



30-039-31201

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

Analysis No: ED190800
Cust No: 25250-12405

Well/Lease Information

Customer Name: ENDURING RESOURCES
Well Name: NE CHACO COM 167H; TBG
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Strn. No.: API # 30-039-31201

Source: TUBING
Well Flowing: Y
Pressure: 40 PSIG
Flow Temp: DEG. F
Ambient Temp: 72 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/08/2019
Sample Time: 10.31 AM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: Y
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	3.1769	3.1926	0.3510	0.00	0.0307
CO2	0.6452	0.6484	0.1110	0.00	0.0098
Methane	62.4161	62.7249	10.6360	630.40	0.3457
Ethane	15.1421	15.2171	4.0700	267.97	0.1572
Propane	11.2510	11.3067	3.1160	283.09	0.1713
Iso-Butane	1.4091	1.4161	0.4630	45.82	0.0283
N-Butane	3.3768	3.3935	1.0700	110.16	0.0678
I-Pentane	0.8384	0.8426	0.3080	33.54	0.0209
N-Pentane	0.7441	0.7478	0.2710	29.83	0.0185
Hexane Plus	1.0003	1.0053	0.4480	52.73	0.0331
Total	100.0000	100.4950	20.8440	1453.54	0.8833

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0054
BTU/CU.FT IDEAL: 1456.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1464.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1439.2
DRY BTU @ 15.025: 1494.0
REAL SPECIFIC GRAVITY: 0.8877

CYLINDER #: 1067
CYLINDER PRESSURE: 31 PSIG
ANALYSIS DATE: 08/12/2019
ANALYSIS TIME: 04:08:00 PM
ANALYSIS RUN BY: PATRICIA KING

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: 08/13/2019

NMOC

AUG 14 2019

DISTRICT III

30-039-31201



ENDURING RESOURCES
WELL ANALYSIS COMPARISON

Lease: NE CHACO COM 167H; TBG
Stn. No.: API # 30-039-
Mtr. No.:

TUBING

08/13/2019
25250-12405

Smpl Date: 08/08/2019
Test Date: 08/12/2019
Run No: ED190800
Nitrogen: 3.1769
CO2: 0.6452
Methane: 62.4161
Ethane: 15.1421
Propane: 11.2510
I-Butane: 1.4091
N-Butane: 3.3768
I-Pentane: 0.8384
N-Pentane: 0.7441
Hexane+: 1.0003
BTU: 1464.7
GPM: 20.8440
SPG: 0.8877



30-039-31201

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

Analysis No: ED190798
Cust No: 25250-12395

Well/Lease Information

Customer Name: ENDURING RESOURCES
Well Name: NE CHACO COM 167H; BHD
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 30-039-31201

Source: BRADENHEAD
Well Flowing:
Pressure: 31 PSIG
Flow Temp: DEG. F
Ambient Temp: 72 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/08/2019
Sample Time: 10.15 AM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	74.8647	8.4371	8.2470	0.00	0.7241
CO2	0.0577	0.0065	0.0100	0.00	0.0009
Methane	14.4837	1.6323	2.4580	146.29	0.0802
Ethane	1.5466	0.1743	0.4140	27.37	0.0161
Propane	2.8670	0.3231	0.7910	72.14	0.0437
Iso-Butane	0.6957	0.0784	0.2280	22.62	0.0140
N-Butane	2.1811	0.2458	0.6880	71.15	0.0438
I-Pentane	0.8323	0.0938	0.3050	33.30	0.0207
N-Pentane	0.8891	0.1002	0.3230	35.64	0.0221
Hexane Plus	1.5821	0.1783	0.7060	83.39	0.0524
Total	100.0000	11.2698	14.1700	491.90	1.0179

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0015
BTU/CU.FT IDEAL: 493.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 493.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 485.2
DRY BTU @ 15.025: 503.7
REAL SPECIFIC GRAVITY: 1.019

CYLINDER #: 1062
CYLINDER PRESSURE: 23 PSIG
ANALYSIS DATE: 08/12/2019
ANALYSIS TIME: 04:00:00 PM
ANALYSIS RUN BY: PATRICIA KING

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: 08/13/2019



30-039-31201

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

Analysis No: ED190799
Cust No: 25250-12400

Well/Lease Information

Customer Name: ENDURING RESOURCES
Well Name: NE CHACO COM 167H;CSG
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 30-039-31201

Source: CASING
Well Flowing: Y
Pressure: 275 PSIG
Flow Temp: DEG. F
Ambient Temp: 72 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/08/2019
Sample Time: 10.25 AM
Sampled By: SEAN CASAUS
Sampled by (CO): ABC

Heat Trace: Y
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	3.2628	3.3062	0.3610	0.00	0.0316
CO2	0.6661	0.6750	0.1140	0.00	0.0101
Methane	63.6791	64.5259	10.8460	643.16	0.3527
Ethane	15.4679	15.6736	4.1560	273.74	0.1606
Propane	11.3314	11.4821	3.1360	285.11	0.1725
Iso-Butane	1.3218	1.3394	0.4350	42.98	0.0265
N-Butane	2.9896	3.0294	0.9470	97.53	0.0600
I-Pentane	0.5164	0.5233	0.1900	20.66	0.0129
N-Pentane	0.4323	0.4380	0.1570	17.33	0.0108
Hexane Plus	0.3326	0.3370	0.1490	17.53	0.0110
Total	100.0000	101.3299	20.4910	1398.04	0.8487

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0049
BTU/CU.FT IDEAL: 1401.3
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1408.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1383.5
DRY BTU @ 15.025: 1436.2
REAL SPECIFIC GRAVITY: 0.8524

CYLINDER #: 1064
CYLINDER PRESSURE: 254 PSIG
ANALYSIS DATE: 08/12/2019
ANALYSIS TIME: 04:16:00 PM
ANALYSIS RUN BY: PATRICIA KING

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: 08/13/2019

GC Method: C6+ Gas



30-039-31201

ENDURING RESOURCES
WELL ANALYSIS COMPARISON

Lease: NE CHACO COM 167H;CSG
Stn. No.: API # 30-039-
Mtr. No.:

CASING

08/13/2019
25250-12400

Smpl Date: 08/08/2019
Test Date: 08/12/2019
Run No: ED190799

Nitrogen: 3.2628
CO2: 0.6661
Methane: 63.6791
Ethane: 15.4679
Propane: 11.3314
I-Butane: 1.3218
N-Butane: 2.9896
I-Pentane: 0.5164
N-Pentane: 0.4323
Hexane+: 0.3326

BTU: 1408.0
GPM: 20.4910
SPG: 0.8524