

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 16, 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 70-015-38426	Pool Code 96210	Pool Name Empire; Glorieta-Yeso
Property Code 38427	Property Name MARACAS "22" STATE	Well Number 3
GRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3595'

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		1910	NORTH	2185	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		1650	NORTH	2310	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

PROPOSED BOTTOM HOLE LOCATION Lat - N 32°49'21.478" Long - W 104°09'45.340" NMSPCE- N 663048.95 E 593786.57 (NAD-83) SURFACE LOCATION Lat - N 32°49'18.914" Long - W 104°09'43.816" NMSPCE- N 662790.0 E 593917.0 (NAD-83) B.O. B.H. S.L. 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 undivided 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 28, 2010 Date Surveyed Signature & Seal of Professional Surveyor W.C. Jones Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23446
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Mud, Casing, Cementing, and BOP Attachment
Maracas 22 State No. 3
 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 1910 FNL & 2185 FEL
 BHL 1650 FNL & 2310 FEL

Elevation above sea level: 3595' GR

Proposed drilling depth: 5015'

Proposed Drilling Plan: After setting surface casing, drill to KOP 2100 with 7 $\frac{7}{8}$ " bit and kick off to drill directional to TD of 5015 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 5000'	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 $\frac{5}{8}$ "	24#	STC	J-55
Production	7 $\frac{7}{8}$ "	0' to 5015'	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 $\frac{5}{8}$ " casing at 400 and cementing to surface. Hydrocarbon zones will be protected by setting 5 $\frac{1}{2}$ " casing at 5015 and cementing to surface.

Collapse Factor
 1.125

Burst Factor
 1.125

Tension Factor
 1.6

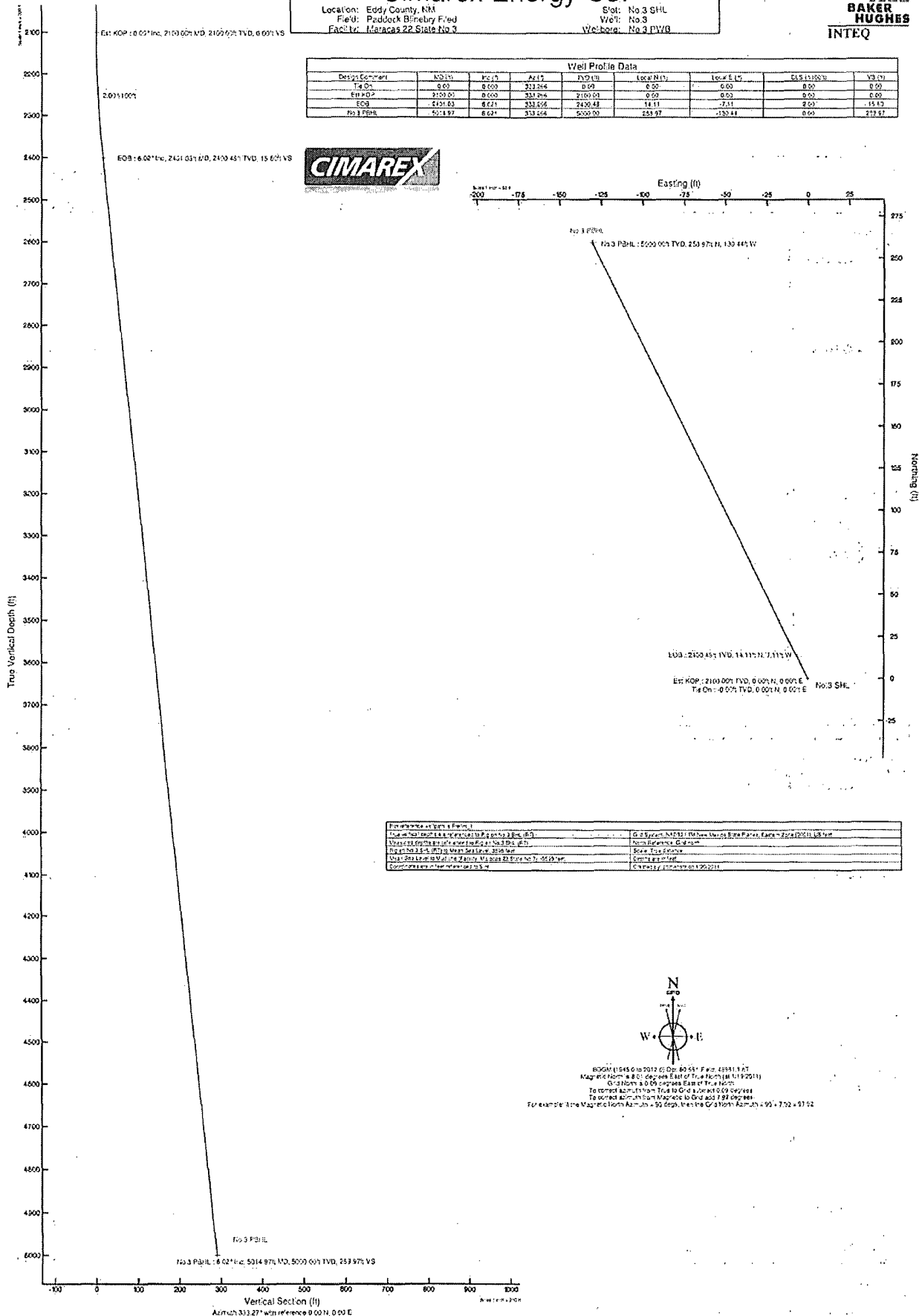
Cimarex Energy Co.

Location: Eddy County, NM
Field: Paddock Blinbury Field
Facility: Maracas 22 State No. 3

Slot: No. 3 SHL
Well: No. 3
Wellbore: No. 3 PWB

**BAKER
HUGHES**
INTEQ

Well Profile Data								
Design Comment	KOB (ft)	POL (ft)	ASL (ft)	TVL (ft)	Local N (ft)	Local E (ft)	ELS (ft) (SSV)	VS (ft)
Td On	0.00	0.00	313.266	0.00	0.00	0.00	0.00	0.00
Est KOP	2100.00	0.00	313.266	2100.00	0.00	0.00	0.00	0.00
EOB	2101.63	0.01	313.266	2430.48	14.11	-7.11	0.00	-15.12
No. 3 PWB	5014.97	0.02	313.266	5000.00	253.97	-130.44	0.00	212.67



From the wellbore to the surface	G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E
From the wellbore to the surface	G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E
From the wellbore to the surface	G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E
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From the wellbore to the surface	G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E
From the wellbore to the surface	G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E
From the wellbore to the surface	G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E



800M (1545.0 to 2012.0) G 2 System, N 2101.63 TVD, 0.00 N, 0.00 E
Mag: 404 North, 0.00 degrees East of True North (at 1/1/2011)
G 2 North, 0.00 degrees East of True North
To correct azimuth from True to G 2, correct 0.00 degrees
To correct azimuth from Magnetic to G 2, add 1.98 degrees
For example: True Magnetic North Azimuth = 90 degrees, then the G 2 North Azimuth = 90 + 1.98 = 91.98



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.3 SHL
Area	Eddy County, NM	Well	No.3
Field	Paddock Blinbry Filed	Wellbore	No.3 PWB
Facility	Maracas 22 State No.3		

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	1/20/2011 at 11:16:00 AM
Convergence at slot	0.09° East	Database/Source file	WA Midland/No.3_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	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W
Facility Reference Pt			593917.00	662790.00	32°49'18.914"N	104°09'43.816"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.3 SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Slot	Rig on No.3 SHL (RT) to Mean Sea Level	3595.00ft
Vertical Reference Pt	Rig on No.3 SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No.3 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	333.27°



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No.3 SHL
Area	Eddy County, NM	Well	No.3
Field	Paddock Blinebry Filed	Wellbore	No.3 PWB
Facility	Maracas 22 State No.3		

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	333.266	0.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	Tie On
100.00†	0.000	333.266	100.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
200.00†	0.000	333.266	200.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
300.00†	0.000	333.266	300.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
400.00†	0.000	333.266	400.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
500.00†	0.000	333.266	500.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
600.00†	0.000	333.266	600.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
700.00†	0.000	333.266	700.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
800.00†	0.000	333.266	800.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
900.00†	0.000	333.266	900.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1000.00†	0.000	333.266	1000.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1100.00†	0.000	333.266	1100.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1200.00†	0.000	333.266	1200.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1300.00†	0.000	333.266	1300.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1400.00†	0.000	333.266	1400.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1500.00†	0.000	333.266	1500.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1600.00†	0.000	333.266	1600.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1700.00†	0.000	333.266	1700.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1800.00†	0.000	333.266	1800.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
1900.00†	0.000	333.266	1900.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
2000.00†	0.000	333.266	2000.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	
2100.00	0.000	333.266	2100.00	0.00	0.00	0.00	593917.00	662790.00	32°49'18.914"N	104°09'43.816"W	0.00	Est KOP
2200.00†	2.000	333.266	2199.98	1.75	1.56	-0.79	593916.22	662791.56	32°49'18.929"N	104°09'43.825"W	2.00	
2300.00†	4.000	333.266	2299.84	6.98	6.23	-3.14	593913.86	662796.23	32°49'18.975"N	104°09'43.853"W	2.00	
2400.00†	6.000	333.266	2399.45	15.69	14.02	-7.06	593909.94	662804.01	32°49'19.052"N	104°09'43.899"W	2.00	
2401.03	6.021	333.266	2400.48	15.80	14.11	-7.11	593909.89	662804.11	32°49'19.053"N	104°09'43.899"W	2.00	EOB
2500.00†	6.021	333.266	2498.90	26.18	23.38	-11.78	593905.22	662813.38	32°49'19.145"N	104°09'43.954"W	0.00	
2600.00†	6.021	333.266	2598.35	36.67	32.75	-16.50	593900.51	662822.75	32°49'19.238"N	104°09'44.009"W	0.00	
2700.00†	6.021	333.266	2697.80	47.16	42.12	-21.21	593895.79	662832.11	32°49'19.331"N	104°09'44.064"W	0.00	
2800.00†	6.021	333.266	2797.25	57.65	51.49	-25.93	593891.07	662841.48	32°49'19.423"N	104°09'44.119"W	0.00	
2900.00†	6.021	333.266	2896.69	68.14	60.85	-30.65	593886.35	662850.85	32°49'19.516"N	104°09'44.174"W	0.00	
3000.00†	6.021	333.266	2996.14	78.63	70.22	-35.37	593881.63	662860.21	32°49'19.609"N	104°09'44.229"W	0.00	
3100.00†	6.021	333.266	3095.59	89.11	79.59	-40.09	593876.92	662869.58	32°49'19.702"N	104°09'44.284"W	0.00	
3200.00†	6.021	333.266	3195.04	99.60	88.96	-44.81	593872.20	662878.95	32°49'19.795"N	104°09'44.340"W	0.00	
3300.00†	6.021	333.266	3294.49	110.09	98.32	-49.52	593867.48	662888.31	32°49'19.887"N	104°09'44.395"W	0.00	
3400.00†	6.021	333.266	3393.94	120.58	107.69	-54.24	593862.76	662897.68	32°49'19.980"N	104°09'44.450"W	0.00	
3500.00†	6.021	333.266	3493.38	131.07	117.06	-58.96	593858.04	662907.05	32°49'20.073"N	104°09'44.505"W	0.00	
3600.00†	6.021	333.266	3592.83	141.56	126.43	-63.68	593853.33	662916.41	32°49'20.166"N	104°09'44.560"W	0.00	
3700.00†	6.021	333.266	3692.28	152.05	135.79	-68.40	593848.61	662925.78	32°49'20.258"N	104°09'44.615"W	0.00	
3800.00†	6.021	333.266	3791.73	162.53	145.16	-73.12	593843.89	662935.15	32°49'20.351"N	104°09'44.670"W	0.00	
3900.00†	6.021	333.266	3891.18	173.02	154.53	-77.83	593839.17	662944.51	32°49'20.444"N	104°09'44.725"W	0.00	
4000.00†	6.021	333.266	3990.63	183.51	163.90	-82.55	593834.46	662953.88	32°49'20.537"N	104°09'44.780"W	0.00	
4100.00†	6.021	333.266	4090.08	194.00	173.26	-87.27	593829.74	662963.25	32°49'20.629"N	104°09'44.836"W	0.00	
4200.00†	6.021	333.266	4189.52	204.49	182.63	-91.99	593825.02	662972.61	32°49'20.722"N	104°09'44.891"W	0.00	
4300.00†	6.021	333.266	4288.97	214.98	192.00	-96.71	593820.30	662981.98	32°49'20.815"N	104°09'44.946"W	0.00	



Planned Wellpath Report

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INTEQ

REFERENCE WELL PATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No.3 SHL
Area	Eddy County, NM	Well	No.3
Field	Paddock Blinbry Filed	Wellbore	No.3 PWB
Facility	Maracas 22 State No.3		

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†	6.021	333.266	4388.42	225.47	201.37	-101.43	593815.58	662991.35	32°49'20.908"N	104°09'45.001"W	0.00	
4500.00†	6.021	333.266	4487.87	235.96	210.73	-106.14	593810.87	663000.71	32°49'21.000"N	104°09'45.056"W	0.00	
4600.00†	6.021	333.266	4587.32	246.44	220.10	-110.86	593806.15	663010.08	32°49'21.093"N	104°09'45.111"W	0.00	
4700.00†	6.021	333.266	4686.77	256.93	229.47	-115.58	593801.43	663019.45	32°49'21.186"N	104°09'45.166"W	0.00	
4800.00†	6.021	333.266	4786.21	267.42	238.84	-120.30	593796.71	663028.81	32°49'21.279"N	104°09'45.221"W	0.00	
4900.00†	6.021	333.266	4885.66	277.91	248.20	-125.02	593791.99	663038.18	32°49'21.371"N	104°09'45.276"W	0.00	
5000.00†	6.021	333.266	4985.11	288.40	257.57	-129.74	593787.28	663047.55	32°49'21.464"N	104°09'45.332"W	0.00	
5014.97	6.021	333.266	5000.00 ¹	289.97	258.97	-130.44	593786.57	663048.95	32°49'21.478"N	104°09'45.340"W	0.00	No.3 PBHL

HOLE & CASING SECTIONS Ref Wellbore: No.3 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	5014.97	4614.97	400.00	5000.00	0.00	0.00	258.97	-130.44

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No.3 PBHL	5014.97	5000.00	258.97	-130.44	593786.57	663048.95	32°49'21.478"N	104°09'45.340"W	point

SURVEY PROGRAM Ref Wellbore: No.3 PWB Ref Wellpath: Prelim_1				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	5014.97	NaviTrak (Standard)		No.3 PWB