

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

RM

OCD-ARTESIA

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Cimarex Energy Co. of Colorado

3a. Address

600 N. Marienfeld St., Ste. 600; Midland, TX 79701

3b. Phone No. (include area code)

432-571-7800

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL 1980 FNL & 330 FWL 1-19S-30E
BHL 1980 FNL & 1650 FEL

5. Lease Serial No.

SHL NM-0560353, BHL LC-063613

6. If Indian, Allottee or Tribe Name

7. If Unit or Co./Agreement, Name and/or No

Pending

8. Well Name and No.

Crescent Hale 1 Federal Com No. 2

9. API Well No.

30-015-~~37652~~ 37750

10. Field and Pool, or Exploratory Area

Undesignated Bone Spring

11. County or Parish, State

Eddy County, NM

RECEIVED

APR 19 2010

NM OCD ARTESIA

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
☒ Notice of Intent	☐ Acidize ☐ Deepen ☐ Production (Start/Resume) ☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing ☐ Fracture Treat ☐ Reclamation ☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair ☐ New Construction ☐ Recomplete ☒ Other <u>Change BHL</u>
	☒ Change Plans ☐ Plug and Abandon ☐ Temporarily Abandon
	☐ Convert to Injection ☐ Plug Back ☐ Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof.

If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Due to the lack of a producing well in NENE, Cimarex has lengthened its lateral on the Crescent Hale 1 Fed Com 2 to include the entire S2N2 1-19S-30E. Please see changes below.

Permitted Location

SHL 1980 FNL & 330 FWL
BHL 1980 FNL & 1650 FEL
1-19S-30E

Eddy County, NM
and intermediate

Proposed Location

SHL 1980 FNL & 330 FWL
BHL 1980 FNL & 330 FEL
1-19S-30E
Eddy County, NM

*Per Zeno Farri's
CRW 4/13/10*

After drilling and setting surface casing, drill to vertical TD 8950' and log. Set 7" casing to 8510' and cross over to 2 3/4" 2000 psi IJ fiberglass tubing underneath to 8950' and cement in place. Drill out of the bottom of the 7" with a 6 1/8" bit and through cement and fiberglass tubing to KOP @ 8570' and kick off to drill the lateral. The fiberglass tubing effectively circulates cement to surface and plugs back the open hole. Drill to lateral TD (13282' MD, 8730' TVD). Run 4 1/2" PEAK liner from RSB packer @ 8410' to TD @ 13282'. Request a 100' tieback for lateral casing string in order to be able to set the pump as deep as possible.

Please see attached revised C-102 and preliminary directional survey.

See Original COA

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Natalie Krueger

Signature

Title

Regulatory

Date

March 18, 2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

Conditions of Approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Title 18 U.S.C. Section 1001, makes 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.

(Instructions on reverse)

APPROVED

APR 15 2010

/s/ Chris Walls

BUREAU OF LAND MANAGEMENT

CARLSBAD FIELD OFFICE

mw

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

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

DISTRICT III
1000 Rio Grande Ed., Artesia, 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	Pool Code	Pool Name Undesignated Bone Spring
Property Code	Property Name CRESCENT HALE "1" FEDERAL COM	Well Number 2
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3526'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	1	19 S	30 E		1980	NORTH	330	WEST	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
H	1	19 S	30 E		1980	NORTH	330	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

SHL & P.P. Bone Spring 1980 FNL & 330 FWL		EOC 1980 FNL & 522 FWL		BHL 660 FNL & 1650 FEL					
3529.9' 3524.1' 330' 330' 3530.5' 3524.0'		NM-0560353 LC-063613 4802.8'		1980' 1980' 330'					
SURFACE LOCATION Lat - N 32°41'28.36" Long - W 103°55'58.60" NMSPCE- N 615426.4 E 664513.5 (NAD-83)		PROPOSED BOTTOM HOLE LOCATION Lat - N 32°41'28.26" Long - W 103°55'04.74" NMSPCE- N 615434.013 E 669116.265 (NAD-83)		Proposed Producing Interval					
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 released 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>Natalie Krueger</i> 4/6/2010 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. GARY L. JONES 2009 Date Surveyed <i>[Signature]</i> Signature & Seal of Professional Surveyor 1984 Certificate No. Gary L. Jones 7977 BASIN SURVEYS									



Cimarex Energy Co.

Location: Eddy County, NM
Field: (Crescent) Sec 1, T19S, R30E
Facility: Crescent Hale 1 Fed Com No. 2H

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

Plot reference wellpath is PWBm_2

True vertical depths are referenced to Rig on No. 2H SHL (RT)

Measured depths are referenced to Rig on No. 2H SHL (RT)

Rig on No. 2H SHL (RT) to Mean Sea Level: 3526 feet

Mean Sea Level to Mud line (Facility: Crescent Hale 1 Fed Com No. 2H) -3526 feet

Coordinates are in feet referenced to Facility Center

Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), U.S. feet

North Reference: Grid north

Scale: True distance

Depths are in feet

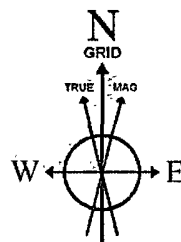
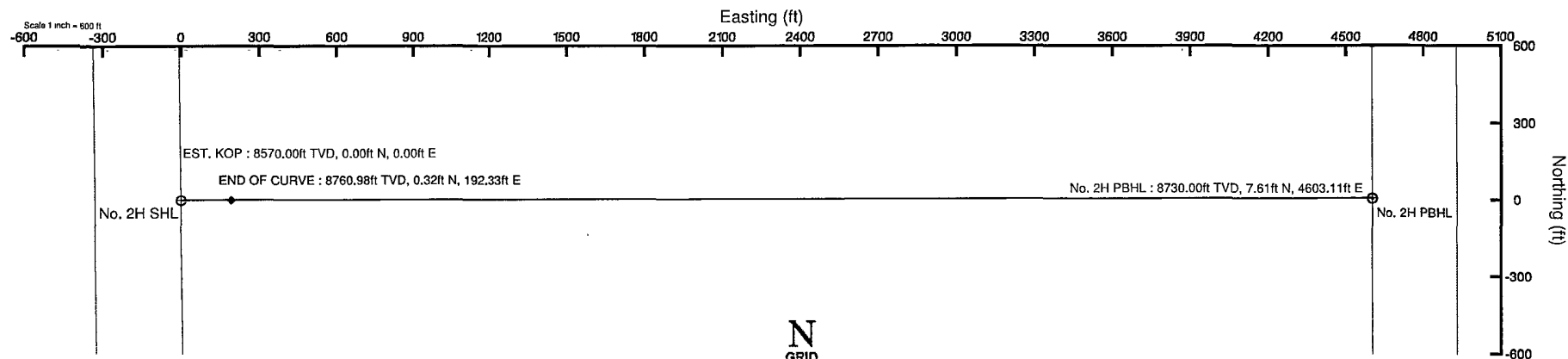
Created by: Victor Hernandez on 2/22/2010



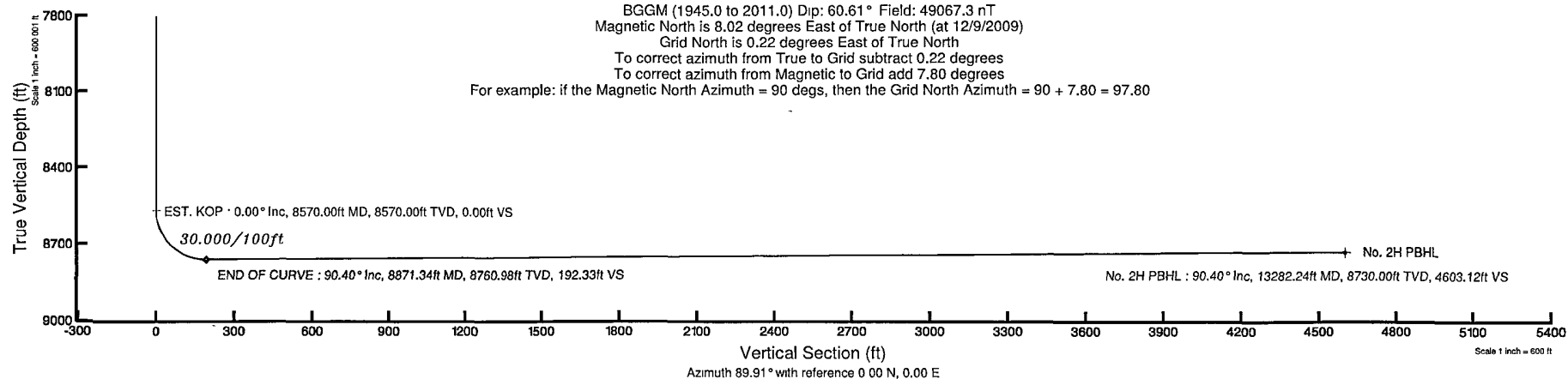
INTEQ

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	89.905	0.00	0.00	0.00	0.00	0.00
EST. KOP	8570.00	0.000	89.905	8570.00	0.00	0.00	0.00	0.00
END OF CURVE	8871.34	90.402	89.905	8760.98	0.32	192.33	30.00	192.33
No. 2H PBHL	13282.24	90.402	89.905	8730.00	7.61	4603.11	0.00	4603.12



BGGM (1945.0 to 2011.0) Dip: 60.61° Field: 49067.3 nT
Magnetic North is 8.02 degrees East of True North (at 12/9/2009)
Grid North is 0.22 degrees East of True North
To correct azimuth from True to Grid subtract 0.22 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

Prelim_2
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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Crescent) Sec 1, T19S, R30E	Wellbore	No. 2H PWB
Facility	Crescent Hale 1 Fed 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	0.999926	Report Generated	2/22/2010 at 5:29:44 PM
Convergence at slot	0.22° 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	664513.50	615426.40	32°41'28.361"N	103°55'58.601"W
Facility Reference Pt			664513.50	615426.40	32°41'28.361"N	103°55'58.601"W
Field Reference Pt			664708.10	613101.90	32°41'05.353"N	103°55'56.426"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 2H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 2H SHL (RT) to Mean Sea Level	3526.00ft
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	89.91°



Planned Wellpath Report

Prelim_2

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**BAKER
HUGHES**

INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Crescent) Sec 1, T19S, R30E	Wellbore	No. 2H PWB
Facility	Crescent Hale 1 Fed Com No. 2H		

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	89.905	0.00	0.00	0.00	0.00	664513.50	615426.40	32°41'28.361"N	103°55'58.601"W	0.00	Tie On
8570.00	0.000	89.905	8570.00	0.00	0.00	0.00	664513.50	615426.40	32°41'28.361"N	103°55'58.601"W	0.00	EST. KOP
8670.00†	30.000	89.905	8665.49	25.59	0.04	25.59	664539.09	615426.44	32°41'28.361"N	103°55'58.301"W	30.00	
8770.00†	60.000	89.905	8735.40	95.49	0.16	95.49	664608.99	615426.56	32°41'28.359"N	103°55'57.483"W	30.00	
8870.00†	90.000	89.905	8760.99	190.99	0.32	190.99	664704.47	615426.72	32°41'28.357"N	103°55'56.366"W	30.00	
8871.34	90.402	89.905	8760.98	192.33	0.32	192.33	664705.81	615426.72	32°41'28.357"N	103°55'56.350"W	30.00	END OF CURVE
8970.00†	90.402	89.905	8760.29	290.98	0.48	290.98	664804.46	615426.88	32°41'28.355"N	103°55'55.196"W	0.00	
9070.00†	90.402	89.905	8759.59	390.98	0.65	390.98	664904.45	615427.05	32°41'28.353"N	103°55'54.026"W	0.00	
9170.00†	90.402	89.905	8758.88	490.98	0.81	490.98	665004.44	615427.21	32°41'28.351"N	103°55'52.856"W	0.00	
9270.00†	90.402	89.905	8758.18	590.98	0.98	590.98	665104.43	615427.38	32°41'28.349"N	103°55'51.686"W	0.00	
9370.00†	90.402	89.905	8757.48	690.97	1.14	690.97	665204.42	615427.54	32°41'28.347"N	103°55'50.516"W	0.00	
9470.00†	90.402	89.905	8756.78	790.97	1.31	790.97	665304.41	615427.71	32°41'28.344"N	103°55'49.346"W	0.00	
9570.00†	90.402	89.905	8756.07	890.97	1.47	890.97	665404.40	615427.87	32°41'28.342"N	103°55'48.176"W	0.00	
9670.00†	90.402	89.905	8755.37	990.97	1.64	990.96	665504.39	615428.04	32°41'28.340"N	103°55'47.006"W	0.00	
9770.00†	90.402	89.905	8754.67	1090.96	1.80	1090.96	665604.38	615428.20	32°41'28.338"N	103°55'45.836"W	0.00	
9870.00†	90.402	89.905	8753.97	1190.96	1.97	1190.96	665704.37	615428.37	32°41'28.336"N	103°55'44.665"W	0.00	
9970.00†	90.402	89.905	8753.26	1290.96	2.14	1290.96	665804.36	615428.54	32°41'28.334"N	103°55'43.495"W	0.00	
10070.00†	90.402	89.905	8752.56	1390.96	2.30	1390.95	665904.35	615428.70	32°41'28.332"N	103°55'42.325"W	0.00	
10170.00†	90.402	89.905	8751.86	1490.95	2.47	1490.95	666004.34	615428.87	32°41'28.330"N	103°55'41.155"W	0.00	
10270.00†	90.402	89.905	8751.16	1590.95	2.63	1590.95	666104.33	615429.03	32°41'28.327"N	103°55'39.985"W	0.00	
10370.00†	90.402	89.905	8750.45	1690.95	2.80	1690.95	666204.32	615429.20	32°41'28.325"N	103°55'38.815"W	0.00	
10470.00†	90.402	89.905	8749.75	1790.95	2.96	1790.94	666304.31	615429.36	32°41'28.323"N	103°55'37.645"W	0.00	
10570.00†	90.402	89.905	8749.05	1890.94	3.13	1890.94	666404.30	615429.53	32°41'28.321"N	103°55'36.475"W	0.00	
10670.00†	90.402	89.905	8748.35	1990.94	3.29	1990.94	666504.29	615429.69	32°41'28.319"N	103°55'35.305"W	0.00	
10770.00†	90.402	89.905	8747.65	2090.94	3.46	2090.94	666604.28	615429.86	32°41'28.317"N	103°55'34.135"W	0.00	
10870.00†	90.402	89.905	8746.94	2190.94	3.62	2190.93	666704.27	615430.02	32°41'28.314"N	103°55'32.965"W	0.00	
10970.00†	90.402	89.905	8746.24	2290.93	3.79	2290.93	666804.26	615430.19	32°41'28.312"N	103°55'31.795"W	0.00	
11070.00†	90.402	89.905	8745.54	2390.93	3.95	2390.93	666904.25	615430.35	32°41'28.310"N	103°55'30.625"W	0.00	
11170.00†	90.402	89.905	8744.84	2490.93	4.12	2490.93	667004.24	615430.52	32°41'28.308"N	103°55'29.455"W	0.00	
11270.00†	90.402	89.905	8744.13	2590.93	4.29	2590.92	667104.23	615430.69	32°41'28.306"N	103°55'28.285"W	0.00	



Planned Wellpath Report

Prelim_2

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Crescent) Sec 1, T19S, R30E	Wellbore	No. 2H PWB
Facility	Crescent Hale 1 Fed Com No. 2H		

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
11370.00†	90.402	89.905	8743.43	2690.92	4.45	2690.92	667204.22	615430.85	32°41'28.304"N	103°55'27.115"W	0.00	
11470.00†	90.402	89.905	8742.73	2790.92	4.62	2790.92	667304.21	615431.02	32°41'28.301"N	103°55'25.945"W	0.00	
11570.00†	90.402	89.905	8742.03	2890.92	4.78	2890.92	667404.20	615431.18	32°41'28.299"N	103°55'24.774"W	0.00	
11670.00†	90.402	89.905	8741.32	2990.92	4.95	2990.91	667504.19	615431.35	32°41'28.297"N	103°55'23.604"W	0.00	
11770.00†	90.402	89.905	8740.62	3090.91	5.11	3090.91	667604.18	615431.51	32°41'28.295"N	103°55'22.434"W	0.00	
11870.00†	90.402	89.905	8739.92	3190.91	5.28	3190.91	667704.17	615431.68	32°41'28.293"N	103°55'21.264"W	0.00	
11970.00†	90.402	89.905	8739.22	3290.91	5.44	3290.90	667804.16	615431.84	32°41'28.290"N	103°55'20.094"W	0.00	
12070.00†	90.402	89.905	8738.51	3390.91	5.61	3390.90	667904.15	615432.01	32°41'28.288"N	103°55'18.924"W	0.00	
12170.00†	90.402	89.905	8737.81	3490.90	5.77	3490.90	668004.14	615432.17	32°41'28.286"N	103°55'17.754"W	0.00	
12270.00†	90.402	89.905	8737.11	3590.90	5.94	3590.90	668104.13	615432.34	32°41'28.284"N	103°55'16.584"W	0.00	
12370.00†	90.402	89.905	8736.41	3690.90	6.10	3690.89	668204.12	615432.50	32°41'28.282"N	103°55'15.414"W	0.00	
12470.00†	90.402	89.905	8735.71	3790.90	6.27	3790.89	668304.11	615432.67	32°41'28.279"N	103°55'14.244"W	0.00	
12570.00†	90.402	89.905	8735.00	3890.89	6.44	3890.89	668404.10	615432.84	32°41'28.277"N	103°55'13.074"W	0.00	
12670.00†	90.402	89.905	8734.30	3990.89	6.60	3990.89	668504.09	615433.00	32°41'28.275"N	103°55'11.904"W	0.00	
12770.00†	90.402	89.905	8733.60	4090.89	6.77	4090.88	668604.08	615433.17	32°41'28.273"N	103°55'10.734"W	0.00	
12870.00†	90.402	89.905	8732.90	4190.89	6.93	4190.88	668704.07	615433.33	32°41'28.271"N	103°55'09.564"W	0.00	
12970.00†	90.402	89.905	8732.19	4290.88	7.10	4290.88	668804.05	615433.50	32°41'28.268"N	103°55'08.394"W	0.00	
13070.00†	90.402	89.905	8731.49	4390.88	7.26	4390.88	668904.04	615433.66	32°41'28.266"N	103°55'07.224"W	0.00	
13170.00†	90.402	89.905	8730.79	4490.88	7.43	4490.87	669004.03	615433.83	32°41'28.264"N	103°55'06.054"W	0.00	
13270.00†	90.402	89.905	8730.09	4590.88	7.59	4590.87	669104.02	615433.99	32°41'28.262"N	103°55'04.884"W	0.00	
13282.24	90.402	89.905	8730.00	4603.12	7.61	4603.11	669116.27	615434.01	32°41'28.261"N	103°55'04.740"W	0.00	No. 2H PBHL

HOLE & CASING SECTIONS Ref Wellbore: No. 2H PWB Ref Wellpath: Prelim_2

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
6.125in Open Hole	8570.00	13282.24	4712.24	8570.00	8730.00	0.00	0.00	7.61	4603.11



Planned Wellpath Report

Prelim_2

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 2H SHL
Area	Eddy County, NM	Well	No. 2H
Field	(Crescent) Sec 1, T19S, R30E	Wellbore	No. 2H PWB
Facility	Crescent Hale 1 Fed 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 PBHL	13282.24	8730.00	7.61	4603.11	669116.27	615434.01	32°41'28.261"N	103°55'04.740"W	point

SURVEY PROGRAM					Ref Wellbore: No. 2H PWB					Ref Wellpath: Prelim_2				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment					Wellbore				
0.00	13282.24	NaviTrak (Standard)								No. 2H PWB				