

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

CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

SEP - 9 2008
OCD-ARTESIA
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-D15-36604		Pool Code 92575	Pool Name Pavo Mesa Abo
Property Code 32150	Property Name ROST "32" STATE COM		Well Number 2
GRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO		Elevation 3603'

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	32	16 S	29 E		1980	NORTH	330	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
E	32	16 S	29 E		1980	NORTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160		C	

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 - N32°52'47.90" Long - W104°06'16.31" NNSPCE- N 683943.400 E 611577.659 (NAD-83) SURFACE LOCATION Lat - N32°54'47.81" Long - W104°05'22.13" NNSPCE- N 683945.4 E 616198.0 (NAD-83) BHL 1980 FNL & 330 FWL P.P. 1980 FNL & 330 FEL SHL 1980 FNL & 330 FEL		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 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. 09-08-08 Signature _____ Date _____ Natalie Krueger 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. APRIL 25 2008 Date Surveyed _____ Signature _____ Professional Surveyor _____ W.O. Jones Certificate No. Gary L. Jones 7977 Basin Surveys
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Rost 32 State Com No. 2

Cimarex Energy Co. of Colorado

Unit H, Section 32

T16S-R29E, Eddy County, NM



SEP - 9 2008

OCD-ARTESIA

Location: SHL 1980 FNL & 330 FEL
BHL 1980 FNL & 330 FEWL

Elevation above sea level: 3,603' GR

Geologic name of surface formation: Quaternary Alluvium Deposits

Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

Proposed drilling depth: Pilot Hole 7,500' MD 11,615' TVD 7,115'

Estimated tops of geological markers:

San Andres 2,400'
Abo Shale 5,825'
Lower Abo Dolomite 7,075'
Wolfcamp 7,200'

Possible mineral bearing formation:

Abo Oil Primary

Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 340'	8.4 - 8.6	28-29	May lose circ	Fresh water gel spud mud
340' to 2,500'	10.0	28-29	May lose circ	Brine Water
2,500' to 7,500'	8.4 - 9.5	29-32	NC	Fresh water and brine, use hi-vis sweeps to keep hole clean
6,877' to MD 11,615' TVD 7,115'	8.4 - 9.5	29-33	NC	2% KCL

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. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

Proposed drilling Plan:

Drill 8½" hole to 7,500' (pilot hole) and cement (see page 2 - Application to Drill). Set whipstock plug @ 6,895.' Mill window from 6,880' to 6,890.' Kick off 6½" lateral @ 6,885.' Drill 6½" hole to MD 11,615' and TVD 7,115.'

Strata-Pak RSBP @ 6,777' (TOL). Install 4½" **Peak Completion Assembly**, 500' of BTC from TOL through the curve (6,777' to 7,277') and LTC thereafter to TD (7,277' to 11,615'). Liner length: 4,838.' Lateral length 4,621.'

Rost 32 State Com No. 2

Cimarex Energy Co. of Colorado

Unit H, Section 32

T16S-R29E, Eddy County, NM

Casing & Cementing Program:

Hole Size	Depth		Casing OD		Weight	Thread	Collar	Grade
17½"	0	to 340'	New	13⅝"	48#	8-R	STC	H-40
12¼"	0	to 2,500'	New	9⅝"	40#	8-R	LTC	J-55
8¾"	0	to 7,500'	New	7"	26#	8-R	LTC	P-110
6⅝"	6777	to MD 11,615' TVD 7,115'	New	4½"	11.6#	8-R	LTC/BTC	P-110

Cementing & Setting Depth:**Surface** Lead: 110 sx Light Premium Plus + 0.125# Poly-e-flake + 1% CaCl₂ (wt 14.2, yld 1.34)Tail: 220 sx Premium Plus + 2% CaCl₂ (wt 14.8, yld 1.34)

TOC Surface

Intermediate Lead: 450 sx Interfill C + 0.125# Poly-e-flake (wt 11.9, yld 2.46)Tail: 215 sx Premium Plus + 1% CaCl₂ (wt 14.8, yld 1.34)

TOC Surface

Pilot Hole 615 sx Super H + 0.5% Halad-344 + 0.4% CFR-3 + 1# Salt + 5# Gilsonite + 0.125# Poly-e-flake
+ 0.35% HR-7 (wt 13.0, yld 1.67)**TOC 2,300'****Liner** No cement needed. Peak completion assembly.Pressure control Equipment:

Exhibit "E". A 13⅝" 5000 PSI working pressure B.O.P. 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 below 6000'. 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 surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

We are requesting a variance for testing the 13⅝" surface casing from Onshore Order No. 2, which states that all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500 psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. We are requesting to test the 13⅝" casing to 1000 psi using rig pumps. The BOP will be tested to 5000 PSI by an independent service company.



Cimarex Energy Co. of Colorado

5215 North O'Connor Blvd. ♦ Suite 1500 ♦ Irving, TX 75039 ♦ (972) 401-3111 ♦ Fax (972) 443-6486

Mailing Address: P.O. Box 140907 ♦ Irving, TX 75014-0907

A subsidiary of Cimarex Energy Co • A NYSE Listed Company • "XEC"

September 8, 2008

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

SEP - 9 2008
OCD-ARTESIA

Re: Statewide Rule 118
Hydrogen Sulfide Gas Contingency Plan
Proposed Rost 32 State Com No. 2 Well

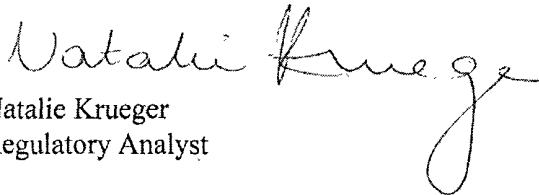
Dear Ms. Wilson:

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 Abo 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):

Rost 32 State Com No. 2
32-16S-29E
SHL 1980 FNL & 330 FEL & 330' FWL
BHL 1980 FNL & 330 FWL
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 469-420-2723.

Yours truly,


Natalie Krueger
Regulatory Analyst



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BAKER
HUGHES
OCD-ARTESIA
INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Rost) Section 32, T16S, R29E	Wellbore	No. 2H PWB
Facility	Rost 32 ST COM No. 2H		

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	0.999916	Report Generated	8/5/2008 at 2:41:03 PM
Convergence at slot	0.13° East	Database/Source file	WA_Midland/No. 2H_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	616198.00	683945.40	32°52'47.813"N	104°05'22.133"W
Facility Reference Pt			616198.00	683945.40	32°52'47.813"N	104°05'22.133"W
Field Reference Pt			611573.42	685263.05	32°53'00.954"N	104°06'16.330"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 2H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 2H SHL (RT) to Mean Sea Level	3621.00ft
Vertical Reference Pt	Rig on No. 2H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 2H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	269.98°



Planned Wellpath Report

Preliminary

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Rost) Section 32, T16S, R29E	Wellbore	No. 2H PWB
Facility	Rost 32 ST COM No. 2H		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00	0.000	269.975	0.00	0.00	0.00	0.00	0.00	Tie On
6885.00	0.000	269.975	6885.00	0.00	0.00	0.00	0.00	EST. KOP
6985.00†	30.000	269.975	6980.49	25.59	-0.01	-25.59	30.00	
7085.00†	60.000	269.975	7050.40	95.49	-0.04	-95.49	30.00	
7183.32	89.495	269.975	7075.98	189.30	-0.08	-189.30	30.00	EOC
7185.00†	89.495	269.975	7075.99	190.99	-0.08	-190.99	0.00	
7285.00†	89.495	269.975	7076.87	290.98	-0.13	-290.98	0.00	
7385.00†	89.495	269.975	7077.75	390.98	-0.17	-390.98	0.00	
7485.00†	89.495	269.975	7078.63	490.97	-0.21	-490.97	0.00	
7585.00†	89.495	269.975	7079.52	590.97	-0.26	-590.97	0.00	
7685.00†	89.495	269.975	7080.40	690.97	-0.30	-690.97	0.00	
7785.00†	89.495	269.975	7081.28	790.96	-0.34	-790.96	0.00	
7885.00†	89.495	269.975	7082.16	890.96	-0.39	-890.96	0.00	
7985.00†	89.495	269.975	7083.04	990.95	-0.43	-990.95	0.00	
8085.00†	89.495	269.975	7083.92	1090.95	-0.47	-1090.95	0.00	
8185.00†	89.495	269.975	7084.80	1190.95	-0.52	-1190.95	0.00	
8285.00†	89.495	269.975	7085.68	1290.94	-0.56	-1290.94	0.00	
8385.00†	89.495	269.975	7086.56	1390.94	-0.60	-1390.94	0.00	
8485.00†	89.495	269.975	7087.44	1490.94	-0.65	-1490.94	0.00	
8585.00†	89.495	269.975	7088.32	1590.93	-0.69	-1590.93	0.00	
8685.00†	89.495	269.975	7089.20	1690.93	-0.73	-1690.93	0.00	
8785.00†	89.495	269.975	7090.08	1790.92	-0.78	-1790.92	0.00	
8885.00†	89.495	269.975	7090.96	1890.92	-0.82	-1890.92	0.00	
8985.00†	89.495	269.975	7091.84	1990.92	-0.86	-1990.92	0.00	
9085.00†	89.495	269.975	7092.72	2090.91	-0.91	-2090.91	0.00	
9185.00†	89.495	269.975	7093.60	2190.91	-0.95	-2190.91	0.00	
9285.00†	89.495	269.975	7094.48	2290.90	-0.99	-2290.90	0.00	
9385.00†	89.495	269.975	7095.36	2390.90	-1.03	-2390.90	0.00	
9485.00†	89.495	269.975	7096.25	2490.90	-1.08	-2490.90	0.00	
9585.00†	89.495	269.975	7097.13	2590.89	-1.12	-2590.89	0.00	



Planned Wellpath Report

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Rost) Section 32, T16S, R29E	Wellbore	No. 2H PWB
Facility	Rost 32 ST COM No. 2H		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
9685.00†	89.495	269.975	7098.01	2690.89	-1.16	-2690.89	0.00	
9785.00†	89.495	269.975	7098.89	2790.89	-1.21	-2790.88	0.00	
9885.00†	89.495	269.975	7099.77	2890.88	-1.25	-2890.88	0.00	
9985.00†	89.495	269.975	7100.65	2990.88	-1.29	-2990.88	0.00	
10085.00†	89.495	269.975	7101.53	3090.87	-1.34	-3090.87	0.00	
10185.00†	89.495	269.975	7102.41	3190.87	-1.38	-3190.87	0.00	
10285.00†	89.495	269.975	7103.29	3290.87	-1.42	-3290.87	0.00	
10385.00†	89.495	269.975	7104.17	3390.86	-1.47	-3390.86	0.00	
10485.00†	89.495	269.975	7105.05	3490.86	-1.51	-3490.86	0.00	
10585.00†	89.495	269.975	7105.93	3590.85	-1.55	-3590.85	0.00	
10685.00†	89.495	269.975	7106.81	3690.85	-1.60	-3690.85	0.00	
10785.00†	89.495	269.975	7107.69	3790.85	-1.64	-3790.85	0.00	
10885.00†	89.495	269.975	7108.57	3890.84	-1.68	-3890.84	0.00	
10985.00†	89.495	269.975	7109.45	3990.84	-1.73	-3990.84	0.00	
11085.00†	89.495	269.975	7110.33	4090.83	-1.77	-4090.83	0.00	
11185.00†	89.495	269.975	7111.21	4190.83	-1.81	-4190.83	0.00	
11285.00†	89.495	269.975	7112.09	4290.83	-1.86	-4290.83	0.00	
11385.00†	89.495	269.975	7112.98	4390.82	-1.90	-4390.82	0.00	
11485.00†	89.495	269.975	7113.86	4490.82	-1.94	-4490.82	0.00	
11585.00†	89.495	269.975	7114.74	4590.82	-1.99	-4590.81	0.00	
11614.93	89.495	269.975	7115.00 ¹	4620.74	-2.00	-4620.74	0.00	No. 2H BHL



Planned Wellpath Report

Preliminary

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator **Cimarex Energy Co. of Colorado**

Slot **No. 2H SHL**

Area **Eddy County, NM**

Well **No. 2H**

Field **(Rost) Section 32, T16S, R29E**

Wellbore **No. 2H PWB**

Facility **Rost 32 ST COM No. 2H**

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 2H BHL	11614.93	7115.00	-2.00	-4620.74	611577.66	683943.40	32°52'47.896"N	104°06'16.314"W	point

SURVEY PROGRAM Ref Wellbore: No. 2H PWB Ref Wellpath: Preliminary

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	11614.93	NaviTrak (Standard)		No. 2H PWB



Cimarex Energy Co. of Colorado

Location: Eddy County, NM
Field: (Rost) Section 32, T16S, R29E
Facility: Rost 32 ST COM No 2H

Slot: No. 2H SHL
Well: No 2H
Wellbore: No 2H PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (%/100ft)	VS (ft)
Tie On	0.00	0.000	269.975	0.00	0.00	0.00	0.00	0.00
EST. KOP	6885.00	0.000	269.975	6885.00	0.00	0.00	0.00	0.00
EOC	7183.32	89.495	269.975	7075.98	-0.08	-189.30	30.00	189.30
No. 2H BHL	11614.93	89.495	269.975	7115.00	-2.00	-4620.74	0.00	4620.74

