



Well Name: FARMINGTON TOWNSITE
 API #: API #3004524851
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS2021098
 Cust No: 35825-13680

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: FARMINGTON TOWNSITE #1E; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: API #3004524851

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 05/27/2021
 Sample Time: 1.20 PM
 Sampled By: JACINTO C.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0206

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5708	0.5644	0.0630	0.00	0.0055
CO2	1.0982	1.0859	0.1880	0.00	0.0167
Methane	79.0849	78.2003	13.4530	798.76	0.4381
Ethane	10.8700	10.7484	2.9170	192.37	0.1129
Propane	4.8291	4.7751	1.3350	121.50	0.0735
Iso-Butane	0.6947	0.6869	0.2280	22.59	0.0139
N-Butane	1.3252	1.3104	0.4190	43.23	0.0266
I-Pentane	0.4343	0.4294	0.1590	17.38	0.0108
N-Pentane	0.3798	0.3756	0.1380	15.23	0.0095
Hexane Plus	0.7130	0.7050	0.3190	37.58	0.0236
Total	100.0000	98.8814	19.2190	1248.64	0.7310

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1251.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1256.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1234.1
 DRY BTU @ 15.025: 1281.2
 REAL SPECIFIC GRAVITY: 0.7334

CYLINDER #: 4247
 CYLINDER PRESSURE: 138 PSIG
 ANALYSIS DATE: 06/07/2021
 ANALYSIS TIME: 11:40:20 AM
 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: 06/09/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FARMINGTON TOWNSITE #1E; BHD BRADENHEAD 06/09/2021
Stn. No.: API #3004524851 35825-13680
Mtr. No.:

Smpl Date: 05/27/2021
Test Date: 06/07/2021
Run No: HS2021098

Nitrogen: 0.5708
CO2: 1.0982
Methane: 79.0849
Ethane: 10.8700
Propane: 4.8291
I-Butane: 0.6947
N-Butane: 1.3252
I-Pentane: 0.4343
N-Pentane: 0.3798
Hexane+: 0.7130

BTU: 1256.0
GPM: 19.2190
SPG: 0.7334



Well Name: FARMINGTON TOWNSITE
 API #: API #3004524851
 Source: CASING
 Sample Type: GAS
 Analysis No: HS2021099
 Cust No: 35825-13685

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: FARMINGTON TOWNSITE #1E; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: API #3004524851

Source: CASING
 Well Flowing: Y
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 05/27/2021
 Sample Time: 12.40 PM
 Sampled By: JACINTO C.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0206

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5713	0.5652	0.0630	0.00	0.0055
CO2	1.1043	1.0926	0.1890	0.00	0.0168
Methane	79.0490	78.2111	13.4470	798.39	0.4379
Ethane	10.8604	10.7453	2.9140	192.20	0.1128
Propane	4.8149	4.7639	1.3310	121.15	0.0733
Iso-Butane	0.6932	0.6859	0.2280	22.54	0.0139
N-Butane	1.3241	1.3101	0.4190	43.20	0.0266
I-Pentane	0.4400	0.4353	0.1610	17.60	0.0110
N-Pentane	0.3880	0.3839	0.1410	15.55	0.0097
Hexane Plus	0.7548	0.7468	0.3380	39.79	0.0250
Total	100.0000	98.9401	19.2310	1250.42	0.7323

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1253.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1258.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1236.1
 DRY BTU @ 15.025: 1283.2
 REAL SPECIFIC GRAVITY: 0.7347

CYLINDER #: 6015
 CYLINDER PRESSURE: 135 PSIG
 ANALYSIS DATE: 06/07/2021
 ANALYSIS TIME: 11:11:08 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: 06/09/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FARMINGTON TOWNSITE #1E; CSG CASING 06/09/2021
Stn. No.: API #3004524851 35825-13685
Mtr. No.:

Smpl Date: 05/27/2021
Test Date: 06/07/2021
Run No: HS2021099

Nitrogen: 0.5713
CO2: 1.1043
Methane: 79.0490
Ethane: 10.8604
Propane: 4.8149
I-Butane: 0.6932
N-Butane: 1.3241
I-Pentane: 0.4400
N-Pentane: 0.3880
Hexane+: 0.7548

BTU: 1258.0
GPM: 19.2310
SPG: 0.7347



Well Name: FARMINGTON TOWNSITE
 API #: API #3004524851
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS2021100
 Cust No: 35825-13690

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: FARMINGTON TOWNSITE #1E; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: API #3004524851

Source: TUBING
 Well Flowing: Y
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 05/27/2021
 Sample Time: 12.50 PM
 Sampled By: JACINTO C.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0206

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6218	0.6146	0.0690	0.00	0.0060
CO2	1.0931	1.0805	0.1870	0.00	0.0166
Methane	81.3390	80.4014	13.8330	821.52	0.4505
Ethane	9.9899	9.8748	2.6800	176.79	0.1037
Propane	4.1835	4.1353	1.1560	105.26	0.0637
Iso-Butane	0.5962	0.5893	0.1960	19.39	0.0120
N-Butane	1.0692	1.0569	0.3380	34.88	0.0215
I-Pentane	0.3112	0.3076	0.1140	12.45	0.0078
N-Pentane	0.1946	0.1924	0.0710	7.80	0.0048
Hexane Plus	0.6015	0.5946	0.2690	31.71	0.0199
Total	100.0000	98.8474	18.9130	1209.80	0.7065

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
 BTU/CU.FT IDEAL: 1212.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1216.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1195.5
 DRY BTU @ 15.025: 1241.1
 REAL SPECIFIC GRAVITY: 0.7086

CYLINDER #: 6088
 CYLINDER PRESSURE: 122 PSIG
 ANALYSIS DATE: 06/07/2021
 ANALYSIS TIME: 11:24:19 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: 06/09/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: FARMINGTON TOWNSITE #1E; TBG TUBING 06/09/2021
Stn. No.: API #3004524851 35825-13690
Mtr. No.:

Smpl Date: 05/27/2021
Test Date: 06/07/2021
Run No: HS2021100

Nitrogen: 0.6218
CO2: 1.0931
Methane: 81.3390
Ethane: 9.9899
Propane: 4.1835
I-Butane: 0.5962
N-Butane: 1.0692
I-Pentane: 0.3112
N-Pentane: 0.1946
Hexane+: 0.6015

BTU: 1216.7
GPM: 18.9130
SPG: 0.7086

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1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 47738

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 47738
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas bradenhead and production casing	10/13/2021