



KANSAS CORPORATION COMMISSION 1082841  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
June 2009  
Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 33019  
Name: Rosewood Resources, Inc.  
Address 1: 2101 CEDAR SPRINGS RD, STE 1500  
Address 2: \_\_\_\_\_  
City: DALLAS State: TX Zip: 75201 + \_\_\_\_\_  
Contact Person: Tom Roelfs  
Phone: ( 214 ) 849-9300  
CONTRACTOR: License # 33532  
Name: Advanced Drilling Technologies LLC  
Wellsite Geologist: Steven VonFeldt  
Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SIOW  
 Gas     D&A     ENHR     SIGW  
 OG     GSW     Temp. Abd.  
 CM (Coal Bed Methane)  
 Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
 Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_  
10/31/2011    11/09/2011    01/05/2012  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date       Recompletion Date

API No. 15 - 15-023-21307-01-00

Spot Description: \_\_\_\_\_  
SE SW NE SE Sec. 13 Twp. 3 S. R. 41  East  West  
1645 Feet from  North /  South Line of Section  
736 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE     NW     SE     SW

County: Cheyenne

Lease Name: Zimbelman Well #: 43-13D

Field Name: \_\_\_\_\_

Producing Formation: Niobrara

Elevation: Ground: 3474 Kelly Bushing: 3472

Total Depth: 1800 Plug Back Total Depth: 1741

Amount of Surface Pipe Set and Cemented at: 300 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 5000 ppm Fluid volume: 200 bbls

Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received  
Date: \_\_\_\_\_  
 Confidential Release Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
ALT  I  II  III Approved by: Deanna Carlick Date: 06/21/2012



1082841

Operator Name: Rosewood Resources, Inc. Lease Name: Zimbelman Well #: 43-13D  
 Sec. 13 Twp. 3 S. R. 41  East  West County: Cheyenne

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:  Cement Bond Log	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum  Niobrara 170 KB
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CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	9.875	7	17	311.95	Portland III ASTM C 150	83	
Production	5.5	4.5	11.6	1783.07	Class A Type II	75	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	-			
	-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	1567 - 1607	Frac w/ 48,403 gals MaxFoam 70 & 100, 120# 16/30 Texas Gold Sand 285,000 and N2	

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. 01/18/2012		Producing Method: <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls. Gas-Oil Ratio Gravity
		40	

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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# Directional Drilling Report

**Customer:** Advanced Drilling Technologies

**Address:** Advanced Drilling Technologies, LLC  
529 North Albany Street  
Suite 1250  
Yuma, CO 80759

**Well Name:** Zimbleman 43-13D  
**Survey Name:** AnTech Zimbleman Gyro Survey  
**Date:** 09/11/2011

AnTech Ltd  
Unit 7, Newbery Centre  
Airport Business Park  
Exeter. EX5 2UL. UK

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[www.antech.co.uk](http://www.antech.co.uk)  
[www.coiledtubingdrilling.com](http://www.coiledtubingdrilling.com)



# Summary

<b>Customer:</b>	Advanced Drilling Technologies	<b>Motor Bend Angle:</b>	1.5
<b>Project:</b>	Polaris Operational Trials	<b>Local Co-ordinate Reference:</b>	GPS
<b>Site:</b>	Zimbleman	<b>TVD Reference:</b>	Minimum Curvature Calculation
<b>Well:</b>	Zimbleman 43-13D	<b>MD Reference:</b>	Pason Bit Depth
<b>Bit &amp; Nozzle Size:</b>	6 1/4"	<b>North Reference:</b>	Gyro True North
<b>Drill Motor:</b>	Hunting 5", 7/8, 4.5, 0.46RPG	<b>Survey Calculation Method:</b>	Minimum Curvature

### Well

<b>Northing [ft]:</b>	-483.16	<b>Deviation In Azimuth Direction [ft]:</b>	784.56
<b>Easting [ft]:</b>	618.95	<b>Maximum Inclination:</b>	54.13
<b>SHL Latitude:</b>	39°47'26"N	<b>Survey Inclination Error:</b>	±0.15
<b>SHL Longitude:</b>	101°51'53"W	<b>Survey Azimuth Error:</b>	±3
		<b>Deviation from Plan at Zone Entry [ft]:</b>	135.75
		<b>Deviation from Plan at TD [ft]:</b>	79.79

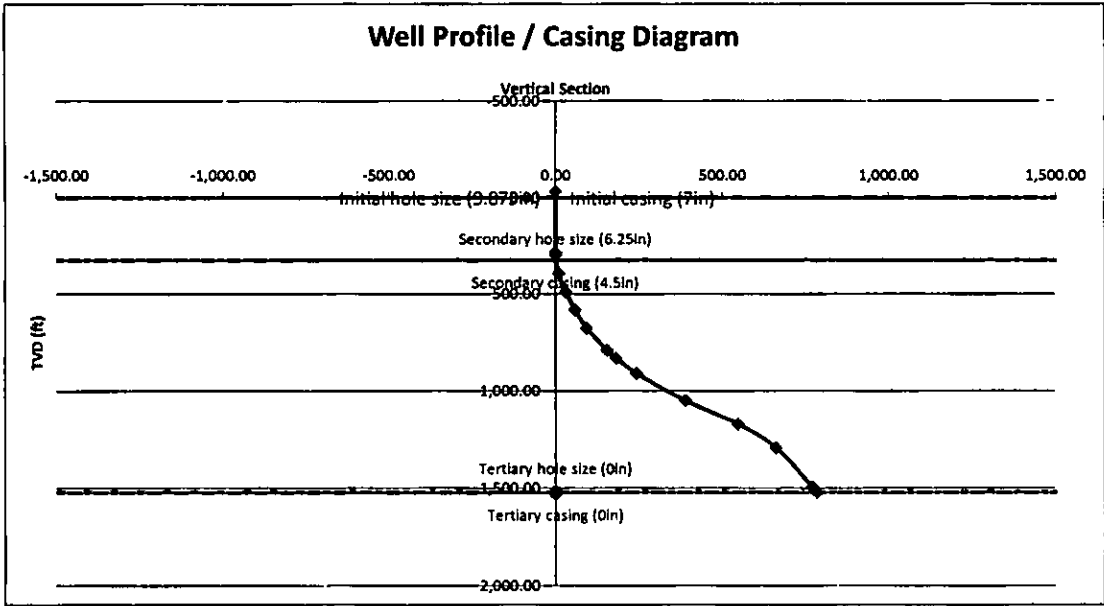


# Casing Diagram

<b>Customer:</b>	Advanced Drilling Technologies	<b>Motor Bend Angle:</b>	1.5
<b>Project:</b>	Polaris Operational Trials	<b>Local Co-ordinate Reference:</b>	GPS
<b>Site:</b>	Zimbleman	<b>TVD Reference:</b>	Minimum Curvature Calculation
<b>Well:</b>	Zimbleman 43-13D	<b>MD Reference:</b>	Pason Bit Depth
<b>Bit &amp; Nozzle Size:</b>	6 1/4"	<b>North Reference:</b>	Gyro True North
<b>Drill Motor:</b>	Hunting 5", 7/8, 4.5, 0.46RPG	<b>Survey Calculation Method:</b>	Minimum Curvature

Depth (ft)	Hole Size (in)	Casing				Cement	Completion Comments
		Size (in)	Weight (ppf)	Grade	Thread		
325	9.875	7	17	J-55		Neat	8hrs to work
1800	6.25	4.5	10.5	J-55		Neat	

	Diameter (in)	Start Depth (TVD)	End Depth (TVD)
Initial hole size	9.88		325.0
Initial casing	7.00		325.0
Secondary hole size	6.25	325.0	1520.0
Secondary casing	4.50	325.0	1520.0
Tertiary hole size		1520.0	1520.0
Tertiary casing		1520.0	1520.0





# Well Data

<b>Customer:</b>	Advanced Drilling Technologies	<b>Motor Bend Angle:</b>	1.5
<b>Project:</b>	Polaris Operational Trials	<b>Local Co-ordinate Reference:</b>	GPS
<b>Site:</b>	Zimbleman	<b>TVD Reference:</b>	Minimum Curvature Calculation
<b>Well:</b>	Zimbleman 43-13D	<b>MD Reference:</b>	Pason Bit Depth
<b>Bit &amp; Nozzle Size:</b>	6 1/4"	<b>North Reference:</b>	Gyro True North
<b>Drill Motor:</b>	Hunting 5", 7/8, 4.5, 0.46RPG	<b>Survey Calculation Method:</b>	Minimum Curvature

### Formation Tops

Name	TVD [ft]	Data Points Direction	Distance [ft]	Dip distance (x) (Dip=1'/x)
TOP BIZ	1290	N-S	3000	5000



# Well Plan Data

<b>Customer:</b>	Advanced Drilling Technologies	<b>Motor Bend Angle:</b>	1.5
<b>Project:</b>	Polaris Operational Trials	<b>Local Co-ordinate Reference:</b>	GPS
<b>Site:</b>	Zimbleman	<b>TVD Reference:</b>	Minimum Curvature Calculation
<b>Well:</b>	Zimbleman 43-13D	<b>MD Reference:</b>	Pason Bit Depth
<b>Bit &amp; Nozzle Size:</b>	6 1/4"	<b>North Reference:</b>	Gyro True North
<b>Drill Motor:</b>	Hunting 5", 7/8, 4.5, 0.46RPG	<b>Survey Calculation Method:</b>	Minimum Curvature

<b>Final Bearing / Azimuth for section view (°)</b>	125.67
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**Projected TD Survey**

Measured Depth ft	Inclination Angle degrees	Azimuth degrees	True Vertical Depth ft	North/South ft	East/West ft	Vertical Section ft	Dogleg Severity °/100ft	Reference	Description	Section
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KKB	tie point	0
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		vertical	0-1
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00		vertical	0-1
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00		vertical	0-1
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	KOP	End vertical	1
400.00	5.26	125.67	399.89	-2.14	2.98	3.67	6.58		vertical	1-2
500.00	11.84	125.67	498.72	-10.81	15.06	18.54	6.58		build	1-2
600.00	18.42	125.67	595.20	-26.02	36.26	44.63	6.58		build	1-2
700.00	25.00	125.67	688.05	-47.58	66.30	81.61	6.58		build	1-2
800.00	31.58	125.67	776.06	-75.20	104.79	128.98	6.58		build	1-2
900.00	38.16	125.67	858.05	-108.52	151.22	186.13	6.58	TOP OF STRAIGHT	End build	2
1000.00	38.16	125.67	936.68	-144.55	201.42	247.92	0.00		straight	2-3
1100.00	38.16	125.67	1,015.31	-180.57	251.61	309.70	0.00		straight	2-3
1200.00	38.16	125.67	1,093.94	-216.60	301.81	371.49	0.00		straight	2-3
1300.00	38.16	125.67	1,172.57	-252.62	352.01	433.27	0.00		straight	2-3
1400.00	38.16	125.67	1,251.20	-288.65	402.20	495.06	0.00		straight	2-3
1449.35	38.16	125.67	1,290.00	-306.43	426.98	525.55	0.00	TOP OF BIE	straight	2-3
1500.00	38.16	125.67	1,329.82	-324.67	452.40	556.85	0.00		straight	2-3
1546.45	38.16	125.67	1,366.50	-341.48	475.81	585.67	0.00		straight	2-3
1600.00	38.16	125.67	1,408.45	-360.70	502.60	618.63	0.00		straight	2-3
1700.00	38.16	125.67	1,487.08	-396.72	552.79	680.42	0.00		straight	2-3
1750.00	38.16	125.67	1,526.40	-414.74	577.89	711.31	0.00	TD	End straight	3



### Drilling Data

Customer:	Advanced Drilling Technologies	Motor Bend Angle:	1.5
Project:	Polaris Operational Trials	Local Co-ordinate Reference:	GPS
Site:	Zimbleman	TVD Reference:	Minimum Curvature Calculation
Well:	Zimbleman 43-13D	MD Reference:	Pason Bit Depth
Bit & Nozzle Size:	6 1/4"	North Reference:	Gyro True North
Drill Motor:	Hunting S <sup>2</sup> , 7/8, 4.5, D.46RPG	Survey Calculation Method:	Minimum Curvature

Final Bearing / Azimuth for section view (°)	125.67
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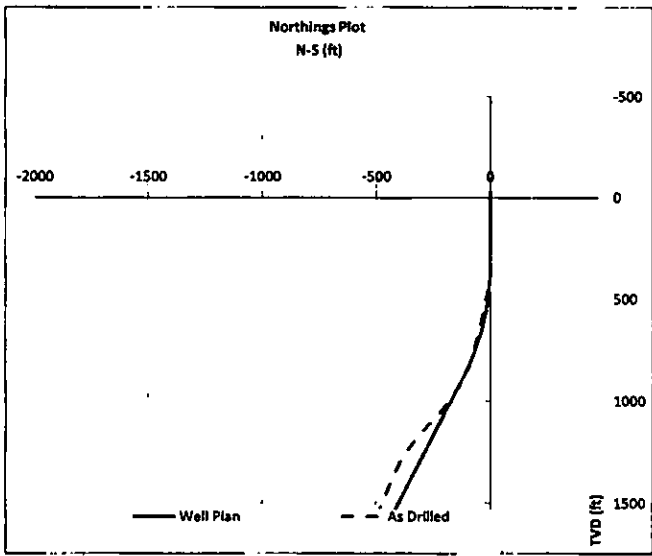
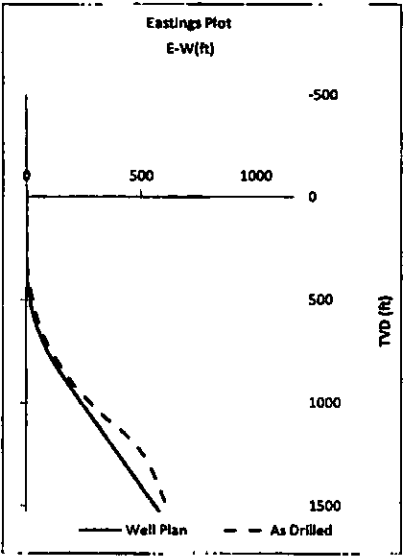
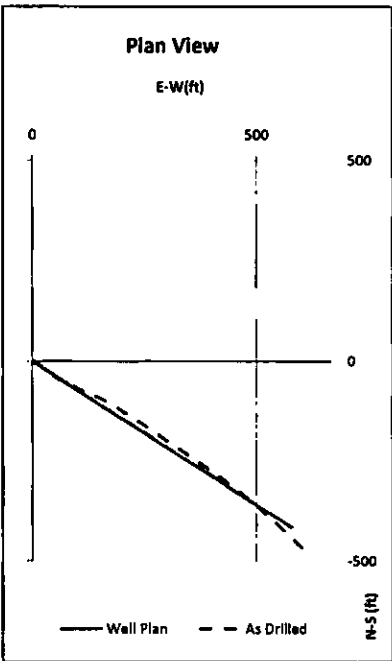
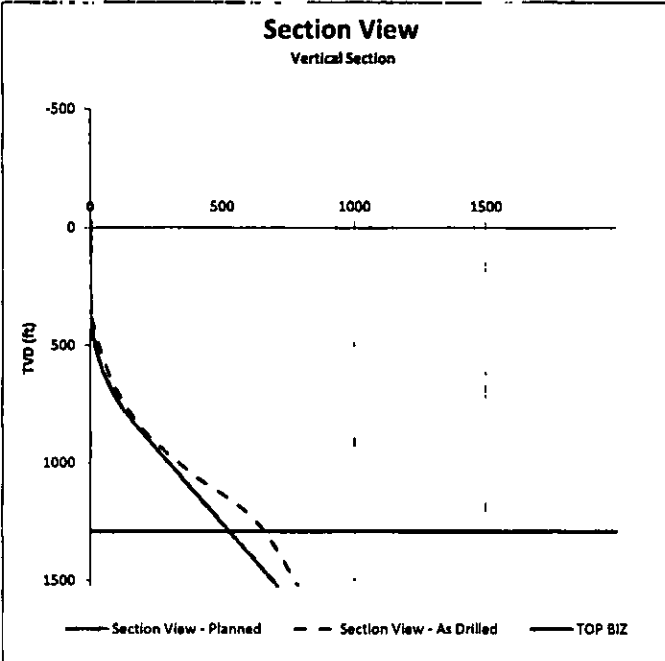
Actual Survey Data													
Measured Depth ft	Bit Depth ft (MD +30 ft)	Inclination Angle degrees	Azimuth degrees	True Vertical Depth ft	North/South ft	East/West ft	Vertical Section ft	Dogleg Severity °/100ft	Reference	Description	Time	Date	
10.00	0.00	0.00	0.00	-30.00	0.00	0.00	0.00	0.00	KB	RH	16:00	08/11/2011	
212.00	312.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	Tag Cement	vertical	16:45		
216.00	316.00	2.74	0.00	295.99	0.33	0.00	0.33	19.57	KOP	build	17:10		
319.00	429.00	31.73	121.82	394.35	-2.61	8.58	8.49	13.49		straight	18:00		
498.00	628.00	34.90	119.24	486.81	-16.36	25.39	30.16	4.64		straight	19:15		
698.00	828.00	17.00	127.49	582.75	-34.86	46.61	58.20	3.64	build 40, straight	straight	20:40		
698.00	728.00	23.90	121.84	676.46	-54.45	75.36	92.97	5.45	build 60, straight	build	21:55		
820.00	850.00	24.83	115.81	790.31	-82.50	130.93	154.47	9.42		build	22:55		
878.00	908.00	34.83	119.70	831.51	-95.18	156.25	182.44	7.02		straight	23:38		
970.00	1000.00	41.23	126.44	910.41	-128.96	207.42	243.70	7.93		build	00:00	09/11/2011	
1173.00	1203.00	61.33	137.92	1,049.09	-216.31	323.31	388.79	5.03		build	01:00		
1378.00	1408.00	84.23	120.98	1,169.57	-314.17	447.82	547.00	1.55		build	03:53		
1548.00	1578.00	31.95	139.49	1,293.20	-392.78	531.73	661.01	13.68	Back survey during POOH	drop	10:02		
1778.00	1808.00	29.97	121.87	1,494.42	-472.73	608.88	770.31	3.05		TD	09:40		
1898.00	N/A	29.97	121.87	1,520.66	-483.16	618.95	784.56	2.70	Extrapolated as a straight line				





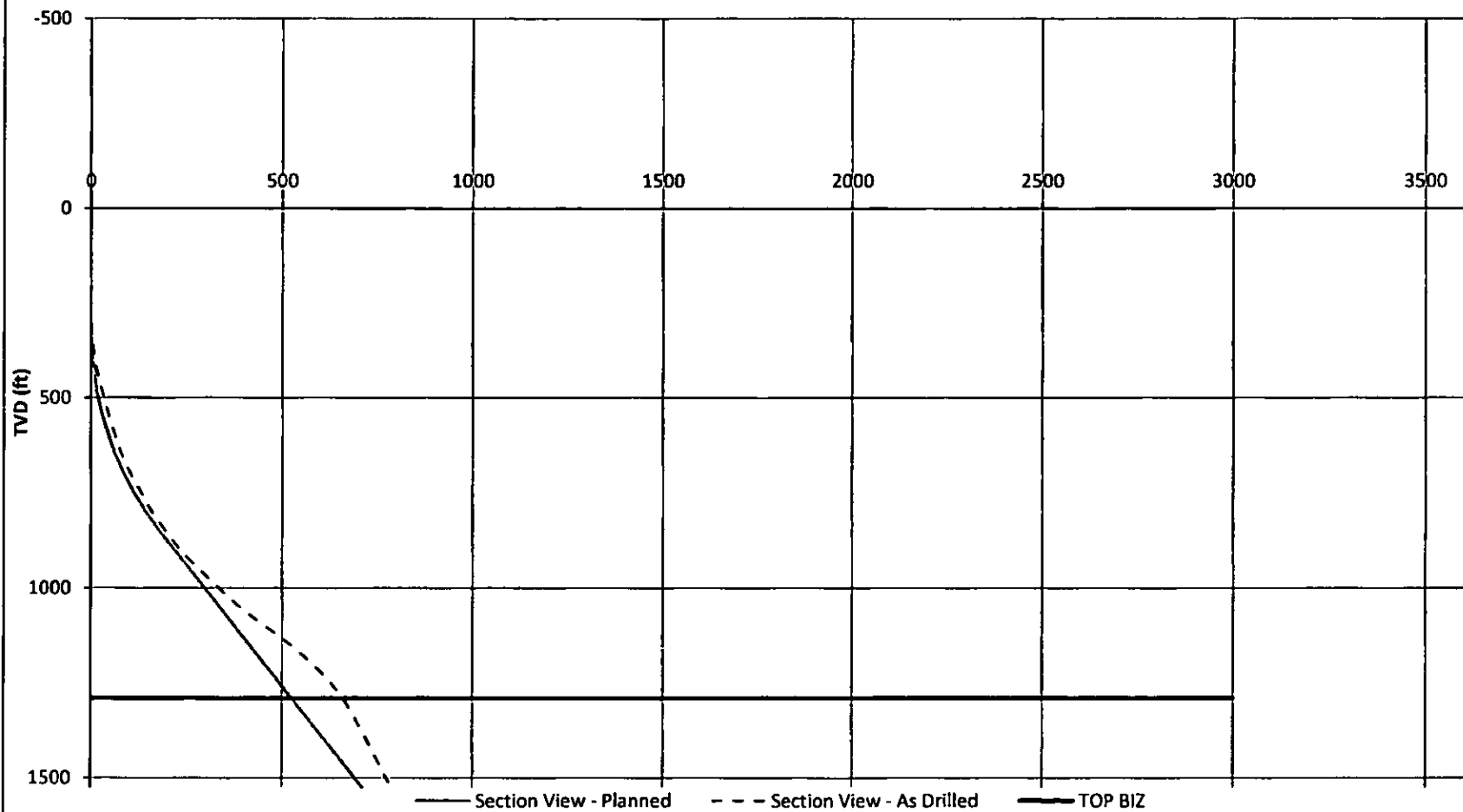
# Summary Well Plots

Customer:	Advanced Drilling Technologies	Motor Bend Angle:	1.5
Project:	Polaris Operational Trials	Local Co-ordinate Reference:	GPS
Site:	Zimbleman	TVD Reference:	Minimum Curvature Calculation
Well:	Zimbleman 43-13D	MD Reference:	Pason Bit Depth
Bit & Nozzle Size:	6 1/4"	North Reference:	Gyro True North
Drill Motor:	Hunting 5", 7/8, 4.5, 0.46RPG	Survey Calculation Method:	Minimum Curvature



# Section View

## Vertical Section



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# Plan Plot

E-W(ft)

ADVANCED  
DRILLING

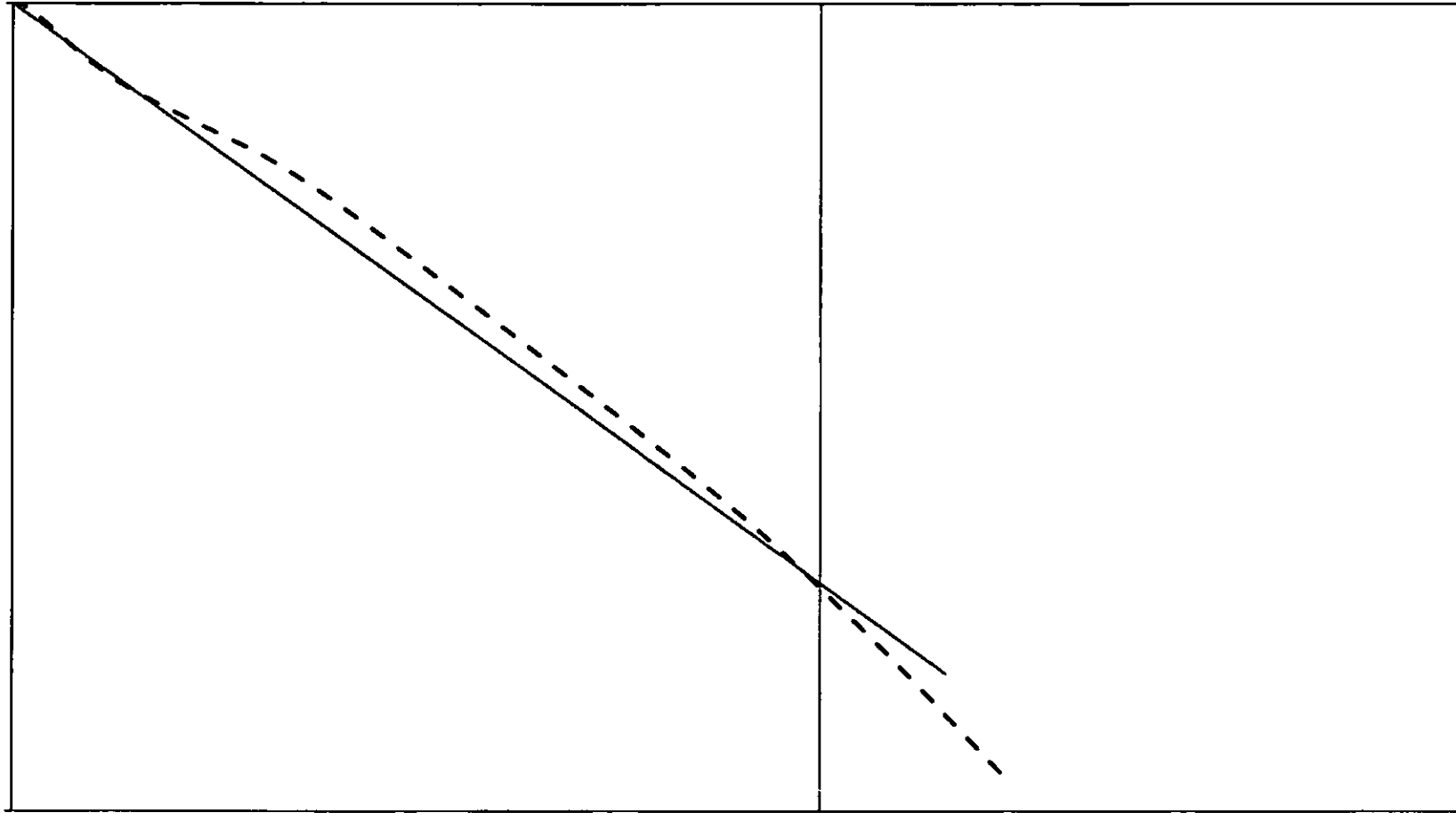
0

500

0

N-S (ft)

-500



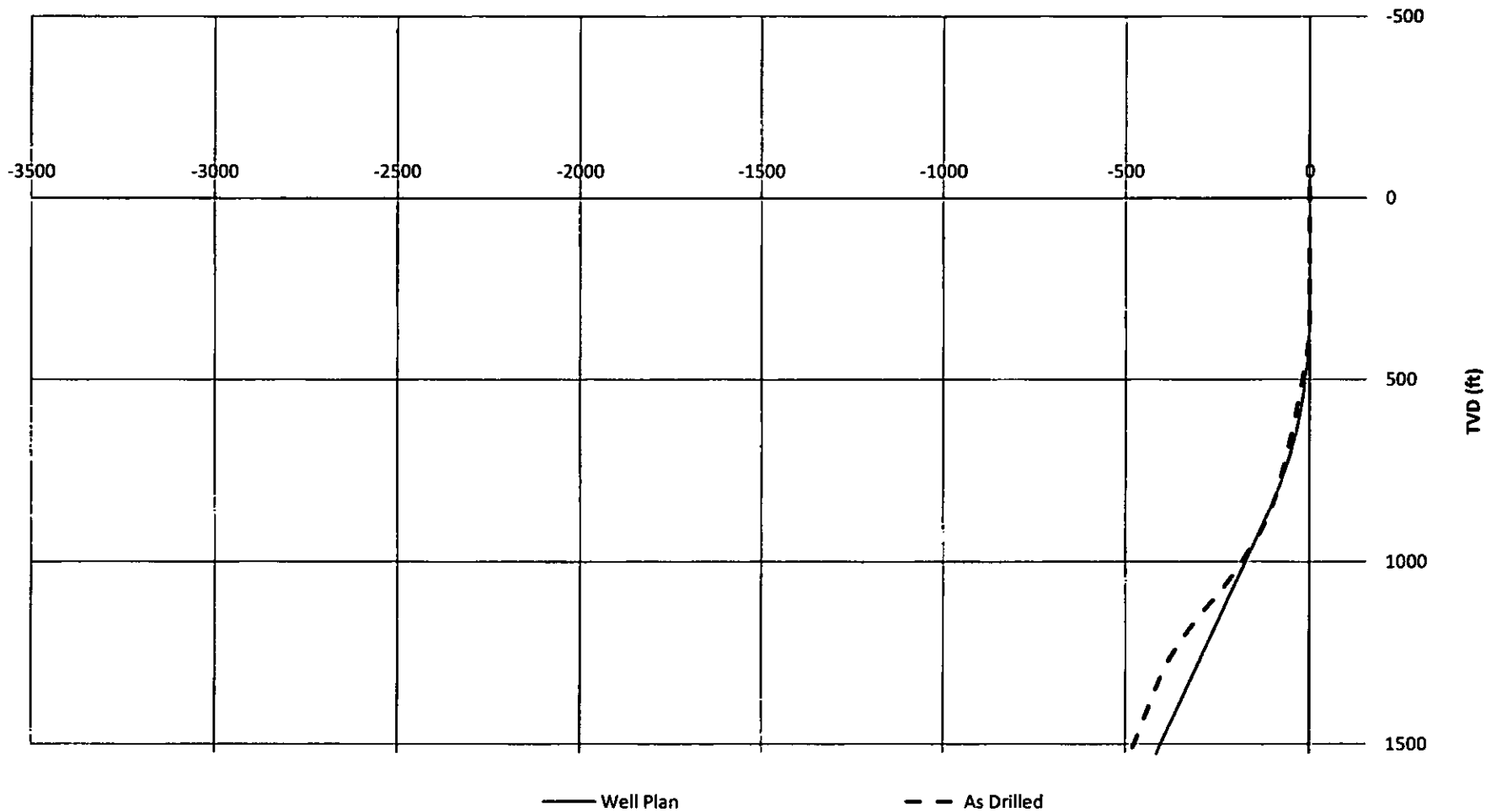
— Well Plan    - - - As Drilled

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# Northings Plot

N-S (ft)

ADVANCED  
DRILLING  
TECHNOLOGIES

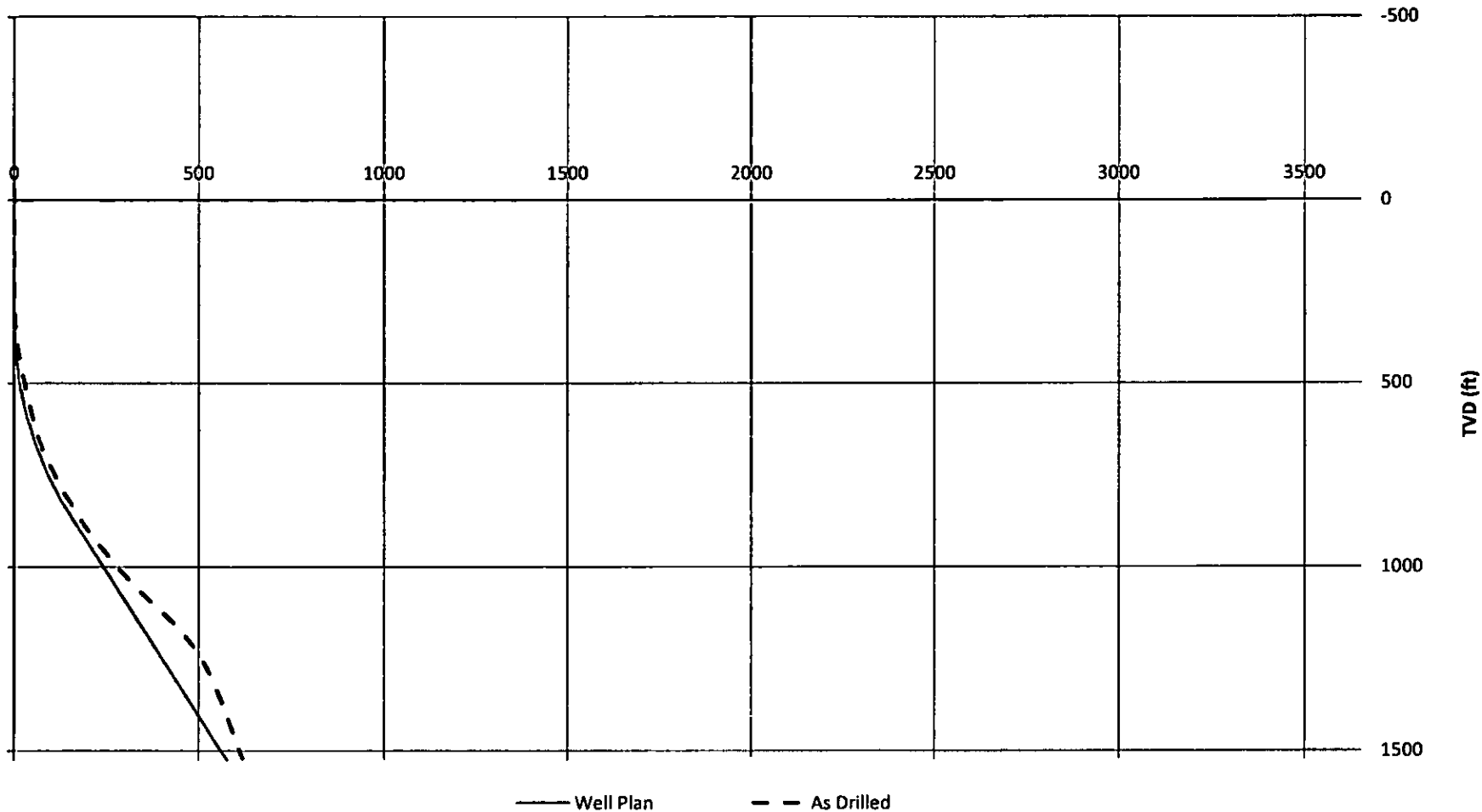


AnTech™

# Eastings Plot

E-W(ft)

ADVANCED  
DRILLING  
TECHNOLOGIES





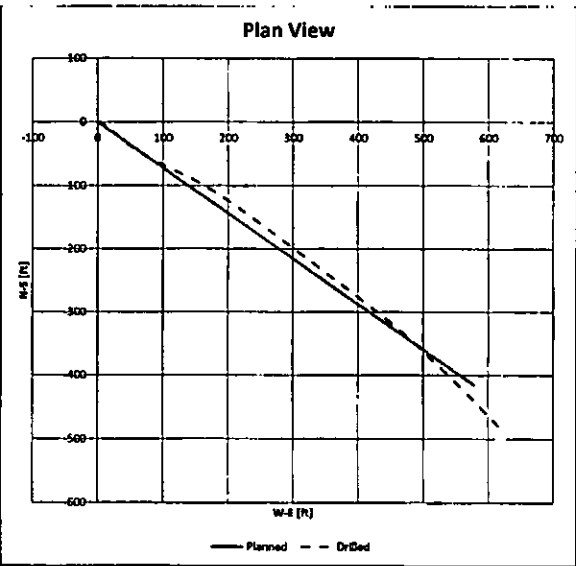
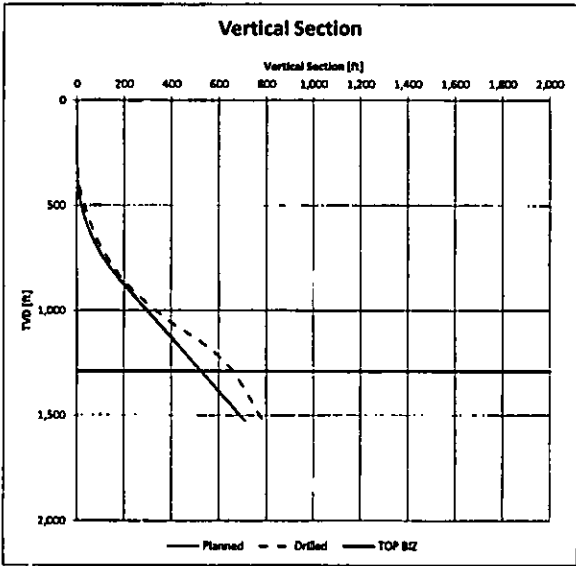
# Directional Drilling Morning Report

DATE: 09/11/2011  
 TIME: 10:31

Customer:	Advanced Drilling Technologies	Motor Bend Angle:	1.5
Project:	Polaris Operational Trials	Local Co-ordinate Reference:	GPS
Site:	Zimbleman	TVD Reference:	Minimum Curvature Calculation
Well:	Zimbleman 43-13D	MD Reference:	Pason Bit Depth
Bit & Nozzle Size:	6 1/4"	North Reference:	Gyro True North
Drill Motor:	Hunting 5", 7/8, 4.5, 0.46RPG	Survey Calculation Method:	Minimum Curvature

**Event Log**

Time	Date	Measured Depth [ft]	Description	Inclination	Azimuth	Pump Rate [GPM]	Mud Weight [PPG]
16:00	08/11/2011		Run in hole				
17:10		296.00	KOP				
19:15		520.00	Pull up 5ft, Circulate, Survey.	14.90	135.14	0.00	
20:40		620.00	Pull up 5ft, Circulate, Survey.	17.88	127.69	0.00	
21:18			Build curve for 65ft, then rotate for 35ft			300.00	
21:54		720.00	Pull up 5ft, Circulate, Survey	22.90	121.56	0.00	
22:00			Build curve for 100ft @ 0deg tool face, then rotate for 30ft			300.00	
23:00		850.00	Pull up 5ft, Circulate, Survey	34.55	113.51	0.00	
23:05			Build 20ft @ 35deg tool face, then rotate 30ft			300.00	
23:40		900.00	Pull up 5ft, Circulate, Survey	34.55	119.70	0.00	
23:52			Build curve for 60ft @ 30 deg tool face, then @0 deg tool face for 40 ft			300.00	
00:00	09/11/2011	1000.00	Pull up 5ft, Circulate, Survey	41.25	126.64	0.00	
00:30			build to 50 inc and drill straight			300.00	
01:00		1200.00	Pull up 5ft, Circulate, Survey	51.35	127.32	0.00	
03:53		1400.00	Pull up 5ft, Circulate, Survey	54.13	128.98	0.00	
05:50			Slow penetration, beginning to stick, Pull out of zone				
06:00			Drill to TD and survey on POOH			300.00	
08:10		1800.00	TD				
09:40		1770.00	Survey on POOH	25.97	131.83		
10:02		1570.00	Survey on POOH	31.95	139.49		
10:10		0.00	POOH for Rig Down				



Drilling Log

Measured Depth ft	Bit Depth ft (MD +30 ft)	Inclination Angle degrees	Azimuth degrees	True Vertical Depth ft	North/South ft	East/West ft	Vertical Section ft	Dogleg Severity /100ft	Reference	Description	Time	Date
-30.00	0.00	0.00	0.00	-30.00	0.00	0.00	0.00	0.00	KB	RH		08/11/2011
282.00	312.00	0.00	0.00	282.00	0.00	0.00	0.00	0.00	Tag Cement	vertical	10:48	
296.00	326.00	2.74	0.00	295.89	0.33	0.00	0.33	19.87	KOP	build	02:24	
399.00	429.00	11.71	121.82	394.38	-2.61	0.58	0.49	13.49		straight	00:00	
490.00	520.00	14.80	138.14	486.81	-34.34	25.39	30.16	4.64		straight	03:36	
590.00	620.00	17.89	127.69	582.75	-34.86	46.61	50.20	1.64		build 40, straight	09:36	
690.00	720.00	22.90	121.86	676.44	-54.45	75.36	92.87	5.45		build 40, straight	13:12	
820.00	850.00	34.68	113.81	790.31	-82.50	130.93	154.47	9.42		build	13:12	
878.00	908.00	34.85	119.78	811.81	-98.18	156.25	182.44	7.02		straight	23:38	
970.00	1000.00	42.25	116.64	910.41	-179.96	207.42	243.78	7.82		build	00:00	08/11/2011
1171.00	1201.00	53.33	127.33	1049.89	-216.31	323.33	388.79	8.83		build	01:00	
1370.00	1400.00	64.13	128.98	1169.67	-314.17	447.82	547.80	1.98		build	01:53	
1540.00	1570.00	31.95	139.49	1393.20	-393.78	631.71	661.01	13.68	Back survey during POCM	drop	10:07	
1770.00	1800.00	29.97	131.61	1694.42	-472.73	608.84	776.31	3.08		TD	09:48	
1800.00	N/A	28.97	131.63	1820.66	-483.16	616.95	786.86	1.70	Extrapolated as a straight line	0.00		