

**Gas Analytical Labs**

Bossier City, Louisiana  
 1408 Alpine Boulevard  
 Bossier City, LA 71111

Report Date: Jul 26, 2017 9:21a

Client:	COMSTOCK	Date Sampled:	Jul 21, 2017
Client Code:	1122	Analysis Date:	Jul 25, 2017 12:00a
Site:	DERRICK 21 HZ1	Collected By:	LM
Field:	383 - LOGANSFORT	Date Effective:	Aug 1, 2017 12:00a
Meter:	COG1087	Source Pressure (PSI):	994.0
Source Laboratory	Bossier City, LA	Source Temp (°F):	74
<b>Lab File No:</b>	<b>516699314</b>	Field H2O (lb/MMSCFD):	0.0000
Cylinder No:	5043		
Analysis Status:	good		
Sample Type:	Spot		
Measurement Analyst:	<i>Deborah G. Murphy</i>		

Component	Mol %	Liquid Recovery GPM
H2S (H2S)		
Helium (He)		
Nitrogen (N2)	0.4087	0.0000
Oxygen (O2)		
CO2 (CO2)	2.1367	0.0000
Methane (C1)	96.8691	0.0000
Ethane (C2)	0.5765	0.1541
Propane (C3)	0.0005	0.0001
I-Butane (IC4)	0.0043	0.0014
N-Butane (NC4)	0.0042	0.0013
I-Pentane (IC5)	0.0000	0.0000
N-Pentane (NC5)	0.0000	0.0000
Hexanes Plus (C6+)	0.0000	0.0000
<b>TOTAL</b>	<b>100.0000</b>	<b>0.1569</b>

Analytical Results at Base Conditions (Real)	
BTU/SCF (Dry):	990.9017 BTU/ft <sup>3</sup>
BTU/SCF (Saturated):	973.9409 BTU/ft <sup>3</sup>
PSIA:	14.696 PSI
Temperature (°F):	60.0 °F
Z Factor (Dry):	0.99795
Z Factor (Saturated):	0.99761

Analytical Results at Contract Conditions (Real)	
BTU/SCF (Dry):	1,013.1317 BTU/ft <sup>3</sup>
BTU/SCF (Saturated):	996.1773 BTU/ft <sup>3</sup>
PSIA:	15.025 PSI
Temperature (°F):	60.0 °F
Z Factor (Dry):	0.99790
Z Factor (Saturated):	0.99762

Calculated Specific Gravities		
Ideal Gravity:	0.5791	Real Gravity: 0.5801
Molecular Wt:	16.7736 lb/lbmol	

Methods, standards, and uncertainties based on  
 GPA 2261-13.  
 Analytical Calculations performed in accordance with  
 GPA 2172-09.

\* CUST. NAME: Comstock Sta. #: COG 1087

FIELD NAME: Logansport

\* STATION NAME: Derrick 21421

\* COUNTY/PARISH: Desoto STATE: \_\_\_\_\_

\* BOTTLE #: 5043 BY LM

\* SAMPLE TYPE:  SPOT  COMPOSITE  GAS  LIQUID

\* TEMP: 74 \* SAMPLE PSIG: 994 970

H<sub>2</sub>S: \_\_\_\_\_ H<sub>2</sub>O: \_\_\_\_\_ CO<sub>2</sub>: \_\_\_\_\_

\* SAMPLE DATE: 7-21 EFFECTIVE DATE: \_\_\_\_\_

COMPOSITE DATE ON: \_\_\_\_\_ COMPOSITE DATE OFF: \_\_\_\_\_

\* TYPE OF ANALYSIS:  STD.  EXTENDED  DISTILLATION  API GRAVITY

OTHER 1122383 COG 1087

New  
COMOI

5043



www.gasana.com  
\* Required Information

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Date: 07/25/2017

SHV	Mole %	GPA repea	run #1	diff 1&2	repeat	reproduce repro diff	GPA Reproducibility	SHV	Mole%	run#2	Diff	reproduce
C1	88.698	0.04	88.7498	-0.029	pass	-0.052	0.13	C1	88.698	88.7787	-0.081	pass
N2	1.006	0.04	0.9779	0.009	pass	0.028	0.16	N2	1.006	0.9692	0.037	pass
C2	3.002	0.02	2.9937	0.003	pass	0.008	0.05	C2	3.002	2.9908	0.011	pass
CO2	1	0.01	0.9965	0.001	pass	0.003	0.12	CO2	1	0.9951	0.005	pass
C3	1.499	0.01	1.497	0.001	pass	0.002	0.03	C3	1.499	1.4957	0.003	pass
IC4	1.499	0.01	1.4905	0	pass	0.009	0.02	IC4	1.499	1.4872	0.01	pass
NC4	1.498	0.01	1.4888	0	pass	0.009	0.04	NC4	1.498	1.486	0.012	pass
IC5	0.7	0.01	0.6969	0	pass	0.003	0.02	IC5	0.7	0.6952	0.005	pass
NC5	0.699	0.01	0.6925	0	pass	0.0065	0.02	NC5	0.699	0.693	0.01	pass
C6+	0.399	0.01	0.4164	0.007	pass	-0.02	0.03	C6+	0.399	0.4091	-0.01	pass

comp	unnorm	norm	Run#1	comp	unorm.	norm.	Run#2
C1	88.7496	88.7498	88.7787	C1	88.7787	88.7787	88.7787
N2	0.9779	0.9779	0.9692	N2	0.9692	0.9692	0.9692
C2	2.9937	2.9937	2.9908	C2	2.9908	2.9908	2.9908
CO2	0.9965	0.9965	0.9951	CO2	0.9951	0.9951	0.9951
C3	1.497	1.497	1.4957	C3	1.4957	1.4957	1.4957
IC4	1.4905	1.4905	1.4872	IC4	1.4872	1.4872	1.4872
NC4	1.4888	1.4888	1.486	NC4	1.486	1.486	1.486
IC5	0.6969	0.6969	0.6952	IC5	0.6952	0.6952	0.6952
NC5	0.6925	0.6925	0.693	NC5	0.693	0.693	0.693
C6+	0.4164	0.4164	0.4091	C6+	0.4091	0.4091	0.4091
	99.9998	100	100		100	100	100