

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.

HOBBS OCD

SUBMIT IN TRIPLICATE - Other instructions on reverse side

NOV 17 2014

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No. JAMES 29 FEDERAL 39 H
2. Name of Operator CIMAREX ENERGY COMPANY OF CO		9. API Well No. 30-025-42091-00-X1
3a. Address 600 NORTH MARIENFELD STREET, SUITE 600 MIDLAND, TX 79701		10. Field and Pool, or Exploratory SAND DUNES
3b. Phone No. (include area code) Ph: 918.295.1763		11. County or Parish, and State LEA COUNTY, NM
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 29 T23S R32E NWNE 330FNL 1450FEL 32.165482 N Lat, 103.413624 W Lon		

RECEIVED

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 CO. RESPECTFULLY REQUESTS TO CHANGE THE BHL AS FOLLOWS:
A REVISED C-102 PLAT IS ATTACHED.

APPROVED: BHL 330 FSL & 1330' FEL

PROPOSED: BHL 330 FSL & 1100' FEL

NEED TO APPLY FOR ADMINISTRATIVE
APPROVAL FOR NSP WITH NMBCD
SANTA FE OFFICE 200 ACRES CONSISTING
OF 1/4 B, G, H, I, P K2

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #271015 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO, sent to the Hobbs Committed to AFMSS for processing by CHRISTOPHER WALLS on 10/23/2014 (15CRW0014SE)	
Name (Printed/Typed) HOPE KNAULS	Title REGULATORY TECH
Signature (Electronic Submission)	Date 10/15/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

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 K2

NOV 7 2014

/s/ Chris Walls

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.

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

NOV 18 2014
m

DISTRICT I
1025 N. French Dr., Hobbs, NM 88240
Phone (505) 393-0101 Fax: (505) 393-0720

DISTRICT II
611 S. First St., Artesia, NM 88210
Phone (505) 745-1253 Fax: (505) 745-0720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-0170 Fax: (505) 334-0170

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 and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-42091	Pool Code 53805	Pool Name Sand Dunes, Bone Spring
Property Code 313195	Property Name JAMES 29 FEDERAL	Well Number 39
OGRID No. 215099	Operator Name CIMAREX ENERGY CO.	Elevation 3686

Surface Location

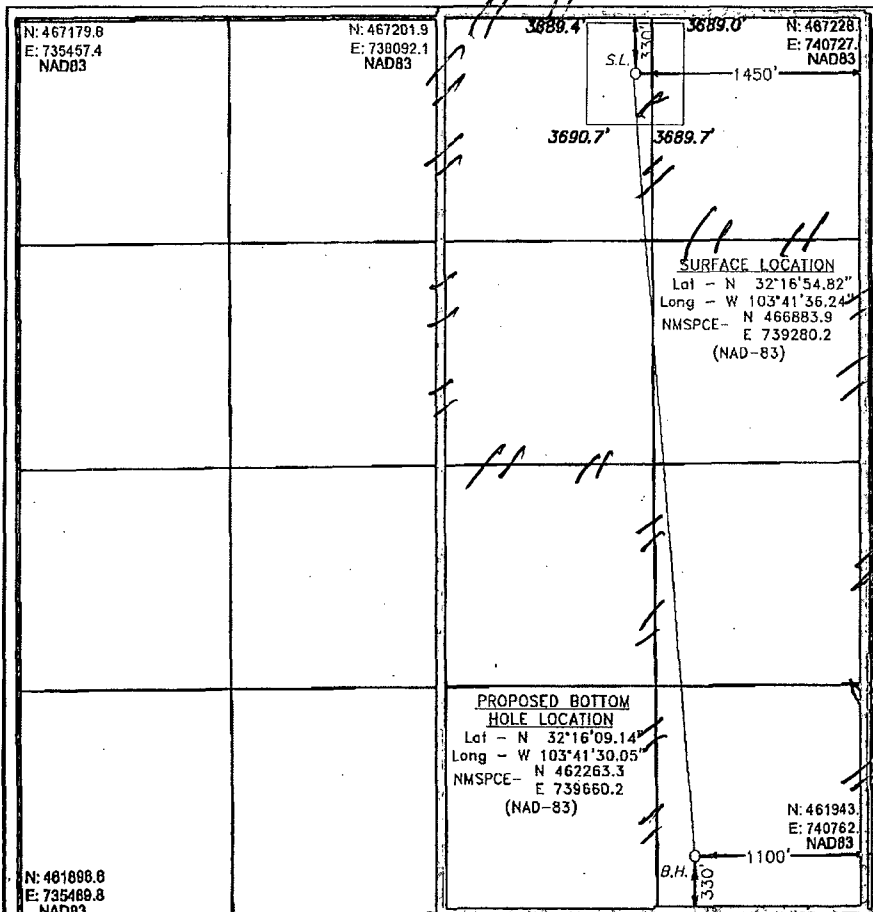
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	23 S	32 E		330	NORTH	1450	EAST	LEA

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
O	29	23 S	32 E		330	SOUTH	1100	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			NSL & NSP Pending

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

N: 467179.8 E: 735457.4 NAD83	N: 467201.9 E: 738092.1 NAD83		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>Hope Knauls</i> 12-9-13 Signature Date Hope Knauls Printed Name hknauls@cimarex.com Email Address 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. SEPTEMBER 1 2013 Date Surveyed Signature of Surveyor Professional Surveyor Certified by Gary Jones 7977 Scale: 1" = 1000' WD Num.: 29278
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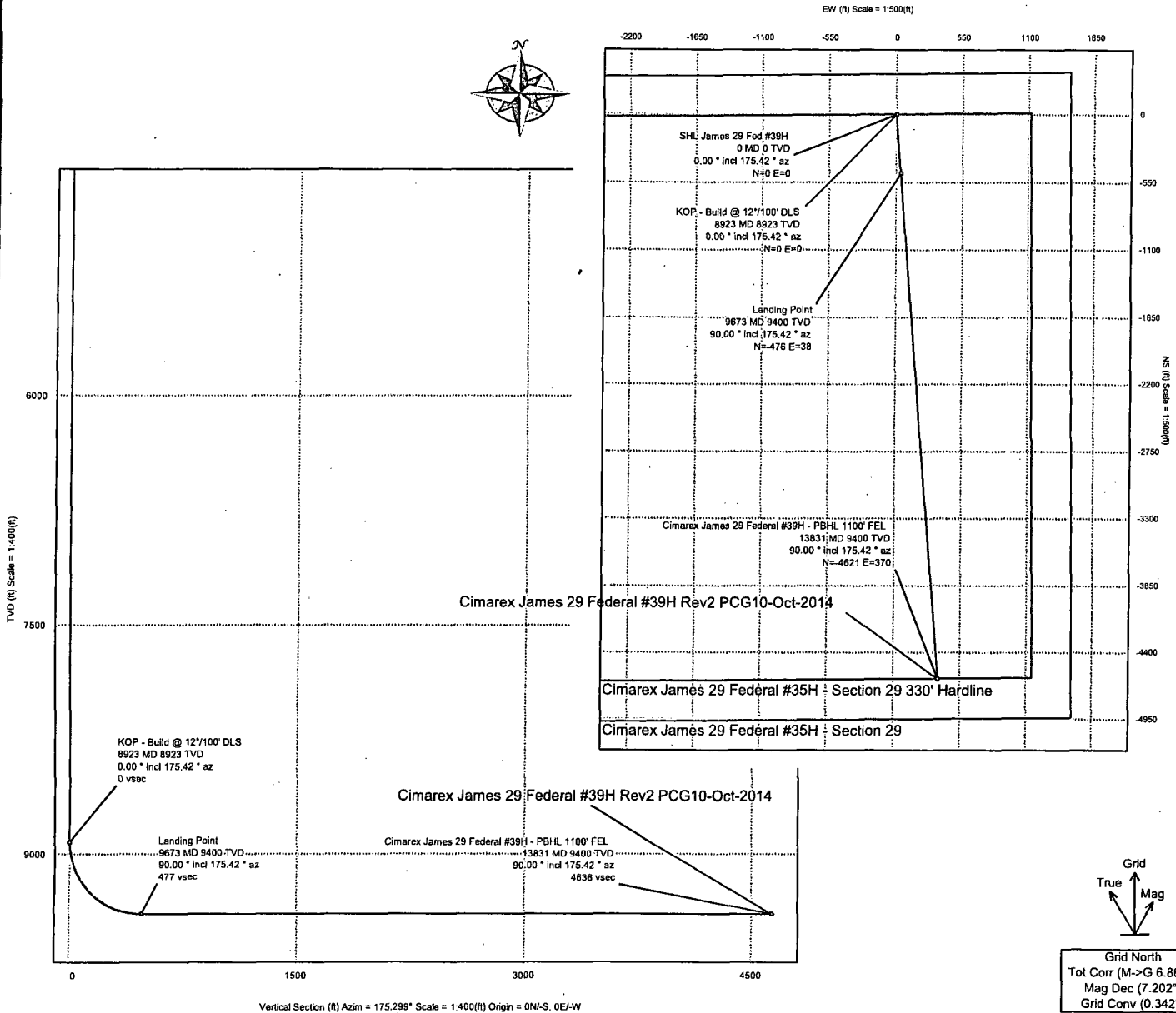


Cimarex



Borehole:	Well:	Field:	Structure:
Original Borehole	James 29 Federal #39H	NM Lea County	TBD

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: HDGM 2014 Dip: 60.126° Date: 10-Oct-2014	NAD83 New Mexico State Plane, Eastern Zone, US Feet	James 29 Federal #39H
MagDec: 7.202° FS: 48434.233nT Gravity FS: 998.692mgn (9.80665 Based)	Let: N 32 16 54.89 Northing: 466883.9RUS Grid Conv: 0.3421°	TVD Ref: Ground Level (3686ft above MSL)
	Lon: W 103 41 34.16 Easting: 739280.2RUS Scale Fact: 0.99995395	Plan: Rev2 PCG10-Oct-2014



Grid
True
Mag

Grid North
Tot Corr (M->G 6.860°)
Mag Dec (7.202°)
Grid Conv (0.342°)

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(°)/S(-)	E(°)/W(-)	DLS
SHL James 29 Fed #39H	0.00	0.00	175.42	0.00	0.00	0.00	0.00	
KOP - Build @ 12°/100' DLS	8922.54	0.00	175.42	8922.54	0.00	0.00	0.00	0.00
Landing Point	9672.54	90.00	175.42	9400.00	477.46	-475.94	38.09	12.00
Cimarex James 29 Federal #39H - PBHL 1100' FEL	13831.67	90.00	175.42	9400.00	4635.59	-4620.82	369.82	0.00

CONTROLLED	
Plan ref	Rev2 PCG10-Oct-2014
Drawing ref	
Copy number	1 of 1
Date	10-Oct-2014
1	Originator
2	DE Sign Off Authority
3	D&M Line Manager
4	Client
Copy number	for



Cimarex James 29 Federal #39H Rev2 PCG10-Oct-2014 Proposal
Geodetic Report 100ft Interpolated
(Non-Def Plan)



Report Date:	October 10, 2014 - 01:26 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Cimarex	Vertical Section Azimuth:	175.299 ° (Grid North)
Field:	NM Lea County (NAD 83)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex James 29 Federal #39H / Cimarex James 29 Federal #39H	TVD Reference Datum:	Ground Level
Well:	Cimarex James 29 Federal #39H	TVD Reference Elevation:	3686.000 ft above MSL
Borehole:	Original Borehole	Seabed / Ground Elevation:	3686.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7.202 °
Survey Name:	Cimarex James 29 Federal #39H Rev2 PCG10-Oct-2014	Total Gravity Field Strength:	998.6917mgn (9.80665 Based)
Survey Date:	October 29, 2013	Gravity Model:	DOX
Tort / AHD / DDI / ERD Ratio:	90.000 ° / 4635.597 ft / 5.788 / 0.493	Total Magnetic Field Strength:	48434.233 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	60.126 °
Location Lat / Long:	N 32° 16' 54.88885", W 103° 41' 34.15967"	Declination Date:	October 10, 2014
Location Grid N/E Y/X:	N 466883.900 ftUS, E 739280.200 ftUS	Magnetic Declination Model:	HDGM 2014
CRS Grid Convergence Angle:	0.3421 °	North Reference:	Grid North
Grid Scale Factor:	0.99995396	Grid Convergence Used:	0.3421 °
Version / Patch:	2.7.1043.0	Total Corr Mag North->Grid North:	6.8500 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Eastng (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL James 29 Fed #39H	0.00	0.00	175.42	0.00	0.00	0.00	0.00	N/A	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	100.00	0.00	175.42	100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	200.00	0.00	175.42	200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	300.00	0.00	175.42	300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	400.00	0.00	175.42	400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	500.00	0.00	175.42	500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	600.00	0.00	175.42	600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	700.00	0.00	175.42	700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	800.00	0.00	175.42	800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	900.00	0.00	175.42	900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1000.00	0.00	175.42	1000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1100.00	0.00	175.42	1100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1200.00	0.00	175.42	1200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1300.00	0.00	175.42	1300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1400.00	0.00	175.42	1400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1500.00	0.00	175.42	1500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1600.00	0.00	175.42	1600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1700.00	0.00	175.42	1700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1800.00	0.00	175.42	1800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	1900.00	0.00	175.42	1900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2000.00	0.00	175.42	2000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2100.00	0.00	175.42	2100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2200.00	0.00	175.42	2200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2300.00	0.00	175.42	2300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2400.00	0.00	175.42	2400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2500.00	0.00	175.42	2500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2600.00	0.00	175.42	2600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2700.00	0.00	175.42	2700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2800.00	0.00	175.42	2800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	2900.00	0.00	175.42	2900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	3000.00	0.00	175.42	3000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
	3100.00	0.00	175.42	3100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	

Comments	MP	Incl	Azim	Grid	VSEC	NS	EW	DLS	Northg	Eastng	Latitude	Longitude
	(°)	(°)	(°)	(°)	(°)	(°)	(°)	(°)	(°)	(°)	(°)	(°)
	3200.00	0.00	175.42	3200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3300.00	0.00	175.42	3300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3400.00	0.00	175.42	3400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3500.00	0.00	175.42	3500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3600.00	0.00	175.42	3600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3700.00	0.00	175.42	3700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3800.00	0.00	175.42	3800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	3900.00	0.00	175.42	3900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4000.00	0.00	175.42	4000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4100.00	0.00	175.42	4100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4200.00	0.00	175.42	4200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4300.00	0.00	175.42	4300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4400.00	0.00	175.42	4400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4500.00	0.00	175.42	4500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4600.00	0.00	175.42	4600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4700.00	0.00	175.42	4700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4800.00	0.00	175.42	4800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	4900.00	0.00	175.42	4900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5000.00	0.00	175.42	5000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5100.00	0.00	175.42	5100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5200.00	0.00	175.42	5200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5300.00	0.00	175.42	5300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5400.00	0.00	175.42	5400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5500.00	0.00	175.42	5500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5600.00	0.00	175.42	5600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5700.00	0.00	175.42	5700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5800.00	0.00	175.42	5800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	5900.00	0.00	175.42	5900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6000.00	0.00	175.42	6000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6100.00	0.00	175.42	6100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6200.00	0.00	175.42	6200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6300.00	0.00	175.42	6300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6400.00	0.00	175.42	6400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6500.00	0.00	175.42	6500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6600.00	0.00	175.42	6600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6700.00	0.00	175.42	6700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6800.00	0.00	175.42	6800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	6900.00	0.00	175.42	6900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7000.00	0.00	175.42	7000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7100.00	0.00	175.42	7100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7200.00	0.00	175.42	7200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7300.00	0.00	175.42	7300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7400.00	0.00	175.42	7400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7500.00	0.00	175.42	7500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7600.00	0.00	175.42	7600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7700.00	0.00	175.42	7700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7800.00	0.00	175.42	7800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	7900.00	0.00	175.42	7900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8000.00	0.00	175.42	8000.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8100.00	0.00	175.42	8100.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8200.00	0.00	175.42	8200.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8300.00	0.00	175.42	8300.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8400.00	0.00	175.42	8400.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8500.00	0.00	175.42	8500.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8600.00	0.00	175.42	8600.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8700.00	0.00	175.42	8700.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8800.00	0.00	175.42	8800.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E
	8900.00	0.00	175.42	8900.00	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W	103 41 34.16 E

Cimarex James
29 Federal #39H
-PBHL 1100'
FEL

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 ° ' ")
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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)	Survey Tool Type	Borehole / Survey
	1	0.000	13830.672	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex James 29 Federal #39H Rev2



Cimarex James 29 Federal #39H Rev2 PCG10-Oct-2014 Proposal
Geodetic Report
(Non-Def Plan)



Report Date: October 10, 2014 - 01:25 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex James 29 Federal #39H / Cimarex James 29 Federal #39H
Well: Cimarex James 29 Federal #39H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex James 29 Federal #39H Rev2 PCG10-Oct-2014
Survey Date: October 29, 2013
Tort / AHD / DDI / ERD Ratio: 90.000 ° / 4635.597 ft / 5.788 / 0.493
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 54.88885", W 103° 41' 34.15967"
Location Grid N/E Y/X: N 466883.900 RUS, E 739280.200 RUS
CRS Grid Convergence Angle: 0.3421 °
Grid Scale Factor: 0.99995396
Version / Patch: 2.7.1043.0
Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 175.299 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground Level
TVD Reference Elevation: 3686.000 ft above MSL
Seabed / Ground Elevation: 3686.000 ft above MSL
Magnetic Declination: 7.202 °
Total Gravity Field Strength: 998.6917mgm (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 48434.233 nT
Magnetic Dip Angle: 60.126 °
Declination Date: October 10, 2014
Magnetic Declination Model: HDGM 2014
North Reference: Grid North
Grid Convergence Used: 0.3421 °
Total Corr Mag North->Grid North: 6.8600 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL James 29 Fed #39H	0.00	0.00	175.42	0.00	0.00	0.00	0.00	N/A	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
KOP - Build @ 12"/100' DLS	8922.54	0.00	175.42	8922.54	0.00	0.00	0.00	0.00	466883.90	739280.20	N 32 16 54.89 W 103 41 34.16	
Landing Point Cimarex James 29 Federal #39H	9672.54	90.00	175.42	9400.00	477.46	-475.94	38.09	12.00	466407.98	739318.29	N 32 16 50.18 W 103 41 33.75	
- PBHL 1100' FEL	13830.67	90.00	175.42	9400.00	4635.59	-4620.82	369.82	0.00	462263.30	739650.00	N 32 16 9.14 W 103 41 30.17	

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)	Survey Tool Type	Borehole / Survey
	1	0.000	13830.672	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex James 29 Federal #39H Rev2