



Directional Drilling Report

Drilling Report Number: DDR-0005

Customer: Advanced Drilling Technologies

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

Well Name: Foust-Ihrig 43-18H

Date: 07/02/2012

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

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www.coiledtubingdrilling.com



Summary

Customer:	Advanced Drilling Technologies	Local Co-ordinate Reference:	GPS
Project:	Polaris Operational Trials	TVD Reference:	Minimum Curvature Calculation
Site:	Foust-Ihrig	MD Reference:	Pason Bit Depth
Well:	Foust-Ihrig 43-18H	North Reference:	Gyro True North
Bit & Nozzle Size:	8.5" PDC (6 x 10/32"), 6.25" PDC (3 x 12/32", 6 x 9/32")	Survey Calculation Method:	Minimum Curvature
Drill Motor:	Hunting 5", 7/8, 4.5, 0.46RPG	Tool Used:	Polaris
Motor Bend Angle:	2.77 & 1.15	Tool Name:	Yellow & Green Tools

Well

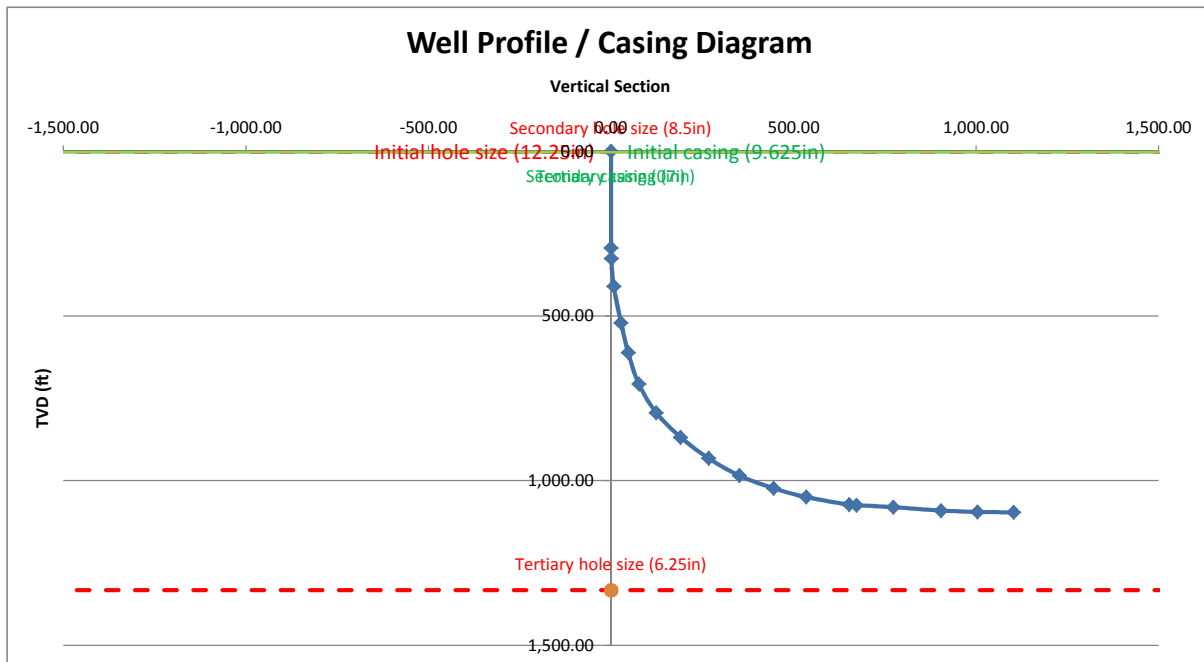
Northing [ft]:	Deviation In Azimuth Direction [ft]:	1102.96
Easting [ft]:	Maximum Inclination:	90.4
SHL Latitude:	Survey Inclination Error:	±0.15
SHL Longitude:	Survey Azimuth Error:	±3
	Deviation from Plan at Zone Entry [ft]:	80.5
	Deviation from Plan at TD [ft]:	

Casing Diagram

Customer:	Advanced Drilling Technologies	Motor Bend Angle:	2.77 & 1.15
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Bit & Nozzle Size:	8.5" PDC (6 x 10/32"), 6.25" PDC (3 x 12/32", 6 x 9/32")	North Reference:	Gyro True North
Drill Motor:	Hunting 5", 7/8, 4.5, 0.46RPG	Survey Calculation Method:	Minimum Curvature

Depth (ft)	Hole Size (in)	Casing			Cement	Completion Comments
		Size (in)	Weight (ppf)	Grade		
336	12.25	9.625	29.3	J-55	Neat	
1332	8.5	7	17	J-55	Neat	

	Diameter (in)	Start Depth (TVD)	End Depth (TVD)
Initial hole size	12.25		336.0
Initial casing	9.63		336.0
Secondary hole size	8.50		1332.0
Secondary casing	7.00		1332.0
Tertiary hole size	6.25	1332.0	1920.0
Tertiary casing			





Well Data

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Formation Tops

Name	TVD [ft]	Data Points Direction	Distance [ft]	Dip distance (χ) (Dip=1'/ χ)
TOP BIZ	1069		3000	66.67
BOTTOM BIZ	1099		3000	66.67



Well Plan Data

Customer:	Advanced Drilling Technologies	Motor Bend Angle:	2.77 & 1.15
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Well:	Foust-Ihrig 43-18H	MD Reference:	Pason Bit Depth
Bit & Nozzle Size:	8.5" PDC (6 x 10/32"), 6.25" PDC (3 x 12/32", 6 x 9/32")	North Reference:	Gyro True North
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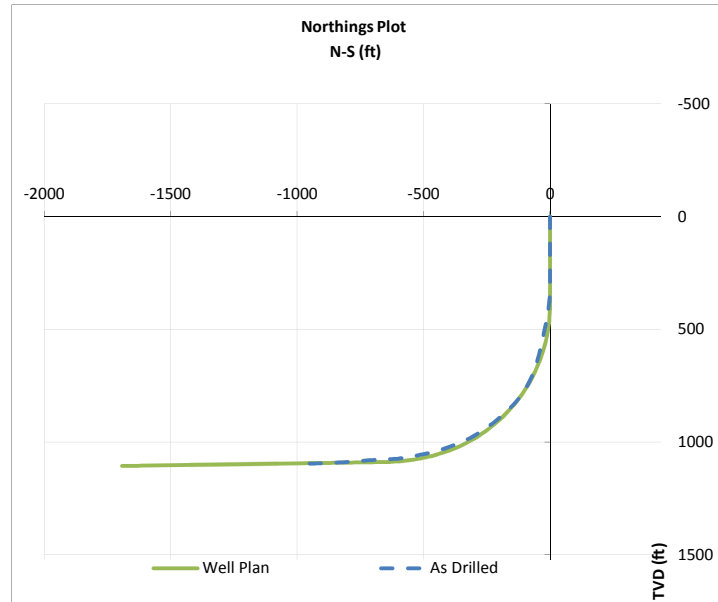
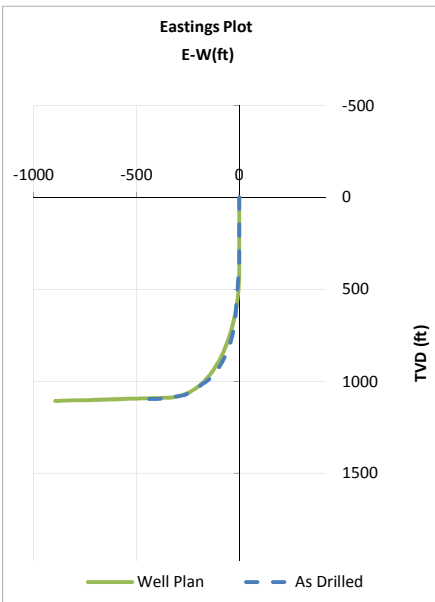
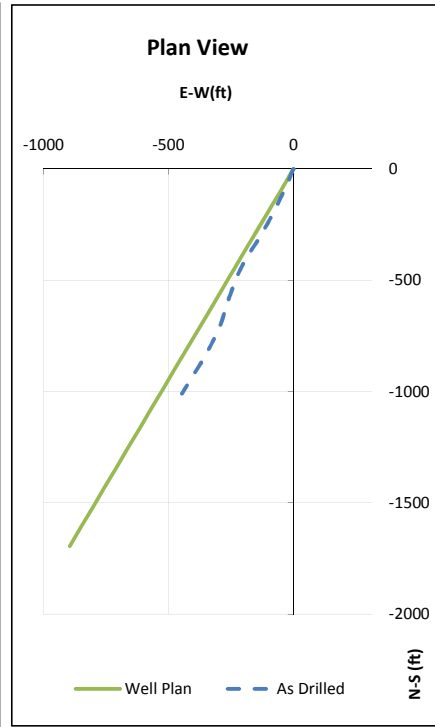
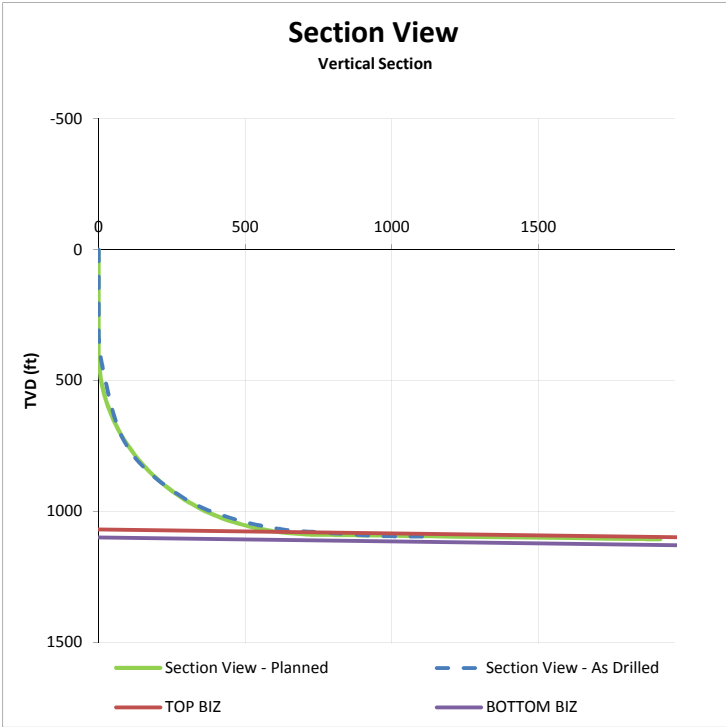
Final Bearing / Azimuth for section view (°)	207.88
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Projected TD Survey

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	RKB	tie point	0
390.00	0.00	0.00	390.00	0.00	0.00	0.00	0.00	KOP	build	1
400.00	0.83	207.88	400.00	-0.06	-0.03	0.07	8.30		build	1-2
500.00	9.13	207.88	499.54	-7.73	-4.09	8.75	8.30		build	1-2
600.00	17.43	207.88	596.78	-28.02	-14.82	31.70	8.30		build	1-2
700.00	25.73	207.88	689.69	-60.50	-32.01	68.44	8.30		build	1-2
800.00	34.03	207.88	776.32	-104.50	-55.28	118.22	8.30		build	1-2
900.00	42.33	207.88	854.85	-159.09	-84.16	179.98	8.30		build	1-2
1000.00	50.63	207.88	923.66	-223.13	-118.04	252.43	8.30		build	1-2
1100.00	58.93	207.88	981.28	-295.28	-156.21	334.05	8.30		build	1-2
1200.00	67.23	207.88	1,026.51	-374.02	-197.87	423.14	8.30		build	1-2
1300.00	75.53	207.88	1,058.41	-457.72	-242.14	517.82	8.30		build	1-2
1329.76	78.00	207.88	1,065.23	-483.32	-255.69	546.79	8.30	End build	build	2
1350.00	78.00	207.88	1,069.43	-500.82	-264.95	566.59	0.00	Top of BIZ Change Bit	straight	3
1400.00	81.29	207.88	1,078.42	-544.29	-287.94	615.76	6.58		build	3-4
1500.00	87.87	207.88	1,087.86	-632.24	-334.47	715.26	6.58		build	3-4
1519.30	89.14	207.88	1,088.36	-649.30	-343.49	734.56	6.58		build	4
1702.53	89.14	207.88	1,091.11	-811.24	-429.17	917.77	0.00		straight	4-5
1800.00	89.14	207.88	1,092.58	-897.39	-474.74	1,015.22	0.00		straight	4-5
1900.00	89.14	207.88	1,094.08	-985.77	-521.50	1,115.21	0.00		straight	4-5
2000.00	89.14	207.88	1,095.58	-1,074.15	-568.25	1,215.20	0.00		straight	4-5
2100.00	89.14	207.88	1,097.08	-1,162.53	-615.01	1,315.19	0.00		straight	4-5
2200.00	89.14	207.88	1,098.58	-1,250.92	-661.77	1,415.18	0.00		straight	4-5
2300.00	89.14	207.88	1,100.08	-1,339.30	-708.52	1,515.17	0.00		straight	4-5
2400.00	89.14	207.88	1,101.58	-1,427.68	-755.28	1,615.16	0.00		straight	4-5
2500.00	89.14	207.88	1,103.08	-1,516.07	-802.04	1,715.15	0.00		straight	4-5
2600.00	89.14	207.88	1,104.58	-1,604.45	-848.80	1,815.13	0.00		straight	4-5
2700.00	89.14	207.88	1,106.09	-1,692.83	-895.55	1,915.12	0.00	TD	End straight	5

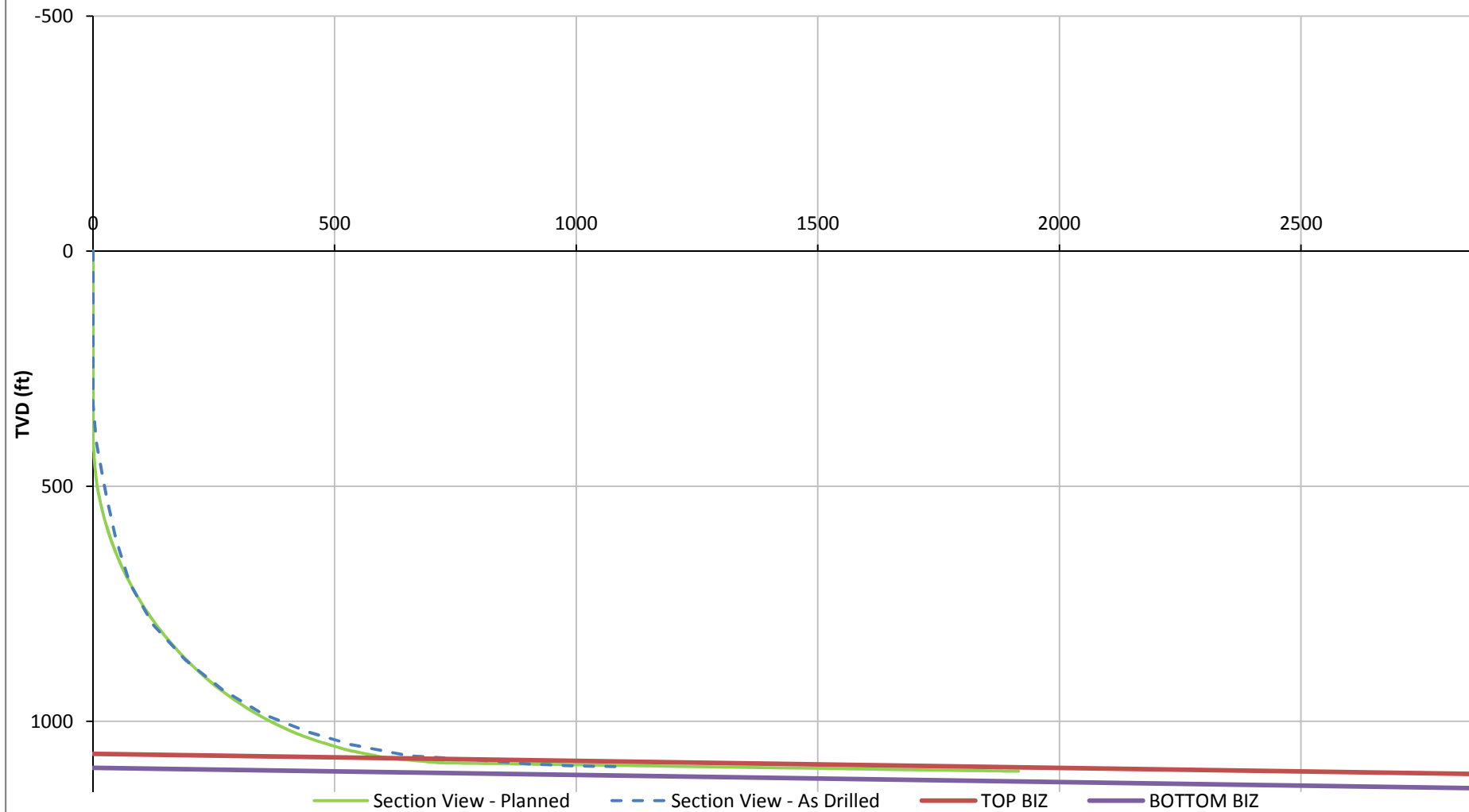
Summary Well Plots

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Section View

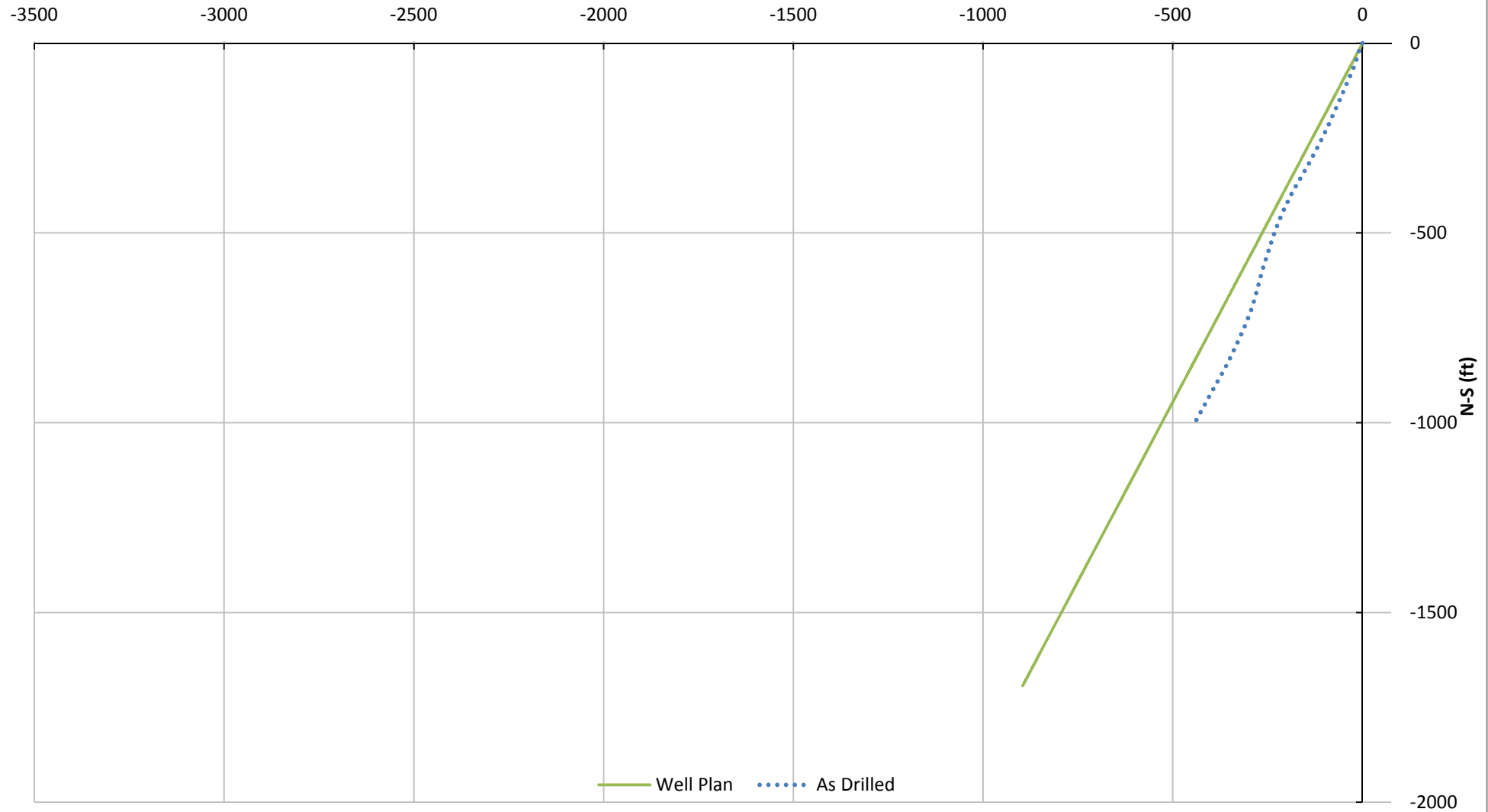
Vertical Section





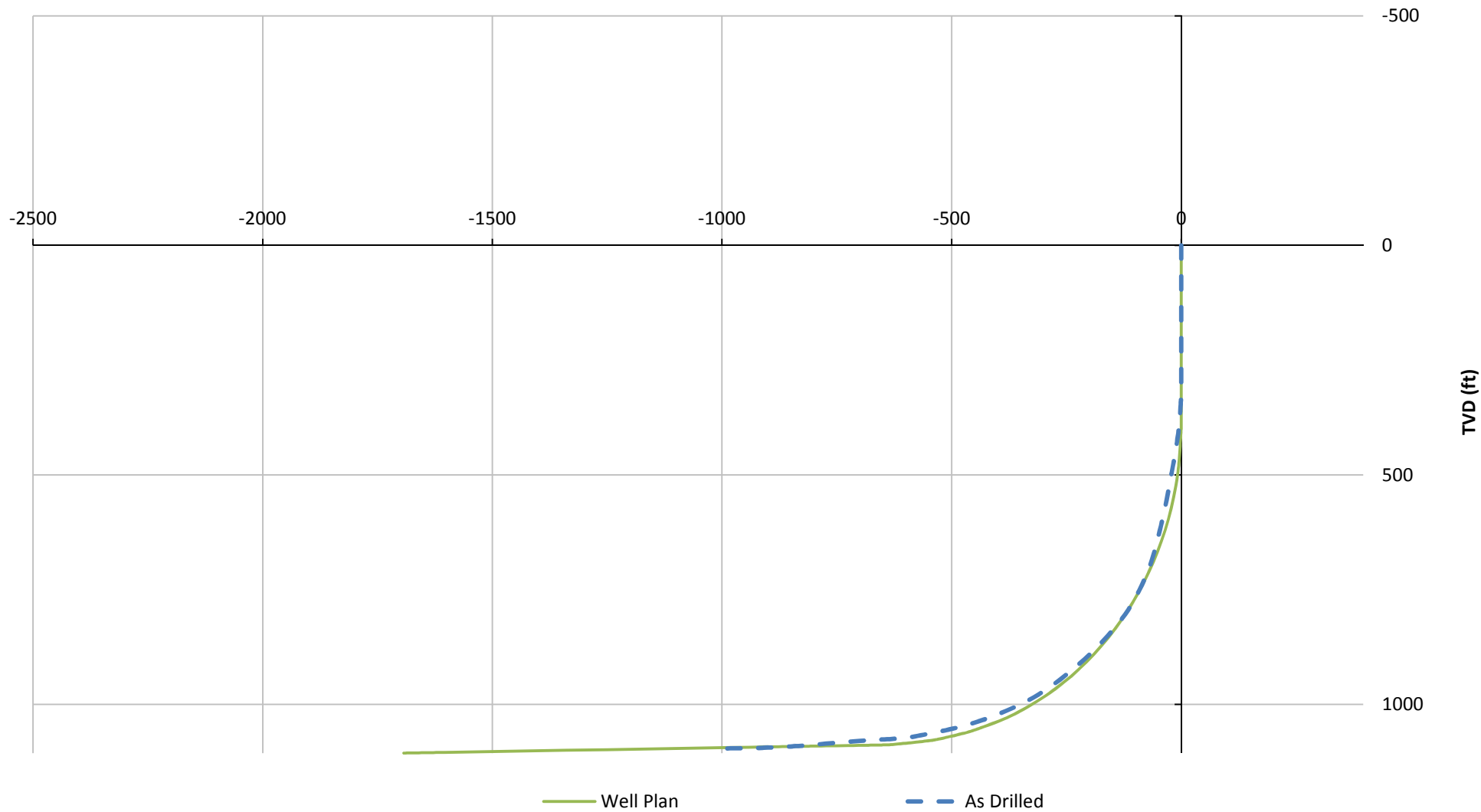
Plan Plot

E-W(ft)



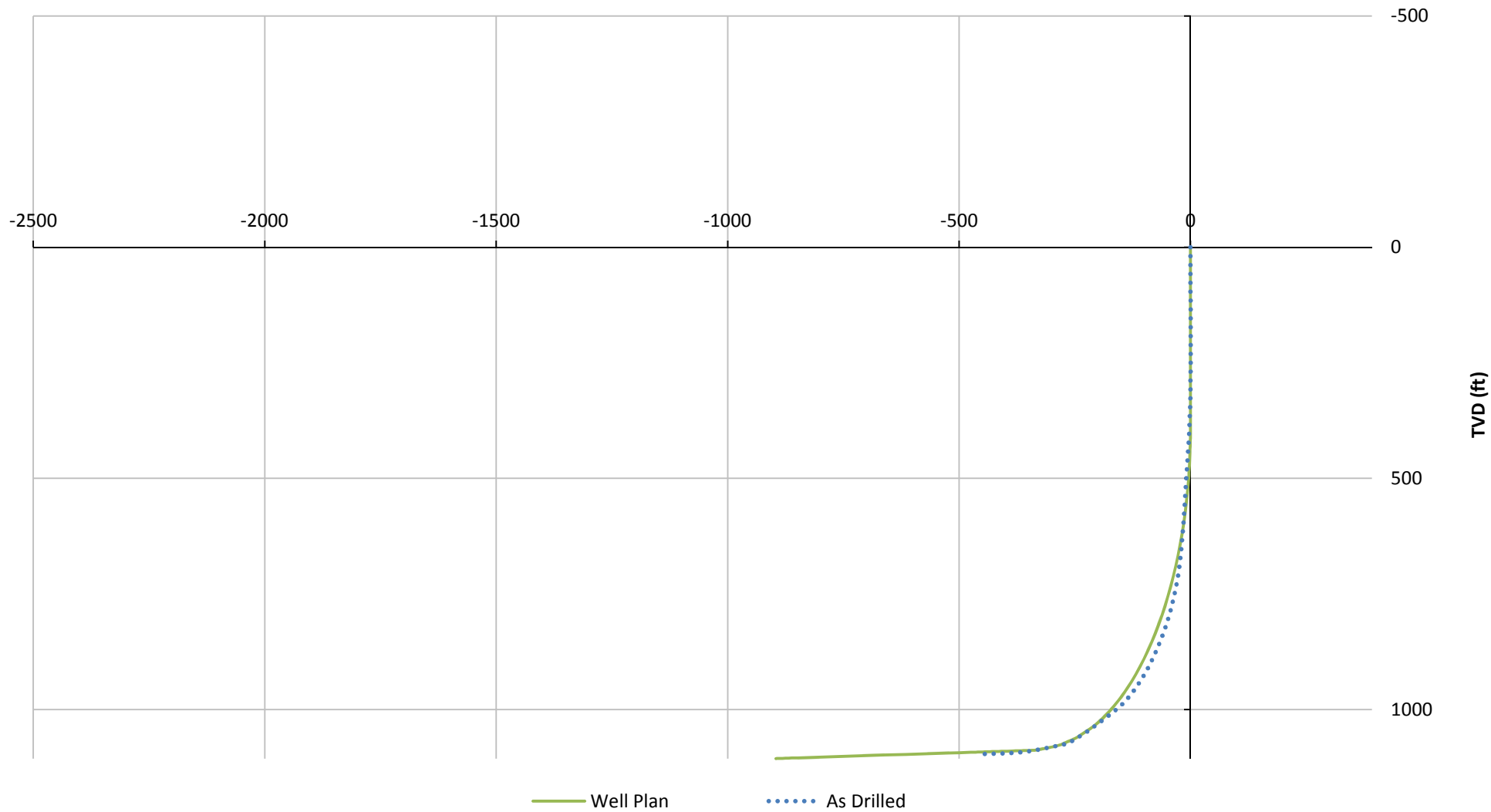
Northings Plot

N-S (ft)



Eastings Plot

E-W(ft)





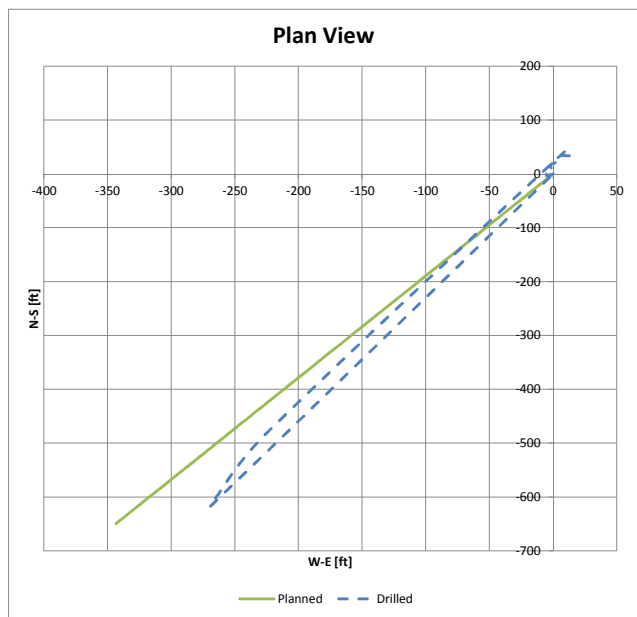
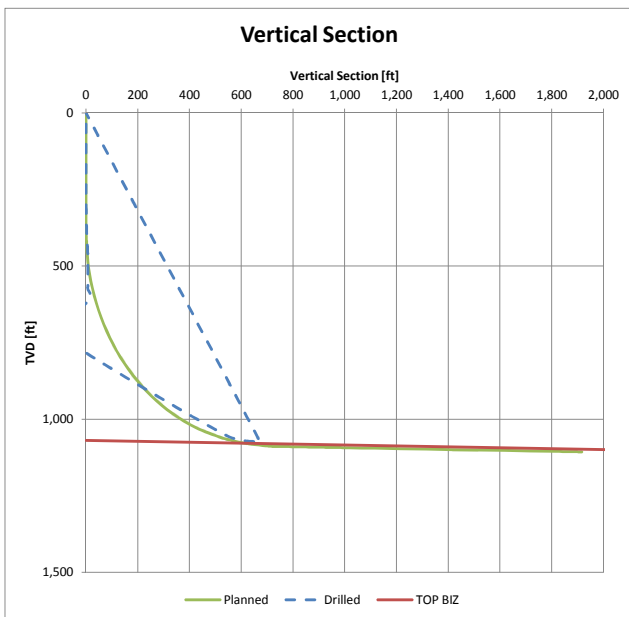
Directional Drilling Morning Report

DATE: 27/01/2012
TIME: 12:12

Customer:	Advanced Drilling Technologies	Motor Bend Angle:	2.77 & 1.15
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Event Log

Time	Date	Measured Depth [ft]	Description	Inclination	Azimuth	Pump Rate [GPM]	Mud Weight [PPG]
23:25	26/01/2012	0.00	Rigged up ready to RIH	N/A	N/A	158.00	
00:51	27/01/2012	60.00	RIH	N/A	N/A	158.00	8.30
02:07		336.00	Tag Cement - Rotate orienter to drill straight to 390	N/A	N/A	300.00	
03:11		390.00	3 Surveys to orient and confirm toolface (at 244.89 deg) - build	1.41	N/A	300.00	
04:00		435.00	Survey - build (tool face at 227.70)	3.47	N/A	300.00	
04:40		485.00	Survey - build (tool face at 255) for 100ft	4.13	N/A	300.00	
06:05		585.00	Survey - build	15.02	10.43	300.00	
06:35		535.00	Survey - pull pack 50ft and re survey	4.91	71.19	300.00	
07:18		605.00	RIH, drill on 40ft straight and survey	14.66	6.42	300.00	
07:58		635.00	Build right (toolface at 90), 30ft and survey	15.02	10.43	300.00	
09:09		675.00	Set toolface to 180 deg, build 40ft	15.71	26.51	300.00	
09:43		715.00	Set toolface to 180 deg, build 40ft	10.42	37.00	300.00	
10:18		755.00	Set toolface to 180 deg, build 40ft	7.54	78.13	300.00	
11:13		795.00	Survey - build too small POOH	4.55	13.98	300.00	
			POOH. Cement to surface				





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		
306.00	336.00	0.00	0.00	306.00	0.00	0.00	0.00	0.00	Tag Cement	Straight		
405.00	435.00	3.47	227.70	404.94	-2.02	-2.22	3.00	3.51	0	build		
455.00	485.00	4.13	251.46	454.83	-3.61	-5.04	6.20	3.38		build	04:47	
555.00	585.00	12.62	18.84	554.10	5.64	-4.93	7.49	15.47		build	06:05	
575.00	605.00	14.66	6.42	573.82	6.32	-0.88	6.38	19.02		Straight	07:18	
605.00	635.00	15.02	10.43	602.65	17.19	-1.99	17.30	6.25		Straight	07:58	
645.00	675.00	15.71	26.51	641.42	23.62	4.34	-22.91	7.63		Build	09:09	
685.00	715.00	10.42	37.00	680.73	33.18	4.25	-31.32	9.16		Build	09:43	
725.00	755.00	7.54	78.13	719.89	34.43	14.35	-37.15	15.60		Build	10:18	
765.00	795.00	4.55	13.98	760.03	42.05	9.37	-41.55	8.10		POOH	00:00	



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
360.00	390.00	0.00	0.00	360.00	0.00	0.00	0.00	0.00		Vertical	06:30	28/01/2012
405.00	435.00	2.70	346.00	404.98	1.03	-0.26	1.06	6.00		Build	12:57	
445.00	475.00	2.31	302.57	444.95	2.38	-1.16	2.65	4.72		Build	09:09	
490.00	520.00	4.21	294.31	489.87	3.55	-3.43	4.94	4.34		Build	09:45	
525.00	555.00	9.92	284.11	524.59	4.81	-7.53	8.94	16.64		Build	10:35	
650.00	680.00	16.60	242.31	646.45	-0.88	-33.87	33.88	9.02		Build	12:00	
701.00	731.00	23.71	234.03	694.31	-10.30	-48.64	49.72	14.99		Build	12:53	
795.00	825.00	36.22	224.51	775.62	-41.35	-83.56	93.23	14.20		Build	13:53	
895.00	925.00	42.03	213.90	853.26	-90.30	-123.02	152.61	8.85		Build	15:00	
995.00	1025.00	51.67	197.54	921.81	-155.87	-153.70	218.91	15.29		Build	16:20	
1095.00	1125.00	60.27	200.39	977.73	-234.13	-180.70	295.75	8.92		Build	17:21	
1195.00	1225.00	67.00	200.00	1022.11	-318.17	-211.61	382.11	6.74		Build	19:10	
1270.00	1300.00	76.00	200.00	1045.89	-384.94	-235.91	451.48	12.00		Straight	19:40	
1300.00	1330.00	76.00	200.00	1053.14	-412.29	-245.86	480.04	0.00		Straight	20:10	
1379.00	1409.00	76.00	200.00	1072.26	-484.32	-272.08	555.52	0.00		Straight	00:00	



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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	



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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	
1315.00	1345.00	76.42	206.19	1049.15	-487.01	-233.78	540.21	4.56		Rotate	07:43	
1375.00	1405.00	78.20	205.75	1062.33	-539.63	-259.41	598.74	3.05	IM TD. In Zone	Rotate	08:53	



Drilling Log

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	
1313.00	1343.00	75.46	212.45	1049.41	-482.61	-237.27	537.78	4.55		Straight	03:09	03/02/2012



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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	
1313.00	1343.00	75.46	212.45	1049.41	-482.61	-237.27	537.78	4.55		Straight	03:09	03/02/2012
1410.00	1440.00	77.50	214.79	1072.09	-561.13	-289.49	631.40	3.15		Build/Rotate	04:48	
1525.00	1555.00	80.56	222.97	1094.01	-648.90	-360.32	742.22	7.47		Build/Rotate	06:45	



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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	
1310.00	1340.00	74.07	199.39	1049.73	-484.50	-226.45	534.81	9.76		0.00	0.00	04/02/2012
1430.00	1460.00	83.74	197.34	1072.80	-596.13	-263.47	651.76	8.23		build	22:15	
1451.00	1481.00	86.83	193.21	1074.53	-616.32	-268.98	672.46	24.51		build	23:18	



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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	
1310.00	1340.00	74.07	199.39	1049.73	-484.50	-226.45	534.81	9.76		0.00	0.00	04/02/2012
1430.00	1460.00	83.74	197.34	1072.80	-596.13	-263.47	651.76	8.23		build	22:15	
1451.00	1481.00	86.83	193.21	1074.53	-616.32	-268.98	672.46	24.51		build	23:18	
1553.00	1583.00	86.47	199.43	1080.49	-713.99	-297.58	773.52	6.10		build	06:56	05/02/2012
1684.00	1714.00	84.70	208.65	1090.60	-833.14	-350.72	903.95	7.15		build	09:06	
1784.00	1814.00	90.40	208.65	1094.87	-920.78	-398.60	1003.36	5.70		build	10:54	
1884.00	1914.00	88.20	208.65	1096.09	-1008.53	-446.54	1102.96	2.20		Straight	01:55	06/02/2012



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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Vertical	12:46	31/01/2012
293.00	323.00	0.00	0.00	293.00	0.00	0.00	0.00	0.00	Tag Cement	Vertical	13:45	
325.00	355.00	1.53	260.80	325.00	-0.07	-0.42	0.43	4.78	KO	Build/Rotate	16:46	
410.00	440.00	8.90	196.75	409.62	-6.56	-3.44	7.41	9.82		Build/Rotate	17:34	
523.00	553.00	11.70	203.59	520.79	-25.43	-10.55	27.53	2.70		Rotate	18:45	
615.00	645.00	12.98	191.59	610.68	-44.11	-16.36	47.04	3.11		Rotate	19:52	
715.00	745.00	20.87	205.66	706.31	-71.22	-26.35	75.93	8.84		Build/Rotate	21:07	
815.00	845.00	36.64	201.98	793.71	-115.22	-45.35	123.83	15.86		Build/Rotate	22:24	
915.00	945.00	46.94	204.87	868.17	-176.21	-71.96	190.34	10.48		Build/Rotate	23:44	
1015.00	1045.00	53.62	204.87	932.04	-245.95	-104.29	267.15	6.68		Build/Rotate	02:27	01/02/2012
1115.00	1145.00	62.85	210.21	984.66	-321.13	-143.71	351.82	10.28		Build/Rotate	04:03	
1216.00	1246.00	72.71	208.86	1022.81	-402.39	-189.71	444.87	9.84		Build/Rotate	05:41	
1310.00	1340.00	74.07	199.39	1049.73	-484.50	-226.45	534.81	9.76		0.00	0.00	04/02/2012
1430.00	1460.00	83.74	197.34	1072.80	-596.13	-263.47	651.76	8.23		build	22:15	
1451.00	1481.00	86.83	193.21	1074.53	-616.32	-268.98	672.46	24.51		build	23:18	
1553.00	1583.00	86.47	199.43	1080.49	-713.99	-297.58	773.52	6.10		build	06:56	05/02/2012
1684.00	1714.00	84.70	208.65	1090.60	-833.14	-350.72	903.95	7.15		build	09:06	
1784.00	1814.00	90.40	208.65	1094.87	-920.78	-398.60	1003.36	5.70		build	10:54	
1884.00	1914.00	88.20	208.65	1096.09	-1008.53	-446.54	1102.96	2.20		Straight	01:55	06/02/2012