



Well Name: PINON MESA A 2; BHD

API #: 3004521968

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS2021126

Cust No: 35825-10455

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: PINON MESA A 2; BHD
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: 3004521968

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 35 PSIG
 Flow Temp: 64 DEG. F
 Ambient Temp: 64 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/22/2021
 Sample Time: 8.13 AM
 Sampled By: VICTOR R.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0202

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8209	0.8144	0.0910	0.00	0.0079
CO2	0.0094	0.0093	0.0020	0.00	0.0001
Methane	90.3513	89.6380	15.3550	912.55	0.5005
Ethane	4.7464	4.7089	1.2720	84.00	0.0493
Propane	2.3268	2.3084	0.6430	58.54	0.0354
Iso-Butane	0.5580	0.5536	0.1830	18.15	0.0112
N-Butane	0.5537	0.5493	0.1750	18.06	0.0111
I-Pentane	0.2260	0.2242	0.0830	9.04	0.0056
N-Pentane	0.1322	0.1312	0.0480	5.30	0.0033
Hexane Plus	0.2753	0.2731	0.1230	14.51	0.0091
Total	100.0000	99.2104	17.9750	1120.15	0.6336

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
 BTU/CU.FT IDEAL: 1122.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1125.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1106.2
 DRY BTU @ 15.025: 1148.3
 REAL SPECIFIC GRAVITY: 0.635

CYLINDER #: 6064
 CYLINDER PRESSURE: 40 PSIG
 ANALYSIS DATE: 06/29/2021
 ANALYSIS TIME: 03:55:49 PM
 ANALYSIS RUN BY: SHYANN GALLEGOS

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: 07/01/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: PINON MESA A 2; BHD
Stn. No.: 3004521968
Mtr. No.:

BRADENHEAD

07/01/2021
35825-10455

Smpl Date:	06/22/2021	08/16/2018
Test Date:	06/29/2021	08/22/2018
Run No:	HS2021126	HS180118
Nitrogen:	0.8209	0.9634
CO2:	0.0094	0.0111
Methane:	90.3513	89.2603
Ethane:	4.7464	4.9626
Propane:	2.3268	2.7394
I-Butane:	0.5580	0.6531
N-Butane:	0.5537	0.6602
I-Pentane:	0.2260	0.2642
N-Pentane:	0.1322	0.1545
Hexane+:	0.2753	0.3312
BTU:	1125.8	1141.1
GPM:	17.9750	18.0910
SPG:	0.6350	0.6464



Well Name: PINON MESA A 2; CSG

API #: 3004521968

Source: CASING

Sample Type: GAS

Analysis No: HS2021127

Cust No: 35825-10460

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: PINON MESA A 2; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: 3004521968

Source: CASING
 Well Flowing:
 Pressure: 131 PSIG
 Flow Temp: 64 DEG. F
 Ambient Temp: 64 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/22/2021
 Sample Time: 8.11 AM
 Sampled By: VICTOR R.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0202

Heat Trace:

Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4637	0.4632	0.0510	0.00	0.0045
CO2	1.0852	1.0841	0.1860	0.00	0.0165
Methane	79.9454	79.8610	13.6000	807.45	0.4428
Ethane	10.1411	10.1304	2.7210	179.47	0.1053
Propane	4.3711	4.3665	1.2080	109.98	0.0665
Iso-Butane	0.7334	0.7326	0.2410	23.85	0.0147
N-Butane	1.2853	1.2839	0.4070	41.93	0.0258
I-Pentane	0.5488	0.5482	0.2010	21.96	0.0137
N-Pentane	0.4500	0.4495	0.1640	18.04	0.0112
Hexane Plus	0.9760	0.9750	0.4370	51.45	0.0323
Total	100.0000	99.8944	19.2160	1254.12	0.7333

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1257.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1261.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1239.7
 DRY BTU @ 15.025: 1287.0
 REAL SPECIFIC GRAVITY: 0.7357

CYLINDER #: 7023
 CYLINDER PRESSURE: 115 PSIG
 ANALYSIS DATE: 06/29/2021
 ANALYSIS TIME: 03:55:53 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: 07/01/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PINON MESA A 2; CSG	CASING	07/01/2021
Stn. No.:	3004521968		35825-10460
Mtr. No.:			

Smpl Date:	06/22/2021	08/16/2018
Test Date:	06/29/2021	08/22/2018
Run No:	HS2021127	HS180119
Nitrogen:	0.4637	0.4362
CO2:	1.0852	1.0699
Methane:	79.9454	80.2008
Ethane:	10.1411	10.3237
Propane:	4.3711	4.3890
I-Butane:	0.7334	0.7277
N-Butane:	1.2853	1.2520
I-Pentane:	0.5488	0.4634
N-Pentane:	0.4500	0.3727
Hexane+:	0.9760	0.7646
BTU:	1261.7	1248.8
GPM:	19.2160	19.1390
SPG:	0.7357	0.7269



Well Name: PINON MESA A 2; TBG

API #: 3004521968

Source: TUBING

Sample Type: GAS

Analysis No: HS2021128

Cust No: 35825-10465

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: PINON MESA A 2; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: 3004521968

Source: TUBING
 Well Flowing:
 Pressure: 128 PSIG
 Flow Temp: 64 DEG. F
 Ambient Temp: 64 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/22/2021
 Sample Time: 8.12 AM
 Sampled By: VICTOR R.
 Sampled by (CO): HILCORP

AREA 2 / RUN 0202

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5375	0.5393	0.0590	0.00	0.0052
CO2	1.0934	1.0971	0.1870	0.00	0.0166
Methane	79.9504	80.2238	13.5990	807.50	0.4428
Ethane	10.3652	10.4006	2.7810	183.43	0.1076
Propane	4.5112	4.5266	1.2470	113.51	0.0687
Iso-Butane	0.7420	0.7445	0.2440	24.13	0.0149
N-Butane	1.2509	1.2552	0.3960	40.81	0.0251
I-Pentane	0.4296	0.4311	0.1580	17.19	0.0107
N-Pentane	0.3086	0.3097	0.1120	12.37	0.0077
Hexane Plus	0.8112	0.8140	0.3630	42.76	0.0268
Total	100.0000	100.3419	19.1460	1241.69	0.7262

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1244.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1249.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1227.4
 DRY BTU @ 15.025: 1274.1
 REAL SPECIFIC GRAVITY: 0.7285

CYLINDER #: 4029
 CYLINDER PRESSURE: 125 PSIG
 ANALYSIS DATE: 06/29/2021
 ANALYSIS TIME: 03:50:22 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: 07/01/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	PINON MESA A 2; TBG	TUBING	07/01/2021
Stn. No.:	3004521968		35825-10465
Mtr. No.:			

Smpl Date:	06/22/2021	08/16/2018
Test Date:	06/29/2021	08/22/2018
Run No:	HS2021128	HS180120
Nitrogen:	0.5375	0.4302
CO2:	1.0934	1.0714
Methane:	79.9504	88.7850
Ethane:	10.3652	4.9362
Propane:	4.5112	2.7248
I-Butane:	0.7420	0.6497
N-Butane:	1.2509	0.6567
I-Pentane:	0.4296	0.2628
N-Pentane:	0.3086	0.1537
Hexane+:	0.8112	0.3295
BTU:	1249.1	1135.0
GPM:	19.1460	18.1160
SPG:	0.7285	0.6540

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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 39629

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 39629
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	8/9/2021