

Liquefied Petroleum Gas (LPG) Analysis [1,3,4,5,6]

ELAP Cert. 1396-A

Rev. 3/13/13

Customer: EXAMPLE
 Address: EXAMPLE
 Attention: EXAMPLE
 Sample Description: EXAMPLE

**GHG Compliant
 Rule (40 CFR Part 98)**

Log #: EXAMPLE
 Date in: EXAMPLE
 Date out: EXAMPLE
 Date reported: EXAMPLE

Constituent	Formula	Mole %	Wt %	Lv %
Nitrogen (Air)	O ₂ /N ₂ /Ar	0.000	0.000	0.000
Methane	CH ₄	0.092	0.026	0.049
Carbon Dioxide	CO ₂	0.016	0.012	0.008
Ethane	C ₂ H ₆	0.068	0.035	0.058
Ethene (Ethylene)	H ₂ C=CH ₂	0.000	0.000	0.000
Propane	C ₃ H ₈	1.372	1.043	1.190
Propene (Propylene)	C ₃ H ₆	0.000	0.000	0.000
<i>iso</i> -Butane	<i>i</i> -C ₄ H ₁₀	22.738	22.796	23.422
<i>n</i> -Butane	<i>n</i> -C ₄ H ₁₀	75.096	75.290	74.553
1-Butene	1-C ₄ H ₈	0.000	0.000	0.000
<i>iso</i> -Butene	<i>iso</i> -C ₄ H ₈	0.000	0.000	0.000
<i>trans</i> -2-Butene	<i>t</i> -C ₄ H ₈	0.000	0.000	0.000
<i>cis</i> -2-Butene	<i>c</i> -C ₄ H ₈	0.000	0.000	0.000
1,3-Butadiene	C=C-C=C	0.000	0.000	0.000
2,2-Dimethyl Propane	C-5	0.040	0.050	0.048
<i>iso</i> -Pentane	<i>i</i> -C-5	0.282	0.350	0.324
<i>n</i> -Pentane	<i>n</i> -C-5	0.178	0.221	0.203
Hexanes and heavier	C-6 (+)	0.119	0.177	0.145

(Neo Pentane)

Totals 100.000 100.000 100.000

(Gasoline Fraction) (Pentanes and heavier) C-5 (+) 0.618 0.798 0.720

Physical Data [4,5]

	Av. Molecular Wt.	57.97		Liq. Vol.	20.74	(Gal/100#)
[6]	Relative Density	0.5783	D 60/60	API Gravity	113.2	
[2]	Liquid Den. Lb/Gal	4.8210		Btu/Cu.Ft	3251.97	(Gas)
[6]	Relative Density-Vapor	2.0019	(Air = 1)	Btu/Gal.	102614	
[2]	Cu.Ft.Vapor/Gal	31.557		Btu/Lb.	21284.4	
[4, 7]	Vapor Pressure (psi)	45.0	V.P. At 100F			

Notes:

- Hexane(+) physical data calculated according to GPA specifications.
- All data tabulated at 14.696 psig - 60/60F unless otherwise specified.

QC: _____ Date: _____

References:

1. ASTM D 2163-96
2. ASTM D 2421-02
3. ASTM D 2597-99
4. ASTM D 2598-02
5. GPA 2177-00
6. GPA 2145-09

Date: _____

Jeff R. Scheidemantel-Laboratory Director Midway Laboratory, Inc.