FORM 3

AMENDED REPORT ☐

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

APPLICATION FOR PERMIT TO DRILL		**1. WELL NAME and NUMBER** BONANZA 1023-2H3CS
2. TYPE OF WORK DRILL NEW WELL ■ REENTER P&A WELL ○ DEEPEN WELL ○		**3. FIELD OR WILDCAT** NATURAL BUTTES
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO		**5. UNIT or COMMUNITIZATION AGREEMENT NAME**
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		**7. OPERATOR PHONE** 720 929-6587
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		**9. OPERATOR E-MAIL** mary.mondragon@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML 23608	**11. MINERAL OWNERSHIP** FEDERAL ○ INDIAN ○ STATE ■ FEE ○	**12. SURFACE OWNERSHIP** FEDERAL ○ INDIAN ○ STATE ■ FEE ○
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		**14. SURFACE OWNER PHONE (if box 12 = 'fee')**
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS** YES ○ (Submit Commingling Application) NO ■	**19. SLANT** VERTICAL ○ DIRECTIONAL ■ HORIZONTAL ○

20. LOCATION OF WELL	**FOOTAGES**	**QTR-QTR**	**SECTION**	**TOWNSHIP**	**RANGE**	**MERIDIAN**
LOCATION AT SURFACE	1191 FNL 1917 FEL	NWNE	2	10.0 S	23.0 E	S
Top of Uppermost Producing Zone	2445 FNL 1175 FEL	SENE	2	10.0 S	23.0 E	S
At Total Depth	2445 FNL 1175 FEL	SWNE	2	10.0 S	23.0 E	S

21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 1175	**23. NUMBER OF ACRES IN DRILLING UNIT** 20
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1200	**26. PROPOSED DEPTH** MD: 8415 TVD: 8000
27. ELEVATION - GROUND LEVEL 5443	**28. BOND NUMBER** 22013542	**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE** Permit #43-8496

ATTACHMENTS

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

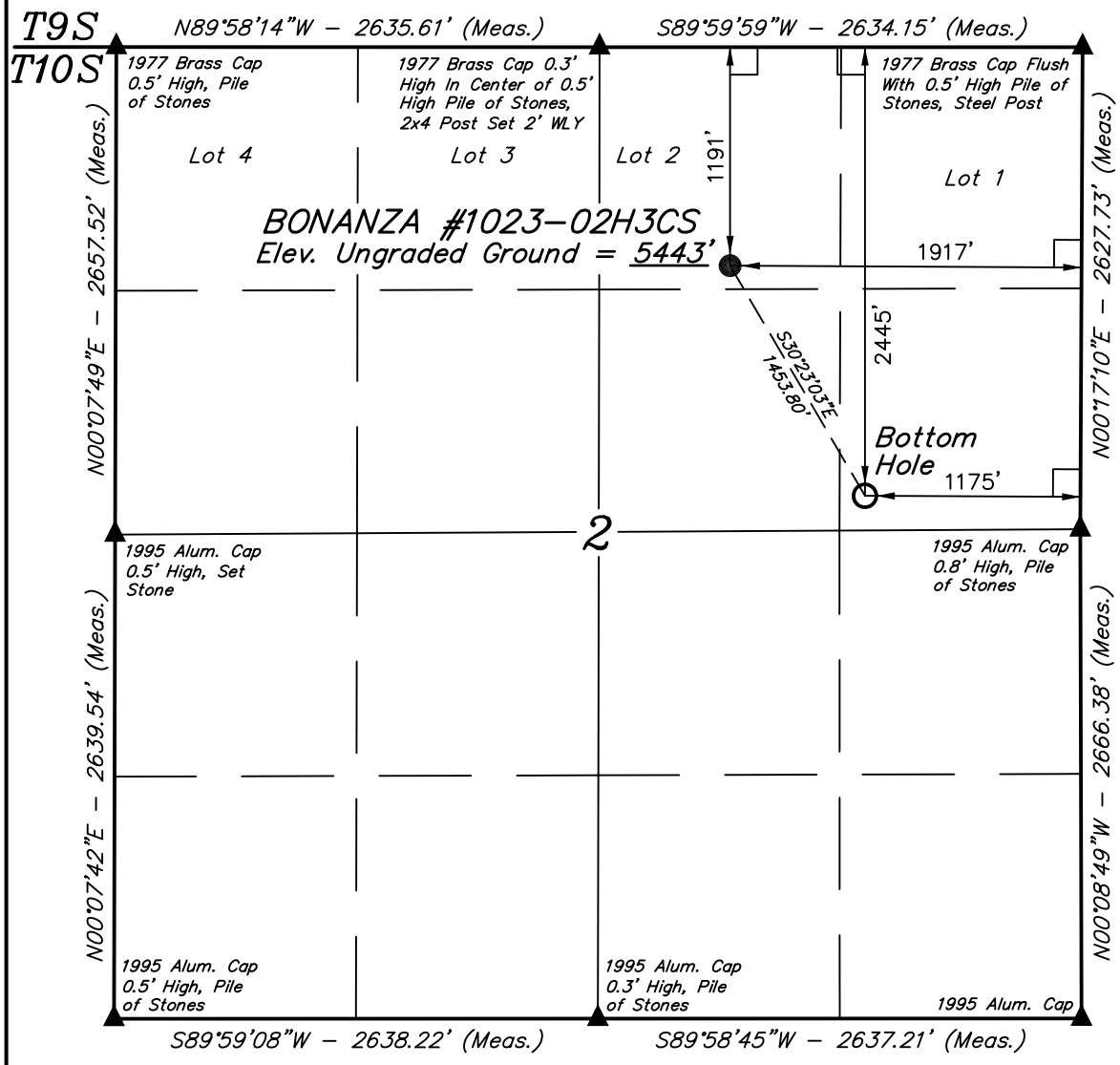
☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**	☑ **COMPLETE DRILLING PLAN**
☐ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**	☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**
☑ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**	☑ **TOPOGRAPHICAL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

NAME Kathy Schneebeck-Dulnoan	**TITLE** Staff Regulatory Analyst	**PHONE** 720 929-6007
SIGNATURE	**DATE** 04/30/2009	**EMAIL** Kathy.SchneebeckDulnoan@anadarko.com
API NUMBER ASSIGNED 43047503440000	**APPROVAL**	Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	4.5	0	8415		
Pipe	**Grade**	**Length**	**Weight**			
	Grade I-80 LT&C	8415	11.6			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	9.625	0	2200		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	2200	36.0			

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



Kerr–McGee Oil & Gas Onshore LP

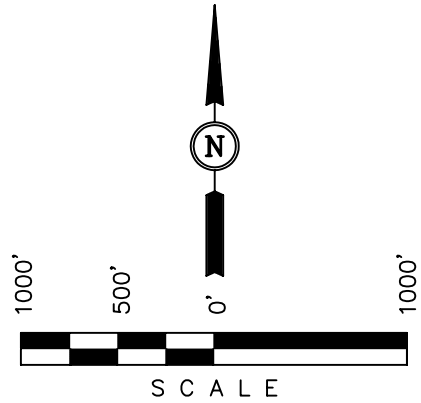
Well location, BONANZA #1023–02H3CS, located as shown in LOT 2 of Section 2, T10S, R23E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

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

BASIS OF BEARINGS

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



CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

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

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

SCALE 1" = 1000'	DATE SURVEYED: 10–15–08	DATE DRAWN: 10–30–08
PARTY D.K. D.D. C.C.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE Kerr–McGee Oil & Gas Onshore LP	

LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°58'42.57" (39.978492)	LATITUDE = 39°58'54.97" (39.981936)
LONGITUDE = 109°17'20.57" (109.289047)	LONGITUDE = 109°17'30.00" (109.291667)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 39°58'42.69" (39.978525)	LATITUDE = 39°58'55.09" (39.981969)
LONGITUDE = 109°17'18.14" (109.288372)	LONGITUDE = 109°17'27.57" (109.290992)

API Well No: 43047503440000

'APIWellNo:43047503440000'

Scientific Drilling
Rocky Mountain Operations

Project: Uintah County, UT NAD27
Site: Bonanza 1023-2B Pad
Well: Bonanza 1023-2H3CS
Wellbore: OH
Design: Plan #1

Kerr McGee Oil and Gas Onshore LP

T M

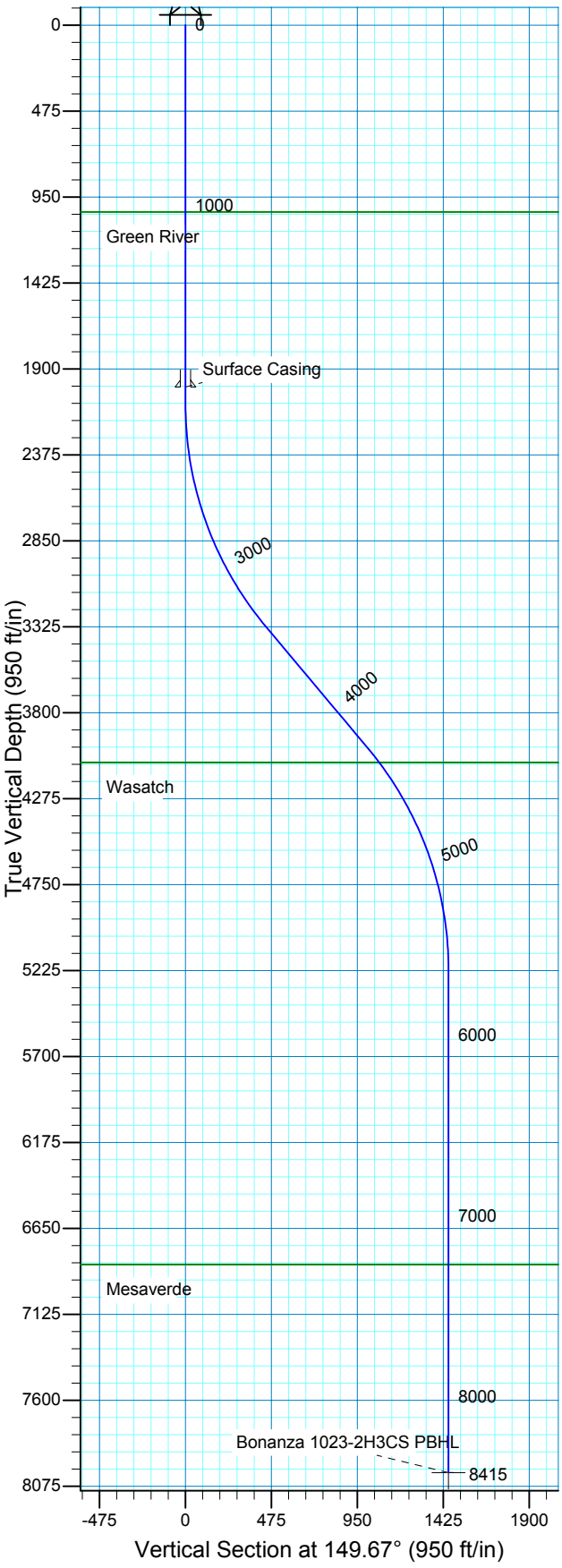
Azimuths to True North
Magnetic North: 11.29°

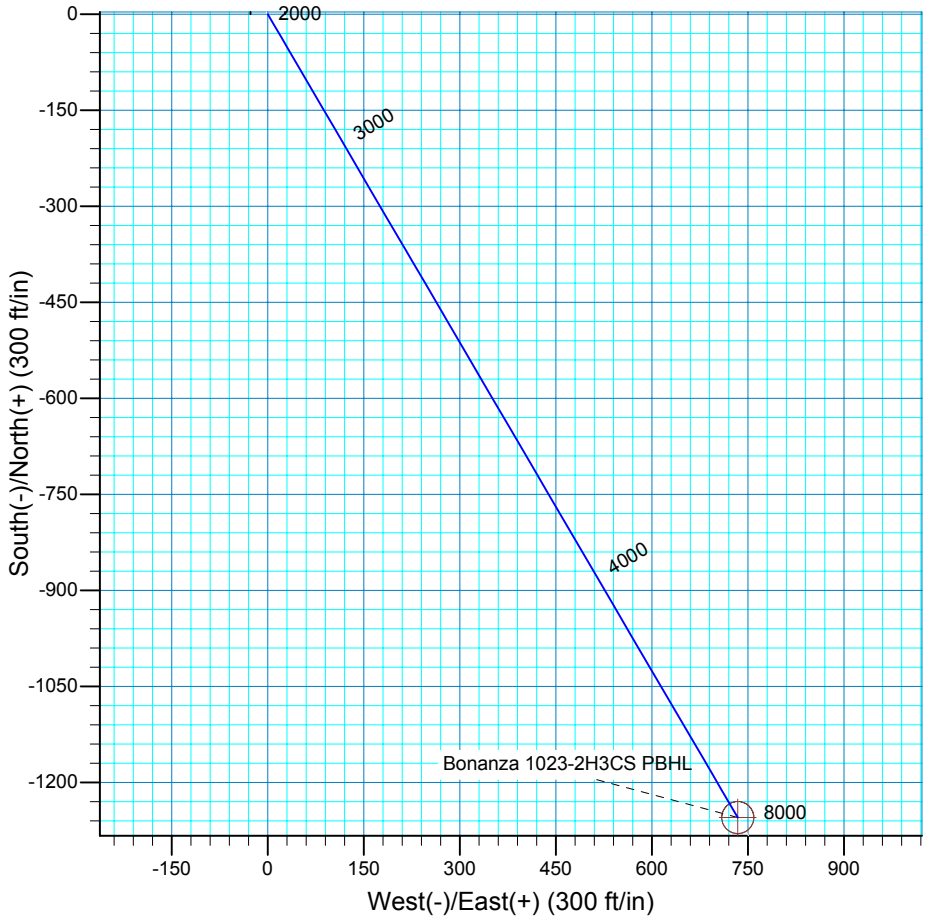
Magnetic Field
Strength: 52621.4snT
Dip Angle: 65.97°
Date: 2008-12-04
Model: IGRF2005-10

WELL DETAILS: Bonanza 1023-2H3CS

GL 5442' & RKB 18' @ 5460.00ft 5442.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	608122.35	2618943.14	39° 58' 55.090 N	109° 17' 27.570 W





Plan: Plan #1 (Bonanza 1023-2H3CS/OH)

Created By: Julie Cruse Date: 2008-12-04

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 2 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	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	
3433.33	40.00	149.67	3327.63	-385.67	225.65	3.00	149.67	446.82	
4304.42	40.00	149.67	3994.92	-868.94	508.41	0.00	0.00	1006.74	
5637.75	0.00	0.00	5222.56	-1254.61	734.05	3.00	180.00	1453.57	
8415.19	0.00	0.00	8000.00	-1254.61	734.05	0.00	0.00	1453.57	Bonanza 1023-2H3CS PBHL

Scientific Drilling
Rocky Mountain Operations

Kerr McGee Oil and Gas Onshore LP

Uintah County, UT NAD27
Bonanza 1023-2B Pad
Bonanza 1023-2H3CS
OH

Plan: Plan #1

Standard Planning Report

04 December, 2008

Scientific Drilling
Rocky Mountain Operations

Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User DB	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Site:	Bonanza 1023-2B Pad	**North Reference:**	True
Well:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project Uintah County, UT NAD27

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site Bonanza 1023-2B Pad, Sec 2 T10S R23E

Site Position:		**Northing:**	608,081.79 ft	**Latitude:**	39° 58' 54.700 N
From:	Lat/Long	**Easting:**	2,618,898.98 ft	**Longitude:**	109° 17' 28.150 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.41 °

Well Bonanza 1023-2H3CS, 1191' FNL 1917' FEL

Well Position	**+N/-S**	0.00 ft	**Northing:**	608,122.35 ft	**Latitude:**	39° 58' 55.090 N
	+E/-W	0.00 ft	**Easting:**	2,618,943.14 ft	**Longitude:**	109° 17' 27.570 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,442.00 ft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	2008-12-04	11.29	65.97	52,621

Design Plan #1

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	149.67

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,433.33	40.00	149.67	3,327.63	-385.67	225.65	3.00	3.00	0.00	149.67	
4,304.42	40.00	149.67	3,994.92	-868.94	508.41	0.00	0.00	0.00	0.00	
5,637.75	0.00	0.00	5,222.56	-1,254.61	734.05	3.00	-3.00	0.00	180.00	
8,415.19	0.00	0.00	8,000.00	-1,254.61	734.05	0.00	0.00	0.00	0.00	Bonanza 1023-2H3CS

Scientific Drilling
Rocky Mountain Operations

Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User DB	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Site:	Bonanza 1023-2B Pad	**North Reference:**	True
Well:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
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
1,033.00	0.00	0.00	1,033.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
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
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing									
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	3.00	149.67	2,199.95	-2.26	1.32	2.62	3.00	3.00	0.00
2,300.00	6.00	149.67	2,299.63	-9.03	5.28	10.46	3.00	3.00	0.00
2,400.00	9.00	149.67	2,398.77	-20.30	11.87	23.51	3.00	3.00	0.00
2,500.00	12.00	149.67	2,497.08	-36.03	21.08	41.74	3.00	3.00	0.00
2,600.00	15.00	149.67	2,594.31	-56.17	32.86	65.08	3.00	3.00	0.00
2,700.00	18.00	149.67	2,690.18	-80.68	47.20	93.48	3.00	3.00	0.00
2,800.00	21.00	149.67	2,784.43	-109.49	64.06	126.85	3.00	3.00	0.00
2,900.00	24.00	149.67	2,876.81	-142.52	83.38	165.12	3.00	3.00	0.00
3,000.00	27.00	149.67	2,967.06	-179.67	105.12	208.16	3.00	3.00	0.00
3,100.00	30.00	149.67	3,054.93	-220.85	129.22	255.87	3.00	3.00	0.00
3,200.00	33.00	149.67	3,140.18	-265.95	155.60	308.12	3.00	3.00	0.00
3,300.00	36.00	149.67	3,222.59	-314.83	184.20	364.75	3.00	3.00	0.00
3,400.00	39.00	149.67	3,301.91	-367.37	214.94	425.62	3.00	3.00	0.00
3,433.33	40.00	149.67	3,327.63	-385.67	225.65	446.82	3.00	3.00	0.00
3,500.00	40.00	149.67	3,378.70	-422.65	247.29	489.67	0.00	0.00	0.00
3,600.00	40.00	149.67	3,455.31	-478.13	279.75	553.95	0.00	0.00	0.00
3,700.00	40.00	149.67	3,531.91	-533.61	312.21	618.23	0.00	0.00	0.00
3,800.00	40.00	149.67	3,608.52	-589.09	344.67	682.51	0.00	0.00	0.00
3,900.00	40.00	149.67	3,685.12	-644.57	377.13	746.79	0.00	0.00	0.00
4,000.00	40.00	149.67	3,761.73	-700.05	409.59	811.07	0.00	0.00	0.00
4,100.00	40.00	149.67	3,838.33	-755.53	442.05	875.35	0.00	0.00	0.00
4,200.00	40.00	149.67	3,914.93	-811.01	474.51	939.63	0.00	0.00	0.00
4,300.00	40.00	149.67	3,991.54	-866.49	506.97	1,003.90	0.00	0.00	0.00
4,304.42	40.00	149.67	3,994.92	-868.94	508.41	1,006.74	0.00	0.00	0.00
4,400.00	37.13	149.67	4,069.65	-920.37	538.49	1,066.33	3.00	-3.00	0.00
4,406.70	36.93	149.67	4,075.00	-923.85	540.53	1,070.36	3.00	-3.00	0.00
Wasatch									
4,500.00	34.13	149.67	4,150.92	-970.65	567.91	1,124.58	3.00	-3.00	0.00

Scientific Drilling
Rocky Mountain Operations

Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User DB	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Site:	Bonanza 1023-2B Pad	**North Reference:**	True
Well:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,600.00	31.13	149.67	4,235.12	-1,017.19	595.14	1,178.50	3.00	-3.00	0.00
4,700.00	28.13	149.67	4,322.03	-1,059.86	620.11	1,227.93	3.00	-3.00	0.00
4,800.00	25.13	149.67	4,411.41	-1,098.54	642.74	1,272.76	3.00	-3.00	0.00
4,900.00	22.13	149.67	4,503.02	-1,133.14	662.98	1,312.84	3.00	-3.00	0.00
5,000.00	19.13	149.67	4,596.59	-1,163.55	680.78	1,348.07	3.00	-3.00	0.00
5,100.00	16.13	149.67	4,691.88	-1,189.69	696.07	1,378.36	3.00	-3.00	0.00
5,200.00	13.13	149.67	4,788.63	-1,211.49	708.83	1,403.62	3.00	-3.00	0.00
5,300.00	10.13	149.67	4,886.56	-1,228.90	719.01	1,423.78	3.00	-3.00	0.00
5,400.00	7.13	149.67	4,985.42	-1,241.85	726.59	1,438.79	3.00	-3.00	0.00
5,500.00	4.13	149.67	5,084.93	-1,250.32	731.54	1,448.60	3.00	-3.00	0.00
5,600.00	1.13	149.67	5,184.81	-1,254.28	733.86	1,453.19	3.00	-3.00	0.00
5,637.75	0.00	0.00	5,222.56	-1,254.61	734.05	1,453.57	3.00	-3.00	0.00
5,700.00	0.00	0.00	5,284.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
5,800.00	0.00	0.00	5,384.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
5,900.00	0.00	0.00	5,484.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,000.00	0.00	0.00	5,584.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,100.00	0.00	0.00	5,684.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,200.00	0.00	0.00	5,784.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,300.00	0.00	0.00	5,884.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,400.00	0.00	0.00	5,984.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,500.00	0.00	0.00	6,084.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,600.00	0.00	0.00	6,184.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,700.00	0.00	0.00	6,284.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,800.00	0.00	0.00	6,384.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
6,900.00	0.00	0.00	6,484.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,000.00	0.00	0.00	6,584.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,100.00	0.00	0.00	6,684.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,200.00	0.00	0.00	6,784.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,265.19	0.00	0.00	6,850.00	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
Mesaverde									
7,300.00	0.00	0.00	6,884.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,400.00	0.00	0.00	6,984.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,500.00	0.00	0.00	7,084.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,600.00	0.00	0.00	7,184.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,700.00	0.00	0.00	7,284.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,800.00	0.00	0.00	7,384.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
7,900.00	0.00	0.00	7,484.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
8,000.00	0.00	0.00	7,584.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
8,100.00	0.00	0.00	7,684.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
8,200.00	0.00	0.00	7,784.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
8,300.00	0.00	0.00	7,884.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
8,400.00	0.00	0.00	7,984.81	-1,254.61	734.05	1,453.57	0.00	0.00	0.00
8,415.19	0.00	0.00	8,000.00	-1,254.61	734.05	1,453.57	0.00	0.00	0.00

Scientific Drilling
Rocky Mountain Operations

Scientific Drilling
Planning Report

Database:	EDM 2003.16 Multi User DB	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Company:	Kerr McGee Oil and Gas Onshore LP	**TVD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Project:	Uintah County, UT NAD27	**MD Reference:**	GL 5442' & RKB 18' @ 5460.00ft
Site:	Bonanza 1023-2B Pad	**North Reference:**	True
Well:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Bonanza 1023-2H3CS F - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,000.00	-1,254.61	734.05	606,886.26	2,619,707.95	39° 58' 42.690 N	109° 17' 18.140 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,000.00	2,000.00	Surface Casing	9.625	13.500

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,033.00	1,033.00	Green River		0.00	
4,406.70	4,075.00	Wasatch		0.00	
7,265.19	6,850.00	Mesaverde		0.00	

Bonanza 1023-2H3CS

Pad: Bonanza 1023-2B
Surface: 1,191’ FNL, 1,917’ FEL (NW/4NE/4) Lot 2
BHL: 2,445’ FNL 1,175’ FEL (SE/4NE/4)
Sec. 2 T10S R23E

Uintah, Utah
Mineral Lease: ML 47062

ONSHORE ORDER NO. 1

DRILLING PROGRAM

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

Formation	Depth	Resource
Uinta	0 – Surface	
Green River	1,033’	
Birds Nest	1,454’	Water
Mahogany	1,962’	Water
Wasatch	4,075’	Gas
Mesaverde	5,863’	Gas
MVU2	6,850’	Gas
MVL1	7,388’	Gas
TVD	8,000’	
TD	8,415’	

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 8,415’ MD, approximately equals 4,806 psi (calculated at 0.57 psi/foot).

Maximum anticipated surface pressure equals approximately 2,809 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.

’APIWellNo:43047503440000’

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

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

10. Other Information:

Please refer to the attached Drilling Program.

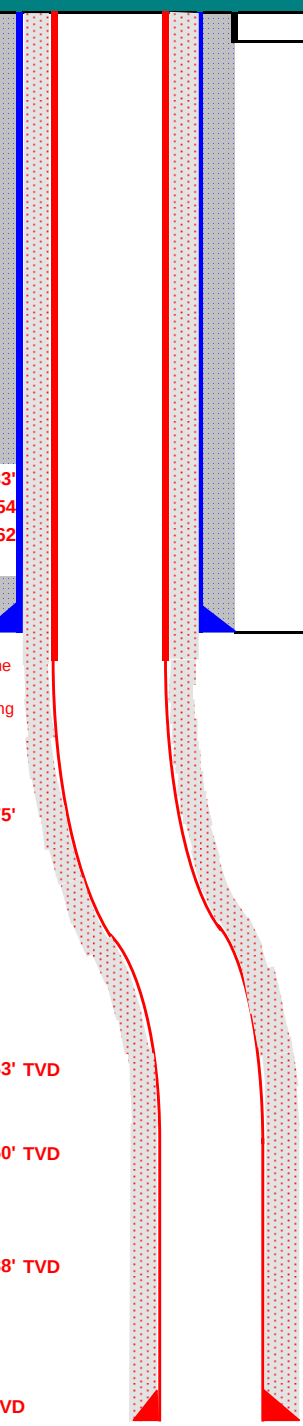
’APIWellNo:43047503440000’

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	April 12, 2009
WELL NAME	**Bonanza 1023-2H3CS**	TD	8,000' TVD 8,415' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah ELEVATION 5,444' GL KB 5,459'
SURFACE LOCATION	NW/4 NE/4 1,191' FNL 1,917' FEL	Sec 2 T 10S R 23E	Lot 2
	Latitude: 39.981969	Longitude: -109.290992	NAD 27
BTM HOLE LOCATION	SW/4 NE/4 2,445' FNL 1,175' FEL	Sec 2 T 10S R 23E	
	Latitude: 39.978525	Longitude: -109.288372	NAD 27
OBJECTIVE ZONE(S)	Wasatch/Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: SITLA (Minerals), UDOGM (Surface), Tri-County Health Dept.		

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		20'	14"		
			12-1/4"	9-5/8", 36#, J-55, LTC	Air mist
All water flows encountered while drilling will be reported to the appropriate agencies.					
	Green River @	**1,033'**			
	Top of Birds Nest @	**1,454**			
	Mahogany @	**1,962**			
	Preset f/ GL @ 2,200' MD				
	Note: 12.25" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the acutal depth of the loss zone.				
	Wasatch @	**4,075'**			
Mud logging program TBD Cased hole logging program from TD - surf csg			7-7/8"	4-1/2" 11.6# I-80 or equivalent LTC csg	Water / Fresh Water Mud 8.3-11.6 ppg
	Mverde @	**5,863' TVD**			
	MVU2 @	**6,850' TVD**			
	MVU1 @	**7,388' TVD**			
Max anticipated Mud required 11.6 ppg	**TD @**	**8,000' TVD** **8,415' MD**			



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2200	36.00	J-55	LTC	1.09	1.96	7.28
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	8415	11.60	I-80	LTC	2.41	1.25	2.36

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 2,975 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 4,981 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + .25 pps flocele				
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
			+.25 pps Flocele + 3% salt BWOW				
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,575'	Premium Lite II + 3% KCl + 0.25 pps	340	40%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	4,840'	50/50 Poz/G + 10% salt + 2% gel	1190	40%	14.30	1.31
			+.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained
*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

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

ADDITIONAL INFORMATION

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

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

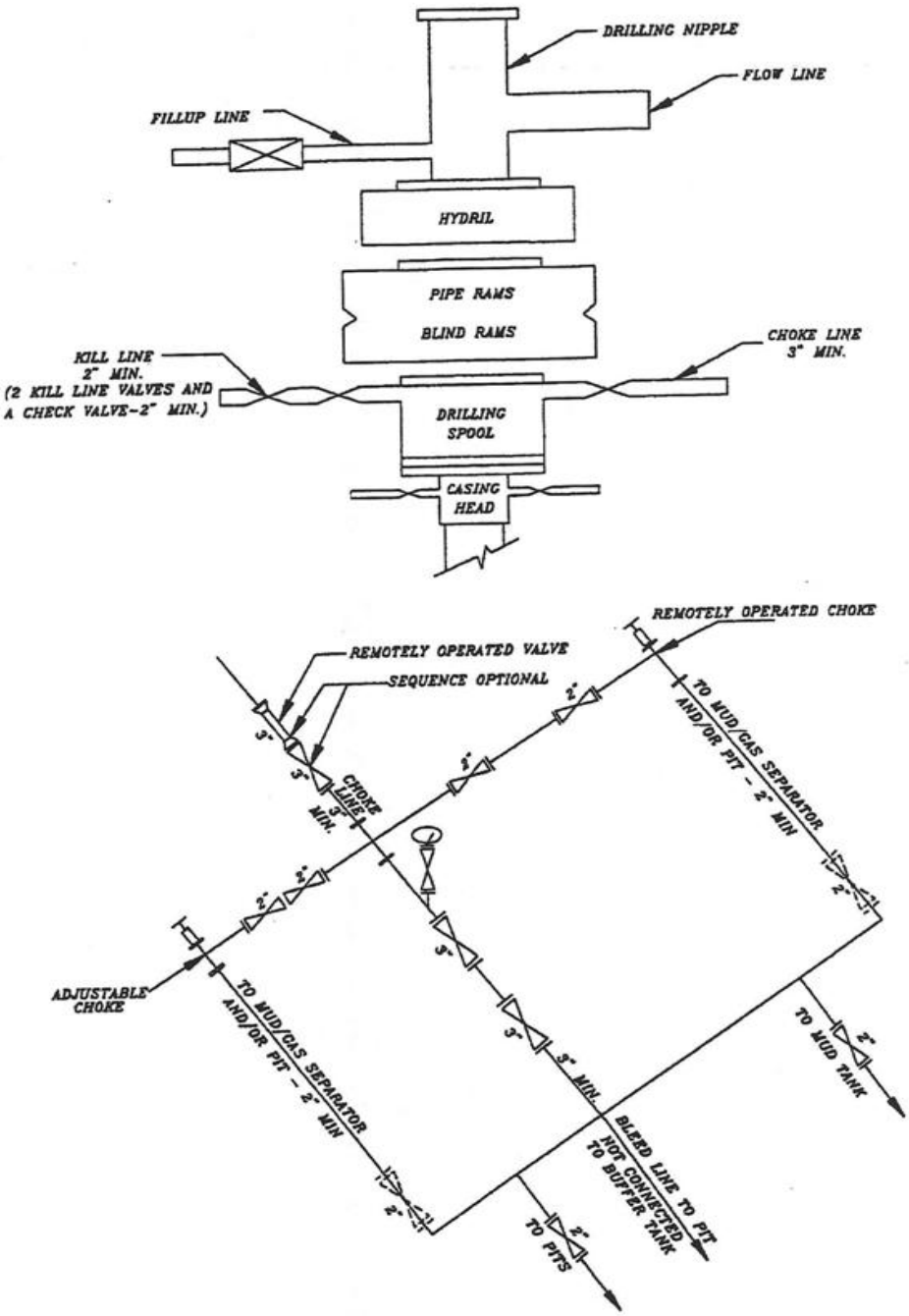
Surveys will be taken at 1,000' minimum intervals.

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

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

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

EXHIBIT A
Bonanza 1023-2H3CS



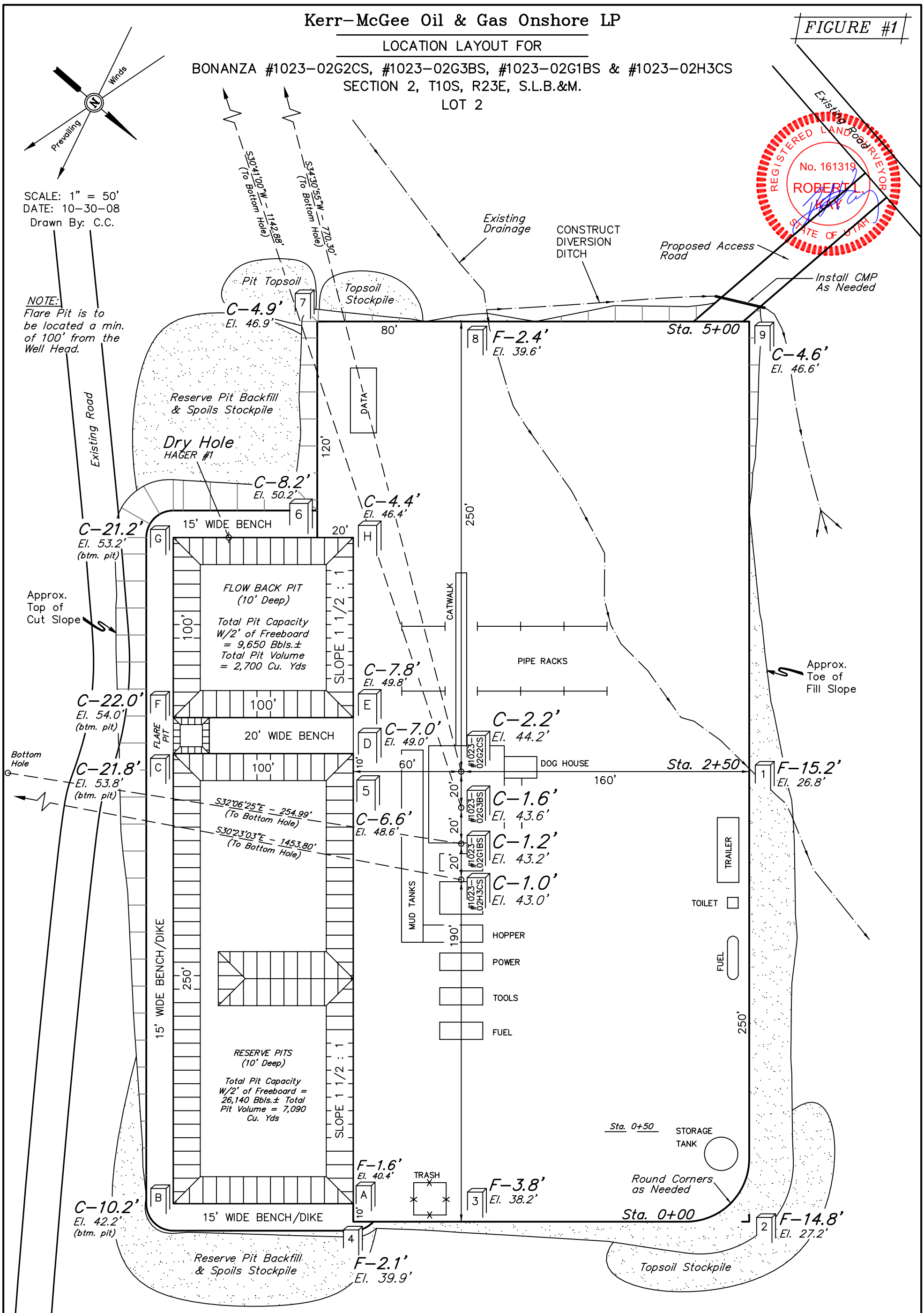
SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Kerr–McGee Oil & Gas Onshore LP

FIGURE #1

LOCATION LAYOUT FOR

BONANZA #1023–02G2CS, #1023–02G3BS, #1023–02G1BS & #1023–02H3CS
SECTION 2, T10S, R23E, S.L.B.&M.
LOT 2



NAD 83 (HAGER #1 DRY HOLE)
LATITUDE = 39°58'52.77" (39.981325)
LONGITUDE = 109°17'30.76" (109.291878)
NAD 27 (HAGER #1 DRY HOLE)
LATITUDE = 39°58'52.89" (39.981358)
LONGITUDE = 109°17'28.33" (109.291203)

Elev. Ungraded Ground at #1023–02G2CS Location Stake = 5444.2'

Elev. Graded Ground at #1023–02G2CS Location Stake = 5442.0'

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

Kerr-McGee Oil & Gas Onshore LP

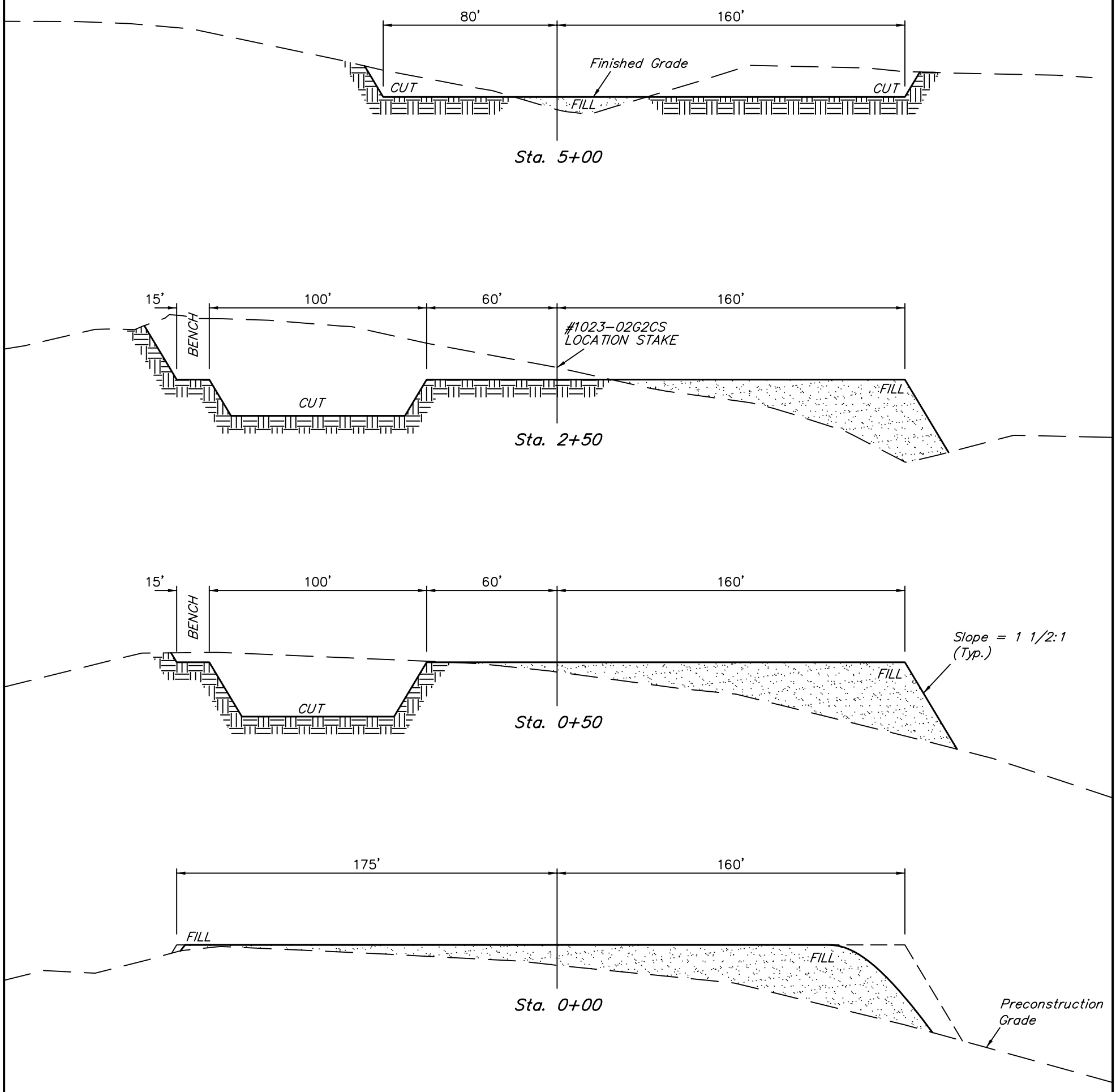
FIGURE #2

TYPICAL CROSS SECTIONS FOR

BONANZA #1023-02G2CS, #1023-02G3BS, #1023-02G1BS & #1023-02H3CS
SECTION 2, T10S, R23E, S.L.B.&M.
LOT 2

1" = 20'
X-Section Scale
1" = 50'
DATE: 10-30-08
Drawn By: C.C.

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



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

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ±4.517 ACRES
ACCESS ROAD DISTURBANCE = ±0.079 ACRES
PIPELINE DISTURBANCE = ±0.133 ACRES
TOTAL = ±4.729 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping = 3,390 Cu. Yds.
Remaining Location = 24,920 Cu. Yds.

TOTAL CUT = 28,310 CU.YDS.
FILL = 17,980 CU.YDS.

EXCESS MATERIAL = 10,330 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.) = 8,290 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation) = 2,040 Cu. Yds.

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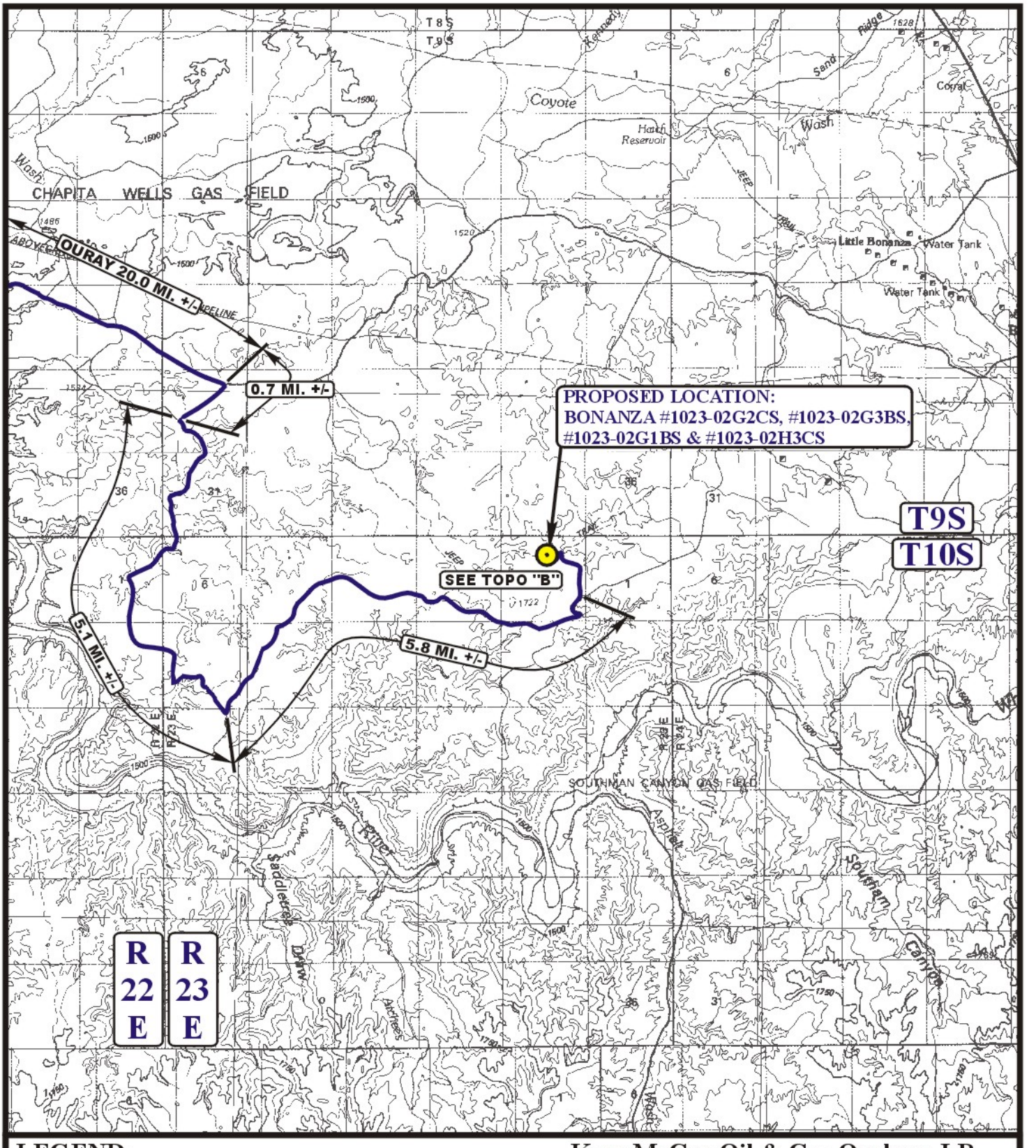


LEGEND:

PROPOSED LOCATION

N

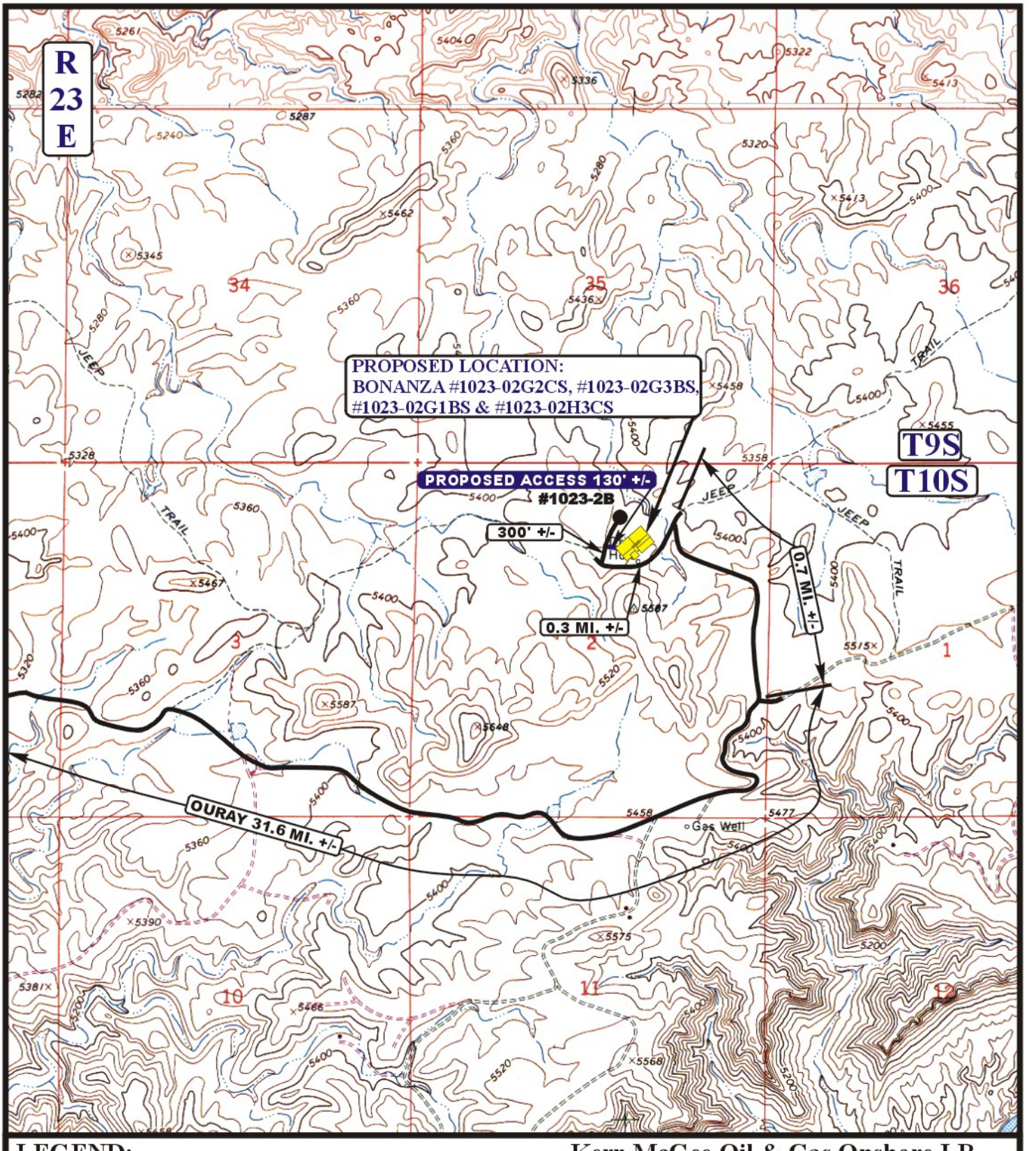
Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-02G2CS, #1023-02G3BS,
#1023-02G1BS & #1023-02H3CS
SECTION 2, T10S, R23E, S.L.B.&M.
LOT 2

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

TOPOGRAPHIC MAP	10 MONTH	28 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: J.H.	REVISED: 00-00-00		

’APIWellNo:43047503440000’



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

N

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-02G2CS, #1023-02G3BS,
#1023-02G1BS & #1023-02H3CS
SECTION 2, T10S, R23E, S.L.B.&M.
LOT 2

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

TOPOGRAPHIC MAP	10 MONTH	28 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		

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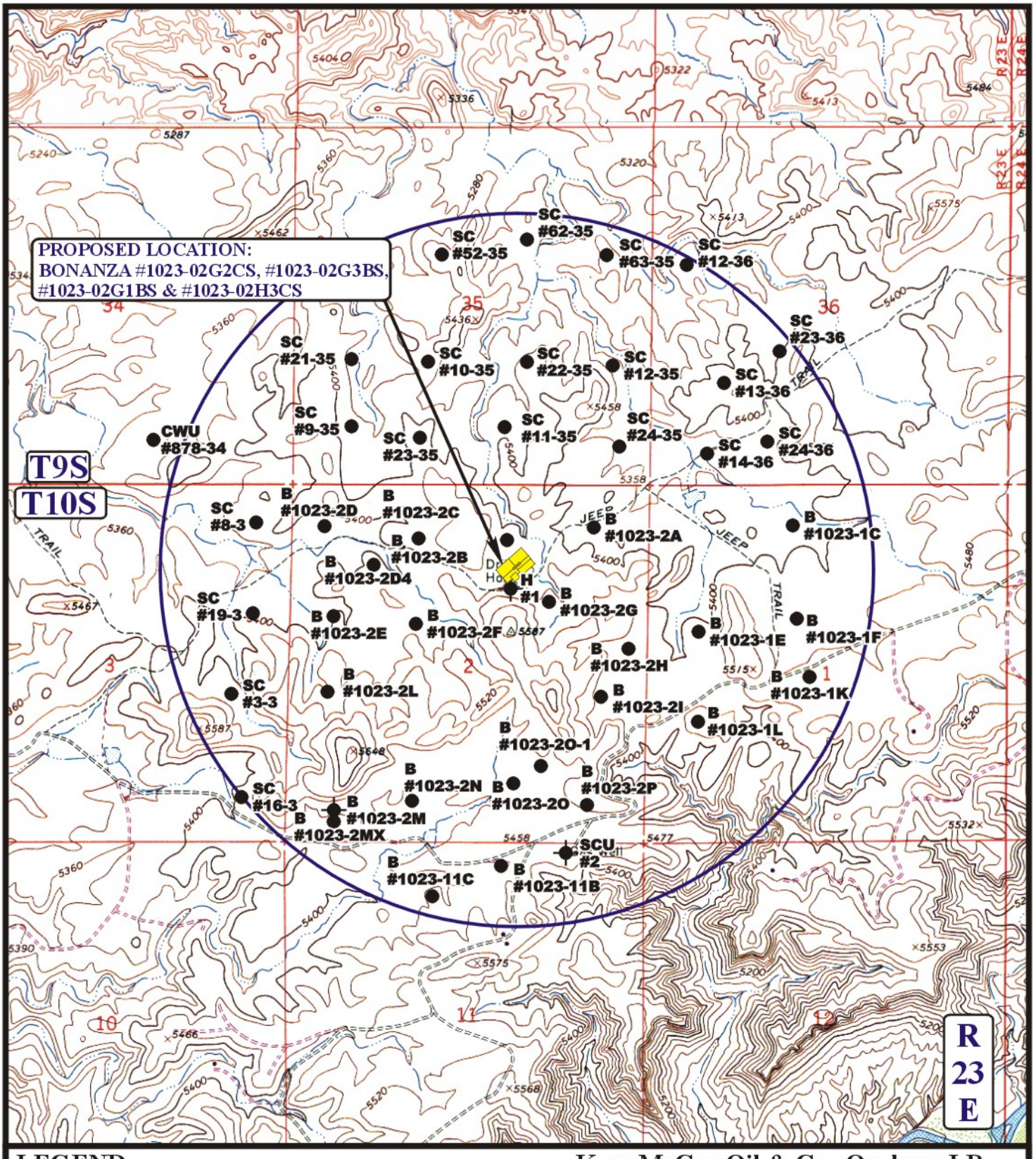

LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-02G2CS, #1023-02G3BS, #1023-02G1BS & #1023-02H3CS
SECTION 2, T10S, R23E, S.L.B.&M.
LOT 2

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

TOPOGRAPHIC MAP	10 MONTH	28 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: J.H.	REVISED: 00-00-00		

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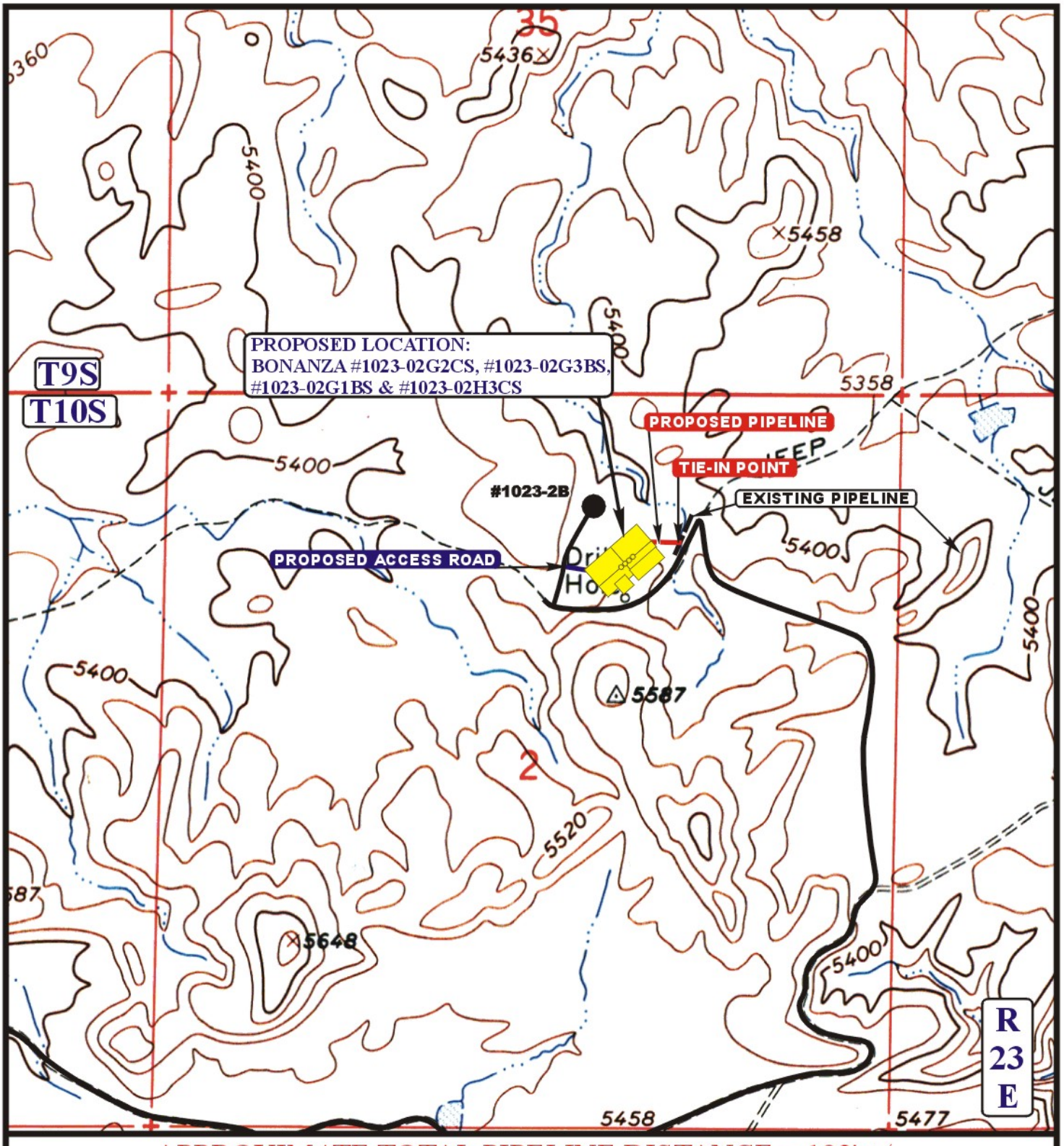


APPROXIMATE TOTAL PIPELINE DISTANCE = 192' +/-

LEGEND:

PROPOSED ACCESS ROAD
EXISTING PIPELINE
PROPOSED PIPELINE

N

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-02G2CS, #1023-02G3BS,
#1023-02G1BS & #1023-02H3CS
SECTION 2, T10S, R23E, S.L.B.&M.
LOT 2

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

TOPOGRAPHIC MAP	10 MONTH	28 DAY	08 YEAR	D TOPO
SCALE: 1" = 1000'	DRAWN BY: J.H.	REVISED: 00-00-00		

Kerr-McGee Oil & Gas Onshore LP
BONANZA #1023-02G2CS, #1023-02G3BS, #1023-02G1BS & #1023-02H3CS
SECTION 2, 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 DIRECTION APPROXIMATELY 5.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 5.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; TURN LEFT AND PROCEED IN A SOUTHWESTERLY, THEN WESTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE JUNCTION OF AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 300’ TO THE BEGINNING OF THE PROPOSED ACCESS TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 130’ MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 63.7 MILES.

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-02G2CS, #1023-02G3BS, #1023-02G1BS & #1023-02H3CS

LOCATED IN UINTAH COUNTY, UTAH
SECTION 2, T10S, R23E, S.L.B.&M.

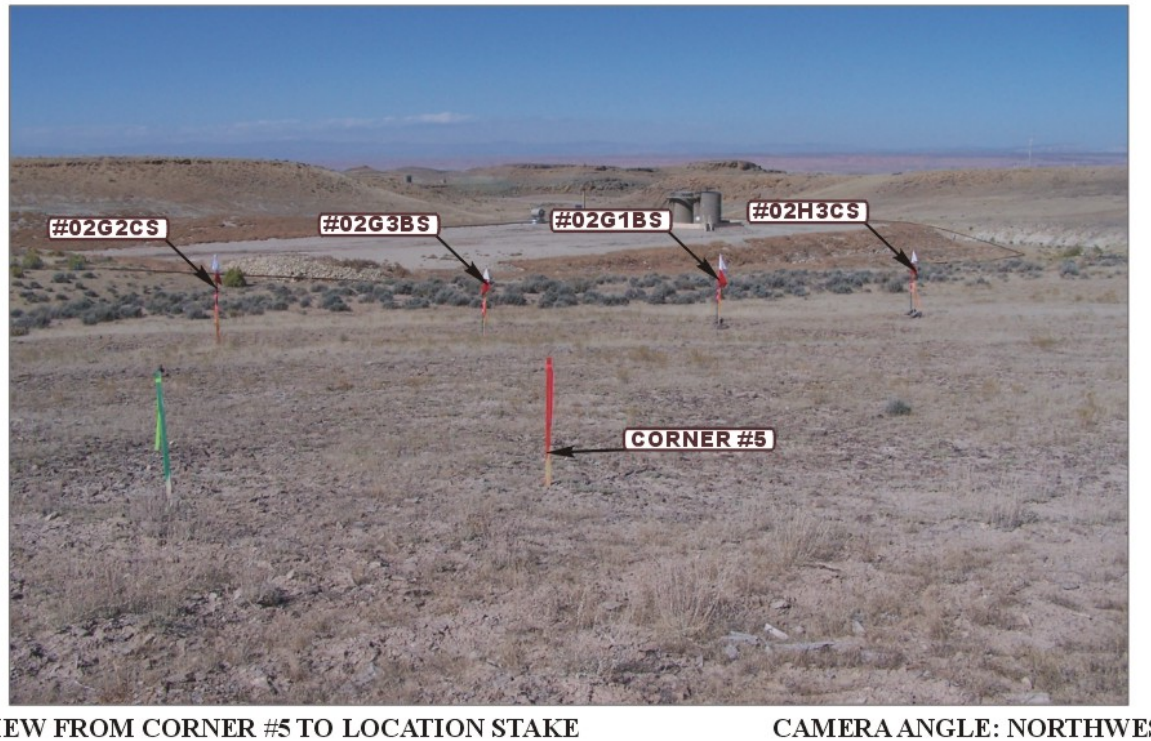


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE — CAMERA ANGLE: NORTHWESTERLY

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS — CAMERA ANGLE: EASTERLY

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

LOCATION PHOTOS	10 MONTH	28 DAY	08 YEAR	PHOTO
TAKEN BY: D.K.	DRAWN BY: J.H.	REVISED: 00-00-00		

Kerr-McGee Oil & Gas Onshore LP

BONANZA #1023-02G2CS, #1023-02G3BS, #1023-02G1BS & #1023-02H3CS

LOCATED IN UINTAH COUNTY, UTAH
SECTION 5, T10S, R23E, S.L.B.&M.

PIPELINE ALIGNMENT

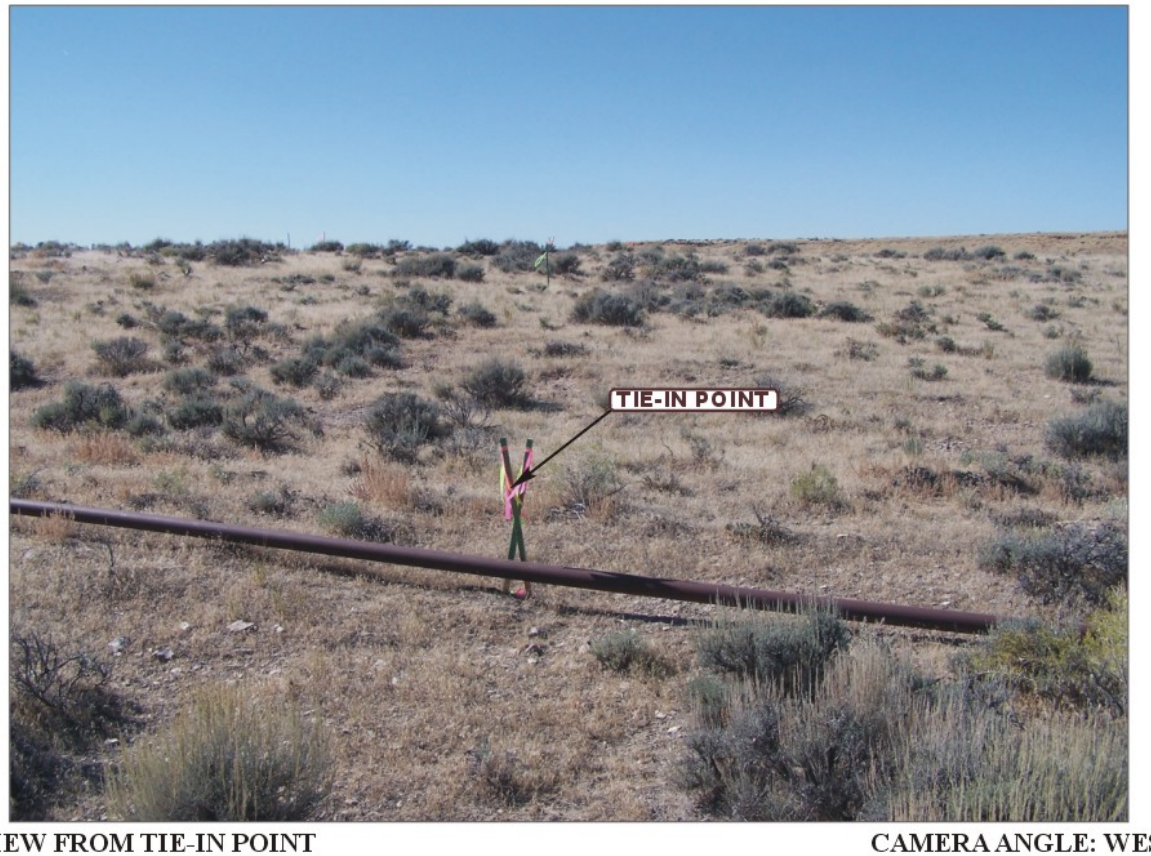


PHOTO: VIEW FROM TIE-IN POINT **CAMERA ANGLE: WESTERLY**

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

PIPELINE PHOTOS	10 MONTH	28 DAY	08 YEAR	PHOTO
TAKEN BY: D.K.	DRAWN BY: J.H.	REVISED: 00-00-00		

Bonanza 1023-2H3CS

Pad: Bonanza 1023-2B
Surface: 1,191’ FNL, 1,917’ FEL (NW/4NE/4) Lot 2
BHL: 2,445’ FNL 1,175’ FEL (SE/4NE/4)
Sec. 2 T10S R23E

Uintah, Utah
Mineral Lease: ML 47062

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

Directional Drilling:

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

1. Existing Roads:

Refer to Topo Map A for directions to the location.

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

Refer to Topo Maps A and B for location of access roads within a 2 mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. Planned Access Roads:

Approximately ±0.02 mi. (±130’) of new access road is proposed. Please refer to the attached Topo Map B.

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. Appropriate water control will be installed to control erosion.

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.

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

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

Please refer to Topo Map C.

4. Location of Existing & 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. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Shadow Gray, a non-reflective earthtone.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Approximately ±192' of 4" pipeline is proposed. Refer to Topo D for the proposed pipeline.

5. 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:

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

Any gravel will be obtained from a commercial source.

7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner and felt will be used; it will be a minimum of 20 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit. Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

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:

None are anticipated.

9. Well Site Layout: (See Location Layout Diagram)

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

Please see the attached diagram to describe rig orientation, parking areas, 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:

39 inch net wire 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 Form 9 shall be submitted.

10. Plans for Reclamation of the Surface:

Producing Location:

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

A plastic, nylon reinforced liner will be used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

11. Surface/Mineral Ownership:

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

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 Plan of Operations, 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.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

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

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 State Surety Bond 22013542.

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

Kathy Schneebeck Dulnoan
Kathy Schneebeck Dulnoan

April 2, 2009
Date

'APIWellNo:43047503440000'

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

March 25, 2009

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

Re: Exception Location R649-3-3 and Directional Drilling R649-3-11
Bonanza 1023-02H3CS
T10S- R23E
Section 2: NWNE/SENE
1191' FNL, 1917' FEL (surface)
2445' FNL, 1175' FEL (bottom hole)
Uintah County, Utah

Dear Ms. Mason:

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

- Kerr-McGee's Bonanza 1023-02H3CS is located within the area covered by Docket No. 2008-011 authorizing the equivalent of an approximate 10-acre well density pattern, and requiring approval for wells drilled at an exception location and wells drilled directionally in accordance with the referenced rules.

- Kerr-McGee is permitting this well at this location and as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing roads and pipelines in the area.

- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to Rule R6493-3 and Rule R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Jessy Pink

Jessy Pink
Landman

'APIWellNo:43047503440000'

'APIWellNo:43047503440000'

IPC #08-298

Paleontological Reconnaissance Survey Report

Survey of Kerr McGee's Proposed Multi-Well Pads, Access Roads, Pipelines, and Pipeline Upgrades for "Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS & #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS" (Sec. 2 & 6, T 10 S, R 23 E)

Asphalt Wash
Topographic Quadrangles
Uintah County, Utah

February 20, 2009

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

INTRODUCTION

At the request of Raleen White of Kerr McGee Onshore LP and authorized by the BLM Vernal Field Office and James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Kerr McGee's proposed multi-well pads, access roads, pipelines, and pipeline upgrades for "Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS & #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS" (Sec. 2 & 6, T 10 S, R 23 E) was conducted by Stephen Sandau and Thomas Temme on November 5, 2008. 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

The new Potential Fossil Yield Classification (PFYC) System (October, 2007) replaces the Condition Classification System from Handbook H-8270-1. Geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential.

- ***Class 1* – Very Low**. Geologic units (igneous, metamorphic, or Precambrian) not likely to contain recognizable fossil remains.
- ***Class 2* – Low.** Sedimentary geologic units not likely to contain vertebrate fossils or scientifically significant non-vertebrate fossils. (Including modern eolian, fluvial, and colluvial deposits etc…)
- ***Class 3* – Moderate or Unknown.** Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential.
    - ***Class 3a* – Moderate Potential.** The potential for a project to be sited on or impact a significant fossil locality is low, but is somewhat higher for common fossils.

- ***Class 3b* – Unknown Potential.** Units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known.

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

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

LOCATION

Kerr McGee’s proposed multi-well pads, access roads, pipelines, and pipeline upgrades for “Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS; #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS” (Sec. 2, & 6, T 10 S, R 23 E) are on lands managed by the BLM and the State of Utah Trust Lands Administration (SITLA), 2 to 6 miles east of the White River, a few miles north of the Saddletree Draw and Asphalt Wash, and about 14-18 miles southwest of Bonanza, UT. The project area can be found on the Asphalt Wash 7.5 minute U. S. Geological Survey Quadrangle Maps, Uintah County, Utah.

PREVIOUS WORK

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

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

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

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

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

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

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

FIELD METHODS

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

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

PROJECT AREA

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

Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS
The proposed access road, pipeline, and well pad are located in the SW/NW quarter-quarter section of Sec. 2, T 10 S, R 23 E (Figure 1). The project area is situated in low, rolling drainage-cut hills of an arid scrubland. Ground cover consists of silty soil and colluvium derived from clasts of green, purple, and tan siltstones and disaggregated mudstones. Alternating beds of semi-fissile green and tan siltstones and friable green and tan mudstones outcrop in small hills and stream banks throughout the project area. Several isolated fossil fragments and turtle scatters were observed in colluvium within the well pad boundary. Most fragments were moderately to well preserved and highly weathered.

Bonanza #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS
The proposed access road, pipeline, and well pad are located in the SW/NW quarter-quarter section of Sec. 6, T 10 S, R 23 E (Figure 2). The project area is situated in large rolling hills, ridges, and buttes as well as drainage-cut valleys and canyons of an arid scrubland. Ground cover consists of silty soil and colluvium/alluvium derived from clasts of green, purple, and tan siltstones; tan, medium to coarse-grained, sub-arkosic sandstone; and disaggregated mudstones and sandstones. Lithologies exposed in the project area are consistent with that of the lower Wagonhound Member and include green, gray, purple, and tan siltstones and mudstones; green and orange-tan, medium to coarse-grained, sub-arkosic sandstones; and purple, fine-grained, parallel-bedded lithic sandstone. Cross-bedded, channel-fill sandstones and conglomeratic sandstone lenses appear in the thickly bedded, tan sandstone layers. Outcrops in the project area occur as resistant beds in hillsides or as exposures in drainage-cut banks or bottoms.

Infrequent to abundant isolated fossil fragments and turtle scatters were observed in colluvium throughout the project area, with higher concentrations observed around the access road to well pad tie-in area and along the eastern edge of the well pad. Most fragments were poorly to well preserved and highly weathered. Seven individual turtles (?*Echmatemys* sp.), were observed in the project area, as fragmentary concentrations sourcing from green and tan siltstones or concentrated in colluvium. A small concentration of unidentifiable mammal limb bone fragments was observed near the pit of the proposed well pad sourcing from green siltstone. A small fragment of petrified wood was also observed in the colluvium of the pit area. Ichnofossil burrows, presumably *Planolites*, were observed in the green, medium-grained sandstones.

SURVEY RESULTS

PROJECT	GEOLOGY	PALEONTOLOGY
“Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS” (Sec. 2, T 10 S, R 23 E)	The project area is situated in low, rolling drainage-cut hills of an arid scrubland. Ground cover consists of silty soil and colluvium derived from clasts of green, purple, and tan siltstones and disaggregated mudstones. Alternating beds of semi-fissile green and tan siltstones and friable green and tan mudstones outcrop in small hills and stream banks throughout the project area.	Several isolated fossil fragments and turtle scatters were observed in colluvium within the well pad boundary. Most fragments were moderately to well preserved and highly weathered. **Class 4a**

“Bonanza #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS” (Sec. 6, T 10 S, R 23 E)	The project area is situated in large rolling hills, ridges, and buttes as well as drainage-cut valleys and canyons of an arid scrubland. Ground cover consists of silty soil and colluvium/alluvium derived from clasts of green, purple, and tan siltstones; tan, medium to coarse-grained, sub-arkosic sandstone; and disaggregated mudstones and sandstones. Lithologies exposed in the project area are consistent with that of the lower Wagonhound Member and include green, gray, purple, and tan siltstones and mudstones; green and orange-tan, medium to coarse-grained, sub-arkosic sandstones; and purple, fine-grained, parallel-bedded lithic sandstone. Cross-bedded, channel-fill sandstones and conglomeratic sandstone lenses appear in the thickly bedded, tan sandstone layers. Outcrops in the project area occur as resistant beds in hillsides or as exposures in drainage-cut banks or bottoms.	Infrequent to abundant isolated fossil fragments and turtle scatters were observed in colluvium throughout the project area, with higher concentrations observed around the access road to well pad tie-in area and along the eastern edge of the well pad. Most fragments were poorly to well preserved and highly weathered. Seven individual turtles (?*Echmatemys* sp.), were observed in the project area, as fragmentary concentrations sourcing from green and tan siltstones or concentrated in colluvium. A small concentration of unidentifiable mammal limb bone fragments was observed near the pit of the proposed well pad sourcing from green siltstone. A small fragment of petrified wood was also observed in the colluvium of the pit area. Ichnofossil burrows, presumably *Planolites*, were observed in the green, medium-grained sandstones. **Class 4a**

RECOMMENDATIONS

A reconnaissance survey was conducted for Kerr McGee’s proposed multi-well pads, access roads, pipelines, and pipeline upgrades for “Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS; #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS” (Sec. 2 & 6, T 10 S, R 23 E). The well pads and the associated access roads, pipeline upgrades, and pipelines covered in this report showed some signs of vertebrate fossils, therefore, we advice the following recommendations.

Due to the abundance of vertebrate fossil material found within the project area for “Bonanza #1023-6M1B, 6N1AS, 6N1CS, & 6N4BS”, we recommend that a permitted paleontologist be present to monitor the construction of the proposed access road, pipeline and well pad.

Furthermore, we recommend that no paleontological restrictions should be placed on the development of the proposed project area for “Bonanza #1023-02G2CS, 02G3BS, 02G1BS, & 02H3CS.”

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.

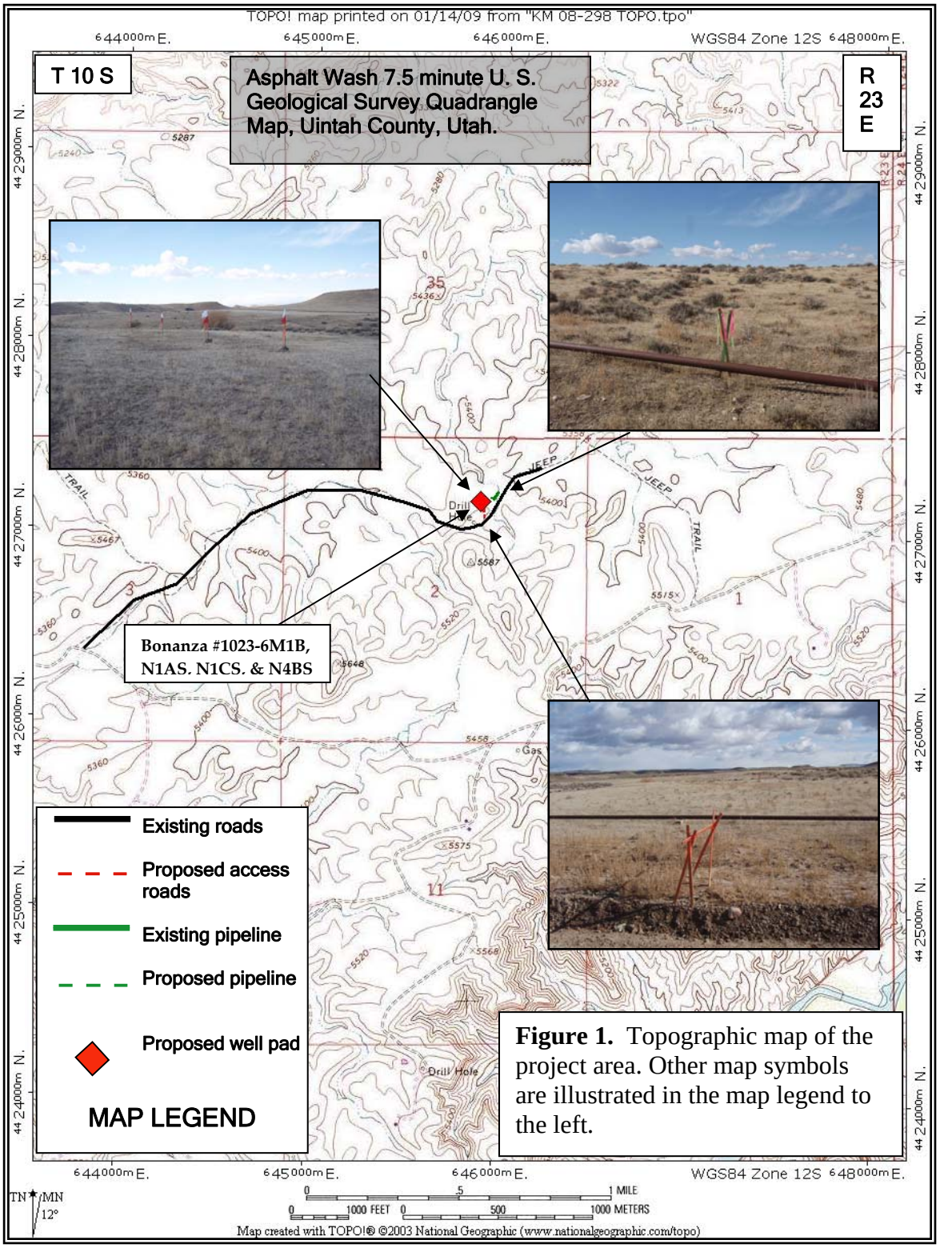


Figure 1. Topographic map of the project area. Other map symbols are illustrated in the map legend to the left.

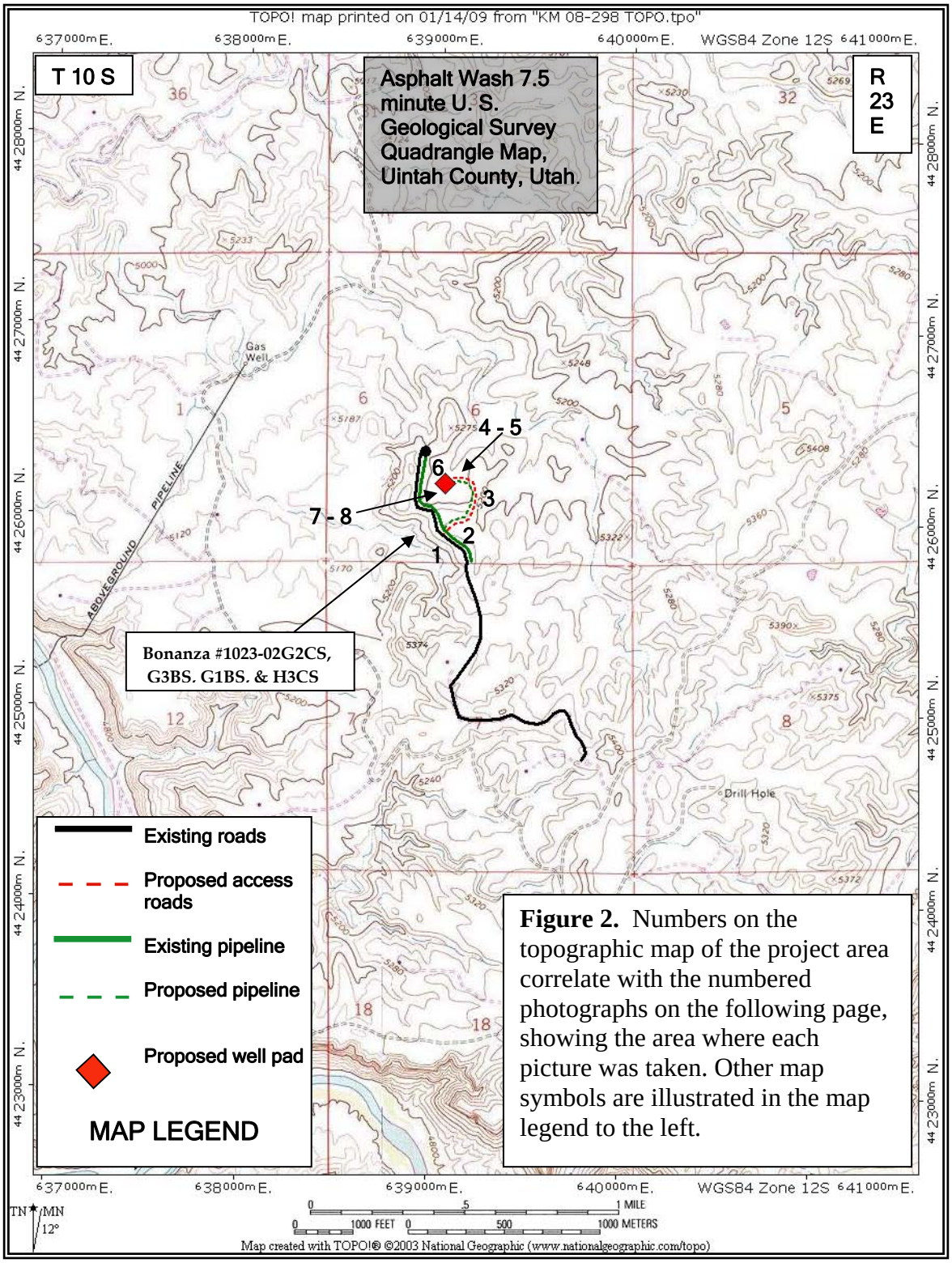


Figure 2. Numbers on the topographic map of the project area correlate with the numbered photographs on the following page, showing the area where each picture was taken. Other map symbols are illustrated in the map legend to the left.

Figure 2. *continued…*

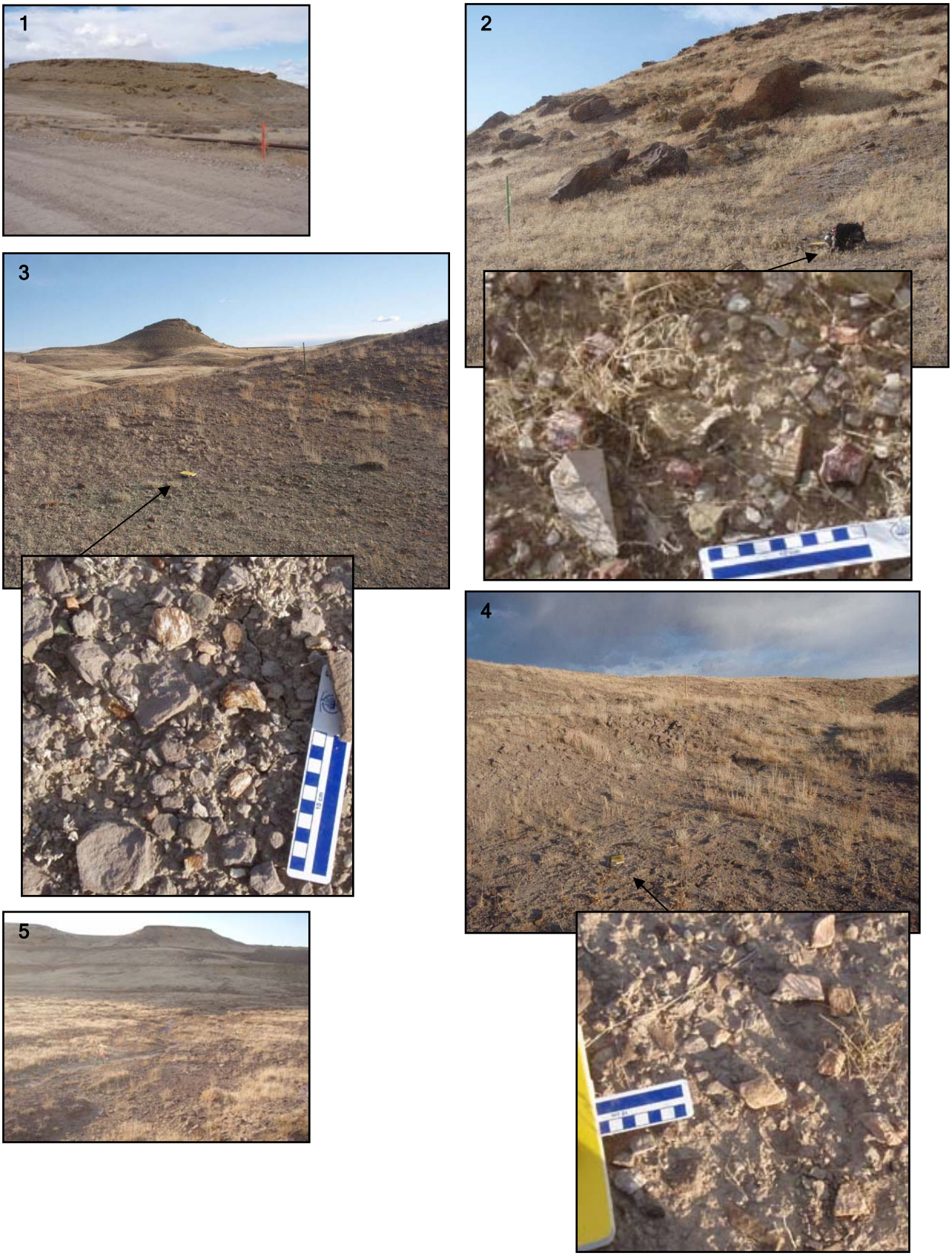
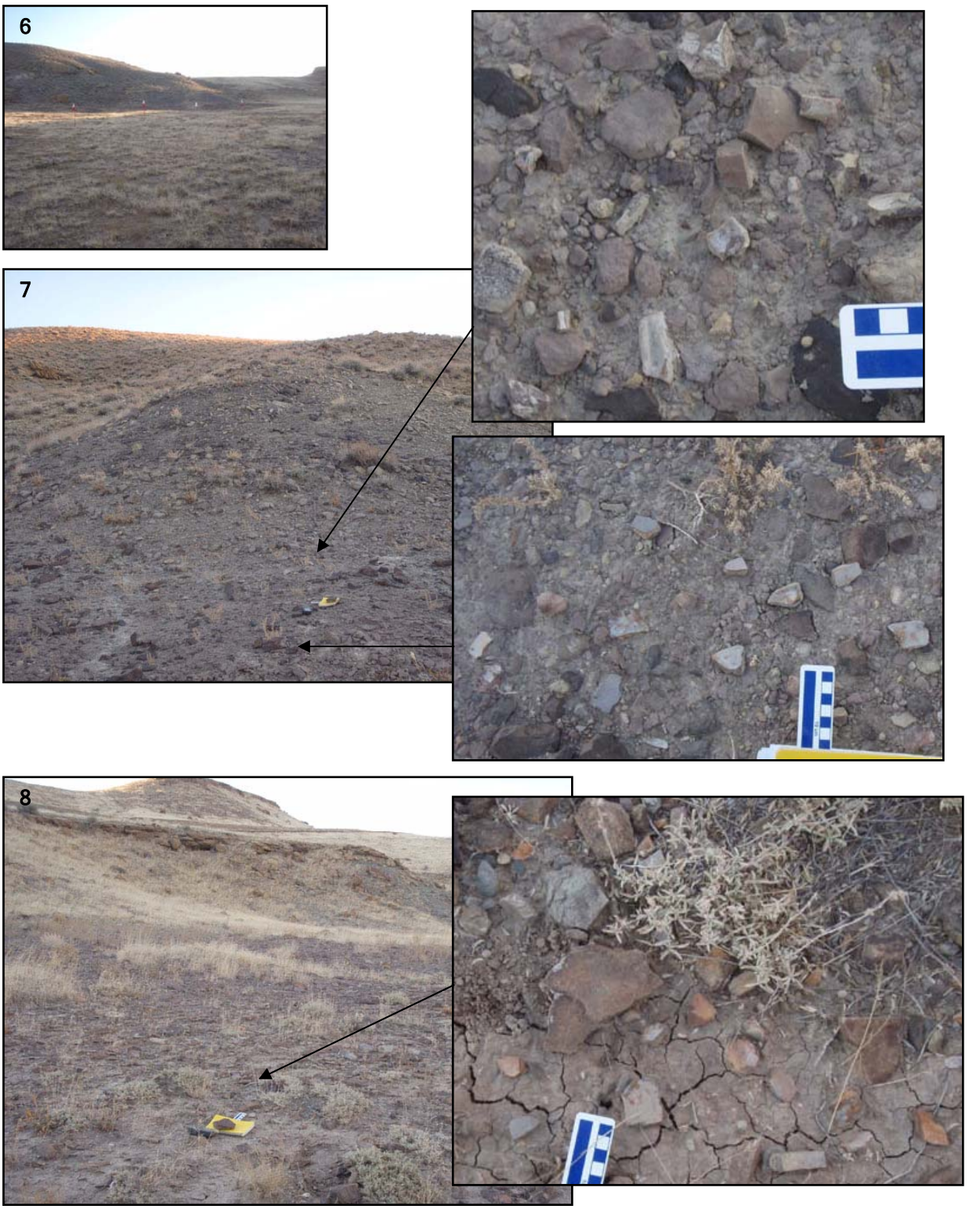


Figure 2. *continued…*



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CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP’S ELEVEN PROPOSED WELL LOCATIONS IN TOWNSHIP 10S, RANGE 23E, SECTIONS 2 AND 7, UINTAH COUNTY, UTAH

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CLASS I REVIEW OF KERR-MCGEE OIL AND GAS ONSHORE LP’S ELEVEN PROPOSED WELL LOCATIONS IN TOWNSHIP 10S, RANGE 23E, SECTIONS 2 AND 7, UINTAH COUNTY, UTAH

By:

Patricia Stavish

Prepared For:

State of Utah
School & Institutional Trust Lands Administration
and
Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

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

Prepared By:

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

MOAC Report No. 09-009

March 3, 2009

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

Public Lands Policy Coordination Office
Archaeological Survey Permit No. 117

INTRODUCTION

A Class I literature review was completed Montgomery Archaeological Consultants Inc. (MOAC) in February 2009 of Kerr-McGee Onshore's 11 proposed directional well locations with associated access and pipeline corridors in Township 10S, Range 23E, Sections 2 and 7. The project area is situated north of the White River, south of the town of Vernal, Uintah County, Utah. The well pads are designated: (Bonanza #1023-02B) Directional Pad, Bonanza #1023-02G1BS, Bonanza #1023-02G3BS, Bonanza #1023-02G2CS, Bonanza #1023-02H3CS, Bonanza #1023-02F Directional Pad, Bonanza #1023-02K1S, Bonanza #1023-02K4S, Bonanza #1023-02L2S, Bonanza #1023-02M1S, and Bonanza #1023-7E-4. This document was implemented at the request of Ms. Raleen White, Kerr-McGee Onshore LP, Denver, Colorado. Land status includes state lands administered by the State of Utah School & Institutional Trust Lands Administration (SITLA) and public lands administered by the Bureau of Land Management, Vernal Field Office.

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

The project area, in which Kerr-McGee Onshore's 11 proposed directional well locations occur, was previously inventoried by MOAC in 2003 for two Class III block inventories of Westport Oil & Gas Company's proposed oil and gas development in Sections 2 and 7 (Elkins and Montgomery 2003a,b). 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 inventory indicated that one previous archaeological site (42Un3475) occurs near the current project area.

DESCRIPTION OF THE PROJECT AREA

The project area is situated near the Southman Canyon Gas Field and north of the White River in the Uinta Basin. The legal description is Township 10 South, Range 23 East, Sections 2 and 7 (Table 1; Figure 1).

Table 1. Kerr-McGee Onshore’s 11 Proposed Directional Well Locations.

Well Designation	Legal Description	Access/Pipeline Corridor	Cultural Resources
(Bonanza #1023-02B) Directional Pad Bonanza #1023-02G1BS Bonanza #1023-02G3BS Bonanza #1023-02G2CS Bonanza #1023-02H3CS	NW/NE Sec. 2, T10S, R23E	Access: 142 ft Pipeline: 204 ft	None
Bonanza #1023-02F Directional Pad Bonanza #1023-02K1S Bonanza #1023-02K4S Bonanza #1023-02L2S Bonanza #1023-02M1S	SE/NW Sec. 2, T10S, R23E	Pipeline: 3844 ft	42Un3475
Bonanza #1023-7E-4	SW/NW Sec. 7, T10S, R23E	Pipeline: 573 ft Access: 310 ft	None

Environmental Setting

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 adjacent to the White River and Bitter Creek. Elevation averages 4860 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.

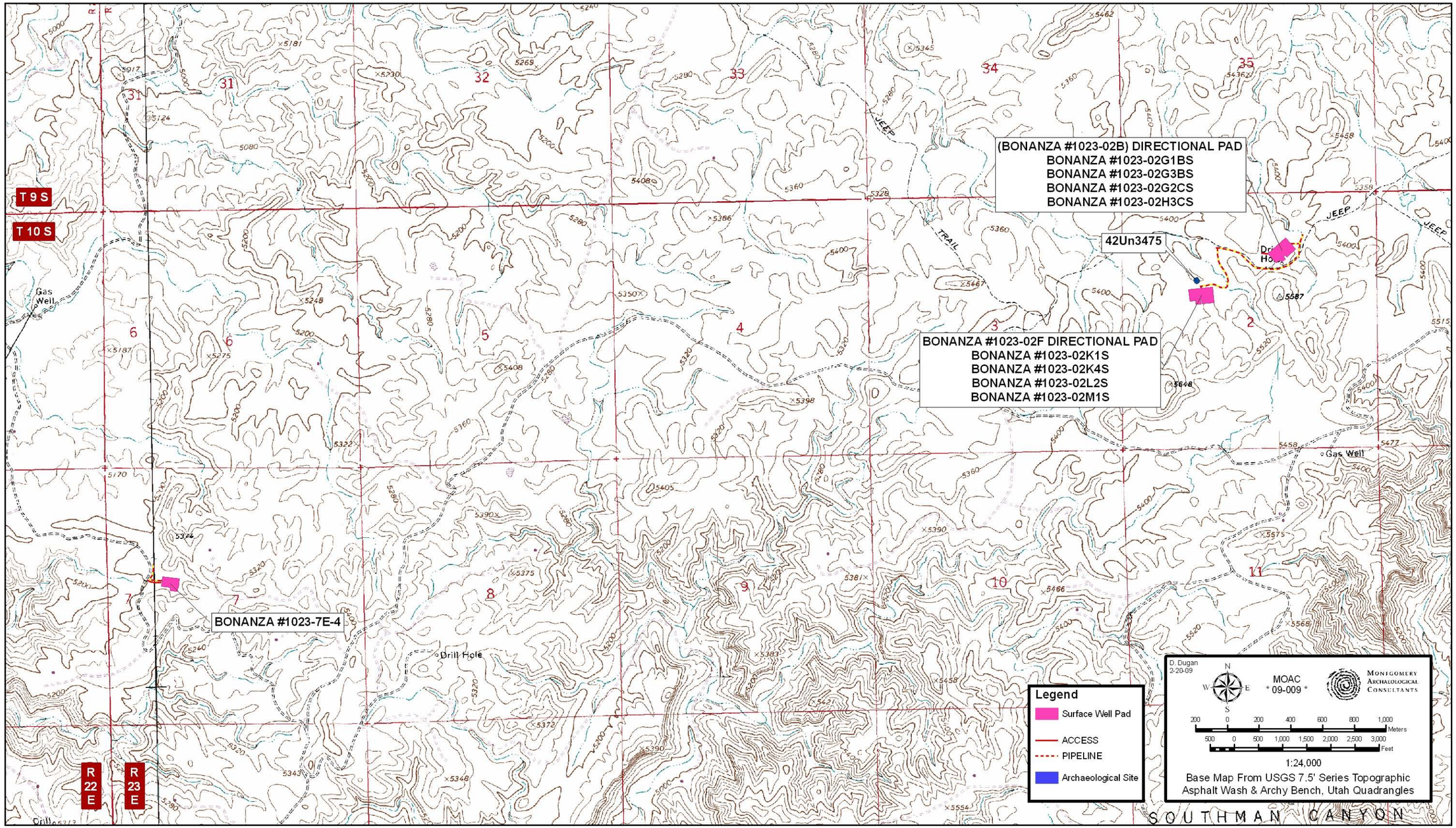

Figure 1. Kerr-McGee Oil & Gas Onshore LP’s 11 Proposed Well Locations with Access and Pipeline Corridors, Uintah County, Utah.

CLASS I RESULTS AND RECOMMENDATIONS

The Class I literature review resulted in the location of one previously documented site, 42Un3475. Site 42Un3475 is a prehistoric temporary camp documented by MOAC in 2003 (Elkins and Montgomery 2003a). The site consists of a rockshelter with a hearth and an artifact scatter. 42Un3475 has been recommended as eligible to the NRHP under Criterion D.

The Class I literature review of 11 proposed well locations with associated pipeline and access corridors in Township 10S, Range 23E, Sections 2 and 7 resulted in the location of one previously documented archaeological site (42Un3474). Site 42Un3475 has been evaluated as eligible to the NRHP under Criterion D. It is recommended that site 42Un3475 be avoided by the undertaking. The Bonanza #1023-02F well pad is situated 100 ft from the site and 75 ft from the associated pipeline, which should provide avoidance of the site. Based on the adherence to this avoidance recommendation, a determination of “no adverse impact” is proposed pursuant to Section 106, CFR 800.

REFERENCES CITED

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2003a Cultural Resource Block Inventory of Section 2, Township 10 South, Range 23 East for Westport Oil & Gas Company, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-03-MQ-883s.

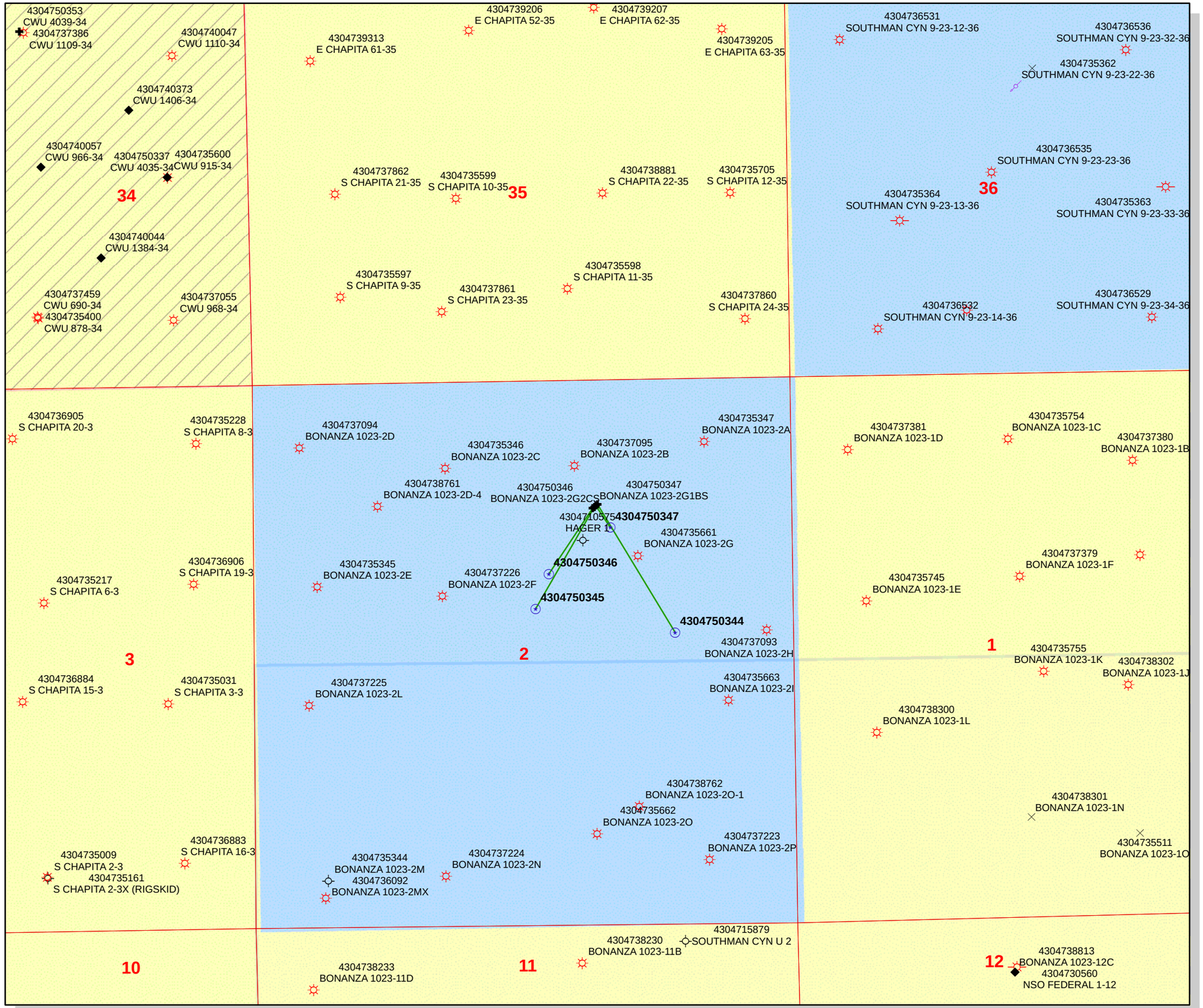
2003b Cultural Resource Block Inventory of Sections 4, 5, 6, 7, and 8, Township 10 South, Range 23 East for Westport Oil & Gas Company, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah. Report No. U-03-MQ-882b.

Patterson, J. J., J. Fritz, K. Lower-Eskelson, R. Stash and A. Thomas

2008 NBU Class I Existing Data Review for Kerr-McGee Oil & Gas Onshore LP, Uintah County, Utah. Montgomery Archaeological Consultants, Moab, Utah.

Stokes, W. L.

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



API Number: 4304750344

Well Name: BONANZA 1023-2H3CS

Township 10.0 S Range 23.0 E Section 2

Meridian: SLBM

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

Map Prepared:
Map Produced by Diana Mason

Units

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

Fields

STATUS
- ACTIVE
- COMBINED
- Sections

Wells Query Events
- <all other values>

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

1,200 600 0 1,200 Feet

1:12,000

'APIWellNo:4304750344000'

API Well No: 43047503440000

From: Davis, Jim(Jim Davis)
To: Mason, Diana
Date: 4/23/2009 7:37 AM
Subject: Kmg well approvals (8)

CC: Garrison, LaVonne, Bonner, Ed, "White, Raleen" <Raleen.White@anadarko.com>

The following wells have been approved by SITLA including arch and paleo clearance.

NBU 922-32E2S -4304750351
NBU 922-32F2S -4304750350
NBU 922-32F3T - 4304750349
NBU 922-32K1S - 4304750348

BONANZA 1023-2G1BS - 4304750347
BONANZA 1023-2G2CS - 4304750346
BONANZA 1023-2G3BS - 4304750345
BONANZA 1023-2H3CS - 4304750344

-Jim

Jim Davis
State of Utah
Trust Lands Administration
(801) 538-5156

BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. BONANZA 1023-2H3CS 43047503440000

Well Name	KERR-MCGEE OIL & GAS ONSHORE, L.P. BONANZA 1023-2H3CS 43047			
String	Surf	Prod		
Casing Size(")	9.625	4.500		
Setting Depth (TVD)	2200	8000		
Previous Shoe Setting Depth (TVD)	20	2200		
Max Mud Weight (ppg)	8.4	11.6		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3520	7780		
Operators Max Anticipated Pressure (psi)	4560	11.0		

Calculations	Surf String	9.625	"
Max BPH (psi)	.052*Setting Depth*MW=	961	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	697	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	477	YES Reasonable depth in area, no expected pressure
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	481	NO Reasonable depth in area, no expected pressure
Required Casing/BOPE Test Pressure=		2200	psi
*Max Pressure Allowed @ Previous Casing Shoe=		20	psi *Assumes 1psi/ft frac gradient

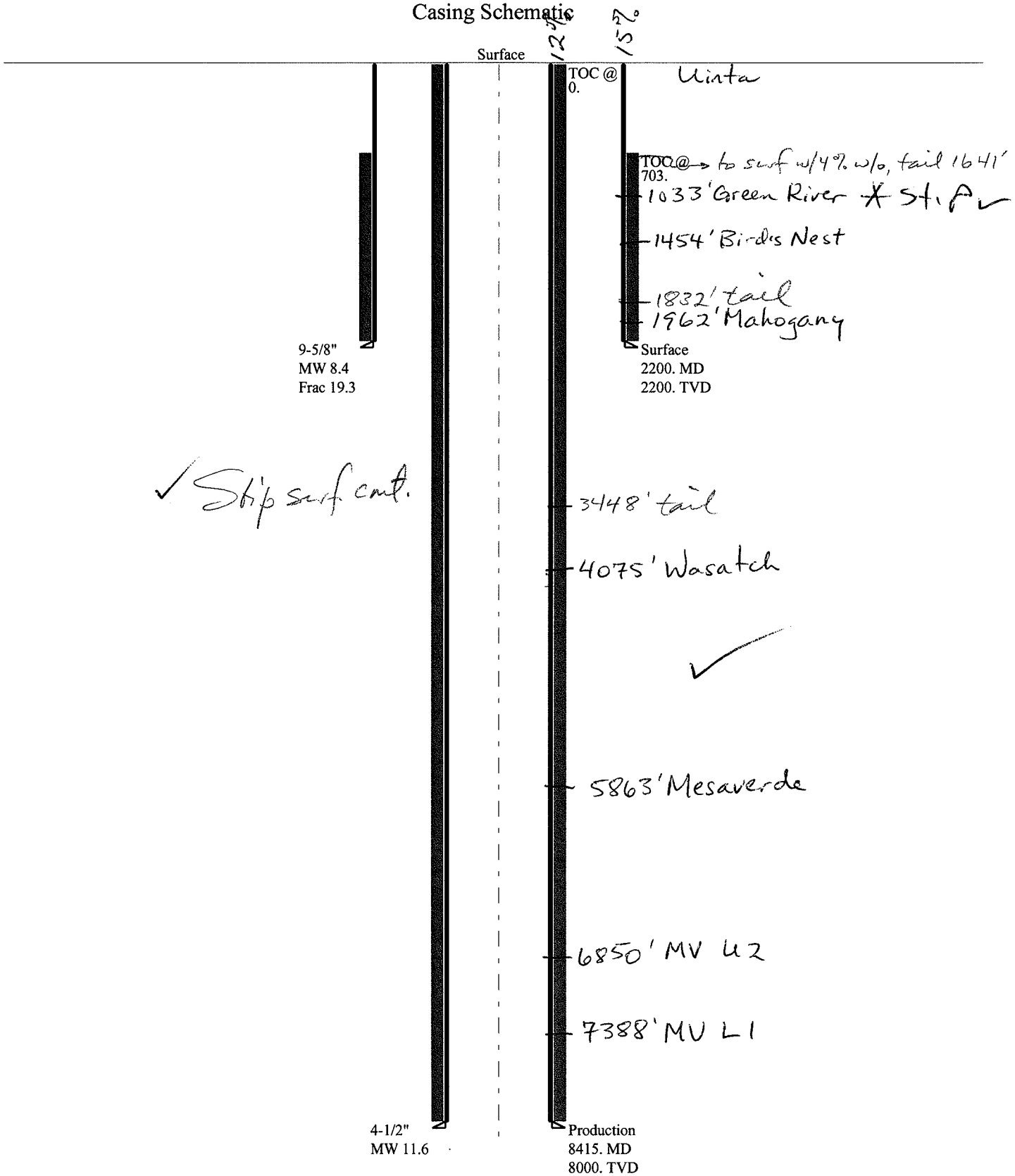
Calculations	Prod String	4.500	"
Max BPH (psi)	.052*Setting Depth*MW=	4826	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3866	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3066	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3550	NO Reasonable, note max allowed pressure
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2200	psi *Assumes 1psi/ft frac gradient

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

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

43047503440000 BONANZA 1023-2H3CS

Casing Schematic



Well name:	**43047503440000 BONANZA 1023-2H3CS**
Operator:	**KERR-MCGEE OIL & GAS ONSHORE, L.P.**
String type:	Surface
Project ID:	43-047-50344
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,936 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,200 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on air weight.
Neutral point: 1,927 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	106 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	1,000 ft
Cement top:	703 ft

Directional well information:

Kick-off point	0 ft
Departure at shoe:	3 ft
Maximum dogleg:	3 °/100ft
Inclination at shoe:	3 °

Re subsequent strings:

Next setting depth:	8,000 ft
Next mud weight:	11.600 ppg
Next setting BHP:	4,821 psi
Fracture mud wt:	19.250 ppg
Fracture depth:	2,200 ft
Injection pressure:	2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	2200	9.625	36.00	J-55	LT&C	2200	2200	8.796	17990

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	960	1948	2.029	2200	3520	1.60	79.2	453	5.72 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: April 29,2009
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

Well name:	**43047503440000 BONANZA 1023-2H3CS**
Operator:	**KERR-MCGEE OIL & GAS ONSHORE, L.P.**
String type:	Production
Project ID:	43-047-50344
Location:	UINTAH COUNTY

Design parameters:

Collapse

Mud weight: 11.600 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 3,061 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 4,821 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on air weight.

Neutral point: 7,028 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	187 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	1,000 ft
Cement top:	Surface

Directional well information:

Kick-off point	0 ft
Departure at shoe:	1454 ft
Maximum dogleg:	3 °/100ft
Inclination at shoe:	0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	8415	4.5	11.60	I-80	LT&C	8000	8415	3.875	111078

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4821	6360	1.319	4821	7780	1.61	92.8	212	2.28 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: April 29,2009
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8000 ft, a mud weight of 11.6 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.				
Well Name	BONANZA 1023-2H3CS				
API Number	43047503440000	**APD No**	1406	**Field/Unit**	NATURAL BUTTES
Location: 1/4,1/4	NWNE **Sec** 2 **Tw** 10.0S **Rng** 23.0E 1191 FNL 1917 FEL				
GPS Coord (UTM)		**Surface Owner**			

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Ramie Hoopes, Griz Oleen and Tony Kzneck (Kerr McGee), Pat Rainbolt (UDWR) and David Kay (Uintah Engineering and Land Surveying).

Regional/Local Setting & Topography

The general area is within the south edge of the Coyote Wash Drainage southwest of Bonanza, Utah. This drainage is a major drainage beginning near the Utah-Colorado border to the east and joining the White River approximately 8 miles to the west. The drainage consists of several significant side drainages. The drainage is dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. The topography is characterized by rolling hills, frequently divided by gentle to deep draws, which flow into Coyote Wash. The draws are often rimmed with steep side hills with exposed sand stone bedrock cliffs. Ouray, Utah is approximately 31.6 road miles to the northwest with Vernal, Utah approximately 35 air miles to the northwest. The area is accessed by Utah State, Uintah County and existing oilfield development Roads to within 300 feet of the site.

Four gas wells are proposed to be directionally drilled from this pad. Part of the location is on the old reclaimed pad of the Hagar #1 well, which has been plugged. The pad will be oriented in a southwest to northeast direction. It is on a gentle to moderately steep north slope which extends away from a high ridge to the south. To the north the pad will end near the pad of another active well. This pad could not be used because of the additional distance from down-hole targets of some wells from this location. An active drainage angle across the location from corner 8 to corner 1. This draw will be diverted along the northwest corner of the pad. A small dam exists in this draw which furnishes water for antelope. A new pond will be constructed in the general area to replace this pond. No stability problems were noted with the old pad. The selected site appears to be a good location for constructing a pad and drilling and operating the proposed wells.

A reserve pit 100'x 250'x 10' deep is planned in an area of cut in the south west corner of the location. Because the length of time the reserve pit will be used and the roughness of the terrain, Kerr McGee committed to line it with a double 20-mil.liner and an appropriate thickness of felt sub-liner to cushion the rock. A second pit for completion flows is shown on the Layout Sheet. If it is to be constructed it will be applied for separately.

Both the surface and minerals for this location are owned by SITLA.

Surface Use Plan

Current Surface Use
Grazing
Recreational
Wildlfe Habitat

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.02	**Width** 335 **Length** 440	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation is poor with halogeton, annual mustard, greasewood, broom snakeweed and shadscale present.

Antelope, coyote, small mammals and birds. Winter domestic sheep grazing

Soil Type and Characteristics

Soils are a rocky shallow sandy loam

Erosion Issues Y

. An active drainage angle across the location from corner 8 to corner 1. This draw will be diverted along the northwest corner of the pad.

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? Y

. An active drainage angle across the location from corner 8 to corner 1. This draw will be diverted along the northwest corner of the pad.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? **Paleo Potental Observed?** N **Cultural Survey Run?** **Cultural Resources?**

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	100 to 200	5	
Distance to Surface Water (feet)	300 to 1000	2	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	42	1 Sensitivity Level

Characteristics / Requirements

A reserve pit 100'x 250'x 10' deep is planned in an area of cut in the south west corner of the location. Because the length of time the reserve pit will be used and the roughness of the terrain, Kerr McGee committed to line it with a double 20-mil.liner and an appropriate thickness of felt sub-liner to cushion the rock. A second pit for completion flows is shown on the Layout Sheet. If it is to be constructed it will be applied for separately.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 40 **Pit Underlayment Required?** Y

Other Observations / Comments

Write-up completed 04-14-2009

Floyd Bartlett	11/18/2008
Evaluator	**Date / Time**

Application for Permit to Drill
Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
1406	43047503440000	SITLA	GW	S	No

Operator	KERR-MCGEE OIL & GAS ONSHORE, L.P.	**Surface Owner-APD**	
Well Name	BONANZA 1023-2H3CS	**Unit**	
Field	NATURAL BUTTES	**Type of Work**	DRILL

Location NWNE 2 10S 23E S 1191 FNL 1917 FEL GPS Coord (UTM) 645922E 4426939N

Geologic Statement of Basis

Kerr McGee proposes to set 2,200’ of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,400'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the proposed location . The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

Brad Hill	4/15/2009
APD Evaluator	**Date / Time**

Surface Statement of Basis

The general area is within the south edge of the Coyote Wash Drainage southwest of Bonanza, Utah. This drainage is a major drainage beginning near the Utah-Colorado border to the east and joining the White River approximately 8 miles to the west. The drainage consists of several significant side drainages. The drainage is dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. The topography is characterized by rolling hills, frequently divided by gentle to deep draws, which flow into Coyote Wash. The draws are often rimmed with steep side hills with exposed sand stone bedrock cliffs. Ouray, Utah is approximately 31.6 road miles to the northwest with Vernal, Utah approximately 35 air miles to the northwest. The area is accessed by Utah State, Uintah County and existing oilfield development Roads to within 300 feet of the site.

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A reserve pit 100’x 250’x 10’ deep is planned in an area of cut in the south west corner of the location. Because the length of time the reserve pit will be used and the roughness of the terrain, Kerr McGee committed to line it with a double 20-mil.liner and an appropriate thickness of felt sub-liner to cushion the rock. A second pit for completion flows is shown on the Layout Sheet. If it is to be constructed it will be applied for separately.

Both the surface and minerals for this location are owned by SITLA. Jim Davis of SITLA attended the pre-site visit and had no concerns regarding the proposed location.
Pat Rainbolt represented the Utah Division of Wildlife Resources. Mr. Rainbolt stated the area is classified as

critical yearlong habitat for antelope. He however recommended no stipulations for this species as the loss of forage from this location is not significant and water not forage is the factor limiting the herd population in the area. He encouraged replacement of the existing pond with another pond in the general area. No other wildlife is expected to be affected. He gave Ramie Hoopes, representing Kerr McGee and Mr. Davis a copy of his evaluation and a DWR recommended seed mix to use when re-vegetating the area.

Floyd Bartlett	11/18/2008
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A double synthetic liner each with a minimum thickness of 20 mils and an appropriate thickness of felt sub-liner to cushion the liners shall be properly installed and maintained in the reserve pit.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/13/2009
API NO. ASSIGNED: 43047503440000
WELL NAME: BONANZA 1023-2H3CS
OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)
PHONE NUMBER: 720 929-6007
CONTACT: Kathy Schneebeck-Dulnoan

PROPOSED LOCATION: NWNE 2 100S 230E
Permit Tech Review: ✔

SURFACE: 1191 FNL 1917 FEL
Engineering Review: ✔

BOTTOM: 2445 FNL 1175 FEL
Geology Review: ✔

COUNTY: UINTAH
LATITUDE: 39.98192
LONGITUDE: -109.29104
UTM SURF EASTINGS: 645922.00
NORTHINGS: 4426939.00
FIELD NAME: NATURAL BUTTES
LEASE TYPE: 3 - State
LEASE NUMBER: ML 23608
PROPOSED FORMATION: WSMVD
SURFACE OWNER: 3 - State
COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- ✔ **PLAT**
- ✔ **Bond:** STATE/FEE - 22013542
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ✔ **Water Permit:** Permit #43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **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. drl. unit boundary

- ✔ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
5 - Statement of Basis - bhill
15 - Directional - dmason
25 - Surface Casing - ddoucet

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 1023-2H3CS
API Well Number: 43047503440000
Lease Number: ML 23608
Surface Owner: STATE
Approval Date: 4/30/2009

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 .

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

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

Conditions of Approval:
In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Surface casing shall be cemented to the surface.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to spudding the well - contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program - contact

API Well No: 43047503440000

Dustin Doucet
- Prior to commencing operations to plug and abandon the well - contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:
- Plugging and abandonment or significant plug back of this well - contact Dustin Doucet
- Any changes to the approved drilling plan - contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):
- Dan Jarvis at: (801) 538-5338 office
  (801) 942-0871 home
- Carol Daniels at: (801) 538-5284 office
- Dustin Doucet at: (801) 538-5281 office
  (801) 733-0983 home

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

Approved By:

Gil Hunt
Associate Director, Oil & Gas

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

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

Well Name: **BONANZA 1023-2H3CS**

Api No: **43-047-50344** Lease Type: **STATE**

Section **02** Township **10S** Range **23E** County **UINTAH**

Drilling Contractor **PETE MARTIN DRLG** RIG # **BUCKET**

SPUDDED:

Date **12/14/2009**

Time **10:30 AM**

How **DRY**

Drilling will Commence:

Reported by **JAMES GOBER**

Telephone # **(435) 828-2079**

Date **12/14/2009** **Signed** **CHD**

API Well No: 43047503440000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-2H3CS

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

9. API NUMBER:
43047503440000

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

PHONE NUMBER:
720 929-6007 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 2 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT Date of Spud: 12/14/2009	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL LOCATION ON 12/14/2009 AT 10:30 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
December 15, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE		**DATE**
N/A		12/15/2009

RECEIVED December 15, 2009

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
4304750344	BONANZA 1023-2H3CS		NWNE	2	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17426	12/14/2009			12/22/09	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 12/14/2009 AT 10:30 HRS. BHL = SWNE

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750347	BONANZA 1023-2G1BS		NWNE	2	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17427	12/14/2009			12/22/09	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 12/14/2009 AT 12:30 HRS. BHL = SWNE

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750345	BONANZA 1023-2G3BS		NWNE	2	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	17428	12/14/2009			12/22/09	

Comments: MIRU PETE MARTIN BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 12/14/2009 AT 14:30 HRS. BHL = SWNE

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

12/15/2009
Date

RECEIVED
DEC 15 2009
DIV. OF OIL, GAS & MINING

(5/2000)

API Well No: 43047503440000

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

FORM 9

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7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-2H3CS

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

9. API NUMBER:
43047503440000

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

PHONE NUMBER:
720 929-6007 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 2 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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TYPE OF SUBMISSION	TYPE OF ACTION		
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☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 12/17/2009	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

MIRU PROPETRO AIR RIG ON 12/15/2009. DRILLED 12-1/4" SURFACE HOLE TO 1960'. RAN 9-5/8" 36# J-55 SURFACE CSG. PUMP 150 BBLS OF H20. PUMP 20 BBLS OF GEL WATER. PUMP 350 SX CLASS G PREM LITE TAIL CMT @ 15.8 PPG, 1.15 YIELD. DROP PLUG ON FLY & DISPLACE W/146.1 BBLS FRESH WATER. 100 PSI OF LIFT. NO RETURNS. BUMP PLUG 600 PSI. TOP OUT # 1 W/100 SX CLASS G PREM LITE @ 15.8 PPG, 1.15 YIELD. WAIT 2 HRS AND PUMP TOP OUT #2 W/100 SX SAME CMT. WAIT 1 HOUR AND PUMP TOP OUT # 3 W/100 SX SAME CMT. NO CMT TO SURFACE. WILL REDIMIX WITH PETE MARTIN DRILLING. WORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
December 21, 2009

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE		**DATE**
N/A		12/21/2009

RECEIVED December 21, 2009

API Well No: 43047503440000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-2H3CS

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

9. API NUMBER:
43047503440000

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

PHONE NUMBER:
720 929-6007 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 2 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
✓ DRILLING REPORT Report Date: 2/2/2010	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

FINISHED DRILLING FROM 1960' TO 8370' ON 1/31/2010. RAN 4-1/2" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS WATER AHEAD. LEAD CMT W/560 SX CLASS G PREM LITE @ 11.8 PPG, 2.42 YIELD. TAILED CMT W/1100 SX CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YIELD. DISPLACE W/129 BBLS WATER, BUMPED PLUG, FLOATS HELD, 1 1/2 BBLS BACK TO TRUCK. CEMENT TO SURFACE GOOD CIRC THROUGHOUT JOB, 2300 PSI FINAL LIFT. CLEAN MUD TANKS. RELEASE ENSIGN 146 RIG ON 2/2/2010 AT 05:30 HRS.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
February 02, 2010

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE		**DATE**
N/A		2/2/2010

RECEIVED February 02, 2010

API Well No: 43047503440000

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-2H3CS

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

9. API NUMBER:
43047503440000

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

PHONE NUMBER:
720 929-6007 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 2 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

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

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

THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 4/15/2010 AT 1:30 A.M. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.

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

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE		**DATE**
N/A		4/15/2010

RECEIVED April 15, 2010

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

AMENDED REPORT ☐ (highlight changes)

FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER: BONANZA 1023-2H3CS

9. API NUMBER: 4304750344

10 FIELD AND POOL, OR WILDCAT: NATURAL BUTTES

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 2 10S 23E

12. COUNTY: UINTAH

13. STATE: UTAH

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

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

2. NAME OF OPERATOR: KERR McGEE OIL & GAS ONSHORE LP

3. ADDRESS OF OPERATOR: P.O. BOX 173779 CITY DENVER STATE CO ZIP 80217

PHONE NUMBER: (720) 929-6100

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: NWNE 1191 FNL & 1917 FEL

AT TOP PRODUCING INTERVAL REPORTED BELOW: SENE 2437 FNL & 1187 FEL SEC.2-10S-23E

AT TOTAL DEPTH: SENE 2427 FNL & 1181 FEL SEC.2-10S-23E

14. DATE SPUDDED: 12/14/2009

15. DATE T.D. REACHED: 1/31/2010

16. DATE COMPLETED: 4/15/2010 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5443' GL

18. TOTAL DEPTH: MD 8,370 TVD 8,066

19. PLUG BACK T.D.: MD 8,313 TVD 8,009

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

SECTOR CBL-GR-HDIL/ZDL/CN

23.

WAS WELL CORED?	NO ☑	YES ☐	(Submit analysis)
WAS DST RUN?	NO ☑	YES ☐	(Submit report)
DIRECTIONAL SURVEY?	NO ☐	YES ☑	(Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20"	14" STL	36.7#		40		28			
12 1/4"	9 5/8 J-55	36#		1,946		650			
7 7/8"	4 1/2 I-80	11.6#		8,356		1660			

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	7,952							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) MESAVERDE	6,842	8,284		
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
6,842 8,284	0.36	124	Open ☑ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

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

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
6,842-8,284	PMP 9,828 BBLS SLICK H2O & 369,899 LBS 30/50 SD.

29. ENCLOSED ATTACHMENTS:

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☑ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: PROD

(5/2000)

(CONTINUED ON BACK)

RECEIVED
MAY 20 2010
DIV. OF OIL, GAS & MINING

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
4/15/2010		4/25/2010		24			0	1,495	332	FLOWING
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
20/64	751	1,374					0	1,495	332	PROD

INTERVAL B (As shown in item #26)

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

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

SOLD

33. SUMMARY OF POROUS ZONES (Include Aquifers):

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

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
GREEN RIVER	1,350				
MAHOGANY	1,956				
WASATCH	4,330	6,075			
MESAVERDE	6,075	8,370	(TD)		

35. ADDITIONAL REMARKS (Include plugging procedure)

ATTACHED IS THE CHRONOLOGICAL WELL HISTORY AND FINAL SURVEY.

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

NAME (PLEASE PRINT) ANDY LYTLE TITLE REGULATORY ANALYST

SIGNATURE DATE 5/14/2010

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

Anadarko Petroleum Corporation

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
Bonanza 1023-2B Pad
Bonanza 1023-2H3CS

Bonanza 1023-2H3CS

Survey: WFT MWD SVY

Standard Survey Report

01 February, 2010

Weatherford®

Anadarko E&P Company LP

Bonanza 1023-2H3CS
UINTAH COUNTY, UTAH (nad 27)
SECTION 2 T10S R23E
1191 FNL 1917 FEL
39° 58' 55.090 N
109° 17' 27.570 W

Weatherford

WELL DETAILS: Bonanza 1023-2H3CS

Ground Level: 5442.00

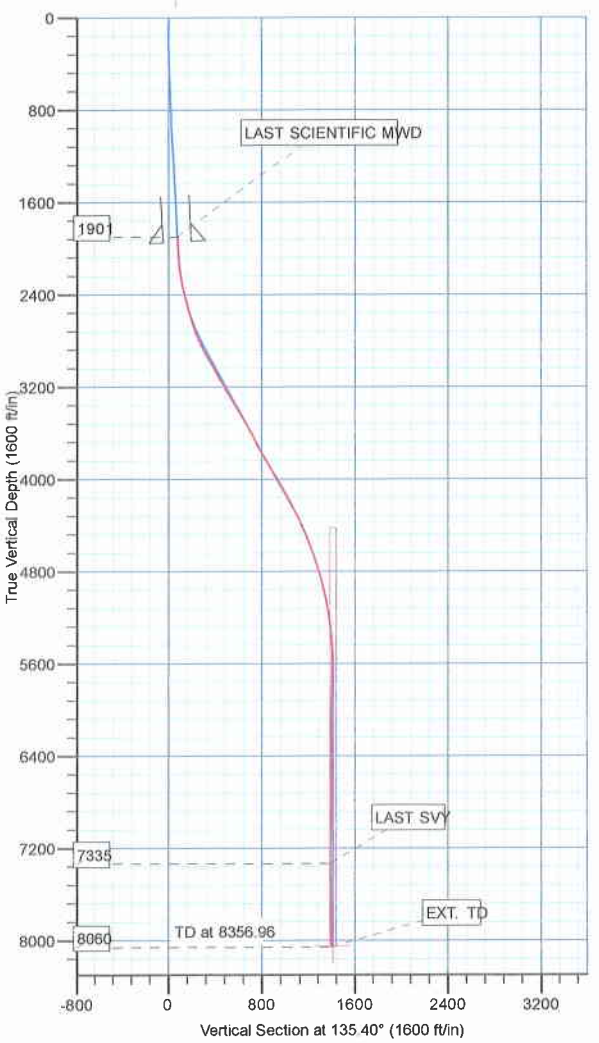
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	14524067.50	2119177.03	39° 58' 55.090 N	109° 17' 27.570 W	

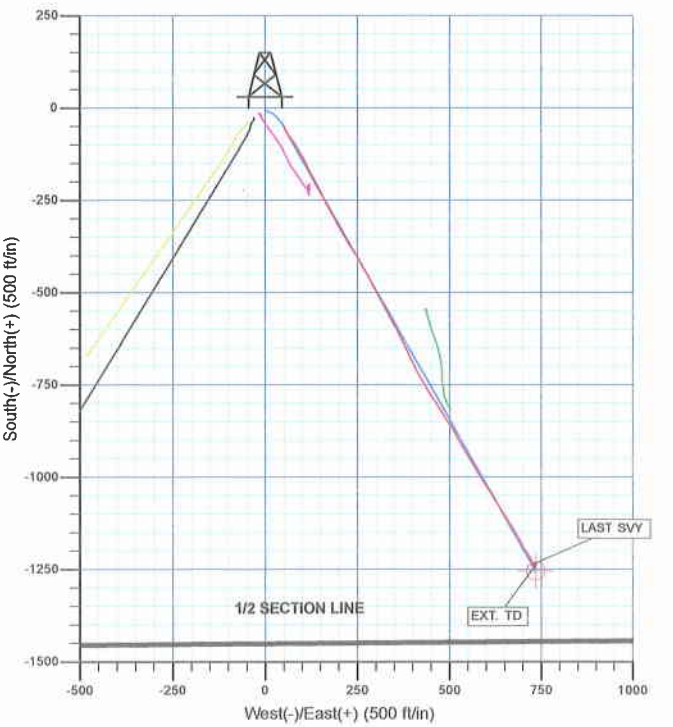
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1903.00	3.26	153.55	1901.15	-52.65	51.92	0.00	0.00	71.66	
2047.00	3.26	153.55	2044.92	-59.98	55.57	0.00	0.00	79.83	
2913.52	29.25	150.35	2869.69	-269.62	173.31	3.00	-3.57	320.24	
4485.46	29.25	150.35	4241.21	-937.12	553.31	0.00	0.00	1088.27	
5947.96	0.00	0.00	5641.00	-1254.56	734.02	2.00	180.00	1453.51	
8356.96	0.00	0.00	8050.00	-1254.56	734.02	0.00	0.00	1453.51	PBHL_Bonanza 1023-2H3CS(2445 FNL 1175 FEL)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4164.00	4385.51	WASATCH
6850.00	7156.96	MESAVERDE

KB @ 5456.00ft
GRD ELEV: 5442.00





WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8050.00	-1254.56	734.02	39° 58' 42.690 N	109° 17' 18.140 W	Circle (Radius: 25.00)

CASING DETAILS

TVD	MD	Name	Size
1944.68	1946.60	9 5/8"	9.62

Survey: WFT MWD SVY (Bonanza 1023-2H3CS/Bonanza 1023-2H3CS)

Created By: Robert H. Scott

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**Database:**	EDM 2003.21 Single User Db

Project UINTAH COUNTY, UTAH (nad 27),

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

Site Bonanza 1023-2B Pad, SECTION 2 T10S R23E

Site Position:		**Northing:**	14,524,067.50 ft	**Latitude:**	39° 58' 55.090 N
From:	Lat/Long	**Easting:**	2,119,177.03 ft	**Longitude:**	109° 17' 27.570 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.10 °

Well Bonanza 1023-2H3CS

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,524,067.50 ft	**Latitude:**	39° 58' 55.090 N
	+E/-W	0.00 ft	**Easting:**	2,119,177.03 ft	**Longitude:**	109° 17' 27.570 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,442.00 ft

Wellbore Bonanza 1023-2H3CS

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2009	1/14/2010	11.19	65.95	52,498

Design Bonanza 1023-2H3CS

Audit Notes:

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

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	135.40

Survey Program **Date** 2/1/2010

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
143.00	1,903.00	SCIENTIFIC MWD (Bonanza 1023-2H3CS	MWD	MWD - Standard
2,008.00	8,370.00	WFT MWD SVY (Bonanza 1023-2H3CS)	MWD	MWD - Standard

Survey

Measured Depth (ft)	**Inclination (°)**	**Azimuth (°)**	**Vertical Depth (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Vertical Section (ft)**	**Dogleg Rate (°/100ft)**	**Build Rate (°/100ft)**	**Turn Rate (°/100ft)**
1,903.00	3.26	153.55	1,901.15	-52.65	51.92	73.95	0.00	0.00	0.00
2,008.00	3.00	158.19	2,005.99	-57.87	54.27	79.32	0.35	-0.25	4.42
2,053.00	3.25	154.82	2,050.93	-60.12	55.25	81.61	0.69	0.56	-7.49
2,099.00	5.13	152.57	2,096.80	-63.13	56.76	84.80	4.10	4.09	-4.89
2,144.00	6.75	147.44	2,141.56	-67.14	59.11	89.31	3.78	3.60	-11.40
2,189.00	7.88	144.07	2,186.19	-71.87	62.34	94.95	2.68	2.51	-7.49
2,235.00	9.06	144.36	2,231.69	-77.37	66.30	101.64	2.57	2.57	0.63
2,280.00	10.13	143.19	2,276.06	-83.41	70.74	109.06	2.42	2.38	-2.60
2,325.00	11.23	144.47	2,320.28	-90.15	75.65	117.31	2.50	2.44	2.84
2,371.00	13.13	146.69	2,365.24	-98.16	81.13	126.86	4.25	4.13	4.83
2,416.00	14.00	149.44	2,408.99	-107.12	86.70	137.15	2.41	1.93	6.11
2,462.00	15.13	148.44	2,453.51	-117.03	92.67	148.40	2.52	2.46	-2.17

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**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)
2,507.00	15.75	149.82	2,496.88	-127.31	98.82	160.03	1.60	1.38	3.07
2,552.00	16.50	153.57	2,540.11	-138.31	104.73	172.02	2.85	1.67	8.33
2,598.00	17.06	155.07	2,584.16	-150.28	110.48	184.58	1.54	1.22	3.26
2,643.00	18.00	154.07	2,627.07	-162.52	116.31	197.38	2.19	2.09	-2.22
2,688.00	19.00	151.44	2,669.74	-175.21	122.85	211.01	2.89	2.22	-5.84
2,734.00	20.44	150.44	2,713.04	-188.77	130.39	225.97	3.22	3.13	-2.17
2,779.00	22.50	152.44	2,754.92	-203.24	138.25	241.79	4.86	4.58	4.44
2,824.00	24.13	153.82	2,796.24	-219.13	146.30	258.75	3.82	3.62	3.07
2,870.00	26.81	154.69	2,837.77	-236.95	154.88	277.46	5.88	5.83	1.89
2,915.00	28.50	153.07	2,877.63	-255.70	164.08	297.27	4.11	3.76	-3.60
2,960.00	29.56	151.19	2,916.97	-275.00	174.30	318.19	3.11	2.36	-4.18
3,006.00	31.13	150.94	2,956.67	-295.33	185.54	340.56	3.42	3.41	-0.54
3,051.00	31.06	150.57	2,995.20	-315.61	196.89	362.97	0.45	-0.16	-0.82
3,096.00	29.06	150.19	3,034.15	-335.21	208.03	384.74	4.46	-4.44	-0.84
3,142.00	29.19	149.19	3,074.33	-354.54	219.33	406.44	1.10	0.28	-2.17
3,187.00	29.75	148.94	3,113.51	-373.53	230.71	427.95	1.27	1.24	-0.56
3,232.00	30.81	148.82	3,152.37	-392.95	242.44	450.02	2.36	2.36	-0.27
3,278.00	30.75	149.19	3,191.89	-413.13	254.56	472.90	0.43	-0.13	0.80
3,323.00	31.31	150.69	3,230.45	-433.20	266.18	495.35	2.12	1.24	3.33
3,368.00	31.31	151.19	3,268.90	-453.65	277.54	517.88	0.58	0.00	1.11
3,414.00	30.63	151.19	3,308.34	-474.39	288.94	540.65	1.48	-1.48	0.00
3,459.00	31.00	151.57	3,346.99	-494.62	299.98	562.82	0.93	0.82	0.84
3,504.00	31.69	152.44	3,385.42	-515.29	310.97	585.25	1.83	1.53	1.93
3,549.00	31.94	152.19	3,423.66	-536.30	321.99	607.94	0.63	0.56	-0.56
3,595.00	32.00	152.07	3,462.68	-557.83	333.38	631.27	0.19	0.13	-0.26
3,640.00	31.00	151.82	3,501.05	-578.58	344.44	653.81	2.24	-2.22	-0.56
3,685.00	30.00	152.57	3,539.82	-598.78	355.09	675.67	2.38	-2.22	1.67
3,731.00	29.00	154.32	3,579.86	-619.04	365.22	697.21	2.87	-2.17	3.80
3,776.00	28.35	154.33	3,619.34	-638.50	374.58	717.63	1.44	-1.44	0.02
3,821.00	28.38	153.32	3,658.94	-657.68	384.01	737.91	1.07	0.07	-2.24
3,867.00	29.56	154.19	3,699.18	-677.67	393.86	759.06	2.72	2.57	1.89
3,912.00	30.38	154.07	3,738.16	-697.89	403.67	780.35	1.83	1.82	-0.27
3,957.00	30.13	151.19	3,777.04	-718.03	414.08	802.00	3.27	-0.56	-6.40
4,002.00	30.88	150.82	3,815.81	-738.00	425.16	824.00	1.72	1.67	-0.82
4,048.00	31.13	149.44	3,855.24	-758.55	436.96	846.91	1.64	0.54	-3.00
4,093.00	30.88	147.69	3,893.81	-778.33	449.05	869.48	2.08	-0.56	-3.89
4,138.00	30.06	145.94	3,932.59	-797.42	461.53	891.84	2.68	-1.82	-3.89
4,184.00	29.31	147.19	3,972.56	-816.43	474.08	914.19	2.11	-1.63	2.72
4,229.00	29.06	148.07	4,011.84	-834.96	485.83	935.64	1.10	-0.56	1.96
4,320.00	28.38	149.19	4,091.65	-872.30	508.60	978.20	0.95	-0.75	1.23
4,410.00	28.81	149.82	4,170.67	-909.41	530.46	1,019.98	0.58	0.48	0.70
4,501.00	27.44	148.44	4,250.92	-946.24	552.45	1,061.64	1.67	-1.51	-1.52
4,592.00	26.13	148.69	4,332.16	-981.22	573.84	1,101.57	1.44	-1.44	0.27
4,682.00	24.31	148.94	4,413.58	-1,014.03	593.70	1,138.88	2.03	-2.02	0.28
4,773.00	23.00	147.82	4,496.93	-1,045.12	612.83	1,174.45	1.52	-1.44	-1.23
4,863.00	22.31	147.94	4,579.98	-1,074.48	631.27	1,208.30	0.77	-0.77	0.13
4,954.00	20.10	147.37	4,664.82	-1,102.29	648.87	1,240.46	2.44	-2.43	-0.63
5,045.00	19.00	147.69	4,750.57	-1,127.98	665.22	1,270.23	1.21	-1.21	0.35
5,135.00	16.63	149.94	4,836.25	-1,151.52	679.50	1,297.01	2.74	-2.63	2.50
5,226.00	14.63	151.32	4,923.88	-1,172.87	691.54	1,320.67	2.24	-2.20	1.52
5,317.00	12.19	149.19	5,012.39	-1,191.21	701.98	1,341.06	2.74	-2.68	-2.34
5,407.00	10.38	145.94	5,100.65	-1,206.09	711.39	1,358.26	2.13	-2.01	-3.61
5,498.00	8.81	154.82	5,190.38	-1,219.19	718.95	1,372.89	2.37	-1.73	9.76
5,589.00	6.88	148.07	5,280.53	-1,230.12	724.79	1,384.78	2.35	-2.12	-7.42

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**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)
5,679.00	5.25	154.32	5,370.02	-1,238.41	729.43	1,393.94	1.95	-1.81	6.94
5,770.00	3.25	169.94	5,460.77	-1,244.70	731.68	1,400.00	2.52	-2.20	17.16
5,861.00	1.13	149.18	5,551.70	-1,248.01	732.59	1,403.00	2.45	-2.33	-22.81
5,952.00	1.38	318.32	5,642.69	-1,247.96	732.33	1,402.78	2.75	0.27	185.87
6,042.00	1.31	322.69	5,732.66	-1,246.33	730.98	1,400.67	0.14	-0.08	4.86
6,133.00	1.38	330.69	5,823.64	-1,244.55	729.81	1,398.58	0.22	0.08	8.79
6,223.00	1.19	339.32	5,913.62	-1,242.73	728.95	1,396.68	0.30	-0.21	9.59
6,314.00	0.88	327.82	6,004.60	-1,241.26	728.25	1,395.14	0.41	-0.34	-12.64
6,405.00	0.44	293.32	6,095.60	-1,240.53	727.56	1,394.13	0.63	-0.48	-37.91
6,495.00	0.19	297.44	6,185.59	-1,240.32	727.11	1,393.67	0.28	-0.28	4.58
6,586.00	0.19	201.07	6,276.59	-1,240.39	726.92	1,393.59	0.31	0.00	-105.90
6,677.00	0.25	220.32	6,367.59	-1,240.68	726.73	1,393.67	0.10	0.07	21.15
6,767.00	0.63	204.07	6,457.59	-1,241.29	726.41	1,393.86	0.44	0.42	-18.06
6,858.00	0.69	168.32	6,548.59	-1,242.28	726.31	1,394.51	0.45	0.07	-39.29
6,948.00	0.75	159.32	6,638.58	-1,243.36	726.63	1,395.50	0.14	0.07	-10.00
7,039.00	0.25	329.07	6,729.58	-1,243.75	726.74	1,395.85	1.10	-0.55	186.54
7,130.00	0.44	309.57	6,820.57	-1,243.35	726.37	1,395.31	0.24	0.21	-21.43
7,220.00	0.13	314.57	6,910.57	-1,243.06	726.03	1,394.87	0.35	-0.34	5.56
7,311.00	1.69	314.69	7,001.56	-1,242.05	725.00	1,393.42	1.71	1.71	0.13
7,402.00	1.56	315.94	7,092.52	-1,240.21	723.19	1,390.84	0.15	-0.14	1.37
7,492.00	1.13	19.44	7,182.50	-1,238.50	722.63	1,389.23	1.62	-0.48	70.56
7,583.00	0.94	60.57	7,273.49	-1,237.28	723.58	1,389.03	0.82	-0.21	45.20
LAST SVY									
7,645.00	0.94	85.82	7,335.48	-1,237.00	724.53	1,389.49	0.66	0.00	40.73
EXT. TD									
8,370.00	0.94	85.82	8,060.38	-1,236.13	736.39	1,397.20	0.00	0.00	0.00

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
7,645.00	7,335.48	-1,237.00	724.53	LAST SVY
8,370.00	8,060.38	-1,236.13	736.39	EXT. TD

Checked By: _____ Approved By: _____ Date: _____

Anadarko Petroleum Corporation

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
Bonanza 1023-2B Pad
Bonanza 1023-2H3CS

Bonanza 1023-2H3CS

Design: Bonanza 1023-2H3CS

Survey Report - Geographic

01 February, 2010

Weatherford®

Weatherford International Ltd.

Survey Report - Geographic

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**Database:**	EDM 2003.21 Single User Db

Project UINTAH COUNTY, UTAH (nad 27),

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

Site Bonanza 1023-2B Pad, SECTION 2 T10S R23E

Site Position:		**Northing:**	14,524,067.50 ft	**Latitude:**	39° 58' 55.090 N
From:	Lat/Long	**Easting:**	2,119,177.03 ft	**Longitude:**	109° 17' 27.570 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.10 °

Well Bonanza 1023-2H3CS

Well Position	**+N/-S**	0.00 ft	**Northing:**	14,524,067.50 ft	**Latitude:**	39° 58' 55.090 N
	+E/-W	0.00 ft	**Easting:**	2,119,177.03 ft	**Longitude:**	109° 17' 27.570 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,442.00 ft

Wellbore Bonanza 1023-2H3CS

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2009	1/14/2010	11.19	65.95	52,498

Design Bonanza 1023-2H3CS

Audit Notes:

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

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	135.40

Survey Program **Date** 2/1/2010

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
143.00	1,903.00	SCIENTIFIC MWD (Bonanza 1023-2H3CS	MWD	MWD - Standard
2,008.00	8,370.00	WFT MWD SVY (Bonanza 1023-2H3CS)	MWD	MWD - Standard

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**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	14,524,067.50	2,119,177.03	39° 58' 55.090 N	109° 17' 27.570 W
143.00	0.37	269.80	143.00	0.00	-0.46	14,524,067.49	2,119,176.57	39° 58' 55.090 N	109° 17' 27.576 W
233.00	0.59	187.68	233.00	-0.46	-0.81	14,524,067.02	2,119,176.22	39° 58' 55.085 N	109° 17' 27.580 W
323.00	1.38	157.07	322.98	-1.92	-0.45	14,524,065.57	2,119,176.61	39° 58' 55.071 N	109° 17' 27.576 W
393.00	1.81	155.53	392.96	-3.70	0.33	14,524,063.80	2,119,177.43	39° 58' 55.053 N	109° 17' 27.566 W
483.00	1.94	138.58	482.91	-6.14	1.93	14,524,061.40	2,119,179.08	39° 58' 55.029 N	109° 17' 27.545 W
573.00	2.16	115.57	572.85	-8.01	4.47	14,524,059.57	2,119,181.65	39° 58' 55.011 N	109° 17' 27.513 W
663.00	2.51	105.57	662.78	-9.27	7.90	14,524,058.38	2,119,185.10	39° 58' 54.998 N	109° 17' 27.469 W
753.00	2.58	105.27	752.69	-10.34	11.75	14,524,057.39	2,119,188.97	39° 58' 54.988 N	109° 17' 27.419 W
843.00	2.71	117.88	842.59	-11.86	15.58	14,524,055.93	2,119,192.84	39° 58' 54.973 N	109° 17' 27.370 W
933.00	2.72	124.60	932.49	-14.07	19.22	14,524,053.80	2,119,196.52	39° 58' 54.951 N	109° 17' 27.323 W
1,023.00	2.78	129.37	1,022.39	-16.67	22.67	14,524,051.27	2,119,200.01	39° 58' 54.925 N	109° 17' 27.279 W
1,113.00	2.99	134.13	1,112.28	-19.69	26.04	14,524,048.31	2,119,203.44	39° 58' 54.895 N	109° 17' 27.235 W
1,203.00	3.05	138.20	1,202.15	-23.11	29.32	14,524,044.96	2,119,206.79	39° 58' 54.862 N	109° 17' 27.193 W
1,293.00	3.11	135.10	1,292.02	-26.62	32.64	14,524,041.51	2,119,210.17	39° 58' 54.827 N	109° 17' 27.151 W
1,383.00	3.14	141.38	1,381.89	-30.28	35.90	14,524,037.91	2,119,213.50	39° 58' 54.791 N	109° 17' 27.109 W
1,473.00	3.46	144.17	1,471.74	-34.40	39.03	14,524,033.85	2,119,216.71	39° 58' 54.750 N	109° 17' 27.069 W
1,563.00	3.00	137.60	1,561.59	-38.34	42.21	14,524,029.97	2,119,219.96	39° 58' 54.711 N	109° 17' 27.028 W
1,653.00	2.84	140.36	1,651.48	-41.80	45.22	14,524,026.57	2,119,223.04	39° 58' 54.677 N	109° 17' 26.989 W
1,743.00	2.82	146.89	1,741.37	-45.37	47.85	14,524,023.05	2,119,225.74	39° 58' 54.642 N	109° 17' 26.955 W
1,833.00	2.97	151.50	1,831.25	-49.27	50.17	14,524,019.19	2,119,228.14	39° 58' 54.603 N	109° 17' 26.925 W
LAST SCIENTIFIC MWD									
1,903.00	3.26	153.55	1,901.15	-52.65	51.92	14,524,015.85	2,119,229.95	39° 58' 54.570 N	109° 17' 26.903 W
2,008.00	3.00	158.19	2,005.99	-57.87	54.27	14,524,010.67	2,119,232.40	39° 58' 54.518 N	109° 17' 26.873 W
2,053.00	3.25	154.82	2,050.93	-60.12	55.25	14,524,008.44	2,119,233.43	39° 58' 54.496 N	109° 17' 26.860 W
2,099.00	5.13	152.57	2,096.80	-63.13	56.76	14,524,005.47	2,119,234.99	39° 58' 54.466 N	109° 17' 26.841 W
2,144.00	6.75	147.44	2,141.56	-67.14	59.11	14,524,001.50	2,119,237.41	39° 58' 54.426 N	109° 17' 26.811 W
2,189.00	7.88	144.07	2,186.19	-71.87	62.34	14,523,996.84	2,119,240.74	39° 58' 54.380 N	109° 17' 26.769 W
2,235.00	9.06	144.36	2,231.69	-77.37	66.30	14,523,991.42	2,119,244.80	39° 58' 54.325 N	109° 17' 26.718 W
2,280.00	10.13	143.19	2,276.06	-83.41	70.74	14,523,985.45	2,119,249.35	39° 58' 54.266 N	109° 17' 26.661 W
2,325.00	11.23	144.47	2,320.28	-90.15	75.65	14,523,978.81	2,119,254.40	39° 58' 54.199 N	109° 17' 26.598 W
2,371.00	13.13	146.69	2,365.24	-98.16	81.13	14,523,970.91	2,119,260.02	39° 58' 54.120 N	109° 17' 26.528 W
2,416.00	14.00	149.44	2,408.99	-107.12	86.70	14,523,962.06	2,119,265.77	39° 58' 54.031 N	109° 17' 26.456 W
2,462.00	15.13	148.44	2,453.51	-117.03	92.67	14,523,952.27	2,119,271.93	39° 58' 53.933 N	109° 17' 26.379 W
2,507.00	15.75	149.82	2,496.88	-127.31	98.82	14,523,942.10	2,119,278.27	39° 58' 53.832 N	109° 17' 26.300 W
2,552.00	16.50	153.57	2,540.11	-138.31	104.73	14,523,931.22	2,119,284.39	39° 58' 53.723 N	109° 17' 26.224 W
2,598.00	17.06	155.07	2,584.16	-150.28	110.48	14,523,919.36	2,119,290.37	39° 58' 53.605 N	109° 17' 26.151 W
2,643.00	18.00	154.07	2,627.07	-162.52	116.31	14,523,907.24	2,119,296.43	39° 58' 53.484 N	109° 17' 26.076 W
2,688.00	19.00	151.44	2,669.74	-175.21	122.85	14,523,894.68	2,119,303.21	39° 58' 53.358 N	109° 17' 25.992 W
2,734.00	20.44	150.44	2,713.04	-188.77	130.39	14,523,881.26	2,119,311.02	39° 58' 53.224 N	109° 17' 25.895 W
2,779.00	22.50	152.44	2,754.92	-203.24	138.25	14,523,866.94	2,119,319.15	39° 58' 53.081 N	109° 17' 25.794 W
2,824.00	24.13	153.82	2,796.24	-219.13	146.30	14,523,851.21	2,119,327.50	39° 58' 52.924 N	109° 17' 25.690 W
2,870.00	26.81	154.69	2,837.77	-236.95	154.88	14,523,833.56	2,119,336.42	39° 58' 52.748 N	109° 17' 25.580 W
2,915.00	28.50	153.07	2,877.63	-255.70	164.08	14,523,814.99	2,119,345.98	39° 58' 52.563 N	109° 17' 25.462 W
2,960.00	29.56	151.19	2,916.97	-275.00	174.30	14,523,795.89	2,119,356.56	39° 58' 52.372 N	109° 17' 25.331 W
3,006.00	31.13	150.94	2,956.67	-295.33	185.54	14,523,775.77	2,119,368.20	39° 58' 52.171 N	109° 17' 25.186 W
3,051.00	31.06	150.57	2,995.20	-315.61	196.89	14,523,755.72	2,119,379.94	39° 58' 51.971 N	109° 17' 25.040 W
3,096.00	29.06	150.19	3,034.15	-335.21	208.03	14,523,736.34	2,119,391.45	39° 58' 51.777 N	109° 17' 24.897 W
3,142.00	29.19	149.19	3,074.33	-354.54	219.33	14,523,717.23	2,119,403.11	39° 58' 51.586 N	109° 17' 24.752 W
3,187.00	29.75	148.94	3,113.51	-373.53	230.71	14,523,698.46	2,119,414.86	39° 58' 51.398 N	109° 17' 24.606 W
3,232.00	30.81	148.82	3,152.37	-392.95	242.44	14,523,679.27	2,119,426.96	39° 58' 51.206 N	109° 17' 24.455 W
3,278.00	30.75	149.19	3,191.89	-413.13	254.56	14,523,659.32	2,119,439.46	39° 58' 51.007 N	109° 17' 24.300 W
3,323.00	31.31	150.69	3,230.45	-433.20	266.18	14,523,639.47	2,119,451.46	39° 58' 50.808 N	109° 17' 24.150 W
3,368.00	31.31	151.19	3,268.90	-453.65	277.54	14,523,619.25	2,119,463.21	39° 58' 50.606 N	109° 17' 24.004 W
3,414.00	30.63	151.19	3,308.34	-474.39	288.94	14,523,598.74	2,119,475.01	39° 58' 50.401 N	109° 17' 23.858 W

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**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
3,459.00	31.00	151.57	3,346.99	-494.62	299.98	14,523,578.72	2,119,486.44	39° 58' 50.201 N	109° 17' 23.716 W
3,504.00	31.69	152.44	3,385.42	-515.29	310.97	14,523,558.26	2,119,497.82	39° 58' 49.997 N	109° 17' 23.575 W
3,549.00	31.94	152.19	3,423.66	-536.30	321.99	14,523,537.47	2,119,509.24	39° 58' 49.789 N	109° 17' 23.433 W
3,595.00	32.00	152.07	3,462.68	-557.83	333.38	14,523,516.16	2,119,521.04	39° 58' 49.576 N	109° 17' 23.287 W
3,640.00	31.00	151.82	3,501.05	-578.58	344.44	14,523,495.63	2,119,532.49	39° 58' 49.371 N	109° 17' 23.145 W
3,685.00	30.00	152.57	3,539.82	-598.78	355.09	14,523,475.63	2,119,543.53	39° 58' 49.172 N	109° 17' 23.008 W
3,731.00	29.00	154.32	3,579.86	-619.04	365.22	14,523,455.57	2,119,554.05	39° 58' 48.971 N	109° 17' 22.878 W
3,776.00	28.35	154.33	3,619.34	-638.50	374.58	14,523,436.30	2,119,563.78	39° 58' 48.779 N	109° 17' 22.758 W
3,821.00	28.38	153.32	3,658.94	-657.68	384.01	14,523,417.30	2,119,573.57	39° 58' 48.590 N	109° 17' 22.637 W
3,867.00	29.56	154.19	3,699.18	-677.67	393.86	14,523,397.50	2,119,583.80	39° 58' 48.392 N	109° 17' 22.510 W
3,912.00	30.38	154.07	3,738.16	-697.89	403.67	14,523,377.47	2,119,594.00	39° 58' 48.192 N	109° 17' 22.384 W
3,957.00	30.13	151.19	3,777.04	-718.03	414.08	14,523,357.54	2,119,604.80	39° 58' 47.993 N	109° 17' 22.250 W
4,002.00	30.88	150.82	3,815.81	-738.00	425.16	14,523,337.78	2,119,616.25	39° 58' 47.796 N	109° 17' 22.108 W
4,048.00	31.13	149.44	3,855.24	-758.55	436.96	14,523,317.46	2,119,628.45	39° 58' 47.593 N	109° 17' 21.956 W
4,093.00	30.88	147.69	3,893.81	-778.33	449.05	14,523,297.92	2,119,640.91	39° 58' 47.397 N	109° 17' 21.801 W
4,138.00	30.06	145.94	3,932.59	-797.42	461.53	14,523,279.07	2,119,653.76	39° 58' 47.208 N	109° 17' 21.641 W
4,184.00	29.31	147.19	3,972.56	-816.43	474.08	14,523,260.30	2,119,666.68	39° 58' 47.020 N	109° 17' 21.479 W
4,229.00	29.06	148.07	4,011.84	-834.96	485.83	14,523,242.00	2,119,678.78	39° 58' 46.837 N	109° 17' 21.328 W
4,320.00	28.38	149.19	4,091.65	-872.30	508.60	14,523,205.11	2,119,702.25	39° 58' 46.468 N	109° 17' 21.036 W
4,410.00	28.81	149.82	4,170.67	-909.41	530.46	14,523,168.42	2,119,724.82	39° 58' 46.101 N	109° 17' 20.755 W
4,501.00	27.44	148.44	4,250.92	-946.24	552.45	14,523,132.03	2,119,747.52	39° 58' 45.737 N	109° 17' 20.472 W
4,592.00	26.13	148.69	4,332.16	-981.22	573.84	14,523,097.45	2,119,769.57	39° 58' 45.392 N	109° 17' 20.198 W
4,682.00	24.31	148.94	4,413.58	-1,014.03	593.70	14,523,065.04	2,119,790.06	39° 58' 45.067 N	109° 17' 19.943 W
4,773.00	23.00	147.82	4,496.93	-1,045.12	612.83	14,523,034.31	2,119,809.78	39° 58' 44.760 N	109° 17' 19.697 W
4,863.00	22.31	147.94	4,579.98	-1,074.48	631.27	14,523,005.31	2,119,828.78	39° 58' 44.470 N	109° 17' 19.460 W
4,954.00	20.10	147.37	4,664.82	-1,102.29	648.87	14,522,977.85	2,119,846.91	39° 58' 44.195 N	109° 17' 19.234 W
5,045.00	19.00	147.69	4,750.57	-1,127.98	665.22	14,522,952.47	2,119,863.75	39° 58' 43.941 N	109° 17' 19.024 W
5,135.00	16.63	149.94	4,836.25	-1,151.52	679.50	14,522,929.22	2,119,878.48	39° 58' 43.708 N	109° 17' 18.840 W
5,226.00	14.63	151.32	4,923.88	-1,172.87	691.54	14,522,908.10	2,119,890.92	39° 58' 43.497 N	109° 17' 18.686 W
5,317.00	12.19	149.19	5,012.39	-1,191.21	701.98	14,522,889.97	2,119,901.71	39° 58' 43.316 N	109° 17' 18.552 W
5,407.00	10.38	145.94	5,100.65	-1,206.09	711.39	14,522,875.27	2,119,911.40	39° 58' 43.169 N	109° 17' 18.431 W
5,498.00	8.81	154.82	5,190.38	-1,219.19	718.95	14,522,862.32	2,119,919.21	39° 58' 43.040 N	109° 17' 18.334 W
5,589.00	6.88	148.07	5,280.53	-1,230.12	724.79	14,522,851.50	2,119,925.27	39° 58' 42.932 N	109° 17' 18.259 W
5,679.00	5.25	154.32	5,370.02	-1,238.41	729.43	14,522,843.30	2,119,930.06	39° 58' 42.850 N	109° 17' 18.199 W
5,770.00	3.25	169.94	5,460.77	-1,244.70	731.68	14,522,837.05	2,119,932.44	39° 58' 42.787 N	109° 17' 18.170 W
5,861.00	1.13	149.18	5,551.70	-1,248.01	732.59	14,522,833.76	2,119,933.41	39° 58' 42.755 N	109° 17' 18.158 W
5,952.00	1.38	318.32	5,642.69	-1,247.96	732.33	14,522,833.80	2,119,933.14	39° 58' 42.755 N	109° 17' 18.162 W
6,042.00	1.31	322.69	5,732.66	-1,246.33	730.98	14,522,835.41	2,119,931.77	39° 58' 42.771 N	109° 17' 18.179 W
6,133.00	1.38	330.69	5,823.64	-1,244.55	729.81	14,522,837.17	2,119,930.56	39° 58' 42.789 N	109° 17' 18.194 W
6,223.00	1.19	339.32	5,913.62	-1,242.73	728.95	14,522,838.97	2,119,929.67	39° 58' 42.807 N	109° 17' 18.205 W
6,314.00	0.88	327.82	6,004.60	-1,241.26	728.25	14,522,840.43	2,119,928.94	39° 58' 42.821 N	109° 17' 18.214 W
6,405.00	0.44	293.32	6,095.60	-1,240.53	727.56	14,522,841.15	2,119,928.23	39° 58' 42.829 N	109° 17' 18.223 W
6,495.00	0.19	297.44	6,185.59	-1,240.32	727.11	14,522,841.34	2,119,927.77	39° 58' 42.831 N	109° 17' 18.229 W
6,586.00	0.19	201.07	6,276.59	-1,240.39	726.92	14,522,841.27	2,119,927.59	39° 58' 42.830 N	109° 17' 18.231 W
6,677.00	0.25	220.32	6,367.59	-1,240.68	726.73	14,522,840.97	2,119,927.41	39° 58' 42.827 N	109° 17' 18.234 W
6,767.00	0.63	204.07	6,457.59	-1,241.29	726.41	14,522,840.37	2,119,927.09	39° 58' 42.821 N	109° 17' 18.238 W
6,858.00	0.69	168.32	6,548.59	-1,242.28	726.31	14,522,839.37	2,119,927.02	39° 58' 42.811 N	109° 17' 18.239 W
6,948.00	0.75	159.32	6,638.58	-1,243.36	726.63	14,522,838.30	2,119,927.36	39° 58' 42.801 N	109° 17' 18.235 W
7,039.00	0.25	329.07	6,729.58	-1,243.75	726.74	14,522,837.91	2,119,927.47	39° 58' 42.797 N	109° 17' 18.234 W
7,130.00	0.44	309.57	6,820.57	-1,243.35	726.37	14,522,838.30	2,119,927.10	39° 58' 42.801 N	109° 17' 18.238 W
7,220.00	0.13	314.57	6,910.57	-1,243.06	726.03	14,522,838.58	2,119,926.75	39° 58' 42.804 N	109° 17' 18.243 W
7,311.00	1.69	314.69	7,001.56	-1,242.05	725.00	14,522,839.58	2,119,925.70	39° 58' 42.814 N	109° 17' 18.256 W
7,402.00	1.56	315.94	7,092.52	-1,240.21	723.19	14,522,841.38	2,119,923.85	39° 58' 42.832 N	109° 17' 18.279 W
7,492.00	1.13	19.44	7,182.50	-1,238.50	722.63	14,522,843.08	2,119,923.26	39° 58' 42.849 N	109° 17' 18.286 W
7,583.00	0.94	60.57	7,273.49	-1,237.28	723.58	14,522,844.31	2,119,924.19	39° 58' 42.861 N	109° 17' 18.274 W

Weatherford International Ltd.

Survey Report - Geographic

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well Bonanza 1023-2H3CS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	KB @ 5456.00ft
Site:	Bonanza 1023-2B Pad	**MD Reference:**	KB @ 5456.00ft
Well:	Bonanza 1023-2H3CS	**North Reference:**	True
Wellbore:	Bonanza 1023-2H3CS	**Survey Calculation Method:**	Minimum Curvature
Design:	Bonanza 1023-2H3CS	**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
LAST SVY									
7,645.00	0.94	85.82	7,335.48	-1,237.00	724.53	14,522,844.62	2,119,925.13	39° 58' 42.864 N	109° 17' 18.262 W
EXT. TD									
8,370.00	0.94	85.82	8,060.38	-1,236.13	736.39	14,522,845.71	2,119,936.98	39° 58' 42.872 N	109° 17' 18.110 W

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,903.00	1,901.15	-52.65	51.92	LAST SCIENTIFIC MWD
7,645.00	7,335.48	-1,237.00	724.53	LAST SVY
8,370.00	8,060.38	-1,236.13	736.39	EXT. TD

Checked By: _____ Approved By: _____ Date: _____

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 1/27/2010	End Date: 2/2/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/15/2009	17:30 - 21:00	3.50	MIRU	01	B	P		MIRU, DRESS CONDUCTOR, INSTALL AIR BOWL, RIG UP BOWIE LINE, RIG UP RIG., BUILD DITCH, RIG UP PUMPS, DOG HOUSE, AIR COMPRESSOR AND BOOSTER.
	21:00 - 22:30	1.50	DRLSUR	02	A	P		AIR SPUD 12/15/2009 21:00 AIR HAMMER FROM 44'-150'.
	22:30 - 0:00	1.50	DRLSUR	06	A	P		LD AIR HAMMER, P/U 1.83 BENT HOUSE MOTOR SN 8039, M/U NEW 12-1/4" Q507 SN 7018337. MAKE UP WRENCH SUB, AND SCRIBE MOTOR.
12/16/2009	0:00 - 3:00	3.00	DRLSUR	06	A	P		P/U SCIENTIFIC MWD TOOLS AND ORIENT. INSTALL WRENCH SUBS ON DIRECTIONAL MONELS.
	3:00 - 21:00	18.00	DRLSUR	02	D	P		DRILL W/ MWD 150'-1960' (1810', 100'/HR) TD 12/16/2009 21:00 WOB 25K, ROT 45, GPM 650, DH ROT 104, PSI 1200/1500, UP/DOWN//ROT 64/64/64. LOSS CIRC ZONE 1050'. HEAVY LOSSES @ 1500' HAD TO REDUCE PUMP TO 210 GPM AND AERATE TO KEEP PIT VOLUME UP. ROP STILL 60'/HR.
	21:00 - 22:30	1.50	CSG	05	F	P		CIRC W/ 84 GPM AND AERATE TO INCREASE PIT VOLUME AND CLEAN HOLE.
	22:30 - 0:00	1.50	CSG	06	D	P		LAYING DOWN DRILL PIPE. TO BHA @ REPORT TIME
12/17/2009	0:00 - 1:00	1.00	CSG	06	D	P		LD DIRECTIONAL TOOLS. LD MOTOR AND BIT.
	1:00 - 3:30	2.50	CSG	12	C	P		RUN 45 JTS OF 9-5/8" J-55 36# W/ 8RD LTC THREADS AND LAND SHOE FLOAT 1936' KB. BAFFLE PLATE RAN IN TOP OF SHOE JT. LANDED @ 1894'KB FILL PIPE @ 800'.
	3:30 - 4:00	0.50	RDMO	01	E	P		RIG DOWN RELEASE RIG 12/17/2009 04:00
	4:00 - 9:30	5.50	CSG	12	E	P		HOLD SAFETY MEETING AND PSI TEST 1500. PUMP 150 BBLS OF H20, PUMP 20 BBLS OF GEL WATER. PUMP 350 SX (72 BBLS) OF 15.8#, 1.15 YD, 5 GAL/SK TAIL CEMENT. DROP PLUG ON FLY, DISPLACE W/ 146.1 BBLS OF FRESH WATER. 100 PSI OF LIFT. NO RETURNS. BUMP PLUG 600 PSI. TOP OUT 100 SX(20 BBLS) OF 15.8#, 1.15 YD, 5 GAL/SK 4% CALC CEMENT. WAIT 2 HRS PUMP 100 SX(20 BBLS) OF SAME CEMENT. CEMENT. WAIT 1 HOUR PUMP 100 SX (20 BBLS) OF SAME CEMENT. NO CEMENT TO SURFACE. WILL REDIMIX WITH PETE MARTIN DRILLING.
1/26/2010	12:30 - 14:30	2.00	MIRU	01	C	P		SKID RIG OVER HOLE
	14:30 - 16:30	2.00	DRLPRO	14	A	P		NIPPLE UP BOP
	16:30 - 19:30	3.00	DRLPRO	15	A	P		TEST BOP
	19:30 - 20:00	0.50	DRLPRO	14	A	Z		NIPPLE DOWN, WOULD NOT TEST
	20:00 - 21:00	1.00	DRLPRO	14	C	Z		WHILE LIFTING BOP OFF OF WELL HEAD TO CHECK GASKET, DRILLER WAS BEING TOLD TO LIFT, AND WAS NOT PAYING ATTENTION TO WEIGHT INDICATOR. WELLHEAD ADAPTER WAS HUNG UP ON WELLHEAD, 110,000 WAS PULLED INDENTED ADAPTER SEAL AREA. HAD TO REMOVE BOTH ADAPTERS AND WAIT ON NEW ONES.
	21:00 - 0:00	3.00	DRLPRO	21	D	Z		WAIT ON NEW ADAPTERS FROM VERNAL
1/27/2010	0:00 - 1:30	1.50	DRLPRO	21	D	Z		WAIT ON ADAPTERS FOR BOP & WELLHEAD
	1:30 - 3:30	2.00	DRLPRO	14	A	Z		INSTALL NEW ADAPTERS & NIPPLE BACK UP

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 1/27/2010	End Date: 2/2/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	3:30 - 7:00	3.50	DRLPRO	15	A	P		FINISH TESTING BOP RAMS, CHOKE, KILLINE, HCR TO 5000 PSI, ANNULAR 2500 PSI, CASING TO 1500 PSI
	7:00 - 10:30	3.50	DRLPRO	06	A	P		P/U NEW BIT, MOTOR, SCRIBE TO MWD & R.I.H TAG CMT. @ 1806 FT.
	10:30 - 12:00	1.50	DRLPRO	02	F	P		DRILL CMT. FLOAT, SHOE
	12:00 - 21:30	9.50	DRLPRO	02	D	P		DRILL & SLIDE F/ 1970 TO 2829 - WOB 18, RPM 45, MMRPM 105, GPM 504 - SLIDES 2058-2072,2103-2117,2149-2163,2194-2208,2239-22 4,2285-2301,2330-2348,2375-2393,2421-2437,2466-2 483,2512-2530,2557-2575,2602-2621,2648-26692693 2715,2738-2762,2784-2807,
	21:30 - 0:00	2.50	DRLPRO	08	A	Z		WORK ON PECO (WEIGHT INDICATOR)
1/28/2010	0:00 - 1:30	1.50	DRLPRO	08	A	Z		WORK ON PECO (WEIGHT INDICATOR) DRAWORKS WON'T PICK UP OR GO DOWN
	1:30 - 12:30	11.00	DRLPRO	02	D	P		DRILL & SLIDE F/ 2829 TO 3917, WATER - 1088 FT. 99 FPH WOB 20, RPM 45, MMRPM 105, GPM 504 - SLIDES 2829-2851,2874-2896,2920-2938,2965-2981,3010-30 2,3056-3065,3101-3114,3146-31613192-3206,3237-3 53,3282-3298,3328-3344,3373-3386,3418-3431,3464- 3479,3509-3521,3554-3566,3599-3609,3645-3655,36 0-3705,3735-3748,3781-3796,3826-3841,3871-3885,3 917-3929
	12:30 - 13:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	13:00 - 0:00	11.00	DRLPRO	02	D	P		DRILL & SLIDE F/ 3917 - 5188 - 1271, WATER 116 FPH. WOB 20, RPM 45, MMRPM 105, GPM 504, 65-345 BG GAS, 120-1865 CONN. GAS, 3345 MAX GAS - SLIDES 3962-3972,4007-4022,4052-4060,4098-4108,4143-41 5,4188-4200,4234-4246,4279-4289,4370-4382,4913-4 923,5095-5107,5185-5195
1/29/2010	0:00 - 13:30	13.50	DRLPRO	02	D	P		DRILL & SLIDE F/ 5188 TO 6364 - 1176 87 FPH. MW 9.7, VIS 38, WOB 18, RPM 45, MMRPM 105, GPM 504, SLIDES 5185-5195,5276-5286,5367-5375,5457-5466,5548-55 7,5639-5649,5729-5744,5820-5838,5911-5929, BG GAS 15-320, CONN. GAS 258-3011, MAX GAS 3694, NO FLARE
	13:30 - 14:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	14:00 - 0:00	10.00	DRLPRO	02	D	P		DRILL & SLIDE F/ 6364 TO 7170 - 806 FT. 80 FPH. MW 10.5, VIS 45, WOB 20, RPM 50, MMRPM 105, GPM 504, SLIDES 6998-7012,7270-7281, BG GAS 15-670, CONN. GAS 495-4745, MAX GAS 4800, NO FLARE
1/30/2010	0:00 - 14:00	14.00	DRLPRO	02	D	P		DRILL & SLIDE F/ 7170 TO 7695 - 525 FT. 37.5 FPH, MW 11.2, VIS 45, WOB 23, RPM 50, MMRPM 105, GPM 504, SLIDES 7270-7281,7452-7466, BG GAS 350-1600, CONN. GAS 2800-4850, MAX GAS 4983, NO FLARE
	14:00 - 14:30	0.50	DRLPRO	05	C	P		CIRC. PREPAIR FOR TRIP
	14:30 - 22:30	8.00	DRLPRO	06	A	P		TRIP OUT FOR BIT, PUMP 12 STDS OFF BTM, PUMP SLUG T.O.H, L/D MOTOR & MWD TOOL, STAND BACK DIRECTIONAL TOOLS IN DERRICK
	22:30 - 0:00	1.50	DRLPRO	06	A	P		STRAP NEW MOTOR & MONEL, P/U NEW BIT & R.I.H
1/31/2010	0:00 - 7:30	7.50	DRLPRO	06	A	P		FINISH TRIPPING IN, FILL PIPE @ SHOE, & 4000 FT.
	7:30 - 8:00	0.50	DRLPRO	03	E	P		WASH & REAM 100 FT. TO BTM.

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 1/27/2010	End Date: 2/2/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:00 - 16:00	8.00	DRLPRO	02	D	P		DRILL F/ 7695 TO 8370 - 675 FT. 84 FPH. MW 11.8, VIS 41, WOB 19, RPM 50, MMRPM 81, GPM 504, BG. GAS 400 - 1000, CONN. GAS 3500 - 4300, TRIP GAS 7070, MAX GAS 7070
	16:00 - 18:30	2.50	DRLPRO	06	E	P		WIPER TRIP 10 STDS. PUMP OUT ALL 10
	18:30 - 20:30	2.00	DRLPRO	05	C	P		COND. MUD RAISE VIS. - CIRC. 2 BTMS. UP
	20:30 - 0:00	3.50	DRLPRO	06	B	P		PUMP 15 STDS. OFF BTM., PUMP SLUG, STRAIGHT PULL OUT OF HOLE
2/1/2010	0:00 - 0:30	0.50	DRLPRO	08	A	Z		REPAIR HYDROLIC HOSE ON IRON ROUGHNECK
	0:30 - 7:00	6.50	DRLPRO	06	B	P		T.O.H FOR LOGS
	7:00 - 14:00	7.00	DRLPRO	11	D	P		HELD SAFETY MEETING W/ BAKER ATLAS, RIG UP & RUN OPEN HOLE LOGS, LOGGERS TD 8370 FT.
	14:00 - 22:30	8.50	DRLPRO	12	C	P		HELD SAFETY MEETING W/ FRANKS CASING CREW, RIG UP & RUN 197 JTS. 4 1/2, 11.6#, I-80, BTC CASING, LANDED SHOE @ 8356 FT., FLOAT COLLAR @ 8311 FT.
	22:30 - 23:30	1.00	DRLPRO	05	D	P		CIRC. THROUGH CASING - MAX GAS 4378, NO FLARE
	23:30 - 0:00	0.50	DRLPRO	12	B	P		HELD SAFETY MEETING W/ BJ - RIG UP EQUIPMENT & PRIME TRUCKS
2/2/2010	0:00 - 3:30	3.50	CSG	12	E	P		PUMP 40 BBLS. WATER AHEAD, LEAD W/ 241 BBLS. 560 SKS., 11.8# 2.42 YIELD, TAIL W/ 256 BBLS., 1100 SKS. 14.3# 1.31 YIELD, & DISPLACE W/ 129 BBLS. WATER, BUMPED PLUG, FLOATS HELD, 1 1/2 BBLS. BACK TO TRUCK, 39 BBLS. CEMENT TO SURFACE GOOD CIRC. THROUGH OUT JOB, 2300 PSI FINAL LIFT
	3:30 - 5:30	2.00	RDMO	14	A	P		NIPPLE DOWN CLEAN MUD TANKS, RIG RELEASED @ 05:30 HRS. 2/2/2010

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: ENSIGN 146/146, PROPETRO/
Event: DRILLING	Start Date: 1/27/2010	End Date: 2/2/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	5:30 - 5:30	0.00	RDMO					CONDUCTOR CASING: Cond. Depth set: 44 Cement sx used: SPUD DATE/TIME: 12/15/2010 21:00 SURFACE HOLE: Surface From depth:44 Surface To depth: 1,960 Total SURFACE hours: 19.50 Surface Casing size:9 5/8 # of casing joints ran: 45 Casing set MD:1,936.0 # sx of cement:350 Cement blend (ppg:)15.8 Cement yield (ft3/sk): 1.15 # of bbls to surface: 0 Describe cement issues: NO RETURNS TOP OUT W/ 300 SKS. STILL NO RETURNS CALLED OUT READYMIX (PETE MARTIN) Describe hole issues: HEAVY LOSSES @ 1500 FT. PRODUCTION: Rig Move/Skid start date/time: 1/26/2010 12:30 Rig Move/Skid finish date/time:1/26/2010 14:30 Total MOVE hours: 2.0 Prod Rig Spud date/time: 1/27/2010 10:30 Rig Release date/time: 2/2/2010 5:30 Total SPUD to RR hours: 139.0 Planned depth MD 8,357 Planned depth TVD 8,050 Actual MD: 8,370 Actual TVD: 8,066 Open Wells $: $630,931 AFE$: $651,858 Open wells $/ft:$75.38 PRODUCTION HOLE: Prod. From depth: 1,970 Prod. To depth:8,370 Total PROD hours: 77 Production Casing size: 4 1/2 # of casing joints ran: 197 Casing set MD:8,356.8 # sx of cement:1,660 Cement blend (ppg:)11.8/14.3 Cement yield (ft3/sk): 2.42/1.31 Est. TOC (Lead & Tail) or 2 Stage : 2030 Describe cement issues: Describe hole issues: RUNNING SHALES DIRECTIONAL INFO: KOP: 320 Max angle: 32.00 Departure: 1406.85 Max dogleg MD: 5.88

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 3/25/2010	End Date: 4/13/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/26/2010	7:00 - 7:15	0.25	COMP	48		P		HSM, MIRU 1ST SHOOT
	7:15 - 16:00	8.75	COMP	36	E	P		MIRU B&C TESTERS, P/T CAG & FRAC VALVES TO 7000# [GOOD TEST] R/D TESTERS, MIRU CASED HOLE SOLUTIONS, PERF MESAVERDE USING 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE 8282'-8284' 4 SPF, 90* PH, 8 HOLES. 8247'-8248' 4 SPF, 90* PH, 4 HOLES. 8212'-8213' 4 SPF, 90* PH, 4 HOLES. 8153'-8154' 4 SPF, 90* PH, 4 HOLES. [20 HOLES] SWI.
3/29/2010	7:00 - 7:15	0.25	COMP	48		P		HSM, MIRU, PERF & FRAC
	7:15 - 18:00	10.75	COMP	36	E	P		MIRU SUPERIOR FRAC, P/T SUREFACE LINE TO 8000#, FRAC STG #1 MESAVERDE 8153'-8284' [20 HOLES] STG #1] WHP=260#, BRK DN PERFS=4390#, INJ RT=50, INJ PSI=4430#, ISIP=2320#, FG=.72, PUMP'D 1085 BBLS SLK WTR W/ 32888# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2075#, FG=.69, AR=49.6, AP=4275#, MR=50.9, MP=6419#, NPI=-245#, 20/20 CALC PERFS OPEN 100% SWIFN.
3/30/2010	7:00 - 7:15	0.25	COMP	48		P		HSM, PERF & FRAC
	7:15 -		COMP	36	E	P		STG #2] P/U RIH W/ HALIBURTON 8K CBP & PERF GUN, SET CBP @ 8116', PERF MESAVERDE USING 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE. 8084'-8086' 4 SPF, 90* PH, 8 HOLES. 8042'-8043' 4 SPF, 90* PH, 4 HOLES. 8023'-8024' 4 SPF, 90* PH, 4 HOLES. 7991'-7992' 4 SPF, 90* PH, 4 HOLES. [20 HOLES] WHP=1718#, BRK DN PERFS=2804#, INJ RT=43.7, INJ PSI=6161#, ISIP=2170#, FG=.71, PUMP'D 712 BBLS SLK WTR W/ 22351# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=2110#, FG=.70, AR=44.4, AP=6122#, MR=50.3, MP=6758#, NPI=-60# 13/20 CALC PERFS OPEN 65% STG #3] P/U RIH W/ HALIBURTON 8K CBL & PERF GUN, SET CBL @ 7869', PERF MESAVERDE USING 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE. 7837'-7839' 4 SPF, 90* PH, 8 HOLES. 7817'-7818' 4 SPF, 9-* PH, 4 HOLES. 7724'-7725' 4 SPF, 90* PH, 4 HOLES. 7693'-7694' 4 SPF, 90* PH, 4 HOLES. [20 HOLES] WHP=514#, BRK DN PERFS=3549#, INJ RT=47.4, INJ PSI=6130#, ISIP=2320#, FG=.74, PUMP'D 2068 BBLS SLK WTR W/ 80477# 30/50 MESH W/ NO RESIN COAT IN TAIL, ISIP=2313#, FG=.74, AR=45.7, AP=5620#, MR=51.4, MP=6973#, NPI=-7#, 15/20 CALC PERFS OPEN 75% SCREENED OFF, CUT SAND 5000# SHORT, DID NT PUMP ANY RESIN, FLOWED BACK 15 MIN, REFLUSHED. SWIFN.

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 3/25/2010	End Date: 4/13/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/31/2010	7:00 - 7:15	0.25	COMP	48		P		HSM, PERF & FRAC
	7:15 - 17:30	10.25	COMP	36	E	P		STG #4] P/U RIH W/ HALIBURTON 8K CBL & PERF GUN, SET CBL @ 7676', PERF MESAVERDE USING 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE. 7644'-7646' 3 SPF, 120* PH, 6 HOLES. 7586'-7587' 4 SPF, 90* PH, 4 HOLES. 7533'-7534' 3 SPF, 120* PH, 3 HOLES. 7509'-7510' 3 SPF, 120* PH, 3 HOLES. 7459'-7460' 3 SPF, 120* PH, 3 HOLES. 7409'-7410' 3 SPF, 120* PH, 3 HOLES. [22 HOLES] WHP=1482#, BRK DN PERFS=3410#, INJ RT=52.1, INJ PSI=4938#, ISIP=1750#, FG=.67, PUMP'D 2860 BBLS SLK WTR W/ 112558# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=1565#, FG=.65, AR=52.1, AP=4718#, MR=54.7, MP=6038#, NPI= -185#, 19/22 CALC PERFS OPEN 88% STG #5] P/U RIH W/ HALIBURTON 8K CBL & PERF GUN, SET CBL @ 7336', PERF MESAVERDE USING 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE. 7305'-7306' 4 SPF, 90* PH, 4 HOLES. 7250'7251' 3 SPF, 120* PH, 3 HOLES. 7218'-7219' 3 SPF, 120* PH, 3 HOLES. 7168'-7169' 3 SPF, 120* PH, 3 HOLES. 7135'-7136' 3 SPF, 120* PH, 3 HOLES. 7109'-7110' 3 SPF, 120* PH, 3 HOLES. 7076'-7077' 3 SPF, 120* PH, 3 HOLES. [22 HOLES] WHP=1351#, BRK DN PERFS=2249#, INJ RT=50.8, INJ PSI=4050#, ISIP=1439#, FG=.64, PUMP'D 2407 BBLS SLK WTR W/ 96736# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=1646#, FG=.67, AR=53.3, AP=3903#, MR=54.9, MP=4719#, NPI=208#, 22/22 CALC PERFS OPEN 100% STG #6] P/U RIH W/ HALIBURTON 8K CBL & PERF GUN, SET CBL @ 6934', PERF MESAVERDE USING 3-3/8 EXPEND [SCALLOP] 23 GRM, 0.36" HOLE. 6902'-6904' 4 SPF, 90* PH, 8 HOLES. 6855'-6856' 4 SPF, 90* PH, 4 HOLES. 6842'-6844' 4 SPF, 90* PH, 8 HOLES. [20 HOLES] WHP=517#, BRK DN PERFS=5187#, INJ RT=39.7, INJ PSI=4583#, ISIP=1995#, FG=.73, PUMP'D 697 BBLS SLK WTR W/ 24889# 30/50 MESH W/ 5000# RESIN COAT IN TAIL, ISIP=1865#, FG=.71, AR=47.1, AP=4853#, MR=48.4, MP=5975#, NPI= -130#, 15/20 CALC PERFS OPEN 76% P/U RIH W/ HALIBURTON 8K CBP FOR KILL PLUG SET @ 6792' SWI.
4/12/2010	7:00 - 7:30	0.50	COMP	48		P		HSM, RIGGING DWN & UP AROUND OTHER FLOWING WELLS.
	7:30 - 10:00	2.50	COMP	30	A	P		RD OFF BON 1023-2G1BS, MOVE OVER & RIG UP, ND FRAC VALVES, NU WEATHERFORDS WH SECTION & BOPS, RU FLOOR.

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 3/25/2010	End Date: 4/13/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	10:00 - 15:00	5.00	COMP	31	I	P		TALLY & PU 37/8 SEALED BEARING BIT, POBS, 1.875 X/N & 213 JTS 23/8 L-80 TBG, TAG UP @ 6739 ' RU DRL EQUIP. EOT@ 6712'. PREP TO D/O IN AM. SWI SDFN.(DUE TO HIGH WINDS.)
4/13/2010	7:00 - 7:30	0.50	COMP	48		P		HSM, DRILL PLUGS W/ POWER SWIVEL.
	7:30 - 15:00	7.50	COMP	44	C	P		BROK CIRC CONVENTIONAL, TEST BOPS TO 3,000# PSI, RIH C/O 53' SAND TAG 1ST PLUG @ 6792' DRL PLG IN 3 MIN, 0# PSI INCREASE RIH. C/O 30' SAND TAG 2ND PLUG @ 6934' DRL PLG IN 4 MIN, 200# PSI INCREASE RIH. C/O 30' SAND TAG 3RD PLUG @ 7336' DRL PLG IN 3 MIN, 100# PSI INCREASE RIH. C/O 30' SAND TAG 4TH PLUG @ 7676' DRL PLG IN 5 MIN, 400# PSI INCREASE RIH. C/O 30' SAND TAG 5TH PLUG @ 7869' DRL PLG IN 3 MIN, 200# PSI INCREASE RIH. C/O 30' SAND TAG 6TH PLUG @ 8116' DRL PLG IN 3 MIN, 200# PSI INCREASE RIH. C/O TO PBTD @ 8313', CIRC CLEAN, RD SWIVEL, L/D 11 JTS 23/8. LAND TBG ON 251 JTS 23/8 L-80 TBG. ND BOPS NU WH, PUMP OFF BIT LET WELL SET FOR 30 MIN FOR BIT TO FALL.TURN WELL OVER TO FB CREW. WIND BLOWING TO HARD TO RIG DWN. SDFD KB = 15' WEATHERFORD 7 1/16 HANGER = .83' 251 JTS 23/8 L-80 = 7934.08' POBS W/ 1.875 X/N = 2.20' EOT @ 7952.11' FTP = 150 SICP : 1400 315 JTS HAULED OUT 251 LANDED 64 TO RETURN TWTR = 10,029 BBLS TWR = 1100 BBLS TWLTR = 8929 BBLS
4/14/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2500#, TP 1450#, 20/64" CK, 48 BWPH, TRACE SAND, LIGHT GAS TTL BBLS RECOVERED: 2064 BBLS LEFT TO RECOVER: 7965
4/15/2010	7:00 -		PROD	33	A			7 AM FLBK REPORT: CP 2400#, TP 1400#, 20/64" CK, 40 BWPH, trace SAND, 1309 GAS TTL BBLS RECOVERED: 3112 BBLS LEFT TO RECOVER: 6917
	13:30 -		PROD	50				WELL TURNED TO SALES @ 1045 HR ON 4/7/10 - 2300 MCFD, 648 BWPD, CP 2850#, FTP 2025#, CK 20/64"
4/16/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2350#, TP 1350#, 20/64" CK, 30 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 3916 BBLS LEFT TO RECOVER: 6113

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: MILES-GRAY 1/1
Event: COMPLETION	Start Date: 3/25/2010	End Date: 4/13/2010
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/17/2010	7:00 -			33	A			7 AM FLBK REPORT: CP 2100#, TP 1300#, 20/64" CK, 20 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 4496 BBLS LEFT TO RECOVER: 5533
4/25/2010	7:00 -		PROD	50				WELL IP'D ON 4/25/10 - 1495 MCFD, 0 BOPD, 332 BWPD, CP 1374#, FTP 751#, CK 20/64", LP 86#, 24 HRS

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
4304750344	BONANZA 1023-2H3CS		~~NENE~~ NWNE	2	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	17426	17426	12/14/2009			4/15/10	

Comments: THIS WELL IS PRODUCING OUT OF THE MVRD ONLY. — 7/13/10

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750379	BONANZA 1023-2M1S		SENW	2	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	17443	17443	1/7/2010			4/28/10	

Comments: THIS WELL IS PRODUCING OUT OF THE MVRD ONLY. — 7/13/10

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304750380	BONANZA 1023-2L2S		SENW	2	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	17444	17444	1/7/2010			4/29/10	

Comments: THIS WELL IS PRODUCING OUT OF THE MVRD ONLY. — 7/13/10

ACTION CODES:

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

ANDY LYTLE
Name (Please Print)

Signature

REGULATORY ANALYST
Title

7/13/2010
Date

RECEIVED
JUL 13 2010
DIV. OF OIL, GAS & MINING

(5/2000)

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-2H3CS

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

9. API NUMBER:
43047503440000

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

PHONE NUMBER:
720 929-6515 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 02 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 4/6/2011	☐ ACIDIZE	☐ ALTER CASING	✓ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: 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.

Approved by the Utah Division of Oil, Gas and Mining

Date: 04/06/2011

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andy Lytle	720 929-6100	Regulatory Analyst
SIGNATURE		**DATE**
N/A		4/6/2011

RECEIVED Apr. 06, 2011

WORKORDER # 88119307

Name: BONANZA 1023-2H3CS – 1023-2B PAD 4/5/11
Surface Location: NWNE Sec. 2, T10S, R23E
Uintah County, UT

API: 4304750344 LEASE#: ML-47062

ELEVATIONS: 5443' GL 5457' KB

TOTAL DEPTH: 8370' PBTD: 8313'

SURFACE CASING: 9 5/8", 36# J-55 @ 1946'

PRODUCTION CASING: 4 1/2", 11.6#, I-80 @ 8356'
TOC @ Surface per CBL

PERFORATIONS: Mesaverde 6842' – 8284'

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.02171	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528	0.0872	0.0155
9.625" 36# J-55	8.921	2020	3520	3.247	0.434	0.0773
Annular Capacities						
2.375" tbg. X 4 ½" 11.6# csg				0.4227	0.0565	0.01

GEOLOGICAL TOPS:

1350' Green River
1956' Mahogany
4330' Wasatch
6075' Mesaverde

RECEIVED Apr. 06, 2011

BONANZA 1023-2H3CS – 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 laying down extra tubing.

5. Rig up wireline service. RIH and set CBP @ ~6792'. Dump bail 4 sx cement on top of plug. POOH and RD wireline service. TIH w/ tubing and seating nipple. Land tubing ±60' above cement. RDMO.

6. Monitor well pressures. If surface casing is dead. MIRU. ND WH and NU BOP. POOH w/ tubing.

7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

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CUT/PATCH PROCEDURE:

1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.

2. POOH, LD cutters and casing.

3. PU 7 3/8" overshot with 4 ½" right hand standard wicker grapple, 1 - 4 ¾" drill collar with 3 ½" IF threads, pup joint, manual bumper sub, and crossovers. If casing cut is deeper than ±30' utilize >7000 ft-lb torque pipe as needed. Pull a minimum of 10,000# to keep grapple engaged if cement top is high (<~900'). If cement top is low (>~900'), more weight will be required to put casing in neutral. Torque casing string to ±7000 ft-lbs, count number of turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out, release overshot, POOH, and lay down.

4. TIH w/ skirted mill and dress off the fish top for approximately ½ hour. TOOH.

5. PU & RIH w/ 4 ½" 10k external casing patch on 4 ½" P-110 casing. Ensure that sliding sleeve assembly shifts ±3' and casing tags no-go portion of patch. NOTE: Shear pins will shear at 3500 to 4500 lbs.

6. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.

7. Install slips. Land casing w/ 80,000# tension.

8. Cut-off and dress 4 ½" casing stub.

9. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~6742. Clean out to PBTD (8313').

10. POOH, land tbg and pump off POBS.

11. 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 casing crew and wireline services. RIH and shoot string shot at casing collar @ ± 46'.

5. Back-off casing, POOH.

RECEIVED Apr. 06, 2011

6. PU new casing joint with buttress threads and entry guide and RIH. Tag casing top. Thread into casing and torque up to ±7000 ft-lbs, count number of additional turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out go to step 7.

7. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 7,000# / 9,000# psi.

8. Install slips. Land casing w/ 80,000# tension.

9. Cut-off and dress 4 ½" casing stub.

10. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~6742. Clean out to PBTD (8313').

11. POOH, land tbg and pump off POBS.

12. 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.

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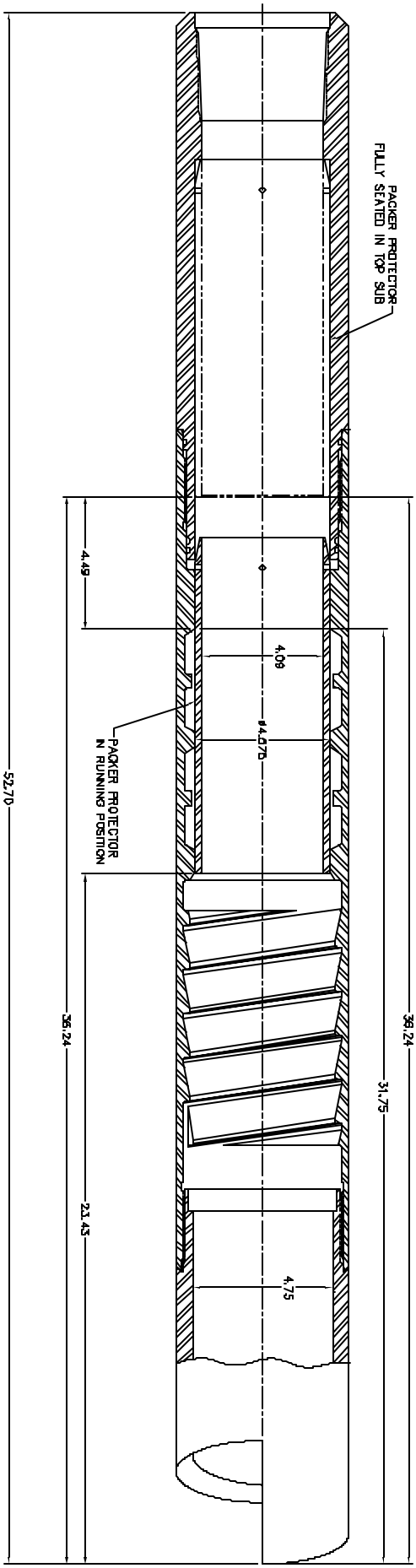
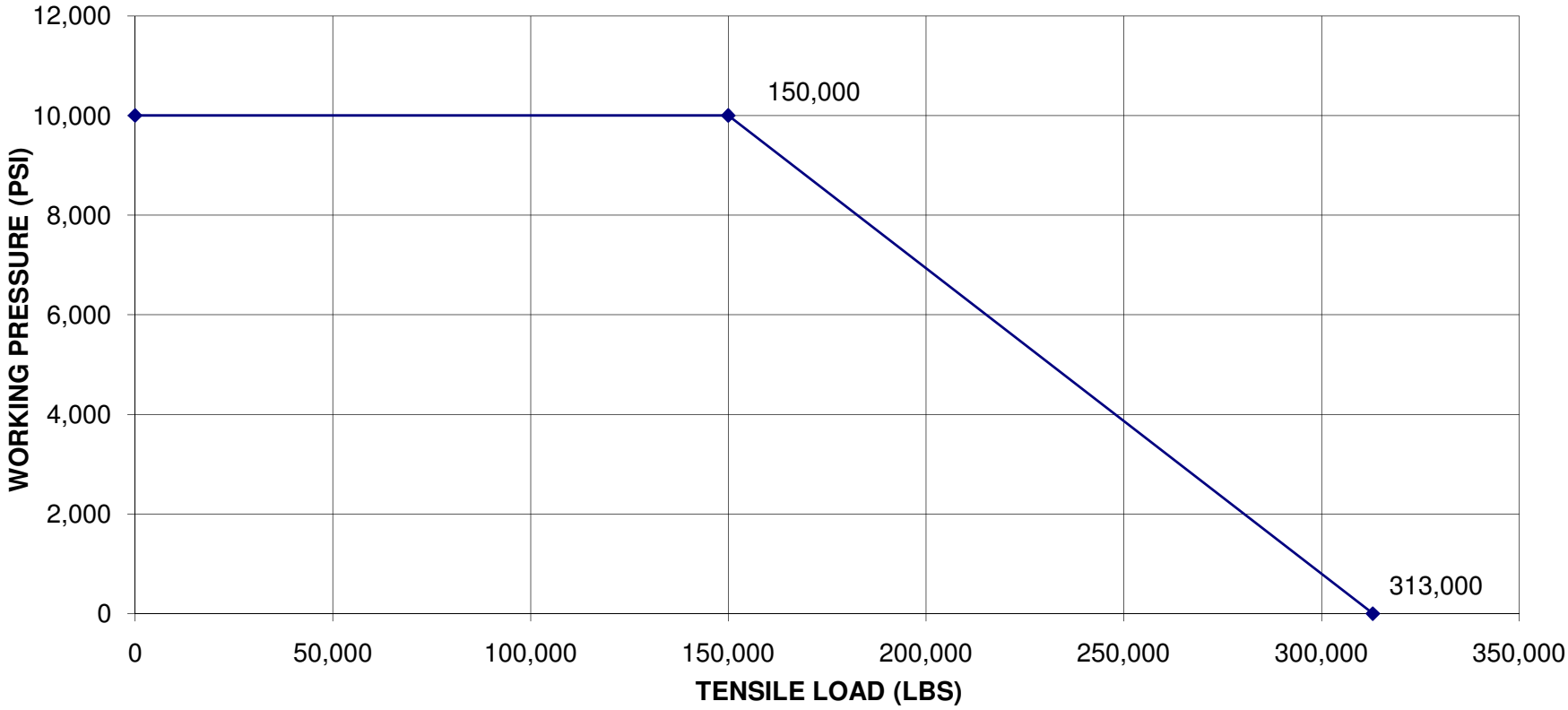


510L-005-001 4-1/2" LOGAN HP CASING PATCH

RECEIVED Apr. 06, 2011

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 Apr. 06, 2011

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-2H3CS

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

9. API NUMBER:
43047503440000

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

PHONE NUMBER:
720 929-6515 Ext

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWNE Section: 02 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

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

TYPE OF SUBMISSION

- ☐ NOTICE OF INTENT
  Approximate date work will start:
- ✓ SUBSEQUENT REPORT
  Date of Work Completion: 5/9/2011
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

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

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

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

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

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

SIGNATURE	DATE
N/A	5/9/2011

RECEIVED May. 09, 2011

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-2H3CS [GREEN]	Spud Conductor: 12/14/2009	Spud Date: 12/15/2009
Project: UTAH-UINTAH	Site: BONANZA 1023-2B PAD	Rig Name No: MILES 2/2
Event: WELL WORK EXPENSE	Start Date: 4/12/2011	End Date: 4/29/2011
Active Datum: RKB @5,457.00ft (above Mean Sea Leve	UWI: NW/NE/0/10/S/23/E/2/0/0/26/PM/N/1,191.00/E/0/1,917.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
4/27/2011	7:00 - 7:30	0.50	MAINT	48		P		TRIPPING WITH PLUNGERS IN TBG
	7:30 - 17:30	10.00	MAINT	35				MIRU, KILL WELL, NDWH, NU BOP'S, UNLAND TBG, POOH TBG, TBG PLUGGED, SWAB TBG, STD BACK 125 STANDS, PLUS A SINGLE, BTM 3 JTS FULL OF SAND, PARAFIN, PLUGGED SOLID, REMOVE 2 PLUNGERS, BUMPER SPRING, RU CUTTERS, TIH GAUGE RING TO 6810', POOH, PU 10K CBP, TIH SET AT 6785', POOH, PU BAILER, BAIL 4 SX CEMENT ON PLUG, RD CUTTERS, SWIFN
4/28/2011	7:00 - 7:30	0.50	MAINT	48		P		REPAIR CSG
	7:30 - 16:30	9.00	MAINT	33		P		NDWH, CEMENT 16' BELOW SURFACE, RU WEATHERFORD, CUT CSG 1 1/2' DWN, TIH OVERSHOT, RU CUTTERS, STRING SHOT CSG AT 4', BACK OFF PUP JT.STING IN PUP JT, TORQUE TO 7000# 15 TURNS,PRESS TEST CSG 1500# 15 MIN,3500# 30 MIN, NU TBG HD, TIH TBG TO 6700' TAG PLUG, SWIFN
4/29/2011	7:00 - 7:30	0.50	MAINT	48		P		DRILLING PLUGS
	7:30 - 17:00	9.50	MAINT	44		P		TIH, TAG CEMENT PLUG, DRILL CEMENT, CBP, TIH 261 JTS 8250', TAG FILL, RU WEATHERFORD FOAM UNIT, BREAK CIRC, PU 3 JTS C/O TO 8313', 63' OF FILL, LD 12 JTS, BROACH TBG, POBS, 2500#, LAND TBG, NUWH, TURN TO PROD TBG RUN 251 JTS 7930.48" KB 14.00' HANGER .83' XNSX 2.2' EOT 7947.51' PBTD 8313.00' WTR PUMPED 460 BBLS WTR RCVD 420 BBLS TBG REPLACED 4 JTS 126.45' WITH 4 JTS 126.45' + 1 JT BENT 31.65' CONTACT CDC 3:15 PM TALKED TO KAGEN

RECEIVED May. 09, 2011

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

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML 47062

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-2H3CS

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

9. API NUMBER: 43047503440000

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

PHONE NUMBER: 720 929-6515 EXT

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1191 FNL 1917 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 02 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/22/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

The operator requests authorization to recomplete the subject well. The operator requests approval to recomplete the Wasatch formation and commingle with the existing Mesaverde formation. Please see the attached procedure. Thank you.

Approved by the Utah Division of Oil, Gas and Mining

Date: May 24, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I

SIGNATURE	DATE
N/A	5/22/2012

RECEIVED: May. 22, 2012

Greater Natural Buttes Unit

BONANZA 1023-2H3CS
RE-COMPLETIONS PROCEDURE

DATE: 05/10/2012
AFE#:
API#: 4304750344
USER ID: WIU473 (Frac Invoices Only)

COMPLETIONS ENGINEER: **Patricia Cuba, Denver, CO**
(720) 929-6348 (Office)
(303) 601-7259 (Cell)

SIGNATURE:

ENGINEERING MANAGER: JEFF DUFRESNE

SIGNATURE:

REMEMBER SAFETY FIRST!

RECEIVED: May. 22, 2012

Name: **Bonanza 1023-2H3CS**
Location: **SW SW SE NE Sec 2 T10S R23E**
LAT: 39.981936 **LONG: -109.291667** **COORDINATE:** *NAD83 (Surface Location)*
Uintah County, UT
Date: **05/10/2012**

ELEVATIONS: 5442' GL 5457' KB *Frac Registry TVD: 8066*

TOTAL DEPTH: 8370' **PBTD:** 8312'
SURFACE CASING: 9 5/8", 36# J-55 LT&C @ 1947'
PRODUCTION CASING: 4 1/2", 11.6#, I-80 BT&C @ 8357'
Marker Joint **4408'-4429'**

TUBULAR PROPERTIES:

	BURST (psi)	COLLAPSE (psi)	DRIFT DIA. (in.)	CAPACITIES (bbl/ft)	CAPACITIES (gal/ft)
2 3/8" 4.7# J-55 tbg	7,700	8,100	1.901"	0.00387	0.1624
4 ½" 11.6# I-80 (See above)	7780	6350	3.875"	0.0155	0.6528
2 3/8" by 4 ½" Annulus				0.0101	0.4227

TOPS: **BOTTOMS:**

1106' Green River Top
1391' Bird's Nest Top
1956' Mahogany Top
4330' Wasatch Top 6146' Wasatch Bottom
6146' Mesaverde Top 8370' Mesaverde Bottom (TD)
*Based on latest geological interpretation

T.O.C. @ 40'

GENERAL:

- A minimum of **4** 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 Schlumbergers Induction-Density-Neutron log dated 02/09/2010
- **2** fracturing stages required for coverage.
- Hydraulic isolation estimated at **46'** based upon from Casedhole Solutions's cbl dated 02/17/2010 **.**
- Procedure calls for **3** 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 0.5 gpt. Remember to pre-load the casing with scale inhibitor for the very first stage with 0.5 gpt.
- 30/50 mesh Ottawa sand, **Slickwater frac**.
- Maximum surface pressure **6200** psi.
- **If casing pressure test fails. MIRU with tubing and packer. Isolate leak by pressure testing above and below the packer. RIH and set appropriate casing leak remediation**

RECEIVED: May. 22, 2012

(specific details on remediation will be provided in post-job-report). Re-pressure test to 1000 and 3500 psi for 15 minutes each and to 6200 psi for 30 minutes.

- 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 densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.**
- Tubing Currently Landed @~7948'
- Originally completed on 03/26/2010

Existing Perforations:

Formation	Zone	Top	Btm	spf	Shots	Date	Reason
MESAVERDE		6842	6844	4	8	03/26/2010	PRODUCTION
MESAVERDE		6855	6856	4	4	03/26/2010	PRODUCTION
MESAVERDE		6902	6904	4	8	03/26/2010	PRODUCTION
MESAVERDE		7076	7077	3	3	03/26/2010	PRODUCTION
MESAVERDE		7109	7110	3	3	03/26/2010	PRODUCTION
MESAVERDE		7135	7136	3	3	03/26/2010	PRODUCTION
MESAVERDE		7168	7169	3	3	03/26/2010	PRODUCTION
MESAVERDE		7218	7219	3	3	03/26/2010	PRODUCTION
MESAVERDE		7250	7251	3	3	03/26/2010	PRODUCTION
MESAVERDE		7305	7306	4	4	03/26/2010	PRODUCTION
MESAVERDE		7409	7410	3	3	03/26/2010	PRODUCTION
MESAVERDE		7459	7460	3	3	03/26/2010	PRODUCTION
MESAVERDE		7509	7510	3	3	03/26/2010	PRODUCTION
MESAVERDE		7533	7534	3	3	03/26/2010	PRODUCTION
MESAVERDE		7586	7587	4	4	03/26/2010	PRODUCTION
MESAVERDE		7644	7646	3	6	03/26/2010	PRODUCTION
MESAVERDE		7693	7694	4	4	03/26/2010	PRODUCTION
MESAVERDE		7724	7725	4	4	03/26/2010	PRODUCTION
MESAVERDE		7817	7818	4	4	03/26/2010	PRODUCTION
MESAVERDE		7837	7839	4	8	03/26/2010	PRODUCTION
MESAVERDE		7991	7992	4	4	03/26/2010	PRODUCTION
MESAVERDE		8023	8024	4	4	03/26/2010	PRODUCTION
MESAVERDE		8042	8043	4	4	03/26/2010	PRODUCTION
MESAVERDE		8084	8086	4	8	03/26/2010	PRODUCTION
MESAVERDE		8153	8154	4	4	03/26/2010	PRODUCTION
MESAVERDE		8212	8213	4	4	03/26/2010	PRODUCTION
MESAVERDE		8247	8248	4	4	03/26/2010	PRODUCTION
MESAVERDE		8282	8284	4	8	03/26/2010	PRODUCTION

Relevant History:

03/26/2010: Completed the Mesaverde formation with 385,560 gallons of slickwater, 343,245 lbs of 30/50 Ottawa sand and ~ 30,000 lbs of resin coated sand.
04/28/2011: Wellhead repair
04/29/2011: Land tubing @ 7948'
06/28/2011: Last slickline report:

RECEIVED: May. 22, 2012

TIH, TAG CEMENT PLUG, DRILL CEMENT, CBP, TIH 261 JTS 8250', TAG FILL, RU WEATHERFORD FOAM UNIT, BREAK CIRC, PU 3 JTS C/O TO 8313', 63' OF FILL, LD 12 JTS, BROACH TBG, POBS, 2500#, LAND TBG, NUWH, TURN TO PROD

TBG RUN	251 JTS	7930.48"	
KB		14.00'	
HANGER		.83'	
XNSX		2.2'	
EOT		7947.51'	
PBTD		8313.00'	
WTR PUMPED		460 BBLS	
WTR RCVD		420 BBLS	
TBG REPLACED 4 JTS 126.45'		WITH 4 JTS	126.45' + 1 JT BENT 31.65'

H_2S History:

Production Date	Gas (avg mcf/day)	Water (avg bbl/day)	Oil (avg bbl/day)	LGR (bbl/Mmcf)	Max H2S Seperator (ppm)
4/30/2010	678.20	0.00	0.00	0.00	
5/31/2010	833.32	62.35	9.58	86.32	
6/30/2010	556.47	72.27	5.77	140.23	10.00
7/31/2010	464.48	64.68	5.35	150.77	12.00
8/31/2010	441.87	69.16	3.61	164.70	0.00
9/30/2010	401.93	59.87	4.17	159.31	6.00
10/31/2010	348.65	47.68	1.71	141.65	5.00
11/30/2010	308.53	38.20	2.30	131.27	22.00
12/31/2010	286.00	34.48	2.06	127.79	14.00
1/31/2011	27.48	4.32	0.84	187.79	7.00
2/28/2011	180.96	15.96	1.64	97.30	9.00
3/31/2011	117.29	5.81	2.71	72.61	0.00
4/30/2011	138.90	10.60	0.57	80.39	0.00
5/31/2011	255.61	56.87	1.39	227.92	0.00
6/30/2011	206.20	38.17	2.37	196.57	0.00
7/31/2011	157.13	19.45	0.03	124.00	
8/31/2011	184.16	32.68	0.03	177.61	
9/30/2011	174.57	25.90	0.03	148.56	
10/31/2011	179.45	23.55	0.03	131.40	
11/30/2011	144.93	19.73	0.43	139.14	
12/31/2011	112.90	13.00	0.06	115.71	0.00
1/31/2012	97.10	18.77	0.00	193.36	
2/29/2012	73.97	20.59	0.07	279.25	
3/31/2012	70.48	16.29	1.08	246.38	
4/30/2012	119.66	12.60	0.53	109.75	

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.

RECEIVED: May. 22, 2012

2. The tubing is below the proposed CBP depth, TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~7948'). Visually inspect for scale and consider replacing if needed.

3. If tbg looks ok consider running a gauge ring to 6020 (50' below proposed CBP). Otherwise P/U a mill and C/O to 6020' (50' below proposed CBP).

4. Set 8000 psi CBP at ~ 5970'. 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; if pressure test fails contact Denver engineer and see notes. As per standard operating procedure install steel blowdown line to reserve pit from 4-1/2" X 9-5/8" annulus. 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	5726	5727	3	3
WASATCH	5786	5787	3	3
WASATCH	5862	5864	3	6
WASATCH	5937	5940	3	9

6. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gals of 15% HCL and let soak 5-10 min. Fracture as outlined in Stage 1 on attached listing. Under-displace to ~5726' and trickle 250gal 15%HCL w/ scale inhibitor in flush .

7. Set 8000 psi CBP at ~5664'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

Zone	From	To	spf	# of shots
WASATCH	5412	5413	3	3
WASATCH	5506	5507	3	3
WASATCH	5554	5556	3	6
WASATCH	5609	5611	3	6
WASATCH	5632	5634	3	6

8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 7 on attached listing. Under-displace to ~5412' andflush only with recycled water.

9. Set 8000 psi CBP at~5362'.

10. ND Frac Valves, NU and Test BOPs.

11. TIH with 3 7/8" mill, pump open sub, XN nipple and tubing.

12. Mill 2 plugs and clean out to a depth of 5960'.

13. Land tubing at 5696', drop ball and pump open sub. Flow back completion load. RDMO

14. MIRU, POOH tbg and mill. TIH with POBS and mill.

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15. Mill last plug @ 5970' clean out to PBTD at 8312'. Land tubing at ±7948' pump off bit and bit sub. This well WILL be commingled at this time.

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

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

For design questions, please call
Patricia Cuba, Denver, CO
(720) 929-6348 (Office)
(303) 601-7259 (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

Verify that the Braden head valve is locked OPEN.

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Fracturing Schedules
Name Bonanza 1023-2H3CS
Slickwater Frac

Copy to new book

Casing Size	4.5
Recomplete?	Y
Pad?	Y
ACTS?	Y

Swabbing Days	3	Enter Number of swabbing days here for recompletes
Production Log	0	Enter 1 if running a Production Log
DFIT	0	Enter Number of DFITs
GR only	N	Enter Y if only Gamma Ray log was run
Los Scale	Y	Enter Y if a LOW concentration of Scale Inhibitor will be pumped

Stage	Zone	Perfs Top, ft.	Perfs Bot., ft	SPF	Holes	Rate BPM	Fluid Type	Initial ppg	Final ppg	Fluid	Volume gals	Cum Vol gals	Volume BBLs	Cum Vol BBLs	Fluid % of frac	Sand % of frac	Sand lbs	Cum. Sand lbs	Footage from CBP to Flush	Scale Inhib., gal.
1	WASATCH	5726	5727	3	3	Varied	Pre-Pad & Pump-in test			Slickwater	3,738	3,738	89	89						2
	WASATCH	5786	5787	3	3	0	ISIP and 5 min ISIP													
	WASATCH	5862	5864	3	6	50	Slickwater Pad			Slickwater	5,042	8,780	120	209	15.0%	0.0%	0	0		3
	WASATCH	5937	5940	3	9	50	Slickwater Ramp	0.25	1	Slickwater	16,806	25,585	400	609	50.0%	37.3%	10,503	10,503		8
	WASATCH					50	Slickwater Ramp	1	2	Slickwater	11,764	37,349	280	889	35.0%	62.7%	17,646	28,149		6
	WASATCH					50	Flush (4-1/2)			Slickwater	3,738	41,087	89	978				28,149		2
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	28,149		0
	WASATCH											41,087	89	978						2
	WASATCH																			22
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		33,611								
																gal/md-ft	19,000	15,913	lbs sand/md-ft	
			# of Perfs/stage		21									Flush depth	5726		CBP depth	5,664	62	
						19.6	<< Above pump time (min)													
2	WASATCH	5412	5413	3	3	Varied	Pump-in test			Slickwater		0	0	0						
	WASATCH	5506	5507	3	3	0	ISIP and 5 min ISIP													
	WASATCH	5554	5556	3	6	50	Slickwater Pad			Slickwater	3,220	3,220	77	77	15.0%	0.0%	0	0		2
	WASATCH	5609	5611	3	6	50	Slickwater Ramp	0.25	1	Slickwater	10,734	13,954	256	332	50.0%	37.3%	6,708	6,708		5
	WASATCH	5632	5634	3	6	50	Slickwater Ramp	1	2	Slickwater	7,513	21,467	179	511	35.0%	62.7%	11,270	17,979		4
	WASATCH					50	Flush (4-1/2)			Slickwater	3,533	25,000	84	595				17,979		2
	WASATCH						ISDP and 5 min ISDP			Slickwater										0
	WASATCH																			0
	WASATCH																	17,979		0
	WASATCH											25,000	84	595						2
	WASATCH																			14
	WASATCH																			
	WASATCH																			
	WASATCH									Sand laden Volume		21,467								
																gal/md-ft	108,970	91,262	lbs sand/md-ft	
			# of Perfs/stage		24									Flush depth	5412		CBP depth	5,362	50	
						11.9	<< Above pump time (min)													
	Totals	Total			45						Total Fluid	66,087	gals	1,573	bbls		Total Sand	46,128		
		ft										1,573	bbls							
						0.5								3.5	tanks				Total Scale Inhib. =	37

Total Stages	2	stages
Last Stage Flush	3,533	gals

Service Company Supplied Chemicals - Job Totals

Friction Reducer	31	gals @	0.5	GPT
Surfactant	63	gals @	1.0	GPT
Clay Stabilizer	31	gals @	0.5	GPT
15% Hcl	500	gals @	250	gal/stg
Iron Control for acid	3	gals @	5.0	GPT of acid
Surfactant for acid	1	gals @	2.0	GPT of acid
Corrosion Inhibitor for acid	3	gals @	6.0	GPT of acid

Third Party Supplied Chemicals Job Totals - Include Pumping Charge if Applicable

Scale Inhibitor	37	gals pumped	0.5	GPT (see schedule)
Biocide	19	gals @	0.3	GPT

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Name Bonanza 1023-2H3CS
Perforation and CBP Summary

Stage	Zones	Perforations Top, ft	Perforations Bottom, ft	SPF	Holes		Fracture Coverage		
1	WASATCH	5726	5727	3	3		5719.5	to	5731.5
	WASATCH	5786	5787	3	3		5775.5	to	5794
	WASATCH	5862	5864	3	6		5852	to	5867.5
	WASATCH	5937	5940	3	9		5932	to	5941
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				21		CBP DEPTH	5,664	
2	WASATCH	5412	5413	3	3		5411.5	to	5414
	WASATCH	5506	5507	3	3		5504	to	5509.5
	WASATCH	5554	5556	3	6		5546	to	5558
	WASATCH	5609	5611	3	6		5606.5	to	5612
	WASATCH	5632	5634	3	6		5628	to	5634.5
	WASATCH								
	WASATCH								
	WASATCH								
	# of Perfs/stage				24		CBP DEPTH	5,362	
	Totals	Total			45				Total

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Bonanza 1023-2H3CS

MD	TVD	EW	NS	INC	AZI
0.00	0.00	0.00	0.00	0.00	0.00
143.00	143.00	-0.46	0.00	0.37	269.80
233.00	233.00	-0.81	-0.46	0.59	187.68
323.00	322.98	-0.45	-1.92	1.38	157.07
393.00	392.96	0.33	-3.70	1.81	155.53
483.00	482.91	1.93	-6.14	1.94	138.58
573.00	572.85	4.47	-8.01	2.16	115.57
663.00	662.78	7.90	-9.27	2.51	105.57
753.00	752.69	11.75	-10.34	2.58	105.27
843.00	842.59	15.58	-11.86	2.71	117.88
933.00	932.49	19.22	-14.07	2.72	124.60
1023.00	1022.39	22.67	-16.67	2.78	129.37
1113.00	1112.28	26.04	-19.69	2.99	134.13
1203.00	1202.15	29.32	-23.11	3.05	138.20
1293.00	1292.02	32.64	-26.62	3.11	135.10
1383.00	1381.89	35.90	-30.28	3.14	141.38
1473.00	1471.74	39.03	-34.40	3.46	144.17
1563.00	1561.59	42.21	-38.34	3.00	137.60
1653.00	1651.48	45.22	-41.80	2.84	140.36
1743.00	1741.37	47.85	-45.37	2.82	146.89
1833.00	1831.25	50.17	-49.27	2.97	151.50
1903.00	1901.15	51.92	-52.65	3.26	153.55
2008.00	2005.99	54.27	-57.87	3.00	158.19
2053.00	2050.93	55.25	-60.12	3.25	154.82
2099.00	2096.80	56.76	-63.13	5.13	152.57
2144.00	2141.56	59.11	-67.14	6.75	147.44
2189.00	2186.19	62.34	-71.87	7.88	144.07
2235.00	2231.69	66.30	-77.37	9.06	144.36
2280.00	2276.06	70.74	-83.41	10.13	143.19
2325.00	2320.28	75.65	-90.15	11.23	144.47
2371.00	2365.24	81.13	-98.16	13.13	146.69
2416.00	2408.99	86.70	-107.12	14.00	149.44
2462.00	2453.51	92.67	-117.03	15.13	148.44
2507.00	2496.88	98.82	-127.31	15.75	149.82
2552.00	2540.11	104.73	-138.31	16.50	153.57
2598.00	2584.16	110.48	-150.28	17.06	155.07
2643.00	2627.07	116.31	-162.52	18.00	154.07
2688.00	2669.74	122.85	-175.21	19.00	151.44
2734.00	2713.04	130.39	-188.77	20.44	150.44
2779.00	2754.92	138.25	-203.24	22.50	152.44
2824.00	2796.24	146.30	-219.13	24.13	153.82
2870.00	2837.77	154.88	-236.95	26.81	154.69
2915.00	2877.63	164.08	-255.70	28.50	153.07
2960.00	2916.97	174.30	-275.00	29.56	151.19
3006.00	2956.67	185.54	-295.33	31.13	150.94
3051.00	2995.20	196.89	-315.61	31.06	150.57
3096.00	3034.15	208.03	-335.21	29.06	150.19
3142.00	3074.33	219.33	-354.54	29.19	149.19
3187.00	3113.51	230.71	-373.53	29.75	148.94
3232.00	3152.37	242.44	-392.95	30.81	148.82
3278.00	3191.89	254.56	-413.13	30.75	149.19
3323.00	3230.45	266.18	-433.20	31.31	150.69
3368.00	3268.90	277.54	-453.65	31.31	151.19
3414.00	3308.34	288.94	-474.39	30.63	151.19
3459.00	3346.99	299.98	-494.62	31.00	151.57
3504.00	3385.42	310.97	-515.29	31.69	152.44
3549.00	3423.66	321.99	-536.30	31.94	152.19
3595.00	3462.68	333.38	-557.83	32.00	152.07
3640.00	3501.05	344.44	-578.58	31.00	151.82
3685.00	3539.82	355.09	-598.78	30.00	152.57
3731.00	3579.86	365.22	-619.04	29.00	154.32
3776.00	3619.34	374.58	-638.50	28.35	154.33
3821.00	3658.94	384.01	-657.68	28.38	153.32
3867.00	3699.18	393.86	-677.67	29.56	154.19
3912.00	3738.16	403.67	-697.89	30.38	154.07
3957.00	3777.04	414.08	-718.03	30.13	151.19
3006.00	2956.67	185.54	-295.33	31.13	150.94
3051.00	2995.20	196.89	-315.61	31.06	150.57
3096.00	3034.15	208.03	-335.21	29.06	150.19
3142.00	3074.33	219.33	-354.54	29.19	149.19
3187.00	3113.51	230.71	-373.53	29.75	148.94
3232.00	3152.37	242.44	-392.95	30.81	148.82
3278.00	3191.89	254.56	-413.13	30.75	149.19
3323.00	3230.45	266.18	-433.20	31.31	150.69
3368.00	3268.90	277.54	-453.65	31.31	151.19
3414.00	3308.34	288.94	-474.39	30.63	151.19
3459.00	3346.99	299.98	-494.62	31.00	151.57
3504.00	3385.42	310.97	-515.29	31.69	152.44
3549.00	3423.66	321.99	-536.30	31.94	152.19
3595.00	3462.68	333.38	-557.83	32.00	152.07
3640.00	3501.05	344.44	-578.58	31.00	151.82
3685.00	3539.82	355.09	-598.78	30.00	152.57
3731.00	3579.86	365.22	-619.04	29.00	154.32
3776.00	3619.34	374.58	-638.50	28.35	154.33
3821.00	3658.94	384.01	-657.68	28.38	153.32
3867.00	3699.18	393.86	-677.67	29.56	154.19
3912.00	3738.16	403.67	-697.89	30.38	154.07
3957.00	3777.04	414.08	-718.03	30.13	151.19
4002.00	3815.81	425.16	-738.00	30.88	150.82
4048.00	3855.24	436.96	-758.55	31.13	149.44
4093.00	3893.81	449.05	-778.33	30.88	147.69
4138.00	3932.59	461.53	-797.42	30.06	145.94
4184.00	3972.56	474.08	-816.43	29.31	147.19
4229.00	4011.84	485.83	-834.96	29.06	148.07
4320.00	4091.65	508.60	-872.30	28.38	149.19
4410.00	4170.67	530.46	-909.41	28.81	149.82
4501.00	4250.92	552.45	-946.24	27.44	148.44
4592.00	4332.16	573.84	-981.22	26.13	148.69
4682.00	4413.58	593.70	-1014.03	24.31	148.94
4773.00	4496.93	612.83	-1045.12	23.00	147.82
4863.00	4579.98	631.27	-1074.48	22.31	147.94
4954.00	4664.82	648.87	-1102.29	20.10	147.37
5045.00	4750.57	665.22	-1127.98	19.00	147.69
5135.00	4836.25	679.50	-1151.52	16.63	149.94
5226.00	4923.88	691.54	-1172.87	14.63	151.32
5317.00	5012.39	701.98	-1191.21	12.19	149.19
5407.00	5100.65	711.39	-1206.09	10.38	145.94
5498.00	5190.38	718.95	-1219.19	8.81	154.82
5589.00	5280.53	724.79	-1230.12	6.88	148.07
5679.00	5370.02	729.43	-1238.41	5.25	154.32
5770.00	5460.77	731.68	-1244.70	3.25	169.94
5861.00	5551.70	732.59	-1248.01	1.13	149.18
5952.00	5642.69	732.33	-1247.96	1.38	318.32
6042.00	5732.66	730.98	-1246.33	1.31	322.69
6133.00	5823.64	729.81	-1244.55	1.38	330.69
6223.00	5913.62	728.95	-1242.73	1.19	339.32
6314.00	6004.60	728.25	-1241.26	0.88	327.82
6405.00	6095.60	727.56	-1240.53	0.44	293.32
6495.00	6185.59	727.11	-1240.32	0.19	297.44
6586.00	6276.59	726.92	-1240.39	0.19	201.07
6677.00	6367.59	726.73	-1240.68	0.25	220.32
6767.00	6457.59	726.41	-1241.29	0.63	204.07
6858.00	6548.59	726.31	-1242.28	0.69	168.32
6948.00	6638.58	726.63	-1243.36	0.75	159.32
7039.00	6729.58	726.74	-1243.75	0.25	329.07
7130.00	6820.57	726.37	-1243.35	0.44	309.57
7220.00	6910.57	726.03	-1243.06	0.13	314.57
7311.00	7001.56	725.00	-1242.05	1.69	314.69
7402.00	7092.52	723.19	-1240.21	1.56	315.94
7492.00	7182.50	722.63	-1238.50	1.13	19.44
7583.00	7273.49	723.58	-1237.28	0.94	60.57
7645.00	7335.48	724.53	-1237.00	0.94	85.82
8370.00	8060.38	736.39	-1236.13	0.94	85.82

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Key Contact information

Completion Engineer

Patricia Cuba: 303/601-7259. 720/929-6348

Production Engineer

Ben Smiley: 435/781-7010, 936/524-4231

Blair Corbett: 435/322-0119, 435/781-9714

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

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 BBLS 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 BBLS 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

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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 BBLS 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

RECEIVED: May. 22, 2012

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

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address: P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: (720) 929-6029

Well 1

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

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

WSMVD

Well 2

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

Comments:

Well 3

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

Comments:

ACTION CODES:

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

Cara Mahler
Name (Please Print)

Signature

REGULATORY ANALYST
Title

5/21/2012
Date

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Div. of Oil, Gas & Mining

(5/2000)

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

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

* not moved in unit

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

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

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

* not moved into unit

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