

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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 page 2**5. Lease Serial No.
NMNM120350

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
HORNSBY 35 FEDERAL COM 10H9. API Well No.
30-015-42170-00-X110. Field and Pool or Exploratory Area
WILDCAT11. County or Parish, State
EDDY COUNTY, NM**12. CHECK THE 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	☐ Hydraulic Fracturing	☐ 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must 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 respectfully request approval to change the original drilling plan for the above referenced well. Cimarex proposes to change the BHL there by changing the directional plan. No additional disturbance is required. Please see attached directional plan and plat.

Approved:

BHL: 330 FNL & 790 FEL Sec 26-26S-27E

Proposed:

BHL: 330 FNL & 600 FEL Sec 26-26S-27E

*All previous COAs still apply.***NM OIL CONSERVATION**

ARTESIA DISTRICT

DEC 12 2016

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #357372 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO. sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 11/08/2016 (17DLM02368E)	
Name (Printed/Typed) ARICKA EASTERLING	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 11/08/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>CHARLES NIMMER</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>11/30/2016</u>
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.		Office <u>Carlsbad</u>

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesian, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-42170	² Pool Code	³ Pool Name Wildcat; Bone Spring
⁴ Property Code	⁵ Property Name HORNSBY 35 FEDERAL COM	⁶ Well Number 10H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3225.1'

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
LOT 1	35	26S	27E		290	SOUTH	820	EAST	EDDY

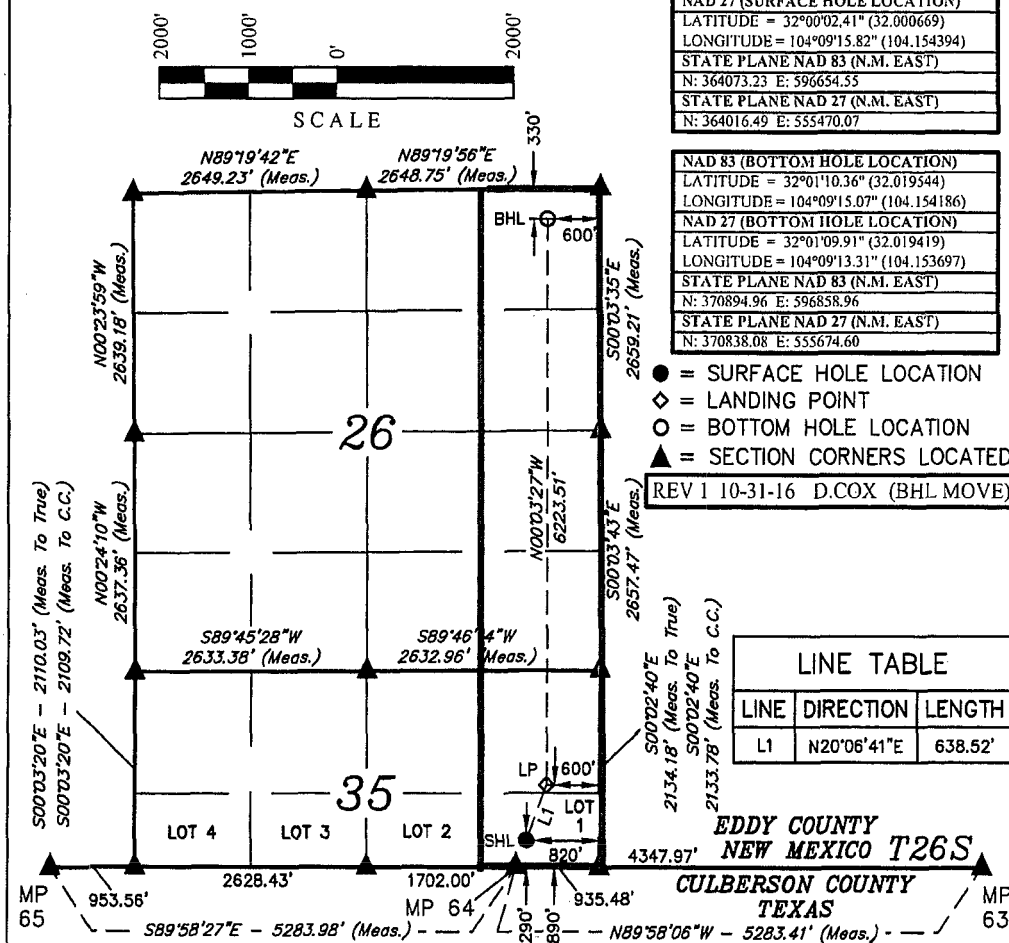
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	26	26S	27E		330	NORTH	600	EAST	EDDY
¹² Dedicated Acres 224.31	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

¹⁶ NOTE:

Distances referenced on plat to section lines and lease lines are perpendicular.



¹⁷ 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.

Signature: *Aricka Easterling* Date: 11/7/16

Printed Name: Aricka Easterling

E-mail Address: aeasterling@cimarex.com

¹⁸ 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.

October 31, 2016

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number:

Cimarex Hornsby 35 Federal Com 10H Rev4 OPB 3-Nov-16 Proposal

Geodetic Report
(Non-Def Plan)

Report Date: November 03, 2016 - 03:42 PM
Client: Cimarex
Field: NM Eddy County (NAD 83)
Structure / Slot: Cimarex Hornsby 35 Federal Com 10H / Cimarex Hornsby 35 Federal Com 10H
Well: Cimarex Hornsby 35 Federal Com 10H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Hornsby 35 Federal Com 10H Rev4 OPB 3-Nov-16
Survey Date: October 14, 2013
Tort / AHD / DDI / ERD Ratio: 111.217' / 6912.870 ft / 6.155 / 0.891
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 0' 2.85120", W 104° 9' 17.57880"
Location Grid N/E Y/X: N 364073.286 ftUS, E 596654.538 ftUS
CRS Grid Convergence Angle: 0.0946°
Grid Scale Factor: 0.9989126
Version / Patch: 2.10.254.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 2.138° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground level
TVD Reference Elevation: 3225.100 ft above MSL
Seabed / Ground Elevation: 3225.100 ft above MSL
Magnetic Declination: 7.496°
Total Gravity Field Strength: 998.6843mgm (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 48182.141 nT
Magnetic Dip Angle: 59.722°
Declination Date: July 20, 2015
Magnetic Declination Model: HDGM 2015
North Reference: Grid North
Grid Convergence Used: 0.0946°
Total Corr Mag North->Grid North: 7.4015°
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL [290' FSL, 820' FEL]	0.00	0.00	80.00	0.00	0.00	0.00	0.00	N/A	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	100.00	0.00	90.00	100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	200.00	0.00	90.00	200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	300.00	0.00	90.00	300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	400.00	0.00	90.00	400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	500.00	0.00	90.00	500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	600.00	0.00	90.00	600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	700.00	0.00	90.00	700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	800.00	0.00	90.00	800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	900.00	0.00	90.00	900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1000.00	0.00	90.00	1000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1100.00	0.00	90.00	1100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1200.00	0.00	90.00	1200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1300.00	0.00	90.00	1300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1400.00	0.00	90.00	1400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1500.00	0.00	90.00	1500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1600.00	0.00	90.00	1600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1700.00	0.00	90.00	1700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1800.00	0.00	90.00	1800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	1900.00	0.00	90.00	1900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2000.00	0.00	90.00	2000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2100.00	0.00	90.00	2100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2200.00	0.00	90.00	2200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2300.00	0.00	90.00	2300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2400.00	0.00	90.00	2400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2500.00	0.00	90.00	2500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	2600.00	0.00	90.00	2600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2700.00	0.00	90.00	2700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2800.00	0.00	90.00	2800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	2900.00	0.00	90.00	2900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3000.00	0.00	90.00	3000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3100.00	0.00	90.00	3100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3200.00	0.00	90.00	3200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3300.00	0.00	90.00	3300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3400.00	0.00	90.00	3400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3500.00	0.00	90.00	3500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3600.00	0.00	90.00	3600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3700.00	0.00	90.00	3700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3800.00	0.00	90.00	3800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	3900.00	0.00	90.00	3900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4000.00	0.00	90.00	4000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4100.00	0.00	90.00	4100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4200.00	0.00	90.00	4200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4300.00	0.00	90.00	4300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4400.00	0.00	90.00	4400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4500.00	0.00	90.00	4500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4600.00	0.00	90.00	4600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4700.00	0.00	90.00	4700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4800.00	0.00	90.00	4800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	4900.00	0.00	90.00	4900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5000.00	0.00	90.00	5000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5100.00	0.00	90.00	5100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5200.00	0.00	90.00	5200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5300.00	0.00	90.00	5300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5400.00	0.00	90.00	5400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5500.00	0.00	90.00	5500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5600.00	0.00	90.00	5600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5700.00	0.00	90.00	5700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5800.00	0.00	90.00	5800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	5900.00	0.00	90.00	5900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6000.00	0.00	90.00	6000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6100.00	0.00	90.00	6100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6200.00	0.00	90.00	6200.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6300.00	0.00	90.00	6300.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6400.00	0.00	90.00	6400.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6500.00	0.00	90.00	6500.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6600.00	0.00	90.00	6600.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6700.00	0.00	90.00	6700.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6800.00	0.00	90.00	6800.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	6900.00	0.00	90.00	6900.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	7000.00	0.00	90.00	7000.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	7100.00	0.00	90.00	7100.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
KOP - Build 12"/100ft DLS	7151.00	0.00	90.00	7151.00	0.00	0.00	0.00	0.00	364073.29	596654.54	N 32 0 2.85 W 104 9 17.58	9 17.58
	7200.00	5.88	90.00	7199.91	0.09	0.00	2.51	12.00	364073.29	596657.05	N 32 0 2.85 W 104 9 17.55	9 17.55
Build 12"/100ft DLS	7300.00	17.88	90.00	7297.59	0.86	0.00	23.06	12.00	364073.29	596677.60	N 32 0 2.85 W 104 9 17.31	9 17.31
	7324.33	20.80	90.00	7320.55	1.16	0.00	31.12	12.00	364073.29	596685.65	N 32 0 2.85 W 104 9 17.22	9 17.22
First Legal Take Point	7400.00	22.69	65.49	7390.97	8.22	6.07	57.89	12.17	364079.35	596712.43	N 32 0 2.91 W 104 9 16.91	9 16.91
	7500.00	29.54	42.31	7480.94	35.81	32.40	92.17	12.17	364105.68	596746.70	N 32 0 3.17 W 104 9 16.51	9 16.51
	7522.00	31.45	38.61	7499.90	44.57	40.90	99.40	12.17	364114.18	596753.93	N 32 0 3.25 W 104 9 16.42	9 16.42
	7600.00	38.89	28.31	7563.67	83.00	78.44	123.77	12.17	364151.72	596778.29	N 32 0 3.63 W 104 9 16.14	9 16.14
	7700.00	49.33	19.26	7635.45	147.66	142.11	151.27	12.17	364215.38	596805.79	N 32 0 4.25 W 104 9 15.82	9 15.82
	7800.00	60.28	12.74	7693.04	226.88	220.56	173.44	12.17	364293.83	596827.96	N 32 0 5.03 W 104 9 15.56	9 15.56

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
Landing Point	7900.00	71.49	7.52	7733.86	317.10	310.26	189.28	12.17	364383.52	596843.80	N 32 0 5.92	W 104 9 15.37
	8000.00	82.82	2.96	7756.06	414.27	407.17	198.08	12.17	364480.42	596852.60	N 32 0 6.88	W 104 9 15.27
	8057.12	90.45	0.04	7760.00	481.22	474.10	199.82	12.17	364547.34	596854.34	N 32 0 7.54	W 104 9 15.25
	8100.00	90.45	0.04	7759.74	514.07	506.97	199.85	0.00	364580.21	596854.37	N 32 0 7.86	W 104 9 15.25
	8200.00	90.45	0.04	7758.95	614.00	606.97	199.92	0.00	364680.20	596854.44	N 32 0 8.85	W 104 9 15.25
	8300.00	90.45	0.04	7758.15	713.93	706.97	199.99	0.00	364780.19	596854.51	N 32 0 9.84	W 104 9 15.24
	8400.00	90.45	0.04	7757.36	813.86	806.96	200.07	0.00	364880.18	596854.59	N 32 0 10.83	W 104 9 15.24
	8500.00	90.45	0.04	7756.57	913.79	906.96	200.14	0.00	364980.16	596854.66	N 32 0 11.82	W 104 9 15.24
	8600.00	90.45	0.04	7755.77	1013.72	1006.96	200.21	0.00	365080.15	596854.73	N 32 0 12.81	W 104 9 15.23
	8700.00	90.45	0.04	7754.98	1113.65	1106.95	200.28	0.00	365180.14	596854.80	N 32 0 13.80	W 104 9 15.23
	8800.00	90.45	0.04	7754.19	1213.58	1206.95	200.36	0.00	365280.13	596854.88	N 32 0 14.79	W 104 9 15.23
	8900.00	90.45	0.04	7753.40	1313.51	1306.95	200.43	0.00	365380.12	596854.95	N 32 0 15.78	W 104 9 15.23
	9000.00	90.45	0.04	7752.61	1413.44	1406.94	200.50	0.00	365480.10	596855.02	N 32 0 16.77	W 104 9 15.22
	9100.00	90.45	0.04	7751.81	1513.37	1506.94	200.58	0.00	365580.09	596855.10	N 32 0 17.76	W 104 9 15.22
	9200.00	90.45	0.04	7751.02	1613.30	1606.94	200.65	0.00	365680.08	596855.17	N 32 0 18.75	W 104 9 15.22
	9300.00	90.45	0.04	7750.23	1713.23	1706.93	200.72	0.00	365780.07	596855.24	N 32 0 19.74	W 104 9 15.22
	9400.00	90.45	0.04	7749.44	1813.16	1806.93	200.79	0.00	365880.06	596855.31	N 32 0 20.73	W 104 9 15.21
	9500.00	90.45	0.04	7748.65	1913.09	1906.93	200.87	0.00	365980.04	596855.39	N 32 0 21.72	W 104 9 15.21
	9600.00	90.45	0.04	7747.86	2013.02	2006.93	200.94	0.00	366080.03	596855.46	N 32 0 22.71	W 104 9 15.21
	9700.00	90.45	0.04	7747.07	2112.95	2106.92	201.01	0.00	366180.02	596855.53	N 32 0 23.70	W 104 9 15.20
	9800.00	90.45	0.04	7746.28	2212.88	2206.92	201.09	0.00	366280.01	596855.60	N 32 0 24.69	W 104 9 15.20
	9900.00	90.45	0.04	7745.49	2312.81	2306.92	201.16	0.00	366380.00	596855.68	N 32 0 25.68	W 104 9 15.20
	10000.00	90.45	0.04	7744.70	2412.74	2406.91	201.23	0.00	366479.98	596855.75	N 32 0 26.67	W 104 9 15.19
	10100.00	90.45	0.04	7743.91	2512.67	2506.91	201.30	0.00	366579.97	596855.82	N 32 0 27.65	W 104 9 15.19
	10200.00	90.45	0.04	7743.12	2612.60	2606.91	201.38	0.00	366679.96	596855.90	N 32 0 28.64	W 104 9 15.19
	10300.00	90.45	0.04	7742.33	2712.53	2706.90	201.45	0.00	366779.95	596855.97	N 32 0 29.63	W 104 9 15.19
	10400.00	90.45	0.04	7741.54	2812.46	2806.90	201.52	0.00	366879.94	596856.04	N 32 0 30.62	W 104 9 15.18
	10500.00	90.45	0.04	7740.75	2912.39	2906.90	201.59	0.00	366979.92	596856.11	N 32 0 31.61	W 104 9 15.18
	10600.00	90.45	0.04	7739.96	3012.32	3006.89	201.67	0.00	367079.91	596856.19	N 32 0 32.60	W 104 9 15.18
	10700.00	90.45	0.04	7739.17	3112.25	3106.89	201.74	0.00	367179.90	596856.26	N 32 0 33.59	W 104 9 15.18
	10800.00	90.45	0.04	7738.38	3212.18	3206.89	201.81	0.00	367279.89	596856.33	N 32 0 34.58	W 104 9 15.17
	10900.00	90.45	0.04	7737.60	3312.11	3306.88	201.89	0.00	367379.87	596856.41	N 32 0 35.57	W 104 9 15.17
	11000.00	90.45	0.04	7736.81	3412.04	3406.88	201.96	0.00	367479.86	596856.48	N 32 0 36.56	W 104 9 15.17
	11100.00	90.45	0.04	7736.02	3511.97	3506.88	202.03	0.00	367579.85	596856.55	N 32 0 37.55	W 104 9 15.17
	11200.00	90.45	0.04	7735.23	3611.90	3606.87	202.10	0.00	367679.84	596856.62	N 32 0 38.54	W 104 9 15.16
	11300.00	90.45	0.04	7734.44	3711.83	3706.87	202.18	0.00	367779.83	596856.70	N 32 0 39.53	W 104 9 15.16
	11400.00	90.45	0.04	7733.66	3811.76	3806.87	202.25	0.00	367879.81	596856.77	N 32 0 40.52	W 104 9 15.16
	11500.00	90.45	0.04	7732.87	3911.69	3906.87	202.32	0.00	367979.80	596856.84	N 32 0 41.51	W 104 9 15.15
	11600.00	90.45	0.04	7732.08	4011.62	4006.86	202.39	0.00	368079.79	596856.91	N 32 0 42.50	W 104 9 15.15
	11700.00	90.45	0.04	7731.30	4111.55	4106.86	202.47	0.00	368179.78	596856.99	N 32 0 43.49	W 104 9 15.15
	11800.00	90.45	0.04	7730.51	4211.48	4206.86	202.54	0.00	368279.77	596857.06	N 32 0 44.48	W 104 9 15.15
	11900.00	90.45	0.04	7729.72	4311.41	4306.85	202.61	0.00	368379.75	596857.13	N 32 0 45.47	W 104 9 15.14
	12000.00	90.45	0.04	7728.94	4411.34	4406.85	202.69	0.00	368479.74	596857.21	N 32 0 46.46	W 104 9 15.14
	12100.00	90.45	0.04	7728.15	4511.27	4506.85	202.76	0.00	368579.73	596857.28	N 32 0 47.45	W 104 9 15.14
	12200.00	90.45	0.04	7727.36	4611.20	4606.84	202.83	0.00	368679.72	596857.35	N 32 0 48.43	W 104 9 15.13
	12300.00	90.45	0.04	7726.58	4711.13	4706.84	202.90	0.00	368779.71	596857.42	N 32 0 49.42	W 104 9 15.13
	12400.00	90.45	0.04	7725.79	4811.06	4806.84	202.98	0.00	368879.69	596857.50	N 32 0 50.41	W 104 9 15.13
	12500.00	90.45	0.04	7725.01	4910.99	4906.83	203.05	0.00	368979.68	596857.57	N 32 0 51.40	W 104 9 15.12
	12600.00	90.45	0.04	7724.22	5010.92	5006.83	203.12	0.00	369079.67	596857.64	N 32 0 52.39	W 104 9 15.12
	12700.00	90.45	0.04	7723.44	5110.85	5106.83	203.19	0.00	369179.66	596857.71	N 32 0 53.38	W 104 9 15.12
	12800.00	90.45	0.04	7722.65	5210.78	5206.82	203.27	0.00	369279.65	596857.79	N 32 0 54.37	W 104 9 15.12
	12900.00	90.45	0.04	7721.87	5310.71	5306.82	203.34	0.00	369379.63	596857.86	N 32 0 55.36	W 104 9 15.12
	13000.00	90.45	0.04	7721.08	5410.64	5406.82	203.41	0.00	369479.62	596857.93	N 32 0 56.35	W 104 9 15.11
	13100.00	90.45	0.04	7720.30	5510.57	5506.82	203.48	0.00	369579.61	596858.00	N 32 0 57.34	W 104 9 15.11
	13200.00	90.45	0.04	7719.52	5610.50	5606.81	203.56	0.00	369679.60	596858.08	N 32 0 58.33	W 104 9 15.11
	13300.00	90.45	0.04	7718.73	5710.43	5706.81	203.63	0.00	369779.59	596858.15	N 32 0 59.32	W 104 9 15.10
	13400.00	90.45	0.04	7717.95	5810.36	5806.81	203.70	0.00	369879.57	596858.22	N 32 1 0.31	W 104 9 15.10
	13500.00	90.45	0.04	7717.16	5910.29	5906.80	203.78	0.00	369979.56	596858.30	N 32 1 1.30	W 104 9 15.10
	13600.00	90.45	0.04	7716.38	6010.22	6006.80	203.85	0.00	370079.55	596858.37	N 32 1 2.29	W 104 9 15.10

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	13700.00	90.45	0.04	7715.60	6110.15	6106.80	203.92	0.00	370179.54	596858.44	N 32 1 3.28 W 104 9 15.09	
	13800.00	90.45	0.04	7714.81	6210.08	6206.79	203.99	0.00	370279.53	596858.51	N 32 1 4.27 W 104 9 15.09	
	13900.00	90.45	0.04	7714.03	6310.01	6306.79	204.07	0.00	370379.51	596858.59	N 32 1 5.26 W 104 9 15.09	
	14000.00	90.45	0.04	7713.25	6409.94	6406.79	204.14	0.00	370479.50	596858.66	N 32 1 6.25 W 104 9 15.08	
	14100.00	90.45	0.04	7712.47	6509.87	6506.78	204.21	0.00	370579.49	596858.73	N 32 1 7.24 W 104 9 15.08	
	14200.00	90.45	0.04	7711.69	6609.80	6606.78	204.28	0.00	370679.48	596858.80	N 32 1 8.23 W 104 9 15.08	
	14300.00	90.45	0.04	7710.90	6709.73	6706.78	204.36	0.00	370779.47	596858.88	N 32 1 9.21 W 104 9 15.08	
	14400.00	90.45	0.04	7710.12	6809.66	6806.78	204.43	0.00	370879.45	596858.95	N 32 1 10.20 W 104 9 15.07	
Cimarex Hornsby 35												
Federal Com 10H PBHL [330' FNL, 600' FEL]	14415.51	90.45	0.04	7710.00	6825.16	6822.28	204.44	0.00	370894.96	596858.96	N 32 1 10.36 W 104 9 15.07	

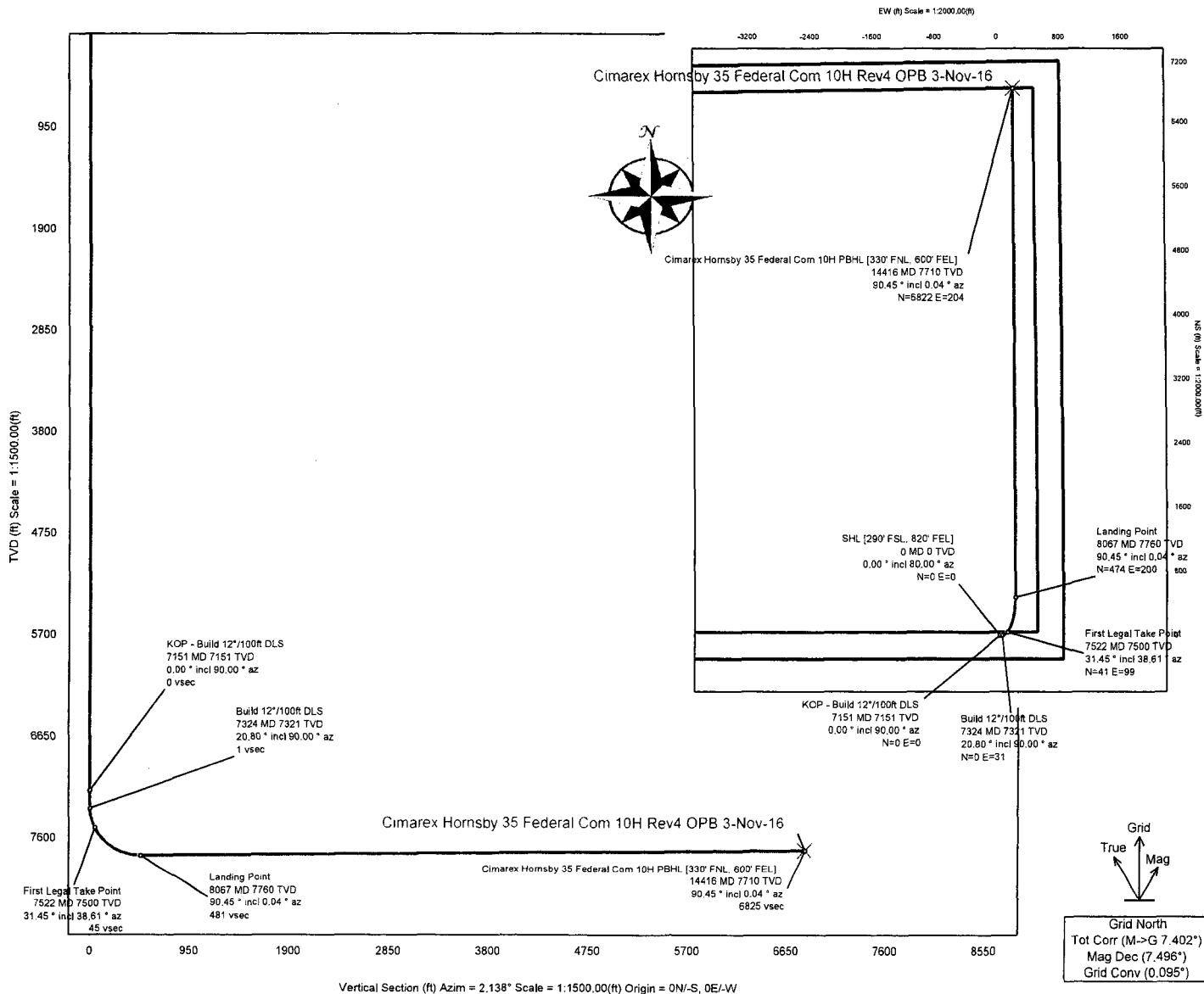
Survey Type: Non-Def Plan

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

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	14415.509	1/100.000	30.000	30.000		SLB_MWD-STD	Original Borehole / Cimarex Hornsby 35 Federal Com 10H

Borehole:	Well:	Field:	Structure:
Original Borehole	Hornsby 35 Federal Com 10H	NM Eddy County (NAD 83)	TBD

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: HDGM 2015 Dip: 59.722° Date: 20-Jul-2015	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Hornsby 35
MagDec: 7.496° FS: 48182.141nT Gravity FS: 998.684mgn (9.80665 Based)	Lat: N 32 0 2.85 Northing: 364073.29ftUS Grid Conv: 0.0946°	Slot: Federal Com TVD Ref: Ground level(3225.1ft above MSL)
	Lon: W 104 9 17.58 Easting: 596654.54ftUS Scale Fact: 0.9999126	Plan: Hornsby 35 Federal Com 10H Rev4 OPB 3-Nov-16



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [290' FSL, 820' FEL]	0.00	0.00	80.00	0.00	0.00	0.00	0.00	
KOP - Build 12°/100ft DLS	7151.00	0.00	90.00	7151.00	0.00	0.00	0.00	0.00
Build 12°/100ft DLS	7324.33	20.80	90.00	7320.55	1.16	0.00	31.12	12.00
First Legal Take Point	7522.00	31.45	38.61	7499.90	44.57	40.90	99.40	12.17
Landing Point	8067.12	90.45	0.04	7760.00	481.22	474.10	199.82	12.17
Cimarex Hornsby 35 Federal Com 10H PBHL [330' FNL, 600' FEL]	14415.51	90.45	0.04	7710.00	6825.16	6822.28	204.44	0.00

D C E		CONTROLLED	
Plan ref	Cimarex Hornsby 35 Federal Com 10H Rev4 OPB 3-Nov-16		
Drawing ref			
Copy number	of 3		
Date	03-Nov-2016		
1	Client		
2	Client		
3	Office		
4	Office		
Copy number		for	