27.200 N	109° 22' 11.419 W
8,578.00	1.06	116.70	8,277.34	-285.16	1,584.98	14,520,831.77	2,097,140.99	39° 58' 27.192 N	109° 22' 11.399 W
8,669.00	1.50	123.70	8,368.32	-286.20	1,586.72	14,520,830.76	2,097,142.76	39° 58' 27.182 N	109° 22' 11.376 W
<b>LAST MWD SVY</b>									
8,740.00	1.78	125.14	8,439.29	-287.35	1,588.40	14,520,829.64	2,097,144.45	39° 58' 27.170 N	109° 22' 11.355 W
<b>EXT TD.</b>									
8,790.00	1.78	124.14	8,489.26	-288.23	1,589.68	14,520,828.78	2,097,145.74	39° 58' 27.161 N	109° 22' 11.339 W

**Company:** ANADARKO PETROLEUM CORP.  
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**Wellbore:** BONANZA 1023-6N1AS  
**Design:** BONANZA 1023-6N1AS

**Local Co-ordinate Reference:** Well BONANZA 1023-6N1AS  
**TVD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**MD Reference:** WELL @ 5158.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,740.00	8,439.29	-287.35	1,588.40	LAST MWD SVY
8,790.00	8,489.26	-288.23	1,589.68	EXT TD.

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN Spud Conductor: 4/7/2010 Spud Date: 4/9/2010  
 Project: UTAH-UINTAH Site: BONANZA 1023-6L PAD Rig Name No: ENSIGN 146/146, CAPSTAR 310/310  
 Event: DRILLING Start Date: 4/8/2010 End Date: 5/31/2010  
 Active Datum: RKB @5,158.01ft (above Mean Sea Level) UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/NW/0/742.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/9/2010	10:00 - 11:00	1.00	RDMO	01	E	P		RIG DOWN, RIG AND READY FOR TRUCKS.
	11:00 - 14:00	3.00	MIRU	01	A	P		MOVE RIG 3 MILES TO LOCATION. AND SPOT RIG IN. START MOVING CAMPS @ 00:00
	14:00 - 15:00	1.00	MIRU	01	B	P		RAISE DERRICK, INSTALL HANDRAILS, R/U PUMPS.
	15:00 - 20:00	5.00	MIRU	14		P		WELD ON RISER, AND ROT. HEAD. INSTALL BOWIE LINE. PRIME PIT PUMP, FILL PITS, INSTALL OVERFLOW LINE TO PIT. PRIME PUMPS. INSPECT RIG. FIX LEAKS. P/U 1.5 DEG. BENT HOUSE MOTOR SN 8039. M/U 11" Q507F SN 2020055 5TH RUN.
	20:00 - 22:00	2.00	DRLSUR	02	B	P		DRILL W/ MUD MOTOR 49'-189'. SPUD 4/9/2010 20:00.
	22:00 - 0:00	2.00	DRLSUR	06	A	P		LD 6" DC'S, SCRIBE MOTOR, P/U DIRECTIONAL TOOLS.
4/10/2010	0:00 - 1:00	1.00	DRLSUR	06	A	P		P/U DIRECTIONAL TOOLS.
	1:00 - 5:00	4.00	DRLSUR	02	D	P		DRILL W/ MWD 189'-635' (446', 112'/HR) WOB 8-12K, RPM 50, MOT RPM 88, GPM 550, ON/OFF PSI 700/550'. UP/DOWN/ROT 38/32/34. NO LOSSES.
	5:00 - 6:00	1.00	MAINT	08	A	X		WORK ON HYDRALIC PUMPS. PUMPS ACTING WEAK. CHANGE FILTERS.
	6:00 - 7:30	1.50	DRLSUR	02	D	P		DRILL 635'-780' (145, 97'/HR) WOB 8-12K, RPM 50, MOT RPM 88, GPM 550, ON/OFF PSI 700/550'. UP/DOWN/ROT 38/32/34. NO LOSSES.
	7:30 - 9:00	1.50	MAINT	08	A	X		CHANGE OUT FRONT HYDRALIC PUMP.
	9:00 - 16:30	7.50	DRLSUR	02	D	P		DRILL W/ MWD 780'-1432' (652, 87'/HR) WOB 8-12K, RPM 50, MOT RPM 88, GPM 550, ON/OFF PSI 950/700'. UP/DOWN/ROT 45/42/40. LOSS PARTIAL RETURNS @ 980'. CIRC. W/ AERATED WATER.
	16:30 - 17:00	0.50	DRLSUR	07	A	P		RIG SERVICE.
	17:00 - 17:30	0.50	MAINT	08	A	X		TRANSMISSION HOSE LEAKING. CHANGE TRANSMISSION HOSE.
	17:30 - 0:00	6.50	DRLSUR	02	D	P		DRILL W/ MWD 1432'- 1814' (382, 60'/HR) WOB 8-12K, RPM 50, MOT RPM 88, GPM 550, ON/OFF PSI 950/700'. UP/DOWN/ROT 52/45/49. FULL LOSSES 1225, WATER @ 1150'. CIRC W/ AERATED WATER.
	4/11/2010	0:00 - 2:00	2.00	DRLSUR	02	D	P	
2:00 - 3:30		1.50	MAINT	22	K	Z		FUEL LINES AND FILTERS PLUGGED OFF. AFTER TRANSPORTING FUEL FROM ARE 10000 GAL TANK. WE TOP THE RIG OFF WITH THE FUEL AFTER SUCKING ALL THE FUEL OUT OF THE TANK ON RIG MOVE. THE ELENBURGE TANK WAS BRAND NEW. CHANGED OUT ALL FUEL FILTERS.
3:30 - 4:00		0.50	DRLSUR	02	D	P		DRILL 1909'-1950' WOB 8-12K, RPM 50, MOT RPM 88, GPM 550, ON/OFF PSI 1000 / 800
4:00 - 5:30		1.50	CSG	05	F	P		UP/DOWN/ROT 55/48/52. FULL LOSSES 1225, WATER @ 1150'. CIRC W/ AERATED WATER CIRC AND CONDITION HOLE. CLEAN HOLE W/ AERATED WATER AND POLYMER.

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN Spud Conductor: 4/7/2010 Spud Date: 4/9/2010  
 Project: UTAH-UINTAH Site: BONANZA 1023-6L PAD Rig Name No: ENSIGN 146/146, CAPSTAR 310/310  
 Event: DRILLING Start Date: 4/8/2010 End Date: 5/31/2010  
 Active Datum: RKB @5,158.01ft (above Mean Sea Level) UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/N/0/742.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	5:30 - 8:00	2.50	CSG	06	D	P		LDDS, LD DIRECTIONAL TOOLS, LD BIT AND MOTOR.
	8:00 - 11:00	3.00	MAINT	08	A	Z		WORK ON TRANSMISSION. TRANSMISSION PROBLEMS. CHANGE SHIFTER ASSEMBLY.
	11:00 - 14:00	3.00	CSG	12	C	P		HOLD SAFETY MEETING, RUN 43 JTS OF 8-5/8" IJ-55 28# CSG W/ 8RD LTC THREADS AND LAND FLOAT SHOE @ 1922' KB . BAFFLE PLATE RAN IN TOP OF SHOE JT LANDED @ 1876' KB. FILL CSG 100, AND 1000'.
	14:00 - 15:00	1.00	CSG	12	C			HOLD SAFETY MEETING W/ SUPERIOR WELL SERVICES CEMENTERS. INSTALL CEMENT HEAD ON TOP OF LANDING JT. PRESSURE TEST LINE TO 2000 PSI. PUMP 50 BBLS AHEAD OF H2O. PROBLEMS WITH WATER FLOW ISSUES TO MIXER. SHUT DOWN.
	15:00 - 17:30	2.50	MAINT	22	L	Z		WORK ON WATER FLOW PROBLEM, FOUND PLUG UP IN HOPPER. CLEAN OUT PLUG.
	17:30 - 18:30	1.00	CSG					PUMP 50 BBLS AHEAD, PUMP 20 BBLS OF GEL WATER FOR SPACER, PUMP 225 SX (46 BBLS) OF 15.8#, 1.15 YD 5 GAL/SK CLASS G 2% CALC + .25 LB/SKS SUPER FLAKES CEMENT. DISPLACE W/117 BBLS OF H2O W/ 150 PSI LIFT @ 1.7 BBLS A MINUTE. BUMP PLUG 500 PSI. FLOAT HELD. NO CIRC THROUGH OUT JOB. TOP OUT W/ 100 SX (20.2 BBLS) 15.8#, 1.15 YD, 5 GAL/ SK 2% CALC CEMENT. RIG DOWN HEAD.
	18:30 - 19:30	1.00	RDMO	14	A	P		CUT OFF AND HANG RISER AND AND ROT HEAD. INSTALL HANG OFF BAR. LAND CSG AND BREAK OFF LANDING JT. CUT OFF CSG COLLAR AND TACK CAP ON TOP OF CSG. BREAK DOWN BOWIE LINE.
	19:30 - 20:30	1.00	CSG	12	E	P		TOP OUT 100 SX (20.4BBLS)OF 15.8#, 1.15 YD. 5 GAL SK 4% CALC. NO CEMENT TO SURFACE. WILL TOP OUT ON NEXT JOB. RELEASE RIG 4/11/2010 20:30 WAITED TILL NEXT CEMENT JOB AND PUMPED 100 SX (20.4 BBLS) TO TOP OUT.
5/25/2010	19:00 - 20:00	1.00	MIRU	01	C	P		SKID RIG
	20:00 - 23:00	3.00	MIRU	01	B	P		RIG UP FLOWLINE, CATWALK, FLARE LINES, REPLACE HYDROLIC FAN MOTOR ON TOP DRIVE NIPPLE UP BOP
5/26/2010	0:00 - 4:30	4.50	DRLPRO	15	A	P		TEST BOP, RAMS, CHOKE, HCR, KILLINE TO 250 LOW 5000 HIGH, ANNULAR 250 LOW, 2500 HIGH, CASING 1500 PSI
	4:30 - 5:00	0.50	DRLPRO	06	J	P		INSTALL WEAR BUSHING
	5:00 - 7:30	2.50	DRLPRO	06	A	P		P/U NEW BIT & MOTOR, SCRIBE TOOLS, R.I.H, TAG CMT @ 1851'
	7:30 - 9:30	2.00	DRLPRO	02	F	P		DRILL CMT, FE & RATHOLE F/1851' TO 1955'
	9:30 - 16:30	7.00	DRLPRO	02	D	P		DRILL SLIDE F/1955' TO 2736' (781' @ 111fph) MW 8.4, WOB 20, RPM 35, MM RPM 140, TQ 8, GPM 500, PSI OFF/ON 1150/1400, SLIDE 2010 2036, 2101 2127, 2191 2217, 2282 2308, 2373 2399, 2463 2489, 2554 2586, 2645 2677, WOB 20, MM RPM 140, GPM 500, DIFF 300
	16:30 - 17:00	0.50	DRLPRO	07	A	P		RIG SER
	17:00 - 0:00	7.00	DRLPRO	02	D	P		DRILL/SLIDE F/2736' TO 3470' (734' @ 104fph) MW 8.4, WOB 20, RPM 35, MM RPM 140, TQ 9, GPM 500, PSI OFF/ON 1275/1520, SLIDE 2736 2768, 2826 2855, 2917 2939, 3008 3026, 3098 3120, 3189 3209, 3280 3305, 3370 3392, WOB 20, MM RPM 140, GPM 500, DIFF 325

**US ROCKIES REGION  
Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN Spud Conductor: 4/7/2010 Spud Date: 4/9/2010  
 Project: UTAH-UJINTAH Site: BONANZA 1023-6L PAD Rig Name No: ENSIGN 146/146, CAPSTAR 310/310  
 Event: DRILLING Start Date: 4/8/2010 End Date: 5/31/2010  
 Active Datum: RKB @5,158.01ft (above Mean Sea Level) UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00NW/0/742.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/27/2010	0:00 - 14:00	14.00	DRLPRO	02	D	P		DRILL/SLIDE F/3470' TO 5092' (1622' @ 115fph) MW 8.7, VIS 32, WOB 20, RPM 35, MM RPM 140, TQ 10, GPM 500, PSI OFF/ON 1450/1770, SLIDE 3470 3481, 3552 3588, 3642 3678, 3733 3771, 3823 3863, 3914 3946, 4004 4019, 4095 4115, 4186 4208, 4276 4304, 4367 4391, 4458 4470, 4548 4560, 4639 4649, 4729 4745, 4820 4842, 4911 4929, 5001 5015, WONB 20, MM RPM 130, GPM 470, DIFF 325 (41% SLIDE - 59% ROT)
	14:00 - 14:30	0.50	DRLPRO	07	A	P		RIG SER
	14:30 - 0:00	9.50	DRLPRO	02	D	P		DRILL/SLIDE F/5092' TO 6070' (978' @ 103fph) MW 9.5, VIS 40, WOB 20, RPM 35, MM RPM 130, TQ 12, GPM 470, PSI OFF/ON 1450/1875, SLIDE 5092 5102, 5183 5197, 5545 5554, 5817 5829, WOB 20, MM RPM 130, GPM 470, DIFF 325, (18% SLIDE - 82% ROT)
5/28/2010	0:00 - 15:00	15.00	DRLPRO	02	D	P		DRILL/SLIDE F/6070' TO 6998' (928' @ 62fph) MW 10.5, VIS 42, WOB 20, RPM 35, MM RPM 130, TQ 12, GPM 470, PSI OFF/ON 1700/2100, SLIDE 6180 6192, 6271 6281, 6543 6555, 6633 6648, 6724 6742, 6814 6834, 6905 6925, WOB 20, MM RPM 130, GPM 470, DIFF 275 (SLIDE 107'/ 5.0 HRS .33% - ROT 821'/ 10 HRS 67%)
	15:00 - 15:30	0.50	DRLPRO	07	A	P		RIG SER
	15:30 - 0:00	8.50	DRLPRO	02	D	P		DRILL/SLIDE F/6998' TO 7380' (382' @ 45fph) MW 11.4, VIS 42, WOB 20, RPM 35, MM RPM 130, TQ 13, GPM 470, PSI OFF/ON 1850/2475, SLIDE 6998 7014, 7177 7185, 7268 7284, 7358 7374, WOB 20, MM RPM 130, GPM 470, DIFF 275 (SLIDE 58'/3 HRS 35% - ROT 324'/ 65%)
5/29/2010	0:00 - 17:30	17.50	DRLPRO	02	D	P		DRILL/SLIDE F/7380' TO 8628' (1248' @ 72fph) MW 11.6, VIS 44, WOB 22, RPM 35, MM RPM 130, TQ 13, GPM 470, PSI OFF/ON /2200/2625 (100% ROT)
	17:30 - 18:00	0.50	DRLPRO	07	A	P		RIG SER
	18:00 - 20:00	2.00	DRLPRO	02	D	P		DRILL/SLIDE F/8628' TO 8790' (162' @ 81fph) MW 11.6, VIS 44, WOB 22, RPM 35, MM RPM 130, TQ 13, GPM 470, PSI OFF/ON 2200/2625 (100% ROT)
	20:00 - 21:30	1.50	DRLPRO	05	C	P		TD WELL 8790' MD - 8489 TVD
	21:30 - 0:00	2.50	DRLPRO	06	D	P		CIRC POOH - BACKREAM AND RACK BACK 26 STANDS - CONT POOH LDDP
5/30/2010	0:00 - 10:30	10.50	DRLPRO	06	D	P		LDDP/BHA
	10:30 - 20:30	10.00	CSG	12	C	P		HPJSM, RUN 208 JTS & 1 MARKER 4.5" I-80, 11.60 BTC PROD CASING FLOAT SHOE @ 8782' - FLOAT COLLAR @ 8736'
	20:30 - 21:30	1.00	CSG	05	D	P		CIRC
	21:30 - 0:00	2.50	CSG	12	E	P		HPJSM, R/UP BJ, TEST LINES 5000 PSI, CEMENT 4.5" PROD CASING PUMPED 40 BBL FRESH WATER SPACER, LEAD 540 SKS 11.6 PPG YIELD 2.62, 483 SKS TAIL 14.3 YIELD 1.31, DROPPED PLUG & DISPLACED W/136 BBL FRESH WATER W/0.1 gal/bbl CLAYFIX II & .01 gal/bbl ALDACIDE G @ 2100 PSI, BUMPED PLUG @ 2700 PSI, FLOATS HELD W/1 BBL RETURN, GOOD CIRC DURING CMT JOB W/30 BBL WATER SPACER TO SURFACE - NO CEMENT TO SURFACE
5/31/2010	0:00 - 3:00	3.00	DRLPRO	14	A	P		L/OUT LANDING JT, N/DN BOPE, CLEAN RIG TANKS, RELEASE RIG 5/31/10 @ 03:00 hrs

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN	Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6L PAD	Rig Name No: ENSIGN 146/146, CAPSTAR 310/310
Event: DRILLING	Start Date: 4/8/2010	End Date: 5/31/2010
Active Datum: RKB @5,158.01ft (above Mean Sea Level)	UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	3:00 - 3:00	0.00	DRLPRO					<p>CONDUCTOR CASING:            Cond. Depth set: 44            Cement sx used: N/A</p> <p>SPUD DATE/TIME: 4/9/2010 20:00</p> <p>SURFACE HOLE:            Surface From depth: 49            Surface To depth: 1,950            Total SURFACE hours: 24.00            Surface Casing size: 8 5/8            # of casing joints ran: 43            Casing set MD: 1,922.0            # sx of cement: 325            Cement blend (ppg): 15.8            Cement yield (ft3/sk): 1.15            # of bbls to surface: 0            Describe cement issues: NO RETURNS TOP OUT W 100 SXS.            Describe hole issues:</p> <p>PRODUCTION:            Rig Move/Skid start date/time: 5/25/2010 19:00            Rig Move/Skid finish date/time: 5/25/2010 20:00            Total MOVE hours: 1.0            Prod Rig Spud date/time: 5/26/2010 7:30            Rig Release date/time: 5/31/2010 3:00            Total SPUD to RR hours: 115.5            Planned depth MD 8,746            Planned depth TVD 8,485            Actual MD: 8,790            Actual TVD: 8,489            Open Wells \$: \$547,585            AFE \$: \$670,774            Open wells \$/ft: \$62.30</p> <p>PRODUCTION HOLE:            Prod. From depth: 1,955            Prod. To depth: 8,790            Total PROD hours: 80.5            Log Depth: NO LOGS            Production Casing size: 4 1/2            # of casing joints ran: 209            Casing set MD: 8,782.0            # sx of cement: 1,023            Cement blend (ppg): LEAD 11.6, TAIL 14.3            Cement yield (ft3/sk): LEAD 2.62, TAIL 1.31            Est. TOC (Lead &amp; Tail) or 2 Stage : 6100            Describe cement issues: 30 BBLS WATER SPACER TO SURFACE - NO CEMENT            Describe hole issues: N/A</p> <p>DIRECTIONAL INFO:            KOP: 189            Max angle: 26.75            Departure: 1613.57            Max dogleg MD: 4.31</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN		Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH		Site: BONANZA 1023-6L PAD	Rig Name No: SWABBCO 1/1
Event: COMPLETION		Start Date: 7/9/2010	End Date:
Active Datum: RKB @5,158.01ft (above Mean Sea Level)		UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/9/2010	15:00 - 16:00	1.00	COMP	33	C	P		R/U B & C QUICK TEST, PRESSURE TEST CSG AND FRAC VALVE TO 7000#, R/U CUTTER WIRELINE RIH W/ PERF GUNS, PERF THE MESAVERDE @ 8344' - 8350', 8293' - 8297', 4-SPF, USING 3 3/8" SCALLOP GUNS, 23 gm, 0.36 HOLE, 90* PHS, 40 HOLES, HSM.
	16:00 - 18:00	2.00	COMP	37	B	P		
7/12/2010	7:00 - 7:15	0.25	COMP	48		P		FRAC STG #1 MESAVERDE 8293'-8350' [40 HOLES]  STG #1] WHP=0#, BEK DN PERFS=4652#, INJ RT=50, INJ PSI=4525#, ISIP=2308#, FG=71, PUMP'D 875 BBLS SLK WTR W/ 23764# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2527#, FG=.74, AR=, AP=#, MR=, MP=#, NPI=219#, 26/40 CALC PERFS OPEN.  STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8186' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 8152'-8156' 4 SPF, 90* PH, 16 HOLES. 8112'-8114' 4 SPF, 90* PH, 8 HOLES. 8086'-8088' 4 SPF, 90* PH, 8 HOLES. 8020'-8022' 4 SPF, 90* PH, 8 HOLES [40 HOLES]  STG #2] WHP=1100#, BEK DN PERFS=6119#, INJ RT=49.4, INJ PSI=5404#, ISIP=2539#, FG=76, PUMP'D 704 BBLS SLK WTR W/ 22742# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2843#, FG=.79, AR=48, AP=5420#, MR=50.8, MP=5401#, NPI=#, 40/40 CALC PERFS OPEN.  STG #3] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 7938' p/u shoot PERF 7902' - 08' (24 holes) p/u shoot 7798' - 7802', 16 holes.. MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE.
	7:15 -			COMP	36	E	P	
7/13/2010	7:00 - 7:15	0.25	COMP	48		P		sdfn HSM, WORKING W/ CHEMICALS

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN		Spud Conductor: 4/7/2010		Spud Date: 4/9/2010	
Project: UTAH-UJINTAH			Site: BONANZA 1023-6L PAD		Rig Name No: SWABBCO 1/1
Event: COMPLETION			Start Date: 7/9/2010		End Date:
Active Datum: RKB @5,158.01ft (above Mean Sea Level)			UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 -		COMP	36	E	P		<p>FRAC STG # 3 MESAVERE 7798'-7908' [40 HOLES]</p> <p>STG #3] WHP=600#, BEK DN PERFS=2103#, INJ RT=33.9, INJ PSI=4855#, ISIP=1556#, FG=.66, PUMP'D 704 BBLS SLK WTR W/ 23829# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2323#, FG=.73, AR=37, AP=5420#, MR=49, MP=6574#, NPI=767#, 27/40 CALC PERFS OPEN.</p> <p>STG #4] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 7728' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 7694'-7689' 4 SPF, 90* PH, 16 HOLES. 7602'-7608' 4 SPF, 90* PH, 24 HOLES [40 HOLES]</p> <p>STG #4] WHP=#, BEK DN PERFS=2035#, INJ RT=4.9 bpm, INJ PSI=#3500, ISIP=#1345, FG=.61, PUMP'D 1037 BBLS SLK WTR W/ 47768# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=#1627, FG=.65, AR=52, AP=4320#, MR=53.7, MP=#5220, NPI=#282, /40 CALC PERFS OPEN.</p> <p>STG #5] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 7556' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 7522'-7526' 4 SPF, 90* PH, 16 HOLES. 7500'-7504' 4 SPF, 90* PH, 16 HOLES. 7464'-7466' 3 SPF, 120* PH, 6 HOLES. 7324'-7326' 4 SPF, 120* PH, 6 HOLES [44 HOLES]</p> <p>HAVING WELL HEAD ISSUES [WELL HEAD JUMPING UP &amp; DN]</p>
7/14/2010	7:00 - 18:00	11.00	COMP	46	E	X		WAIT ON WEATHERFORD TO CHECK OUT WELL HEAD.
7/15/2010	7:00 - 7:15	0.25	COMP	48		P		HSM

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN		Spud Conductor: 4/7/2010		Spud Date: 4/9/2010	
Project: UTAH-UINTAH			Site: BONANZA 1023-6L PAD		Rig Name No: SWABBCO 1/1
Event: COMPLETION			Start Date: 7/9/2010		End Date:
Active Datum: RKB @5,158.01ft (above Mean Sea Level)			UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 15:00	7.75	COMP	36	E	P		<p>FRAC STG #5 MESAVERDE 7324'-7526' [44 HOLES]</p> <p>STG #5] WHP=800#, BEK DN PERFS=3053#, INJ RT=33.8, INJ PSI=6270#, ISIP=1345#, FG=.60, PUMP'D 1091 BBLS SLK WTR W/ 42460# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2031#, FG=.71, AR=42, AP=4320#, MR=53, MP=6449#, NPI=775#, 33/40 CALC PERFS OPEN.</p> <p>STG #6] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 7272' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 7234' - 38', 4 SPF, 90* PH, 16 HOLES. 7106' - 10', 4 SPF, 90* PH, 16 HOLES. 7084' - 86', 4 SPF, 90* PH, 8 HOLES.</p> <p>STG #6] WHP=700#, BEK DN PERFS=2898#, INJ RT=48.7, INJ PSI=4844#, ISIP=1713#, FG=.67, PUMP'D 680 BBLS SLK WTR W/ # 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2352#, FG=.77, AR=50.3, AP=4413#, MR=52.7, MP=5221#, NPI=639#, 32/40 CALC PERFS OPEN.</p> <p>STG #7] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @ 6868' PERF MESAVERDE USING 3-3/8 EXPEND, 23 GRM, 0.36" HOLE. 6835' - 38', 4 SPF, 90* PH, 12 HOLES. 6778' - 6782', 4 SPF, 90* PH, 16 HOLES. 6739' - 6742', 3 SPF, 120* PH, 6 HOLES. 6671' - 6674', 4 SPF, 120* PH, 6 HOLES [44 HOLES]</p> <p>STG #7] WHP=800#, BEK DN PERFS=3053#, INJ RT=54.3, INJ PSI=4251#, ISIP=1345#, FG=.60, PUMP'D 4315 BBLS SLK WTR W/ 166552# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2280#, FG=.73, AR=53, AP=4107#, MR=54, MP=5159#, NPI=963#, 27/40 CALC PERFS OPEN.</p>
7/16/2010	7:00 - 7:15	0.25	COMP	48		P		<p>P/U RIH W/ HALIBURTON 8K CBP. SET CBP @ 6621' FOR TOP KILL. SWI.</p> <p>JSA= NU WELL &amp; BOPS</p>
	7:15 - 15:00	7.75	COMP	30		P		<p>MOVE IN SPOT RIG &amp; EQUIP RU RIG ND FRAC VALVES RE PLACE WEATHERFORD CASING HEAD NU BOPS RU FLOOR &amp; TUBING EQUIP SPOT IN TUBING PU SEALED BIT, POBS &amp; 1.87XN NPL TALLEY &amp; PU PIPE RIH TAG KILL PLUG @ 6621' 210 JNTS OF 2-3/8" L-80 NU RIG PUMP PU PWR SWVL PREP TO DRILL MON.</p> <p>JSA DRILLING PLUGS</p>
7/19/2010	7:00 - 7:15	0.25	COMP	48		P		<p>JSA DRILLING PLUGS</p>

**US ROCKIES REGION  
Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN Spud Conductor: 4/7/2010 Spud Date: 4/9/2010  
 Project: UTAH-UINTAH Site: BONANZA 1023-6L PAD Rig Name No: SWABBCO 1/1  
 Event: COMPLETION Start Date: 7/9/2010 End Date:  
 Active Datum: RKB @5,158.01ft (above Mean Sea Level) UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 7:15	0.00	COMP	30		P		0 PSI ON WELL EST CIRC DRILL THRU TOP PLUG  PLUG #1] DRILL THRU HALLI 8K CBP @ 6621' IN 11 MIN W/ 50# INCREASE  PLUG #2] CONTINUE TO RIH TAG SAND @ 6838' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 6868' IN 12 MIN W/ 200# INCREASE  PLUG #3] CONTINUE TO RIH TAG SAND @ 7238' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 7268' IN 9 MIN W/ 100# INCREASE W/ 200# ON WELL  PLUG # 4] CONTINUE TO RIH TAG SAND @ 7536' (20' FILL) C/O & DRILL THRU HALLI 8K CBP @ 7556' IN 12 MIN W/ 150# INCREASE  PLUG #5] CONTINUE TO RIH TAG SAND @ 7698' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 7728' IN 6 MIN W/ 150# INCREASE  PLUG #6] CONTINUE TO RIH TAG SAND @ 7908' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 7938' IN 9 MIN W/ 100# INCREASE  PLUG #7] CONTINUE TO RIH TAG SAND @ 8156' (30' FILL) C/O & DRILL THRU HALLI 8K CBP @ 8186' IN 11 MIN W/ 0 INCREASE (400# ON WELL)  CONTINUE TO RIH TAG SAND @ 8649' (90' FILL) C/O TO PBD @ 8739' CIRC CLEAN POOH LD 20 JNTS LAND TUBING ON HANGER W/ 253 JNTS OF 2-3/8" L-80 TUBING EOT @ 8004.47 RD FLOOR & TUBING EQUIP ND BOPS NU WELLHEAD DROP BOLL PUMP OFF BIT @ 0 PSI (PUMPED 40 BBLS) SHUT WELL IN 30 MIN TURN OVER TO FBC @ W  TOTAL BBLS PUMPED= 9555 BBLS RIG REC= 2000 BBLS LEFT TO REC= 7555 BBLS RIG DOWN RIG MOVE TO YELLOW WELL RIG UP RIG PREP TO PICKUP PIPE IN AM SDFN  LANDING DETAIL KB= 15.00 HANGER= 1.00 253 JNTS 2-3/8" L-80= 7986.27 POBS= 2.20 EOT= 8004.47  7 AM FLBK REPORT: CP 1825#, TP 1450#, 20/64" CK, 47 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 2903 BBLS LEFT TO RECOVER: 6652 WELL TURNED TO SALES @ 1500 HR ON 7/20/2010 - 1100 MCFD, 1032 BWPD, CP 1850#, FTP 1500#, CK 20/64"  7 AM FLBK REPORT: CP 2200#, TP 1350#, 20/64" CK, 36 BWPH, TRACE SAND, 1544 GAS TTL BBLS RECOVERED: 3870 BBLS LEFT TO RECOVER: 5685
7/20/2010	7:00 -			33	A			
	15:00 -		PROD	50				
7/21/2010	7:00 -			33	A			

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN	Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6L PAD	Rig Name No: SWABBCO 1/1
Event: COMPLETION	Start Date: 7/9/2010	End Date:
Active Datum: RKB @5,158.01ft (above Mean Sea Level)	UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/22/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2025#, TP 1275#, 20/64" CK, 28 BWPH, TRACE SAND, 1571 GAS TTL BBLS RECOVERED: 4622 BBLS LEFT TO RECOVER: 4933
7/23/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 1925#, TP 1200#, 20/64" CK, 21 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 5218 BBLS LEFT TO RECOVER: 4337
7/25/2010	7:00 -							WELL IP'D ON 7/25/10 - 1237 MCFD, 0 BOPD, 480 BWPD, CP 1850#, FTP 1150#, CK 20/64", LP 103#, 24 HRS

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 11/19/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input checked="" type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Wellhead"/>

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

The operator requests approval to conduct wellhead/casing repair operations on the subject well location. Please find the attached procedure for the proposed repair work on the subject well location.

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

Date: 11/18/2010

By: *Derek Quist*

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/18/2010	

Name: **BONANZA 1023-6N1AS**  
 Location: NWSW Sec. 6 10S 23E  
 Uintah County, UT

11/17/10

ELEVATIONS: 5144' GL 5159' KB

TOTAL DEPTH: 8790' PBTB: 8739'

SURFACE CASING: 8 5/8", 28# J-55 ST&C @ 1928', TOC @ surface

PRODUCTION CASING: 4 1/2", 11.6#, I-80 LT&C @ 8782'  
 Marker Joint 6528'-6549'  
 T.O.C.@ 500'

PERFORATIONS: Mesaverde 6671' - 8350'

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

**GEOLOGICAL TOPS:**

- 1125' Green River
- 1386' Bird's Nest
- 1753' Mahogany
- 4174' Wasatch
- 6282' Mesaverde
- 8790' Bottom of Mesaverde (TD)

**Completion Information:**

- 7/15/10 - Perf and frac gross MV interval f/ 6671' - 8350' in 7 stages
- Well IP'd on 7/25/10 - 1237 MCFD, 0 BOPD, 480 BWPD, CP 1850#, FTP 1150#, CK 20/64", LP 103#, 24 HRS

## **BONANZA 1023-6N1AS – WELLHEAD REPLACEMENT PROCEDURE**

### **PREP-WORK PRIOR TO MIRU:**

1. Dig out down to the 2” surface casing valve or to the valve on the riser off the surface casing.
2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.
3. Open casing valve and record pressures.
4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100’ from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.
5. Open the relief valve and blow well down to the atmosphere.
6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.
7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

### **WORKOVER PROCEDURE:**

1. MIRU workover rig.
2. Kill well with 10# brine / KCL (dictated by well pressure ).
3. Remove tree, install double BOP with blind and 2 3/8” pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.
4. Pooh w/ tubing.
5. Rig up wireline service. RIH and set CBP @ ~6621’. Dump bail 4 sx cement on top of plug. POOH and RD wireline service.
6. Remove BOP and ND WH.
7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

### **CUT/PATCH PROCEDURE:**

1. PU internal casing cutters and RIH. Cut casing at +/- 30’ from surface.
2. Pooh, LD cutters and casing.

3. PU & RIH w/ 4 ½" 10k external casing patch on 4 ½" I-80 or P-110 casing.
4. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
5. Install C-22 slips. Land casing w/ 80,000# tension.
6. Cut-off and dress 4 ½" casing stub.
7. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~6621'. Clean out to PBSD (8739').
8. POOH, land tbg and pump off POBS.
9. NUWH, RDMO. Turn well over to production ops.

**BACK-OFF PROCEDURE:**

1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
2. POOH, LD cutters and casing.
3. PU 4 ½" overshot. RIH, latch fish. Pick string weight to neutral.
4. MIRU wireline services. RIH and shoot string shot at casing collar @ 46'.
5. MIRU casing crew.
6. Back-off casing, Pooh.
7. PU new casing joint w/ entry guide and RIH. Tag casing top. Thread into casing and torque up to +/- 6000#.
8. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.
9. Install C-22 slips. Land casing w/ 80,000# tension.
10. Cut-off and dress 4 ½" casing stub.
11. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~6621'. Clean out to PBSD (8739').
12. POOH, land tbg and pump off POBS.
13. NUWH, RDMO. Turn well over to production ops.



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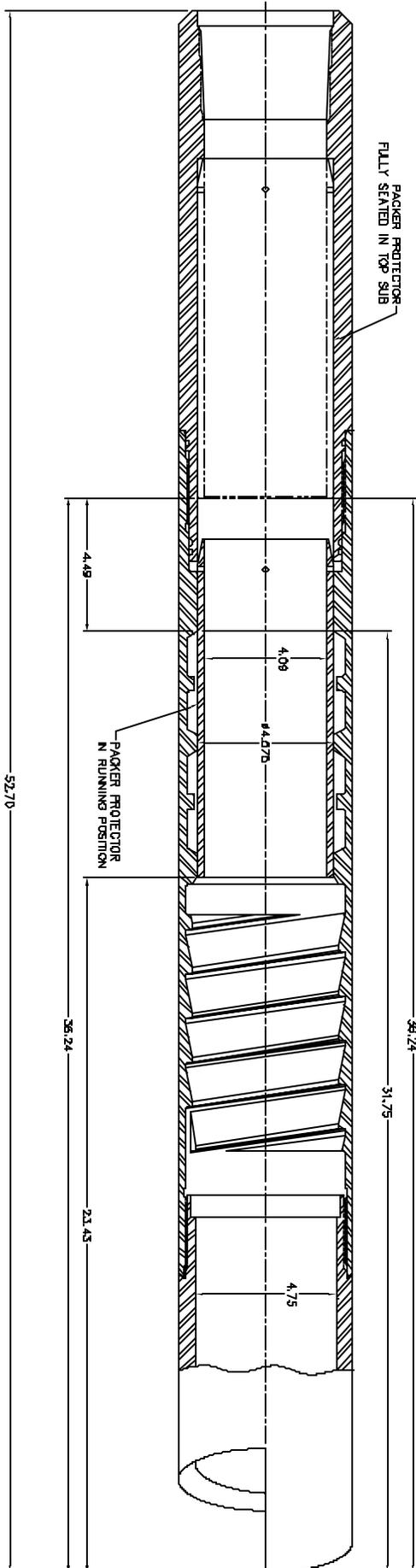
## **Logan High Pressure Casing Patches Assembly Procedure**

All parts should be thoroughly greased before being assembled.

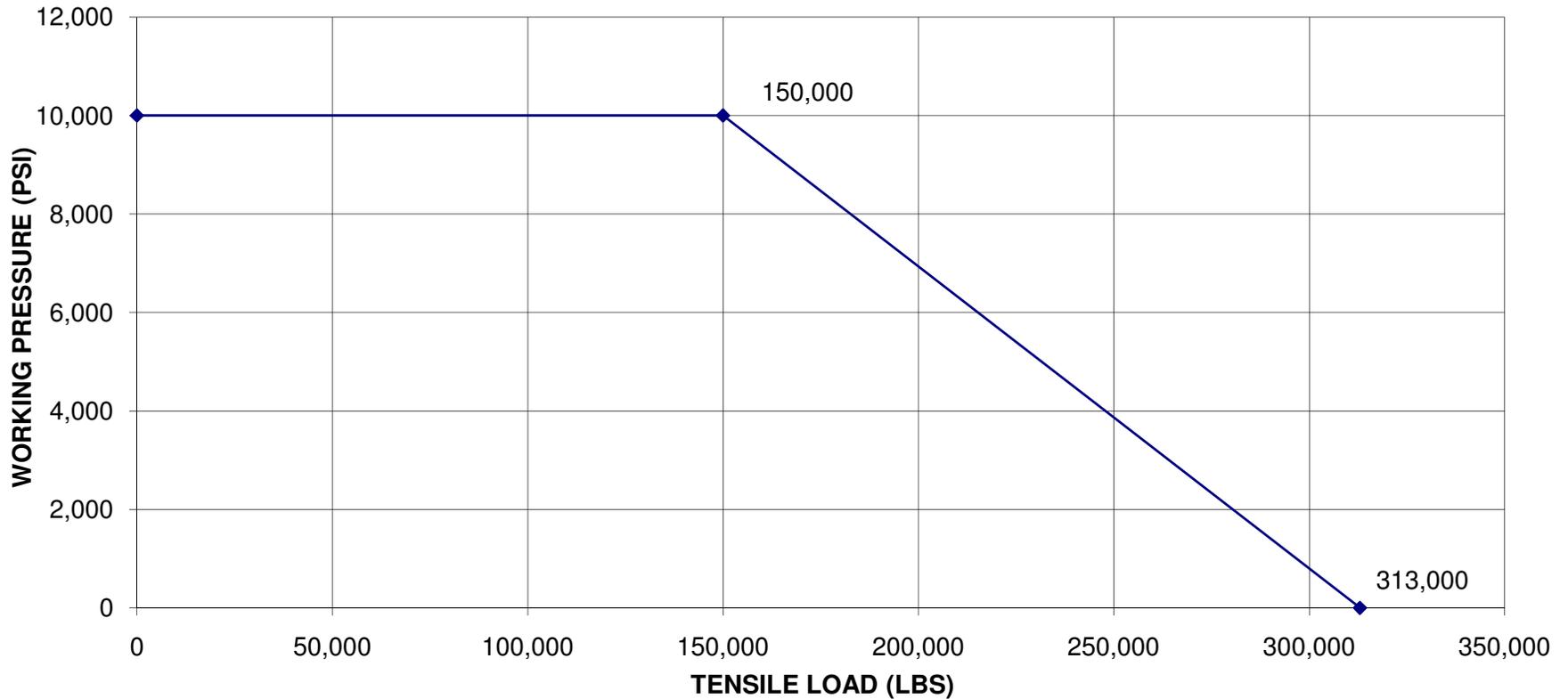
1. Install all four Logan Type "L" Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector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

Follow recommended Make-Up Torque as provided in chart.

510L-005-001 4-1/2" LOGAN HP CASING PATCH



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



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

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

DATA BY SLS 11/16/2009

RECEIVED November 18, 2010

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text" value="Wellhead"/>
<input checked="" type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion: 11/29/2010			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

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

The operator has concluded the wellhead/casing repair on the subject well location. Please see the attached chronological well history for details of the operation.

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

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/30/2010	

**US ROCKIES REGION  
Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN Spud Conductor: 4/7/2010 Spud Date: 4/9/2010  
 Project: UTAH-UINTAH Site: BONANZA 1023-6L PAD Rig Name No: MILES 3/3  
 Event: WELL WORK EXPENSE Start Date: 11/19/2010 End Date: 11/29/2010  
 Active Datum: RKB @5,158.00ft (above Mean Sea Level) UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/22/2010	7:00 - 7:30	0.50	MAINT	48		P		JSA- ROADING RIG
	7:30 - 20:30	13.00	MAINT	47	C	P		ROAD RIG TO LOCATION. FTP 265, FCP 265. BLEED OFF 150# SURFACE CSG PRESSURE. SPOT AND RUSU. HOLD SAFETY MTG ON PROCESS OF REPAIRING WH. KILL TBG W/ 20 BBLS TMAC. ND WH. NU BOP. RU FLOOR AND TBG EQUIP.PMP 30 BBLS DOWN CSG. UNLAND TBG FROM 8004'. PULL AND LD HANGER (GALLED ON JT). POOH W/ 252-TOTAL JTS. (LD BTM 5-JTS W/ SCALE). RU W'FORD EWL. RIH W/ W'FORD 10K CBP. SET AT 6610'. FILL W/ 50 BBLS AND P-TEST TO 1000#. GOOD. DUMP BAIL 4 SX CMT IN 2 RUNS W/ 3-1/2" X 30' BAILER. SDFN. WILL RD EWL IN AM.
11/23/2010	7:00 - 8:00	1.00	MAINT	48		P		JSA- BACK OFF CSG. SCREW IN CSG. P-TESTING.
	8:00 - 17:00	9.00	MAINT	47	C	P		CHECK PRESSURE- 0 PSI. FILL CSG. MOVE EWL SHEEVE. MU CUTTER ASSY ON PUP JT. RD FLOOR AND TBG EQUIP. ND BOP AND TBG HEAD. RU PWR SWIVEL AND CUTTER ASSY. CUT OFF 4-1/2" CSG AT 7'. RD PWR SWIVEL AND CUTTER. REMOVE AND LD CUT OFF PIECE AND HANGER MANDRELL. PU PONY COLLAR OVERSHOT. LATCH ONTO 4-1/2" CSG. RU CSG CREW. RIH W/ 80 GRAIN SHOT AND SPOT IN CPLG AT 48'. BACK OFF 1-JT CSG. LD OVERHSOT AND CSG. HAVE BOX UP. RD EWL. PU 4-1/2" I-80 BTC SKIRTED CSG AND SCREW BACK IN AT 48'. TORQUE UP. WORK CSG TO 50K. RETORQUE CSG. RD CSG CREW. PU ST WT TO 95K. HOOK UP W'FORD PRES TEST. TEST 4-1/2" CSG-- 200# FOR 10 MIN, GOOD. TEST TO 2000# FOR 10 MIN, GOOD. TEST TO 5000# FOR 15 MIN, TEST PLUG LEAKING. BLEED OFF AND TIGHTEN PLUG. RETEST TO 5000# FOR 30 MIN, LOST 75 PSI IN 30 MIN. TEST PLUG STILL LEAKING SLOW. DROP IN AND LAND 4-1/2" CSG ON C-21 SLIPS. CUT OFF AND DRESS 4-1/2". INSTALL H-PLATE AND NU SPOOL. P-TEST VOID TO 5000#, GOOD. P-TEST ANNULUS-- 50# FOR 10 MIN, GOOD. 500# FOR 10 MIN, GOOD. 900# FOR 10 MIN, GOOD. NU TBG HEAD AND BOP. RU FLOOR AND TBG EQUIP. LD 2-JTS W/ BAD PINS (GALLED AS POOH). SDFN.
11/24/2010	7:00 - 7:30	0.50	MAINT	48		P		JSA- RIH W/ TBG. ICE PLUGS. FOAM UNIT.
	7:30 - 17:00	9.50	MAINT	47	C	P		CHECK PRESSURE- 0 PSI. MU 3-7/8" BIT, POBS, AND 1.87" XN AND RIH AS MEAS TBG. TAG CMT AT 6561'. RU DRLG EQUIP. CIRC W/ RIG PUMP AT 1 BPM AND FOAM/AIR UNT. D/O CMT TO CBP AT 6610'. D/O PLUG IN 5 MIN. PWR SWIVEL LOCKED UP. SHUT DOWN RIG PUMP AND ATTEMPT TO CIRC W/ FOAM UNIT FOR 2 HRS. PRESSURE AT 1350#. NO RETURNS. PMP 12 BBLS DOWN TBG. RD PWR SWIVEL. DRAIN EQUIP. SDFTD.
11/29/2010	7:00 - 7:30	0.50	MAINT	48		P		JSA- RIH / PU TBG. GAS ON LOCATION.

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS GREEN	Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6L PAD	Rig Name No: MILES 3/3
Event: WELL WORK EXPENSE	Start Date: 11/19/2010	End Date: 11/29/2010
Active Datum: RKB @5,158.00ft (above Mean Sea Level) UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation															
	7:30 - 18:00	10.50	MAINT	47	C	P		<p>SITP 1500, SICP 1200. OPEN CSG TO FBT. PMP 15 BBLs DOWN TBG. CONT RIH W/ 3-7/8" BIT AND POBS ON TBG. TAG SCALE AT 8260'. RU PWR SWIVEL. START AIR/FOAM DOWN TBG. 1:45 TO GET RETURNS. D/O SCALE TO 8290'. FELL THRU. CONT RIH TO TAG AT 8714'. (364' RATHOLE). DID NOT CIRC ON BTM. POOH AS LD 23-JTS TBG. PU 7" 5K HANGER. LUB IN AND LAND 253-JTS 2-3/8" L-80 TBG W/ EOT AT 7994.10'. RD PWR SWIVEL. RD FLOOR. ND BOP. NU WH. POBS AT 2100#. LEFT WELL SHUT IN AND TURN OVER TO PRODUCTION. RDSU AND ROAD TO NBU 921-27G PAD.</p> <table style="margin-left: 40px; border: none;"> <tr><td>TBG DETAIL</td><td>KB</td><td>15.00</td></tr> <tr><td>7" 5K HANGER</td><td></td><td>1.00</td></tr> <tr><td>253-JTS L-80 TBG</td><td></td><td>7975.90</td></tr> <tr><td>POBS W/ 1.87" XN</td><td></td><td>2.20</td></tr> <tr><td>EOT</td><td></td><td>7994.10</td></tr> </table> <p style="margin-left: 40px;">PMP 570 BBLs RCVR 360 BBLs LTR 210 BBLs</p>	TBG DETAIL	KB	15.00	7" 5K HANGER		1.00	253-JTS L-80 TBG		7975.90	POBS W/ 1.87" XN		2.20	EOT		7994.10
TBG DETAIL	KB	15.00																					
7" 5K HANGER		1.00																					
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POBS W/ 1.87" XN		2.20																					
EOT		7994.10																					

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
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.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS	
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH	
	<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 4/4/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The operator requests authorization to re-complete the subject well location.            The operator proposes to re-complete the Wasatch Formation. The operator also requests to commingle the newly Wasatch and existing Mesaverde Formations. Please refer to the attached re-completion procedures</p>		
		<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> 04/05/2011 <b>By:</b> <u>Derek Quist</u>
<b>NAME (PLEASE PRINT)</b> Gina Becker	<b>PHONE NUMBER</b> 720 929-6086	<b>TITLE</b> Regulatory Analyst II
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/4/2011	



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43047504530000**

**Authorization: Board Cause No. 179-14.**

# Greater Natural Buttes Unit



**BONANZA 1023-6N1AS**  
**RE-COMPLETIONS PROCEDURE**

**DATE:1/18/2011**  
**AFE#:**  
**USER ID:JVN975** (Frac Invoices Only)

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

**SIGNATURE:**

**ENGINEERING MANAGER: JEFF DUFRESNE**

**SIGNATURE:**

**REMEMBER SAFETY FIRST!**

**Name:** Bonanza 1023-6N1AS  
**Location:** NWSW Sec. 6 10S 23E  
**Uintah County, UT**  
**Date:** 1/18/11

**ELEVATIONS:** 5144' GL 5159' KB

**TOTAL DEPTH:** 8790' **PBTD:** 8737'  
**SURFACE CASING:** 8 5/8", 28# J-55 LTC @ 1928'  
**PRODUCTION CASING:** 4 1/2", 11.6#, I-80 BTC @ 8782'  
 Marker Joint **6525-6545'**

**TUBULAR PROPERTIES:**

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

**TOPS:**

1125' Green River Top  
 1386' Bird's Nest Top  
 1753' Mahogany Top  
 4174' Wasatch Top  
 6523' Mesaverde Top

**BOTTOMS:**

6523' Wasatch Bottom  
 8790' Mesaverde Bottom (TD)

**T.O.C. @ 500'**

**GENERAL:**

- A minimum of **8** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Bakers RPM cased hole log dated 6/3/2010
- **5** fracturing stages required for coverage.
- Procedure calls for **6** CBP's (**8000** psi) .
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gpt (in pad and until 1.25 ppg ramp up is reached) and 10 gpt in all flushes except the final stage. Remember to pre-load the casing with scale inhibitor for the very first stage with 10 gpt.
- 30/50 mesh Ottawa sand, **Slickwater frac.**
- Maximum surface pressure **6200** psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.

- **Call flush at 0 PPG @ inline densimeters. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.**
- **If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing - over flush stage by 5 bbls (from top perf)**
- Service companies need to provide surface/production annulus pop-offs to be set for 500 psi for each frac.
- Pump 20/40 mesh **curable resin coated sand** last 5,000# of all frac stages
- Tubing Currently Landed @~7994'
- Originally completed on 7/12/2010

**Existing Perforations:**

Legal Well Name	Date	MD Top (ft)	MD Base (ft)	SPF	Stage
BONANZA 1023-6N1AS	7/12/2010	6,671.00	6,674.00	3	7
BONANZA 1023-6N1AS	7/12/2010	6,739.00	6,742.00	3	7
BONANZA 1023-6N1AS	7/12/2010	6,778.00	6,782.00	3	7
BONANZA 1023-6N1AS	7/12/2010	6,835.00	6,838.00	4	7
BONANZA 1023-6N1AS	7/12/2010	7,084.00	7,086.00	4	6
BONANZA 1023-6N1AS	7/12/2010	7,106.00	7,110.00	4	6
BONANZA 1023-6N1AS	7/12/2010	7,234.00	7,238.00	4	6
BONANZA 1023-6N1AS	7/12/2010	7,324.00	7,326.00	3	5
BONANZA 1023-6N1AS	7/12/2010	7,464.00	7,466.00	3	5
BONANZA 1023-6N1AS	7/12/2010	7,500.00	7,504.00	4	5
BONANZA 1023-6N1AS	7/12/2010	7,522.00	7,526.00	4	5
BONANZA 1023-6N1AS	7/12/2010	7,602.00	7,608.00	4	4
BONANZA 1023-6N1AS	7/12/2010	7,694.00	7,698.00	4	4
BONANZA 1023-6N1AS	7/12/2010	7,798.00	7,802.00	4	3
BONANZA 1023-6N1AS	7/12/2010	7,902.00	7,908.00	4	3
<b>EOT @ 7994'</b>					
BONANZA 1023-6N1AS	7/12/2010	8,020.00	8,022.00	4	2
BONANZA 1023-6N1AS	7/12/2010	8,086.00	8,088.00	4	2
BONANZA 1023-6N1AS	7/12/2010	8,112.00	8,114.00	4	2
BONANZA 1023-6N1AS	7/12/2010	8,152.00	8,156.00	4	2
BONANZA 1023-6N1AS	7/12/2010	8,293.00	8,297.00	4	1
BONANZA 1023-6N1AS	7/12/2010	8,344.00	8,350.00	4	1
<b>PBTD @ 8739'</b>					

**Relevant History:**

- Jul 2010 – Initial Completion – 7 slickwater stages in MVD; C/O to PBTD @ 8739'. Land tubing @ 8004'
- Sep 2010 – Slickline ran. Max TD @ 7911'. Could not get any deeper. Found scale.
- Oct 2010 – Slickline ran. Max TD @ 7910'. Could not get any deeper. Heavy trash on tubing.
- Nov 2010 – Repair mandrel type wellhead w/ slip type wellhead. Back off casing at 58' and replace with new 4 ½" csg. Workover plugged tubing. LD 5 jts. Land tubing at 7994'.
- Jan 2011 – Slickline ran. Stacked out @ 8718' (20 ft from bottom). Dropped spring.

**H2S History: No History**

**PROCEDURE: (If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work.)**

1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
2. If the tubing is below the proposed CBP depth, TOO H with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~7994'). Visually inspect for scale and consider replacing if needed. If the tubing is above the proposed CBP depth, RIH with tubing and tag for fill before TOO H.
3. If tbg looks ok consider running a gauge ring to 6513 (50' below proposed CBP). Otherwise P/U a mill and C/O to 6513 (50' below proposed CBP).
4. Set 8000 psi CBP at ~ 6463'. ND BOPs and NU frac valves. Test frac valves and casing to 1000 and 3500 psi for 15 minutes each and to 6200 psi for 30 minutes. Test 4-1/2 x 8-5/8" annulus to 200 psi for 15 minutes and check for communication to the production casing. As per standard operating procedure install steel blowdown line to reserve pit from 4-1/2" X 8-5/8" annulus with pressure relief valve in line. Pressure relief will be set to release at 500 psig. Lock **OPEN** the Braden head valve. Annulus will be monitored throughout stimulation. If release occurs, stimulation will be shut down. Well conditions will be assessed and actions taken as necessary to secure the well. UDOGM will be notified if a release to the annulus occurs.

5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

Zone	From	To	spf	# of shots
WASATCH	6229	6230	4	4
WASATCH	6346	6348	4	8
WASATCH	6414	6415	4	4
WASATCH	6427	6428	4	4
WASATCH	6432	6433	4	4

6. Breakdown perfs and establish injection rate (include scale inhibitor in fluid). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~6229' and trickle 250gal 15%HCL w/ scale inhibitor in flush .

7. Set 8000 psi CBP at ~6,113'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

Zone	From	To	spf	# of shots
WASATCH	5839	5840	3	3
WASATCH	5851	5852	3	3
WASATCH	5892	5894	3	6
WASATCH	5904	5905	3	3
WASATCH	5998	5999	3	3
WASATCH	6012	6013	3	3

8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~5839' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

9. Set 8000 psi CBP at ~5,789'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
------	------	----	-----	------------

WASATCH	5598	5599	4	4
WASATCH	5620	5621	4	4
WASATCH	5639	5640	4	4
WASATCH	5659	5660	4	4
WASATCH	5685	5686	4	4
WASATCH	5693	5694	4	4

10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~5598' trickle 250gal 15%HCL w/ scale inhibitor in flush.

11. Set 8000 psi CBP at ~5,548'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
WASATCH	5370	5371	4	4
WASATCH	5378	5379	4	4
WASATCH	5458	5460	4	8
WASATCH	5471	5473	4	8

12. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 4 on attached listing. Under-displace to ~5370' and trickle 250gal 15%HCL w/ scale inhibitor in flush.

13. Set 8000 psi CBP at ~5,320'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone	From	To	spf	# of shots
WASATCH	5078	5080	4	8
WASATCH	5232	5234	4	8
WASATCH	5270	5272	4	8

14. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 5 on attached listing. Under-displace to ~5078' and flush only with recycled water.

15. Set 8000 psi CBP at ~5,028'.

16. ND Frac Valves, NU and Test BOPs.

17. TIH with 3 7/8" bit, pump off sub, SN and tubing.

18. Drill plugs and clean out to PBTD. Shear off bit and land tubing at  $\pm 7990'$  unless indicated otherwise by the well's behavior. The well will be commingled at this time.

19. Clean out well with foam and/or swabbing unit until steady flow has been established from completion.

20. **Leave surface casing valve open.** Monitor and report any flow from surface casing. RDMO

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

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

NOTES:

**If using any chemicals for pickling tubing or H2S Scavenging, have MSDS for all chemicals prior to starting work**

Acid Pickling and H2S Procedures (If Required)

**\*\*PROCEDURE FOR PUMPING ACID DOWN TBG**

WHEN FINDING SCALE IN TUBING THAT IS ACID SOLUBLE, ENSURE THAT PLUNGER EQUIPMENT IS REMOVED AND ABLE TO PUMP DOWN TBG. INSTALL A 'T' IN PUMP LINE W/2" VALVE THAT NALCO CAN TIE INTO. HAVE 60 BBL 2% KCL MIXED W/ 10-15 GAL H2S SCAVENGER IN RIG FLAT TANK. (WE USED THE RIG FLAT TANK FOR MIXING CHEMICAL SO WE DIDN'T HAVE THE CHEMICAL IN ALL FLUIDS ON LOCATION, ONLY WHAT WE NEEDED TO PUMP DOWN HOLE)

1. PUMP 5-10 BBL 2% KCL DOWN TBG (NALCO CANNOT PUMP AGAINST PRESSURE)
2. NALCO WILL PUMP 3 DRUMS HCL (31%) INTO PUMP LINE.
3. FLUSH BEHIND ACID WITH 10-15 BBL 2% KCL
4. PUMP 2—30 BBL 2% W/ H2S SCAVENGER DOWN TBG.
5. PUMP REMAINDER OF 2% W/ H2S SCAVENGER DOWN CASING AND SHUT WELL IN FOR MINIMUM OF 2 HRS.
6. OVER DISPLACE DOWN TBG AND CSG TO FLUSH ACID AND SCAVENGER INTO FORMATION
7. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

**\*\* PROCEDURE FOR PUMPING H2S SCAVENGER WITHOUT ACID**

PRIOR TO RIG MOVING ON OR AS RIG PULLS ONTO LOCATION. TEST CASING, TUBING AND SEPARATOR FOR H2S. IF FOUND MAKE SURE THAT PLUNGER SYSTEM IS REMOVED (IT IS POSSIBLE TO PUMP AROUND PLUNGERS BUT SOME WILL HAVE A STANDING VALVE IN SEATING NIPPLE).

1. MIX 10-15 GAL H2S SCAVENGER WITH 60-100 BBL 2% KCL IN RIG FLAT TANK.
2. PUMP 25 BBL MIXTURE DOWN TUBING AND REST DOWN CASING. SHUT WELL IN FOR 2 HOURS.
3. IF WELL HAS PRESSURE AFTER 2 HOURS – RETEST CASING AND TUBING FOR H2S.
4. FLUSH TUBING AND CASING PUSHING H2S SCAVENGER INTO FORMATION.
5. MONITOR TUBING FOR FLOW AND CASING FOR H2S NOW AS POOH W/ TUBING.

\*\* As per APC standard operating procedure, APC foreman will verify ALL volumes pumped and record on APC Volume Report Form

Key Contact information

Completion Engineer

Michael Sollee: 832-859-0515, 720-929-6057

Production Engineer

Kyle Bohannon: 804-512-1985, 435-781-7068

Completion Supervisor Foreman

Jeff Samuels: 435-828-6515, 435-781-7046

Completion Manager

Jeff Dufresne: 720-929-6281, 303-241-8428

Vernal Main Office

435-789-3342

Emergency Contact Information—Call 911

Vernal Regional Hospital Emergency: 435-789-3342

Police: (435) 789-5835

Fire: 435-789-4222



**Name** Bonanza 1023-6N1AS  
**Perforation and CBP Summary**

Stage	Zones	Perforations		SPF	Holes	Fracture Coverage		
		Top, ft	Bottom, ft					
1	WASATCH	6229	6230	4	4	6215	to	6237
	WASATCH	6346	6348	4	8	6342.5	to	6354
	WASATCH	6414	6415	4	4	6410.5	to	6442
	WASATCH	6427	6428	4	4	6410.5	to	6442
	WASATCH	6432	6433	4	4	6410.5	to	6442
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	6,113	
2	WASATCH	5839	5840	3	3	5837.5	to	5843.5
	WASATCH	5851	5852	3	3	5850	to	5854
	WASATCH	5892	5894	3	6	5890.5	to	5897
	WASATCH	5904	5905	3	3	5898.5	to	5910.5
	WASATCH	5998	5999	3	3	5991	to	6009.5
	WASATCH	6012	6013	3	3	6011.5	to	6014
	WASATCH							
	# of Perfs/stage				21	CBP DEPTH	5,789	
3	WASATCH	5598	5599	4	4	5595.5	to	5627.5
	WASATCH	5620	5621	4	4	5635	to	5666.5
	WASATCH	5639	5640	4	4	5635	to	5666.5
	WASATCH	5659	5660	4	4	5667.5	to	5690.5
	WASATCH	5685	5686	4	4	5667.5	to	5690.5
	WASATCH	5693	5694	4	4	5692	to	5696
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	5,548	
4	WASATCH	5370	5371	4	4	5369	to	5371.5
	WASATCH	5378	5379	4	4	5376.5	to	5380
	WASATCH	5458	5460	4	8	5454	to	5463
	WASATCH	5471	5473	4	8	5468	to	5475.5
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	5,320	
5	WASATCH	5078	5080	4	8	5074	to	5086
	WASATCH	5232	5234	4	8	5229	to	5236
	WASATCH	5270	5272	4	8	5268	to	5273.5
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				24	CBP DEPTH	5,028	
	Totals				117			

	<b>MD</b>	<b>TVD</b>	<b>INC</b>		<b>MD</b>	<b>TVD</b>	<b>INC</b>
	0.00	0.00	0.00		4679.00	4480.40	24.63
	172.00	171.99	0.81		4770.00	4563.21	24.38
	268.00	267.99	0.63		4861.00	4645.84	25.13
	364.00	363.97	1.50		4951.00	4727.01	26.06
	459.00	458.93	1.75		5042.00	4808.61	26.50
	554.00	553.89	1.69		5133.00	4890.38	25.56
	650.00	649.84	1.75		5223.00	4971.69	25.19
	745.00	744.79	2.25		5314.00	5054.54	23.69
	937.00	936.63	2.38		5405.00	5138.47	21.75
	1128.00	1127.49	2.06		5495.00	5222.68	19.56
	1223.00	1222.42	2.31		5586.00	5308.56	19.06
	1319.00	1318.34	2.50		5677.00	5394.98	17.44
	1415.00	1414.24	2.69		5767.00	5481.30	15.44
	1511.00	1510.13	2.88		5858.00	5569.12	14.94
	1606.00	1605.02	2.44		5949.00	5657.36	13.35
	1702.00	1700.93	2.50		6040.00	5746.07	12.38
	1797.00	1795.85	2.25		6130.00	5834.19	11.06
	1901.00	1899.78	2.19		6221.00	5923.73	9.50
	1960.00	1958.74	2.00		6311.00	6012.77	7.25
	2051.00	2049.61	4.00		6402.00	6103.08	6.81
	2141.00	2139.17	7.13		6493.00	6193.51	6.06
	2232.00	2229.22	9.44		6583.00	6283.14	4.31
	2323.00	2318.65	11.81		6674.00	6373.95	3.00
	2413.00	2406.61	12.69		6764.00	6463.88	1.56
	2504.00	2495.22	13.63		6855.00	6554.87	0.69
	2595.00	2583.18	16.06		6946.00	6645.86	0.63
	2686.00	2670.03	18.63		7036.00	6735.85	1.56
	2776.00	2754.28	22.50		7127.00	6826.82	1.00
	2867.00	2837.57	25.00		7218.00	6917.81	1.31
	2958.00	2919.60	26.30		7308.00	7007.75	2.68
	3048.00	3000.60	25.38		7399.00	7098.66	2.50
	3139.00	3082.67	25.81		7490.00	7189.59	1.94
	3230.00	3164.74	25.38		7580.00	7279.54	1.81
	3320.00	3245.84	26.00		7671.00	7370.50	1.44
	3411.00	3327.37	26.75		7762.00	7461.48	1.13
	3502.00	3409.29	24.86		7853.00	7552.46	1.19
	3592.00	3491.03	24.63		7943.00	7642.45	1.00
	3683.00	3573.77	24.56		8034.00	7733.44	0.50
	3773.00	3655.63	24.56		8125.00	7824.43	0.75
	3864.00	3738.59	24.00		8216.00	7915.42	1.19
	3954.00	3820.36	25.38		8306.00	8005.40	1.31
	4045.00	3902.54	25.47		8397.00	8096.38	1.19
	4136.00	3984.92	24.81		8488.00	8187.36	1.19
	4226.00	4067.32	22.63		8578.00	8277.34	1.06
	4317.00	4151.33	22.56		8669.00	8368.32	1.50
	4408.00	4234.80	24.38		8740.00	8439.29	1.78
	4498.00	4316.57	25.00		8790.00	8489.26	1.78
	4589.00	4398.88	25.50				

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS	
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 7/9/2011	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER: <input style="width: 50px;" type="text"/>	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. THE OPERATOR HAS PERFORMED THE RECOMPLETION ON THE SUBJECT WELL. THE OPERATOR HAS RECOMPLETED THE WASATCH FORMATION. THE OPERATOR HAS COMMINGLED THE NEWLY WASATCH FORMATION WITH THE EXISTING MESAVERDE FORMATION. THE SUBJECT WELL WAS RETURNED BACK TO PRODUCTION ON 07/09/2011 AT 3:15 PM. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.		
<b>NAME (PLEASE PRINT)</b> Sheila Wopsock		<b>PHONE NUMBER</b> 435 781-7024
<b>SIGNATURE</b> N/A		<b>TITLE</b> Regulatory Analyst  <b>DATE</b> 7/11/2011

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

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No. BONANZA 1023-6N1AS

9. API Well No. 43-047-50453

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

17. Elevations (DF, KB, RT, GL)\* 5144 GL

14. Date Spudded 04/07/2010 15. Date T.D. Reached 05/29/2010 16. Date Completed  D & A  Ready to Prod. 07/09/2011

18. Total Depth: MD 8790 TVD 8489 19. Plug Back T.D.: MD 8738 TVD 8437 20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR/CCL/CBL-RPM *Original Log* 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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7		40		28			
11.000	8.625 IJ-55	28.0		1927		525		0	
7.875	4.500 I-80	11.6		8782		1023		500	

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	7998							

25. Producing Intervals 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WASATCH	5078	6433	5078 TO 6433	0.360	117	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
5078 TO 6433	PUMP 3,268 BBLs SLICK H2O 74,468 LBS SAND

**RECEIVED**  
SEP 07 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
07/09/2011	07/28/2011	24	▶	0.0	932.0	170.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	SI 140	637.0	▶	0	932	170		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.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		▶						

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	1125				
BIRD'S NEST	1386				
MAHOGANY	1753				
WASATCH	4174	6282			
MESAVERDE	6282	8790			

32. Additional remarks (include plugging procedure):

Attached is the chronological recompletion history and perforation report.

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 #116151 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 08/25/2011

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 fraudulent 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 1023-6N1AS RED		Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH		Site: BONANZA 1023-6L PAD	Rig Name No: MILES 2/2, SWABBCO 6/6
Event: RECOMPL/RESEREVEADD		Start Date: 6/23/2011	End Date: 7/7/2011
Active Datum: RKB @5,158.00ft (above Mean Sea Level)		UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/NW/0/742.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/23/2011	7:00 - 7:15	0.25	REE	48		P		JSA= SCAN TECH SAFETY
	7:15 - 17:00	9.75	REE	30		P		FWP= 150 PSI CONTROL WELL W/ TMAC ND WELLHEAD NU BOPS RU FLOOR & TUBING EQUIP UNLAND TUB LD HNGR RU SCAN TECH POOH W/ 253 JNTS 138 YB GOOD JNTS 115 BAD JNTS (OF THOSE BAD JNTS 45 WAS INT SCALE TO BE CLEANED OUT BY B&C) RD SCANNERS RU W/L PU RIH W/ GUAGE RNG TO 6550' POOH PU 10K CBP RIH SET @ 6463' DUMP BAIL 4 SKS CEM ON CBP FILL HOLE W/ TMAC TEST TO 500# RD FLOOR & TUBING EQUIP ND BOPS NU W/H RD RIG PREP TO MOVE IN AM SIW SDFN
6/30/2011	6:45 - 7:00	0.25	COMP	33	C	P		LOCK SURFACE CSG VALVE OPEN. FILL SURFACE CSG. PSI TEST AS PER PROCEDURE. PSI TEST T/ 1000 PSI. HOLD FOR 15 MIN. LOST 6 PSI. PSI TEST T/ 3500 PSI. HOLD FOR 15 MIN. LOST 18 PSI. 1ST TEST. PSI T/ 6200 PSI. HOLD FOR 30 MIN. LOST 44 PSI. GOOD TEST. BLEED OFF PSI. SWI. MOVE T/ NEXT WELL.
7/1/2011	7:00 - 18:00	11.00	COMP	37	B	P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER STG 1 PERF DESIGN. SWIFN.
7/2/2011	6:45 - 7:00	0.25	COMP	48		P		HSM CHEMICALS AND PP&E

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS RED		Spud Conductor: 4/7/2010		Spud Date: 4/9/2010	
Project: UTAH-UINTAH		Site: BONANZA 1023-6L PAD		Rig Name No: MILES 2/2, SWABBCO 6/6	
Event: RECOMPL/RESEREVEADD		Start Date: 6/23/2011		End Date: 7/7/2011	
Active Datum: RKB @5,158.00ft (above Mean Sea Level)		UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 7:12	0.20	COMP	36	B	P		<p>FRAC STG 1)WHP 184 PSI, BRK 5226 PSI @ 4.7 BPM. ISIP 3735 PSI, FG 1.0 PUMP 100 BBLS @ 28.5 BPM @ 5554 PSI = 60% HOLES OPEN. ISIP 2145 PSI, FG .78, NPI -1586 PSI. MP 6033 PSI, MR 30.5 BPM, AP 5551 PSI, AR 26.8 BPM, PMP 667 BBLS SW &amp; 11,770 LBS OF 30/50 SND. NO RESIN IN THIS STG. TOTAL PROP 11,770 LBS SWI X-OVER TO W L. (( DIDNT GET ALL THE SAND IN THIS STG</p> <p>PERF STG 2)PU 4 1/2 8K HAL CBP &amp; 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6229' P/U PERF AS PER PERF DESIGN. POOH. X-OVER FOR FRAC CREW</p> <p>FRAC STG 2)WHP 142 PSI, BRK 1352 PSI @ 4.7 BPM. ISIP 789 PSI, FG .56 PUMP 100 BBLS @ 50.2 BPM @ 4033 PSI = 88% HOLES OPEN. ISIP 1569 PSI, FG .70, NPI 780 PSI. MP 4628 PSI, MR 50.6 BPM, AP 4075 PSI, AR 50.1 BPM, PMP 647 BBLS SW &amp; 14,051 LBS OF 30/50 SND &amp; 2090 LBS OF 20/40 RESIN SND. TOTAL PROP 16,141 LBS SWI X-OVER TO W L</p> <p>PERF STG 3)PU 4 1/2 8K HAL CBP &amp; 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 5789' P/U PERF AS PER PERF DESIGN. POOH.</p> <p>FRAC STG 3)WHP 125 PSI, BRK 2659 PSI @ 4.7 BPM. ISIP 1748 PSI, FG .75. PUMP 100 BBLS @ 48 BPM @ 5013 PSI = 71% HOLES OPEN. ISIP 1370 PSI, FG .68, NPI -378 PSI. MP 5739 PSI, MR 50.5 BPM, AP 4428 PSI, AR 49.8 BPM, PMP 635 BBLS SW &amp; 12,512 LBS OF 30/50 SND &amp; 2905 LBS OF 20/40 RESIN SND. TOTAL PROP 15,417 LBS. SWI. X-OVER FOR WL.</p> <p>PERF STG 4)PU 4 1/2 8K HAL CBP &amp; 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE.90 DEG PHASING. RIH SET CBP @ 5724' P/U PERF AS PER STG 3 DESIGN. POOH. X-OVER FOR FRAC CREW.</p> <p>FRAC STG 4)WHP 138 PSI, BRK 2531 PSI @ 4.6 BPM. ISIP 1992 PSI, FG .81. PUMP 100 BBLS @ 42.4 BPM @ 5138 PSI = 62% HOLES OPEN. ISIP 1853 PSI, FG .78, NPI -139 PSI. MP 5426 PSI, MR 50.3 BPM, AP 5156 PSI, AR 46 BPM, PMP 653 BBLS SW &amp; 13,285 LBS OF 30/50 SND &amp; 2470 LBS OF 20/40 RESIN SND. TOTAL PROP 15,755 LBS. SWIFWE.</p>
7/5/2011	7:00 - 7:15	0.25	COMP	48		P		HSM,

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS RED	Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH	Site: BONANZA 1023-6L PAD	Rig Name No: MILES 2/2, SWABBCO 6/6
Event: RECOMPL/RESEREVEADD	Start Date: 6/23/2011	End Date: 7/7/2011
Active Datum: RKB @5,158.00ft (above Mean Sea Level)		UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 7:15	0.00	COMP	36	E	P		<p>PERF STG #5] P/U RIH W/ HALIBURTON 8K CBP &amp; PERF GUN, SET CBP @=5,320', PERF WASATCH USING 3-1/8 EXPEND, 23 GRM, 0.36" HOLE. AS PERSAY IN PROCEDURE, X OVER TO FRAC CREW</p> <p>FRAC STG #5] WHP=799#, BRK DN PERFS=2,224#, @=10 BPM, INJ RT=42.2, INJ PSI=4,994#, ISIP=1,570#, FG=.74, PUMP'D 684 BBLs SLK WTR W/ 12,535# 30/50 MESH W/ 2,850# RESIN COAT IN TAIL W/ 15,385# TOTAL PROP PUMP'D, ISIP=1,465#, FG=.72, AR=47.5, AP=4,592#, MR=50.2, MP=5,287#, NPI=-105#, 14/24 CALC PERFS OPEN 60%. X OVER TO WIRE LINE</p> <p>P/U RIH W/ HALIBURTON 8K CBP SET FOR TOP KILL @=5,025</p> <p>3,268 TOTAL BBLs 74,468# TOTAL SAND 483 GALS SCALE INHIB 68 GALS BIO MIRU</p>
7/7/2011	7:00 - 7:30	0.50	COMP	48		P		MIRU, NDWH, NU BOP'S, TEST BOP'S, PU SLIDING SLEEVE,BIT, BIT SUB, TIH WITH 20 JTS TBG, SWIFN
	7:30 - 7:30	0.00	COMP	44		P		DRILL PLUGS
7/8/2011	7:00 - 7:30	0.50	COMP	48		P		TIH WITH 158 JTS, 5024', TAG PLUG# 1, DRILL 1-5 PLUGS, TAG CEMENT AT 6413", POOH TO 6115.21', 193 JTS, LAND TBG, CALL DELSCO TO PULL SLEEVE TUIRN TO FBC .RTP
	7:30 - 7:30	0.00	COMP	44		P		<p>PLUG# 1 5024' 0' SAND 5 MIN 100# PLUG# 2 5297' 15' SAND 15 MIN 0# KICK PLUG# 3 5503' 40' SAND 20 MIN 0# KICK PLUG# 4 5730' 40' SAND 10 MIN 100# KICK PLUG# 5 6113' 30' SAND 15 MIN 0# KICK</p> <p>PBTD 6418' BTM PERF 6406' TBG 193 JTS 6115.21' HANGER .83 SLIDING SLEEVE ASSY 2.10' EOT 6133.14' CALL CDC JIM 3:55 PM FRAC WTR 3268 BBLs RCVD 500 BBLs LTR 2768 BBLs</p>
7/9/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 0#, TP 0#, OPEN/64" CK, 0 BWPH, - SAND, - GAS TTL BBLs RECOVERED: 500 BBLs LEFT TO RECOVER: 2768
7/10/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 1200#, TP 0#, OPEN/64" CK, 0 BWPH, - SAND, - GAS TTL BBLs RECOVERED: 760 BBLs LEFT TO RECOVER: 2508
7/11/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 1400#, TP 0#, OPEN/64" CK, 0 BWPH, - SAND, - GAS TTL BBLs RECOVERED: 960 BBLs LEFT TO RECOVER: 2308
7/12/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 500#, TP 175#, 32/64" CK, 5 BWPH, TRACE SAND, - GAS TTL BBLs RECOVERED: 1279 BBLs LEFT TO RECOVER: 1989

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS RED		Spud Conductor: 4/7/2010		Spud Date: 4/9/2010	
Project: UTAH-UINTAH			Site: BONANZA 1023-6L PAD		Rig Name No: MILES 2/2, SWABBCO 6/6
Event: RECOMPL/RESEREVEADD			Start Date: 6/23/2011		End Date: 7/7/2011
Active Datum: RKB @5,158.00ft (above Mean Sea Level)			UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/NW/0/742.00/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/13/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 500#, TP 200#, 30/64" CK, 5 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 1399 BBLS LEFT TO RECOVER: 1869
7/14/2011	7:00 -			33	A			7 AM FLBK REPORT: CP 450#, TP 250#, 30/64" CK, 4 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 1511 BBLS LEFT TO RECOVER: 1757
7/22/2011	7:00 - 7:30	0.50	COMP	48		P		TRIPPING TBG
	7:30 - 7:30	0.00	COMP	44		P		MIRU, RU DELSCO, PULL PLUG, RUN SLIDING SLEEVE, NDWH, NU BOP'S, TIH 9 JTS, TAG CEMENT TOP, DRILL CEMENT, CBP,6463' 200# KICK , TIH 268 JTS TO 8585.33', BREAK CIRC WITH FOAM UNIT, POOH LAY DWN 16 JTS TO 7998.33' LAND TBG, ND BOP'S, NUWH, CALL DELSCO TO PULL SLIDING SLEEVE, SET PLUG, TURN TO PROD.RDMO TO BON 1023-6N1CS JTS           252 JTS L-80           7981.27' KB   15.00' SLIDING SLEEVE                           2.10 EOT   7998.33' PBD 8585.33'                           BTM PERF 8350.00' CDC JR 5:30 PM

## 1 General

### 1.1 Customer Information

Company	US ROCKIES REGION		
Representative			
Address			

### 1.2 Well Information

Well	BONANZA 1023-6N1AS RED		
Common Name	BONANZA 1023-6N1AS		
Well Name	BONANZA 1023-6N1AS	Wellbore No.	OH
Report No.	1	Report Date	6/22/2011
Project	UTAH-UINTAH	Site	BONANZA 1023-6L PAD
Rig Name/No.		Event	RECOMPL/RESERVEADD
Start Date	6/23/2011	End Date	7/7/2011
Spud Date	4/9/2010	Active Datum	RKB @5,158.00ft (above Mean Sea Level)
UWI	NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0		

### 1.3 General

Contractor		Job Method	PERFORATE	Supervisor	
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

### 1.4 Initial Conditions

Fluid Type		Fluid Density		Gross Interval	5,078.0 (ft)-6,433.0 (ft)	Start Date/Time	6/28/2011 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	24	End Date/Time	6/28/2011 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	117	Net Perforation Interval	31.00 (ft)
Hydrostatic Press		Press Difference		Avg Shot Density	3.77 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

### 1.5 Summary

## 2 Intervals

### 2.1 Perforated Interval

Date	Formation/Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/Add. Shot	Diameter (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			5,078.0	5,080.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO	
														N	

2.1 Perforated Interval (Continued)

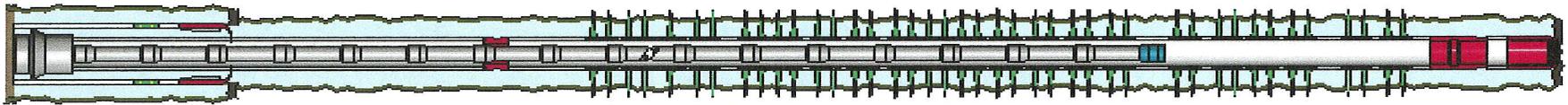
Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			5,232.0	5,234.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,270.0	5,272.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,370.0	5,371.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,378.0	5,379.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,458.0	5,460.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,471.0	5,473.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,598.0	5,599.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,620.0	5,621.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,639.0	5,640.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,659.0	5,660.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,685.0	5,686.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,693.0	5,694.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,839.0	5,840.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,851.0	5,852.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,892.0	5,894.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,904.0	5,905.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			5,998.0	5,999.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			6,012.0	6,013.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			6,229.0	6,230.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			6,346.0	6,348.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			6,414.0	6,415.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)	MD Base (ft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			6,427.0	6,428.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			6,432.0	6,433.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic



**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				5/11/2012	
<b>Comments:</b> Please see attachment with list of Wells in the Ponderosa Unit. <u>W5MVD</u>							5/30/2012

**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	
<b>Comments:</b>							

**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	
<b>Comments:</b>							

**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)

**RECEIVED**

**MAY 21 2012**

Div. of Oil, Gas & Mining

Cara Mahler

Name (Please Print)

Signature

REGULATORY ANALYST

5/21/2012

Title

Date

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	SESW			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	SESW	D		1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F3BS	08	100S	230E	4304751136	18227			1	GW	P	SESW	D		1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F4AS	08	100S	230E	4304751137	18224			1	GW	P	SESW	D		1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8F4DS	08	100S	230E	4304751138	18225			1	GW	P	SESW	D		1	WSMVD	P	UTU 37355	N2995
BONANZA 1023-8J2CS	08	100S	230E	4304751139	18226			1	GW	P	SESW	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	P	NENW	D			P	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 6

**ENTITY ACTION FORM**

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

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750454	BONANZA 1023-6N1CS		NWSW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<i>A</i>	99999	<i>17580</i>	4/7/2010		<i>4/28/10</i>		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 4/7/2010 AT 8:00 HRS. <i>BHL=SESU —</i>							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750453	BONANZA 1023-6N1AS		NWSW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
<i>A</i>	99999	<i>17581</i>	4/7/2010		<i>4/28/10</i>		
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 4/7/2010 AT 11:00 HRS. <i>BHL=SESU —</i>							

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)

**RECEIVED**

APR 08 2010

ANDY LYTLE

Name (Please Print)

Signature   
REGULATORY ANALYST

4/8/2010

Title

Date

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> PONDEROSA
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS	
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6511	<b>9. FIELD and POOL or WILDCAT:</b> MATHEW BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/24/2013  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION  <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	
		<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text" value="Production Enhancement"/>
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <p style="text-align: center;">The operator conducted the following workover/wellbore cleanout on the subject well on 10/24/2013. Please see the attached chronological well history for details. Thank you.</p> <div style="text-align: right; margin-top: 20px;"> <p><b>Accepted by the Utah Division of Oil, Gas and Mining</b></p> <p><b>FOR RECORD ONLY</b></p> <p>December 05, 2013</p> </div>		
<b>NAME (PLEASE PRINT)</b> Kay E. Kelly	<b>PHONE NUMBER</b> 720 929 6582	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 12/4/2013	

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS RED			Spud Conductor: 4/7/2010			Spud Date: 4/9/2010		
Project: UTAH-UINTAH			Site: BONANZA 1023-6L PAD			Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3		
Event: WELL WORK EXPENSE			Start Date: 10/22/2013			End Date: 10/24/2013		
Active Datum: RKB @5,158.00usft (above Mean Sea Level)			UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
10/22/2013	7:00 - 8:00	1.00	MAINT	30	A	P		MIRU.
	8:00 - 8:15	0.25	MAINT	48		P		HSM, REVIEW SCANNING TBG
	8:15 - 9:00	0.75	MAINT	30	F	P		SICP. 620 PSI. SITP. 620 PSI. BLEW TBG DWN, PUMP 30 BBLS DWN TBG, TBG NOT PLUGGED, BLEW CSG DWN, PUMP 30 BBLS DWN CSG, ND WH, PU ON TBG, TBG FREE, NU BOP'S, RU FLOOR & TBG EQUIPMENT, UN-LAND TBG HANGER, LD 1 JNT.
	9:00 - 10:00	1.00	MAINT	31	I	P		PU & RIH 5 JTS. TBG F/ TRAILER, TAG SCALE @ 8072', BTM PERF @ 8350', (278') PERFS COVERED UP), POOH 5 JTS.
	10:00 - 15:00	5.00	MAINT	45	A	P		RU SCAN TECH, POOH & SCAN 251 JTS. 2-3/8" L-80 TBG, LD 93 JTS. DUE TO INT & EXT SCALE W/ PITTING & WALL LOSS, FOUND BUMPER STRING STUCK IN XN, RD SCAN TECH.
	15:00 - 17:00	2.00	MAINT	31	I	P		PU 3-7/8" SLAUGH LONG NECK MILL, FLOAT SUB, TALLY & RIH 158 JTS. EOT @ 5.023', SWI, SDFN.
10/23/2013	7:00 - 7:15	0.25	MAINT	48		P		HSM, REVIEW AIR FOAM UNIT
	7:15 - 9:30	2.25	MAINT	31	I	P		SICP. 535 PSI. TP. 0 PSI. FINISH RIH TBG F/ TRAILER, TAG SCALE @ 8006' W/ 252 JTS.
	9:30 - 10:00	0.50	MAINT	47	A	P		NU PWR SWVL, RU TECH FOAM.
	10:00 - 11:00	1.00	MAINT	31	H	P		EST CIRC IN 60 MINS, KILL TBG, INSTALL TSF.
	11:00 - 13:00	2.00	MAINT	44	D	P		C/O SCALE F/ 8006' TO 8227' ( 221') FELL THROUGH, RIH TBG TO 8577', BTM PERF @ 8350', ( 227' RAT HOLE), CIRC HOLE CLEAN.
	13:00 - 14:30	1.50	MAINT	31	H	P		CIRC WELL CLEAN, RD TECH FOAM, KILL TBG, ND PWR SWVL.
	14:30 - 17:00	2.50	MAINT	31	I	P		POOH & LD 21 JTS. 2-3/8" L-80 TBG ON TRAILER, REMOVE TSF, POOH 249 JTS. 2-3/8" L-80 TBG, LD 3-7/8" LONG-NECK SLAUGH MILL & FLOAT SUB, SWI, SDFN.
10/24/2013	7:00 - 7:15	0.25	MAINT	48		P		HSM, REVIEW JSA # 3

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6N1AS RED		Spud Conductor: 4/7/2010	Spud Date: 4/9/2010
Project: UTAH-UINTAH		Site: BONANZA 1023-6L PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: WELL WORK EXPENSE		Start Date: 10/22/2013	End Date: 10/24/2013
Active Datum: RKB @5,158.00usft (above Mean Sea Level)		UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 12:00	4.75	MAINT	31	I	P		<p>SICP. 590 PSI. BLEW CSG DWN, CONTROL CSG W/ 30 BBLs, PU 1.875 X 1.78 LSN, RIH 125 JTS. 2-3/8" L-80 TBG, RU SWAB EQUIPMENT, RIH W/ 1.910 BROACH &amp; BROACH TBG TO SN, GOOD, POOH SWAB EQUIPMENT, RIH 125 JTS. 2-3/8" L-80 TBG, LAND TBG W/ 250 JTS. 2-3/8" L-80 TBG, EOT @ 7940.93', RU SWAB EQUIPMENT, RIH W/ 1.910 BROACH &amp; BROACH TBG TO SN, GOOD, POOH &amp; RD SWAB EQUIPMENT, RD FLOOR &amp; TBG EQUIPMENT, ND BOP'S, NU WH, CLEAN LOCATION, RDMO. MOVE TO THE BONANZA 1023-6H1BS.</p> <p style="text-align: right;">TBG LANDING DETAIL:</p> <p>KB----- -----15 HANGER----- -----1.0 250 JTS. 2-3/8" L-80 TBG-----7923.59 1.875 X 1.78 LSN-----1.34 EOT @-----79 40.93 WLTR. 125 BBLs. TOP PERF @ 5,078' BTM PERF @ 8,350' C/O W/ FOAM UNIT TO 8,577' PBTD @ 8,585'</p>

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419
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<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> PONDEROSA
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<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS
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<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047504530000
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<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6454	<b>9. FIELD and POOL or WILDCAT:</b> WESTERN BUTTES
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<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH
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11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>8/17/2016</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> <b>PLUG AND ABANDON</b> <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

Kerr-McGee Oil & Gas Onshore, LP respectfully requests to plug and abandon the BONANZA 1023-6N1AS well. Please see the attached procedure for details. Thank you.

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

Date: August 25, 2016

By: *Derek Duff*

<b>NAME (PLEASE PRINT)</b> Candice Barber	<b>PHONE NUMBER</b> 435 781-9749	<b>TITLE</b> HSE Representative
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/17/2016	

BONANZA 1023-6N1AS  
1570' FSL & 742' FWL  
NWSW SEC. 6, T10S, R23E  
UINTAH UT

KBE: 5156' API NUMBER: 4304750453  
GLE: 5144' LEASE NUMBER: UTU38419  
TD: 8790' LAT/LONG: 39.974969/-109.376169  
PBDT: 8737'

CASING : 11' hole  
SURFACE 8.625" 28# J-55 @ 1928'

PRODUCTION 7.875" hole  
4.5" 11.6# I-80 @ 8768'  
Est. TOC @ 350' CBL

PERFORATIONS: WASATCH-MESAVERDE TOP-BOTTOM 6669'-8348'

TUBING: 2.375" 4.7# L-80 tbg at 6878'

Tubular/Borehole	ID	Drift inches	Collapse psi	Burst psi	Capacities		
	inches				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg	1.995	1.901	8100	7700	0.1624	0.02171	0.00387
2.375" 4.7# P-110 tbg	1.995	1.901	13800	15400	0.1624	0.02171	0.00387
2.375" 4.7# L-80 tbg	1.995	1.901	11780	11200	0.1624	0.02171	0.00387
4.5" 11.6# I-80 csg	4	3.875	6350	7780	0.65282	0.08727	0.01554
8.625" 28# J-55 csg	8.017	7.892	1880	3390	2.6223	0.35055	0.06244

Annular Capacities	Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" tbg. X 4.5" csg	0.42272	0.05651	0.01006
4.5" csg. X 8.625" csg	1.79607	0.2401	0.04276
4.5" csg X 7.875 borehole	1.70406	0.2278	0.04057

#### GEOLOGIC INFORMATION:

Formation	Depth to top, ft.
Uinta	Surface
Top Green River	996'
Top Mahogany	1854'
Base Parachute	2691'
Top Wasatch	4305'
Top Mesaverde	6555'

<http://digitallibrary.utah.gov/awweb/awarchive?type=file&item=55737>

BMSW Elevation ~2016' MSL  
BMSW Depth ~3140'

## **BONANZA 1023-6N1AS PLUG & ABANDONMENT PROCEDURE**

### **GENERAL**

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- BLOW DOWN BRADEN HEAD AND SURFACE CASING AS NEEDED AS PER SOP.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, 15.8ppg, YIELD 1.145 CUFT/SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESPONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME.
- TREATED FRESH WATER WILL BE PLACED BETWEEN ALL PLUGS INSTEAD OF BRINE.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDES. PREMIX 5 GALLONS PER 100 BBLS FLUID AND IS TO BE PLACED BETWEEN ALL PLUGS.
- NOTIFY APPROPRIATE AGENCY 48 HOURS BEFORE MOVING ON LOCATION.

PERTINENT WELL HISTORY: s.n. @ 6891'

### **PROCEDURE**

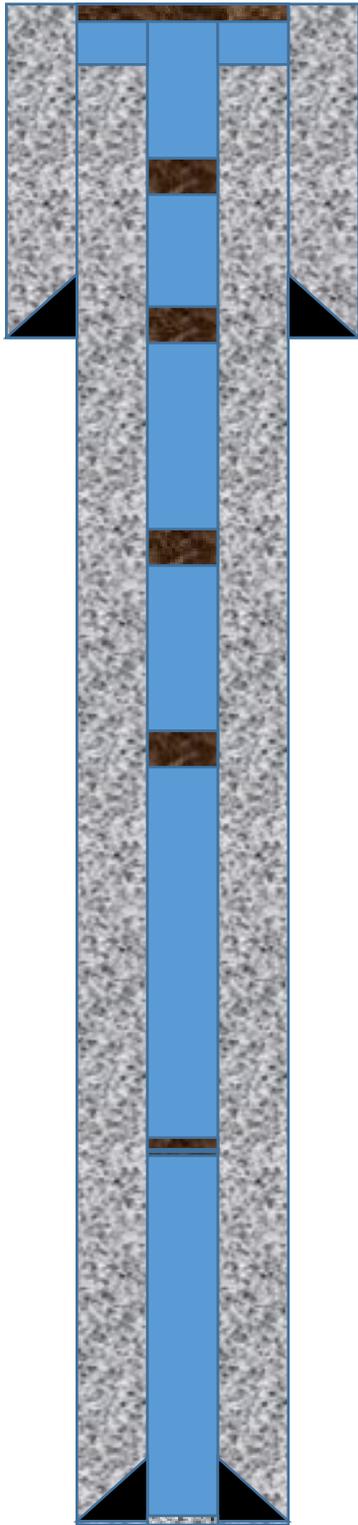
**Note:** Approx. 105 SXS Class "G" cement needed for procedure & (1) 4.5" CIBP

**Note: YES GYRO ON RECORD.** (IF GYRO NEEDED, A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE).

1. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.
2. POOH W/ TBG & L/D SAME. RU WIRELINE AND MAKE A GAUGE RING RUN TO CHECK FOR FILL PER FOREMAN DISCRETION.
3. ISOLATE PERFORATIONS (8348'-6669'): RIH ON WIRELINE OR TUBING W/ 4.5" CIBP. SET @ ~6619', (50' above top perf at 6669'). RELEASE CIBP, PUH 10', CIRC ENTIRE HOLE W/ TREATED FRESH WATER AND PRESSURE TEST CASING. SET A 105FT BALANCED CMT PLUG F/ 6619' to 6514'(8 SXS, 9.16 FT3, 1.64 BBLS).
4. PROTECT WASATCH TOP (4305'): PUH WITH TUBING AND PUMP A MINIMUM OF (210FT) CMT F/ 4305' to 4095' (16 SXS, 18.32 FT3, 3.27 BBLS).
5. PROTECT BMSW (3140'): PUH WITH TUBING AND PUMP A MINIMUM OF (210FT) CMT F/ 3245' to 3035' (16 SXS, 18.32 FT3, 3.27 BBLS).
6. PROTECT MAHOGANY BASE AND CASING SHOE (1854', 1928'): PUH WITH TUBING AND PUMP A MINIMUM OF (250FT) CMT F/ 1990' to 1740' (19 SXS, 21.76 FT3, 3.88 BBLS).
7. PROTECT GREEN RIVER (996'): PUH WITH TUBING AND PUMP A MINIMUM OF (210FT) CMT F/ 1101' to 891' (16 SXS, 18.32 FT3, 3.27 BBLS).
8. PROTECT SURFACE (102'): PUH WITH TUBING AND PUMP A MINIMUM OF (105 FT) CMT F/ 105'-0' (8 SXS, 9.16 FT3, 1.64 BBLS). POOH AND RUN 1 INCH TUBING DOWN THE PRODUCTION/SURFACE CASING ANNULUS TO AS DEEP AS POSSIBLE AND CEMENT TO SURFACE (22 SXS, 25.21 FT3, 4.49 BBLS).
9. CUT OFF WELLHEAD AND INSTALL MARKER PER REGULATIONS.
10. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB. SURFACE RECLAMATION TO BE PERFORMED IN ACCORDANCE TO REGULATIONS.

# BONANZA 1023-6N1AS

Total SXS: 105, Total CIBP: 1



<- Plug for Surface at 0' from 0' to 102' with 30SXS,102ft.

<- TOC at 350'

<- Plug for GreenRiver at 996' from 1101' to 891' with 16SXS,210ft.

<- Plug for Mahogany and Casing Shoe at 1854', 1928' from 1981' to 1749' with 19SXS,250ft.

<- Parachute Base at 2691'

<- Plug for BMSW at 3140' from 3245' to 3035' with 16SXS,210ft.

<- Plug for Wasatch at 4305' from 4305' to 4095' with 16SXS,210ft.

<- Plug above CIBP at 6619' from 6619' to 6514' with 8SXS,105ft.

<-CIBP Above Perfs at 6619'

<-Top Perf at 6669'

<-PBTD at 8737'

<- Production Casing Shoe at 8768'

<-TD at 8790'

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>
<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU 38419	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>	
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.	
<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>	
<b>7. UNIT or CA AGREEMENT NAME:</b> PONDEROSA	
<b>1. TYPE OF WELL</b> Gas Well	
<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6N1AS	
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	
<b>9. API NUMBER:</b> 43047504530000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779 <span style="float: right;"><b>PHONE NUMBER:</b> 720 929-6456</span>	
<b>9. FIELD and POOL or WILDCAT:</b> BONANZA BUTTES	
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1570 FSL 0742 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	
<b>COUNTY:</b> UINTAH	
<b>STATE:</b> UTAH	

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/23/2016			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

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

Kerr-McGee Oil & Gas Onshore, LP has plugged and abandoned the BONANZA 1023-6N1AS well on 9/23/2016. Please see the operations summary report for details. Thank you.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 October 04, 2016

<b>NAME (PLEASE PRINT)</b> Candice Barber	<b>PHONE NUMBER</b> 435 781-9749	<b>TITLE</b> HSE Representative
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/28/2016	

US ROCKIES REGION  
Operation Summary Report

US ROCKIES REGION								
Operation Summary Report								
Well: BONANZA 1023-6N1AS RED			Spud Conductor: 4/7/2010			Spud date: 4/9/2010		
Project: UTAH-UINTAH			Site: BONANZA 1023-6L PAD			Rig name no.: MILES 4/4		
Event: ABANDONMENT			Start date: 9/19/2016			End date: 9/23/2016		
Active datum: RKB @5,158.00usft (above Mean Sea Level)			UWI: NW/SW/0/10/S/23/E/6/0/0/6/PM/S/1,570.00/W/0/742.00/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
9/20/2016	7:30 - 8:00	0.50	ABANDP	48		P		HSM ROADING RIG & EQUIP.
	8:00 - 11:00	3.00	ABANDP	30	A	P		MIRU, FROM THREE PINES.
	11:00 - 15:00	4.00	ABANDP	30		S		CHANGED DRILL LINE ON RIG.
	15:00 - 17:30	2.50	ABANDP	30	F	P		SICP & SITP 150, BLEW WELL DWN, ND WH UNLAND TBG NOT STUCK. RELAND NU BOPS. SWI SDFN.
9/21/2016	7:00 - 7:30	0.50	ABANDP	48		P		HSM, WORKING WITH SCAN TECH
	7:30 - 12:30	5.00	ABANDP	45	A	P		SICP & SITP, 200 PSI BLEW DWN WELL PUMPED 20 BBLS T-MAC DWN TBG, UNLAND L/D HANGER, RU & SCAN OUT W/ 217 JTS 23/8 L-80 148 YB, 69 RED, RD SCAN TECH.JTS 44 - 84 LIGHT EXT PITTING, JTS 51 - 110 LIGHT EXT PITTING, 116 - 131 LIGHT EXT PITTING, 143 - 217 LIGHT INT PITTING, 179 - 197 MEDIUM INT PITTING, 195 - 207 LIGHT EXT SCALE.
	12:30 - 17:00	4.50	ABANDP	31	I	P		PU 41/2 CIBP & 207 JTS 23/8 SET CIBP @ 6623' SWI SDFN.
9/22/2016	7:00 - 7:30	0.50	ABANDP	48		P		HSM, WORKING W/ CMT CREW.
	7:30 - 8:00	0.50	ABANDP	51	D	P		SICP 0, CIRC WELL W/ 100 BBLS T-MAC, TEST CSG TO 500 PSI.NO TEST INJ @ 2 BPM @ 400 PSI, PUMPED 2.6 FRESH, 3.27 BBLS 16 SXS 15.8# 1.15 YEILD G CMT, 1 BBL FRESH, DISPL W/ 23.6 BBLS T-MAC. L/D 20 JTS EOT @ 5773'.
	8:00 - 10:00	2.00	ABANDP	46	B	P		WAIT 2 HRS TRY TO TEST CSG TO 500,NO TEST.PU 12 JTS TAGGED CMT @ 6366' FOUND OUT THAT WELL WAS PERF'D @ 5232 TOP PERF DURING RECOMPLETE.
	10:00 - 17:00	7.00	ABANDP	31	I	P		POOH W/ 163 JTS L/D 36 JTS & STINGER.PU 2ND 41/2 CIBP & RIH W/ 163 JTS SET CIBP @ 5190' FILL HOLE, TEST CSG TO 500 PSI,SMALL LEAK, FOUND PERFS @ 5078, PUMPED 2.6 BBLS FRESH, 4 BBLS 20 SXS 15.8# 1.15 YEILD G CMT W/ CACL, 1 BBL FRESH, DISPL W/ 17.9 BBLS T-MAC 258' PLUG TO COVER PERF, L/D 28 JTS EOT @ 4300' SWI SDFN.
9/23/2016	7:00 - 7:30	0.50	ABANDP	48		P		HSM, LAYING TBG ON TRAILOR
	7:30 - 13:00	5.50	ABANDP	51	D	P		SICP 0, PU 20 JTS TBG TAG CMT @ 4915', L/D 20 JTS EOT @ 4300 'RU PUMPED 2.6 BBLS FRESH, 3.27 BBLS 16 SXS 15.8# 1.15 YEILD G CMT. 1 BBL FRESH, DISPL W/ 14.7 BBLS T-MAC. L/D 33 JTS EOT @ 3246', PUMPED 2.6 BBLS FRESH, 3.27 BBLS 16 SXS 15.8# 1.15 YEILD G CMT, 1 BBL FRESH, DISPL W/ 10.6 BBLS T-MAC.L/D 40 JTS EOT @ 1984', PUMPED 2.6 BBLS FRESH, 4 BBLS 20 SXS 15.8# 1.15 YEILD G CMT, 1 BBL FRESH, DISPL W/ 5.5 BBLS T-MAC. L/D 28 JTS EOT @ 1102', PUMPED 2.6 BBLS FRESH, 3.27 BBLS 16 SXS 15.8# 1.15 YEILD G CMT, 1 BBL FRESH, DISPL W/ 2.3 BBLS T-MAC. L/D 34 JTS, ND BOPS RIG DOWN RIG PULL AHEAD, DIG & CUT OFF WH. RUN 1" 100' INSIDE 41/2 TOP OFF W/ CMT , RUN 1" 100' DWN 85/8 FILL W/ CMT, WELD PLATE P&A COMPLETE. 60 SXS TO FILL 41/2 & 85/8.