Analysis Certificate

Analysis Requested: **GPA Standard 2261-13**

API: 30-039-24181

Client:	McElvain	Project #:	06039-0058
Site Name:	Ora #3 (TBG)	Laboratory #:	P605096-04
Meter ID:	Ora #3 (TBG)	Date Reported:	6/8/2016
Sampled by:	Glenn Hise	Date Sampled:	5/26/2016
Analyzed by:	Alanna Yazzie	Date Received:	5/27/2016
Sample Pressure:	160 psi	Date Analyzed:	6/1/2016
Sample Temperature:	60 F	Analysis Time:	Standard

Components	Mol %	Wt %	GPM Total	(gal/ideal MCF)
Nitrogen	0.863	1.109		
Carbon Dioxide	0.824	1.664		
Methane	74.82	55.069		
Ethane	12.712	17.536	GPM C2+	6.6761
Propane	7.429	15.029	GPM C3+	3.2487
Iso-Butane	0.859	2.291		
N-Butane	1.754	4.677		
Iso-Pentane	0.32	1.059	GPM iC5+	0.3048
N-Pentane	0.233	0.771		
Hexane Plus	0.186	0.795		
Totals	100.000	100.000		

GPA Standard 2172-09 Calculations

Compressibility Factor:	0.996		Base Pressure:	14.73 psi
Ideal Gas Relative Density:	0.755		Base Temperature:	60 F
Dry Molecular Weight:	21.797	g/mol		
Real Gas Dry BTU per ft3:	1292.38	BTU/ft3		

ND = Parameter below the instrument/method detection limit.

N/R = Parameter not recorded

Reviewer

6/8/2016

Date

Comments: P605096-04

Note: The above analyses are performed in compliance with GPA Standard 2261-13 quality assurance procedures.

References: GPA Standard 2261-13 and GPA Standard 2172-09

Analysis Certificate

Analysis Requested: **GPA Standard 2261-13**

API: 30-039-24181

Client:	McElvain	Project #:	06039-0058
Site Name:	Ora #3 (CSG)	Laboratory #:	P605096-05
Meter ID:	Ora #3 (CSG)	Date Reported:	6/8/2016
Sampled by:	Glenn Hise	Date Sampled:	5/26/2016
Analyzed by:	Alanna Yazzie	Date Received:	5/27/2016
Sample Pressure:	160 psi	Date Analyzed:	6/1/2016
Sample Temperature:	60 F	Analysis Time:	Standard

Components	Mol %	Wt %	GPM Total	(gal/ideal MCF)
Nitrogen	0.745	0.942		
Carbon Dioxide	0.58	1.152		
Methane	72.918	52.794		
Ethane	14.891	20.208	GPM C2+	7.3268
Propane	6.91	13.751	GPM C3+	3.3119
Iso-Butane	0.955	2.505		
N-Butane	1.986	5.209		
Iso-Pentane	0.502	1.635	GPM iC5+	0.4057
N-Pentane	0.372	1.211		
Hexane Plus	0.141	0.593		
Totals	100.000	100.000		

GPA Standard 2172-09 Calculations

Compressibility Factor:	0.996		Base Pressure:	14.73 psi
Ideal Gas Relative Density:	0.768		Base Temperature:	60 F
Dry Molecular Weight:	22.158	g/mol		
Real Gas Dry BTU per ft3:	1320.315	BTU/ft3		

ND = Parameter below the instrument/method detection limit.

N/R = Parameter not recorded

Reviewer

6/8/2016

Date

Comments: P605096-05

Note: The above analyses are performed in compliance with GPA Standard 2261-13 quality assurance procedures.

References: GPA Standard 2261-13 and GPA Standard 2172-09

Analysis Certificate

Analysis Requested: **GPA Standard 2261-13**

API: 30-039-24181

Client:	McElvain	Project #:	06039-0058
Site Name:	Ora #3 (BHD)	Laboratory #:	P605096-03
Meter ID:	Ora #3 (BHD)	Date Reported:	6/8/2016
Sampled by:	Glenn Hise	Date Sampled:	5/26/2016
Analyzed by:	Alanna Yazzie	Date Received:	5/27/2016
Sample Pressure:	10 psi	Date Analyzed:	6/1/2016
Sample Temperature:	60 F	Analysis Time:	Standard

Components	Mol %	Wt %	GPM Total	(gal/ideal MCF)
Nitrogen	42.122	45.579		
Carbon Dioxide	0.175	0.297		
Methane	40.274	24.957		
Ethane	8.642	10.037	GPM C2+	5.2182
Propane	4.561	7.769	GPM C3+	2.8881
Iso-Butane	0.669	1.502		
N-Butane	1.47	3.3		
Iso-Pentane	0.567	1.58	GPM iC5+	0.905
N-Pentane	0.606	1.689		
Hexane Plus	0.914	3.29		
Totals	100.000	100.000		

GPA Standard 2172-09 Calculations

Compressibility Factor:	0.998		Base Pressure:	14.73 psi
Ideal Gas Relative Density:	0.896		Base Temperature:	60 F
Dry Molecular Weight:	25.889	g/mol		
Real Gas Dry BTU per ft3:	841.997	BTU/ft3		

ND = Parameter below the instrument/method detection limit.

N/R = Parameter not recorded

Reviewer

6/8/2016

Date

Comments: P605096-03

Note: The above analyses are performed in compliance with GPA Standard 2261-13 quality assurance procedures.

References: GPA Standard 2261-13 and GPA Standard 2172-09