OCD Received
6/25/2020

Well Name: NANCY LARTMAN #1; BHD
API #: 30-045-26741
Source: BRADENHEAD
Sample Type: GAS

Analysis No: MG200012
Cust No: 51105-10070

Well/Lease Information

Customer Name:	MANANA GAS, INC.	Source:	BRADENHEAD
Well Name:	NANCY LARTMAN #1; BHD	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	OTERO CHACRA	Flow Rate:	MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
		Sample Date:	05/28/2020
		Sample Time:	10.00 AM
		Sampled By:	BRANDYN A.
Heat Trace:		Sampled by (CO):	WALSH
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4609	0.4456	0.0510	0.00	0.0045
CO2	0.0633	0.0612	0.0110	0.00	0.0010
Methane	86.9039	84.0116	14.7730	877.73	0.4814
Ethane	7.0523	6.8176	1.8910	124.80	0.0732
Propane	3.2148	3.1078	0.8880	80.89	0.0489
Iso-Butane	0.6226	0.6019	0.2040	20.25	0.0125
N-Butane	0.8408	0.8128	0.2660	27.43	0.0169
I-Pentane	0.2800	0.2707	0.1030	11.20	0.0070
N-Pentane	0.1920	0.1856	0.0700	7.70	0.0048
Hexane Plus	0.3694	0.3571	0.1650	19.47	0.0122
Total	100.0000	96.6719	18.4220	1169.47	0.6623

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.003	CYLINDER #:	6142
BTU/CU.FT IDEAL:	1172.2	CYLINDER PRESSURE:	12 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1175.7	ANALYIS DATE:	06/04/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1155.2	ANALYIS TIME:	04:07:12 PM
DRY BTU @ 15.025:	1199.2	ANALYSIS RUN BY:	PATRICIA KING
REAL SPECIFIC GRAVITY:	0.664		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA-2261
GC: Danalyzer Model 500 **Last Cal/Verify: 06/09/2020**
GC Method: C6+ Gas

MANANA GAS, INC.

WELL ANALYSIS COMPARISON

Lease:	NANCY LARTMAN #1; BHD	BRADENHEAD	06/09/2020
Stn. No.:		OTERO CHACRA	51105-10070
Mtr. No.:			

Smpl Date:	05/28/2020
Test Date:	06/04/2020
Run No:	MG200012
Nitrogen:	0.4609
CO2:	0.0633
Methane:	86.9039
Ethane:	7.0523
Propane:	3.2148
I-Butane:	0.6226
N-Butane:	0.8408
I-Pentane:	0.2800
N-Pentane:	0.1920
Hexane+:	0.3694
BTU:	1175.7
GPM:	18.4220
SPG:	0.6640

Well Name: NANCY LARTMAN #1; CSG
API #: 30-045-26741
Source: CASING
Sample Type: GAS

Analysis No: MG200013
Cust No: 51105-10075

Well/Lease Information

Customer Name: MANANA GAS, INC.
Well Name: NANCY LARTMAN #1; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: OTERO CHACRA
Cust. Stn. No.:

Heat Trace:
Remarks:

Source: CASING
Well Flowing: N
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/28/2020
Sample Time: 10.10 AM
Sampled By: BRANDYN A.
Sampled by (CO): WALSH

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5477	0.5348	0.0600	0.00	0.0053
CO2	0.1689	0.1649	0.0290	0.00	0.0026
Methane	86.1437	84.1130	14.6440	870.05	0.4771
Ethane	7.1112	6.9436	1.9070	125.85	0.0738
Propane	3.7197	3.6320	1.0280	93.59	0.0566
Iso-Butane	0.5133	0.5012	0.1680	16.69	0.0103
N-Butane	0.9234	0.9016	0.2920	30.12	0.0185
I-Pentane	0.2653	0.2590	0.0970	10.61	0.0066
N-Pentane	0.2004	0.1957	0.0730	8.03	0.0050
Hexane Plus	0.4064	0.3968	0.1820	21.42	0.0135
Total	100.0000	97.6426	18.4800	1176.38	0.6694

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR	(1/Z):	1.003	CYLINDER #:	4199
BTU/CU.FT IDEAL:		1179.1	CYLINDER PRESSURE:	28 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):		1182.6	ANALYIS DATE:	06/04/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):		1162.0	ANALYIS TIME:	04:22:30 PM
DRY BTU @ 15.025:		1206.3	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:		0.6711		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA-2261
GC: Danalyzer Model 500 **Last Cal/Verify: 06/09/2020**
GC Method: C6+ Gas

MANANA GAS, INC.

WELL ANALYSIS COMPARISON

Lease:	NANCY LARTMAN #1; CSG	CASING	06/09/2020
Stn. No.:		OTERO CHACRA	51105-10075
Mtr. No.:			

Smpl Date:	05/28/2020
Test Date:	06/04/2020
Run No:	MG200013
Nitrogen:	0.5477
CO2:	0.1689
Methane:	86.1437
Ethane:	7.1112
Propane:	3.7197
I-Butane:	0.5133
N-Butane:	0.9234
I-Pentane:	0.2653
N-Pentane:	0.2004
Hexane+:	0.4064
BTU:	1182.6
GPM:	18.4800
SPG:	0.6711

Well Name: NANCY LARTMAN #1; TBG
API #: 30-045-26741
Source: TUBING
Sample Type: GAS

Analysis No: MG200014
Cust No: 51105-10080

Well/Lease Information

Customer Name: MANANA GAS, INC.
Well Name: NANCY LARTMAN #1; TBG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: OTERO CHACRA
Cust. Stn. No.:

Heat Trace:
Remarks:

Source: TUBING
Well Flowing:
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 05/28/2020
Sample Time: 10.15 AM
Sampled By: BRANDYN A.
Sampled by (CO): WALSH

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5456	0.5325	0.0600	0.00	0.0053
CO2	0.1647	0.1607	0.0280	0.00	0.0025
Methane	85.0945	83.0465	14.4690	859.45	0.4713
Ethane	7.1812	7.0084	1.9260	127.09	0.0746
Propane	3.9604	3.8651	1.0940	99.65	0.0603
Iso-Butane	0.5882	0.5740	0.1930	19.13	0.0118
N-Butane	1.1085	1.0818	0.3500	36.16	0.0222
I-Pentane	0.3613	0.3526	0.1330	14.46	0.0090
N-Pentane	0.2866	0.2797	0.1040	11.49	0.0071
Hexane Plus	0.7090	0.6919	0.3170	37.37	0.0235
Total	100.0000	97.5932	18.6740	1204.79	0.6876

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0032
BTU/CU.FT IDEAL:	1207.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1211.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1190.4
DRY BTU @ 15.025:	1235.8
REAL SPECIFIC GRAVITY:	0.6896

CYLINDER #:	4232
CYLINDER PRESSURE:	93 PSIG
ANALYIS DATE:	06/04/2020
ANALYIS TIME:	04:33:01 PM
ANALYSIS RUN BY:	RICHARD WILSON

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA-2261
GC: Danalyzer Model 500 **Last Cal/Verify: 06/09/2020**
GC Method: C6+ Gas

MANANA GAS, INC.

WELL ANALYSIS COMPARISON

Lease:	NANCY LARTMAN #1; TBG	TUBING	06/09/2020
Stn. No.:		OTERO CHACRA	51105-10080
Mtr. No.:			

Smpl Date:	05/28/2020
Test Date:	06/04/2020
Run No:	MG200014
Nitrogen:	0.5456
CO2:	0.1647
Methane:	85.0945
Ethane:	7.1812
Propane:	3.9604
I-Butane:	0.5882
N-Butane:	1.1085
I-Pentane:	0.3613
N-Pentane:	0.2866
Hexane+:	0.7090
BTU:	1211.5
GPM:	18.6740
SPG:	0.6896