

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM 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.5. Lease Serial No.
NMNM127894

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

DEC 02 2013

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

RECEIVED

2. Name of Operator

CIMAREX ENERGY COMPANY

Contact: DEYSI FAVELA

E-Mail: dfavela@cimarex.com

8. Well Name and No.
DIAMONDTAIL 23 FEDERAL 1H9. API Well No.
30-025-40780

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
DIAMONDTAIL; BONE SPRING

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

Sec 23 T23S R32E NWNW 330FNL 600FWL

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 A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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 changes to the original APD

Approved:
BHL 330FSL & 375 FWL
KOP 10534'
EOC 11083'
MD 15425'
TVD 10920'Change to:
BHL 330 FSL & 590 FWL
KOP 9123'

Original COMS still stand.

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

Electronic Submission #228122 verified by the BLM Well Information System
For CIMAREX ENERGY COMPANY, sent to the Hobbs

Name (Printed/Typed) DEYSI FAVELA

Title DRILLING TECHNICIAN

Signature (Electronic Submission)

Date 11/26/2013

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

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD 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 02 2013

Additional data for EC transaction #228122 that would not fit on the form

32. Additional remarks, continued

EOC 9872'
MD 14011'
TVD 9600'

Please see attachments.

PLEASE DESREGARD PREVIOUS SUBMISSION.

DEC 02 2013

DISTRICT I

1825 N. French Dr., Hobbs, NM 88240
Phone (505) 393-8181 Fax: (505) 393-0720

DISTRICT II

811 S. First St., Artesia, NM 88210
Phone (505) 748-1883 Fax: (505) 748-9720

DISTRICT III

1000 Rio Bravos Rd., Aztec, NM 87410
Phone (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 478-3160 Fax: (505) 478-3162RECEIVED 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 August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-40780	Pool Code	Pool Name Wildcat Bone Spring
Property Code	Property Name DIAMONDTAIL 23 FEDERAL	Well Number 1
OGRIID No. 162683	Operator Name CIMAREX ENERGY CO.	Elevation 3705'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	23	23 S	32 E		330	NORTH	600	WEST	LEA

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
M	23	23 S	32 E		330	SOUTH	590	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

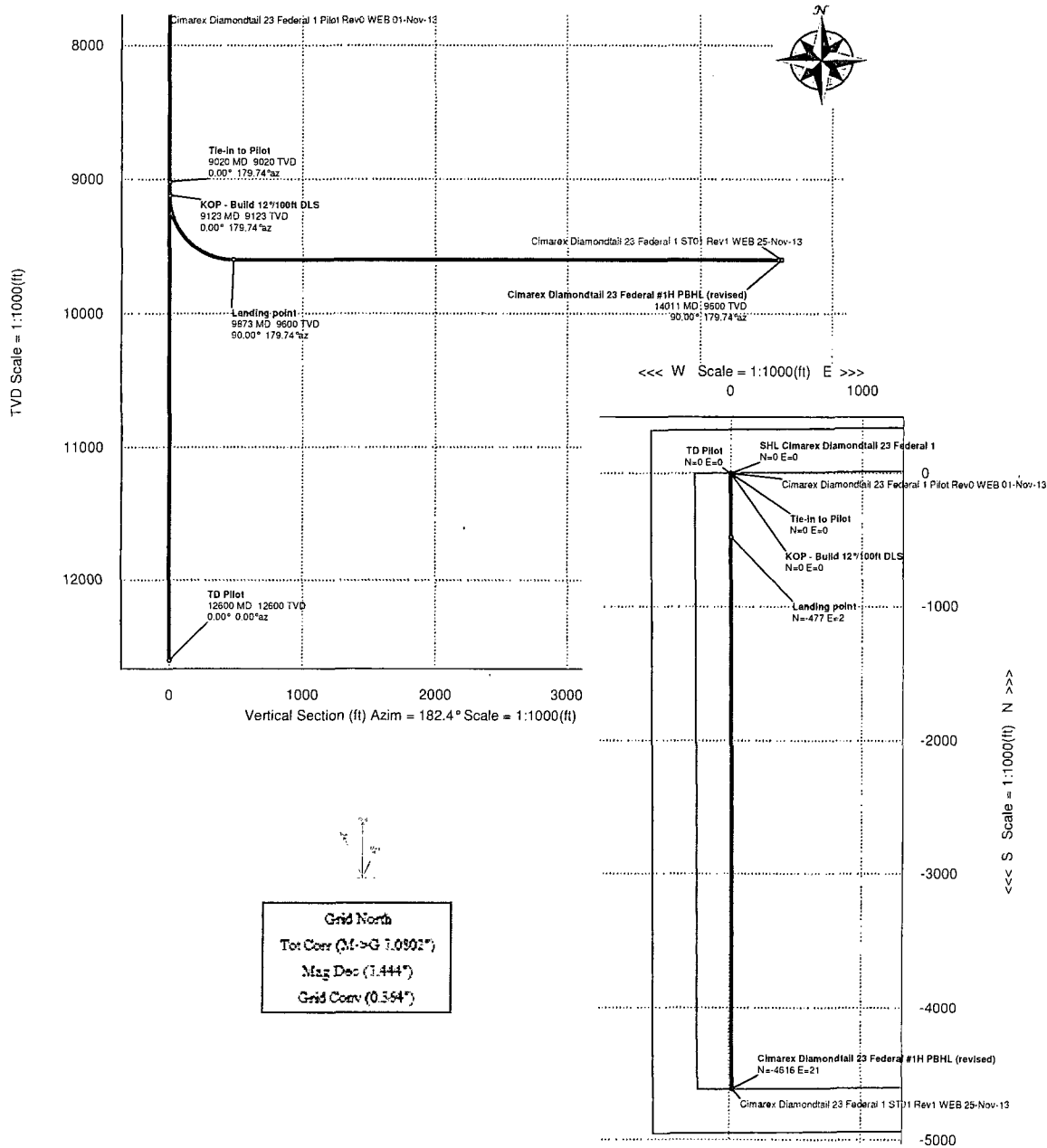
	SURFACE LOCATION Lat - N 32°17'47.56" Long - W 103°39'07.20" NMSPC - N 472284.0 E 751062.5 (NAD-83)	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased 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. <i>Deysi Favela</i> 11/26/2013 Signature Date Deysi Favela Printed Name dfavela@cimarex.com Email Address
PROPOSED BOTTOM HOLE LOCATION Lat - N 32°17'01.83" Long - W 103°39'07.29" NMSPC - N 467663.2 E 751063.6 (NAD-83)	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. GARY L. JONES FEBRUARY 13 2012 Date Surveyed Signature & Seal of Professional Surveyor WELLS 1103-20191 Certificate No. Gary L. Jones 7977 BASIN SURVEYS 26191	



Cimarex

PATHFINDER
A Schlumberger Company

WELL	Diamondtail 23 Federal 1			FIELD	NM Lea County			STRUCTURE	Scandrell Eagle		
Magnetic Parameters											
Model:	BGM2013		Dip:	60.189°	Date:	November 01, 2013		Surface Location			
Mag Dec:	7.444°		F.S:	42395 EnT	Lat:	N 32 17 47.557		Lon:	W 103 28 7.197		
					East:	W 103 28 7.197		North:	472284.00 NUS		
					East:	751492.50 NUS		Scale:	0.999595		
Miscellaneous											
					Plan:	ST01 Rev1 WEB 25-Nov-13			Scale: 1:1000		
					Grid Conv:	0.364°			Scale Fact: 0.999595		
					Plan:	ST01 Rev1 WEB 25-Nov-13			Scale: 1:1000		
					Grid Conv:	0.364°			Scale Fact: 0.999595		



Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
Tie-in to Pilot	9020.00	0.00	179.74	9020.00	0.00	0.00	0.00	
KOP - Build 12"/100ft DLS	9122.50	0.00	179.74	9122.50	0.00	0.00	0.00	0.00
Landing point	9872.56	90.00	179.74	9600.00	476.98	-477.50	2.17	12.00
Cimarex Diamondtail 23 Federal #1H PBHL (revised)	14011.09	90.00	179.74	9600.00	4611.04	-4615.99	21.10	0.00



Cimarex Diamondtail 23 Federal 1 ST01 Rev1 WEB 25-Nov-13 Proposal
Report 100' Interpolated
(Non-Def Plan)

PATHFINDER
A Schlumberger Company

Report Date: November 25, 2013 - 04:03 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Scandril Eagle / Cimarex Diamondtail 23 Federal 1
Well: Cimarex Diamondtail 23 Federal 1
Borehole: ST01 Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Diamondtail 23 Federal 1 ST01 Rev1 WEB 25-Nov-13
Survey Date: November 01, 2013
Tort / AHD / DDI / ERD Ratio: 90.004 ° / 4616.038 ft / 5.783 / 0.481
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 17' 47.55722", W 103° 39' 7.19713"
Location Grid N/E Y/X: N 472284.000 ftUS, E 751862.500 ftUS
CRS Grid Convergence Angle: 0.3641 °
Grid Scale Factor: 0.99995985

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 182.404 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3730.000 ft above MSL
Seabed / Ground Elevation: 3705.000 ft above MSL
Magnetic Declination: 7.444 °
Total Gravity Field Strength: 998.4637mgn (9.80665 Based)
Total Magnetic Field Strength: 48396.570 nT
Magnetic Dip Angle: 60.169 °
Declination Date: November 01, 2013
Magnetic Declination Model: BGGM 2013
North Reference: Grid North
Grid Convergence Used: 0.3641 °
Total Corr Mag North->Grid North: 7.0802 °
Local Coord Referenced To: Structure Reference Point

HOBBS OCD

DEC 02 2013

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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 Diamondtail 23 Federal 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	N/A
	100.00	0.00	179.74	100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	200.00	0.00	179.74	200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	300.00	0.00	179.74	300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	400.00	0.00	179.74	400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	500.00	0.00	179.74	500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	600.00	0.00	179.74	600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	700.00	0.00	179.74	700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	800.00	0.00	179.74	800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	900.00	0.00	179.74	900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1000.00	0.00	179.74	1000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1100.00	0.00	179.74	1100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1200.00	0.00	179.74	1200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1300.00	0.00	179.74	1300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1400.00	0.00	179.74	1400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1500.00	0.00	179.74	1500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1600.00	0.00	179.74	1600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1700.00	0.00	179.74	1700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1800.00	0.00	179.74	1800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	1900.00	0.00	179.74	1900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2000.00	0.00	179.74	2000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2100.00	0.00	179.74	2100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2200.00	0.00	179.74	2200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2300.00	0.00	179.74	2300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2400.00	0.00	179.74	2400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2500.00	0.00	179.74	2500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2600.00	0.00	179.74	2600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2700.00	0.00	179.74	2700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	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	179.74	2800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	2900.00	0.00	179.74	2900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3000.00	0.00	179.74	3000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3100.00	0.00	179.74	3100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3200.00	0.00	179.74	3200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3300.00	0.00	179.74	3300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3400.00	0.00	179.74	3400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3500.00	0.00	179.74	3500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3600.00	0.00	179.74	3600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3700.00	0.00	179.74	3700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3800.00	0.00	179.74	3800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	3900.00	0.00	179.74	3900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4000.00	0.00	179.74	4000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4100.00	0.00	179.74	4100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4200.00	0.00	179.74	4200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4300.00	0.00	179.74	4300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4400.00	0.00	179.74	4400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4500.00	0.00	179.74	4500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4600.00	0.00	179.74	4600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4700.00	0.00	179.74	4700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4800.00	0.00	179.74	4800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	4900.00	0.00	179.74	4900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5000.00	0.00	179.74	5000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5100.00	0.00	179.74	5100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5200.00	0.00	179.74	5200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5300.00	0.00	179.74	5300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5400.00	0.00	179.74	5400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5500.00	0.00	179.74	5500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5600.00	0.00	179.74	5600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5700.00	0.00	179.74	5700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5800.00	0.00	179.74	5800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	5900.00	0.00	179.74	5900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6000.00	0.00	179.74	6000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6100.00	0.00	179.74	6100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6200.00	0.00	179.74	6200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6300.00	0.00	179.74	6300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6400.00	0.00	179.74	6400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6500.00	0.00	179.74	6500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6600.00	0.00	179.74	6600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6700.00	0.00	179.74	6700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6800.00	0.00	179.74	6800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	6900.00	0.00	179.74	6900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7000.00	0.00	179.74	7000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7100.00	0.00	179.74	7100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7200.00	0.00	179.74	7200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7300.00	0.00	179.74	7300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7400.00	0.00	179.74	7400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7500.00	0.00	179.74	7500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7600.00	0.00	179.74	7600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7700.00	0.00	179.74	7700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7800.00	0.00	179.74	7800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	7900.00	0.00	179.74	7900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8000.00	0.00	179.74	8000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8100.00	0.00	179.74	8100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8200.00	0.00	179.74	8200.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)	DLS (%/100ft)
	8300.00	0.00	179.74	8300.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8400.00	0.00	179.74	8400.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8500.00	0.00	179.74	8500.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8600.00	0.00	179.74	8600.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8700.00	0.00	179.74	8700.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8800.00	0.00	179.74	8800.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	8900.00	0.00	179.74	8900.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	9000.00	0.00	179.74	9000.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
Tie-in to Pilot	9020.00	0.00	179.74	9020.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	9100.00	0.00	179.74	9100.00	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
KOP - Build 12*/100ft DLS	9122.50	0.00	179.74	9122.50	0.00	0.00	0.00	472284.00	751862.50	N 32 17 47.56	W 103 39 7.20	0.00	0.00	0.00
	9200.00	9.30	179.74	9199.66	6.27	-6.28	0.03	472277.72	751862.53	N 32 17 47.50	W 103 39 7.20	6.28	179.74	12.00
	9300.00	21.30	179.74	9295.94	32.58	-32.61	0.15	472251.39	751862.65	N 32 17 47.23	W 103 39 7.20	32.61	179.74	12.00
	9400.00	33.30	179.74	9384.64	78.31	-78.39	0.36	472205.61	751862.86	N 32 17 46.78	W 103 39 7.20	78.39	179.74	12.00
	9500.00	45.30	179.74	9461.89	141.46	-141.61	0.64	472142.40	751863.14	N 32 17 46.16	W 103 39 7.20	141.61	179.74	12.00
	9600.00	57.30	179.74	9524.30	219.27	-219.50	1.00	472064.51	751863.50	N 32 17 45.39	W 103 39 7.20	219.51	179.74	12.00
	9700.00	69.29	179.74	9569.16	308.34	-308.67	1.40	471975.34	751863.90	N 32 17 44.50	W 103 39 7.20	308.68	179.74	12.00
	9800.00	81.29	179.74	9594.50	404.79	-405.22	1.84	471878.80	751864.34	N 32 17 43.55	W 103 39 7.21	405.22	179.74	12.00
Landing point	9872.56	90.00	179.74	9600.00	476.98	-477.50	2.17	471806.53	751864.67	N 32 17 42.83	W 103 39 7.21	477.50	179.74	12.00
	9900.00	90.00	179.74	9600.00	504.40	-504.94	2.29	471779.08	751864.79	N 32 17 42.56	W 103 39 7.21	504.94	179.74	0.00
	10000.00	90.00	179.74	9600.00	604.29	-604.94	2.75	471679.09	751865.25	N 32 17 41.57	W 103 39 7.21	604.94	179.74	0.00
	10100.00	90.00	179.74	9600.00	704.18	-704.94	3.20	471579.09	751865.70	N 32 17 40.58	W 103 39 7.21	704.94	179.74	0.00
	10200.00	90.00	179.74	9600.00	804.07	-804.94	3.65	471479.10	751866.15	N 32 17 39.59	W 103 39 7.21	804.94	179.74	0.00
	10300.00	90.00	179.74	9600.00	903.97	-904.94	4.11	471379.10	751866.61	N 32 17 38.60	W 103 39 7.22	904.94	179.74	0.00
	10400.00	90.00	179.74	9600.00	1003.86	-1004.93	4.56	471279.11	751867.06	N 32 17 37.61	W 103 39 7.22	1004.94	179.74	0.00
	10500.00	90.00	179.74	9600.00	1103.75	-1104.93	5.02	471179.11	751867.52	N 32 17 36.62	W 103 39 7.22	1104.94	179.74	0.00
	10600.00	90.00	179.74	9600.00	1203.64	-1204.93	5.47	471079.12	751867.97	N 32 17 35.63	W 103 39 7.22	1204.94	179.74	0.00
	10700.00	90.00	179.74	9600.00	1303.53	-1304.93	5.93	470979.12	751868.43	N 32 17 34.64	W 103 39 7.22	1304.94	179.74	0.00
	10800.00	90.00	179.74	9600.00	1403.43	-1404.93	6.38	470879.13	751868.88	N 32 17 33.66	W 103 39 7.23	1404.94	179.74	0.00
	10900.00	90.00	179.74	9600.00	1503.32	-1504.93	6.84	470779.13	751869.34	N 32 17 32.67	W 103 39 7.23	1504.94	179.74	0.00
	11000.00	90.00	179.74	9600.00	1603.21	-1604.93	7.29	470679.14	751869.79	N 32 17 31.68	W 103 39 7.23	1604.94	179.74	0.00
	11100.00	90.00	179.74	9600.00	1703.10	-1704.93	7.75	470579.14	751870.25	N 32 17 30.69	W 103 39 7.23	1704.94	179.74	0.00
	11200.00	90.00	179.74	9600.00	1802.99	-1804.93	8.21	470479.15	751870.71	N 32 17 29.70	W 103 39 7.24	1804.94	179.74	0.00
	11300.00	90.00	179.74	9600.00	1902.88	-1904.93	8.66	470379.16	751871.16	N 32 17 28.71	W 103 39 7.24	1904.94	179.74	0.00
	11400.00	90.00	179.74	9600.00	2002.78	-2004.92	9.12	470279.16	751871.62	N 32 17 27.72	W 103 39 7.24	2004.94	179.74	0.00
	11500.00	90.00	179.74	9600.00	2102.67	-2104.92	9.58	470179.17	751872.08	N 32 17 26.73	W 103 39 7.24	2104.94	179.74	0.00
	11600.00	90.00	179.74	9600.00	2202.56	-2204.92	10.03	470079.17	751872.53	N 32 17 25.74	W 103 39 7.24	2204.94	179.74	0.00
	11700.00	90.00	179.74	9600.00	2302.45	-2304.92	10.49	469979.18	751872.99	N 32 17 24.75	W 103 39 7.25	2304.94	179.74	0.00
	11800.00	90.00	179.74	9600.00	2402.34	-2404.92	10.95	469879.18	751873.45	N 32 17 23.76	W 103 39 7.25	2404.94	179.74	0.00
	11900.00	90.00	179.74	9600.00	2502.24	-2504.92	11.40	469779.19	751873.90	N 32 17 22.77	W 103 39 7.25	2504.94	179.74	0.00
	12000.00	90.00	179.74	9600.00	2602.13	-2604.92	11.86	469679.19	751874.36	N 32 17 21.78	W 103 39 7.25	2604.94	179.74	0.00
	12100.00	90.00	179.74	9600.00	2702.02	-2704.92	12.32	469579.20	751874.82	N 32 17 20.79	W 103 39 7.25	2704.94	179.74	0.00
	12200.00	90.00	179.74	9600.00	2801.91	-2804.92	12.78	469479.20	751875.28	N 32 17 19.80	W 103 39 7.26	2804.94	179.74	0.00
	12300.00	90.00	179.74	9600.00	2901.80	-2904.91	13.24	469379.21	751875.73	N 32 17 18.81	W 103 39 7.26	2904.94	179.74	0.00
	12400.00	90.00	179.74	9600.00	3001.69	-3004.91	13.69	469279.21	751876.19	N 32 17 17.82	W 103 39 7.26	3004.94	179.74	0.00
	12500.00	90.00	179.74	9600.00	3101.59	-3104.91	14.15	469179.22	751876.65	N 32 17 16.83	W 103 39 7.26	3104.94	179.74	0.00
	12600.00	90.00	179.74	9600.00	3201.48	-3204.91	14.61	469079.22	751877.11	N 32 17 15.84	W 103 39 7.26	3204.94	179.74	0.00
	12700.00	90.00	179.74	9600.00	3301.37	-3304.91	15.07	468979.23	751877.57	N 32 17 14.85	W 103 39 7.27	3304.94	179.74	0.00
	12800.00	90.00	179.74	9600.00	3401.26	-3404.91	15.53	468879.23	751878.03	N 32 17 13.87	W 103 39 7.27	3404.94	179.74	0.00
	12900.00	90.00	179.74	9600.00	3501.15	-3504.91	15.99	468779.24	751878.49	N 32 17 12.88	W 103 39 7.27	3504.94	179.74	0.00
	13000.00	90.00	179.74	9600.00	3601.04	-3604.91	16.45	468679.24	751878.95	N 32 17 11.89	W 103 39 7.27	3604.94	179.74	0.00
	13100.00	90.00	179.74	9600.00	3700.94	-3704.91	16.91	468579.25	751879.41	N 32 17 10.90	W 103 39 7.27	3704.94	179.74	0.00
	13200.00	90.00	179.74	9600.00	3800.83	-3804.91	17.37	468479.26	751879.87	N 32 17 9.91	W 103 39 7.28	3804.94	179.74	0.00
	13300.00	90.00	179.74	9600.00	3900.72	-3904.90	17.83	468379.26	751880.32	N 32 17 8.92	W 103 39 7.28	3904.94	179.74	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)
	13400.00	90.00	179.74	9600.00	4000.61	-4004.90	18.29	468279.27	751880.78	N 32 17 7.93	W 103 39 7.28	4004.94	179.74	0.00
	13500.00	90.00	179.74	9600.00	4100.50	-4104.90	18.75	468179.27	751881.25	N 32 17 6.94	W 103 39 7.28	4104.94	179.74	0.00
	13600.00	90.00	179.74	9600.00	4200.39	-4204.90	19.21	468079.28	751881.71	N 32 17 5.95	W 103 39 7.28	4204.94	179.74	0.00
	13700.00	90.00	179.74	9600.00	4300.28	-4304.90	19.67	467979.28	751882.17	N 32 17 4.96	W 103 39 7.29	4304.94	179.74	0.00
	13800.00	90.00	179.74	9600.00	4400.18	-4404.90	20.13	467879.29	751882.63	N 32 17 3.97	W 103 39 7.29	4404.94	179.74	0.00
	13900.00	90.00	179.74	9600.00	4500.07	-4504.90	20.59	467779.29	751883.09	N 32 17 2.98	W 103 39 7.29	4504.94	179.74	0.00
	14000.00	90.00	179.74	9600.00	4599.96	-4604.90	21.05	467679.30	751883.55	N 32 17 1.99	W 103 39 7.29	4604.94	179.74	0.00
Cimarex Diamondtail 23 Federal #1H PBHL (revised)	14011.09	90.00	179.74	9600.00	4611.04	-4615.99	21.10	467668.20	751883.60	N 32 17 1.88	W 103 39 7.29	4616.04	179.74	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	25.000	1/100.000	30.000	30.000	SLB_MWD-POOR-Depth Only	Pilot Borehole / Cimarex Diamondtail 23 Federal 1 Pilot
	25.000	9020.000	1/100.000	30.000	30.000	SLB_MWD-POOR	Pilot Borehole / Cimarex Diamondtail 23 Federal 1 Pilot
	9020.000	14011.093	1/100.000	30.000	30.000	SLB_MWD-STD	ST01 Borehole / Cimarex Diamondtail 23 Federal 1 ST01