



Well Name: PINON MESA A 1E; BHD
 API #: 3004526390
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS2021123
 Cust No: 35825-13760

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	PINON MESA A 1E; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	33 PSIG
Location:		Flow Temp:	64 DEG. F
Lease/PA/CA:		Ambient Temp:	64 DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004526390	Sample Method:	Purge & Fill
		Sample Date:	06/22/2021
		Sample Time:	8.52 AM
		Sampled By:	VICTOR R.
		Sampled by (CO):	HILCORP

Heat Trace: AREA 2 / RUN 0202

Remarks: PRESSURED WITH HELIUM TO 30LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.9184	0.6884	0.2120	0.00	0.0186
CO2	0.0162	0.0058	0.0030	0.00	0.0002
Methane	89.1568	31.9939	15.1580	900.48	0.4938
Ethane	4.7374	1.7000	1.2710	83.84	0.0492
Propane	1.0779	0.3868	0.2980	27.12	0.0164
Iso-Butane	0.2427	0.0871	0.0800	7.89	0.0049
N-Butane	0.2319	0.0832	0.0730	7.57	0.0047
I-Pentane	0.0850	0.0305	0.0310	3.40	0.0021
N-Pentane	0.0800	0.0287	0.0290	3.21	0.0020
Hexane Plus	2.4537	0.8805	1.0970	129.34	0.0812
Total	100.0000	35.8849	18.2520	1162.84	0.6731

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	6007
BTU/CU.FT IDEAL:	1165.5	CYLINDER PRESSURE:	7 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1169.2	ANALYSIS DATE:	06/29/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1148.9	ANALYSIS TIME:	03:57:20 PM
DRY BTU @ 15.025:	1192.6	ANALYSIS RUN BY:	SHYANN GALLEGOS
REAL SPECIFIC GRAVITY:	0.6749		

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 1E; BHD
Stn. No.: 3004526390
Mtr. No.:

BRADENHEAD

07/01/2021
35825-13760

Smpl Date: 06/22/2021
Test Date: 06/29/2021
Run No: HS2021123

Nitrogen: 1.9184
CO2: 0.0162
Methane: 89.1568
Ethane: 4.7374
Propane: 1.0779
I-Butane: 0.2427
N-Butane: 0.2319
I-Pentane: 0.0850
N-Pentane: 0.0800
Hexane+: 2.4537

BTU: 1169.2
GPM: 18.2520
SPG: 0.6749



Well Name: PINION MESA A 1E; CSG

API #: 3004526390

Source: CASING

Sample Type: GAS

Analysis No: HS2021124

Cust No: 35825-13765

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: PINION MESA A 1E; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: 3004526390

Source: CASING
 Well Flowing: Y
 Pressure: 156 PSIG
 Flow Temp: 64 DEG. F
 Ambient Temp: 66 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/22/2021
 Sample Time: 8.48 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	1.3617	1.3132	0.1500	0.00	0.0132
CO2	1.2180	1.1746	0.2090	0.00	0.0185
Methane	79.3610	76.5355	13.4980	801.55	0.4396
Ethane	10.2054	9.8420	2.7380	180.60	0.1060
Propane	4.4223	4.2648	1.2220	111.27	0.0673
Iso-Butane	0.7134	0.6880	0.2340	23.20	0.0143
N-Butane	1.2160	1.1727	0.3850	39.67	0.0244
I-Pentane	0.4433	0.4275	0.1630	17.74	0.0110
N-Pentane	0.3386	0.3265	0.1230	13.57	0.0084
Hexane Plus	0.7203	0.6947	0.3220	37.97	0.0238
Total	100.0000	96.4395	19.0440	1225.57	0.7266

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
 BTU/CU.FT IDEAL: 1228.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1232.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1211.3
 DRY BTU @ 15.025: 1257.4
 REAL SPECIFIC GRAVITY: 0.7288

CYLINDER #: 6148
 CYLINDER PRESSURE: 146 PSIG
 ANALYSIS DATE: 06/29/2021
 ANALYSIS TIME: 02:07:05 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: PINION MESA A 1E; CSG
Stn. No.: 3004526390
Mtr. No.:

CASING

07/01/2021
35825-13765

Smpl Date: 06/22/2021
Test Date: 06/29/2021
Run No: HS2021124

Nitrogen: 1.3617
CO2: 1.2180
Methane: 79.3610
Ethane: 10.2054
Propane: 4.4223
I-Butane: 0.7134
N-Butane: 1.2160
I-Pentane: 0.4433
N-Pentane: 0.3386
Hexane+: 0.7203

BTU: 1232.7
GPM: 19.0440
SPG: 0.7288



Well Name: PINON MESA A 1E; TBG

API #: 3004526390

Source: TUBING

Sample Type: GAS

Analysis No: HS2021125

Cust No: 35825-13770

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: PINON MESA A 1E; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation:
 Cust. Stn. No.: 3004526390

Source: TUBING
 Well Flowing: Y
 Pressure: 130 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: 8.50 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	0.4564	0.4581	0.0500	0.00	0.0044
CO2	1.2078	1.2124	0.2070	0.00	0.0184
Methane	80.2785	80.5863	13.6550	810.81	0.4447
Ethane	10.2142	10.2534	2.7410	180.76	0.1060
Propane	4.4497	4.4668	1.2300	111.96	0.0677
Iso-Butane	0.7089	0.7116	0.2330	23.05	0.0142
N-Butane	1.2034	1.2080	0.3810	39.26	0.0241
I-Pentane	0.4118	0.4134	0.1510	16.48	0.0103
N-Pentane	0.3063	0.3075	0.1110	12.28	0.0076
Hexane Plus	0.7630	0.7659	0.3410	40.22	0.0253
Total	100.0000	100.3834	19.1000	1234.82	0.7227

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1237.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1242.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1220.5
 DRY BTU @ 15.025: 1267.0
 REAL SPECIFIC GRAVITY: 0.7251

CYLINDER #: 6238
 CYLINDER PRESSURE: 141 PSIG
 ANALYSIS DATE: 06/29/2021
 ANALYSIS TIME: 03:48:29 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 1E; TBG
Stn. No.: 3004526390
Mtr. No.:

TUBING

07/01/2021
35825-13770

Smpl Date: 06/22/2021
Test Date: 06/29/2021
Run No: HS2021125

Nitrogen: 0.4564
CO2: 1.2078
Methane: 80.2785
Ethane: 10.2142
Propane: 4.4497
I-Butane: 0.7089
N-Butane: 1.2034
I-Pentane: 0.4118
N-Pentane: 0.3063
Hexane+: 0.7630

BTU: 1242.1
GPM: 19.1000
SPG: 0.7251

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1625 N. French Dr., Hobbs, NM 88240
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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 34807

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 34807
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	8/6/2021