

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 10, 2010

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 70-015-38428	Pool Code 96210	Pool Name Empire; Glorieta-Yeso
Property Code 38427	Property Name MARACAS "22" STATE	Well Number 5
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3706'

Surface Location:

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	22	17 S	28 E		345	NORTH	160	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
A	22	17 S	28 E		990	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			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

SURFACE LOCATION Lat - N 32°49'34.512" Long - W 104°09'20.437" NMSPCE- N 664369.6 E 595909.3 (NAD-83) PROPOSED BOTTOM HOLE LOCATION Lat - N 32°49'28.121" Long - W 104°09'22.286" NMSPCE- N 663723.54 E 595752.60 (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.	
	GARY L. JONES OCTOBER 10 2010 Date Surveyed <i>[Signature]</i> Signature & Seal of Professional Surveyor W.S. No. 23448	
	Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23448	

Mud, Casing, Cementing, and BOP Attachment
Maracas 22 State No. 5
 Cimarex Energy Co. of Colorado
 Unit A, 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 345 FNL & 160 FEL
 BHL 990 FNL & 330 FEL

Elevation above sea level: 3706' GR

Proposed drilling depth: 5077'

Proposed Drilling Plan: After setting surface casing, drill to KOP 2000 with 7½" bit and kick off to drill directional to TD of 5077 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 5077'	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 5077'	New 5½"	17#	LTC	J-55

Cementing Plan:

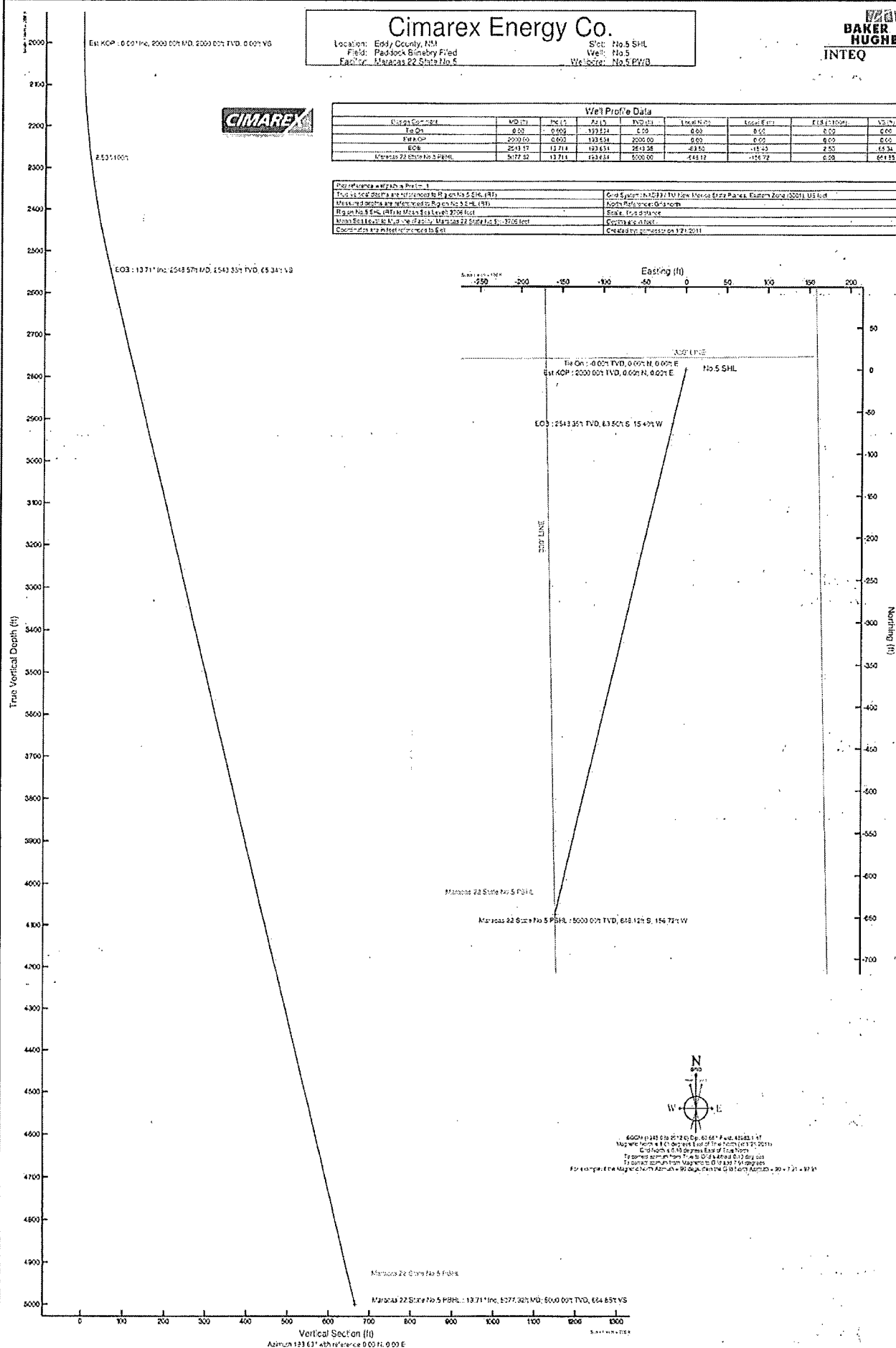
Surface Lead: 600 sx Class H
 Tail: 500 sx Class H
 TOC Surface

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 5077 and cementing to surface.

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

**BAKER
HUGHES**
INTEQ

[illegible][illegible]



Planned Wellpath Report

Prelim_1
Page 1 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.5 SHL
Area	Eddy County, NM	Well	No.5
Field	Paddock Blinebry Filed	Wellbore	No.5 PWB
Facility	Maracas 22 State No.5		

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	0.999913	Report Generated	1/21/2011 at 4:29:35 PM
Convergence at slot	0.10° East	Database/Source file	WA Midland/No.5_PWB.xml

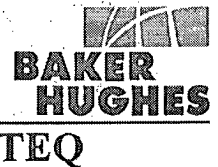
WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W
Facility Reference Pt			595909.30	664369.60	32°49'34.511"N	104°09'20.437"W
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.5 SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.5 SHL (RT) to Mean Sea Level	3706.00ft
Vertical Reference Pt	Rig on No.5 SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.5 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	193.63°



Planned Wellpath Report

Prelim_1
Page 2 of 3



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.5 SHL
Area	Eddy County, NM	Well	No.5
Field	Paddock Blinebry Filed	Wellbore	No.5 PWB
Facility	Maracas 22 State No.5		

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	193.634	0.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00	Tie On	
100.00†	0.000	193.634	100.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
200.00†	0.000	193.634	200.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
300.00†	0.000	193.634	300.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
400.00†	0.000	193.634	400.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
500.00†	0.000	193.634	500.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
600.00†	0.000	193.634	600.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
700.00†	0.000	193.634	700.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
800.00†	0.000	193.634	800.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
900.00†	0.000	193.634	900.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1000.00†	0.000	193.634	1000.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1100.00†	0.000	193.634	1100.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1200.00†	0.000	193.634	1200.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1300.00†	0.000	193.634	1300.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1400.00†	0.000	193.634	1400.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1500.00†	0.000	193.634	1500.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1600.00†	0.000	193.634	1600.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1700.00†	0.000	193.634	1700.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1800.00†	0.000	193.634	1800.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
1900.00†	0.000	193.634	1900.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00		
2000.00	0.000	193.634	2000.00	0.00	0.00	0.00	595909.30	664369.60	32°49'34.511"N	104°09'20.437"W	0.00	Est KOP	
2100.00†	2.500	193.634	2099.97	2.18	-2.12	-0.51	595908.79	664367.48	32°49'34.490"N	104°09'20.443"W	2.50		
2200.00†	5.000	193.634	2199.75	8.72	-8.48	-2.06	595907.25	664361.13	32°49'34.428"N	104°09'20.461"W	2.50		
2300.00†	7.500	193.634	2299.14	19.61	-19.05	-4.62	595904.68	664350.55	32°49'34.323"N	104°09'20.492"W	2.50		
2400.00†	10.000	193.634	2397.97	34.82	-33.84	-8.21	595901.10	664335.77	32°49'34.177"N	104°09'20.534"W	2.50		
2500.00†	12.500	193.634	2496.04	54.33	-52.79	-12.81	595896.50	664316.81	32°49'33.989"N	104°09'20.588"W	2.50		
2548.57	13.714	193.634	2543.35	65.34	-63.50	-15.40	595893.90	664306.11	32°49'33.883"N	104°09'20.619"W	2.50	EOB	
2600.00†	13.714	193.634	2593.31	77.53	-75.35	-18.28	595891.03	664294.26	32°49'33.766"N	104°09'20.653"W	0.00		
2700.00†	13.714	193.634	2690.46	101.24	-98.39	-23.86	595885.44	664271.22	32°49'33.538"N	104°09'20.719"W	0.00		
2800.00†	13.714	193.634	2787.61	124.95	-121.43	-29.45	595879.85	664248.18	32°49'33.310"N	104°09'20.785"W	0.00		
2900.00†	13.714	193.634	2884.76	148.66	-144.47	-35.04	595874.27	664225.15	32°49'33.083"N	104°09'20.851"W	0.00		
3000.00†	13.714	193.634	2981.91	172.36	-167.51	-40.63	595868.68	664202.11	32°49'32.855"N	104°09'20.917"W	0.00		
3100.00†	13.714	193.634	3079.06	196.07	-190.55	-46.22	595863.09	664179.07	32°49'32.627"N	104°09'20.983"W	0.00		
3200.00†	13.714	193.634	3176.20	219.78	-213.59	-51.81	595857.50	664156.03	32°49'32.399"N	104°09'21.048"W	0.00		
3300.00†	13.714	193.634	3273.35	243.49	-236.63	-57.39	595851.91	664133.00	32°49'32.171"N	104°09'21.114"W	0.00		
3400.00†	13.714	193.634	3370.50	267.20	-259.67	-62.98	595846.33	664109.96	32°49'31.943"N	104°09'21.180"W	0.00		
3500.00†	13.714	193.634	3467.65	290.90	-282.71	-68.57	595840.74	664086.92	32°49'31.715"N	104°09'21.246"W	0.00		
3600.00†	13.714	193.634	3564.80	314.61	-305.75	-74.16	595835.15	664063.88	32°49'31.488"N	104°09'21.312"W	0.00		
3700.00†	13.714	193.634	3661.95	338.32	-328.79	-79.75	595829.56	664040.84	32°49'31.260"N	104°09'21.378"W	0.00		
3800.00†	13.714	193.634	3759.10	362.03	-351.83	-85.34	595823.97	664017.81	32°49'31.032"N	104°09'21.444"W	0.00		
3900.00†	13.714	193.634	3856.25	385.74	-374.87	-90.92	595818.39	663994.77	32°49'30.804"N	104°09'21.510"W	0.00		
4000.00†	13.714	193.634	3953.40	409.44	-397.91	-96.51	595812.80	663971.73	32°49'30.576"N	104°09'21.576"W	0.00		
4100.00†	13.714	193.634	4050.55	433.15	-420.95	-102.10	595807.21	663948.69	32°49'30.348"N	104°09'21.642"W	0.00		
4200.00†	13.714	193.634	4147.69	456.86	-443.99	-107.69	595801.62	663925.65	32°49'30.120"N	104°09'21.708"W	0.00		
4300.00†	13.714	193.634	4244.84	480.57	-467.03	-113.28	595796.04	663902.62	32°49'29.892"N	104°09'21.774"W	0.00		



Planned Wellpath Report

Prelim_1

Page 3 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No.5 SHL
Area	Eddy County, NM	Well	No.5
Field	Paddock Blinebry Filed	Wellbore	No.5 PWB
Facility	Maracas 22 State No.5		

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†	13.714	193.634	4341.99	504.28	-490.07	-118.87	595790.45	663879.58	32°49'29.665"N	104°09'21.840"W	0.00	
4500.00†	13.714	193.634	4439.14	527.98	-513.11	-124.45	595784.86	663856.54	32°49'29.437"N	104°09'21.906"W	0.00	
4600.00†	13.714	193.634	4536.29	551.69	-536.15	-130.04	595779.27	663833.50	32°49'29.209"N	104°09'21.972"W	0.00	
4700.00†	13.714	193.634	4633.44	575.40	-559.19	-135.63	595773.68	663810.47	32°49'28.981"N	104°09'22.038"W	0.00	
4800.00†	13.714	193.634	4730.59	599.11	-582.23	-141.22	595768.10	663787.43	32°49'28.753"N	104°09'22.104"W	0.00	
4900.00†	13.714	193.634	4827.74	622.82	-605.27	-146.81	595762.51	663764.39	32°49'28.525"N	104°09'22.169"W	0.00	
5000.00†	13.714	193.634	4924.89	646.52	-628.31	-152.40	595756.92	663741.35	32°49'28.297"N	104°09'22.235"W	0.00	
5077.32	13.714	193.634	5000.00 ¹	664.85	-646.12	-156.72	595752.60	663723.54	32°49'28.121"N	104°09'22.286"W	-0.00	Maracas 22 State No.5 PBHL

HOLE & CASING SECTIONS Ref Wellbore: No.5 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	5077.32	4677.32	400.00	5000.00	0.00	0.00	-646.12	-156.72

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.5 PBHL	5077.32	5000.00	-646.12	-156.72	595752.60	663723.54	32°49'28.121"N	104°09'22.286"W	point

SURVEY PROGRAM Ref Wellbore: No.5 PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	5077.32	NaviTrak (Standard)		No.5 PWB