



Cimarex Energy Co., Inc.

Lea Co, New Mexico

Crestone #1

Crestone #1

Plan #1

Plan: Plan #1

Standard Survey Report

11 April, 2006

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Black Viper Energy Services

Survey Report



Company:	Cimarex Energy Co., Inc.	Local Co-ordinate Reference:	Well Crestone #1
Project:	Lea Co. New Mexico	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Crestone #1	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Well:	Crestone #1	North Reference:	True
Wellbore:	Plan #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003.11 Server Db

Project	Lea Co. New Mexico	System Datum:	Ground Level
Map System:	US State Plane 1927 (Exact solution)		
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

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Site	Crestone #1				
Site Position:		Northing:	746,432.02 ft	Latitude:	33° 02' 47.436" N
From:	Lat/Long	Easting:	858,551.55 ft	Longitude:	103° 09' 47.700" W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.64 °

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Well	Crestone #1					
Well Position	+N/-S	0.00 ft	Northing:	746,432.02 ft	Latitude:	33° 02' 47.436" N
	+E/-W	0.00 ft	Easting:	858,551.55 ft	Longitude:	103° 09' 47.700" W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	0.00 ft

Wellbore	Plan #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	4/11/2006	(°)	(°)	(nT)
			8.07	61.16	49,724

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	9,095.00	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	0.00	

Survey Tool Program	Date	4/11/2006			
From	To	Survey (Wellbore)	Tool Name	Description	
(ft)	(ft)				
0.00	9,095.00	Plan #1 (OH)	MWD	Standard MWD	
9,095.00	11,175.73	Plan #1 (Plan #1)			

Planned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
9,095.00	0.00	0.00	9,095.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Window									
9,102.80	3.00	0.00	9,102.80	0.20	0.00	0.20	38.46	38.46	0.00
Btm of Window									
9,149.08	3.00	360.00	9,149.01	2.63	0.00	2.63	0.00	0.00	0.00
KOP - Build 30°/100									
9,439.08	90.00	360.00	9,330.00	193.35	0.00	193.35	30.00	30.00	0.00
EOC - Hold 90° to TD									
11,175.73	90.00	360.00	9,330.00	1,930.00	0.00	1,930.00	0.00	0.00	0.00



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Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	ft	ft	(ft)	(ft)		
- Shape									
PBHL #1 [C#1]	0.00	0.00	9,330.00	1,930.00	0.00	748,361.90	858,530.05	33° 03' 06.531" N	103° 09' 47.700" W
- plan misses by 1736.65ft at 9439.08ft MD (9330.00 TVD, 193.35 N, 0.00 E)									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
9,095.00	9,095.00	0.00	0.00	Top of Window
9,102.80	9,102.80	0.20	0.00	Btm of Window
9,149.08	9,149.01	2.63	0.00	KOP - Build 30"/100
9,439.08	9,330.00	193.35	0.00	EOC - Hold 90° to TD

Checked By: _____ Approved By: _____ Date: _____

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