Form 3160-5 (August 2007)

# **UNITED STATES**

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY Do not use th	EPARTMENT OF THE IN UREAU OF LAND MANA NOTICES AND REPOR IS form for proposals to III. Use form 3160-3 (API	GEMENT RTS ON WELLS drill or to re-enter an	5. Lease Serial N NMNM8472	
SUBMIT IN TR	IPLICATE - Other instruc	tions on reverse side.	7. If Unit or CA/	Agreement, Name and/or No.
Type of Well ✓     Gas Well □ Ot	her		8. Well Name and CUERVO FE	
Name of Operator     CIMAREX ENERGY COMPA	Contact: NY / E-Mail: cburdell@c	CRISTEN BURDELL simarex.com	9. API Well No. 30-025-405	59
3a. Address 202 S. CHEYENNE AVE STE TULSA, OK 74103	1000	3b. Phone No. (include area code) Ph: 918-560-7038	DIAMONDT	
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description	HOPPS	11. County or Pa	rish, and State
Sec 14 T23S R32E NENE 33	0FNL 375FEL 🗸	APR 182	LEA COUN	TY COUNTY, NM
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE NA FUREOF	CE, REPORT, OR OT	HER DATA
TYPE OF SUBMISSION		TYPE O	FACTION	
□ Notice of Intent	☐ Acidize	□ Deepen	☐ Production (Start/Resume	e) Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	□ Reclamation	■ Well Integrity
Subsequent Report     ■	□ Casing Repair	■ New Construction	□ Recomplete	Other
☐ Final Abandonment Notice	☐ Change Plans	Plug and Abandon	□ Temporarily Abandon	
	☐ Convert to Injection	□ Plug Back	■ Water Disposal	
13. Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involve testing has been completed. Final A determined that the site is ready for	ally or recomplete horizontally, ork will be performed or provide d operations. If the operation res bandonment Notices shall be file	give subsurface locations and measurement the Bond No. on file with BLM/BIA sults in a multiple completion or reco	red and true vertical depths of all parts. Required subsequent reports shapempletion in a new interval, a Forn	pertinent markers and zones. all be filed within 30 days and 3160-4 shall be filed once
H2S gas analysis for facility a	s requested			

A25 100	PPM. Submit ROE				THE RESERVE
14. I hereby certify the	nat the foregoing is true and correct.  Electronic Submission #273996 verifie  For CIMAREX ENERGY CO  Committed to AFMSS for processing	MPANY	sent to the Hobbs		
Name(Printed/Typ	ped) CRISTEN BURDELL	Title	REGULATORY	ANALYST	
Signature	(Electronic Submission)  THIS SPACE FOR FEDERA	Date	10/27/2014 STATE OFFICE	USE	
Mccepted +	A RELOCA				1
Approved By	lamo a. Com	Title	SPET		9-10-16 Bate
certify that the applican	if any, are attached. Approval of this notice does not warrant or tholds legal or equitable title to those rights in the subject lease applicant to conduct operations thereon.	Office	150	Ka	

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 are false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Job Number: 31318.001

## CHROMATOGRAPH EXTENDED ANALYSIS TOTAL REPORT

COMPONENT	MOL %	GPM	WT%
Hydrogen Sulfide*	< 0.001	)100 psm	< 0.001
Nitrogen	1.991	16	2.509
Carbon Dioxide	0.273		0.541
Methane	73.408		52.979
Ethane	13.081	3.478	17.695
Propane	6.939	1.901	13.765
Isobutane	0.879	0.286	2.298
n-Butane	2.071	0.649	5.415
2,2 Dimethylpropane	0.016	0.006	0.052
Isopentane	0.431	0.157	1.399
n-Pentane	0.416	0.150	1.350
2,2 Dimethylbutane	0.002	0.001	0.008
Cyclopentane	0.024	0.010	0.076
2,3 Dimethylbutane	0.006	0.002	0.023
2 Methylpentane	0.063	0.026	0.244
3 Methylpentane	0.034	0.014	0.132
n-Hexane	0.068	0.028	0.264
Methylcyclopentane	0.038	0.013	0.144
Benzene	0.043	0.012	0.151
Cyclohexane	0.059	0.020	0.223
2-Methylhexane	0.008	0.004	0.036
3-Methylhexane	0.009	0.004	0.041
2,2,4 Trimethylpentane	0.000	0.000	0.000
Other C7's	0.025	0.011	0.112
n-Heptane	0.015	0.007	0.068
Methylcyclohexane	0.035	0.014	0.155
Toluene	0.022	0.007	0.091
Other C8's	0.023	0.011	0.114
n-Octane	0.003	0.002	0.015
Ethylbenzene	0.002	0.001	0.010
M & P Xylenes	0.003	0.001	0.014
O-Xylene	0.001	0.000	0.005
Other C9's	0.006	0.003	0.034
n-Nonane	0.002	0.001	0.012
Other C10's	0.004	0.002	0.025
n-Decane	0.000	0.000	0.000
Undecanes (11)	0.000	0.000	0.000
Totals	100.000	6.821	100.000

## Computed Real Characteristics of Total Sample

Specific Gravity	0.771	(Air=1)
Compressibility (Z)	0.9960	
Molecular Weight	22.23	
Gross Heating Value		
Dry Basis	1303	BTU/CF
Saturated Basis	1281	BTU/CF

## FESCO, Ltd. 1100 Fesco Ave. - Alice, Texas 78332

Sample: Cuervo Federal 20H

First Stage Separator Gas Sampled @ 90 psig & 70 °F

Date Sampled: 01/15/13

#### Job Number: 31318.001

#### **GLYCALC FORMAT**

COMPONENT	MOL%	GPM	Wt %
Carbon Dioxide	0.273		0.541
Hydrogen Sulfide	< 0.001	Oppm	< 0.001
Nitrogen	1.991	,	2.509
Methane	73.408		52.979
Ethane	13.081	3.478	17.695
Propane	6.939	1.901	13.765
Isobutane	0.879	0.286	2.298
n-Butane	2.087	0.655	5.467
Isopentane	0.431	0.157	1.399
n-Pentane	0.416	0.150	1.350
Cyclopentane	0.024	0.010	0.076
n-Hexane	0.068	0.028	0.264
Cyclohexane	0.059	0.020	0.223
Other C6's	0.105	0.043	0.407
Heptanes	0.095	0.038	0.401
Methylcyclohexane	0.035	0.014	0.155
2,2,4 Trimethylpentane	0.000	0.000	0.000
Benzene	0.043	0.012	0.151
Toluene	0.022	0.007	0.091
Ethylbenzene	0.002	0.001	0.010
Xylenes	0.004	0.002	0.019
Octanes Plus	0.038	0.019	0.200
Totals	100.000	6.821	100.000

### Real Characteristics Of Octanes Plus:

Specific Gravity	4.065	(Air=1)
Molecular Weight	117.28	
Gross Heating Value	5975	BTU/CF

## Real Characteristics Of Total Sample:

Specific Gravity	0.771	(Air=1)
Compressibility (Z)	0.9960	
Molecular Weight	22.23	
Gross Heating Value		
Dry Basis	1303	BTU/CF
Saturated Basis	1281	BTU/CF