

Berry Petroleum Company

BERRY PETROLEUM COMPANY

GARFIELD COUNTY, COLORADO

GRANLEE OM C-10 696

OM03C C-10-696

1

Survey: FINAL

Standard Survey Report

15 September, 2008



Weatherford®



Berry Petroleum Company

OM03C C-10-696
GARFIELD COUNTY, COLORADO
SECTION 10-T6S-R96W
255' FNL, 1774 FWL
39° 32' 38.418 N
108° 5' 45.8756 W
RIG:PATTERSON 175



Weatherford®

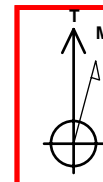
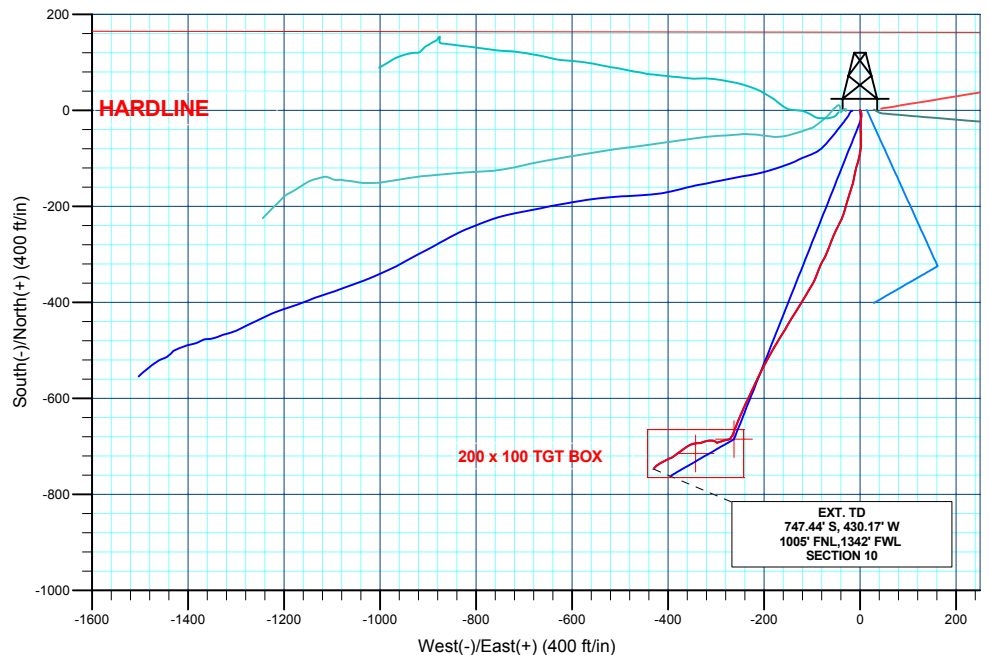
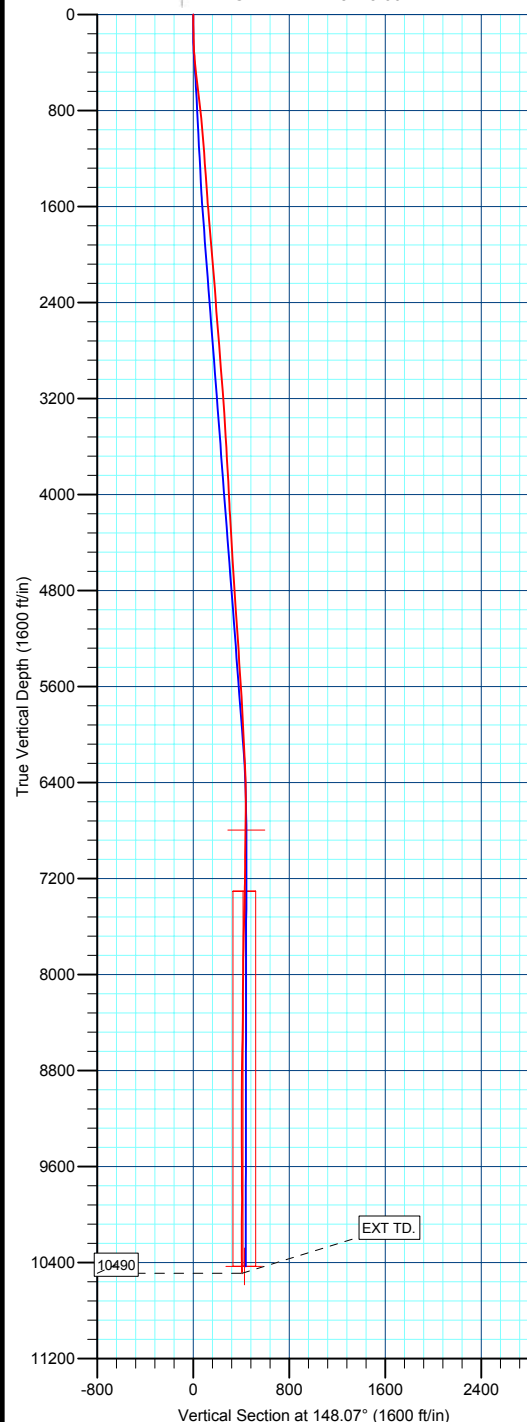
WELL DETAILS: OM03C C-10-696							
+N/-S	+E/-W	Northing	Ground Level: Easting	8125.00 Latitude	Longitude	Slot	
0.00	0.00	1633492.26	2267985.28	39° 32' 38.418 N	108° 5' 45.8756 W		

Survey: Survey #1 (OM03C C-10-696/1)								
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
10540.00	4.81	218.43	10489.85	-747.44	-430.17	0.00	0.00	406.79

REFERENCE INFORMATION	
Co-ordinate (N/E) Reference:	Well OM03C C-10-696, True North
Vertical (TVD) Reference:	SITE @ 8147.00ft (Original Site Elev)
Section (VS) Reference:	Slot - (0.00N, 0.00E)
Measured Depth Reference:	SITE @ 8147.00ft (Original Site Elev)
Calculation Method:	Minimum Curvature



KB ELEV: SITE @ 8147.00ft (Original Site Elev)
GRD ELEV: 8125.00



Azimuths to True North
Magnetic North: 10.79°
Magnetic Field
Strength: 52513.4nT
Dip Angle: 65.84°
Date: 9/11/2008
Model: BGGM2007



Company: BERRY PETROLEUM COMPANY
Project: GARFIELD COUNTY, COLORADO
Site: GRANLEE OM C-10 696
Well: OM03C C-10-696
Wellbore: 1
Design: 1
Local Co-ordinate Reference: Well OM03C C-10-696
TVD Reference: SITE @ 8147.00ft (Original Site Elev)
MD Reference: SITE @ 8147.00ft (Original Site Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.21 Single User Db

Project: GARFIELD COUNTY, COLORADO, COLORADO
Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: Colorado Central Zone
System Datum: Mean Sea Level

Site: GRANLEE OM C-10 696, SECTION 10-T6S-R96W
Site Position: From: Lat/Long
Northing: 1,633,489.69 ft
Easting: 2,267,940.20 ft
Position Uncertainty: 0.00 ft
Slot Radius: 0.00 in
Latitude: 39° 32' 38.380 N
Longitude: 108° 5' 46.4500 W
Grid Convergence: -1.64°

Well: OM03C C-10-696
Well Position: +N/-S 0.00 ft, +E/-W 0.00 ft
Position Uncertainty: 0.00 ft
Northing: 1,633,492.26 ft
Easting: 2,267,985.28 ft
Wellhead Elevation: ft
Latitude: 39° 32' 38.418 N
Longitude: 108° 5' 45.8756 W
Ground Level: 8,125.00 ft

Wellbore: 1

Magnetics: Model Name BGGM2007, Sample Date 9/11/2008, Declination 10.79, Dip Angle 65.84, Field Strength 52,513

Design: 1

Audit Notes: Version 1.0, Phase: ACTUAL, Tie On Depth: 0.00
Vertical Section: Depth From (TVD) 0.00 ft, +N/-S 0.00 ft, +E/-W 0.00 ft, Direction 148.07°

Survey Program: Date 9/15/2008
From 164.00 ft, To 10,540.00 ft, Survey (Wellbore) Survey #1 (1), Tool Name MWD, Description MWD - Standard

Survey data table with columns: 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)



Company:	BERRY PETROLEUM COMPANY	Local Co-ordinate Reference:	Well OM03C C-10-696
Project:	GARFIELD COUNTY, COLORADO	TVD Reference:	SITE @ 8147.00ft (Original Site Elev)
Site:	GRANLEE OM C-10 696	MD Reference:	SITE @ 8147.00ft (Original Site Elev)
Well:	OM03C C-10-696	North Reference:	True
Wellbore:	1	Survey Calculation Method:	Minimum Curvature
Design:	1	Database:	EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,251.00	6.50	194.93	1,243.88	-119.18	-7.62	97.11	0.25	-0.20	-1.32
1,346.00	6.13	193.68	1,338.31	-129.30	-10.21	104.34	0.42	-0.39	-1.32
1,441.00	5.63	190.55	1,432.81	-138.81	-12.26	111.32	0.63	-0.53	-3.29
1,536.00	5.44	190.93	1,527.36	-147.82	-13.97	118.06	0.20	-0.20	0.40
1,632.00	6.56	197.18	1,622.84	-157.52	-16.45	124.98	1.35	1.17	6.51
1,727.00	6.75	199.55	1,717.20	-167.97	-19.92	132.01	0.35	0.20	2.49
1,822.00	6.88	197.05	1,811.53	-178.67	-23.46	139.22	0.34	0.14	-2.63
1,918.00	7.50	195.43	1,906.77	-190.21	-26.81	147.24	0.68	0.65	-1.69
2,013.00	7.75	194.80	2,000.93	-202.38	-30.10	155.83	0.28	0.26	-0.66
2,109.00	7.75	198.80	2,096.05	-214.76	-33.84	164.36	0.56	0.00	4.17
2,204.00	8.13	203.68	2,190.15	-226.98	-38.60	172.21	0.81	0.40	5.14
2,299.00	8.00	209.05	2,284.21	-238.91	-44.51	179.21	0.80	-0.14	5.65
2,394.00	7.31	205.18	2,378.36	-250.16	-50.29	185.70	0.91	-0.73	-4.07
2,490.00	7.38	202.30	2,473.57	-261.39	-55.23	192.62	0.39	0.07	-3.00
2,585.00	7.88	201.55	2,567.73	-273.09	-59.93	200.06	0.54	0.53	-0.79
2,680.00	8.13	199.80	2,661.81	-285.47	-64.60	208.10	0.37	0.26	-1.84
2,776.00	8.50	203.05	2,756.80	-298.38	-69.68	216.37	0.62	0.39	3.39
2,871.00	8.06	212.43	2,850.81	-310.47	-76.00	223.28	1.49	-0.46	9.87
2,966.00	8.31	203.18	2,944.85	-322.40	-82.27	230.09	1.41	0.26	-9.74
3,063.00	7.81	200.93	3,040.89	-335.00	-87.39	238.08	0.61	-0.52	-2.32
3,159.00	7.37	199.98	3,136.05	-346.88	-91.82	245.81	0.48	-0.46	-0.99
3,254.00	7.51	209.19	3,230.25	-358.02	-96.93	252.57	1.26	0.15	9.69
3,349.00	7.82	210.51	3,324.40	-369.01	-103.24	258.56	0.38	0.33	1.39
3,540.00	7.06	210.18	3,513.79	-390.35	-115.74	270.06	0.40	-0.40	-0.17
3,635.00	6.94	212.18	3,608.08	-400.26	-121.73	275.30	0.29	-0.13	2.11
3,730.00	7.63	211.93	3,702.32	-410.47	-128.12	280.58	0.73	0.73	-0.26
3,920.00	7.25	212.55	3,890.72	-431.28	-141.24	291.30	0.20	-0.20	0.33
4,111.00	6.00	208.05	4,080.44	-450.25	-152.42	301.49	0.71	-0.65	-2.36
4,206.00	7.06	212.55	4,174.82	-459.55	-157.90	306.48	1.24	1.12	4.74
4,397.00	7.44	211.68	4,364.30	-479.97	-170.71	317.04	0.21	0.20	-0.46
4,588.00	7.50	210.18	4,553.67	-501.27	-183.47	328.36	0.11	0.03	-0.79
4,778.00	7.06	207.05	4,742.14	-522.39	-195.01	340.18	0.31	-0.23	-1.65
4,969.00	7.25	207.05	4,931.66	-543.58	-205.83	352.44	0.10	0.10	0.00
5,160.00	7.44	204.55	5,121.09	-565.56	-216.45	365.47	0.19	0.10	-1.31
5,350.00	6.81	206.93	5,309.62	-586.79	-226.66	378.09	0.37	-0.33	1.25
5,445.00	6.38	206.55	5,403.99	-596.53	-231.57	383.76	0.45	-0.45	-0.40
5,541.00	7.19	203.18	5,499.32	-606.83	-236.32	389.99	0.94	0.84	-3.51
5,731.00	5.69	204.68	5,688.12	-626.32	-244.94	401.97	0.79	-0.79	0.79
5,922.00	5.00	202.43	5,878.28	-642.62	-252.07	412.03	0.38	-0.36	-1.18
6,112.00	4.84	202.39	6,067.58	-657.68	-258.28	421.53	0.08	-0.08	-0.02
6,302.00	4.70	199.82	6,256.93	-672.41	-263.97	431.02	0.13	-0.07	-1.35
6,398.00	3.75	212.55	6,352.67	-678.76	-266.99	434.81	1.38	-0.99	13.26
6,493.00	2.31	218.80	6,447.53	-682.87	-269.86	436.78	1.55	-1.52	6.58
6,588.00	1.44	244.80	6,542.48	-684.87	-272.14	437.27	1.26	-0.92	27.37
6,684.00	1.38	250.30	6,638.45	-685.78	-274.32	436.89	0.15	-0.06	5.73
6,779.00	1.56	262.93	6,733.42	-686.32	-276.68	436.10	0.39	0.19	13.29
6,874.00	1.63	261.93	6,828.38	-686.67	-279.31	435.01	0.08	0.07	-1.05
7,064.00	2.49	250.86	7,018.26	-688.40	-285.88	433.00	0.50	0.45	-5.83
7,159.00	2.69	248.55	7,113.16	-689.89	-289.90	432.14	0.24	0.21	-2.43
7,254.00	3.25	251.68	7,208.04	-691.56	-294.54	431.10	0.61	0.59	3.29
7,350.00	1.69	285.18	7,303.95	-692.04	-298.49	429.42	2.15	-1.62	34.90
7,445.00	1.56	315.43	7,398.91	-690.75	-300.75	427.13	0.90	-0.14	31.84
7,540.00	1.50	297.30	7,493.88	-689.26	-302.76	424.80	0.51	-0.06	-19.08
7,635.00	1.75	286.05	7,588.84	-688.29	-305.26	422.66	0.43	0.26	-11.84



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Site:	GRANLEE OM C-10 696	MD Reference:	SITE @ 8147.00ft (Original Site Elev)
Well:	OM03C C-10-696	North Reference:	True
Wellbore:	1	Survey Calculation Method:	Minimum Curvature
Design:	1	Database:	EDM 2003.21 Single User Db

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)
7,731.00	1.81	273.93	7,684.79	-687.78	-308.18	420.68	0.40	0.06	-12.62
7,827.00	2.00	267.93	7,780.74	-687.74	-311.36	418.96	0.29	0.20	-6.25
7,922.00	1.63	266.93	7,875.69	-687.87	-314.37	417.48	0.39	-0.39	-1.05
8,017.00	1.75	258.30	7,970.65	-688.24	-317.14	416.33	0.30	0.13	-9.08
8,112.00	1.94	258.43	8,065.60	-688.85	-320.14	415.27	0.20	0.20	0.14
8,207.00	1.94	253.30	8,160.55	-689.64	-323.25	414.28	0.18	0.00	-5.40
8,302.00	1.88	247.43	8,255.50	-690.70	-326.23	413.61	0.22	-0.06	-6.18
8,398.00	2.19	251.43	8,351.43	-691.89	-329.42	412.93	0.36	0.32	4.17
8,493.00	1.94	250.55	8,446.37	-693.00	-332.66	412.16	0.27	-0.26	-0.93
8,588.00	1.88	274.68	8,541.32	-693.41	-335.73	410.88	0.84	-0.06	25.40
8,683.00	2.19	263.65	8,636.26	-693.48	-339.09	409.17	0.52	0.33	-11.61
8,779.00	1.81	266.80	8,732.20	-693.77	-342.42	407.65	0.41	-0.40	3.28
8,874.00	1.88	260.80	8,827.15	-694.10	-345.46	406.33	0.22	0.07	-6.32
9,064.00	2.06	246.08	9,017.04	-695.98	-351.66	404.65	0.28	0.09	-7.75
9,255.00	2.63	239.93	9,207.88	-699.57	-358.59	404.02	0.33	0.30	-3.22
9,445.00	2.88	233.68	9,397.66	-704.58	-366.21	404.25	0.21	0.13	-3.29
9,636.00	3.69	233.55	9,588.35	-711.08	-375.02	405.10	0.42	0.42	-0.07
9,731.00	3.63	234.68	9,683.15	-714.63	-379.93	405.52	0.10	-0.06	1.19
9,826.00	4.44	232.43	9,777.92	-718.61	-385.30	406.06	0.87	0.85	-2.37
9,921.00	3.94	236.55	9,872.66	-722.65	-390.94	406.50	0.61	-0.53	4.34
10,016.00	3.44	255.30	9,967.47	-725.18	-396.42	405.74	1.37	-0.53	19.74
10,112.00	4.13	240.43	10,063.26	-727.61	-402.21	404.75	1.24	0.72	-15.49
10,207.00	4.38	241.93	10,158.00	-731.01	-408.39	404.36	0.29	0.26	1.58
10,302.00	5.00	240.93	10,252.68	-734.73	-415.20	403.91	0.66	0.65	-1.05
10,397.00	4.69	236.30	10,347.34	-738.89	-422.05	403.82	0.53	-0.33	-4.87
10,480.00	4.81	218.43	10,430.06	-743.50	-427.04	405.10	1.78	0.14	-21.53
10,540.00	4.81	218.43	10,489.85	-747.44	-430.17	406.79	0.00	0.00	0.00

Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
10,540.00	10,489.85	-747.44	-430.17	EXT TD.

Checked By: _____ Approved By: _____ Date: _____



BHA Report

BHA 1 - Build & Hold Section

FILE #: 4015272
JOB TYPE: UBD Directional
RIG & NO: Patterson 175

WELL NAME: Granlee OMO3C C-10-696
COMPANY: Berry Petroleum
SURFACE LOCATION:

SERVICE CO.: WEATHERFORD
SURVEY TYPE: Electromagnetic MWD
FIELD / LOCATION: 257'FNL, 1758' FWL / GARFIELD

Company Man: George Urban, Kim Gritz
DIR Supervisor: Bill Morris
MWD Supervisor: Leon Castillo

BHA SURVEY TYPE: Electromagnetic MWD

HOLE SIZE: 16 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	Tri-Cone Bit RR	Hughes	606582	MX09H	16	0	0		7 5/8" REG Pin	1.50 ft	1.50 ft
1	Drilling Motor	Weatherford	960-2677	LE7840	13	0	3.36	7 5/8" REG Box	6 5/8" REG Box	30.78 ft	32.28 ft
1	Stabilizer 14	Spidle	90567		8	2.75	0	6 5/8" REG Pin	6 5/8" REG Box	4.48 ft	36.76 ft
1	Shock Sub	Spidle	160-8030		8.1875	2.75	0	6 5/8" REG Pin	6 5/8" REG Box	13.64 ft	50.40 ft
1	UBHO Sub	Weatherford	775-17748		7.75	3.0625	0	6 5/8" REG Pin	6 5/8" REG Box	3.61 ft	54.01 ft
1	Double Pin	Weatherford	WFT 3004		8	2.8125	0	6 5/8" REG Pin	6 5/8" REG Pin	2.93 ft	56.94 ft
1	MWD Tool Carrier	Weatherford	800-19344		8	3.5	0	6 5/8" REG Box	6 5/8" REG Box	19.51 ft	76.45 ft
1	MWD Emitter Sub	Weatherford	775-18177		7.75	2.8125	0	6 5/8" REG Pin	6 5/8" REG Box	11.31 ft	87.76 ft
1	NMDC	Weatherford	80-30-7832		7.875	2.875	0	6 5/8" REG Pin	6 5/8" REG Box	28.23 ft	115.99 ft
1	8" Steel DC (3)	Rig	N/A		7.9375	2.5	0	6 5/8" REG Pin	6 5/8" REG Box	92.41 ft	208.40 ft
1	X/O Sub	Weatherford	800-101		7.75	3.125	0	6 5/8" REG Pin	4 1/2" XH Box	2.96 ft	211.36 ft
1	HWDP 21 jts.	Rig	N/A		4.5	0	0	4 1/2" XH Pin	4 1/2" XH Box	639.65 ft	851.01 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN:	2008/09/04 TO 2008/09/06
DEPTH IN:	0.00 ft
DEPTH OUT:	3050.00 ft
DRILL HRS:	40.83
ORIENTING HRS:	14.58
ROTATING HRS:	26.25
ANGLE IN:	0.00 °
ANGLE OUT:	8.31 °
BUILD:	8.31 °
HOLE MADE:	3050.00 ft
AVG R.O.P.:	74.70 ft/hr

MOTOR INFORMATION

MANFCT.	Weatherford	SETTING:	2.12 °
SERIAL #:	960-2677	KICK PAD:	10 5/8" (270mm)
MODEL:	LE7840	STABILIZER:	13"
LOBE CFG:	7/8	MOTOR HRS:	45.33
BIT TO BEND:	7.7		

PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	0	35	0
STROKE VOLUME:	0.0 gal/stk	4.9213 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	534.83 gal/min		
PUMP PRESSURE:	OFF BTM: 484 psi	ON BTM: 520 psi	

MUD INFORMATION

MUD TYPE:	LSND	LIQUID BASE:	Water
DENSITY:	8.5 lb/gal	TEMP:	60 °F
VISCOSITY:	37 sec/qt	pH:	9
WTR LOSS:	12.8 cc/30min	SAND:	0.001
PLAST VISC:	4 cP	SOLIDS:	1
YIELD PT:	2 lb/100 ft ²	OIL:	0
		LIQUID RATE:	163.63 gal/min
		GAS TYPE:	Air
		GAS RATE:	2400 cu ft/min

BIT INFORMATION

MANFCT:	Hughes	TYPE:	MX09H	IADC BIT GRADE:	2 / 6 / BT / G / 5 / 2 / RG / TD
			NOZZLES:	3 in ² TFA	

REASON FOR BHA CHANGE

TD surface.

FORMATION CHARACTERISTICS

Formation was soft and hard to hold azimuth.



BHA 1 - Build & Hold Section

MWD COMMENTS

Good run no problems.

SIDETRACKING PROCEDURE COMMENTS

N/A

RUN SUMMARY

Low build rate on azimuth and inclination. Bit was worn on gauge row and missing buttons.



BHA Report

BHA 2 - Hold Section

Drilling Services
v4.2.2674

FILE #: 4015272
JOB TYPE: UBD Directional
RIG & NO: Patterson 175

WELL NAME: Granlee OMO3C C-10-696
COMPANY: Berry Petroleum
SURFACE LOCATION:

SERVICE CO.: WEATHERFORD
SURVEY TYPE: Electromagnetic MWD
FIELD / LOCATION: 257'FNL, 1758' FWL / GARFIELD

Company Man: George Urban
DIR Supervisor: Bill Morris
MWD Supervisor: Leon Castillo

BHA SURVEY TYPE: Electromagnetic MWD

HOLE SIZE: 8.5 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	PDC Bit	Security	11222036	FM 3563 Z	8.5	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor	Hunting Proform	BM1275 2159	H 7/8 57 .24	7	0	2	4 1/2" REG Box	4 1/2" XH Box	31.87 ft	32.87 ft
1	Stabilizer 7 5/8	Spidle	FB7009		6.5	2.625	0	4 1/2" XH Pin	4 1/2" XH Box	6.10 ft	38.97 ft
1	Extension Sub NM	Weatherford	650-007		6.25	3.25	0	4 1/2" XH Pin	4 1/2" XH Box	2.00 ft	40.97 ft
1	Double Pin	Weatherford	PES		6.125	2.875	0	4 1/2" XH Pin	4 1/2" XH Pin	2.25 ft	43.22 ft
1	MWD Tool Carrier	Weatherford	625-8853		6.125	3.5625	0	4 1/2" XH Box	4 1/2" XH Box	19.70 ft	62.92 ft
1	MWD Emitter Sub	Weatherford	625-448		6.125	2.375	0	4 1/2" XH Pin	4 1/2" XH Box	9.50 ft	72.42 ft
1	NMDC	Weatherford	650-9911		6.5625	2.5625	0	4 1/2" XH Pin	4 1/2" XH Box	30.82 ft	103.24 ft
1	HWDP 21 jts.	Rig	N/A		4.5	0	0	4 1/2" XH Pin	4 1/2" XH Box	639.65 ft	742.89 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

— GENERAL INFORMATION —

DATES RUN: 2008/09/08 TO 2008/09/10
DEPTH IN: 3050.00 ft ANGLE IN: 8.31 °
DEPTH OUT: 6141.00 ft ANGLE OUT: 5.00 °
DRILL HRS: 27.00 BUILD: -3.31 °
ORIENTING HRS: 1.25 HOLE MADE: 3091.00 ft
ROTATING HRS: 25.75 AVG R.O.P.: 114.48 ft/hr

— MOTOR INFORMATION —

MANFCT. Hunting Proform SETTING: 1.75 °
SERIAL #: BM1275 2159 KICK PAD: 7
MODEL: H 7/8 57 .24 STABILIZER: No
LOBE CFG: 7/8 MOTOR HRS: 28.75
BIT TO BEND: 4.6

— PUMP INFORMATION —

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	87	0	0
STROKE VOLUME:	4.9213 gal/stk	0.0 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	406.74328 gal/min		
PUMP PRESSURE:	OFF BTM: 1290 psi	ON BTM: 1645 psi	

— MUD INFORMATION —

MUD TYPE: LSND LIQUID BASE: Water
DENSITY: 9.1 lb/gal TEMP: 112.1 °F
VISCOSITY: 65 sec/qt pH: 8.5
WTR LOSS: 6.4 cc/30min SAND: 0.5 LIQUID RATE: 425 gal/min
PLAST VISC: 22 cP SOLIDS: 5.5 GAS TYPE: Air
YIELD PT: 18 lb/100 ft² OIL: 3 GAS RATE: 1800 cu ft/min

— BIT INFORMATION —

MANFCT: Security TYPE: FM 3563 Z IADC BIT GRADE: 1 / 2 / BU / A / X / 1 / WT / PR
NOZZLES: 0.982 in² TFA

— REASON FOR BHA CHANGE —

Lost all diff. psi. and P-rate dropped off.

— FORMATION CHARACTERISTICS —

Formations have held angle and direction very well. Very little sliding was done.

— MWD COMMENTS —

The tool performed very well. We remained in .5amp over the whole run.



—SIDETRACKING PROCEDURE COMMENTS —

N/A

—RUN SUMMARY —

Not as good a run as we have had due to this trip.



BHA Report

BHA 3 - Hold Section

Drilling Services
v4.2.2674

FILE #: 4015272 WELL NAME: Granlee OMO3C C-10-696 SERVICE CO.: WEATHERFORD
 JOB TYPE: UBD Directional COMPANY: Berry Petroleum SURVEY TYPE: Electromagnetic MWD
 RIG & NO: Patterson 175 SURFACE LOCATION: FIELD / LOCATION: 257'FNL, 1758' FWL / GARFIELD

Company Man: George Urban
 DIR Supervisor: Bill Morris, BILL WRIGHT
 MWD Supervisor: Leon Castillo

BHA SURVEY TYPE: Electromagnetic MWD HOLE SIZE: 7.875 in

QTY	COMPONENT	MANFCT.	SERIAL #	MODEL	O.D.	I.D.	F.N.	BOT. CONN.	TOP CONN.	LEN.	C.LEN.
1	PDC Bit	Security	11180092	FMHX 555 ZM	7.875	0	0		4 1/2" REG Pin	1.00 ft	1.00 ft
1	Drilling Motor	Hunting Proform	BM1851 6312	H 7/8 3.3	6.75	0	1.84	4 1/2" REG Box	4 1/2" XH Box	31.50 ft	32.50 ft
1	Stabilizer 7 5/8	Spidle	FB7009		6.5	2.625	0	4 1/2" XH Pin	4 1/2" XH Box	6.10 ft	38.60 ft
1	Extension Sub NM	Weatherford	650-007		6.25	3.25	0	4 1/2" XH Pin	4 1/2" XH Box	2.00 ft	40.60 ft
1	Double Pin	Weatherford	PES		6.125	2.875	0	4 1/2" XH Pin	4 1/2" XH Pin	2.25 ft	42.85 ft
1	MWD Tool Carrier	Weatherford	625-8853		6.125	3.5625	0	4 1/2" XH Box	4 1/2" XH Box	19.70 ft	62.55 ft
1	MWD Emitter Sub	Weatherford	625-448		6.125	2.375	0	4 1/2" XH Pin	4 1/2" XH Box	9.50 ft	72.05 ft
1	NMDC	Weatherford	650-9911		6.5625	2.5625	0	4 1/2" XH Pin	4 1/2" XH Box	30.82 ft	102.87 ft
1	HWDP 21 jts.	Rig	N/A		4.5	0	0	4 1/2" XH Pin	4 1/2" XH Box	639.65 ft	742.52 ft

(O.D. units are in; I.D. units are in; FNeck units are ft)

GENERAL INFORMATION

DATES RUN: 2008/09/10 TO 2008/09/13
 DEPTH IN: 6141.00 ft ANGLE IN: 5.00 °
 DEPTH OUT: 10540.00 ft ANGLE OUT: 4.81 °
 DRILL HRS: 56.50 BUILD: -0.19 °
 ORIENTING HRS: 3.25 HOLE MADE: 4399.00 ft
 ROTATING HRS: 53.25 AVG R.O.P.: 77.86 ft/hr

MOTOR INFORMATION

MANFCT. Hunting Proform SETTING: 1.88 °
 SERIAL #: BM1851 6312 KICK PAD: 6.75
 MODEL: H 7/8 3.3 STABILIZER: No
 LOBE CFG: 7/8 MOTOR HRS: 59.25
 BIT TO BEND: 4.68

PUMP INFORMATION

PUMPS	PUMP 1	PUMP 2	PUMP 3
EFFICIENCY:	95.0%	95.0%	100.0%
S.P.M.:	78	0	0
STROKE VOLUME:	4.9213 gal/stk	0.0 gal/stk	0.0 gal/stk
TOTAL FLOW RATE:	364.66639 gal/min		
PUMP PRESSURE:	OFF BTM: 1250 psi	ON BTM: 1800 psi	

MUD INFORMATION

MUD TYPE: LSND LIQUID BASE: Water
 DENSITY: 9.2 lb/gal TEMP: 0 °F
 VISCOSITY: 81 sec/qt pH: 8.8
 WTR LOSS: 6.4 cc/30min SAND: 0.5 LIQUID RATE: 364 gal/min
 PLAST VISC: 37 cP SOLIDS: 6.5 GAS TYPE: Air
 YIELD PT: 20 lb/100 ft² OIL: 4 GAS RATE: 150 cu ft/min

BIT INFORMATION

MANFCT: Security TYPE: FMHX 555 ZMDC BIT GRADE: 2 / 2 / BT / N / X / 1 / BT / TD
 NOZZLES: 0.863 in² TFA

REASON FOR BHA CHANGE

TD

FORMATION CHARACTERISTICS

Finished drop in the Ohio Creek & rotated to the Cameo and Rawlins where it had a tendency to build angle

MWD COMMENTS

Had to bump up to 10 amps @ 9791, and lost telecommand @ 9800' (Cameo) - All in all a good run for MWD



—SIDETRACKING PROCEDURE COMMENTS —

N/A

—RUN SUMMARY —

Made bit trip above the Ohio Creek - When coming back up through after TD, that entire formation was extremely tight - other than that, a good run.



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 1 - 2008/09/04 TO 2008/09/06

FILE #: 4015272
JOB TYPE: UBD Directional
RIG & NO: Patterson 175

WELL NAME: Granlee OMO3C C-10-696
COMPANY: Berry Petroleum
SURFACE LOCATION:

SERVICE CO.: WEATHERFORD
SURVEY TYPE: Electromagnetic MWD
FIELD / LOCATION: 257'FNL, 1758' FWL / GARFIELD COUNTY, COLC

Company Man: George Urban, Kim Gritz
DIR Supervisor: Bill Morris
MWD Supervisor: Leon Castillo

BHA NO: 1	DATES RUN: 2008/09/04 TO 2008/09/06	SECTION: Build & Ho	TOOLFACE OFFSET: 299.8 °	SURVEY OFFSET: 75 ft
MOTOR SETTING: 2.12 °	KICKPAD: 10 5/8" (270mm)	STABILIZER: 13"	MODEL: LE7840	SERIAL NO: 960-2677
			BHA SURVEY TYPE: Electromagnetic MWD	

(Distances are shown in feet.)

BIT DEPTH	DRILLED	SURVEY			ORIENTING			ROTATING			SLIDE SEEN	BUR /ft	BUR /100ft	COMMENTS	
		DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO					FEET
0.00	239.00	-75.00	0.00	0.00	180M	0.00	35.00	35.00	35.00	239.00	204.00	0.00	0.00	0.00	
239.00	60.00	164.00	1.64	145.93	180M	239.00	274.00	35.00	274.00	299.00	25.00	35.00	0.05	0.69	
299.00	92.00	224.00	2.13	152.30	190M	299.00	324.00	25.00	324.00	391.00	67.00	0.00	0.00	0.82	
391.00	276.00	316.00	4.13	178.55	ROT	391.00	391.00	0.00	391.00	667.00	276.00	52.00	0.04	2.17	
667.00	91.00	592.00	8.31	177.43	320M	667.00	682.00	15.00	682.00	758.00	76.00	8.00	0.52	1.51	
758.00	93.00	683.00	8.44	177.43	90R	758.00	783.00	25.00	783.00	851.00	68.00	15.00	0.01	0.14	
851.00	94.00	776.00	7.63	180.05	275M	851.00	876.00	25.00	876.00	945.00	69.00	18.00	-0.04	-0.87	
945.00	95.00	870.00	6.56	185.36	275M	945.00	965.00	20.00	965.00	1040.00	75.00	26.00	-0.04	-1.14	
1040.00	95.00	965.00	6.00	189.69	280 M	1040.00	1070.00	30.00	1070.00	1135.00	65.00	26.00	-0.02	-0.59	
1135.00	96.00	1060.00	6.63	194.05	ROT	1135.00	1135.00	0.00	1135.00	1231.00	96.00	20.00	0.03	0.66	
1231.00	95.00	1156.00	6.69	196.18	270M	1231.00	1256.00	25.00	1256.00	1326.00	70.00	10.00	0.01	0.06	
1326.00	190.00	1251.00	6.50	194.93	ROT	1326.00	1326.00	0.00	1326.00	1516.00	190.00	20.00	-0.01	-0.20	
1516.00	95.00	1441.00	5.63	190.55	245M	1516.00	1565.00	49.00	1565.00	1611.00	46.00	5.00	-0.17	-0.46	
1611.00	96.00	1536.00	5.44	190.93	199M	1611.00	1632.00	21.00	1632.00	1707.00	75.00	20.00	-0.01	-0.20	
1707.00	95.00	1632.00	6.56	197.18	209M	1707.00	1737.00	30.00	1737.00	1802.00	65.00	50.00	0.02	1.17	
1802.00	95.00	1727.00	6.75	199.55	215M	1802.00	1848.00	46.00	1848.00	1897.00	49.00	20.00	0.01	0.20	
1897.00	96.00	1822.00	6.88	197.05	235M	1897.00	1942.00	45.00	1942.00	1993.00	51.00	30.00	0.00	0.14	
1993.00	95.00	1918.00	7.50	195.43	260M	1993.00	2033.00	40.00	2033.00	2088.00	55.00	47.00	0.01	0.65	
2088.00	96.00	2013.00	7.75	194.80	265M	2088.00	2118.00	30.00	2118.00	2184.00	66.00	44.00	0.01	0.26	
2184.00	95.00	2109.00	7.75	198.80	275M	2184.00	2219.00	35.00	2219.00	2279.00	60.00	41.00	0.00	0.00	
2279.00	95.00	2204.00	8.13	203.68	290M	2279.00	2297.00	18.00	2297.00	2374.00	77.00	29.00	0.01	0.40	
2374.00	95.00	2299.00	8.00	209.05	ROT	2374.00	2374.00	0.00	2374.00	2469.00	95.00	33.00	0.00	-0.14	
2469.00	96.00	2394.00	7.31	205.18	260M	2469.00	2499.00	30.00	2499.00	2565.00	66.00	0.00	0.00	-0.73	
2565.00	95.00	2490.00	7.38	202.30	270M	2565.00	2590.00	25.00	2590.00	2660.00	70.00	21.00	0.00	0.07	



Slide Sheet Report

BHA 1 - 2008/09/04 TO 2008/09/06

(Distances are shown in feet.)

BIT		SURVEY				----- ORIENTING -----			----- ROTATING -----			SLIDE	BUR	BUR	COMMENTS
DEPTH	DRILLED	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET	SEEN	/ft	/100ft	
2660.00	95.00	2585.00	7.88	201.55	ROT	2660.00	2660.00	0.00	2660.00	2755.00	95.00	29.00	0.02	0.53	
2755.00	96.00	2680.00	8.13	199.80	289M	2755.00	2797.00	42.00	2797.00	2851.00	54.00	5.00	0.05	0.26	
2851.00	95.00	2776.00	8.50	203.05	ROT	2851.00	2851.00	0.00	2851.00	2946.00	95.00	21.00	0.02	0.39	
2946.00	95.00	2871.00	8.06	212.43	ROT	2946.00	2946.00	0.00	2946.00	3041.00	95.00	21.00	-0.02	-0.46	
3041.00	9.00	2966.00	8.31	203.18	ROT	3041.00	3041.00	0.00	3041.00	3050.00	9.00	0.00	0.00	0.26	
3050.00	0.00	2975.00	8.31	203.18	TD SURFACE	3050.00	3050.00	0.00	3050.00	3050.00	0.00	0.00	0.00	0.00	

Totals:	646.00 ft	2404.00 ft
Percentages:	21.2%	78.8%
Time:	14.58 hrs	26.25 hrs
Percentages:	35.7%	64.3%



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 2 - 2008/09/08 TO 2008/09/10

FILE #: 4015272
JOB TYPE: UBD Directional
RIG & NO: Patterson 175

WELL NAME: Granlee OMO3C C-10-696
COMPANY: Berry Petroleum
SURFACE LOCATION:

SERVICE CO.: WEATHERFORD
SURVEY TYPE: Electromagnetic MWD
FIELD / LOCATION: 257'FNL, 1758' FWL / GARFIELD COUNTY, COLC

Company Man: George Urban
DIR Supervisor: Bill Morris
MWD Supervisor: Leon Castillo

BHA NO: 2	DATES RUN: 2008/09/08 TO 2008/09/10	SECTION: Hold	TOOLFACE OFFSET: 150.3 °	SURVEY OFFSET: 60 ft
MOTOR SETTING: 1.75 °	KICKPAD: 7	STABILIZER: No	MODEL: H 7/8 57 .24	SERIAL NO: BM1275 2159
			BHA SURVEY TYPE: Electromagnetic MWD	

(Distances are shown in feet.)

BIT DEPTH	DRILLED	SURVEY			ORIENTING			ROTATING			SLIDE SEEN	BUR /ft	BUR /100ft	COMMENTS	
		DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO					FEET
3050.00	73.00	2990.00	8.31	203.18	ROT	3050.00	3050.00	0.00	3050.00	3123.00	73.00	0.00	0.00	0.00	
3123.00	96.00	3063.00	7.81	200.93	ROT	3123.00	3123.00	0.00	3123.00	3219.00	96.00	0.00	0.00	-0.68	
3219.00	95.00	3159.00	7.37	199.98	65R	3219.00	3231.00	12.00	3231.00	3314.00	83.00	0.00	0.00	-0.46	
3314.00	95.00	3254.00	7.51	209.19	ROT	3314.00	3314.00	0.00	3314.00	3409.00	95.00	12.00	0.01	0.15	
3409.00	191.00	3349.00	7.82	210.51	ROT	3409.00	3409.00	0.00	3409.00	3600.00	191.00	0.00	0.00	0.33	
3600.00	95.00	3540.00	7.06	210.18	ROT	3600.00	3600.00	0.00	3600.00	3695.00	95.00	0.00	0.00	-0.40	
3695.00	95.00	3635.00	6.94	212.18	25L	3695.00	3706.00	11.00	3706.00	3790.00	84.00	0.00	0.00	-0.13	
3790.00	190.00	3730.00	7.63	211.93	ROT	3790.00	3790.00	0.00	3790.00	3980.00	190.00	11.00	0.06	0.73	
3980.00	191.00	3920.00	7.75	212.55	ROT	3980.00	3980.00	0.00	3980.00	4171.00	191.00	0.00	0.00	0.06	
4171.00	95.00	4111.00	6.00	208.05	HS	4171.00	4183.00	12.00	4183.00	4266.00	83.00	0.00	0.00	-0.92	
4266.00	191.00	4206.00	7.06	212.55	ROT	4266.00	4266.00	0.00	4266.00	4457.00	191.00	12.00	0.09	1.12	
4457.00	191.00	4397.00	7.44	211.68	ROT	4457.00	4457.00	0.00	4457.00	4648.00	191.00	0.00	0.00	0.20	
4648.00	191.00	4588.00	7.50	210.18	ROT	4648.00	4648.00	0.00	4648.00	4839.00	191.00	0.00	0.00	0.03	
4839.00	190.00	4779.00	7.06	207.05	ROT	4839.00	4839.00	0.00	4839.00	5029.00	190.00	0.00	0.00	-0.23	
5029.00	191.00	4969.00	7.25	207.05	ROT	5029.00	5029.00	0.00	5029.00	5220.00	191.00	0.00	0.00	0.10	
5220.00	190.00	5160.00	7.44	204.55	ROT	5220.00	5220.00	0.00	5220.00	5410.00	190.00	0.00	0.00	0.10	
5410.00	96.00	5350.00	6.81	206.93	ROT	5410.00	5410.00	0.00	5410.00	5506.00	96.00	0.00	0.00	-0.33	
5506.00	95.00	5446.00	6.38	206.55	HS	5506.00	5516.00	10.00	5516.00	5601.00	85.00	0.00	0.00	-0.45	
5601.00	190.00	5541.00	7.19	203.18	ROT	5601.00	5601.00	0.00	5601.00	5791.00	190.00	10.00	0.08	0.85	
5791.00	191.00	5731.00	5.69	204.68	ROT	5791.00	5791.00	0.00	5791.00	5982.00	191.00	0.00	0.00	-0.79	
5982.00	159.00	5922.00	5.00	202.43	ROT	5982.00	5982.00	0.00	5982.00	6141.00	159.00	0.00	0.00	-0.36	



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 2 - 2008/09/08 TO 2008/09/10

Totals:	45.00 ft	3046.00 ft
Percentages:	1.5%	98.5%
Time:	1.25 hrs	25.75 hrs
Percentages:	4.6%	95.4%



Slide Sheet Report

Drilling Services
v4.2.2674

BHA 3 - 2008/09/10 TO 2008/09/13

FILE #: 4015272
JOB TYPE: UBD Directional
RIG & NO: Patterson 175

WELL NAME: Granlee OMO3C C-10-696
COMPANY: Berry Petroleum
SURFACE LOCATION:

SERVICE CO.: WEATHERFORD
SURVEY TYPE: Electromagnetic MWD
FIELD / LOCATION: 257'FNL, 1758' FWL / GARFIELD COUNTY, COLC

Company Man: George Urban
DIR Supervisor: Bill Morris, BILL WRIGHT
MWD Supervisor: Leon Castillo

BHA NO: 3	DATES RUN: 2008/09/10 TO 2008/09/13	SECTION: Hold	TOOLFACE OFFSET: 13.7 °	SURVEY OFFSET: 60 ft
MOTOR SETTING: 1.88 °	KICKPAD: 6.75	STABILIZER: No	MODEL: H 7/8 3.3	SERIAL NO: BM1851 6312
			BHA SURVEY TYPE: Electromagnetic MWD	

(Distances are shown in feet.)

BIT DEPTH	DRILLED	SURVEY			ORIENTING			ROTATING			SLIDE SEEN	BUR /ft	BUR /100ft	COMMENTS	
		DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO					FEET
6141.00	31.00	6081.00	5.00	202.43	ROT	6141.00	6141.00	0.00	6141.00	6172.00	31.00	0.00	0.00	0.00	
6172.00	190.00	6112.00	4.84	202.39	ROT	6172.00	6172.00	0.00	6172.00	6362.00	190.00	0.00	0.00	-0.52	
6362.00	96.00	6302.00	4.70	199.82	LS-165R	6362.00	6374.00	12.00	6374.00	6458.00	84.00	0.00	0.00	-0.07	
6458.00	95.00	6398.00	3.75	212.55	45M	6458.00	6480.00	22.00	6480.00	6553.00	73.00	12.00	-0.08	-0.99	
6553.00	95.00	6493.00	2.31	218.80	38M	6553.00	6572.00	19.00	6572.00	6648.00	76.00	22.00	-0.07	-1.52	
6648.00	96.00	6588.00	1.44	244.80	ROT	6648.00	6648.00	0.00	6648.00	6744.00	96.00	19.00	-0.05	-0.92	
6744.00	95.00	6684.00	1.38	250.30	ROT	6744.00	6744.00	0.00	6744.00	6839.00	95.00	0.00	0.00	-0.06	
6839.00	95.00	6779.00	1.56	262.93	ROT	6839.00	6839.00	0.00	6839.00	6934.00	95.00	0.00	0.00	0.19	
6934.00	190.00	6874.00	1.63	261.93	ROT	6934.00	6934.00	0.00	6934.00	7124.00	190.00	0.00	0.00	0.07	
7124.00	95.00	7064.00	2.49	250.86	LS	7124.00	7169.00	45.00	7169.00	7219.00	50.00	0.00	0.00	0.45	
7219.00	95.00	7159.00	2.69	248.55	LS	7219.00	7235.00	16.00	7235.00	7314.00	79.00	35.00	0.01	0.21	
7314.00	96.00	7254.00	3.25	251.68	LS	7314.00	7354.00	40.00	7354.00	7410.00	56.00	26.00	0.02	0.59	
7410.00	95.00	7350.00	1.69	285.18	ROT	7410.00	7410.00	0.00	7410.00	7505.00	95.00	36.00	-0.04	-1.63	
7505.00	95.00	7445.00	1.56	315.43	ROT	7505.00	7505.00	0.00	7505.00	7600.00	95.00	4.00	-0.03	-0.14	
7600.00	95.00	7540.00	1.50	297.30	ROT	7600.00	7600.00	0.00	7600.00	7695.00	95.00	0.00	0.00	-0.06	
7695.00	96.00	7635.00	1.75	286.05	ROT	7695.00	7695.00	0.00	7695.00	7791.00	96.00	0.00	0.00	0.26	
7791.00	96.00	7731.00	1.81	273.93	ROT	7791.00	7791.00	0.00	7791.00	7887.00	96.00	0.00	0.00	0.06	
7887.00	95.00	7827.00	2.00	267.93	ROT	7887.00	7887.00	0.00	7887.00	7982.00	95.00	0.00	0.00	0.20	
7982.00	95.00	7922.00	1.63	266.93	ROT	7982.00	7982.00	0.00	7982.00	8077.00	95.00	0.00	0.00	-0.39	
8077.00	95.00	8017.00	1.75	258.30	ROT	8077.00	8077.00	0.00	8077.00	8172.00	95.00	0.00	0.00	0.13	
8172.00	95.00	8112.00	1.94	258.43	ROT	8172.00	8172.00	0.00	8172.00	8267.00	95.00	0.00	0.00	0.20	
8267.00	95.00	8207.00	1.94	253.30	ROT	8267.00	8267.00	0.00	8267.00	8362.00	95.00	0.00	0.00	0.00	
8362.00	96.00	8302.00	1.88	247.43	ROT	8362.00	8362.00	0.00	8362.00	8458.00	96.00	0.00	0.00	-0.06	
8458.00	95.00	8398.00	2.19	251.43	ROT	8458.00	8458.00	0.00	8458.00	8553.00	95.00	0.00	0.00	0.32	



Slide Sheet Report

BHA 3 - 2008/09/10 TO 2008/09/13

(Distances are shown in feet.)

BIT		SURVEY				----- ORIENTING -----			----- ROTATING -----			SLIDE	BUR	BUR	COMMENTS
DEPTH	DRILLED	DEPTH	INC	AZM	TF	FROM	TO	FEET	FROM	TO	FEET	SEEN	/ft	/100ft	
8553.00	95.00	8493.00	1.94	250.55	ROT	8553.00	8553.00	0.00	8553.00	8648.00	95.00	0.00	0.00	-0.26	
8648.00	95.00	8588.00	1.88	274.68	ROT	8648.00	8648.00	0.00	8648.00	8743.00	95.00	0.00	0.00	-0.06	
8743.00	96.00	8683.00	2.19	263.65	ROT	8743.00	8743.00	0.00	8743.00	8839.00	96.00	0.00	0.00	0.33	
8839.00	95.00	8779.00	1.81	266.80	ROT	8839.00	8839.00	0.00	8839.00	8934.00	95.00	0.00	0.00	-0.40	
8934.00	95.00	8874.00	1.88	260.80	ROT	8934.00	8934.00	0.00	8934.00	9029.00	95.00	0.00	0.00	0.07	
9029.00	95.00	8969.00	2.06	246.08	ROT	9029.00	9029.00	0.00	9029.00	9124.00	95.00	0.00	0.00	0.19	
9124.00	191.00	9064.00	2.06	246.08	ROT	9124.00	9124.00	0.00	9124.00	9315.00	191.00	0.00	0.00	0.00	
9315.00	190.00	9255.00	2.63	239.93	ROT	9315.00	9315.00	0.00	9315.00	9505.00	190.00	0.00	0.00	0.30	
9505.00	191.00	9445.00	3.69	233.68	ROT	9505.00	9505.00	0.00	9505.00	9696.00	191.00	0.00	0.00	0.56	
9696.00	95.00	9636.00	3.69	233.55	ROT	9696.00	9696.00	0.00	9696.00	9791.00	95.00	0.00	0.00	0.00	
9791.00	95.00	9731.00	3.63	234.68	ROT	9791.00	9791.00	0.00	9791.00	9886.00	95.00	0.00	0.00	-0.06	
9886.00	95.00	9826.00	4.44	232.43	155R	9886.00	9908.00	22.00	9908.00	9981.00	73.00	0.00	0.00	0.85	
9981.00	95.00	9921.00	3.94	236.55	ROT	9981.00	9981.00	0.00	9981.00	10076.00	95.00	22.00	-0.02	-0.53	
10076.00	96.00	10016.00	3.44	255.30	ROT	10076.00	10076.00	0.00	10076.00	10172.00	96.00	0.00	0.00	-0.53	
10172.00	95.00	10112.00	4.13	240.43	ROT	10172.00	10172.00	0.00	10172.00	10267.00	95.00	0.00	0.00	0.72	
10267.00	95.00	10207.00	4.38	241.93	ROT	10267.00	10267.00	0.00	10267.00	10362.00	95.00	0.00	0.00	0.26	
10362.00	95.00	10302.00	5.00	240.93	ROT	10362.00	10362.00	0.00	10362.00	10457.00	95.00	0.00	0.00	0.65	
10457.00	83.00	10397.00	4.69	236.30	ROT	10457.00	10457.00	0.00	10457.00	10540.00	83.00	0.00	0.00	-0.33	
10540.00	0.00	10480.00	4.81	218.43	TD	10540.00	10540.00	0.00	10540.00	10540.00	0.00	0.00	0.00	0.14	

Totals:	176.00 ft	4223.00 ft
Percentages:	4.0%	96.0%
Time:	3.25 hrs	53.25 hrs
Percentages:	5.8%	94.2%



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