

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No NMLC062085	
b Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff Resvr Other _____		6 If Indian, Allottee or Tribe Name	
2 Name of Operator CIMAREX ENERGY CO. OF COLORADO Contact: CAROLYN D LARSON Email: clarson@cimarex.com		7 Unit or CA Agreement Name and No	
3 Address 600 N. MARIENFELD SUITE 600 MIDLAND, TX 79701		8 Lease Name and Well No. WEST SHUGART 31 FEDERAL COM 005	
3a Phone No. (include area code) Ph: 432-620-1946		9 API Well No. 30-015-38221	
4 Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 1 T18S R31E Mer NMP At surface S2NE 1980FSL 375FEL Sec 1 T18S R31E Mer NMP At top prod interval reported below S2NE 1980FSL 375FEL Sec 31 T18S R31E Mer NMP At total depth S2NW 2310FSL 330FVL		10 Field and Pool, or Exploratory HACKBERRY, BONE SPRING, N	
14 Date Spudded 04/04/2011		11 Sec, T, R, M, or Block and Survey or Area Sec 1 T18S R31E Mer NMP	
15 Date T.D. Reached 04/29/2011		12 County or Parish EDDY	
16 Date Completed ☐ D & A ☒ Ready to Prod 08/02/2011		13 State NM	
17 Elevations (DF, KB, RT, GL)* 3547 GL			
18 Total Depth: MD 12978 TVD 8749		19 Plug Back T.D.: MD 12978 TVD 8257	
20 Depth Bridge Plug Set: MD 8257 TVD 8257			
21 Type Electric & Other Mechanical Logs Run (Submit copy of each) DSN, DUAL LATEROLOG		22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)	

23 Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No of Sk. & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J55 SC	48.0		615		540		0	
12.250	9.625 K55 LTC	40.0		3646		1315		0	
8.750	5.500 P110	17.0		12961		2050		460	

24 Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8310							

25 Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf Status
A) BONE SPRING	9127	12910	12301 TO 12910		40	OPEN
B)			11515 TO 12114		40	OPEN
C)			10719 TO 11318		40	OPEN
D)			9923 TO 10522		40	OPEN

27. Acid, Fracture, Treatment, Cement Squeeze, Etc

Depth Interval	Amount and Type of Material
12301 TO 12910	FRAC W/199,820 GALS 20# BORATE XL & 236,809# 20/40 CRC SAND
11515 TO 12114	FRAC W/189,678 GALS 20# BORATE XL & 255,943# 20/40 CRC SAND
10719 TO 11318	FRAC W/164,458 GALS 20# BORATE XL & 251,834# 20/40 CRC SAND
9923 TO 10522	FRAC W/197,320 GALS 20# BORATE XL & 248,391# 20/40 CRC SAND

RECLAMATION
DUE 2-2-11

28 Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
08/02/2011	08/14/2011	24	→	133.0	105.0	241.0	38.8		ELECTRIC PUMPING UNIT
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
--	SI 55	133.0	→	133	105	241	789	POW	

28a Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #120489 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

RECEIVED
OCT 27 2011
NMLC062085

ACCEPTED FOR RECORD

OCT 25 2011
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate →	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	

29 Disposition of Gas (Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc	Name	Top
					Meas Depth
				BONE SPRING	6199
				1ST BONE SPRING	7698
				2ND BONE SPRING	8577
				3RD BONE SPRING CARBONATE	8960

32 Additional remarks (include plugging procedure)

#24 SHL NM-0560354, BHL LC-062084
#43 9127-9726 40 holes Open
#44 9127-9726 Frac'd w/160,894 gals 20# Borate XL and 248,084# 20/40 CRC sand

Logs will be mailed under separate cover.
Other Directional survey, C-102, Wellbore diagram

33 Circle enclosed attachments

- | | | | |
|--|--------------------|--------------|-----------------------|
| 1 Electrical/Mechanical Logs (1 full set req'd) | 2. Geologic Report | 3 DST Report | 4. Directional Survey |
| 5 Sundry Notice for plugging and cement verification | 6 Core Analysis | 7 Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #120489 Verified by the BLM Well Information System.
For CIMAREX ENERGY CO. OF COLORADO, sent to the Carlsbad

Name (please print) CAROLYN D LARSON

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 10/18/2011

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

Additional data for transaction #120489 that would not fit on the form

32. Additional remarks, continued

DISTRICT I
1025 N. French Dr., Hobbs, NM 88240

DISTRICT II
1501 W. Grand Avenue, Arizola, NY 08210

DISTRICT III
1000 Rio Braxos 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, 2000

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 30-015-38221	Pool Code 97056	Pool Name Hackberry; Bone Spring, North
Property Code 300582	Property Name WEST SHUGART "31" FEDERAL COM	Well Number 5
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3547'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	31	18 S	31 E		1980	SOUTH	375	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
L	31	18 S	31 E		2185	SOUTH	476	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
155.78			

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

	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. 8/16/11 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 MARCH 15, 2010 Signature & Seal of Professional Surveyor JONES No. 22450 Certificate No. 6011 Jones 7977 BASIN SURVEYS
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Location: Eddy County, NM
Field: (West Shugart) Sec 31, T18S, R31E
Facility: West Shugart 31 Fed Com No. 5H

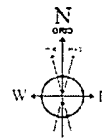
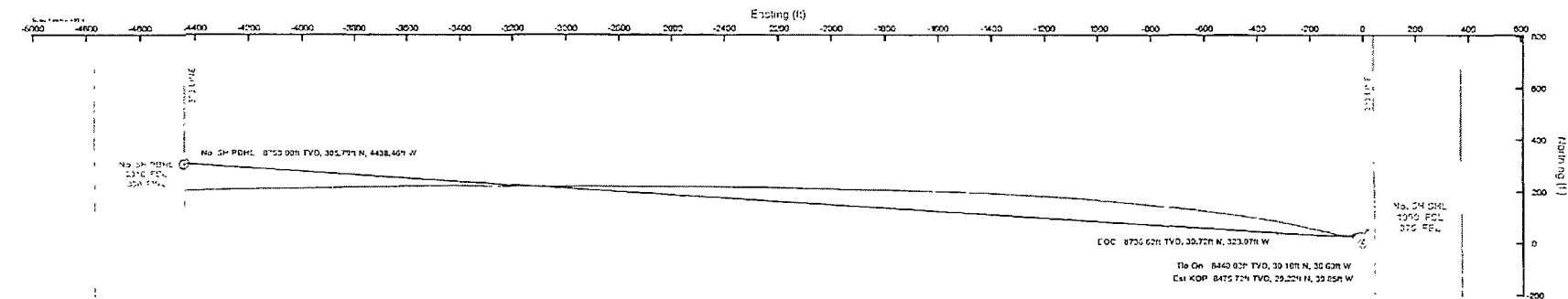
Cimarex Energy Co.

Slot: No. 5H SHL
Well: No. 5H
Wellbore: No. 5H PWB

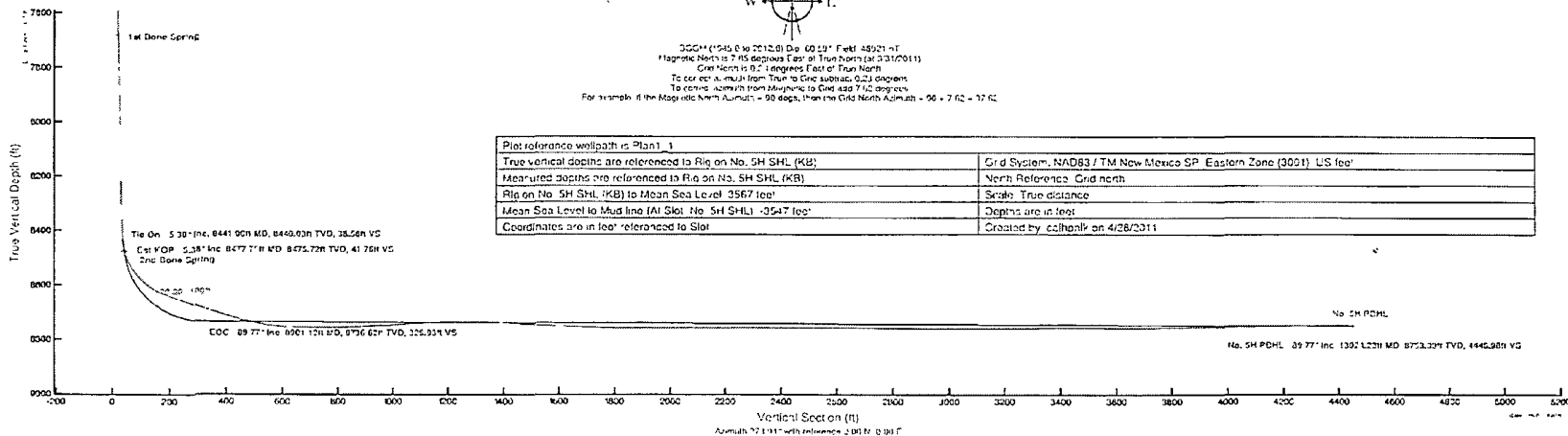


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8441.90	5.385	254.985	8440.03	30.10	-36.60	0.00	38.58
Est KOP	8477.75	5.385	254.985	8475.72	29.22	-39.85	0.00	41.76
EOC	8901.12	89.772	273.700	8736.62	39.72	-323.97	20.00	325.93
No. 5H PBHL	13024.23	89.772	273.700	8753.00	305.79	-4438.46	0.00	4448.98



356° (1545) to 251.2 (8) Dip 60.13° Field 48921 -T
Magnetic North is 7.15 degrees East of True North (at 3/31/2011)
Grid North is 0.2 degrees East of True North
To correct a multi from True to Grid subtract 0.23 degrees
To correct azimuth from Magnetic to Grid add 7.12 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.12 = 97.12



Plot reference wellpath is Plan 1	
True vertical depths are referenced to Rig on No. 5H SHL (KB)	Grid System: NAD83 / TM New Mexico SP Eastern Zone (3001) US feet
Measured depths are referenced to Rig on No. 5H SHL (KB)	North Reference: Grid north
Rig on No. 5H SHL (KB) to Mean Sea Level 3567 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot No. 5H SHL) -3547 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cchilink on 4/28/2011

30-015-38221



Actual Wellpath Report

No. 5H AWP_Corrected

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REPORT NO. 018 AWP/PA/HT/ED/NO/HT/CAUTION			
Operator	Cimarex Energy Co.	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(West Shugart) Sec 31, T18S, R31E	Wellbore	No. 5H AWP
Facility	West Shugart 31 Fed Com No. 5H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Calhphik
Scale	0.999929	Report Generated	5/2/2011 at 4:11:26 PM
Convergence at slot	0.23° East	Database/Source file	WA Midland/No. 5H_AWP.xml

WELL/PA/HT/ED/NO/HT/CAUTION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	674199.50	619421.00	32°42'07.512"N	103°54'05.068"W
Facility Reference Pt			674199.50	619421.00	32°42'07.512"N	103°54'05.068"W
Field Reference Pt			669901.10	621047.30	32°42'23.775"N	103°54'55.298"W

WELL/PA/HT/ED/NO/HT/CAUTION			
Calculation method	Minimum curvature	Rig on No. 5H SHL (KB) to GL	20.00ft
Horizontal Reference Pt	Slot	Rig on No. 5H SHL (KB) to Mean Sea Level	3567.00ft
Vertical Reference Pt	Rig on No. 5H SHL (KB)	Rig on No. 5H SHL (KB) to Mud Line at Slot (No. 5H SHL)	20.00ft
MD Reference Pt	Rig on No. 5H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	273.94°



Actual Wellpath Report

No. 5H AWP_Corrected

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REFERENCE WELL INFORMATION (CAUTION)			
Operator	Cimarex Energy Co.	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(West Shugart) Sec 31, T18S, R31E	Wellbore	No. 5H AWP
Facility	West Shugart 31 Fed Com No. 5H		

WELLPATH DATA (159 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	211.480	0.00	0.00	0.00	0.00	674199.50	619421.00	32°42'07.512"N	103°54'05.068"W	0.00	
20.00	0.000	211.480	20.00	0.00	0.00	0.00	674199.50	619421.00	32°42'07.512"N	103°54'05.068"W	0.00	
100.00	0.210	211.480	100.00	0.07	-0.13	-0.08	674199.42	619420.87	32°42'07.511"N	103°54'05.069"W	0.26	
200.00	0.300	210.040	200.00	0.27	-0.51	-0.30	674199.20	619420.49	32°42'07.507"N	103°54'05.072"W	0.09	
300.00	0.370	207.940	300.00	0.51	-1.02	-0.59	674198.91	619419.98	32°42'07.502"N	103°54'05.075"W	0.07	
400.00	0.260	215.700	400.00	0.76	-1.49	-0.87	674198.63	619419.51	32°42'07.497"N	103°54'05.083"W	0.12	
500.00	0.360	246.600	499.99	1.16	-1.80	-1.29	674198.21	619419.20	32°42'07.494"N	103°54'05.083"W	0.19	
600.00	0.330	266.040	599.99	1.73	-1.94	-1.87	674197.63	619419.06	32°42'07.493"N	103°54'05.090"W	0.12	
717.80	0.460	292.360	717.79	2.51	-1.79	-2.64	674196.86	619419.21	32°42'07.494"N	103°54'05.099"W	0.19	
813.00	0.420	288.450	812.99	3.21	-1.53	-3.33	674196.17	619419.47	32°42'07.497"N	103°54'05.107"W	0.05	
908.30	0.370	293.760	908.28	3.84	-1.30	-3.94	674195.56	619419.70	32°42'07.499"N	103°54'05.114"W	0.06	
1003.60	0.320	319.410	1003.58	4.32	-0.97	-4.39	674195.11	619420.03	32°42'07.502"N	103°54'05.119"W	0.17	
1098.70	0.310	325.620	1098.68	4.66	-0.56	-4.71	674194.79	619420.44	32°42'07.507"N	103°54'05.123"W	0.04	
1194.00	0.380	344.050	1193.98	4.93	-0.04	-4.94	674194.56	619420.96	32°42'07.512"N	103°54'05.126"W	0.14	
1289.30	0.480	359.840	1289.28	5.07	0.66	-5.03	674194.47	619421.66	32°42'07.519"N	103°54'05.127"W	0.16	
1384.70	0.500	6.830	1384.67	5.07	1.48	-4.98	674194.52	619422.48	32°42'07.527"N	103°54'05.126"W	0.07	
1479.80	0.540	11.890	1479.77	4.99	2.33	-4.84	674194.66	619423.33	32°42'07.535"N	103°54'05.125"W	0.06	
1575.30	0.610	9.020	1575.26	4.88	3.27	-4.67	674194.83	619424.27	32°42'07.544"N	103°54'05.122"W	0.08	
1670.50	0.620	12.200	1670.46	4.76	4.27	-4.48	674195.02	619425.27	32°42'07.554"N	103°54'05.120"W	0.04	
1766.00	0.960	26.450	1765.95	4.38	5.49	-4.02	674195.48	619426.49	32°42'07.566"N	103°54'05.115"W	0.41	
1861.10	1.310	44.020	1861.03	3.38	6.99	-2.91	674196.59	619427.99	32°42'07.581"N	103°54'05.102"W	0.51	
1956.60	1.470	47.760	1956.50	1.83	8.60	-1.24	674198.26	619429.60	32°42'07.597"N	103°54'05.082"W	0.19	
2051.80	1.460	45.760	2051.67	0.17	10.27	0.53	674200.03	619431.26	32°42'07.613"N	103°54'05.061"W	0.05	
2147.10	1.390	30.840	2146.94	-1.16	12.10	2.00	674201.50	619433.10	32°42'07.632"N	103°54'05.044"W	0.40	
2242.60	1.370	9.230	2242.42	-1.79	14.23	2.77	674202.27	619435.22	32°42'07.653"N	103°54'05.035"W	0.54	
2337.80	1.440	4.900	2337.59	-1.91	16.54	3.06	674202.56	619437.54	32°42'07.675"N	103°54'05.031"W	0.13	
2433.10	1.600	0.040	2432.85	-1.84	19.06	3.16	674202.66	619440.06	32°42'07.700"N	103°54'05.030"W	0.22	
2528.30	1.750	356.760	2528.01	-1.57	21.85	3.08	674202.58	619442.84	32°42'07.728"N	103°54'05.031"W	0.19	
2623.60	1.860	4.370	2623.27	-1.40	24.84	3.11	674202.61	619445.84	32°42'07.758"N	103°54'05.030"W	0.28	
2719.00	1.740	10.370	2718.62	-1.57	27.81	3.49	674202.99	619448.81	32°42'07.787"N	103°54'05.026"W	0.23	
2814.30	1.740	18.480	2813.88	-2.10	30.60	4.21	674203.71	619451.60	32°42'07.814"N	103°54'05.017"W	0.26	
2909.60	1.600	18.000	2909.14	-2.79	33.24	5.08	674204.58	619454.24	32°42'07.841"N	103°54'05.007"W	0.15	
3004.80	1.400	22.960	3004.30	-3.51	35.65	5.98	674205.48	619456.64	32°42'07.864"N	103°54'04.996"W	0.18	
3100.10	1.440	18.940	3099.57	-4.23	37.92	6.85	674206.35	619458.92	32°42'07.887"N	103°54'04.986"W	0.12	
3195.60	1.110	17.810	3195.05	-4.76	39.93	7.52	674207.02	619460.93	32°42'07.907"N	103°54'04.978"W	0.35	
3291.10	0.910	18.760	3290.53	-5.17	41.53	8.05	674207.55	619462.53	32°42'07.922"N	103°54'04.972"W	0.21	
3386.20	0.710	26.700	3385.62	-5.59	42.77	8.55	674208.05	619463.77	32°42'07.935"N	103°54'04.966"W	0.24	
3481.60	0.590	28.200	3481.02	-6.02	43.74	9.05	674208.55	619464.73	32°42'07.944"N	103°54'04.960"W	0.13	
3576.80	0.590	20.650	3576.21	-6.37	44.63	9.46	674208.96	619465.62	32°42'07.953"N	103°54'04.955"W	0.08	
3672.20	0.370	33.610	3671.61	-6.66	45.34	9.80	674209.30	619466.34	32°42'07.960"N	103°54'04.951"W	0.26	
3767.50	0.370	40.180	3766.90	-6.99	45.83	10.17	674209.67	619466.83	32°42'07.965"N	103°54'04.947"W	0.04	
3862.90	0.340	46.700	3862.30	-7.37	46.26	10.57	674210.07	619467.26	32°42'07.969"N	103°54'04.942"W	0.05	
3958.20	0.330	55.010	3957.60	-7.77	46.61	11.00	674210.50	619467.61	32°42'07.973"N	103°54'04.937"W	0.05	
4053.70	0.260	67.870	4053.10	-8.18	46.85	11.43	674210.93	619467.85	32°42'07.975"N	103°54'04.932"W	0.10	
4148.90	0.290	81.180	4148.30	-8.61	46.97	11.87	674211.37	619467.97	32°42'07.976"N	103°54'04.927"W	0.07	



Actual Wellpath Report

No. 5H AWP_Corrected

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REFERENCE AND IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(West Shugart) Sec 31, T18S, R31E	Wellbore	No. 5H AWB
Facility	West Shugart 31 Fed Com No. 5H		

WELLPATH DATA (159 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4244.20	0.210	58.080	4243.60	-8.99	47.10	12.26	674211.75	619468.10	32°42'07.977"N	103°54'04.922"W	0.13	
4339.60	0.180	42.820	4339.00	-9.22	47.30	12.51	674212.00	619468.30	32°42'07.979"N	103°54'04.919"W	0.06	
4434.90	0.190	30.270	4434.30	-9.39	47.55	12.69	674212.19	619468.55	32°42'07.982"N	103°54'04.917"W	0.04	
4530.20	0.210	10.490	4529.60	-9.48	47.86	12.80	674212.30	619468.85	32°42'07.985"N	103°54'04.916"W	0.07	
4625.90	0.280	4.240	4625.30	-9.50	48.26	12.85	674212.35	619469.26	32°42'07.989"N	103°54'04.915"W	0.08	
4721.00	0.300	3.850	4720.39	-9.50	48.74	12.88	674212.38	619469.74	32°42'07.994"N	103°54'04.915"W	0.02	
4816.40	0.320	1.080	4815.79	-9.49	49.26	12.90	674212.40	619470.26	32°42'07.999"N	103°54'04.915"W	0.03	
4912.00	0.470	9.010	4911.39	-9.51	49.91	12.97	674212.47	619470.91	32°42'08.005"N	103°54'04.914"W	0.17	
5007.40	0.590	23.150	5006.79	-9.70	50.75	13.22	674212.72	619471.75	32°42'08.013"N	103°54'04.911"W	0.19	
5102.70	0.730	19.590	5102.08	-10.03	51.77	13.62	674213.12	619472.77	32°42'08.024"N	103°54'04.906"W	0.15	
5198.10	0.800	22.170	5197.47	-10.40	52.96	14.08	674213.57	619473.96	32°42'08.035"N	103°54'04.901"W	0.08	
5293.70	0.880	39.540	5293.06	-11.04	54.15	14.79	674214.29	619475.14	32°42'08.047"N	103°54'04.892"W	0.28	
5389.20	0.900	62.990	5388.55	-12.17	55.09	16.00	674215.50	619476.08	32°42'08.056"N	103°54'04.878"W	0.41	
5484.70	1.260	70.690	5484.03	-13.84	55.81	17.72	674217.22	619476.81	32°42'08.063"N	103°54'04.858"W	0.32	
5579.90	1.560	83.080	5579.20	-16.08	56.31	20.00	674219.50	619477.31	32°42'08.068"N	103°54'04.831"W	0.45	
5675.30	0.770	88.080	5674.58	-17.99	56.49	21.93	674221.43	619477.49	32°42'08.070"N	103°54'04.809"W	0.83	
5770.60	0.450	149.140	5769.88	-18.84	56.19	22.76	674222.26	619477.19	32°42'08.067"N	103°54'04.799"W	0.71	
5865.80	0.890	175.120	5865.07	-19.17	55.13	23.01	674222.51	619476.13	32°42'08.056"N	103°54'04.796"W	0.55	
5961.10	0.820	202.300	5960.36	-19.07	53.76	22.82	674222.32	619474.76	32°42'08.043"N	103°54'04.798"W	0.43	
6056.80	0.900	219.470	6056.05	-18.42	52.55	22.08	674221.58	619473.55	32°42'08.031"N	103°54'04.807"W	0.28	
6152.00	0.970	235.290	6151.24	-17.35	51.52	20.94	674220.44	619472.51	32°42'08.021"N	103°54'04.820"W	0.28	
6247.40	0.890	244.290	6246.62	-16.08	50.73	19.61	674219.11	619471.73	32°42'08.013"N	103°54'04.836"W	0.17	
6342.90	1.000	240.940	6342.11	-14.73	50.01	18.21	674217.71	619471.00	32°42'08.006"N	103°54'04.852"W	0.13	
6438.40	1.330	239.700	6437.59	-13.12	49.04	16.53	674216.03	619470.04	32°42'07.996"N	103°54'04.872"W	0.35	
6534.10	1.310	228.670	6533.27	-11.43	47.76	14.75	674214.25	619468.76	32°42'07.984"N	103°54'04.893"W	0.27	
6629.40	1.220	232.350	6628.54	-9.91	46.42	13.13	674212.63	619467.42	32°42'07.971"N	103°54'04.912"W	0.13	
6725.10	1.120	240.740	6724.22	-8.36	45.34	11.50	674211.00	619466.34	32°42'07.960"N	103°54'04.931"W	0.21	
6820.20	1.010	242.060	6819.31	-6.87	44.49	9.95	674209.45	619465.49	32°42'07.952"N	103°54'04.949"W	0.12	
6915.70	1.270	240.780	6914.79	-5.27	43.58	8.29	674207.79	619464.58	32°42'07.943"N	103°54'04.969"W	0.27	
7011.10	1.400	242.500	7010.46	-3.39	42.53	6.32	674205.82	619463.52	32°42'07.932"N	103°54'04.992"W	0.14	
7106.80	1.730	250.090	7105.83	-1.07	41.50	3.94	674203.44	619462.49	32°42'07.922"N	103°54'05.020"W	0.41	
7202.30	2.610	269.260	7201.26	2.41	40.98	0.41	674199.91	619461.98	32°42'07.917"N	103°54'05.061"W	1.18	
7296.80	2.070	279.110	7295.68	6.26	41.22	-3.43	674196.07	619462.22	32°42'07.920"N	103°54'05.106"W	0.71	
7392.30	2.640	281.770	7391.10	10.15	41.94	-7.29	674192.21	619462.94	32°42'07.927"N	103°54'05.151"W	0.61	
7487.10	2.490	273.290	7485.80	14.37	42.51	-11.48	674188.02	619463.50	32°42'07.933"N	103°54'05.200"W	0.43	
7581.80	2.210	264.990	7580.42	18.24	42.47	-15.35	674184.15	619463.46	32°42'07.933"N	103°54'05.246"W	0.46	
7677.10	1.800	252.030	7675.67	21.44	41.84	-18.61	674180.89	619462.84	32°42'07.927"N	103°54'05.284"W	0.64	
7772.60	1.230	259.090	7771.13	23.82	41.19	-21.04	674178.46	619462.18	32°42'07.920"N	103°54'05.312"W	0.63	
7868.20	0.950	268.830	7866.71	25.60	40.98	-22.84	674176.66	619461.97	32°42'07.918"N	103°54'05.333"W	0.35	
7964.00	0.970	262.260	7962.50	27.19	40.85	-24.44	674175.06	619461.85	32°42'07.917"N	103°54'05.352"W	0.12	
8059.50	0.860	246.550	8057.99	28.62	40.46	-25.90	674173.61	619461.45	32°42'07.913"N	103°54'05.369"W	0.29	
8155.10	1.360	229.160	8153.57	30.06	39.43	-27.41	674172.09	619460.43	32°42'07.903"N	103°54'05.387"W	0.62	
8250.70	2.230	230.700	8249.12	32.22	37.51	-29.71	674169.79	619458.51	32°42'07.884"N	103°54'05.414"W	0.91	
8346.40	2.780	218.210	8344.73	34.88	34.51	-32.59	674166.92	619455.50	32°42'07.855"N	103°54'05.448"W	0.81	
8419.00	4.000	214.400	8417.20	37.16	31.03	-35.11	674164.40	619452.03	32°42'07.820"N	103°54'05.477"W	1.71	



Actual Wellpath Report

No. 5H AWP_Corrected

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REFERENCE WELL INFORMATION			
Operator	Cimarex Energy Co.	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(West Shugart) Sec 31, T18S, R31E	Wellbore	No. 5H AWB
Facility	West Shugart 31 Fed Com No. 5H		

WELLPATH DATA (159 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8451.00	6.400	264.300	8449.08	39.48	29.93	-37.51	674161.99	619450.93	32°42'07.810"N	103°54'05.506"W	15.29	
8482.00	13.500	273.100	8479.60	44.81	29.96	-42.85	674156.65	619450.96	32°42'07.810"N	103°54'05.568"W	23.36	
8514.00	22.100	271.900	8510.04	54.58	30.36	-52.62	674146.89	619451.36	32°42'07.814"N	103°54'05.682"W	26.90	
8546.00	30.900	273.600	8538.65	68.84	31.08	-66.86	674132.64	619452.08	32°42'07.822"N	103°54'05.849"W	27.60	
8578.00	39.000	276.500	8564.86	87.15	32.74	-85.10	674114.41	619453.73	32°42'07.839"N	103°54'06.062"W	25.83	
8609.00	45.600	281.900	8587.78	107.89	36.13	-105.66	674093.85	619457.13	32°42'07.874"N	103°54'06.303"W	24.29	
8611.00	53.500	284.400	8608.53	131.90	41.69	-129.34	674070.17	619462.69	32°42'07.930"N	103°54'06.580"W	25.39	
8673.00	62.700	283.600	8625.54	158.55	48.23	-155.60	674043.91	619469.23	32°42'07.995"N	103°54'06.887"W	27.27	
8705.00	69.200	281.900	8638.70	187.35	54.65	-184.03	674015.48	619475.65	32°42'08.060"N	103°54'07.219"W	22.40	
8737.00	70.100	282.500	8649.83	217.05	60.99	-213.36	673986.16	619481.99	32°42'08.124"N	103°54'07.562"W	3.32	
8769.00	70.000	282.300	8660.75	246.80	67.45	-242.74	673956.78	619488.45	32°42'08.189"N	103°54'07.905"W	0.67	
8801.00	70.000	282.300	8671.69	276.55	73.86	-272.12	673927.40	619494.85	32°42'08.254"N	103°54'08.249"W	0.00	
8832.00	70.500	281.100	8682.17	305.46	79.78	-300.69	673898.84	619500.77	32°42'08.313"N	103°54'08.583"W	3.98	
8864.00	70.900	280.300	8692.75	335.45	85.38	-330.36	673869.16	619506.38	32°42'08.370"N	103°54'08.930"W	2.67	
8896.00	71.600	279.600	8703.03	365.58	90.62	-360.21	673839.32	619511.61	32°42'08.423"N	103°54'09.279"W	3.01	
8928.00	72.800	279.300	8712.81	395.91	95.62	-390.26	673809.27	619516.61	32°42'08.474"N	103°54'09.630"W	3.85	
8958.00	73.200	278.700	8721.59	424.49	100.11	-418.60	673780.93	619521.10	32°42'08.519"N	103°54'09.962"W	2.33	
8990.00	75.200	278.100	8730.30	455.18	104.61	-449.06	673750.48	619525.60	32°42'08.565"N	103°54'10.318"W	6.51	
9021.00	77.200	277.000	8737.69	485.23	108.56	-478.90	673720.64	619529.55	32°42'08.605"N	103°54'10.667"W	7.31	
9053.00	79.500	277.100	8744.15	516.52	112.41	-510.00	673689.54	619533.40	32°42'08.645"N	103°54'11.031"W	7.19	
9083.00	81.800	277.000	8749.03	546.08	116.04	-539.38	673660.16	619537.03	32°42'08.682"N	103°54'11.374"W	7.67	
9115.00	84.200	277.800	8752.93	577.78	120.13	-570.87	673628.67	619541.12	32°42'08.723"N	103°54'11.743"W	7.90	
9146.00	86.800	277.600	8755.36	608.61	124.27	-601.49	673598.05	619545.26	32°42'08.766"N	103°54'12.101"W	8.41	
9178.00	89.100	276.600	8756.50	640.54	128.22	-633.23	673566.32	619549.21	32°42'08.806"N	103°54'12.472"W	7.84	
9210.00	89.500	276.500	8756.89	672.51	131.87	-665.01	673534.53	619552.86	32°42'08.843"N	103°54'12.844"W	1.29	
9242.00	89.800	276.700	8757.09	704.47	135.55	-696.80	673502.75	619556.54	32°42'08.881"N	103°54'13.216"W	1.13	
9274.00	89.500	276.400	8757.29	736.44	139.20	-728.59	673470.96	619560.19	32°42'08.918"N	103°54'13.588"W	1.33	
9306.00	89.600	276.000	8757.54	768.41	142.66	-760.40	673439.15	619563.65	32°42'08.954"N	103°54'13.960"W	1.29	
9337.00	90.800	275.700	8757.43	799.39	145.82	-791.24	673408.32	619566.81	32°42'08.986"N	103°54'14.320"W	3.99	
9432.00	92.700	275.900	8754.53	894.29	155.41	-885.71	673313.86	619576.40	32°42'09.085"N	103°54'15.425"W	2.01	
9528.00	92.800	275.400	8749.92	990.14	164.85	-981.13	673218.44	619585.84	32°42'09.182"N	103°54'16.542"W	0.53	
9623.00	93.000	274.300	8745.12	1085.01	172.87	-1075.67	673123.91	619593.86	32°42'09.265"N	103°54'17.648"W	1.18	
9719.00	92.400	273.900	8740.59	1180.90	179.73	-1171.31	673028.27	619600.72	32°42'09.337"N	103°54'18.766"W	0.75	
9814.00	91.000	273.100	8737.78	1275.85	185.53	-1266.09	672933.50	619606.51	32°42'09.398"N	103°54'19.875"W	1.70	
9910.00	86.600	273.000	8739.79	1371.79	190.63	-1361.91	672837.69	619611.62	32°42'09.453"N	103°54'20.996"W	4.58	
10005.00	85.700	272.400	8746.16	1466.56	195.10	-1456.59	672743.02	619616.08	32°42'09.501"N	103°54'22.104"W	1.14	
10101.00	87.200	271.900	8752.11	1562.32	198.69	-1552.34	672647.28	619619.68	32°42'09.540"N	103°54'23.224"W	1.65	
10196.00	87.800	272.100	8756.25	1657.18	202.00	-1647.19	672552.43	619622.99	32°42'09.577"N	103°54'24.334"W	0.67	
10292.00	88.800	271.800	8759.10	1753.07	205.27	-1743.09	672456.54	619626.25	32°42'09.613"N	103°54'25.456"W	1.09	
10388.00	89.900	271.200	8760.19	1848.98	207.78	-1839.05	672360.59	619628.77	32°42'09.641"N	103°54'26.579"W	1.31	
10483.00	89.900	271.100	8760.35	1943.87	209.69	-1934.03	672265.61	619630.67	32°42'09.664"N	103°54'27.691"W	0.11	
10579.00	90.200	271.400	8760.27	2039.76	211.78	-2030.00	672169.64	619632.77	32°42'09.688"N	103°54'28.814"W	0.44	
10674.00	90.300	271.400	8759.86	2134.67	214.10	-2124.98	672074.68	619635.09	32°42'09.715"N	103°54'29.925"W	0.11	
10769.00	90.700	270.900	8759.03	2229.55	216.01	-2219.95	671979.71	619636.99	32°42'09.738"N	103°54'31.036"W	0.67	
10865.00	89.500	270.600	8758.86	2325.40	217.27	-2315.94	671883.73	619638.25	32°42'09.754"N	103°54'32.160"W	1.29	



Actual Wellpath Report

No. 5H AWP_Corrected

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REF: SINGLE WELLPATH WELLBORE IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 5H SHL
Area	Eddy County, NM	Well	No. 5H
Field	(West Shugart) Sec 31, T18S, R31E	Wellbore	No. 5H AWB
Facility	West Shugart 31 Fed Com No. 5H		

WELLPATH DATA (159 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10960.00	89.800	270.400	8759.44	2420.22	218.09	-2410.94	671788.74	619639.08	32°42'09.766"N	103°54'33.271"W	0.38	
11056.00	89.900	270.600	8759.69	2516.05	218.93	-2506.93	671692.75	619639.92	32°42'09.778"N	103°54'34.394"W	0.23	
11152.00	89.800	270.300	8759.94	2611.87	219.69	-2602.93	671596.76	619640.67	32°42'09.789"N	103°54'35.518"W	0.33	
11246.00	89.400	270.100	8760.60	2705.67	220.01	-2696.93	671502.77	619641.00	32°42'09.796"N	103°54'36.618"W	0.48	
11341.00	89.300	270.300	8761.68	2800.46	220.35	-2791.92	671407.78	619641.33	32°42'09.803"N	103°54'37.729"W	0.24	
11436.00	89.300	270.300	8762.84	2895.26	220.84	-2886.91	671312.80	619641.83	32°42'09.812"N	103°54'38.841"W	0.00	
11530.00	89.900	269.800	8763.49	2989.04	220.93	-2980.91	671218.81	619641.91	32°42'09.817"N	103°54'39.941"W	0.83	
11625.00	90.400	270.100	8763.24	3083.81	220.84	-3075.91	671123.82	619641.83	32°42'09.819"N	103°54'41.053"W	0.61	
11720.00	90.400	270.200	8762.58	3178.60	221.09	-3170.90	671028.83	619642.08	32°42'09.826"N	103°54'42.164"W	0.11	
11816.00	90.800	270.300	8761.58	3274.40	221.51	-3266.90	670932.84	619642.49	32°42'09.834"N	103°54'43.288"W	0.43	
11911.00	90.700	270.600	8760.33	3369.21	222.26	-3361.89	670837.86	619643.24	32°42'09.845"N	103°54'44.399"W	0.33	
12007.00	89.900	269.500	8759.83	3464.99	222.34	-3457.88	670741.87	619643.32	32°42'09.849"N	103°54'45.523"W	1.42	
12102.00	89.500	269.400	8760.33	3559.69	221.43	-3552.88	670646.88	619642.41	32°42'09.844"N	103°54'46.634"W	0.43	
12198.00	89.900	268.900	8760.83	3655.36	220.00	-3648.86	670550.90	619640.99	32°42'09.834"N	103°54'47.758"W	0.67	
12293.00	90.600	269.300	8760.42	3750.02	218.51	-3743.85	670455.92	619639.50	32°42'09.823"N	103°54'48.869"W	0.85	
12388.00	90.700	268.500	8759.34	3844.64	216.69	-3838.83	670360.95	619637.67	32°42'09.808"N	103°54'49.981"W	0.85	
12484.00	90.800	269.000	8758.08	3940.24	214.59	-3934.80	670264.99	619635.58	32°42'09.791"N	103°54'51.104"W	0.53	
12579.00	91.200	268.900	8756.42	4034.86	212.85	-4029.76	670170.03	619633.84	32°42'09.778"N	103°54'52.215"W	0.43	
12675.00	91.500	269.500	8754.16	4130.51	211.51	-4125.73	670074.07	619632.50	32°42'09.768"N	103°54'53.338"W	0.70	
12770.00	90.700	268.800	8752.34	4225.16	210.10	-4220.70	669979.11	619631.09	32°42'09.758"N	103°54'54.450"W	1.12	
12865.00	90.900	268.900	8751.01	4319.77	208.20	-4315.67	669884.14	619629.18	32°42'09.743"N	103°54'55.561"W	0.24	
12917.00	90.900	268.500	8750.19	4371.55	207.02	-4367.65	669832.17	619628.00	32°42'09.733"N	103°54'56.170"W	0.77	
12973.00	90.900	268.500	8749.31	4427.29	205.55	-4423.62	669776.20	619626.54	32°42'09.721"N	103°54'56.825"W	0.00	
12978.00	90.900	268.500	8749.24	4432.27	205.42	-4428.62	669771.20	619626.41	32°42'09.720"N	103°54'56.883"W	0.00	Project to Bit

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No. 5H PBHL		8753.00	305.79	-4438.46	669761.37	619726.77	32°42'10.713"N	103°54'56.994"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 5H AWB Ref Wellpath: No. 5H AWP_Corrected

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
20.00	8346.40	Generic gyro - northseeking (Standard)	Gyro	No. 5H AWB
8346.40	12978.00	NavitTrak (Standard)	MWD_Cor	No. 5H AWB



Cimarex Energy Co. of Colorado
West Shugart 31 Fed 5H
SHL 1980' FSL & 375' FEL
BHL 2310' FSL & 330' FWL
Sec 31 - T18S - R31E, Eddy County NM

M. Ketter

8/1/2011

TOC @ 460' (Temp survey)

13-3/8" 48# H40 STC @ 615'
540 sxs cmt; cmt circ'd

Quantity	Description	Length	Setting Depth
	KB	18 00	18 00
243	2-7/8" eu 8rd Tbg	7941 45	7959 45
1	2-7/8" x 5-1/2" TAC	2 68	7962 13
4	2-7/8" L-80 Tbg	130 83	8092 96
1	2-7/8" SN	1 10	8094 06
1	Cavins D2711-G Desander	19 25	8113 31
6	2-7/8" L-80 Tbg	196 13	8309 44
1	2-7/8" Collared Bull Plug	0 65	8310 09

9-5/8" 40# J55 LTC @ 3646'
1315 sxs cmt, cmt circ'd

Sqz csg leak 3770'-3802' with 125 sxs
Sqz csg leak 3770'-3802' with 1/5 sxs cmt went down csg.

Top Good Cement 4800'

Quantity	Description	Length	Setting Depth
	KB		0 00
1	PR and Stuffing Box		
1	1-1/4" x 18" Pony Rod		
115	1-1/4" Fiber Rod Fiberglass Rods		
84	1" Weatherford S-881 Rods		
40	7/8" Weatherford S-88 Rods		
6	1" x 4' Stabilizer Bars		
	(Spaced out every 3 sinker bars)		
18	1-1/2" C Grade Sinker Bars		

2nd Bone Spring Perfs:

9127'-29', 9326'-28', 9525'-27', 9724'-26',
9,923'-25', 10,122'-124', 10,321'-323', 10,520'-522',
10,719'-721', 10,918'-920', 11,117'-119', 11,316'-318',
11,515'-517', 11,714'-716', 11,913'-915', 12,112'-114',
12,301'-303', 12,525'-527', 12,716'-718', 12,908'-910'

2050 sxs cmt; TOC @ 460' (TS)
5-1/2" 17# P110 LTC @ 12962'
(Buttress from 8354' - 9166')

KOP @ 8427'

350 sxs cmt plug

TD: 12,978 (MD), 8,478' (TVD)
PBSD 11,688" (MD)

Possible Csg Problems Below 9800'
Cleaned out to 11,688'
CIBP @ 12,213'



30-015-38221

CACTUS DRILLING COMPANY, L.L.C.

REPORT OF PROOF OF APPARENT DEVIATION
NEW MEXICOOPERATOR CIMAREX CO OF COLORADO600 N MARIENFELD ST
MIDLAND, TX 79701

FIELD NAME _____

COUNTY/PARISH EDDYWELL NAME & NO. WEST SHUGART 31 FEO COM 6LEGAL SEC 31-18S-31E

MEASURED DEPTH (FT)	COURSE LENGTH (HUNDREDS OF FT)	ANGLE OF INCLINATION (DEGREES)	DISPLACEMENT PER HUNDRED FT (SINE OF ANGLE X 100)	COURSE DISPLACEMENT (FEET)	ACCUMULATIVE DISPLACEMENT (FEET)	REMARKS
336	3.36	1/2	0.8727	2.93	2.93	
816	4.80	1	1.7452	8.30	11.31	
1066	2.50	1/2	0.8727	2.18	13.49	
1536	4.70	1/2	0.8727	4.10	17.59	
2029	4.93	1/2	0.8727	4.30	21.89	
2498	4.67	1/2	0.8727	4.08	25.97	
2985	4.90	1/2	0.8727	4.28	30.25	
3496	5.10	1	1.7452	8.90	39.15	
3719	2.23	1/2	0.8727	1.95	41.09	
4209	4.90	1/2	0.8727	4.28	45.37	
4709	5.00	1/2	0.8727	4.36	49.73	
5266	5.57	1/2	0.8727	4.86	54.59	
5709	4.43	1/2	0.8727	3.87	58.46	
6164	4.55	1	1.8325	8.34	66.80	
6607	4.43	1	1.7452	7.73	74.53	
7107	5.00	1/2	0.8727	4.36	78.89	
7533	4.26	1 1/5	2.1117	9.00	87.89	
8075	5.42	1/2	0.8028	4.35	92.24	

Kara Watts
Notary Public
Exp 12/29/2011P.O. Box 270848 • Oklahoma City, OK 73137-0848
(405) 577-5347 • Fax (405) 577-9306

10/17/2011

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 & Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised June 10, 2003

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Cimarex Energy Co. of Colorado 600 N. Marienfeld., Ste. 600 Midland, TX 79701		² OGRID Number 162683
		³ Reason for Filing Code/ Effective Date NW / 12-16-10
⁴ API Number 30-015-38221	⁵ Pool Name Hackberry; Bone Spring, North	⁶ Pool Code 97056
⁷ Property Code 300582	⁸ Property Name West Shugart 31 Federal Com	⁹ Well Number 005

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West line	County
I	31	18S	31E		1980	South	375	East	Eddy

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	31	18S	31E		2310	South	330	West	Eddy
¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 12-16-10	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description
21778	Sunoco Inc R&M PO Box 2039 Tulsa, OK		O	
180055	Duke Energy Field Services 6120 S. Yale Ave. Ste 1100 Tulsa, OK		G	

RECEIVED
OCT 19 2011
NMOCD ARTESIA

IV. Produced Water

²³ POD	²⁴ POD ULSTR Location and Description Same as above
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V. Well Completion Data

²⁵ Spud Date	²⁶ Ready Date	²⁷ TD	²⁸ PBTD	²⁹ Perforations	³⁰ DHC, MC
04-04-11	08-02-11	MD 12978 TVD 8749	MD 12978 TVD 8257	9172-12910	
³¹ Hole Size	³² Casing & Tubing Size	³³ Depth Set	³⁴ Sacks Cement		
17½	13¾	615	540		
12¼	9¾	3646	1315		
8¾	5½	12961	2050		
	27⅞	8310			

VI. Well Test Data

³⁵ Date New Oil	³⁶ Gas Delivery Date	³⁷ Test Date	³⁸ Test Length	³⁹ Tbg. Pressure	⁴⁰ Csg. Pressure
08-02-11	08-10-11	08-14-11	24 hrs	170	55
⁴¹ Choke Size	⁴² Oil	⁴³ Water	⁴⁴ Gas	⁴⁵ AOF	⁴⁶ Test Method
	133	241	105		Producing

⁴⁷ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Carolyn Larson*

Printed name: Carolyn Larson

Title: Regulatory

E-mail Address: clarson@cimarex.com

Date: October 18, 2011

Phone: 432-620-1946

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

JAN 30 2012

dm