

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised July 18, 2010
Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-38430	Pool Code 96210	Pool Name Empire; Glorieta-Yeso
Property Code 38427	Property Name MARACAS "22" STATE	Well Number 8
GRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3594'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	22	17 S	28 E		2028	NORTH	2120	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	22	17 S	28 E		2310	NORTH	2310	EAST	EDDY

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
------------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION Lot - N 32°49'17.749" Long - W 104°09'43.030" NMSPCE- N 662672.4 E 593984.2 (NAD-83) PROPOSED BOTTOM HOLE LOCATION Lot - N 32°49'14.950" Long - W 104°09'45.194" NMSPCE- N 662389.26 E 593800.09 (NAD-83) BO-1111-0000	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Natalie Krueger</i> 1/25/2011 Signature Date Natalie Krueger Printed Name nkrueger@cimarex.com Email Address SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. OCTOBER 25 2010 Date Surveyed <i>[Signature]</i> Signature & Seal of Professional Surveyor 7977 Certificate No. 23451 BASIN SURVEYS
---	--

Mud, Casing, Cementing, and BOP Attachment
Maracas 22 State No. 8
 Cimarex Energy Co. of Colorado
 Unit G, Section 22
 T17S-R28E, Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

Location: SHL 2028 FNL & 2120 FEL
 BHL 2310 FNL & 2310 FEL

Elevation above sea level: 3594' GR

Proposed drilling depth: 5018'

Proposed Drilling Plan: After setting surface casing, drill to KOP 1700 with 7½" bit and kick off to drill directional to TD of 5018 MD, 5000 TVD. Set and cement 5½" production casing.

Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 400'	8.4 - 8.6	28	NC	FW
0' to 5018'	10.0	30-32	NC	Brine water

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Casing & Cementing Plan:

String	Hole Size	Depth	Casing OD	Weight	Collar	Grade
Surface	12¼"	0' to 400'	New 8½"	24#	STC	J-55
Production	7½"	0' to 5018'	New 5½"	17#	LTC	J-55

Cementing Plan:

Surface Lead: 600 sx Class H
 Tail: 500 sx Class H
TOC Surface

Production Lead: 700 sx Class H
 Tail: 600 sx Class H
TOC 0'

Fresh water zones will be protected by setting 8½" casing at 400 and cementing to surface. Hydrocarbon zones will be protected by setting 5½" casing at 5018 and cementing to surface.

Collapse Factor
 1.125

Burst Factor
 1.125

Tension Factor
 1.6



Cimarex Energy Co.

Location: Eddy County, NM
Field: Paddock Bineby Field
Facility: Maracas 22 State No 8

Sol: No 8 SHL
Well: No 8
Wellbore: No 8 PWB



Well Profile Data

Design Comment	KD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	D, S (11005)	VS (ft)
Tie On	0.00	0.000	213.034	0.00	0.00	0.00	0.00	0.00
Est KOP	1700.00	0.000	213.034	1700.00	0.00	0.00	0.00	0.00
EOB	1812.63	6.055	213.034	1842.17	-10.76	-6.59	2.52	12.83
No 8 PWB	5017.67	6.055	213.034	5000.00	-283.17	-164.13	0.00	337.77

Plot reference wellpath is Profile 1

True vertical depths are referenced to Rig on No 8 SHL (RT)

Measured depths are referenced to Rig on No 8 SHL (RT)

Rig on No 8 SHL (RT) to Mean Sea Level: 3594 feet

Mean Sea Level to Mud Line (Facility: Maracas 22 State No 8): 3594 feet

Coordinates are in feet referenced to Sol

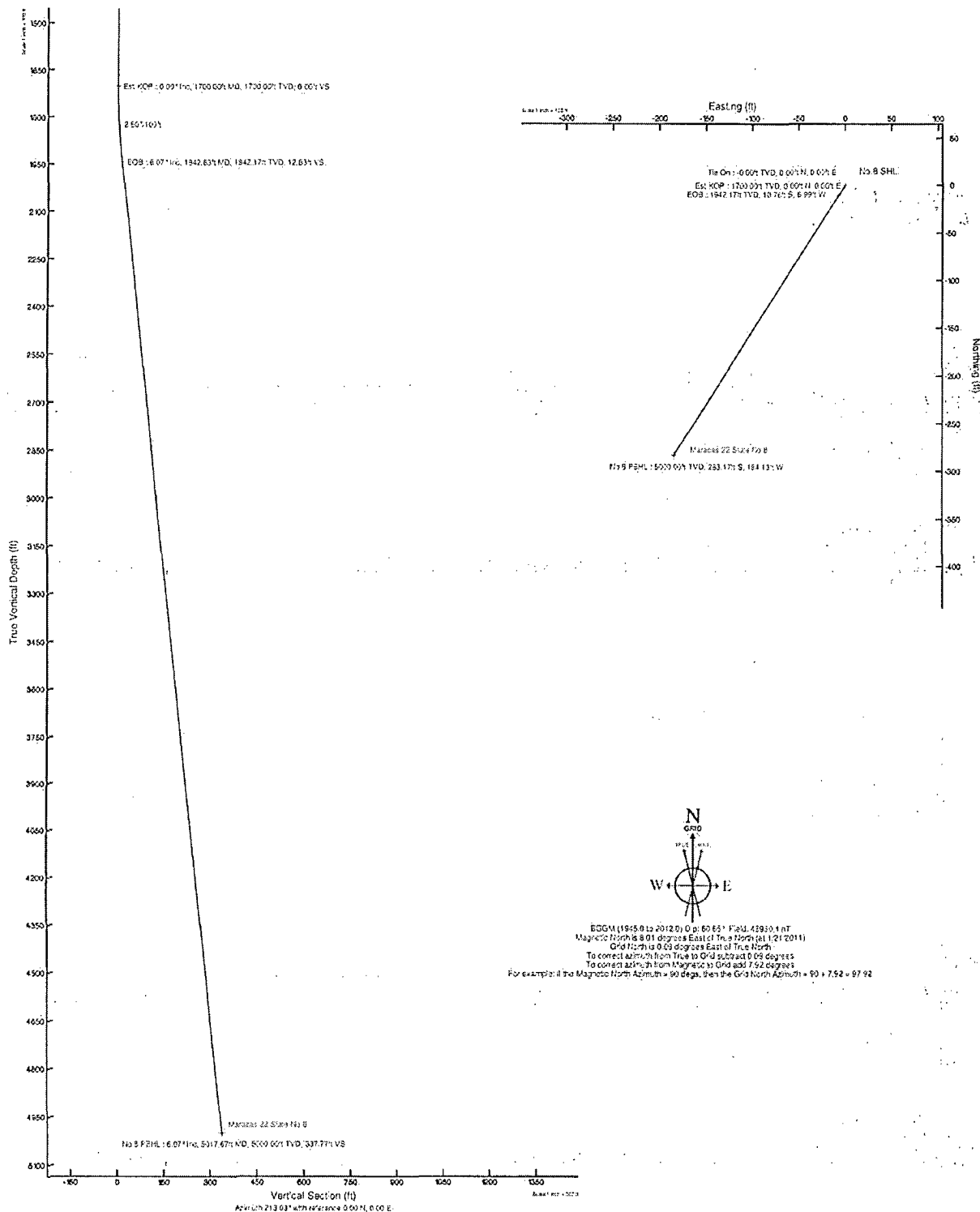
Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3091), US feet

North Reference: Grid north

Scale: True distance

Depths are in feet

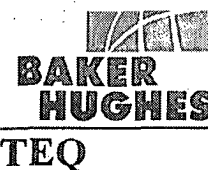
Created by: gortepson on 1/24/2011





Planned Wellpath Report

Prelim_1
Page 1 of 3



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.8 SHL
Area	Eddy County, NM	Well	No.8
Field	Paddock Blinbry Filed	Wellbore	No.8 PWB
Facility	Maracas 22 State No.8		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Gomeoscr
Scale	0.999912	Report Generated	1/24/2011 at 2:30:54 PM
Convergence at slot	0.09° East	Database/Source file	WA Midland/No.8_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W
Facility Reference Pt			593984.20	662672.40	32°49'17.749"N	104°09'43.031"W
Field Reference Pt			594612.60	661200.10	32°49'03.170"N	104°09'35.695"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No.8 SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.8 SHL (RT) to Mean Sea Level	3594.00ft
Vertical Reference Pt	Rig on No.8 SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.8 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	213.03°



Planned Wellpath Report

Prelim_1

Page 2 of 3



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.8 SHL
Area	Eddy County, NM	Well	No.8
Field	Paddock Blinbry Filed	Wellbore	No.8 PWB
Facility	Maracas 22 State No.8		

WELLPATH DATA (53 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	213.034	0.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	Tie On
100.00†	0.000	213.034	100.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
200.00†	0.000	213.034	200.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
300.00†	0.000	213.034	300.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
400.00†	0.000	213.034	400.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
500.00†	0.000	213.034	500.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
600.00†	0.000	213.034	600.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
700.00†	0.000	213.034	700.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
800.00†	0.000	213.034	800.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
900.00†	0.000	213.034	900.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1000.00†	0.000	213.034	1000.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1100.00†	0.000	213.034	1100.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1200.00†	0.000	213.034	1200.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1300.00†	0.000	213.034	1300.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1400.00†	0.000	213.034	1400.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1500.00†	0.000	213.034	1500.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1600.00†	0.000	213.034	1600.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	
1700.00	0.000	213.034	1700.00	0.00	0.00	0.00	593984.20	662672.40	32°49'17.749"N	104°09'43.031"W	0.00	Est KOP
1800.00†	2.500	213.034	1799.97	2.18	-1.83	-1.19	593983.01	662670.57	32°49'17.731"N	104°09'43.045"W	2.50	
1900.00†	5.000	213.034	1899.75	8.72	-7.31	-4.75	593979.45	662665.09	32°49'17.677"N	104°09'43.087"W	2.50	
1942.63	6.066	213.034	1942.17	12.83	-10.76	-6.99	593977.21	662661.64	32°49'17.643"N	104°09'43.113"W	2.50	EOB
2000.00†	6.066	213.034	1999.23	18.89	-15.84	-10.30	593973.90	662656.56	32°49'17.592"N	104°09'43.152"W	0.00	
2100.00†	6.066	213.034	2098.67	29.46	-24.70	-16.06	593968.14	662647.70	32°49'17.505"N	104°09'43.220"W	0.00	
2200.00†	6.066	213.034	2198.11	40.03	-33.56	-21.82	593962.38	662638.85	32°49'17.417"N	104°09'43.287"W	0.00	
2300.00†	6.066	213.034	2297.55	50.59	-42.42	-27.58	593956.62	662629.99	32°49'17.330"N	104°09'43.355"W	0.00	
2400.00†	6.066	213.034	2396.99	61.16	-51.27	-33.34	593950.86	662621.13	32°49'17.242"N	104°09'43.423"W	0.00	
2500.00†	6.066	213.034	2496.43	71.73	-60.13	-39.10	593945.10	662612.27	32°49'17.155"N	104°09'43.490"W	0.00	
2600.00†	6.066	213.034	2595.87	82.29	-68.99	-44.86	593939.34	662603.41	32°49'17.067"N	104°09'43.558"W	0.00	
2700.00†	6.066	213.034	2695.31	92.86	-77.85	-50.62	593933.58	662594.56	32°49'16.979"N	104°09'43.626"W	0.00	
2800.00†	6.066	213.034	2794.75	103.43	-86.71	-56.38	593927.82	662585.70	32°49'16.892"N	104°09'43.693"W	0.00	
2900.00†	6.066	213.034	2894.19	113.99	-95.57	-62.14	593922.06	662576.84	32°49'16.804"N	104°09'43.761"W	0.00	
3000.00†	6.066	213.034	2993.63	124.56	-104.43	-67.90	593916.30	662567.98	32°49'16.717"N	104°09'43.829"W	0.00	
3100.00†	6.066	213.034	3093.07	135.13	-113.28	-73.66	593910.54	662559.13	32°49'16.629"N	104°09'43.896"W	0.00	
3200.00†	6.066	213.034	3192.51	145.70	-122.14	-79.42	593904.78	662550.27	32°49'16.542"N	104°09'43.964"W	0.00	
3300.00†	6.066	213.034	3291.95	156.26	-131.00	-85.18	593899.02	662541.41	32°49'16.454"N	104°09'44.032"W	0.00	
3400.00†	6.066	213.034	3391.39	166.83	-139.86	-90.94	593893.26	662532.55	32°49'16.367"N	104°09'44.099"W	0.00	
3500.00†	6.066	213.034	3490.83	177.40	-148.72	-96.70	593887.50	662523.69	32°49'16.279"N	104°09'44.167"W	0.00	
3600.00†	6.066	213.034	3590.27	187.96	-157.58	-102.46	593881.74	662514.84	32°49'16.191"N	104°09'44.235"W	0.00	
3700.00†	6.066	213.034	3689.71	198.53	-166.44	-108.22	593875.98	662505.98	32°49'16.104"N	104°09'44.302"W	0.00	
3800.00†	6.066	213.034	3789.15	209.10	-175.30	-113.99	593870.23	662497.12	32°49'16.016"N	104°09'44.370"W	0.00	
3900.00†	6.066	213.034	3888.59	219.66	-184.15	-119.75	593864.47	662488.26	32°49'15.929"N	104°09'44.438"W	0.00	
4000.00†	6.066	213.034	3988.03	230.23	-193.01	-125.51	593858.71	662479.40	32°49'15.841"N	104°09'44.505"W	0.00	
4100.00†	6.066	213.034	4087.47	240.80	-201.87	-131.27	593852.95	662470.55	32°49'15.754"N	104°09'44.573"W	0.00	
4200.00†	6.066	213.034	4186.91	251.36	-210.73	-137.03	593847.19	662461.69	32°49'15.666"N	104°09'44.641"W	0.00	
4300.00†	6.066	213.034	4286.35	261.93	-219.59	-142.79	593841.43	662452.83	32°49'15.579"N	104°09'44.708"W	0.00	



Planned Wellpath Report

Prelim_1

Page 3 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.8 SHL
Area	Eddy County, NM	Well	No.8
Field	Paddock Blinbry Filed	Wellbore	No.8 PWB
Facility	Maracas 22 State No.8		

WELLPATH DATA (53 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4400.00†	6.066	213.034	4385.79	272.50	-228.45	-148.55	593835.67	662443.97	32°49'15.491"N	104°09'44.776"W	0.00	
4500.00†	6.066	213.034	4485.23	283.06	-237.31	-154.31	593829.91	662435.11	32°49'15.403"N	104°09'44.844"W	0.00	
4600.00†	6.066	213.034	4584.67	293.63	-246.17	-160.07	593824.15	662426.26	32°49'15.316"N	104°09'44.911"W	0.00	
4700.00†	6.066	213.034	4684.11	304.20	-255.02	-165.83	593818.39	662417.40	32°49'15.228"N	104°09'44.979"W	0.00	
4800.00†	6.066	213.034	4783.55	314.76	-263.88	-171.59	593812.63	662408.54	32°49'15.141"N	104°09'45.047"W	0.00	
4900.00†	6.066	213.034	4882.99	325.33	-272.74	-177.35	593806.87	662399.68	32°49'15.053"N	104°09'45.114"W	0.00	
5000.00†	6.066	213.034	4982.43	335.90	-281.60	-183.11	593801.11	662390.83	32°49'14.966"N	104°09'45.182"W	0.00	
5017.67	6.066	213.034	5000.00†	337.77	-283.17	-184.13	593800.09	662389.26	32°49'14.950"N	104°09'45.194"W	0.00	No.8 PBHL

HOLE & CASING SECTIONS Ref Wellbore: No.8 PWB Ref Wellpath: Prelim_1									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
8.625in Casing	0.00	400.00	400.00	0.00	400.00	0.00	0.00	0.00	0.00
7.875in Open Hole	400.00	5017.67	4617.67	400.00	5000.00	0.00	0.00	-283.17	-184.13

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) Maracas 22 State No.8	5017.67	5000.00	-283.17	-184.13	593800.09	662389.26	32°49'14.950"N	104°09'45.194"W	point

SURVEY PROGRAM Ref Wellbore: No.8 PWB Ref Wellpath: Prelim_1				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	5017.67	NaviTrak (Standard)		No.8 PWB