



OCD Received
8/28/2020

Well Name: FEE 8A; BHD
API #: API # 3004524693
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200204
Cust No: 35825-12915

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: FEE 8A; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3004524693
94586

Source: BRADENHEAD
Well Flowing:
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/19/2020
Sample Time: 8.50 AM
Sampled By: TYLER ANDERSON
Sampled by (CO): HILCORP

AREA 3 / RUN 307

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6712	0.6658	0.0740	0.00	0.0065
CO2	0.0035	0.0035	0.0010	0.00	0.0001
Methane	89.5846	88.8691	15.2240	904.80	0.4962
Ethane	5.2191	5.1774	1.3990	92.36	0.0542
Propane	2.6391	2.6180	0.7290	66.40	0.0402
Iso-Butane	0.5930	0.5883	0.1950	19.28	0.0119
N-Butane	0.6070	0.6022	0.1920	19.80	0.0122
I-Pentane	0.2351	0.2332	0.0860	9.41	0.0059
N-Pentane	0.1410	0.1399	0.0510	5.65	0.0035
Hexane Plus	0.3064	0.3040	0.1370	16.15	0.0101
Total	100.0000	99.2014	18.0880	1133.86	0.6407

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1136.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1139.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1119.8
DRY BTU @ 15.025: 1162.4
REAL SPECIFIC GRAVITY: 0.6422

CYLINDER #: 7028
CYLINDER PRESSURE: 74 PSIG
ANALYSIS DATE: 08/21/2020
ANALYSIS TIME: 02:40:04 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: 08/26/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FEE 8A; BHD
Stn. No.: API # 3004524693
Mtr. No.: 94586

BRADENHEAD

08/26/2020
35825-12915

Smpl Date: 08/19/2020
Test Date: 08/21/2020
Run No: HS200204

Nitrogen: 0.6712
CO2: 0.0035
Methane: 89.5846
Ethane: 5.2191
Propane: 2.6391
I-Butane: 0.5930
N-Butane: 0.6070
I-Pentane: 0.2351
N-Pentane: 0.1410
Hexane+: 0.3064

BTU: 1139.6
GPM: 18.0880
SPG: 0.6422



Well Name: FEE 8A; CSG
API #: API # 3004524693
Source: CASING
Sample Type: GAS
Analysis No: HS200205
Cust No: 35825-12920

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: FEE 8A; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.: API # 3004524693
94586

Source: CASING
Well Flowing:
Pressure: 217 PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/19/2020
Sample Time: 9.05 AM
Sampled By: TYLER ANDERSON
Sampled by (CO): HILCORP

AREA 3 / RUN 307

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5205	0.5185	0.0570	0.00	0.0050
CO2	0.0174	0.0173	0.0030	0.00	0.0003
Methane	89.7135	89.3603	15.2480	906.11	0.4969
Ethane	5.2206	5.2001	1.4000	92.39	0.0542
Propane	2.6228	2.6125	0.7240	65.99	0.0399
Iso-Butane	0.5902	0.5879	0.1940	19.19	0.0118
N-Butane	0.6018	0.5994	0.1900	19.63	0.0121
I-Pentane	0.2372	0.2363	0.0870	9.49	0.0059
N-Pentane	0.1456	0.1450	0.0530	5.84	0.0036
Hexane Plus	0.3304	0.3291	0.1480	17.42	0.0109
Total	100.0000	99.6064	18.1040	1136.06	0.6407

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1138.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1141.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1121.9
DRY BTU @ 15.025: 1164.7
REAL SPECIFIC GRAVITY: 0.6422

CYLINDER #: 7000
CYLINDER PRESSURE: 236 PSIG
ANALYSIS DATE: 08/21/2020
ANALYSIS TIME: 02:31:14 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: 08/26/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FEE 8A; CSG
Stn. No.: API # 3004524693
Mtr. No.: 94586

CASING

08/26/2020
35825-12920

Smpl Date: 08/19/2020
Test Date: 08/21/2020
Run No: HS200205

Nitrogen: 0.5205
CO2: 0.0174
Methane: 89.7135
Ethane: 5.2206
Propane: 2.6228
I-Butane: 0.5902
N-Butane: 0.6018
I-Pentane: 0.2372
N-Pentane: 0.1456
Hexane+: 0.3304

BTU: 1141.8
GPM: 18.1040
SPG: 0.6422