

Cimarex Energy Co.

Project Eddy County (NM83E)
Site Sec 11 - T19S - R29E
Well Parkway 11 State #1
Wellbore Wellbore #1
Design Plan #1

WELL DETAILS Parkway 11 State #1

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0 0	0 0	611019 70	627862.70	32° 40' 45 921 N	104° 3' 7 618 W
			SHL 1085' FNL / 610 FWL		
			BHL 330' FSL / 660' FWL		



Azimuths to Grid North
Total Correction 7.81
Magnetic Field
Strength 49002.95nT
Dip Angle 60.57°
Date 2010/05/18
Mag. Declination 5.0°

WELLBORE TARGET DETAILS

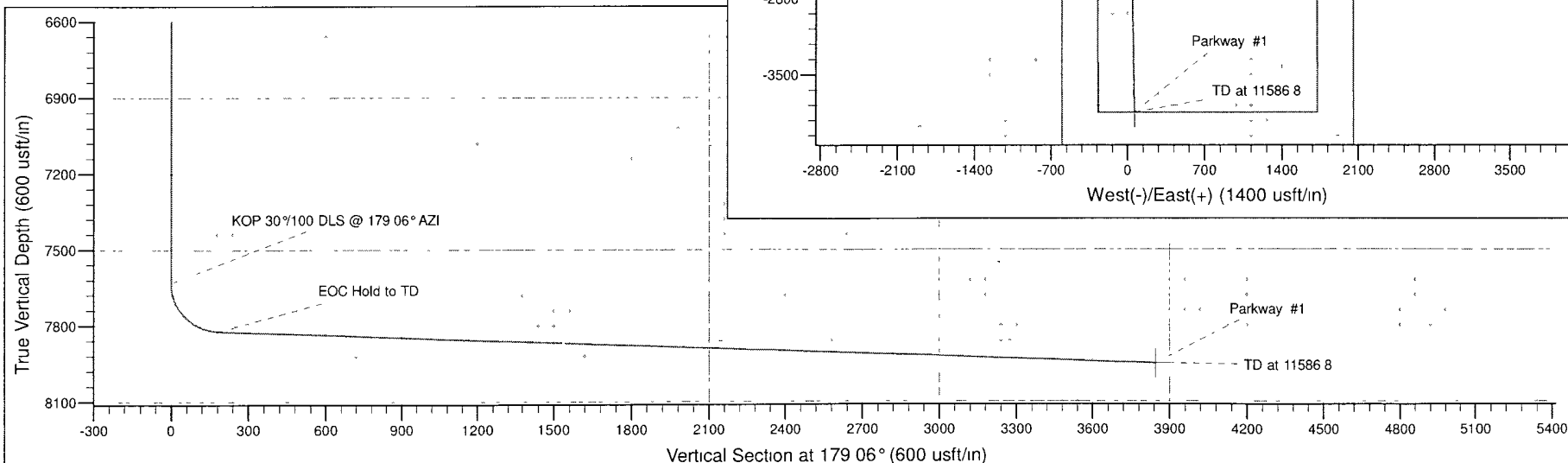
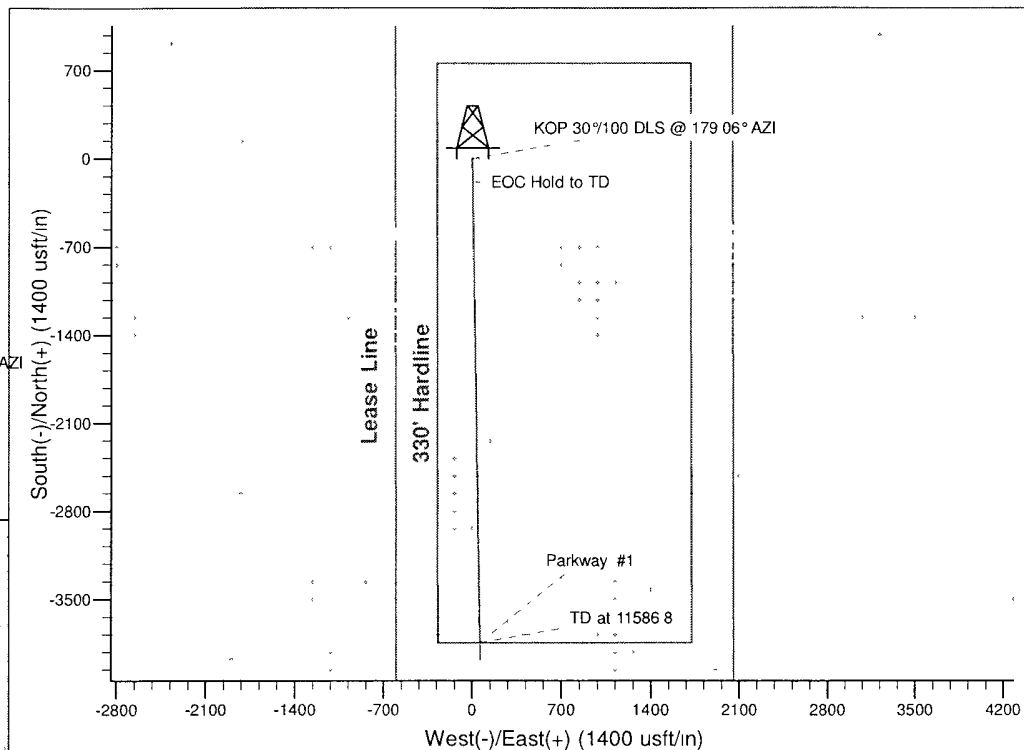
Name	TVD	+N/-S	+E/-W	Northing	Easting	Point
Parkway #1	7950 0	-3845 3	63 3	607174 38	627925 98	

PLAN DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 0	
7630 0	0 00	0 00	7630 0	0 0	0 0	0 00	0 00	0 0	
7923 3	87 98	179 06	7820 9	-184 2	3 0	30 00	179 06	184 3	
11586 8	87 98	179 06	7950 0	-3845 0	63 1	0 00	0 00	3845 5	Parkway #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
7630 0	7630 0	0 00	0 00	0 0	0 0	0 0	0 0	KOP 30°/100 DLS @ 179 06° AZI
7820 9	7923 3	87 98	179 06	-184 2	3 0	184 3	184 3	EOC Hold to TD
7950 0	11586 8	87 98	179 06	-3845 0	63 1	3845 5	3845 5	TD at 11586 8



30-015-38065

Cimarex Energy Co.

Eddy County (NM83E)

Sec 11 - T19S - R29E

Parkway 11 State #1

Wellbore #1

Plan: Plan #1

Standard Planning Report

18 May, 2010

Great White Directional Services

Planning Report

Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Well Parkway 11 State #1
Company:	Cimarex Energy Co	TVD Reference:	WELL @ 0 0usft (Original Well Elev)
Project:	Eddy County (NM83E)	MD Reference:	WELL @ 0 0usft (Original Well Elev)
Site:	Sec 11 - T19S - R29E	North Reference:	Grid
Well:	Parkway 11 State #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County (NM83E)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 11 - T19S - R29E		
Site Position		Northing:	611,019 70 usft
From	Map	Easting:	627,862 70 usft
Position Uncertainty:	0 0 usft	Slot Radius	13-3/16 "
		Latitude:	32° 40' 45 921 N
		Longitude:	104° 3' 7 618 W
		Grid Convergence:	0 15 °

Well	Parkway 11 State #1		
Well Position	+N/-S	0 0 usft	Latitude: 32° 40' 45 921 N
	+E/-W	0 0 usft	Longitude: 104° 3' 7 618 W
Position Uncertainty	0 0 usft	Wellhead Elevation:	Ground Level: 0 0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF200510	2010/05/18	7 96
			Dip Angle (°) 60 57
			Field Strength (nT) 49,003

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth 0 0
Vertical Section:	Depth From (TVD)	+N/-S (usft)	+E/-W (usft)
	0 0	0 0	0 0
			Direction (°) 179 06

Plan Sections									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 00	0 00
7,630 0	0 00	0 00	7,630 0	0 0	0 0	0 00	0 00	0 00	0 00
7,923 3	87 98	179 06	7,820 9	-184 2	3 0	30 00	30 00	0 00	179 06
11,586 8	87 98	179 06	7,950 0	-3,845 0	63 1	0 00	0 00	0 00	0 00 Parkway #1

Great White Directional Services

Planning Report

Database: EDM 5000 1 Single User Db
 Company: Cimarex Energy Co
 Project: Eddy County (NM83E)
 Site: Sec 11 - T19S - R29E
 Well: Parkway 11 State #1
 Wellbore: Wellbore #1
 Design: Plan #1

Local Co-ordinate Reference: Well Parkway 11 State #1
 TVD Reference: WELL @ 0 0usft (Original Well Elev)
 MD Reference: WELL @ 0 0usft (Original Well Elev)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,630 0	0 00	0 00	7,630 0	0 0	0 0	0 0	0 00	0 00	0 00
KOP 30°/100 DLS @ 179.06° AZI									
7,640 0	3 00	179 06	7,640 0	-0 3	0 0	0 3	30 00	30 00	0 00
7,650 0	6 00	179 06	7,650 0	-1 0	0 0	1 0	30 00	30 00	0 00
7,660 0	9 00	179 06	7,659 9	-2 4	0 0	2 4	30 00	30 00	0 00
7,670 0	12 00	179 06	7,669 7	-4 2	0 1	4 2	30 00	30 00	0 00
7,680 0	15 00	179 06	7,679 4	-6 5	0 1	6 5	30 00	30 00	0 00
7,690 0	18 00	179 06	7,689 0	-9 3	0 2	9 3	30 00	30 00	0 00
7,700 0	21 00	179 06	7,698 4	-12 7	0 2	12 7	30 00	30 00	0 00
7,710 0	24 00	179 06	7,707 7	-16 5	0 3	16 5	30 00	30 00	0 00
7,720 0	27 00	179 06	7,716 7	-20 8	0 3	20 8	30 00	30 00	0 00
7,730 0	30 00	179 06	7,725 5	-25 6	0 4	25 6	30 00	30 00	0 00
7,740 0	33 00	179 06	7,734 0	-30 8	0 5	30 8	30 00	30 00	0 00
7,750 0	36 00	179 06	7,742 3	-36 5	0 6	36 5	30 00	30 00	0 00
7,760 0	39 00	179 06	7,750 2	-42 6	0 7	42 6	30 00	30 00	0 00
7,770 0	42 00	179 06	7,757 8	-49 0	0 8	49 1	30 00	30 00	0 00
7,780 0	45 00	179 06	7,765 0	-55 9	0 9	55 9	30 00	30 00	0 00
7,790 0	48 00	179 06	7,771 9	-63 2	1 0	63 2	30 00	30 00	0 00
7,800 0	51 00	179 06	7,778 4	-70 8	1 2	70 8	30 00	30 00	0 00
7,810 0	54 00	179 06	7,784 5	-78 7	1 3	78 7	30 00	30 00	0 00
7,820 0	57 00	179 06	7,790 2	-87 0	1 4	87 0	30 00	30 00	0 00
7,830 0	60 00	179 06	7,795 4	-95 5	1 6	95 5	30 00	30 00	0 00
7,840 0	63 00	179 06	7,800 2	-104 3	1 7	104 3	30 00	30 00	0 00
7,850 0	66 00	179 06	7,804 5	-113 3	1 9	113 3	30 00	30 00	0 00
7,860 0	69 00	179 06	7,808 3	-122 5	2 0	122 5	30 00	30 00	0 00
7,870 0	72 00	179 06	7,811 6	-132 0	2 2	132 0	30 00	30 00	0 00
7,880 0	75 00	179 06	7,814 5	-141 5	2 3	141 6	30 00	30 00	0 00
7,890 0	78 00	179 06	7,816 8	-151 3	2 5	151 3	30 00	30 00	0 00
7,900 0	81 00	179 06	7,818 6	-161 1	2 6	161 1	30 00	30 00	0 00
7,910 0	84 00	179 06	7,819 9	-171 0	2 8	171 0	30 00	30 00	0 00
7,920 0	87 00	179 06	7,820 7	-181 0	3 0	181 0	30 00	30 00	0 00
7,923 3	87 98	179 06	7,820 9	-184 2	3 0	184 3	30 00	30 00	0 00
EOC Hold to TD									
8,000 0	87 98	179 06	7,823 6	-260 9	4 3	260 9	0 00	0 00	0 00
8,100 0	87 98	179 06	7,827 1	-360 8	5 9	360 9	0 00	0 00	0 00
8,200 0	87 98	179 06	7,830 6	-460 8	7 6	460 8	0 00	0 00	0 00
8,300 0	87 98	179 06	7,834 1	-560 7	9 2	560 8	0 00	0 00	0 00
8,400 0	87 98	179 06	7,837 7	-660 6	10 8	660 7	0 00	0 00	0 00
8,500 0	87 98	179 06	7,841 2	-760 5	12 5	760 6	0 00	0 00	0 00
8,600 0	87 98	179 06	7,844 7	-860 5	14 1	860 6	0 00	0 00	0 00
8,700 0	87 98	179 06	7,848 2	-960 4	15 8	960 5	0 00	0 00	0 00
8,800 0	87 98	179 06	7,851 8	-1,060 3	17 4	1,060 4	0 00	0 00	0 00
8,900 0	87 98	179 06	7,855 3	-1,160 2	19 0	1,160 4	0 00	0 00	0 00
9,000 0	87 98	179 06	7,858 8	-1,260 1	20 7	1,260 3	0 00	0 00	0 00
9,100 0	87 98	179 06	7,862 3	-1,360 1	22 3	1,360.3	0 00	0 00	0 00
9,200 0	87 98	179 06	7,865 9	-1,460 0	24 0	1,460 2	0 00	0 00	0 00
9,300 0	87 98	179 06	7,869 4	-1,559 9	25 6	1,560 1	0 00	0 00	0 00
9,400 0	87 98	179 06	7,872 9	-1,659 8	27 2	1,660 1	0 00	0 00	0 00
9,500 0	87 98	179 06	7,876 4	-1,759 8	28 9	1,760 0	0 00	0 00	0 00
9,600 0	87 98	179 06	7,880 0	-1,859 7	30 5	1,859 9	0 00	0 00	0 00
9,700 0	87 98	179 06	7,883 5	-1,959 6	32 2	1,959 9	0 00	0 00	0 00
9,800 0	87 98	179 06	7,887 0	-2,059 5	33 8	2,059 8	0 00	0 00	0 00
9,900 0	87 98	179 06	7,890 5	-2,159 5	35 4	2,159 8	0 00	0 00	0 00
10,000 0	87 98	179 06	7,894.1	-2,259 4	37 1	2,259 7	0 00	0 00	0 00

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 Wellbore: Wellbore #1
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 MD Reference: WELL @ 0 0usft (Original Well Elev)
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 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,100 0	87 98	179 06	7,897 6	-2,359 3	38 7	2,359 6	0 00	0 00	0 00
10,200 0	87 98	179 06	7,901 1	-2,459 2	40 4	2,459 6	0 00	0 00	0 00
10,300 0	87 98	179 06	7,904 6	-2,559 2	42 0	2,559 5	0 00	0 00	0 00
10,400 0	87 98	179 06	7,908 2	-2,659 1	43 6	2,659 4	0 00	0 00	0 00
10,500 0	87 98	179 06	7,911 7	-2,759 0	45 3	2,759 4	0 00	0 00	0 00
10,600 0	87 98	179 06	7,915 2	-2,858 9	46 9	2,859 3	0 00	0 00	0 00
10,700 0	87 98	179 06	7,918 7	-2,958 9	48 5	2,959 3	0 00	0 00	0 00
10,800 0	87 98	179 06	7,922 3	-3,058 8	50 2	3,059 2	0 00	0 00	0 00
10,900 0	87 98	179 06	7,925 8	-3,158 7	51 8	3,159 1	0 00	0 00	0 00
11,000 0	87 98	179 06	7,929 3	-3,258 6	53 5	3,259 1	0 00	0 00	0 00
11,100 0	87 98	179 06	7,932 8	-3,358 6	55 1	3,359 0	0 00	0 00	0 00
11,200 0	87 98	179 06	7,936 4	-3,458 5	56 7	3,459 0	0 00	0 00	0 00
11,300 0	87 98	179 06	7,939 9	-3,558 4	58 4	3,558 9	0 00	0 00	0 00
11,400 0	87 98	179 06	7,943 4	-3,658 3	60 0	3,658 8	0 00	0 00	0 00
11,500 0	87 98	179 06	7,946 9	-3,758 3	61 7	3,758 8	0 00	0 00	0 00
11,586 8	87 98	179 06	7,950 0	-3,845 0	63 1	3,845 5	0 00	0 00	0 00

TD at 11586.8 - Parkway #1

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Parkway #1	0 00	0 00	7,950 0	-3,845 3	63 3	607,174 38	627,925 98	32° 40' 7 869 N	104° 3' 6 997 W
- plan misses target center by 0 4usft at 11586 8usft MD (7950 0 TVD, -3845 0 N, 63 1 E)									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
7,630 0	7,630 0	0 0	0 0	KOP 30°/100 DLS @ 179 06° AZI
7,923 3	7,820 9	-184 2	3 0	EOC Hold to TD
11,586 8	7,950 0	-3,845 0	63 1	TD at 11586 8