



Well Name: SCHALK 54 #1; CSG
API #: API # 30-039-20579
Source: CASING
Sample Type: GAS
Analysis No: AR200001
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.: API # 30-039-20579

Source: CASING
Well Flowing: N
Pressure: 284 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 01/06/2020
Sample Time: 9.24 AM
Sampled By: SCOTT RODGERS
Sampled by (CO): WALSH

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0885	0.0894	0.0100	0.00	0.0009
CO2	3.1677	3.1983	0.5420	0.00	0.0481
Methane	96.5784	97.5104	16.4030	975.44	0.5349
Ethane	0.1555	0.1570	0.0420	2.75	0.0016
Propane	0.0056	0.0057	0.0020	0.14	0.0001
Iso-Butane	0.0011	0.0011	0.0000	0.04	0.0000
N-Butane	0.0013	0.0013	0.0000	0.04	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	0.0019	0.0019	0.0010	0.10	0.0001
Total	100.0000	100.9651	17.0000	978.51	0.5857

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 980.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 982.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 965.7
DRY BTU @ 15.025: 1002.5
REAL SPECIFIC GRAVITY: 0.5867

CYLINDER #: 4220
CYLINDER PRESSURE: 297 PSIG
ANALYSIS DATE: 01/07/2020
ANALYSIS TIME: 08:16:11 AM
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

GC Method: C6+ Gas

Last Cal/Verify: 01/08/2020



2030 Afton Place
Farmington, NM 87401
(505) 325-6622
GAS

Analysis No: AR200002
Cust No: 99035-10070

Well/Lease Information

Customer Name: ARAPAHOE DRILLING, CO.
Well Name: SCHALK 54 #1; INT
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 30-039-20579

Source: INTERMEDIATE
Well Flowing: N
Pressure: 284 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 01/06/2020
Sample Time: 9.30 AM
Sampled By: SCOTT RODGERS
Sampled by (CO): WALSH

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2006	0.1999	0.0220	0.00	0.0019
CO2	0.0200	0.0199	0.0030	0.00	0.0003
Methane	82.8118	82.5326	14.0800	836.40	0.4587
Ethane	11.1479	11.1103	2.9900	197.28	0.1157
Propane	3.6827	3.6703	1.0180	92.66	0.0561
Iso-Butane	0.5380	0.5362	0.1770	17.50	0.0108
N-Butane	0.7040	0.7016	0.2230	22.97	0.0141
I-Pentane	0.2587	0.2578	0.0950	10.35	0.0064
N-Pentane	0.1596	0.1591	0.0580	6.40	0.0040
Hexane Plus	0.4767	0.4751	0.2130	25.13	0.0158
Total	100.0000	99.6628	18.8790	1208.68	0.6839

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT IDEAL: 1211.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1215.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1194.3
DRY BTU @ 15.025: 1239.7
REAL SPECIFIC GRAVITY: 0.6858

CYLINDER #: 6111
CYLINDER PRESSURE: 21 PSIG
ANALYSIS DATE: 01/07/2020
ANALYSIS TIME: 08:28:39 AM
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: 01/08/2020

GC Method: C6+ Gas



Well Name: SCHALK 54 #1; TBG
API #: API # 30-039-20579
Source: TUBING
Sample Type: GAS

Analysis No: AR200003
Cust No: 99035-10075

Well/Lease Information

Customer Name: ARAPAHOE DRILLING, CO.
Well Name: SCHALK 54 #1; TBG
County/State: RIO ARRIBA NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 30-039-20579

Source: TUBING
Well Flowing: N
Pressure: 239 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 01/06/2020
Sample Time: 9.20 AM
Sampled By: SCOTT RODGERS
Sampled by (CO): WALSH

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0831	0.0837	0.0090	0.00	0.0008
CO2	3.1750	3.1993	0.5430	0.00	0.0482
Methane	96.5748	97.3137	16.4030	975.41	0.5349
Ethane	0.1563	0.1575	0.0420	2.77	0.0016
Propane	0.0061	0.0061	0.0020	0.15	0.0001
Iso-Butane	0.0011	0.0011	0.0000	0.04	0.0000
N-Butane	0.0014	0.0014	0.0000	0.05	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	0.0022	0.0022	0.0010	0.12	0.0001
Total	100.0000	100.7650	17.0000	978.52	0.5858

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 980.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 982.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 965.8
DRY BTU @ 15.025: 1002.6
REAL SPECIFIC GRAVITY: 0.5868

CYLINDER #: 4173
CYLINDER PRESSURE: 269 PSIG
ANALYSIS DATE: 01/07/2020
ANALYSIS TIME: 08:47:17 AM
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: 01/08/2020

GC Method: C6+ Gas