

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTOCD Hobbs
HOBBBSFORM APPROVED
OMB NO 1004-0135
Expires July 31, 2010**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.

NOV 14 2012

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

RECEIVED

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5 Lease Serial No NMNM01917
2 Name of Operator CIMAREX ENERGY COMPANY		6 If Indian, Allottee or Tribe Name
Contact TERRI STATHEM E-Mail tstathem@cimarex.com		7 If Unit or CA/Agreement, Name and/or No
3a Address 600 NORTH MARIENFELD STREET SUITE 600 MIDLAND, TX 79701	3b Phone No (include area code) Ph 432-620-1936	8 Well Name and No DOS EQUIS 12 FEDERAL COM 2H
4 Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 12 T24S R32E 330FNL 1980FEL		9 API Well No 30-025-40791
		10 Field and Pool, or Exploratory TRIPLE X, BONE SPRING W
		11 County or Parish, and State LEA COUNTY, NM

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
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original APD
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including 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.)

Cimarex Energy respectfully requests approval to change the following drilling plans.

1) This well is a planned pilot hole

a. Plan to drill to +/- 12,650' TVD, run OH logs, plug back and cement with OH whipstock set at +/- 10,550'. Kick off and land curve at +/- 11,030' TVD and drill lateral to planned MD

b. Plug cement planned 1,100 sacks, 15 6 ppg, 1 19 yield

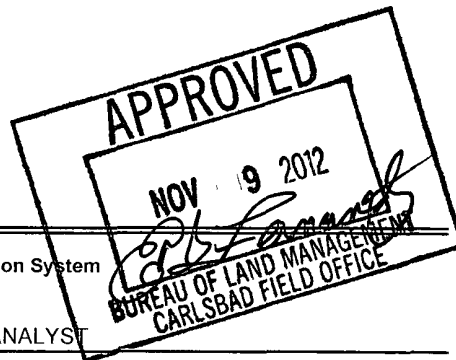
2) 5-1/2" Casing and centralization

a. 5-1/2" 17# P-110 LTC from 0' to 10,350'

b. 5-1/2" 17# P-110 BTC from 10,350' to TD (5,100')

c. No centralization in the lateral. Plan to run 1 centralizer per joint in the curve and 1 every 4th joint in the vertical to 200' above previous casing shoe

3) 5-1/2" cement

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14 I hereby certify that the foregoing is true and correct	
Electronic Submission #159615 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY, sent to the Hobbs	
Name (Printed/Typed) TERRI STATHEM	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 11/07/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>Ed Fernandez</u>	Title PETROLEUM ENGINEER	Date
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 these rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office

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

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****
**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

NOV 15 2012

Additional data for EC transaction #159615 that would not fit on the form

32. Additional remarks, continued

a We've had limited success raising the 11.9 ppg lead slurry in this area to planned TOC.

b Proposed Changes

i. Lead 735 sacks, 10.8 ppg, 3.7 yield

ii. Tail: 1,595 sacks, 14.2 ppg, 1.3 yield

4) 9-5/8" cement

a. The following cement will be utilized on the intermediate casing

i. Lead 1660 sacks, 12.9 ppg, 1.92 yield

ii. Tail 200 sacks, 14.8 ppg, 1.34 yield

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**



Cimarex Dos Equis 12 Federal Com #2H ST01 Rev0 RJS 12-Oct-12 Proposal Report

(Non-Def Plan)



Report Date: November 06, 2012 - 03.03 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cactus 110 / Cimarex Dos Equis 12 Federal Com #2H
Well: Cimarex Dos Equis 12 Federal Com #2H
Borehole: ST01
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Dos Equis 12 Federal Com #2H ST01 Rev0 RJS 12-Oct-12
Survey Date: October 12, 2012
Tort / AHD / DDI / ERD Ratio: 89.036 ° / 4623 256 ft / 5 758 / 0 417
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 14' 18.91516", W 103° 37' 34.20451"
Location Grid N/E Y/X: N 451251.500 ftUS, E 759983 200 ftUS
CRS Grid Convergence Angle: 0.3772 °
Grid Scale Factor: 0.99996384
Survey / DLS Computation. Minimum Curvature / Lubinski
Vertical Section Azimuth: 179 664 ° (Gnd North)
Vertical Section Origin: 0.000 ft, 0 000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3625 000 ft above MSL
Seabed / Ground Elevation: 3605 000 ft above MSL
Magnetic Declination: 7.543 °
Total Gravity Field Strength: 999 1461 mgn (9.8 based)
Total Magnetic Field Strength: 48465.468 nT
Magnetic Dip Angle: 60.117 °
Declination Date: November 06, 2012
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.3772 °
Total Corr Mag North->Grid North: 7 1653 °
Local Coord Referenced To: Structure Reference Point

HOBBS OCD

NOV 14 2012

RECEIVED

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Dos Equis 12 Fed Com #2H	0.00	0.00	0 00	0.00	-3625 00	0 00	0.00	0 00	N/A	N/A	N/A	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
Tie-In ST01	10550.00	0.00	179 66	10550.00	6925.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
KOP - Build @ 12°/100' DLS	10552.50	0.00	179 66	10552.50	6927.50	0 00	0.00	0 00	0 00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
Landing Point	11294.62	89.03	179.66	11030.00	7405 00	469.52	-469.52	2 75	12 00	12.00	0 00	450782.00	759985.95	N 32 14 14.27	W 103 37 34.21
Cimarex Dos Equis 12 Federal Com #2H PBHL	15448.94	89.03	179.66	11100 00	7475 00	4623.26	-4623 18	27 10	0.00	0.00	0.00	446628.50	760010.30	N 32 13 33.17	W 103 37 34.24

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program.

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0 000	20 000	1/100.000	30 000	30 000	SLB_NSG+MSHOT-Depth Only	Original Borehole / Cimarex Dos Equis 12 Federal Com #2H Pilot Rev0 RJS 12-Oct-12
	20 000	10550.000	1/100 000	30.000	30 000	SLB_NSG+MSHOT	Original Borehole / Cimarex Dos Equis 12 Federal Com #2H Pilot
	10550 000	15448.939	1/100 000	30 000	30.000	SLB_MWD-STD	ST01 / Cimarex Dos Equis 12 Federal Com #2H ST01 Rev0



Cimarex



A Schlumberger Company

Cactus 110

ST01 Rev0

WELL	FIELD	WELL TYPE
Dos Equis 12 Federal Com #2H	NM Lea County	Cactus 110
Major Parameters	Location	Measurements
Initial: 06/01/2012	Lat: 36° 11' 11" N	Well: Dos Equis 12 Federal Com #2H
Dep: 7.421"	Long: 106° 11' 11" W	Well: Dos Equis 12 Federal Com #2H
Obs: 06/01/2012	Alt: 4512.51 MSL	Well: Dos Equis 12 Federal Com #2H
PS: 4512.51 MSL	Well: Dos Equis 12 Federal Com #2H	Well: Dos Equis 12 Federal Com #2H

Legend

Legend

SHL Dos Equis 12 Fed Com #2H

Tie-In STD1

KOP - Build @ 12°/100' DLS

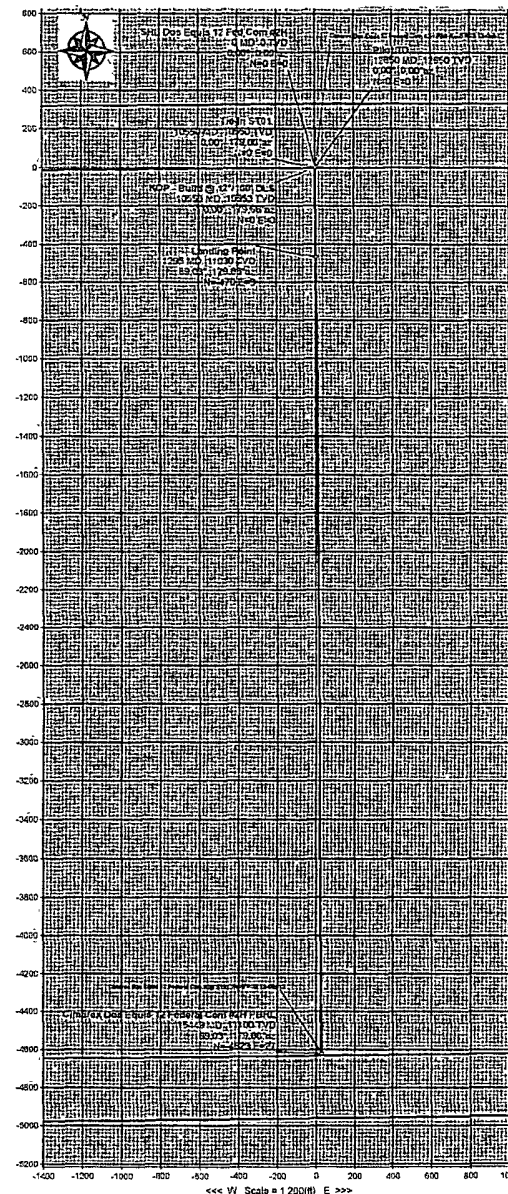
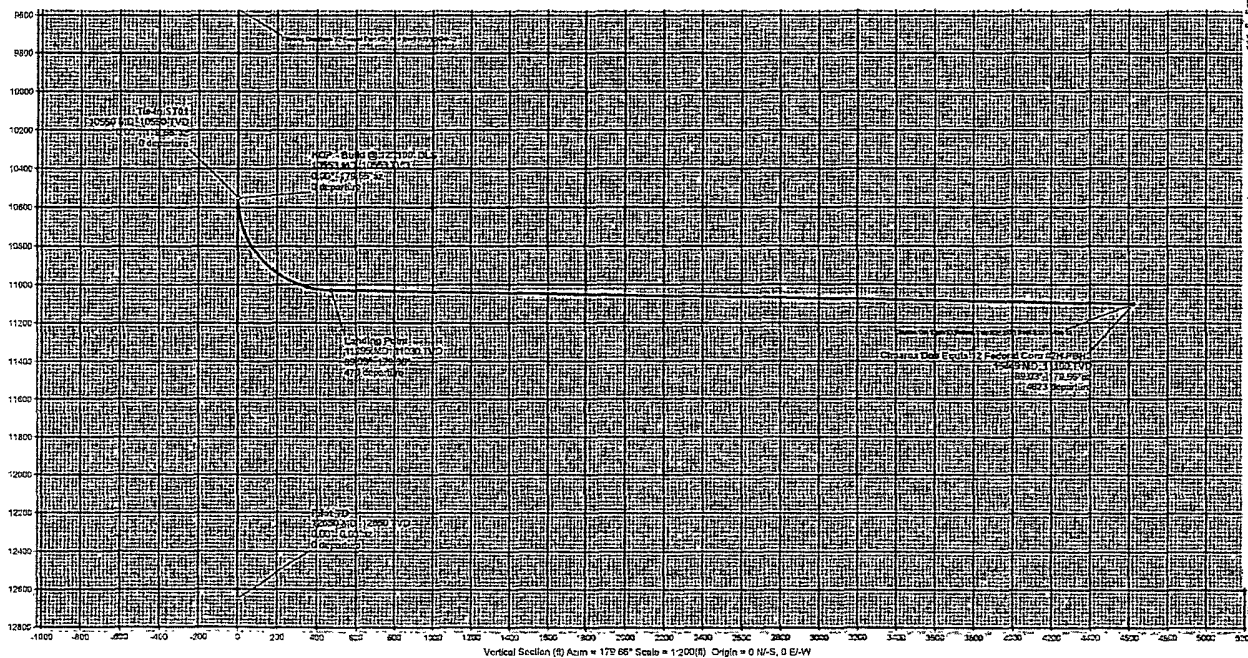
Landing Point

Cimarex Dos Equis 12 Federal Com #2H PBHL



Grid North
Tot Corr (M->G 7.1653°)
Mag Dec (7.543°)
Grid Conv (0.377°)

Comments	Survey ID (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Sub-Sea TVD (ft)	VS (ft)	NS (ft)	EW (ft)	Latitude (deg)	Longitude (deg)	Easting (ftUS)	Northing (ftUS)	DLS (1/100 ft)	Tool Face (deg)
SHL Dos Equis 12 Fed Com #2H	0.00	0.00	0.00	0.00	-3525.00	0.00	0.00	0.00	N 32 14 18.915	W 103 37 34.205	759933.20	451251.50		179.65
Tie-In STD1	10560.00	0.00	179.66	10560.00	6925.00	0.00	0.00	0.00	N 32 14 18.915	W 103 37 34.205	759933.20	451251.50	0.00	179.65
KOP - Build @ 12°/100' DLS	10552.50	0.00	179.66	10552.50	5927.50	0.00	0.00	0.00	N 32 14 18.915	W 103 37 34.205	759933.20	451251.50	0.00	179.65
Landing Point	11254.62	89.03	179.66	11090.00	7405.00	459.52	-465.52	2.75	N 32 14 14.269	W 103 37 34.208	759933.95	450782.00	12.00	0.00
Cimarex Dos Equis 12 Federal Com #2H PBHL	15448.94	89.03	179.66	11100.00	7475.00	4623.26	-4623.18	27.10	N 32 13 33.167	W 103 37 34.243	750010.30	445626.50	0.00	



Drawn By: J. L. Schumacher
Checked By: J. L. Schumacher
Cleared Date: November 05, 2012 13:05:59 PM
Approved By: J. L. Schumacher
Approved Date:



Cimarex Dos Equis 12 Federal Com #2H ST01 Rev0 RJS 12-Oct-12 Proposal
Report 100' Interpolated
 (Non-Def Plan)



Report Date:	November 06, 2012 - 03:03 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Cimarex	Vertical Section Azimuth:	179.664 ° (Grid North)
Field:	NM Lea County (NAD 83)	Vertical Section Origin:	0 000 ft, 0.000 ft
Structure / Slot:	Cactus 110 / Cimarex Dos Equis 12 Federal Com #2H	TVD Reference Datum:	RKB
Well:	Cimarex Dos Equis 12 Federal Com #2H	TVD Reference Elevation:	3625.000 ft above MSL
Borehole:	ST01	Seabed / Ground Elevation:	3605.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7 543 °
Survey Name:	Cimarex Dos Equis 12 Federal Com #2H ST01 Rev0 RJS 12-Oct-12	Total Gravity Field Strength:	999.1461 mgn (9.8 based)
Survey Date:	October 12, 2012	Total Magnetic Field Strength:	48465.468 nT
Tort / AHD / DDI / ERD Ratio:	89 036 ° / 4623 255 ft / 5 758 / 0 417	Magnetic Dip Angle:	60.117 °
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Declination Date:	November 06, 2012
Location Lat / Long	N 32° 14' 18 91516", W 103° 37' 34.20451"	Magnetic Declination Model:	BGGM 2012
Location Grid N/E Y/X:	N 451251.500 ftUS, E 759983.200 ftUS	North Reference:	Grid North
CRS Grid Convergence Angle:	0.3772 °	Grid Convergence Used:	0.3772 °
Grid Scale Factor:	0.99996384	Total Corr Mag North->Grid North:	7 1653 °

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Dos Equis 12 Fed Com #2H	0 00	0.00	0 00	0 00	-3625.00	0 00	0.00	0.00	N/A	N/A	N/A	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	100.00	0.00	179.66	100 00	-3525.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	200.00	0.00	179.66	200 00	-3425.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	300.00	0.00	179.66	300 00	-3325.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	400.00	0.00	179.66	400 00	-3225.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	500.00	0.00	179.66	500 00	-3125.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	600.00	0.00	179.66	600.00	-3025.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	700.00	0.00	179.66	700.00	-2925.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	800.00	0.00	179.66	800.00	-2825.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	900.00	0.00	179.66	900.00	-2725.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1000.00	0.00	179.66	1000 00	-2625.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1100.00	0.00	179.66	1100.00	-2525.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1200.00	0.00	179.66	1200 00	-2425.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1300.00	0.00	179.66	1300.00	-2325.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1400.00	0.00	179.66	1400 00	-2225.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1500.00	0.00	179.66	1500 00	-2125.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1600.00	0.00	179.66	1600 00	-2025.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1700.00	0.00	179.66	1700.00	-1925.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1800.00	0.00	179.66	1800.00	-1825.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	1900.00	0.00	179.66	1900 00	-1725.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2000.00	0.00	179.66	2000 00	-1625.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2100.00	0.00	179.66	2100 00	-1525.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2200.00	0.00	179.66	2200.00	-1425.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2300.00	0.00	179.66	2300.00	-1325.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2400.00	0.00	179.66	2400.00	-1225.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2500.00	0.00	179.66	2500.00	-1125.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2600.00	0.00	179.66	2600.00	-1025.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2700.00	0.00	179.66	2700 00	-925.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2800.00	0.00	179.66	2800 00	-825.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	2900.00	0.00	179.66	2900.00	-725.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	3000.00	0.00	179.66	3000 00	-625.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	3100.00	0.00	179.66	3100 00	-525.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	3200.00	0.00	179.66	3200 00	-425.00	0 00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20

11/7/2012 8:41 AM Page 2 of 4

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	9300.00	0.00	179.66	9300.00	5675.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	9400.00	0.00	179.66	9400.00	5775.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	9500.00	0.00	179.66	9500.00	5875.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	9600.00	0.00	179.66	9600.00	5975.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	9700.00	0.00	179.66	9700.00	6075.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	9800.00	0.00	179.66	9800.00	6175.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	9900.00	0.00	179.66	9900.00	6275.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10000.00	0.00	179.66	10000.00	6375.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10100.00	0.00	179.66	10100.00	6475.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10200.00	0.00	179.66	10200.00	6575.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10300.00	0.00	179.66	10300.00	6675.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10400.00	0.00	179.66	10400.00	6775.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10500.00	0.00	179.66	10500.00	6875.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10550.00	0.00	179.66	10550.00	6925.00	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10552.50	0.00	179.66	10552.50	6927.50	0.00	0.00	0.00	0.00	0.00	0.00	451251.50	759983.20	N 32 14 18.92	W 103 37 34.20
	10600.00	5.70	179.66	10599.92	6974.92	2.36	-2.36	0.01	12.00	12.00	0.00	451249.14	759983.21	N 32 14 18.89	W 103 37 34.20
	10700.00	17.70	179.66	10697.67	7072.67	22.60	-22.60	0.13	12.00	12.00	0.00	451228.90	759983.33	N 32 14 18.69	W 103 37 34.20
	10800.00	29.69	179.66	10789.07	7164.07	62.71	-62.71	0.37	12.00	12.00	0.00	451188.79	759983.57	N 32 14 18.29	W 103 37 34.21
	10900.00	41.69	179.66	10870.14	7245.14	120.95	-120.95	0.71	12.00	12.00	0.00	451130.56	759983.91	N 32 14 17.72	W 103 37 34.21
	11000.00	53.69	179.66	10937.33	7312.33	194.76	-194.76	1.14	12.00	12.00	0.00	451056.75	759984.34	N 32 14 16.99	W 103 37 34.21
	11100.00	65.69	179.66	10987.71	7362.71	280.93	-280.93	1.65	12.00	12.00	0.00	450970.58	759984.85	N 32 14 16.14	W 103 37 34.21
	11200.00	77.68	179.66	11019.08	7394.08	375.69	-375.69	2.20	12.00	12.00	0.00	450875.83	759985.40	N 32 14 15.20	W 103 37 34.21
	11294.62	89.03	179.66	11030.00	7405.00	469.52	-469.52	2.75	12.00	12.00	0.00	450782.00	759985.95	N 32 14 14.27	W 103 37 34.21
	11300.00	89.03	179.66	11030.09	7405.09	474.91	-474.90	2.78	0.02	-0.01	0.01	450776.62	759985.98	N 32 14 14.22	W 103 37 34.21
	11400.00	89.03	179.66	11031.78	7406.78	574.89	-574.88	3.37	0.00	0.00	0.00	450676.64	759986.57	N 32 14 13.23	W 103 37 34.21
	11500.00	89.03	179.66	11033.46	7408.46	674.88	-674.87	3.96	0.00	0.00	0.00	450576.66	759987.16	N 32 14 12.24	W 103 37 34.21
	11600.00	89.03	179.66	11035.15	7410.15	774.86	-774.85	4.54	0.00	0.00	0.00	450476.68	759987.74	N 32 14 11.25	W 103 37 34.21
	11700.00	89.03	179.66	11036.83	7411.83	874.85	-874.83	5.13	0.00	0.00	0.00	450376.70	759988.33	N 32 14 10.26	W 103 37 34.21
	11800.00	89.03	179.66	11038.52	7413.52	974.83	-974.82	5.72	0.00	0.00	0.00	450276.72	759988.92	N 32 14 9.27	W 103 37 34.21
	11900.00	89.03	179.66	11040.20	7415.20	1074.82	-1074.80	6.30	0.00	0.00	0.00	450176.74	759989.50	N 32 14 8.28	W 103 37 34.21
	12000.00	89.03	179.66	11041.89	7416.89	1174.81	-1174.79	6.89	0.00	0.00	0.00	450076.76	759990.09	N 32 14 7.29	W 103 37 34.21
	12100.00	89.03	179.66	11043.57	7418.57	1274.79	-1274.77	7.47	0.00	0.00	0.00	449976.78	759990.67	N 32 14 6.30	W 103 37 34.22
	12200.00	89.03	179.66	11045.26	7420.26	1374.78	-1374.75	8.06	0.00	0.00	0.00	449876.80	759991.26	N 32 14 5.31	W 103 37 34.22
	12300.00	89.03	179.66	11046.94	7421.94	1474.76	-1474.74	8.65	0.00	0.00	0.00	449776.82	759991.85	N 32 14 4.32	W 103 37 34.22
	12400.00	89.03	179.66	11048.63	7423.63	1574.75	-1574.72	9.23	0.00	0.00	0.00	449676.84	759992.43	N 32 14 3.33	W 103 37 34.22
	12500.00	89.03	179.66	11050.31	7425.31	1674.74	-1674.71	9.82	0.00	0.00	0.00	449576.86	759993.02	N 32 14 2.34	W 103 37 34.22
	12600.00	89.03	179.66	11052.00	7427.00	1774.72	-1774.69	10.40	0.00	0.00	0.00	449476.88	759993.60	N 32 14 1.35	W 103 37 34.22
	12700.00	89.03	179.66	11053.68	7428.68	1874.71	-1874.67	10.99	0.00	0.00	0.00	449376.90	759994.19	N 32 14 0.36	W 103 37 34.22
	12800.00	89.03	179.66	11055.37	7430.37	1974.69	-1974.66	11.58	0.00	0.00	0.00	449276.92	759994.78	N 32 13 56.38	W 103 37 34.22
	12900.00	89.03	179.66	11057.05	7432.05	2074.68	-2074.64	12.16	0.00	0.00	0.00	449176.94	759995.36	N 32 13 58.39	W 103 37 34.22
	13000.00	89.03	179.66	11058.74	7433.74	2174.66	-2174.63	12.75	0.00	0.00	0.00	449076.96	759995.95	N 32 13 57.40	W 103 37 34.22
	13100.00	89.03	179.66	11060.42	7435.42	2274.65	-2274.61	13.33	0.00	0.00	0.00	448976.98	759996.53	N 32 13 56.41	W 103 37 34.22
	13200.00	89.03	179.66	11062.11	7437.11	2374.64	-2374.60	13.92	0.00	0.00	0.00	448877.00	759997.12	N 32 13 55.42	W 103 37 34.22
	13300.00	89.03	179.66	11063.79	7438.79	2474.62	-2474.58	14.51	0.00	0.00	0.00	448777.02	759997.71	N 32 13 54.43	W 103 37 34.23
	13400.00	89.03	179.66	11065.48	7440.48	2574.61	-2574.56	15.09	0.00	0.00	0.00	448677.03	759998.29	N 32 13 53.44	W 103 37 34.23
	13500.00	89.03	179.66	11067.16	7442.16	2674.59	-2674.55	15.68	0.00	0.00	0.00	448577.05	759998.88	N 32 13 52.45	W 103 37 34.23
	13600.00	89.03	179.66	11068.85	7443.85	2774.58	-2774.53	16.26	0.00	0.00	0.00	448477.07	759999.46	N 32 13 51.46	W 103 37 34.23
	13700.00	89.03	179.66	11070.53	7445.53	2874.56	-2874.52	16.85	0.00	0.00	0.00	448377.09	760000.05	N 32 13 50.47	W 103 37 34.23
	13800.00	89.03	179.66	11072.22	7447.22	2974.55	-2974.50	17.44	0.00	0.00	0.00	448277.11	760000.64	N 32 13 49.48	W 103 37 34.23
	13900.00	89.03	179.66	11073.90	7448.90	3074.54	-3074.48	18.02	0.00	0.00	0.00	448177.13	760001.22	N 32 13 48.49	W 103 37 34.23
	14000.00	89.03	179.66	11075.59	7450.59	3174.52	-3174.47	18.61	0.00	0.00	0.00	448077.15	760001.81	N 32 13 47.50	W 103 37 34.23
	14100.00	89.03	179.66	11077.27	7452.27	3274.51	-3274.45	19.20	0.00	0.00	0.00	447977.17	760002.39	N 32 13 46.51	W 103 37 34.23
	14200.00	89.03	179.66	11078.96	7453.96	3374.49	-3374.44	19.78	0.00	0.00	0.00	447877.19	760002.98	N 32 13 45.52	W 103 37 34.23
	14300.00	89.03	179.66	11080.64	7455.64	3474.48	-3474.42	20.37	0.00	0.00	0.00	447777.21	760003.57	N 32 13 44.53	W 103 37 34.23
	14400.00	89.03	179.66	11082.33	7457.33	3574.47	-3574.40	20.95	0.00	0.00	0.00	447677.23	760004.15	N 32 13 43.54	W 103 37 34.23
	14500.00	89.03	179.66	11084.01	7459.01	3674.45	-3674.39	21.54	0.00	0.00	0.00	447577.25	760004.74	N 32 13 42.55	W 103 37 34.24
	14600.00	89.03	179.66	11085.70	7460.70	3774.44	-3774.37	22.13	0.00	0.00	0.00	447477.27	760005.32	N 32 13 41.57	W 103 37 34.24
	14700.00	89.03	179.66	11087.38	7462.38	3874.42	-3874.36	22.71	0.00	0.00	0.00	447377.29	760005.91	N 32 13 40.58	W 103 37 34.24
	14800.00	89.03	179.66	11089.07	7464.07	3974.41	-3974.34	23.30	0.00	0.00	0.00	447277.31	760006.50	N 32 13 39.59	W 103 37 34.24

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	14900.00	89 03	179.66	11090.75	7465.75	4074.39	-4074.32	23.88	0.00	0.00	0.00	447177.33	760007.08	N 32 13 38.60	W 103 37 34.24
	15000.00	89 03	179.66	11092.44	7467.44	4174.38	-4174.31	24.47	0.00	0.00	0.00	447077.35	760007.67	N 32 13 37.61	W 103 37 34.24
	15100.00	89 03	179.66	11094.12	7469.12	4274.37	-4274.29	25.06	0.00	0.00	0.00	446977.37	760008.26	N 32 13 36.62	W 103 37 34.24
	15200.00	89 03	179.66	11095.81	7470.81	4374.35	-4374.28	25.64	0.00	0.00	0.00	446877.39	760008.84	N 32 13 35.63	W 103 37 34.24
	15300.00	89.03	179.66	11097.49	7472.49	4474.34	-4474.26	26.23	0.00	0.00	0.00	446777.41	760009.43	N 32 13 34.64	W 103 37 34.24
	15400.00	89 03	179.66	11099.18	7474.18	4574.32	-4574.25	26.81	0.00	0.00	0.00	446677.43	760010.01	N 32 13 33.65	W 103 37 34.24
Cimarex Dos Equis 12 Federal Com #2H PBHL	15448.94	89 03	179.66	11100.00	7475.00	4623.26	-4623.18	27.10	0.00	0.00	0.00	446628.50	760010.30	N 32 13 33.17	W 103 37 34.24

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	20.000	1/100.000	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Borehole / Cimarex Dos Equis 12 Federal Com #2H Pilot Rev0 RJS 12-Oct-12
	20.000	10550.000	1/100.000	30.000	30.000	SLB_NSG+MSHOT	Original Borehole / Cimarex Dos Equis 12 Federal Com #2H Pilot ST01 / Cimarex Dos Equis 12 Federal Com #2H ST01 Rev0
	10550.000	15448.939	1/100.000	30.000	30.000	SLB_M/WD-STD	

CONDITIONS OF APPROVAL

Sundry dated 11/07/20152

OPERATOR'S NAME:	Cimarex Energy Co of Colo
LEASE NO.:	NM1917
WELL NAME & NO.:	2 Dos Equis 12 Federal Com
SURFACE HOLE FOOTAGE:	330' FNL & 1980' FEL
BOTTOM HOLE FOOTAGE	330' FSL & 1980' FEL
LOCATION:	Section 12, T.24 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

Original COA still applies with the following changes

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

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. The minimum required fill of cement behind the **9 5/8** inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see below.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- c. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Pilot hole is required to have a plug at the bottom of the hole. Due to length of pilot hole; Operator will be require to first pump bottom plug which shall be Class H and a minimum of 226' in length. Wait on cement and the BLM is to be contacted (575-361-2822) to witness tagging of the bottom plug.

Bottom plug to be tag and witness by the BLM
TOP plug to be tag and witness by the BLM

Operator is utilizing a whipstock with tubing stinger on bottom to pump top plug. The cement must circulate above the whipstock. If cement is not tagged above the whipstock, contact the appropriate BLM office before proceeding.

Report tag depths on subsequent sundry.

Centralizer are approved as stated on sundry.

2. The minimum required fill of cement behind the 5-1/2 inch production casing is:

☒ Cement as proposed. Operator shall provide method of verification.

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.

EGF 111012