



# Laboratory Services, Inc.

2609 West Marland  
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Lemmons Gas Measurement Inc.  
Attention: R.W. Lemmons  
P.O. Box 5798  
Hobbs, New Mexico 88241

SAMPLE: Sta. #CES137  
IDENTIFICATION: LA Federal #1A  
COMPANY: Cimarex  
LEASE:  
PLANT:

SAMPLE DATA: DATE SAMPLED: 9/20/04  
ANALYSIS DATE: 9/22/04  
PRESSURE - PSIA 426.4  
SAMPLE TEMP. °F 84.5  
ATMOS. TEMP. °F  
REMARKS: H2S= 0

GAS (XX) LIQUID ( )  
SAMPLED BY: Richard Lemmons  
ANALYSIS BY: Vickie Biggs

## COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)	0.000	
Nitrogen (N2)	1.358	
Carbon Dioxide (CO2)	0.295	
Methane (C1)	76.163	
Ethane (C2)	12.494	3.333
Propane (C3)	5.919	1.627
I-Butane (IC4)	0.827	0.270
N-Butane (NC4)	1.472	0.463
I-Pentane (IC5)	0.390	0.142
N-Pentane (NC5)	0.322	0.116
Hexane Plus (C6+)	0.760	0.330
	100.000	6.281

BTU/CU.FT. - DRY 1279  
AT 14.650 DRY 1275  
AT 14.650 WET 1253  
AT 14.73 DRY 1282  
AT 14.73 WET 1260

MOLECULAR WT. 21.6468

SPECIFIC GRAVITY -  
CALCULATED 0.746  
MEASURED

**HALLIBURTON****BOREHOLE COMPENSATED****SONIC LOG**

COMPANY CIMAREX ENERGY COMPANY	WELL LA FEDERAL No. 1 (RE-ENTRY)	FIELD WILDCAT	COUNTY EDDY	STATE NM	COMPANY <u>CIMAREX ENERGY COMPANY</u>	
					WELL <u>LA FEDERAL No. 1 (RE-ENTRY)</u>	
					FIELD <u>WILDCAT</u>	
					COUNTY <u>EDDY</u> STATE <u>NM</u>	
					API No. <u>30-015-22654</u>	Other Services EMI <b>RECEIVED</b>  SEP 29 2004 <b>OGG-ARTESIA</b>
					Location <u>1980' FSL AND 660' FEL</u>	
Sect <u>11</u> Twp <u>22S</u> Rge <u>22E</u>						
Permanent Datum <u>GROUND LEVEL</u> Elev <u>4183'</u>					Elev. : K.B. <u>4197'</u>	
Log measured from <u>K.B.</u> <u>14</u> ft. above perm. datum					D.F. <u>4196'</u>	
Drilling measured from <u>KELLY BUSHING</u>					G.L. <u>4183'</u>	
Date	11-AUG-2004					
Run No.	ONE					
Depth - Driller	7487'					
Depth - Logger	7396'					
Bottom - Logged Interval	7359'					
Top - Logged Interval	2050'					
Casing - Driller	8.625 @ 2050'	@	@	@		
Casing - Logger	2050'					
Bit Size	7.875"					
Type Fluid in Hole	BRINE					
Dens.   Visc.	9.4   N/A					
Ph   Fluid Loss	N/A   N/A					
Source of Sample	MUD TANK					
Rm @ Meas. Temp.	0.055 @ 79 F	@	@	@		
Rmf @ Meas. Temp.	0.044 @ 79 F	@	@	@		
Rmc @ Meas. Temp.	0.069 @ 79 F	@	@	@		
Source Rmf   Rmc	MEAS.   MEAS.					
Rm @ BHT	0.034 @ 130 F	@	@	@		
Time Since Circ.	0730 8-11					
Time on Bottom	1530 8-11					
Max. Rec. Temp.	130 F @ TD	@	@	@		
Equip.   Location	388   HOBBS					
Recorded By	K. ANUSKEWICZ					
Witnessed By	MR. READ					

# HALLIBURTON

## GAMMA RAY / CCL CEMENT BOND / MSG LOG

CIMAREX ENERGY COMPANY

LA FEDERAL #1 (RE-ENTRY)

WILDCAT

EDDY

State NM

Company

Well

Field

County

Company **CIMAREX ENERGY COMPANY**

Well **LA FEDERAL #1 (RE-ENTRY)**

Field **WILDCAT**

County **EDDY**

State **NM**

API No.: 30-015-22654

Serv #: 3241167

Location: 1980' FSL & 660' FEL

Other Services

**RECEIVED**

**SEP 29 2004**

**ROO-ARTESIA**

Sec: 11 Twp: 22S Rge: 22E

Permanent Datum **GROUND LEVEL** Elevation **4183'**  
Log Measured From **KB** 14 Ft. above perm. datum  
Drilling Measured From **KB**

Elevation  
K.B. 4197'  
D.F. 4196'  
G.L. 4183'

Date @ Time Logged	18-AUGUST-2004	Type Fluid in Hole	KCL WATER
Run No.	ONE	Density of Fluid	NA
Depth - Driller	7320'	Fluid Level	FULL
Depth - Logger	7316'	Cement Top Est. Logged	1974'
Bottom - Logged Interval	7306'	Equipment / Location	10549600 / HOBBS, NM
Top - Log Interval	1850'	Recorded by	SHANE NORTON
Max. Recorded Temp.	NA	Witnessed by	ROY SHIRLEY

CEMENTING DATA	Surface	Protection	Production	Liner
	String	String	String	
Date / Time Cemented				
Primary / Squeeze				
Expected				
Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				5.5"	17#	SURFACE	7320'

<<< Fold Here >>>