

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

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



SUNDY 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

JUL 25 2008

2. Name of Operator
Cimarex Energy Co. of Colorado

OCD-ARTESIA

3a. Address
PO Box 140907; Irving, TX 75014-0907

3b. Phone No. (include area code)
972-401-3111

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL 1340 FNL & 990 FWL 23-25S-26E
BHL 1110 FNL & 660 FEL

Serial No.
NM-94839

6. If Indian, Allottee or Tribe Name

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

Pending

8. Well Name and No.

Pintail 23 Federal Com No. 1

9. API Well No.

30-015-33431

10. Field and Pool, or Exploratory Area

Cottonwood Draw; Morrow

11. County or Parish, State

Eddy County, NM

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

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

On 06-03-08, Cimarex submitted a 3160-5 with plans to revise its Re-entry plans for the Pintail 23 Fed Com No. 1 to a Horizontal Cisco Recompletion.

Cimarex would like to change its proposed BHL for this well as shown on the attached plats. The preliminary directional survey has also been revised and is attached. All that has changed in the proposed drilling plan is the TD, shown below:

Clean out cement plugs at the surface, 165'-265', 3350'-3475', 5300'-5450', 8410'-8650' to TD top of cement plug @ 11230'. Pull up and set kick off plug to kick off at 10270'. Drill curve at 25 deg/100' and land curve in the Cisco Canyon. Drill well to TD (MD 14108' and TVD 10537') and cement 4 1/2" 11.6# N-80 LTC csg in place.

Cement with Lead 620 sx Interfill H + 0.3% HR-601 + 5 lb/sx Gilsonite + 0.125 lb/sx Poly-E-Flake + mixed at 11.9 ppg. Yield 2.47 cf/sx. Tail 480 sx Super H + 0.5% Halad ® 344 + 0.25% D-Air 3000 + 0.4% CFR-3 + 1 lb/sx Salt + 5 lb/sx Gilsonite + 0.125 lb/sx Poly-E-Flake + 0.35% HR-7 mixed at 13.2 ppg. Yield 1.61 cf/sx. Estimated TOC at 4,000 ft.

Frac in 5 stages.

Please see attached revised plat and revised preliminary directional survey.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

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

Natalie Krueger

Signature

Natalie Krueger

Title

Regulatory Analyst

Date

June 23, 2008

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

JUL 21 2008

**WESLEY W. INGRAM
PETROLEUM ENGINEER**

Accepted for record - NMOCD

DISTRICT I

1625 N. FRENCH DR., BOBBS, NM 86240

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

OIL 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-33431	Pool Code 97354	Pool Name Cottonwood Draw; Upper Penn (Gas)
Property Code	Property Name PINTAIL 23 FEDERAL COM	Well Number 1
OCRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3330'

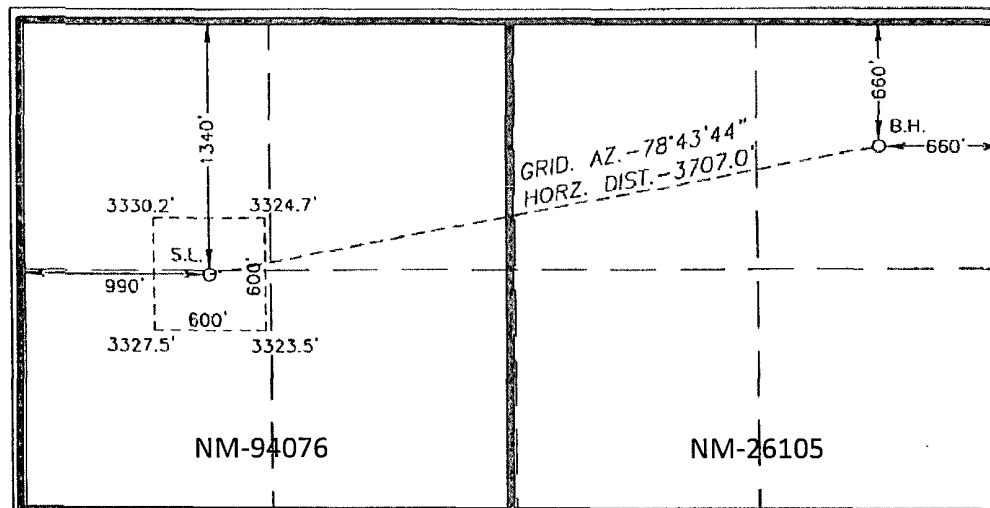
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	23	25-S	26-E		1340	NORTH	990	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
A	23	25-S	26-E		660	NORTH	660	EAST	EDDY
Dedicated Acres 320	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



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Zeno Farris 06-23-08
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.

RONALD J. EIDSON
MARCH 04 2004
Date Surveyed
Signature & Seal of Professional Surveyor
Ronald J. Eidson 6/19/08
10813-1908

Certificate No. GARY EIDSON 12641
RONALD EIDSON 3239

GEODETC COORDINATES
NAD 27 NMC
SURFACE LOCATION
Y=406937.2 N
X=520132.3 E

BOTTOM HOLE LOCATION
Y=407661.5 N
X=523766.8 E

LAT.=32°07'07.60" N
LONG.=104°16'05.90" W



Planned Wellpath Report

Preliminary
Page 1 of 3



INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Pintail) Sec 23, T25S, R26E	Wellbore	No. 1H PWB
Facility	Pintail 23 Fed Com No. 1H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.99991	Report Generated	6/23/2008 at 2:06:40 PM
Convergence at slot	0.03° East	Database/Source file	WA_Midland/No. 1H_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	520132.30	406937.20	32°07'07.572"N	104°16'05.899"W
Facility Reference Pt			520132.30	406937.20	32°07'07.572"N	104°16'05.899"W
Field Reference Pt			520132.30	406937.20	32°07'07.572"N	104°16'05.899"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (RT) to Mean Sea Level	3348.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	78.73°



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Facility	Pintail 23 Fed Com No. 1H		

WELLPATH DATA (42 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00	0.000	78.729	0.00	0.00	0.00	0.00	0.00	Tie On
10270.00	0.000	78.729	10270.00	0.00	0.00	0.00	0.00	KOP
10370.00†	24.910	78.729	10366.88	21.40	4.18	20.99	24.91	
10470.00†	49.820	78.729	10445.73	81.61	15.95	80.04	24.91	
10570.00†	74.730	78.729	10491.89	169.43	33.11	166.17	24.91	
10628.85	89.391	78.729	10500.00	227.56	44.48	223.18	24.91	EOC
10670.00†	89.391	78.729	10500.44	268.71	52.52	263.53	0.00	
10770.00†	89.391	78.729	10501.50	368.70	72.06	361.59	0.00	
10870.00†	89.391	78.729	10502.56	468.70	91.60	459.66	0.00	
10970.00†	89.391	78.729	10503.63	568.69	111.15	557.72	0.00	
11070.00†	89.391	78.729	10504.69	668.69	130.69	655.79	0.00	
11170.00†	89.391	78.729	10505.75	768.68	150.23	753.86	0.00	
11270.00†	89.391	78.729	10506.82	868.67	169.78	851.92	0.00	
11370.00†	89.391	78.729	10507.88	968.67	189.32	949.99	0.00	
11470.00†	89.391	78.729	10508.94	1068.66	208.86	1048.05	0.00	
11570.00†	89.391	78.729	10510.01	1168.66	228.40	1146.12	0.00	
11670.00†	89.391	78.729	10511.07	1268.65	247.95	1244.19	0.00	
11770.00†	89.391	78.729	10512.14	1368.65	267.49	1342.25	0.00	
11870.00†	89.391	78.729	10513.20	1468.64	287.03	1440.32	0.00	
11970.00†	89.391	78.729	10514.26	1568.63	306.58	1538.38	0.00	
12070.00†	89.391	78.729	10515.33	1668.63	326.12	1636.45	0.00	
12170.00†	89.391	78.729	10516.39	1768.62	345.66	1734.52	0.00	
12270.00†	89.391	78.729	10517.45	1868.62	365.21	1832.58	0.00	
12370.00†	89.391	78.729	10518.52	1968.61	384.75	1930.65	0.00	
12470.00†	89.391	78.729	10519.58	2068.61	404.29	2028.71	0.00	
12570.00†	89.391	78.729	10520.64	2168.60	423.83	2126.78	0.00	
12670.00†	89.391	78.729	10521.71	2268.60	443.38	2224.85	0.00	
12770.00†	89.391	78.729	10522.77	2368.59	462.92	2322.91	0.00	
12870.00†	89.391	78.729	10523.83	2468.58	482.46	2420.98	0.00	
12970.00†	89.391	78.729	10524.90	2568.58	502.01	2519.04	0.00	



Planned Wellpath Report

Preliminary
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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Pintail) Sec 23, T25S, R26E	Wellbore	No. 1H PWB
Facility	Pintail 23 Fed Com No. 1H		

WELLPATH DATA (42 stations) † = interpolated/extrapolated station								
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
13070.00†	89.391	78.729	10525.96	2668.57	521.55	2617.11	0.00	
13170.00†	89.391	78.729	10527.03	2768.57	541.09	2715.18	0.00	
13270.00†	89.391	78.729	10528.09	2868.56	560.64	2813.24	0.00	
13370.00†	89.391	78.729	10529.15	2968.56	580.18	2911.31	0.00	
13470.00†	89.391	78.729	10530.22	3068.55	599.72	3009.37	0.00	
13570.00†	89.391	78.729	10531.28	3168.54	619.27	3107.44	0.00	
13670.00†	89.391	78.729	10532.34	3268.54	638.81	3205.51	0.00	
13770.00†	89.391	78.729	10533.41	3368.53	658.35	3303.57	0.00	
13870.00†	89.391	78.729	10534.47	3468.53	677.89	3401.64	0.00	
13970.00†	89.391	78.729	10535.53	3568.52	697.44	3499.70	0.00	
14070.00†	89.391	78.729	10536.60	3668.52	716.98	3597.77	0.00	
14107.80	89.391	78.729	10537.00†	3706.31	724.37	3634.84	0.00	No. 1H BHL

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H BHL	14107.80	10537.00	724.37	3634.84	523766.80	407661.50	32°07'14.717"N	104°15'23.631"W	point

SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Preliminary				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	14107.80	NaviTrak (Standard)		No. 1H PWB



Cimarex Energy Co. of Colorado

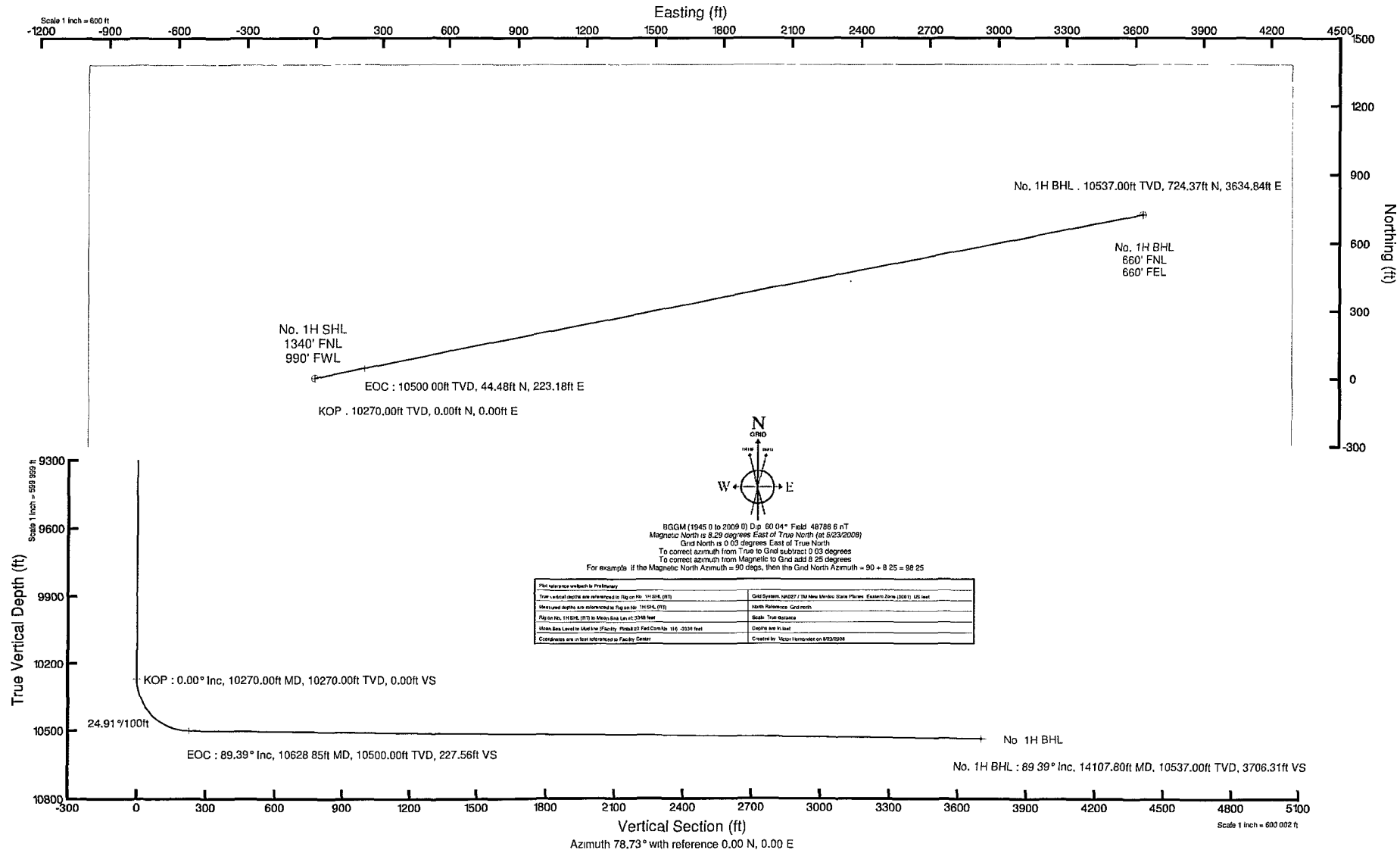
Location: Eddy County, NM
Field (Pintail) Sec 23, T25S, R26E
Facility Pintail 23 Fed Com No. 1H

Slot No. 1H SHL
Well No. 1H
Wellbore No. 1H 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	78.729	0.00	0.00	0.00	0.00	0.00
KOP	10270.00	0.000	78.729	10270.00	0.00	0.00	0.00	0.00
EOC	10628.85	89.391	78.729	10500.00	44.48	223.18	24.91	227.56
No. 1H BHL	14107.80	89.391	78.729	10537.00	724.37	3634.84	0.00	3706.31



**PECOS DISTRICT
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Cimarex Energy Co. of Colorado
LEASE NO.:	NM 94076 SHL / NM 26105 BHL
WELL NAME & NO.:	Pintail 23 Fed Com 1
SURFACE HOLE FOOTAGE:	1340' FNL & 0990' FWL
BOTTOM HOLE FOOTAGE:	1110' FNL & 0660' FEL
LOCATION:	Section 23, T. 25 S., R 26 E., NMPM
COUNTY:	Eddy County, New Mexico

RE-ENTRY

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. H2S has been reported in section 11, 13 and 14 from the Delaware formation measuring from 1200-1500 in STV. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string.

BOP/BOPE AND A CASING TEST WILL BE PERFORMED AFTER DRILLING OUT THE FIRST TWO PLUGS (ONE FROM SURFACE TO 60' AND ONE FROM 165' TO 265'). THESE TESTS WILL BE PERFORMED PRIOR TO DRILLING OUT THE 9 5/8 SHOE PLUG.

Possible abnormal pressures in the Wolfcamp and high pressure gas down through the Pennsylvanian Section.

1. The 13 3/8 inch surface casing **already exists at a depth of 216 feet and was circulated to surface.**
2. The 9 5/8 inch intermediate casing **already exists at a depth of 3431 feet and was circulated to surface.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i.

Kick off plug will be set from 10000-10600' and dressed to 10240' for kick off.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

3. The minimum required fill of cement behind the 5 -1/2 and 4-1/2 inch production casing is:
 - ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Additional cement will be required.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required will be a **5000 (5M)** psi.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 072108