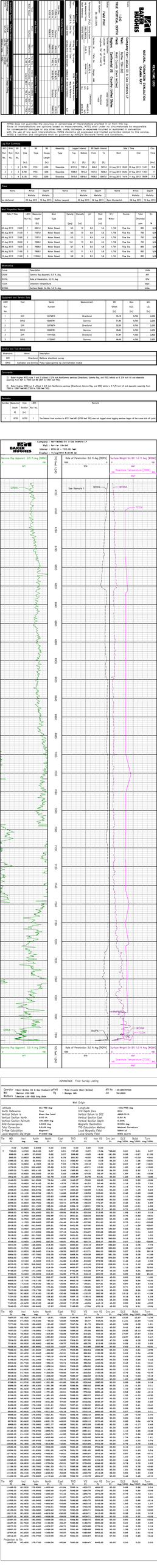

BAKER HUGHES

REALTIME LOG
NATURAL FORMATION EVALUATION
GAMMA RAY

Scale: 1:240
TRUE VERTICAL DEPTH
Status: **Field Print**

Company: Kerr-McGee Oil & Gas Onshore LP
Well: Rattler 13N-3HZ
Field: Weld County (Kerr McGee)
Region: Continental US **Country:** United States

API Number: 05-123-37075
Surface Location: Latitude: 40° 10' 30.698" N Longitude: 104° 46' 12.040" W
Section: 34 TWN: 3N Range: 66W
Other Services: Directional VSS

Permanent Datum (P.D.): Ground Level Elevation: 4970.00 ft.
Log Measured From: Kelly Bushing 13.00 ft. Above P.D.
Depth Reference: Driller's Depth
Elevations: KB: 4983.00 ft. DF: N/A GL: 4970.00 ft.

Interval Logged		Dates		Magnetic Field Reference	
Top:	6727.0 ft.	Date From:	04 Aug 13	Dip Angle:	67.02 °
Bottom:	12867.0 ft.	Date To:	11 Aug 2013	Total	
		Spud Date:	03 Aug 2013	Field Strength:	52800.0 nT
				Azi Reference North:	True
				Mag to Reference North Correction:	8.51 °

Borehole Record

Hole Size	From	To
13.500 in.	Surface	824.0 ft.
8.750 in.	824.0 ft.	7658.0 ft.
6.125 in.	7658.0 ft.	12867.0 ft.

Casing Record

Size	Weight	From	To
9.625 in.	36.00 lb/ft	Surface	813.0 ft.
7.000 in.	26.00 lb/ft	Surface	7648.0 ft.

Mud Record

Type	From	To
Water Based	Surface	12867.0 ft.

Deviation Record

Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
8.750 in.	Intermediate	1.6 ° / 39.6 °	89.4 ° / 182.6 °
6.125 in.	Lateral	89.4 ° / 182.6 °	90.5 ° / 179.8 °
		/	/
		/	/
		/	/
		/	/

Acquisition System	Software Version	Other	
Advantage	2.20U4	Rig: / Contractor:	Ensign 145 / Ensign Drilling
PATS	6.4.1.34	Job No:	5610308
		District: / Unit:	RMD /

INTEQ does not guarantee the accuracy or correctness of interpretations provided in or from this log. Since all interpretations are opinions based on measurements, INTEQ shall under no circumstances be responsible for consequential damages or any other loss, costs, damages or expenses incurred or sustained in connection with the use of any such interpretations. INTEQ disclaims all expressed and implied warranties related to this service. INTEQ s liabilities and obligations shall be governed by INTEQ's Standard Terms and Conditions.

Log Run Summary

LWD Run No.	BHA Run No.	Bit Run No.	Bit Size (in.)	Bit Type	Bit Gauge Length (in.)	Assembly Type	Logged Interval Top (ft.)	Logged Interval Bottom (ft.)	Bit Depth Interval From (ft.)	Bit Depth Interval To (ft.)	Date / Time Start	Date / Time End	Circ. Time (hrs.)
1	1	2	8.750	PDC	2.000	Steerable	6727.0	7387.0	824.0	7437.0	04 Aug 2013 20:02	05 Aug 2013 14:01	35.9
2	2	3	8.750	PDC	1.000	Steerable	7388.0	7612.0	7437.0	7658.0	07 Aug 2013 04:44	07 Aug 2013 13:23	11
3	3	4	6.125	PDC	3.000	Steerable	7610.0	12819.0	7658.0	12867.0	09 Aug 2013 14:16	11 Aug 2013 08:08	37.8

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Ian McCarrell	02 Aug 2013	12 Aug 2013	Nathan Leopold	02 Aug 2013	06 Aug 2013	Ryan Wunderlich	06 Aug 2013	12 Aug 2013

Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides ppm	K+ %
04 Aug 2013	23:00	1	6961.0	Water Based	9.5	12	8.9	5.4	1 / 94	Flow line	800	N/A
05 Aug 2013	21:30	1	7437.0	Water Based	9.5	13	9.6	5.6	1 / 92	Flow line	700	N/A
06 Aug 2013	22:00	2	7437.0	Water Based	9.5	11	8.9	4.4	1 / 92	Flow line	700	N/A
07 Aug 2013	20:00	2	7658.0	Water Based	10.1	13	8.5	4.2	1 / 90	Flow line	700	N/A
08 Aug 2013	19:30	2	7658.0	Water Based	9.7	6	9.0	4.8	1 / 91	Flow line	900	N/A
09 Aug 2013	21:00	3	7858.0	Water Based	9.3	11	9.3	5.8	1 / 92	Flow line	800	N/A
10 Aug 2013	21:00	3	11556.0	Water Based	9.8	14	8.5	5.8	1 / 91	Flow line	800	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
ROPA	Rate of Penetration, 3.0 ft. Avg	ft/hr
TCDX	Downhole Temperature	degF.
WOBA	Surface Weight On Bit, 1.0 ft. Avg.	kLbs.

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12479874	Directional	55.18	6.750	2.250
1	SRIG	10595781	Gamma	51.80	6.750	2.250
2	DIR	12479874	Directional	52.00	6.750	2.250
2	SRIG	10595781	Gamma	48.62	6.750	2.250
3	DIR	11941435	Directional	51.84	4.750	2.625
3	SRIG	11732967	Gamma	48.46	4.750	2.625

Service and Tool Mnemonics

Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module

Comments

1) Baker Hughes INTEQ runs 1 and 2 utilized 6 3/4 inch NaviGamma services (Directional, Gamma Ray, and VSS) behind an 8 3/4 inch bit and steerable assembly from 824 to 7658 feet MD (824 to 7305 feet TVD).

2) Baker Hughes INTEQ run 3 utilized 4 3/4 inch NaviGamma services (Directional, Gamma Ray, and VSS) behind a 6 1/8 inch bit and steerable assembly from 7658 to 12867 feet MD (7305 to 7290 feet TVD).

Remarks

Number	Measured Depth ft)	Hole Section (in.)	LWD Run No.	Remark
1	6735	8.750	1	The interval from surface to 6727 feet MD (6709 feet TVD) was not logged since logging services began at the curve kick off point.

BAKER HUGHES
Company : Kerr-McGee Oil & Gas Onshore LP
Well : Rattler 13N-3HZ
Interval : 6705.00 - 7310.00 feet
Created : 11/Aug/2013 8:48:56 AM

Gamma Ray Apparent 0.5 ft Avg [GRAX]
0
150
API
TVD feet 1:240
Rate of Penetration 3.0 ft Avg [ROPA]
1000
0
ft/hr
Surface Weight On Bit 1.0 ft Avg [WOBA]
0
100
klbf
Downhole Temperature [TCDX]
100
300
degF
GRAX
See Remark 1
ROPA
WOBA
TCDX
6720
6740
6760
6780
6800
6820
6840
6860
6880
6900
6920
6940
6960
6980
7000
7020
7040
7060
7080
7100
7120
7140
7160
7180
7200
7220
7240
7260
7280
7300
GRAX
ROPA
WOBA
TCDX
Gamma Ray Apparent 0.5 ft Avg [GRAX]
0
150
API
TVD feet 1:240
Rate of Penetration 3.0 ft Avg [ROPA]
1000
0
ft/hr
Surface Weight On Bit 1.0 ft Avg [WOBA]
0
100
klbf
Downhole Temperature [TCDX]
100
300
degF

ADVANTAGE Final Survey Listing

Operator : **Kerr-McGee Oil & Gas Onshore LP** Field : **Weld County (Kerr McGee)** API No : **051233707500**
Well : **Rattler 13N-3HZ** Rig : **Ensign 145** Job : **5610308**
Wellbore : **Rattler 13N-3HZ Orig Hole**

Well Origin

Latitude	40.1752 deg	Longitude	-104.7700 deg
North Reference	True	Drill Depth Zero	NULL
Vertical Datum is	Mean Sea Level	Vertical Datum to DDZ	4983.00 ft
Vertical Section North	0.00 ft	Vertical Section East	0.00 ft
Vertical Section Azimuth	180.4800 deg	Vertical Section Depth	0.00ft
Grid Convergence	0.0000 deg	Magnetic Declination	8.5100 deg
Total Correction	8.5100 deg	TVD Calculation Method	Minimal Curvature
D-Raw Calculation	Magcorr1	Local Magnetic Field	52800 nT
Local Magnetic Dip Angle	67.0200 deg	Local Gravity Field	9.801 m/s^2

Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
	0.00	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00				
U	738.00	1.5700	39.6100	5.67	0.61	737.96	-5.67	-7.84	738.00	0.21	0.21	5.37
	899.00	1.1400	57.8500	8.22	3.37	898.92	-8.25	-4.08	161.00	0.38	-0.27	11.33
	992.00	0.9600	54.6800	9.16	4.79	991.90	-9.20	-2.38	93.00	0.20	-0.19	-3.41
	1086.00	2.1400	22.8000	11.24	6.11	1085.87	-11.29	0.08	94.00	1.51	1.26	-33.91
	1180.00	3.9900	4.1800	16.12	7.03	1179.73	-16.18	5.05	94.00	2.21	1.97	-19.81
	1273.00	5.3700	352.4600	23.66	6.70	1272.42	-23.71	12.60	93.00	1.80	1.48	-12.60
	1367.00	7.4400	353.4100	34.07	5.42	1365.83	-34.11	23.08	94.00	2.20	2.20	1.01
	1461.00	8.9500	350.3200	47.32	3.49	1458.86	-47.35	36.47	94.00	1.67	1.61	-3.29
	1554.00	9.4400	343.8600	61.78	0.16	1550.67	-61.78	51.31	93.00	1.23	0.53	-6.95
	1648.00	9.6600	341.0500	76.64	-4.55	1643.37	-76.60	66.90	94.00	0.55	0.23	-2.99
	1741.00	9.6600	347.6100	91.64	-8.76	1735.05	-91.57	82.48	93.00	1.18	0.00	7.05
	1835.00	9.2500	353.6700	106.86	-11.28	1827.78	-106.76	97.90	94.00	1.14	-0.44	6.45
	1929.00	10.3600	355.5700	122.79	-12.77	1920.40	-122.68	113.91	94.00	1.23	1.18	2.02
	2019.00	10.1100	353.5700	138.71	-14.28	2008.97	-138.59	129.90	90.00	0.48	-0.28	-2.22
	2109.00	9.6200	348.5000	153.93	-16.66	2097.64	-153.78	145.30	90.00	1.11	-0.54	-5.63
	2199.00	9.1700	344.3400	168.20	-20.10	2186.44	-168.03	159.98	90.00	0.90	-0.50	-4.62
	2289.00	9.3600	346.7500	182.23	-23.71	2275.26	-182.03	174.47	90.00	0.48	0.21	2.68
	2379.00	8.9000	351.1500	196.24	-26.46	2364.12	-196.01	188.74	90.00	0.93	-0.51	4.89
	2469.00	8.2600	351.5800	209.51	-28.47	2453.12	-209.27	202.17	90.00	0.71	-0.71	0.48
	2559.00	6.7900	354.4500	221.20	-29.94	2542.34	-220.94	213.95	90.00	1.69	-1.63	3.19
	2649.00	4.3700	348.8600	229.86	-31.11	2631.91	-229.59	222.69	90.00	2.75	-2.69	-6.21
	2739.00	3.0700	337.4600	235.45	-32.70	2721.72	-235.17	228.50	90.00	1.66	-1.44	-12.67
	2829.00	1.1700	288.9900	237.98	-34.49	2811.66	-237.68	231.60	90.00	2.73	-2.11	-53.86
	2919.00	0.1900	241.5900	238.21	-35.49	2901.65	-237.90	232.63	90.00	1.17	-1.09	-52.67
	3099.00	0.5600	204.4200	237.26	-36.12	3081.64	-236.95	233.76	180.00	0.24	0.21	-20.65
	3459.00	0.1500	217.0300	235.29	-37.13	3441.64	-234.97	235.98	360.00	0.12	-0.11	3.50
	3819.00	1.1200	221.7200	232.28	-39.76	3801.61	-231.94	239.97	360.00	0.27	0.27	1.30
	4179.00	1.6800	221.8200	225.72	-45.62	4161.50	-225.33	248.76	360.00	0.16	0.16	0.03
	4539.00	0.8400	118.0500	220.55	-46.81	4521.44	-220.15	254.07	360.00	0.57	-0.23	-28.83
	4901.00	1.0500	146.0200	216.55	-42.61	4883.40	-216.19	259.87	362.00	0.14	0.06	7.73
	5261.00	0.3700	20.4800	214.91	-40.36	5243.38	-214.56	262.66	360.00	0.36	-0.19	-34.87
	5623.00	0.6500	162.3400	214.04	-39.33	5605.37	-213.71	264.00	362.00	0.27	0.08	39.19
	5984.00	0.9300	157.7000	209.38	-37.59	5966.34	-209.06	268.97	361.00	0.08	0.08	-1.29
	6254.00	1.3300	17.3700	210.35	-35.83	6236.31	-210.04	270.99	270.00	0.79	0.15	-51.97
	6434.00	0.5100	18.0200	213.10	-34.96	6416.29	-212.80	273.88	180.00	0.46	-0.46	0.36
	6670.00	0.7900	358.3000	215.73	-34.68	6652.27	-215.43	276.52	236.00	0.15	0.12	-8.36
	6703.00	0.5100	22.2300	216.09	-34.63	6685.27	-215.79	276.88	33.00	1.16	-0.85	72.52
	6748.00	1.9700	171.1200	215.51	-34.44	6730.26	-215.22	277.49	45.00	5.38	3.24	330.87
	6793.00	5.8400	180.3000	212.46	-34.33	6775.15	-212.16	280.55	45.00	8.68	8.60	20.40
	6838.00	9.7100	179.7600	206.37	-34.32	6819.73	-206.08	286.64	45.00	8.60	8.60	-1.20
	6883.00	13.7100	178.7100	197.24	-34.19	6863.78	-196.95	295.77	45.00	8.90	8.89	-2.33
	6928.00	17.6100	178.9100	185.10	-33.94	6907.10	-184.81	307.91	45.00	8.67	8.67	0.44
	6972.00	21.8800	179.0500	170.24	-33.68	6948.51	-169.95	322.77	44.00	9.71	9.70	0.32
	7017.00	26.0400	178.1700	151.97	-33.22	6989.62	-151.69	341.04	45.00	9.28	9.24	-1.96
	7062.00	30.5900	177.6100	130.65	-32.43	7029.23	-130.37	362.38	45.00	10.13	10.11	-1.24
	7107.00	34.6000	179.4500	106.42	-31.83	7067.13	-106.15	386.62	45.00	9.18	8.91	4.09
	7152.00	38.9200	181.1500	79.50	-31.99	7103.18	-79.23	413.54	45.00	9.86	9.60	3.78
	7197.00	43.3400	180.9100	49.92	-32.52	7137.06	-49.64	443.13	45.00	9.83	9.82	-0.53
	7242.00	47.5300	180.8000	17.87	-33.00	7168.63	-17.59	475.18	45.00	9.31	9.31	-0.24
	7287.00	52.1500	180.0100	-16.51	-33.23	7197.65	16.79	509.57	45.00	10.35	10.27	-1.76
	7332.00	57.0900	179.5400	-53.19	-33.08	7223.69	53.47	546.24	45.00	11.01	10.98	-1.04
	7377.00	59.5100	180.4000	-91.48	-33.07	7247.34	91.75	584.53	45.00	5.62	5.38	1.91
	7422.00	63.7400	180.1600	-131.06	-33.26	7268.72	131.33	624.11	45.00	9.41	9.40	-0.53
	7467.00	71.0000	179.0900	-172.57	-32.98	7286.02	172.84	665.62	45.00	16.28	16.13	-2.38
	7512.00	78.9500	179.0900	-215.99	-32.29	7297.68	216.25	709.05	45.00	17.67	17.67	0.00
	7557.00	87.4600	181.5500	-260.63	-32.54	7303.00	260.89	753.68	45.00	19.67	18.91	5.47
	7604.00	89.3800	182.6200	-307.57	-34.25	7304.30	307.85	800.66	47.00	4.68	4.09	2.28
	7719.00	89.5300	182.8800	-422.44	-39.77	7305.39	422.75	915.66	115.00	0.26	0.13	0.23
	7809.00	89.9000	182.6000	-512.33	-44.07	7305.84	512.68	1005.66	90.00	0.52	0.41	-0.31
	7899.00	90.0900	181.9000	-602.26	-47.61	7305.85	602.64	1095.66	90.00	0.81	0.21	-0.78
	7989.00	90.4000	181.5500	-692.22	-50.31	7305.46	692.62	1185.66	90.00	0.52	0.34	-0.39
	8079.00	90.1500	181.0800	-782.19	-52.38	7305.03	782.61	1275.65	90.00	0.59	-0.28	-0.52
	8169.00	90.6700	181.1900	-872.17	-54.16	7304.38	872.60	1365.65	90.00	0.59	0.58	0.12
	8259.00	90.7700	180.8200	-962.15	-55.74	7303.25	962.59	1455.64	90.00	0.43	0.11	-0.41
	8349.00	90.7600	180.5400	-1052.14	-56.81	7302.05	1052.58	1545.64	90.00	0.31	-0.01	-0.31
	8439.00	91.5000	181.2000	-1142.11	-58.18	7300.28	1142.56	1635.62	90.00	1.10	0.82	0.73
	8529.00	91.7200	180.5500	-1232.06	-59.55	7297.75	1232.52	1725.58	90.00	0.76	0.24	-0.72
	8619.00	91.6900	180.3800	-1322.02	-60.28	7295.07	1322.48	1815.54	90.00	0.19	-0.03	-0.19
	8709.00	90.8000	180.1500	-1412.00	-60.70	7293.12	1412.46	1905.52	90.00	1.02	-0.99	-0.26
	8799.00	91.5700	180.3200	-1501.98	-61.06	7291.25	1502.44	1995.50	90.00	0.88	0.86	0.19
	8889.00	90.4900	180.4200	-1591.96	-61.65	7289.64	1592.42	2085.48	90.00	1.21	-1.20	0.11
	8979.00	90.2400	179.4200	-1681.96	-61.52	7289.06	1682.41	2175.48	90.00	1.15	-0.28	-1.11
	9069.00	90.7600	179.3000	-1771.95	-60.51	7288.28	1772.39	2265.48	90.00	0.59	0.58	-0.13
	9159.00	89.5900	179.0300	-1861.93	-59.20	7288.00	1862.37	2355.47	90.00	1.33	-1.30	-0.30
	9249.00	89.6600	179.3000	-1951.92	-57.89	7288.59	1952.34	2445.47	90.00	0.31	0.08	0.30
	9339.00	90.4900	179.5600	-2041.92	-57.00	7288.47	2042.32	2535.47	90.00	0.97	0.92	0.29
	9429.00	90.8600	179.1900	-2131.91	-56.01	7287.41	2132.30	2625.46	90.00	0.58	0.41	-0.41
	9519.00	91.4500	178.6000	-2221.87	-54.28	7285.60	2222.25	2715.45	90.00	0.93	0.66	-0.66
	9609.00	90.9500	178.7000	-2311.83	-52.16	7283.71	2312.18	2805.43	90.00	0.57	-0.56	0.11
	9699.00	90.2400	179.3300	-2401.81	-50.61	7282.78	2402.15	2895.42	90.00	1.05	-0.79	0.70
	9789.00	90.0600	179.3500	-2491.80	-49.58	7282.54	2492.13	2985.42	90.00	0.20	-0.20	0.02
	9879.00	90.6400	178.6800	-2581.78	-48.03	7281.99	2582.10	3075.42	90.00	0.98	0.64	-0.74
	9969.00	89.5900	179.0900	-2671.77	-46.28	7281.81	2672.06	3165.42	90.00	1.25	-1.17	0.46
	10060.00	89.5300	179.2900	-2762.75	-44.99	7282.51	2763.03	3256.41	91.00	0.23	-0.07	0.22
	10148.00	90.4000	178.8700	-2850.74	-43.58	7282.57	2851.01	3344.41	88.00	1.10	0.99	-0.48
	10238.00	91.0100	178.5500	-2940.71	-41.55	7281.46	2940.96	3434.40	90.00	0.77	0.68	-0.36
	10328.00	90.4300	180.0000	-3030.69	-40.41	7280.33	3030.93	3524.39	90.00	1.74	-0.64	1.61
	10418.00	89.5300	180.6700	-3120.69	-40.94	7280.36	3120.92	3614.39	90.00	1.25	-1.00	0.74
	10508.00	90.1800	180.7500	-3210.68	-42.05	7280.59	3210.92	3704.39	90.00	0.73	0.72	0.09
	10598.00	90.0600	180.7400	-3300.68	-43.23	7280.40	3300.92	3794.39	90.00	0.13	-0.13	-0.01
	10689.00	88.3000	181.2300	-3391.65	-44.79	7281.70	3391.90	3885.38	91.00	2.01	-1.93	0.54
	10778.00	88.8900	180.6000	-3480.61	-46.21	7283.88	3480.87	3974.35	89.00	0.97	0.66	-0.71
	10868.00	89.8400	180.7400	-3570.60	-47.26	7284.88	3570.87	4064.34	90.00	1.07	1.06	0.16
	10958.00	88.5800	181.0400	-3660.58	-48.66	7286.12	3660.85	4154.33	90.00	1.44	-1.40	0.33
	11048.00	89.2900	181.0600	-3750.54	-50.31	7287.79	3750.83	4244.32	90.00	0.79	0.79	0.02
	11139.00	90.0000	180.7000	-3841.53	-51.71	7288.36	3841.83	4335.32	91.00	0.87	0.78	-0.40
	11229.00	88.4800	179.9000	-3931.52	-52.18	7289.55	3931.82	4425.30	90.00	1.91	-1.69	-0.89
	11318.00	89.0100	179.9800	-4020.50	-52.08	7291.50	4020.79	4514.28	89.00	0.60	0.60	0.09
	11408.00	89.4400	179.8900	-4110.49	-51.98	7292.72	4110.78	4604.27	90.00	0.49	0.48	-0.10
	11498.00	90.0300	179.9300	-4200.49	-51.84	7293.14	4200.77	4694.27	90.00	0.66	0.66	0.04
	11588.00	90.9200	179.8500	-4290.48	-51.67	7292.39	4290.76	4784.27	90.00	0.99	0.99	-0.09
	11678.00	90.2700	179.8600	-4380.48	-51.44	7291.45	4380.75	4874.26	90.00	0.72	-0.72	0.01
	11768.00	89.2900	180.6900	-4470.47	-51.87	7291.80	4470.75	4964.26	90.00	1.43	-1.09	0.92
	11858.00	90.1800	180.5600	-4560.47	-52.85	7292.22	4560.75	5054.26	90.00	1.00	0.99	-0.14
	11948.00	89.2600	181.7000	-4650.45	-54.63	7292.66	4650.74	5144.26	90.00	1.63	-1.02	1.27
	12038.00	88.7900	180.8300	-4740.41	-56.62	7294.19	4740.72	5234.24	90.00	1.10	-0.52	-0.97
	12128.00	89.7200	180.3600	-4830.40	-57.55	7295.36	4830.71	5324.23	90.00	1.16	1.03	-0.52
	12217.00	90.0300	180.5200	-4919.39	-58.23	7295.55	4919.71	5413.23	89.00	0.39	0.35	0.18
	12307.00	90.3000	180.4900	-5009.39	-59.03	7295.29	5009.71	5503.23	90.00	0.30	0.30	-0.03
	12397.00	90.5500	180.0000	-5099.38	-59.41	7294.63	5099.70	5593.23	90.00	0.61	0.28	-0.54
	12487.00	90.7300	180.0700	-5189.38	-59.47	7293.62	5189.70	5683.22	90.00	0.21	0.20	0.08
	12577.00	91.0700	180.2400	-5279.37	-59.71	7292.21	5279.68	5773.21	90.00	0.42	0.38	0.19
	12667.00	89.8400	180.4200	-5369.36	-60.23	7291.49	5369.68	5863.21	90.00	1.38	-1.37	0.20
	12757.00	90.3000	180.0200	-5459.36	-60.57	7291.38	5459.68	5953.21	90.00	0.68	0.51	-0.44
	12814.00	90.4600	179.7700	-5516.36	-60.47	7291.00	5516.67	6010.21	57.00	0.52	0.28	-0.44
Projection to TD:												
	12867.00	90.4600	179.7700	-5569.36	-60.26	7290.58	5569.67	6063.20	53.00	0.00	0.00	0.00