Well Name: SCHALK 54 #1; BHD
API #:
Source: BRADENHEAD
Sample Type: GAS

Analysis No: AR190001
Cust No: 99035-10050

30-039-20579

Well/Lease Information

Customer Name:	ARAPAHOE DRILLING, CO.	Source:	BRADENHEAD
Well Name:	SCHALK 54 #1; BHD	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	34.5 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
		Sample Date:	05/22/2019
		Sample Time:	10.02 AM
		Sampled By:	SCOTT RODGERS
Heat Trace:	N	Sampled by (CO):	WALSH
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3498	0.3417	0.0390	0.00	0.0034
CO2	0.0247	0.0241	0.0040	0.00	0.0004
Methane	83.0296	81.1138	14.1170	838.60	0.4599
Ethane	10.8424	10.5922	2.9080	191.88	0.1126
Propane	3.6823	3.5973	1.0170	92.65	0.0561
Iso-Butane	0.5645	0.5515	0.1850	18.36	0.0113
N-Butane	0.7096	0.6932	0.2240	23.15	0.0142
I-Pentane	0.2503	0.2445	0.0920	10.01	0.0062
N-Pentane	0.1513	0.1478	0.0550	6.07	0.0038
Hexane Plus	0.3955	0.3864	0.1770	20.85	0.0131
Total	100.0000	97.6925	18.8180	1201.56	0.6810

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

COMPRESSIBLITY FACTOR (1/Z):	1.0032	CYLINDER #:	6069
BTU/CU.FT IDEAL:	1204.3	CYLINDER PRESSURE:	41 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1208.2	ANALYIS DATE:	05/29/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1187.2	ANALYIS TIME:	04:33:06 AM
DRY BTU @ 15.025:	1232.4	ANALYIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6829		

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: 12/30/2019**
GC Method: C6+ Gas

ARAPAHOE DRILLING, CO.

WELL ANALYSIS COMPARISON

Lease: SCHALK 54 #1; BHD | BRADENHEAD | 12/30/2019

Stn. No.: | | 99035-10050

Mtr. No.:

Smpl Date:	05/22/2019	07/22/2016
Test Date:	05/29/2019	07/22/2016
Run No:	AR190001	AR160013
Nitrogen:	0.3498	0.1910
CO2:	0.0247	0.0100
Methane:	83.0296	88.5600
Ethane:	10.8424	7.2220
Propane:	3.6823	2.5920
I-Butane:	0.5645	0.3990
N-Butane:	0.7096	0.5010
I-Pentane:	0.2503	0.1570
N-Pentane:	0.1513	0.0980
Hexane+:	0.3955	0.2700
BTU:	1208.2	1147.1
GPM:	18.8180	18.2310
SPG:	0.6829	0.6419

Well Name: SCHALK 54 #1; CSG
API #:
Source: CASING
Sample Type: GAS

Analysis No: AR190002
Cust No: 99035-10055

Well/Lease Information

Customer Name: ARAPAHOE DRILLING, CO.
Well Name: SCHALK 54 #1; CSG
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.:

Heat Trace: N
Remarks:

Source: CASING
Well Flowing: N
Pressure: 225 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 05/22/2019
Sample Time: 10.10 AM
Sampled By: SCOTT RODGERS
Sampled by (CO): WALSH

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0994	0.0990	0.0110	0.00	0.0010
CO2	3.0614	3.0481	0.5230	0.00	0.0465
Methane	96.6765	96.2563	16.4200	976.43	0.5355
Ethane	0.1508	0.1501	0.0400	2.67	0.0016
Propane	0.0059	0.0059	0.0020	0.15	0.0001
Iso-Butane	0.0012	0.0012	0.0000	0.04	0.0000
N-Butane	0.0010	0.0010	0.0000	0.03	0.0000
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0038	0.0038	0.0020	0.20	0.0001
Total	100.0000	99.5654	16.9980	979.52	0.5848

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

COMPRESSIBLITY FACTOR	(1/Z):	1.0021	CYLINDER #:	6126
BTU/CU.FT IDEAL:		981.8	CYLINDER PRESSURE:	236 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):		983.9	ANALYIS DATE:	05/31/2019
BTU/CU.FT (WET) CORRECTED FOR (1/Z):		966.8	ANALYIS TIME:	08:16:56 AM
DRY BTU @ 15.025:		1003.6	ANALYSIS RUN BY:	PATRICIA KING
REAL SPECIFIC GRAVITY:		0.5858		

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: 12/30/2019**
GC Method: C6+ Gas

ARAPAHOE DRILLING, CO.

WELL ANALYSIS COMPARISON

Lease: SCHALK 54 #1; CSG | CASING | 12/30/2019

Stn. No.: | 99035-10055

Mtr. No.:

Smpl Date:	05/22/2019	07/22/2016
Test Date:	05/31/2019	07/22/2016
Run No:	AR190002	AR160014
Nitrogen:	0.0994	0.0930
CO2:	3.0614	3.1500
Methane:	96.6765	96.5640
Ethane:	0.1508	0.1620
Propane:	0.0059	0.0050
I-Butane:	0.0012	0.0040
N-Butane:	0.0010	0.0140
I-Pentane:	0.0000	0.0040
N-Pentane:	0.0000	0.0010
Hexane+:	0.0038	0.0030
BTU:	983.9	983.6
GPM:	16.9980	17.0010
SPG:	0.5858	0.5870