



Well Name: PINON MESA B #1E; BHD

API #: 3004526387

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS2021144

Cust No: 35825-10500

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: PINON MESA B #1E; BHD

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004526387

95-455-01

AREA 2 / RUN 0202

Heat Trace:

Remarks:

Source: BRADENHEAD

Well Flowing: Y

Pressure: 84 PSIG

Flow Temp: 85 DEG. F

Ambient Temp: 85 DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 07/28/2021

Sample Time: 11.40 AM

Sampled By: VICTOR R.

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6459	0.6438	0.0710	0.00	0.0062
CO2	1.0087	1.0054	0.1730	0.00	0.0153
Methane	80.7076	80.4422	13.7270	815.15	0.4470
Ethane	9.9863	9.9535	2.6790	176.73	0.1037
Propane	4.2685	4.2545	1.1800	107.40	0.0650
Iso-Butane	0.6983	0.6960	0.2290	22.71	0.0140
N-Butane	1.1743	1.1704	0.3710	38.31	0.0236
I-Pentane	0.4374	0.4360	0.1600	17.50	0.0109
N-Pentane	0.3485	0.3474	0.1270	13.97	0.0087
Hexane Plus	0.7245	0.7221	0.3240	38.19	0.0240
Total	100.0000	99.6713	19.0410	1229.95	0.7184

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
 BTU/CU.FT IDEAL: 1232.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1237.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1215.6
 DRY BTU @ 15.025: 1261.9
 REAL SPECIFIC GRAVITY: 0.7206

CYLINDER #: 008
 CYLINDER PRESSURE: 79 PSIG
 ANALYSIS DATE: 08/04/2021
 ANALYSIS TIME: 02:32:02 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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PINON MESA B #1E; BHD	BRADENHEAD	08/06/2021
Stn. No.:	3004526387		35825-10500
Mtr. No.:	95-455-01		

Smpl Date:	07/28/2021	08/16/2018
Test Date:	08/04/2021	08/22/2018
Run No:	HS2021144	HS180127
Nitrogen:	0.6459	0.6177
CO2:	1.0087	0.9870
Methane:	80.7076	80.9483
Ethane:	9.9863	9.8712
Propane:	4.2685	4.1076
I-Butane:	0.6983	0.6822
N-Butane:	1.1743	1.1510
I-Pentane:	0.4374	0.4331
N-Pentane:	0.3485	0.3464
Hexane+:	0.7245	0.8555
BTU:	1237.1	1238.8
GPM:	19.0410	19.0440
SPG:	0.7206	0.7211



Well Name: PINON MESA B #1E; CSG

API #: 3004526387

Source: CASING

Sample Type: GAS

Analysis No: HS2021145

Cust No: 35825-10505

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: PINON MESA B #1E; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004526387

95-455-01

AREA 2 / RUN 0202

Heat Trace:

Remarks:

Source: CASING

Well Flowing: Y

Pressure: 147 PSIG

Flow Temp: 85 DEG. F

Ambient Temp: 85 DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 07/28/2021

Sample Time: 11.50 AM

Sampled By: VICTOR R.

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6355	0.6310	0.0700	0.00	0.0061
CO2	1.0228	1.0156	0.1750	0.00	0.0155
Methane	80.1043	79.5373	13.6270	809.05	0.4437
Ethane	10.0325	9.9615	2.6920	177.55	0.1042
Propane	4.3215	4.2909	1.1950	108.73	0.0658
Iso-Butane	0.7206	0.7155	0.2370	23.43	0.0145
N-Butane	1.2241	1.2154	0.3870	39.93	0.0246
I-Pentane	0.4847	0.4813	0.1780	19.39	0.0121
N-Pentane	0.3963	0.3935	0.1440	15.89	0.0099
Hexane Plus	1.0577	1.0502	0.4730	55.75	0.0350
Total	100.0000	99.2922	19.1780	1249.73	0.7313

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1252.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1257.3
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1235.4
 DRY BTU @ 15.025: 1282.5
 REAL SPECIFIC GRAVITY: 0.7337

CYLINDER #: 037
 CYLINDER PRESSURE: 142 PSIG
 ANALYSIS DATE: 08/04/2021
 ANALYSIS TIME: 02:43:20 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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PINON MESA B #1E; CSG	CASING	08/06/2021
Stn. No.:	3004526387		35825-10505
Mtr. No.:	95-455-01		

Smpl Date:	07/28/2021	08/16/2018	08/16/2018
Test Date:	08/04/2021	08/22/2018	08/22/2018
Run No:	HS2021145	HS180128	HS180129
Nitrogen:	0.6355	0.6326	0.4564
CO2:	1.0228	0.9905	1.0973
Methane:	80.1043	81.1678	81.5969
Ethane:	10.0325	9.7243	10.0492
Propane:	4.3215	4.1102	3.9403
I-Butane:	0.7206	0.6880	0.5998
N-Butane:	1.2241	1.1376	0.9381
I-Pentane:	0.4847	0.4275	0.2510
N-Pentane:	0.3963	0.3414	0.1725
Hexane+:	1.0577	0.7801	0.8985
BTU:	1257.3	1233.9	1222.5
GPM:	19.1780	19.0060	18.9510
SPG:	0.7337	0.7181	0.7107



Well Name: PINON MESA B 1E; TBG

API #: 3004526387

Source: TUBING

Sample Type: GAS

Analysis No: HS2021146

Cust No: 35825-13835

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: PINON MESA B 1E; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation:

Cust. Stn. No.: 3004526387
95-455-01

AREA 2 / RUN 0202

Heat Trace: N

Remarks:

Source: TUBING

Well Flowing: Y

Pressure: 145 PSIG

Flow Temp: 86 DEG. F

Ambient Temp: 86 DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 07/28/2021

Sample Time: 11.55 AM

Sampled By: VICTOR R.

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4844	0.4840	0.0530	0.00	0.0047
CO2	1.1080	1.1070	0.1900	0.00	0.0168
Methane	80.2287	80.1544	13.6470	810.31	0.4444
Ethane	10.3588	10.3492	2.7800	183.32	0.1075
Propane	4.4288	4.4247	1.2240	111.43	0.0674
Iso-Butane	0.7107	0.7100	0.2330	23.11	0.0143
N-Butane	1.1783	1.1772	0.3730	38.44	0.0236
I-Pentane	0.4173	0.4169	0.1530	16.70	0.0104
N-Pentane	0.3290	0.3287	0.1200	13.19	0.0082
Hexane Plus	0.7560	0.7553	0.3380	39.85	0.0250
Total	100.0000	99.9074	19.1110	1236.35	0.7224

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1239.2
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1243.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1222.1
 DRY BTU @ 15.025: 1268.6
 REAL SPECIFIC GRAVITY: 0.7247

CYLINDER #: 2003
 CYLINDER PRESSURE: 145 PSIG
 ANALYSIS DATE: 08/04/2021
 ANALYSIS TIME: 02:45:23 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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: PINON MESA B 1E; TBG
Stn. No.: 3004526387
Mtr. No.: 95-455-01

TUBING

08/06/2021
35825-13835

Smpl Date: 07/28/2021
Test Date: 08/04/2021
Run No: HS2021146

Nitrogen: 0.4844
CO2: 1.1080
Methane: 80.2287
Ethane: 10.3588
Propane: 4.4288
I-Butane: 0.7107
N-Butane: 1.1783
I-Pentane: 0.4173
N-Pentane: 0.3290
Hexane+: 0.7560

BTU: 1243.7
GPM: 19.1110
SPG: 0.7247

District I

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

COMMENTS

Action 44507

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 44507
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

COMMENTS

Created By	Comment	Comment Date
mkuehling	same gas all strings	9/3/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

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

CONDITIONS

Action 44507

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 44507
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	9/3/2021