

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

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 30-015-38441	Pool Code 96210	Pool Name Empire; Glorieta-Yeso
Property Code 38427	Property Name MARACAS "22" STATE	Well Number 10
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3591'

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		1905	NORTH	765	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	330	EAST	EDDY

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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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

BOTTOM HOLE LOCATION Lat - N 32°49'21.593" Long - W 104°09'22.14" NMSPCE- N 663063.8 E 595766.2 (NAD-83)	SURFACE LOCATION Lat - N 32°49'19.045" Long - W 104°09'27.184" NMSPCE- N 662805.6 E 595336.2 (NAD-83)	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> 2/2/2011 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 Signature & Seal of Professional Surveyor W.O. No. 23453		Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23453

Mud, Casing, Cementing, and BOP Attachment
Maracas 22 State No. 10
 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 1905 FNL & 765 FEL
 BHL 1650 FNL & 330 FEL

Elevation above sea level: 3591' GR

Proposed drilling depth: 5028'

Proposed Drilling Plan: After setting surface casing, drill to KOP500 with 7½" bit and kick off to drill directional to TD of 5028 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 5028'	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	7⅞"	0' to 5028'	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 5028 and cementing to surface.

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



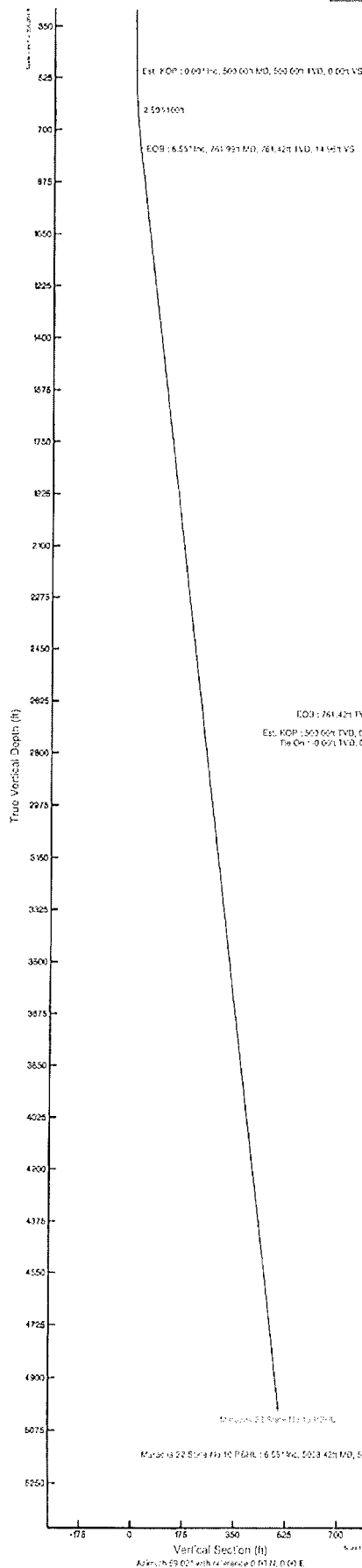
Cimarex Energy Co.

Location: Eddy County, NM
Field: Redlock Blinberry Field
Facility: Maraca 22 State No. 10

Sol: No. 10 SHL
Well: No. 10
Wellbore: No. 10 PWB

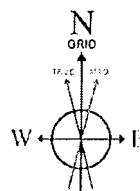
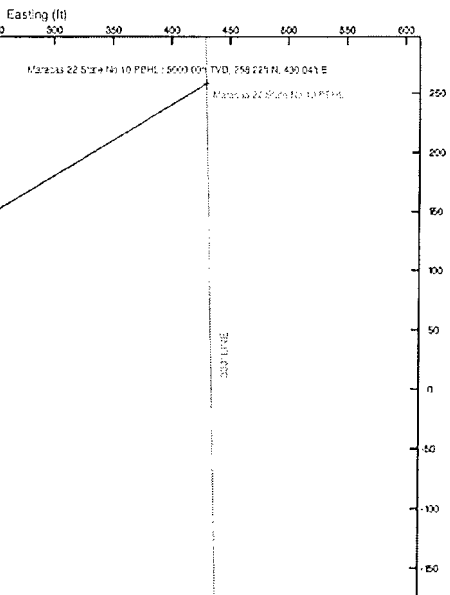


INTEQ



Well Profile Data							
Depth (m)	MD (m)	AS (m)	TVD (m)	Loss (m)	Loss (m)	Loss (m)	VS (m)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	500.00	500.00	500.00	0.00	0.00	0.00	0.00
761.93	761.93	761.93	761.42	7.79	12.52	2.50	14.50
5003.42	5003.42	5003.42	5003.00	255.32	433.04	0.00	501.61

Easting (ft)		North (ft)	
0		0	
50		50	
100		100	
150		150	
200		200	
250		250	
300		300	
350		350	
400		400	
450		450	
500		500	
550		550	
600		600	
650		650	



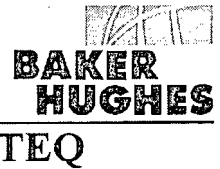
BGGM (1945.0 to 2012.0) D.p: 60.66° Field: 48931.2 nT
Magnetic North is 8.01 degrees East of True North (at 1/21/2011)
Grid North is 0.10 degrees East of True North
To correct azimuth from True to Grid subtract 0.10 degrees
To correct azimuth from Magnetic to Grid add 7.92 degrees
For example: if the Magnetic North Azimuth = 90 + 7.92 = 97.92



Planned Wellpath Report

Prelim_1

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REFERENCE WELL IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.10 SHL
Area	Eddy County, NM	Well	No.10
Field	Paddock Blinbry Field	Wellbore	No.10 PWB
Facility	Maracas 22 State No.10		

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	1/28/2011 at 1:02:34 PM
Convergence at slot	0.10° East	Database/Source file	WA Midland/No.10_PWB.xml

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W
Facility Reference Pt			595336.20	662805.60	32°49'19.045"N	104°09'27.184"W
Field Reference Pt			594612.60	661200.10	32°49'03.170"N	104°09'35.695"W

WELL DATA INFORMATION			
Calculation method	Minimum curvature	Rig on No.10 SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.10 SHL (RT) to Mean Sea Level	3591.00ft
Vertical Reference Pt	Rig on No.10 SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.10 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	59.02°



Planned Wellpath Report

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INTEQ

REFERENCE WELL AND IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.10 SHL
Area	Eddy County, NM	Well	No.10
Field	Paddock Blinbry Field	Wellbore	No.10 PWB
Facility	Maracas 22 State No.10		

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	59.017	0.00	0.00	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W	0.00	Tie On
100.00†	0.000	59.017	100.00	0.00	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W	0.00	
200.00†	0.000	59.017	200.00	0.00	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W	0.00	
300.00†	0.000	59.017	300.00	0.00	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W	0.00	
400.00†	0.000	59.017	400.00	0.00	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W	0.00	
500.00	0.000	59.017	500.00	0.00	0.00	0.00	595336.20	662805.60	32°49'19.045"N	104°09'27.184"W	0.00	Est. KOP
600.00†	2.500	59.017	599.97	2.18	1.12	1.87	595338.07	662806.72	32°49'19.056"N	104°09'27.162"W	2.50	
700.00†	5.000	59.017	699.75	8.72	4.49	7.48	595343.68	662810.09	32°49'19.089"N	104°09'27.097"W	2.50	
761.99	6.550	59.017	761.42	14.96	7.70	12.82	595349.02	662813.30	32°49'19.121"N	104°09'27.034"W	2.50	EOB
800.00†	6.550	59.017	799.18	19.29	9.93	16.54	595352.74	662815.53	32°49'19.143"N	104°09'26.990"W	0.00	
900.00†	6.550	59.017	898.53	30.70	15.80	26.32	595362.52	662821.40	32°49'19.201"N	104°09'26.876"W	0.00	
1000.00†	6.550	59.017	997.88	42.11	21.68	36.10	595372.30	662827.27	32°49'19.259"N	104°09'26.761"W	0.00	
1100.00†	6.550	59.017	1097.22	53.51	27.55	45.88	595382.07	662833.15	32°49'19.317"N	104°09'26.646"W	0.00	
1200.00†	6.550	59.017	1196.57	64.92	33.42	55.66	595391.85	662839.02	32°49'19.375"N	104°09'26.531"W	0.00	
1300.00†	6.550	59.017	1295.92	76.33	39.29	65.44	595401.63	662844.89	32°49'19.433"N	104°09'26.417"W	0.00	
1400.00†	6.550	59.017	1395.27	87.73	45.16	75.22	595411.41	662850.76	32°49'19.491"N	104°09'26.302"W	0.00	
1500.00†	6.550	59.017	1494.61	99.14	51.04	84.99	595421.19	662856.63	32°49'19.549"N	104°09'26.187"W	0.00	
1600.00†	6.550	59.017	1593.96	110.55	56.91	94.77	595430.96	662862.50	32°49'19.606"N	104°09'26.073"W	0.00	
1700.00†	6.550	59.017	1693.31	121.95	62.78	104.55	595440.74	662868.37	32°49'19.664"N	104°09'25.958"W	0.00	
1800.00†	6.550	59.017	1792.65	133.36	68.65	114.33	595450.52	662874.25	32°49'19.722"N	104°09'25.843"W	0.00	
1900.00†	6.550	59.017	1892.00	144.77	74.52	124.11	595460.30	662880.12	32°49'19.780"N	104°09'25.728"W	0.00	
2000.00†	6.550	59.017	1991.35	156.17	80.40	133.89	595470.08	662885.99	32°49'19.838"N	104°09'25.614"W	0.00	
2100.00†	6.550	59.017	2090.70	167.58	86.27	143.67	595479.86	662891.86	32°49'19.896"N	104°09'25.499"W	0.00	
2200.00†	6.550	59.017	2190.04	178.99	92.14	153.45	595489.63	662897.73	32°49'19.954"N	104°09'25.384"W	0.00	
2300.00†	6.550	59.017	2289.39	190.39	98.01	163.23	595499.41	662903.60	32°49'20.012"N	104°09'25.270"W	0.00	
2400.00†	6.550	59.017	2388.74	201.80	103.88	173.01	595509.19	662909.47	32°49'20.070"N	104°09'25.155"W	0.00	
2500.00†	6.550	59.017	2488.09	213.21	109.76	182.78	595518.97	662915.35	32°49'20.128"N	104°09'25.040"W	0.00	
2600.00†	6.550	59.017	2587.43	224.61	115.63	192.56	595528.75	662921.22	32°49'20.186"N	104°09'24.926"W	0.00	
2700.00†	6.550	59.017	2686.78	236.02	121.50	202.34	595538.52	662927.09	32°49'20.244"N	104°09'24.811"W	0.00	
2800.00†	6.550	59.017	2786.13	247.42	127.37	212.12	595548.30	662932.96	32°49'20.302"N	104°09'24.696"W	0.00	
2900.00†	6.550	59.017	2885.48	258.83	133.24	221.90	595558.08	662938.83	32°49'20.360"N	104°09'24.581"W	0.00	
3000.00†	6.550	59.017	2984.82	270.24	139.12	231.68	595567.86	662944.70	32°49'20.418"N	104°09'24.467"W	0.00	
3100.00†	6.550	59.017	3084.17	281.64	144.99	241.46	595577.64	662950.57	32°49'20.476"N	104°09'24.352"W	0.00	
3200.00†	6.550	59.017	3183.52	293.05	150.86	251.24	595587.41	662956.45	32°49'20.533"N	104°09'24.237"W	0.00	
3300.00†	6.550	59.017	3282.86	304.46	156.73	261.02	595597.19	662962.32	32°49'20.591"N	104°09'24.123"W	0.00	
3400.00†	6.550	59.017	3382.21	315.86	162.60	270.80	595606.97	662968.19	32°49'20.649"N	104°09'24.008"W	0.00	
3500.00†	6.550	59.017	3481.56	327.27	168.48	280.57	595616.75	662974.06	32°49'20.707"N	104°09'23.893"W	0.00	
3600.00†	6.550	59.017	3580.91	338.68	174.35	290.35	595626.53	662979.93	32°49'20.765"N	104°09'23.778"W	0.00	
3700.00†	6.550	59.017	3680.25	350.08	180.22	300.13	595636.31	662985.80	32°49'20.823"N	104°09'23.664"W	0.00	
3800.00†	6.550	59.017	3779.60	361.49	186.09	309.91	595646.08	662991.67	32°49'20.881"N	104°09'23.549"W	0.00	
3900.00†	6.550	59.017	3878.95	372.90	191.96	319.69	595655.86	662997.55	32°49'20.939"N	104°09'23.434"W	0.00	
4000.00†	6.550	59.017	3978.30	384.30	197.83	329.47	595665.64	663003.42	32°49'20.997"N	104°09'23.320"W	0.00	
4100.00†	6.550	59.017	4077.64	395.71	203.71	339.25	595675.42	663009.29	32°49'21.055"N	104°09'23.205"W	0.00	
4200.00†	6.550	59.017	4176.99	407.12	209.58	349.03	595685.20	663015.16	32°49'21.113"N	104°09'23.090"W	0.00	
4300.00†	6.550	59.017	4276.34	418.52	215.45	358.81	595694.97	663021.03	32°49'21.171"N	104°09'22.976"W	0.00	



Planned Wellpath Report

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REFERENCE WELL INFORMATION			
Operator	Cimarex Energy Co.	Slot	No.10 SHL
Area	Eddy County, NM	Well	No.10
Field	Paddock Blinberry Field	Wellbore	No.10 PWB
Facility	Maracas 22 State No.10		

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†	6.550	59.017	4375.69	429.93	221.32	368.59	595704.75	663026.90	32°49'21.229"N	104°09'22.861"W	0.00	
4500.00†	6.550	59.017	4475.03	441.34	227.19	378.36	595714.53	663032.77	32°49'21.287"N	104°09'22.746"W	0.00	
4600.00†	6.550	59.017	4574.38	452.74	233.07	388.14	595724.31	663038.65	32°49'21.345"N	104°09'22.631"W	0.00	
4700.00†	6.550	59.017	4673.73	464.15	238.94	397.92	595734.09	663044.52	32°49'21.403"N	104°09'22.517"W	0.00	
4800.00†	6.550	59.017	4773.07	475.56	244.81	407.70	595743.87	663050.39	32°49'21.460"N	104°09'22.402"W	0.00	
4900.00†	6.550	59.017	4872.42	486.96	250.68	417.48	595753.64	663056.26	32°49'21.518"N	104°09'22.287"W	0.00	
5000.00†	6.550	59.017	4971.77	498.37	256.55	427.26	595763.42	663062.13	32°49'21.576"N	104°09'22.173"W	0.00	
5028.42	6.550	59.017	5000.00†	501.61	258.22	430.04	595766.20	663063.80	32°49'21.593"N	104°09'22.140"W	0.00	Maracas 22 State No.10 PBHL

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.10 PBHL	5028.42	5000.00	258.22	430.04	595766.20	663063.80	32°49'21.593"N	104°09'22.140"W	point

SURVEY PROGRAM Ref Wellbore: No.10 PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	5028.42	NaviTrak (Standard)		No.10 PWB