

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Urazos 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 October 15, 2009

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 30-015-78222	Pool Code 60660	Pool Name Turkey Track; Bone Spring
Property Code 38289	Property Name PARKWAY "12" STATE COM	Well Number 4
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3392'

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	12	19 S	29 E		330	NORTH	760	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
P	12	19 S	29 E		330	SOUTH	660	EAST	EDDY
Dedicated Acres 160	Joint or Infill	Consolidation Code P	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 Lat - N 32°40'52.82" Long - W 104°01'19.78" NMSPCE- N 611743.0 E 637077.7 (NAD-83) SHL & PP Bone Spring 330 FNL & 760 FEL EOC/Beginning of Prod Interval 515 FNL & 757 FEL BHL/End of Prod Interval 330 FSL & 660 FEL PROPOSED BOTTOM HOLE LOCATION Lat - N 32°40'07.09" Long - W 104°01'18.94" NMSPCE- N 607120.95 E 637162.53 (NAD-83)	BO-9739-0026 BO-7717-0013 LO-2634-0004 V0-4803-0000	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>Zeno Farris</i> 10/5/2010 Signature Date Zeno Farris Printed Name 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. Date Surveyed Signature & Seal of Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS
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Cimarex Energy Co. of Colorado

600 N. Marienfeld St. ♦ Suite 400 ♦ Midland, TX 79701 ♦ (432) 571-7800 ♦ Fax (432) 620-1940
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

October 5, 2010

Oil Conservation Division
District II Office
1301 W. Grand Ave.
Artesia, New Mexico 88210
Attn: Ms. Linda Bratcher

Re: Statewide Rule 118
Hydrogen Sulfide Gas Contingency Plan
Proposed Parkway State 12 State Com No. 4 Well

Dear Ms. Bratcher:

In accordance with NMAC 19.15.3.118 C. (1) governing the determination of the hydrogen sulfide concentration in gaseous mixtures in each of its operations, Cimarex Energy Co. of Colorado does not anticipate that there will be enough H₂S from the surface to the Bone Spring formations to meet the OCD's minimum requirements for the submission of a contingency plan for the drilling and completion of the following test(s):

Parkway 12 State Com No. 4
12-19S-29E
SHL 330 FNL & 760 FEL
BHL 330 FSL & 660 FEL
Eddy County, NM

If anything further is needed regarding this issue, or if you have any questions, please feel free to contact the undersigned at 432-620-1938.

Yours truly,

A handwritten signature in black ink that reads "Zeno Farris".

Zeno Farris
Manager Operations Administration

Mud, Casing, Cementing, and BOP Attachment
Parkway 12 State Com No. 4
Cimarex Energy Co. of Colorado
Unit A, Section 12
T19S-R29E, 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 330 FNL & 760 FEL
BHL 330 FSL & 660 FEL

Elevation above sea level: 3392' GR

Proposed drilling depth: MD 12364' TVD 7950'

Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 250'	8.4 - 8.6	28	NC	FW
0' to 2500'	10.0	30-32	NC	Brine water
0' to 12364'	8.4 - 9.5	30-32	NC	FW, brine

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.

Proposed drilling Plan

Drill 8¾" hole to KOP @ 7630' and drill through curve to TD @ 12364.' Run 5½" 17# P-110 LTC from 0-12364.' Cement to 2300.'

Mud, Casing, Cementing, and BOP Attachment
 Parkway 12 State Com No. 4
 Cimarex Energy Co. of Colorado
 Unit O, Section 15
 T19S-R29E, Eddy County, NM

Casing & Cementing Plan:

String	Hole Size	Depth			Casing OD		Weight	Collar	Grade
Surface	17½"	0'	to	250'	New	13⅝"	48#	STC	H-40
Intermediate	12¼"	0'	to	2500'	New	9⅞"	40#	LTC	J/K-55
Production	8¾"	0'	to	12364'	New	5½"	17#	LTC	P-110

Cementing Plan:

Surface	310 sx Premium Plus + 2% CaCl ₂ (wt 14.8, yld 1.35) TOC Surface
Intermediate	Lead: 150 sx Econocem + 3% Salt + 2% CaCl ₂ + 3 lbm/sk Gilsonite (wt 11.7, yld 2.06) Tail: 550 sks Premium Plus + 1% CaCl ₂ (wt 14.8, yld 1.34) TOC Surface
Production	Lead: 500 sx EconoCem + 5# Gilsonite (wt 11.9, yld 2.48) Tail: 1730 sx Halcem (wt 15.6, yld 1.19) TOC 2300'

Fresh water zones will be protected by setting 13⅝" casing at 250' and cementing to surface. Hydrocarbon zones will be protected by setting 9⅞" casing at 2500' and cementing to surface, and by setting 5½" casing at 12364' and cementing to 2300.'

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

Pressure control Equipment:

Exhibit "E". A 13⅝" 5000 PSI working pressure BOP tested to 3000 psi consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head as needed. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be nipped up and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling. From the base of the 13⅝" casing through the running of production casing, the well will be equipped with a 5000 psi BOP system tested to 3000 psi.

BOPS will be tested by an independent service company to 250 psi low and 3000 psi high. Hydril will be tested to 250 psi low and 1500 psi high.

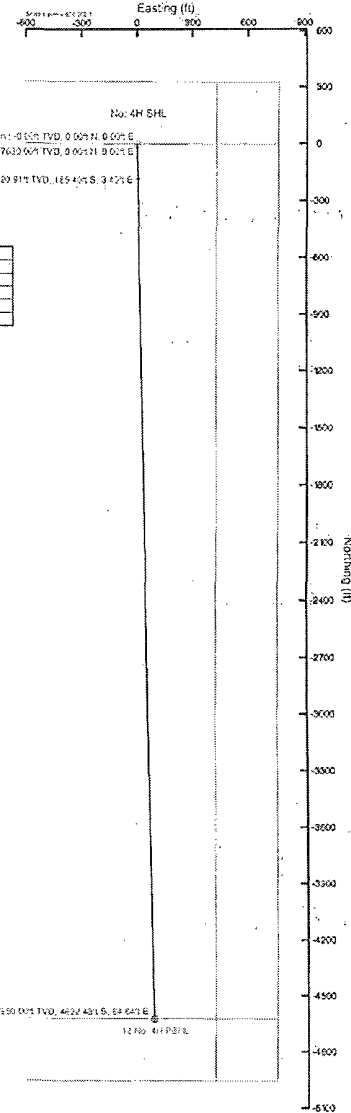
Cimarex Energy Co.

Location: Eddy County, NM
Field: Parkway
Facility: Parkway 12 State Com No. 4H

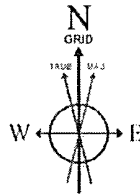
Sect: No. 4H SHL
Well: No. 4H
Wellbore: No. 4H PWB

Well Profile Data

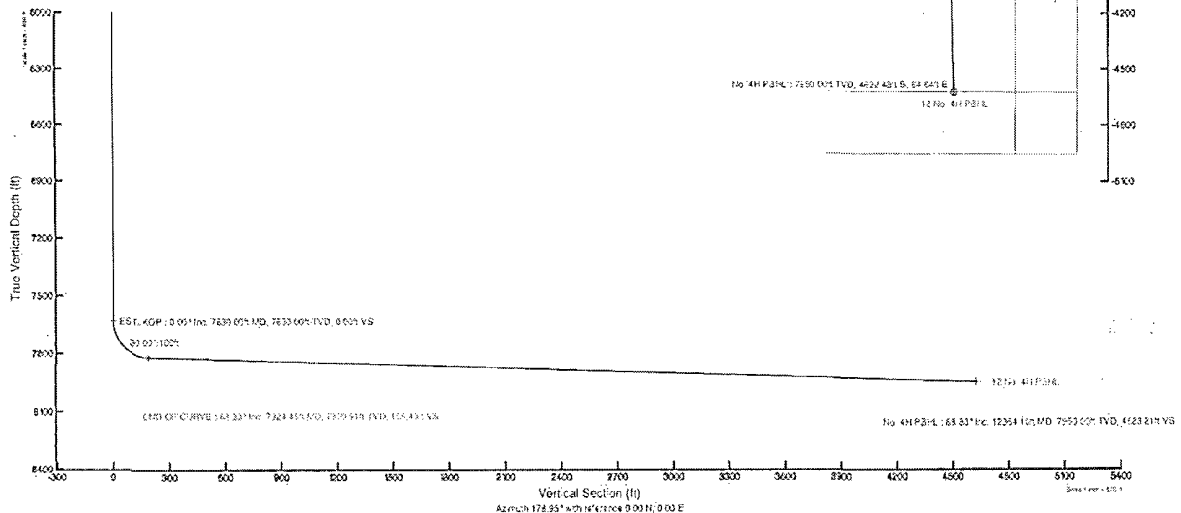
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (1/100ft)	VS (ft)
Tie On	0.00	0.000	178.949	0.00	0.00	0.00	0.00	0.00
EST. KOP	7630.00	0.000	178.949	7630.00	0.00	0.00	0.00	0.00
END OF CURVE	7924.45	88.334	178.949	7820.91	-185.40	3.40	30.00	185.43
No. 4H PBHL	12364.10	88.334	178.949	7950.00	-4622.43	84.84	0.00	4523.21



Profile was calculated from:	Grid System: NAD83 / NM New Mexico State Plane, Eastern Zone (32N), US feet
True vertical depths are referenced to Region No. 4H SHL (N.B.)	North Reference: BGR North
Measured depths are referenced to Region No. 4H SHL (N.B.)	Scale: True distance
Region No. 4H SHL (N.B.) is Mean Sea Level, 1952 feet	Depth scale in feet
Mean Sea Level is 11.1 ft from Parkway 12 State Com No. 4H - 3222 feet	Created by: Victor Hernandez on 8/20/2010
Coordinates are 9 feet referenced to SL	



BGGM (1945.0 to 2011.0) Dip: 60.57° Field: 48989.7 nT
Magnetic North is 7.97 degrees East of True North (at 8/20/2010)
Grid North is 0.17 degrees East of True North
To correct azimuth from True to Grid subtract 0.17 degrees
To correct azimuth from Magnetic to Grid add 7.80 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.80 = 97.80





Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	Parkway	Wellbore	No. 4H PWB
Facility	Parkway 12 State Com No. 4H		

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	Victor Hernandez
Scale	0.99992	Report Generated	8/20/2010 at 10:22:19 AM
Convergence at slot	0.17° East	Database/Source file	WA_Midland/No_4H_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	637077.70	611743.00	32°40'52.824"N	104°01'19.775"W
Facility Reference Pt			637077.70	611743.00	32°40'52.824"N	104°01'19.775"W
Field Reference Pt			623994.14	604893.77	32°39'45.403"N	104°03'53.063"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 4H SHL (KB) to GL	0.00ft
Horizontal Reference Pt	SL	Rig on No. 4H SHL (KB) to Mean Sea Level	3392.00ft
Vertical Reference Pt	Rig on No. 4H SHL (KB)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 4H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	178.95°



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	Parkway	Wellbore	No. 4H PWB
Facility	Parkway 12 State Com No. 4H		

WELLPATH DATA (51 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	178.949	0.00	0.00	0.00	0.00	637077.70	611743.00	32°40'52.824"N	104°01'19.775"W	0.00	Tie On
7630.00	0.000	178.949	7630.00	0.00	0.00	0.00	637077.70	611743.00	32°40'52.824"N	104°01'19.775"W	0.00	EST. KOP
7730.00†	30.000	178.949	7725.49	25.59	-25.58	0.47	637078.17	611717.42	32°40'52.571"N	104°01'19.770"W	30.00	
7830.00†	60.000	178.949	7795.40	95.49	-95.48	1.75	637079.45	611647.53	32°40'51.879"N	104°01'19.758"W	30.00	
7924.45	88.334	178.949	7820.91	185.43	-185.40	3.40	637081.10	611557.61	32°40'50.989"N	104°01'19.741"W	30.00	END OF CURVE
7930.00†	88.334	178.949	7821.07	190.98	-190.95	3.50	637081.20	611552.06	32°40'50.934"N	104°01'19.740"W	0.00	
8030.00†	88.334	178.949	7823.97	290.94	-290.89	5.34	637083.04	611452.13	32°40'49.945"N	104°01'19.722"W	0.00	
8130.00†	88.334	178.949	7826.88	390.90	-390.83	7.17	637084.87	611352.20	32°40'48.956"N	104°01'19.704"W	0.00	
8230.00†	88.334	178.949	7829.79	490.86	-490.77	9.01	637086.71	611252.27	32°40'47.968"N	104°01'19.686"W	0.00	
8330.00†	88.334	178.949	7832.70	590.82	-590.72	10.84	637088.54	611152.33	32°40'46.979"N	104°01'19.668"W	0.00	
8430.00†	88.334	178.949	7835.61	690.77	-690.66	12.68	637090.37	611052.40	32°40'45.990"N	104°01'19.650"W	0.00	
8530.00†	88.334	178.949	7838.51	790.73	-790.60	14.51	637092.21	610952.47	32°40'45.001"N	104°01'19.632"W	0.00	
8630.00†	88.334	178.949	7841.42	890.69	-890.54	16.34	637094.04	610852.53	32°40'44.012"N	104°01'19.614"W	0.00	
8730.00†	88.334	178.949	7844.33	990.65	-990.48	18.18	637095.88	610752.60	32°40'43.023"N	104°01'19.596"W	0.00	
8830.00†	88.334	178.949	7847.24	1090.60	-1090.42	20.01	637097.71	610652.67	32°40'42.034"N	104°01'19.578"W	0.00	
8930.00†	88.334	178.949	7850.14	1190.56	-1190.36	21.85	637099.55	610552.74	32°40'41.045"N	104°01'19.560"W	0.00	
9030.00†	88.334	178.949	7853.05	1290.52	-1290.30	23.68	637101.38	610452.80	32°40'40.056"N	104°01'19.542"W	0.00	
9130.00†	88.334	178.949	7855.96	1390.48	-1390.24	25.52	637103.21	610352.87	32°40'39.067"N	104°01'19.524"W	0.00	
9230.00†	88.334	178.949	7858.87	1490.43	-1490.18	27.35	637105.05	610252.94	32°40'38.078"N	104°01'19.506"W	0.00	
9330.00†	88.334	178.949	7861.78	1590.39	-1590.12	29.18	637106.88	610153.01	32°40'37.090"N	104°01'19.488"W	0.00	
9430.00†	88.334	178.949	7864.68	1690.35	-1690.07	31.02	637108.72	610053.07	32°40'36.101"N	104°01'19.470"W	0.00	
9530.00†	88.334	178.949	7867.59	1790.31	-1790.01	32.85	637110.55	609953.14	32°40'35.112"N	104°01'19.452"W	0.00	
9630.00†	88.334	178.949	7870.50	1890.27	-1889.95	34.69	637112.38	609853.21	32°40'34.123"N	104°01'19.434"W	0.00	
9730.00†	88.334	178.949	7873.41	1990.22	-1989.89	36.52	637114.22	609753.28	32°40'33.134"N	104°01'19.416"W	0.00	
9830.00†	88.334	178.949	7876.31	2090.18	-2089.83	38.36	637116.05	609653.34	32°40'32.145"N	104°01'19.398"W	0.00	
9930.00†	88.334	178.949	7879.22	2190.14	-2189.77	40.19	637117.89	609553.41	32°40'31.156"N	104°01'19.380"W	0.00	
10030.00†	88.334	178.949	7882.13	2290.10	-2289.71	42.02	637119.72	609453.48	32°40'30.167"N	104°01'19.362"W	0.00	
10130.00†	88.334	178.949	7885.04	2390.05	-2389.65	43.86	637121.55	609353.55	32°40'29.178"N	104°01'19.344"W	0.00	
10230.00†	88.334	178.949	7887.95	2490.01	-2489.59	45.69	637123.39	609253.61	32°40'28.189"N	104°01'19.326"W	0.00	
10330.00†	88.334	178.949	7890.85	2589.97	-2589.53	47.53	637125.22	609153.68	32°40'27.201"N	104°01'19.308"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	Parkway	Wellbore	No. 4H PWB
Facility	Parkway 12 State Com No. 4H		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TYD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10430.00†	88.334	178.949	7893.76	2689.93	-2689.47	49.36	637127.06	609053.75	32°40'26.212"N	104°01'19.290"W	0.00	
10530.00†	88.334	178.949	7896.67	2789.88	-2789.42	51.20	637128.89	608953.81	32°40'25.223"N	104°01'19.272"W	0.00	
10630.00†	88.334	178.949	7899.58	2889.84	-2889.36	53.03	637130.72	608853.88	32°40'24.234"N	104°01'19.254"W	0.00	
10730.00†	88.334	178.949	7902.48	2989.80	-2989.30	54.86	637132.56	608753.95	32°40'23.245"N	104°01'19.236"W	0.00	
10830.00†	88.334	178.949	7905.39	3089.76	-3089.24	56.70	637134.39	608654.02	32°40'22.256"N	104°01'19.218"W	0.00	
10930.00†	88.334	178.949	7908.30	3189.72	-3189.18	58.53	637136.23	608554.08	32°40'21.267"N	104°01'19.199"W	0.00	
11030.00†	88.334	178.949	7911.21	3289.67	-3289.12	60.37	637138.06	608454.15	32°40'20.278"N	104°01'19.181"W	0.00	
11130.00†	88.334	178.949	7914.12	3389.63	-3389.06	62.20	637139.90	608354.22	32°40'19.289"N	104°01'19.163"W	0.00	
11230.00†	88.334	178.949	7917.02	3489.59	-3489.00	64.03	637141.73	608254.29	32°40'18.300"N	104°01'19.145"W	0.00	
11330.00†	88.334	178.949	7919.93	3589.55	-3588.94	65.87	637143.56	608154.35	32°40'17.311"N	104°01'19.127"W	0.00	
11430.00†	88.334	178.949	7922.84	3689.50	-3688.83	67.70	637145.40	608054.42	32°40'16.323"N	104°01'19.109"W	0.00	
11530.00†	88.334	178.949	7925.75	3789.46	-3788.82	69.54	637147.23	607954.49	32°40'15.334"N	104°01'19.091"W	0.00	
11630.00†	88.334	178.949	7928.65	3889.42	-3888.76	71.37	637149.07	607854.56	32°40'14.345"N	104°01'19.073"W	0.00	
11730.00†	88.334	178.949	7931.56	3989.38	-3988.71	73.21	637150.90	607754.62	32°40'13.356"N	104°01'19.055"W	0.00	
11830.00†	88.334	178.949	7934.47	4089.34	-4088.65	75.04	637152.73	607654.69	32°40'12.367"N	104°01'19.037"W	0.00	
11930.00†	88.334	178.949	7937.38	4189.29	-4188.59	76.87	637154.57	607554.76	32°40'11.378"N	104°01'19.019"W	0.00	
12030.00†	88.334	178.949	7940.29	4289.25	-4288.53	78.71	637156.40	607454.82	32°40'10.389"N	104°01'19.001"W	0.00	
12130.00†	88.334	178.949	7943.19	4389.21	-4388.47	80.54	637158.24	607354.89	32°40'09.400"N	104°01'18.983"W	0.00	
12230.00†	88.334	178.949	7946.10	4489.17	-4488.41	82.38	637160.07	607254.96	32°40'08.411"N	104°01'18.965"W	0.00	
12330.00†	88.334	178.949	7949.01	4589.12	-4588.35	84.21	637161.90	607155.03	32°40'07.422"N	104°01'18.947"W	0.00	
12364.10	88.334	178.949	7950.00†	4623.21	-4622.43	84.84	637162.53	607120.95	32°40'07.085"N	104°01'18.941"W	0.00	No. 4H PBHL



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 4H SHL
Area	Eddy County, NM	Well	No. 4H
Field	Parkway	Wellbore	No. 4H PWB
Facility	Parkway 12 State Com No. 4H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) 12 No. 4H PBHL	12364.10	7950.00	-4622.43	84.84	637162.53	607120.95	32°40'07.085"N	104°01'18.941"W	point

SURVEY PROGRAM Ref Wellbore: No. 4H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	12364.10	NaviTrak (Standard)		No. 4H PWB