

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.

OCD Hobbs

5. Lease Serial No.
NMNM0392082A

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

HALLERTAU 5 FEDERAL COM 3H

2. Name of Operator

CIMAREX ENERGY COMPANY

Contact: DEYSI FAVELA

E-Mail: dfavela@cimarex.com

9. API Well No.

30-025-40455

3a. Address

600 NORTH MARIENFELD STREET STE 600
MIDLAND, TX 79701

3b. Phone No. (include area code)

Ph: 432-620-1964

10. Field and Pool, or Exploratory
BONE SPRING WILDCAT

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

Sec 5 T26S R32E SESW 330FSL 1980FWL

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 recomplete 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 recompletion 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 changes to the APD:

Approved:

BHL 330 FNL & 1980 FWL

Change to:

BHL 330 FNL & 2260 FWL

See attachments:

Original COA Still Stand.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #227798 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY, sent to the Hobbs
Committed to AFMSS for processing by JOHNNY DICKERSON on 11/25/2013 ()

Name (Printed/Typed) DEYSI FAVELA

Title DRILLING TECHNICIAN

Signature (Electronic Submission)

Date 11/22/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

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

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 **

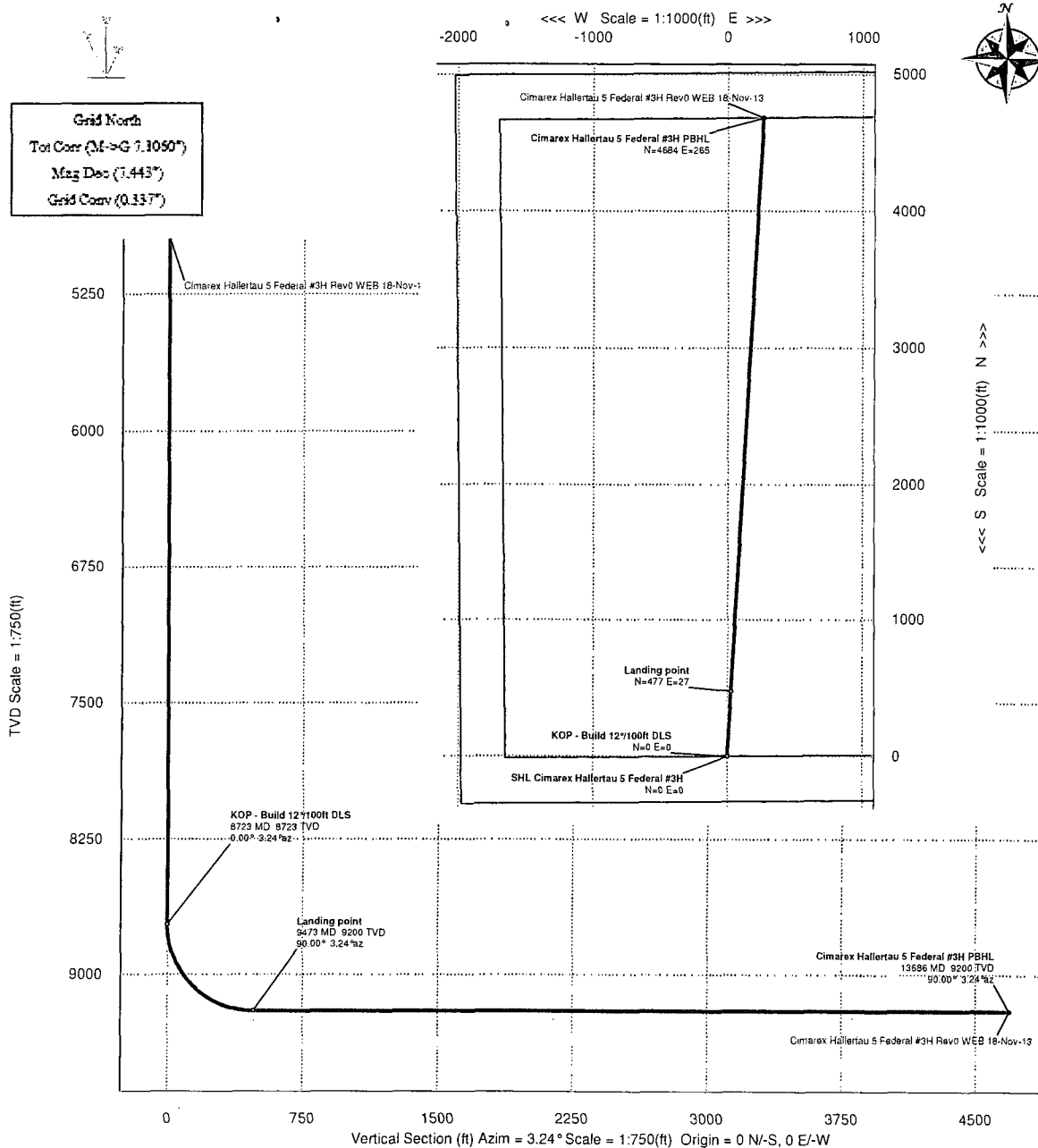
DEC 31 2013



Cimarex

PATHFINDER
A Schlumberger Company

WELL		Hallertau 5 Federal #3H		FIELD		NM Lea County		STRUCTURE		TBD	
Magnetic Parameters				Surface Location		NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous	
Model	BGM 2013	Op.	59 943'	Date	November 18, 2013	Lat	N 32 31.5 955	Heading	388255 93 NUS	Grid Conv	0.333'
		Mag Dec	7.443°	FS	48248 50T	Lon	W 103 41 57.827	Easting	737703 02 NUS	Scale Fact	0.95995325
										Plan	
										Cimarex Hallertau 5 Federal #3H Rev0 WEB 18-Nov-13	
										Ground level (32720 above NSL)	
										Any Date: November 18, 2013	



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(±) / S(±)	E(±) / W(±)	DLS
SHL Cimarex Hallertau 5 Federal #3H	0.00	0.00	3.24	0.00	0.00	0.00	0.00	
KOP - Build 12°/100ft DLS	8722.50	0.00	3.24	8722.50	0.00	0.00	0.00	0.00
Landing point	9472.56	90.00	3.24	9200.00	477.50	476.74	26.99	12.00
Cimarex Hallertau 5 Federal #3H PBHL	13686.26	90.00	3.24	9200.00	4691.20	4683.69	265.29	0.00



Cimarex Hallertau 5 Federal #3H Rev0 WEB 18-Nov-13 Proposal Report 100'
Interpolated
(Non-Def Plan)



Report Date: November 18, 2013 - 10:40 AM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: TBD / Cimarex Hallertau 5 Federal #3H
Well: Cimarex Hallertau 5 Federal #3H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Hallertau 5 Federal #3H Rev0 WEB 18-Nov-13
Survey Date: November 18, 2013
Tort / AHD / DDI / ERD Ratio: 90.004 ° / 4691.201 ft / 5.798 / 0.510
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 3' 56.95550", W 103° 41' 57.92706"
Location Grid N/E Y/X: N 388259.934 ftUS, E 737703.024 ftUS
CRS Grid Convergence Angle: 0.3365 °
Grid Scale Factor: 0.99995325

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 3.242 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground level
TVD Reference Elevation: 3272.000 ft above MSL
Seabed / Ground Elevation: 3272.000 ft above MSL
Magnetic Declination: 7.443 °
Total Gravity Field Strength: 998.4868mgn (9.80665 Based)
Total Magnetic Field Strength: 48248.649 nT
Magnetic Dip Angle: 59.943 °
Declination Date: November 18, 2013
Magnetic Declination Model: BGGM 2013
North Reference: Grid North
Grid Convergence Used: 0.3365 °
Total Corr Mag North->Grid North: 7.1060 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)
SHL Cimarex Hallertau 5 Federal #3H	0.00	0.00	3.24	0.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	N/A
	100.00	0.00	3.24	100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	200.00	0.00	3.24	200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	300.00	0.00	3.24	300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	400.00	0.00	3.24	400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	500.00	0.00	3.24	500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	600.00	0.00	3.24	600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	700.00	0.00	3.24	700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	800.00	0.00	3.24	800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	900.00	0.00	3.24	900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1000.00	0.00	3.24	1000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1100.00	0.00	3.24	1100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1200.00	0.00	3.24	1200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1300.00	0.00	3.24	1300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1400.00	0.00	3.24	1400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1500.00	0.00	3.24	1500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1600.00	0.00	3.24	1600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1700.00	0.00	3.24	1700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1800.00	0.00	3.24	1800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	1900.00	0.00	3.24	1900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2000.00	0.00	3.24	2000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2100.00	0.00	3.24	2100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2200.00	0.00	3.24	2200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2300.00	0.00	3.24	2300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2400.00	0.00	3.24	2400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2500.00	0.00	3.24	2500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2600.00	0.00	3.24	2600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2700.00	0.00	3.24	2700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)
	2800.00	0.00	3.24	2800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	2900.00	0.00	3.24	2900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3000.00	0.00	3.24	3000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3100.00	0.00	3.24	3100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3200.00	0.00	3.24	3200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3300.00	0.00	3.24	3300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3400.00	0.00	3.24	3400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3500.00	0.00	3.24	3500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3600.00	0.00	3.24	3600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3700.00	0.00	3.24	3700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3800.00	0.00	3.24	3800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	3900.00	0.00	3.24	3900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4000.00	0.00	3.24	4000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4100.00	0.00	3.24	4100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4200.00	0.00	3.24	4200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4300.00	0.00	3.24	4300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4400.00	0.00	3.24	4400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4500.00	0.00	3.24	4500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4600.00	0.00	3.24	4600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4700.00	0.00	3.24	4700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4800.00	0.00	3.24	4800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	4900.00	0.00	3.24	4900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5000.00	0.00	3.24	5000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5100.00	0.00	3.24	5100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5200.00	0.00	3.24	5200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5300.00	0.00	3.24	5300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5400.00	0.00	3.24	5400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5500.00	0.00	3.24	5500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5600.00	0.00	3.24	5600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5700.00	0.00	3.24	5700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5800.00	0.00	3.24	5800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	5900.00	0.00	3.24	5900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6000.00	0.00	3.24	6000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6100.00	0.00	3.24	6100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6200.00	0.00	3.24	6200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6300.00	0.00	3.24	6300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6400.00	0.00	3.24	6400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6500.00	0.00	3.24	6500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6600.00	0.00	3.24	6600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6700.00	0.00	3.24	6700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6800.00	0.00	3.24	6800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	6900.00	0.00	3.24	6900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7000.00	0.00	3.24	7000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7100.00	0.00	3.24	7100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7200.00	0.00	3.24	7200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7300.00	0.00	3.24	7300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7400.00	0.00	3.24	7400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7500.00	0.00	3.24	7500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7600.00	0.00	3.24	7600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7700.00	0.00	3.24	7700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7800.00	0.00	3.24	7800.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	7900.00	0.00	3.24	7900.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8000.00	0.00	3.24	8000.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8100.00	0.00	3.24	8100.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8200.00	0.00	3.24	8200.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)
KOP - Build 12"/100ft DLS	8300.00	0.00	3.24	8300.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8400.00	0.00	3.24	8400.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8500.00	0.00	3.24	8500.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8600.00	0.00	3.24	8600.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8700.00	0.00	3.24	8700.00	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8722.50	0.00	3.24	8722.50	0.00	0.00	0.00	388259.93	737703.02	N 32 3 56.96	W 103 41 57.93	0.00	0.00	0.00
	8800.00	9.30	3.24	8799.66	6.28	6.27	0.35	388266.20	737703.38	N 32 3 57.02	W 103 41 57.92	6.28	3.24	12.00
	8900.00	21.30	3.24	8895.94	32.61	32.56	1.84	388292.49	737704.87	N 32 3 57.28	W 103 41 57.90	32.61	3.24	12.00
	9000.00	33.30	3.24	8984.64	78.39	78.27	4.43	388338.20	737707.45	N 32 3 57.73	W 103 41 57.87	78.39	3.24	12.00
	9100.00	45.30	3.24	9061.89	141.61	141.38	8.00	388401.31	737711.03	N 32 3 58.35	W 103 41 57.82	141.61	3.24	12.00
	9200.00	57.30	3.24	9124.30	219.51	219.15	12.41	388479.08	737715.43	N 32 3 59.12	W 103 41 57.77	219.51	3.24	12.00
	9300.00	69.29	3.24	9169.16	308.68	308.18	17.45	388568.10	737720.47	N 32 4 0.00	W 103 41 57.70	308.68	3.24	12.00
Landing point	9400.00	81.29	3.24	9194.50	405.22	404.58	22.90	388664.49	737725.93	N 32 4 0.96	W 103 41 57.63	405.22	3.24	12.00
	9472.56	90.00	3.24	9200.00	477.50	476.74	26.99	388736.65	737730.01	N 32 4 1.67	W 103 41 57.58	477.50	3.24	12.00
	9500.00	90.00	3.24	9200.00	504.94	504.14	28.54	388764.05	737731.56	N 32 4 1.94	W 103 41 57.56	504.94	3.24	0.00
	9600.00	90.00	3.24	9200.00	604.94	603.98	34.19	388863.88	737737.21	N 32 4 2.93	W 103 41 57.49	604.94	3.24	0.00
	9700.00	90.00	3.24	9200.00	704.94	703.82	39.84	388963.72	737742.86	N 32 4 3.92	W 103 41 57.42	704.94	3.24	0.00
	9800.00	90.00	3.24	9200.00	804.94	803.66	45.50	389063.55	737748.52	N 32 4 4.91	W 103 41 57.34	804.94	3.24	0.00
	9900.00	90.00	3.24	9200.00	904.94	903.50	51.15	389163.39	737754.17	N 32 4 5.89	W 103 41 57.27	904.94	3.24	0.00
	10000.00	90.00	3.24	9200.00	1004.94	1003.34	56.80	389263.22	737759.82	N 32 4 6.88	W 103 41 57.20	1004.94	3.24	0.00
	10100.00	90.00	3.24	9200.00	1104.94	1103.18	62.45	389363.06	737765.47	N 32 4 7.87	W 103 41 57.13	1104.94	3.24	0.00
	10200.00	90.00	3.24	9200.00	1204.94	1203.02	68.11	389462.89	737771.13	N 32 4 8.86	W 103 41 57.05	1204.94	3.24	0.00
	10300.00	90.00	3.24	9200.00	1304.94	1302.86	73.76	389562.73	737776.78	N 32 4 9.84	W 103 41 56.98	1304.94	3.24	0.00
	10400.00	90.00	3.24	9200.00	1404.94	1402.70	79.41	389662.56	737782.43	N 32 4 10.83	W 103 41 56.91	1404.94	3.24	0.00
	10500.00	90.00	3.24	9200.00	1504.94	1502.54	85.07	389762.40	737788.09	N 32 4 11.82	W 103 41 56.84	1504.94	3.24	0.00
	10600.00	90.00	3.24	9200.00	1604.94	1602.38	90.72	389862.23	737793.74	N 32 4 12.81	W 103 41 56.76	1604.94	3.24	0.00
	10700.00	90.00	3.24	9200.00	1704.94	1702.22	96.37	389962.07	737799.39	N 32 4 13.79	W 103 41 56.69	1704.94	3.24	0.00
	10800.00	90.00	3.24	9200.00	1804.94	1802.06	102.03	390061.90	737805.05	N 32 4 14.78	W 103 41 56.62	1804.94	3.24	0.00
	10900.00	90.00	3.24	9200.00	1904.94	1901.90	107.68	390161.74	737810.70	N 32 4 15.77	W 103 41 56.55	1904.94	3.24	0.00
	11000.00	90.00	3.24	9200.00	2004.94	2001.74	113.34	390261.58	737816.35	N 32 4 16.76	W 103 41 56.47	2004.94	3.24	0.00
	11100.00	90.00	3.24	9200.00	2104.94	2101.58	118.99	390361.41	737822.01	N 32 4 17.74	W 103 41 56.40	2104.94	3.24	0.00
	11200.00	90.00	3.24	9200.00	2204.94	2201.42	124.65	390461.25	737827.66	N 32 4 18.73	W 103 41 56.33	2204.94	3.24	0.00
	11300.00	90.00	3.24	9200.00	2304.94	2301.26	130.30	390561.08	737833.32	N 32 4 19.72	W 103 41 56.26	2304.94	3.24	0.00
	11400.00	90.00	3.24	9200.00	2404.94	2401.10	135.96	390660.92	737838.97	N 32 4 20.71	W 103 41 56.18	2404.94	3.24	0.00
	11500.00	90.00	3.24	9200.00	2504.94	2500.94	141.61	390760.75	737844.63	N 32 4 21.69	W 103 41 56.11	2504.94	3.24	0.00
	11600.00	90.00	3.24	9200.00	2604.94	2600.78	147.27	390860.59	737850.28	N 32 4 22.68	W 103 41 56.04	2604.94	3.24	0.00
	11700.00	90.00	3.24	9200.00	2704.94	2700.62	152.92	390960.42	737855.94	N 32 4 23.67	W 103 41 55.97	2704.94	3.24	0.00
	11800.00	90.00	3.24	9200.00	2804.94	2800.46	158.58	391060.26	737861.59	N 32 4 24.66	W 103 41 55.89	2804.94	3.24	0.00
	11900.00	90.00	3.24	9200.00	2904.94	2900.30	164.23	391160.09	737867.25	N 32 4 25.65	W 103 41 55.82	2904.94	3.24	0.00
	12000.00	90.00	3.24	9200.00	3004.94	3000.14	169.89	391259.93	737872.90	N 32 4 26.63	W 103 41 55.75	3004.94	3.24	0.00
	12100.00	90.00	3.24	9200.00	3104.94	3099.98	175.54	391359.76	737878.56	N 32 4 27.62	W 103 41 55.68	3104.94	3.24	0.00
	12200.00	90.00	3.24	9200.00	3204.94	3199.82	181.20	391459.60	737884.22	N 32 4 28.61	W 103 41 55.60	3204.94	3.24	0.00
	12300.00	90.00	3.24	9200.00	3304.94	3299.66	186.86	391559.43	737889.87	N 32 4 29.60	W 103 41 55.53	3304.94	3.24	0.00
	12400.00	90.00	3.24	9200.00	3404.94	3399.50	192.51	391659.27	737895.53	N 32 4 30.58	W 103 41 55.46	3404.94	3.24	0.00
	12500.00	90.00	3.24	9200.00	3504.94	3499.34	198.17	391759.10	737901.19	N 32 4 31.57	W 103 41 55.39	3504.94	3.24	0.00
	12600.00	90.00	3.24	9200.00	3604.94	3599.18	203.83	391858.94	737906.84	N 32 4 32.56	W 103 41 55.31	3604.94	3.24	0.00
	12700.00	90.00	3.24	9200.00	3704.94	3699.02	209.49	391958.77	737912.50	N 32 4 33.55	W 103 41 55.24	3704.94	3.24	0.00
	12800.00	90.00	3.24	9200.00	3804.94	3798.86	215.14	392058.61	737918.16	N 32 4 34.53	W 103 41 55.17	3804.94	3.24	0.00
	12900.00	90.00	3.24	9200.00	3904.94	3898.70	220.80	392158.44	737923.81	N 32 4 35.52	W 103 41 55.09	3904.94	3.24	0.00
	13000.00	90.00	3.24	9200.00	4004.94	3998.54	226.46	392258.28	737929.47	N 32 4 36.51	W 103 41 55.02	4004.94	3.24	0.00
	13100.00	90.00	3.24	9200.00	4104.94	4098.38	232.12	392358.11	737935.13	N 32 4 37.50	W 103 41 54.95	4104.94	3.24	0.00
	13200.00	90.00	3.24	9200.00	4204.94	4198.22	237.77	392457.95	737940.79	N 32 4 38.48	W 103 41 54.88	4204.94	3.24	0.00
	13300.00	90.00	3.24	9200.00	4304.94	4298.06	243.43	392557.78	737946.44	N 32 4 39.47	W 103 41 54.80	4304.94	3.24	0.00
	13400.00	90.00	3.24	9200.00	4404.94	4397.90	249.09	392657.62	737952.10	N 32 4 40.46	W 103 41 54.73	4404.94	3.24	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)
	13500.00	90.00	3.24	9200.00	4504.94	4497.74	254.75	392757.45	737957.76	N 32 4 41.45	W 103 41 54.66	4504.94	3.24	0.00
	13600.00	90.00	3.24	9200.00	4604.94	4597.58	260.41	392857.29	737963.42	N 32 4 42.43	W 103 41 54.59	4604.94	3.24	0.00
Cimarex Hallertau 5 Federal #3H PBHL	13686.26	90.00	3.24	9200.00	4691.20	4683.69	265.29	392943.40	737968.30	N 32 4 43.29	W 103 41 54.52	4691.20	3.24	0.00

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	8722.500	1/100.000	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Hallertau 5 Federal #3H Rev0
	8722.500	13686.257	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Hallertau 5 Federal #3H Rev0