

DISTRICT I
1025 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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-38427	Pool Code 96210	Pool Name Empire; Glorieta-Yeso
Property Code 38427	Property Name MARACAS "22" STATE	Well Number 4
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3598'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	22	17 S	28 E		1480	NORTH	815	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
H	22	17 S	28 E		1650	NORTH	990	EAST	EDDY
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No. NSL Pending						

**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**

	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 06 2010 Date Surveyed NEW MEXICO Professional Surveyor 7977 Signature
	Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23447

Mud, Casing, Cementing, and BOP Attachment
Maracas 22 State No. 4
 Cimarex Energy Co. of Colorado
 Unit H, 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 1480 FNL & 815 FEL
 BHL 1650 FNL & 990 FEL

Elevation above sea level: 3598' GR

Proposed drilling depth: 5013'

Proposed Drilling Plan: After setting surface casing, drill to KOP2600 with 7 $\frac{1}{8}$ " bit and kick off to drill directional to TD of 5013 MD, 5000 TVD. Set and cement 5 $\frac{1}{2}$ " 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 5013'	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	12 $\frac{1}{4}$ "	0' to 400'	New 8 $\frac{7}{8}$ "	24#	STC	J-55
Production	7 $\frac{1}{8}$ "	0' to 5013'	New 5 $\frac{1}{2}$ "	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 8 $\frac{7}{8}$ " casing at 400 and cementing to surface. Hydrocarbon zones will be protected by setting 5 $\frac{1}{2}$ " casing at 5013 and cementing to surface.

<u>Collapse Factor</u>	<u>Burst Factor</u>	<u>Tension Factor</u>
1.125	1.125	1.6



Cimarex Energy Co.

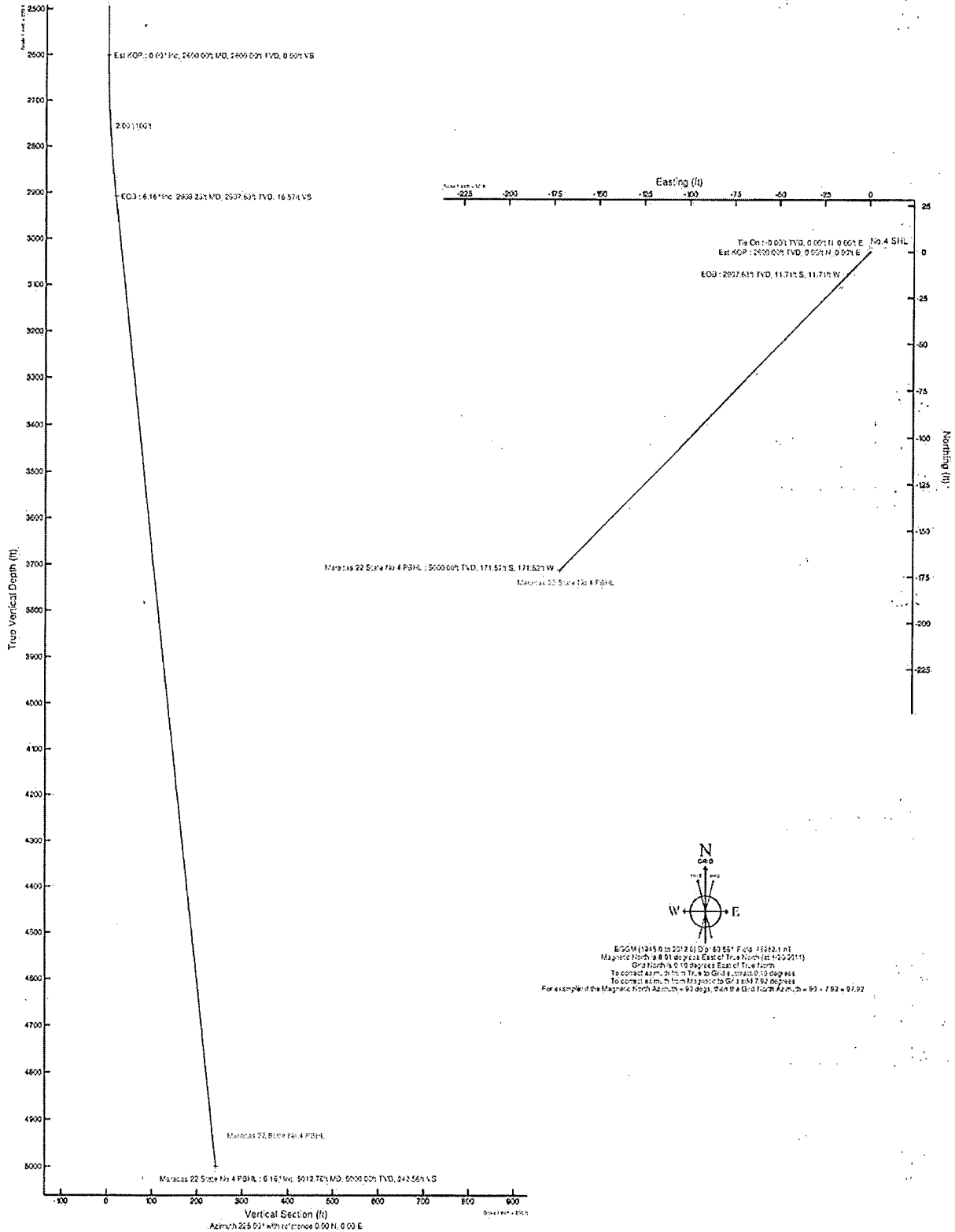
Location: Eddy County, NM
Field: Paradox Brinebury Field
Facility: Maracas 22 State No. 4

Site: No. 4 SHL
Well: No. 4
Wellbore: No. 4 PWB



Well Profile Data								
Depth Comment	MD (ft)	Inc (°)	As (ft)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (11000)	VS (ft)
Tie On	0.00	0.00	245.00	0.00	0.00	0.00	0.00	0.00
Est KOP	2600.00	0.00	225.00	2600.00	0.00	0.00	0.00	0.00
EOB	2903.23	6.16	225.00	2907.63	-11.71	-11.71	2.00	18.57
Maracas 22 State No. 4 PWB	5012.79	6.16	225.00	5000.00	-171.52	-171.52	0.00	212.56

Foot reference well is Profile 1		Grid System: NAD83 / T.M. New Mexico State Plane, Eastern Zone (2011) US feet
True vertical depths are referenced to Rig on No. 4 SHL (RT)		North Reference: Grid north
Measured depths are referenced to Rig on No. 4 SHL (RT)		Scale: True distance
Rig on No. 4 SHL (RT) to Mean Sea Level: 3563 feet		Depth is in feet
Mean Sea Level to M.O.D. (Facility: Maracas 22 State No. 4): 3583 feet		Created by: gormishen 1/21/2011
Downhole are in feet referenced to Grid		





Planned Wellpath Report

Prelim_1
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No.4 SHL
Area	Eddy County, NM	Well	No.4
Field	Paddock Blinbry Filed	Wellbore	No.4 PWB
Facility	Maracas 22 State No.4		

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	1/21/2011 at 4:10:33 PM
Convergence at slot	0.10° East	Database/Source file	WA Midland/No.4_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	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W
Facility Reference Pt			595277.80	663230.10	32°49'23.246"N	104°09'27.860"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.4 SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.4 SHL (RT) to Mean Sea Level	3598.00ft
Vertical Reference Pt	Rig on No.4 SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.4 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	225.00°



Planned Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.4 SHL
Area	Eddy County, NM	Well	No.4
Field	Paddock Blinbry Filed	Wellbore	No.4 PWB
Facility	Maracas 22 State No.4		

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	225.000	0.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	Tie On
100.00†	0.000	225.000	100.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
200.00†	0.000	225.000	200.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
300.00†	0.000	225.000	300.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
400.00†	0.000	225.000	400.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
500.00†	0.000	225.000	500.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
600.00†	0.000	225.000	600.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
700.00†	0.000	225.000	700.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
800.00†	0.000	225.000	800.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
900.00†	0.000	225.000	900.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1000.00†	0.000	225.000	1000.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1100.00†	0.000	225.000	1100.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1200.00†	0.000	225.000	1200.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1300.00†	0.000	225.000	1300.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1400.00†	0.000	225.000	1400.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1500.00†	0.000	225.000	1500.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1600.00†	0.000	225.000	1600.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1700.00†	0.000	225.000	1700.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1800.00†	0.000	225.000	1800.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
1900.00†	0.000	225.000	1900.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2000.00†	0.000	225.000	2000.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2100.00†	0.000	225.000	2100.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2200.00†	0.000	225.000	2200.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2300.00†	0.000	225.000	2300.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2400.00†	0.000	225.000	2400.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2500.00†	0.000	225.000	2500.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	
2600.00	0.000	225.000	2600.00	0.00	0.00	0.00	595277.80	663230.10	32°49'23.246"N	104°09'27.860"W	0.00	Est KOP
2700.00†	2.000	225.000	2699.98	1.75	-1.23	-1.23	595276.57	663228.87	32°49'23.234"N	104°09'27.875"W	2.00	
2800.00†	4.000	225.000	2799.84	6.98	-4.93	-4.93	595272.87	663225.17	32°49'23.198"N	104°09'27.918"W	2.00	
2900.00†	6.000	225.000	2899.45	15.69	-11.10	-11.10	595266.70	663219.00	32°49'23.137"N	104°09'27.991"W	2.00	
2908.23	6.165	225.000	2907.63	16.57	-11.71	-11.71	595266.09	663218.39	32°49'23.131"N	104°09'27.998"W	2.00	EOB
3000.00†	6.165	225.000	2998.88	26.42	-18.68	-18.68	595259.12	663211.42	32°49'23.062"N	104°09'28.080"W	0.00	
3100.00†	6.165	225.000	3098.30	37.16	-26.28	-26.28	595251.53	663203.83	32°49'22.987"N	104°09'28.169"W	0.00	
3200.00†	6.165	225.000	3197.72	47.90	-33.87	-33.87	595243.93	663196.23	32°49'22.912"N	104°09'28.258"W	0.00	
3300.00†	6.165	225.000	3297.14	58.64	-41.46	-41.46	595236.34	663188.64	32°49'22.837"N	104°09'28.347"W	0.00	
3400.00†	6.165	225.000	3396.56	69.37	-49.05	-49.05	595228.75	663181.05	32°49'22.762"N	104°09'28.436"W	0.00	
3500.00†	6.165	225.000	3495.98	80.11	-56.65	-56.65	595221.16	663173.46	32°49'22.687"N	104°09'28.525"W	0.00	
3600.00†	6.165	225.000	3595.41	90.85	-64.24	-64.24	595213.56	663165.86	32°49'22.612"N	104°09'28.614"W	0.00	
3700.00†	6.165	225.000	3694.83	101.59	-71.83	-71.83	595205.97	663158.27	32°49'22.537"N	104°09'28.704"W	0.00	
3800.00†	6.165	225.000	3794.25	112.33	-79.43	-79.43	595198.38	663150.68	32°49'22.462"N	104°09'28.793"W	0.00	
3900.00†	6.165	225.000	3893.67	123.07	-87.02	-87.02	595190.79	663143.09	32°49'22.387"N	104°09'28.882"W	0.00	
4000.00†	6.165	225.000	3993.09	133.80	-94.61	-94.61	595183.19	663135.49	32°49'22.312"N	104°09'28.971"W	0.00	
4100.00†	6.165	225.000	4092.51	144.54	-102.21	-102.21	595175.60	663127.90	32°49'22.237"N	104°09'29.060"W	0.00	
4200.00†	6.165	225.000	4191.94	155.28	-109.80	-109.80	595168.01	663120.31	32°49'22.162"N	104°09'29.149"W	0.00	
4300.00†	6.165	225.000	4291.36	166.02	-117.39	-117.39	595160.42	663112.72	32°49'22.087"N	104°09'29.238"W	0.00	



Planned Wellpath Report

Prelim_1

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.4 SHL
Area	Eddy County, NM	Well	No.4
Field	Paddock Blinbry Filed	Wellbore	No.4 PWB
Facility	Maracas 22 State No.4		

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†	6.165	225.000	4390.78	176.76	-124.99	-124.99	595152.82	663105.12	32°49'22.012"N	104°09'29.327"W	0.00	
4500.00†	6.165	225.000	4490.20	187.50	-132.58	-132.58	595145.23	663097.53	32°49'21.937"N	104°09'29.417"W	0.00	
4600.00†	6.165	225.000	4589.62	198.24	-140.17	-140.17	595137.64	663089.94	32°49'21.862"N	104°09'29.506"W	0.00	
4700.00†	6.165	225.000	4689.04	208.97	-147.77	-147.77	595130.05	663082.35	32°49'21.787"N	104°09'29.595"W	0.00	
4800.00†	6.165	225.000	4788.47	219.71	-155.36	-155.36	595122.45	663074.75	32°49'21.712"N	104°09'29.684"W	0.00	
4900.00†	6.165	225.000	4887.89	230.45	-162.95	-162.95	595114.86	663067.16	32°49'21.637"N	104°09'29.773"W	0.00	
5000.00†	6.165	225.000	4987.31	241.19	-170.55	-170.55	595107.27	663059.57	32°49'21.562"N	104°09'29.862"W	0.00	
5012.76	6.165	225.000	5000.00†	242.56	-171.52	-171.52	595106.30	663058.60	32°49'21.552"N	104°09'29.874"W	0.00	Maracas 22 State No.4 PBHL

HOLE & CASING SECTIONS Ref Wellbore: No.4 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	5012.76	4612.76	400.00	5000.00	0.00	0.00	-171.52	-171.52

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.4 PBHL	5012.76	5000.00	-171.52	-171.52	595106.30	663058.60	32°49'21.552"N	104°09'29.874"W	point

SURVEY PROGRAM Ref Wellbore: No.4 PWB Ref Wellpath: Prelim_1				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	5012.76	NaviTrak (Standard)		No.4 PWB