



Well Name: STATE N 1M; BHD
 API #: 94827
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230052
 Cust No: 35825-14845

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	STATE N 1M; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	80 PSIG
Location:		Flow Temp:	62 DEG. F
Lease/PA/CA:	E10405	Ambient Temp:	55 DEG. F
Formation:		Flow Rate:	0 MCF/D
Cust. Stn. No.:	94827	Sample Method:	
	3004525419	Sample Date:	06/05/2023
	AREA 8 / RUN 0804	Sample Time:	7.20 AM
Heat Trace:	N	Sampled By:	BRIAN EVERETT
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9309	0.9042	0.1030	0.00	0.0090
CO2	0.0119	0.0116	0.0020	0.00	0.0002
Methane	87.6980	85.1851	14.9050	885.75	0.4858
Ethane	6.2633	6.0838	1.6790	110.84	0.0650
Propane	3.2034	3.1116	0.8850	80.60	0.0488
Iso-Butane	0.5618	0.5457	0.1840	18.27	0.0113
N-Butane	0.6544	0.6356	0.2070	21.35	0.0131
I-Pentane	0.2639	0.2563	0.0970	10.56	0.0066
N-Pentane	0.1816	0.1764	0.0660	7.28	0.0045
Hexane Plus	0.2308	0.2242	0.1030	12.17	0.0076
Total	100.0000	97.1345	18.2310	1146.81	0.6519

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0028	CYLINDER #:	6129
BTU/CU.FT IDEAL:	1149.5	CYLINDER PRESSURE:	87 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1152.7	ANALYSIS DATE:	06/07/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1132.6	ANALYSIS TIME:	08:29:00 AM
DRY BTU @ 15.025:	1175.8	ANALYSIS RUN BY:	KERRA GONZALEZ
REAL SPECIFIC GRAVITY:	0.6535		

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: 06/07/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	STATE N 1M; BHD	BRADENHEAD	06/07/2023
Stn. No.:	94827		35825-14845
Mtr. No.:	3004525419		

Smpl Date: 06/05/2023
Test Date: 06/07/2023
Run No: HS20230052

Nitrogen: 0.9309
CO2: 0.0119
Methane: 87.6980
Ethane: 6.2633
Propane: 3.2034
I-Butane: 0.5618
N-Butane: 0.6544
I-Pentane: 0.2639
N-Pentane: 0.1816
Hexane+: 0.2308

BTU: 1152.7
GPM: 18.2310
SPG: 0.6535



Well Name: STATE N 1M; CSG
 API #: 94827
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230053
 Cust No: 35825-14850

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: STATE N 1M; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: E10405
 Formation:
 Cust. Stn. No.: 94827
 3004525419
 AREA 8 / RUN 0804

Source: CASING
 Well Flowing:
 Pressure: 80 PSIG
 Flow Temp: 62 DEG. F
 Ambient Temp: 55 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method:
 Sample Date: 06/05/2023
 Sample Time: 7.20 AM
 Sampled By: BRIAN EVERETT
 Sampled by (CO): HILCORP

Heat Trace:
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4137	0.4161	0.0460	0.00	0.0040
CO2	0.5904	0.5938	0.1010	0.00	0.0090
Methane	75.0321	75.4599	12.7720	757.82	0.4156
Ethane	10.7925	10.8540	2.8980	190.99	0.1120
Propane	7.7020	7.7459	2.1300	193.79	0.1173
Iso-Butane	1.7706	1.7807	0.5820	57.58	0.0355
N-Butane	1.7826	1.7928	0.5640	58.15	0.0358
I-Pentane	0.6138	0.6173	0.2250	24.56	0.0153
N-Pentane	0.4266	0.4290	0.1550	17.10	0.0106
Hexane Plus	0.8757	0.8807	0.3920	46.16	0.0290
Total	100.0000	100.5702	19.8650	1346.16	0.7841

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0043
 BTU/CU.FT IDEAL: 1349.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1355.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1331.5
 DRY BTU @ 15.025: 1382.2
 REAL SPECIFIC GRAVITY: 0.7872

CYLINDER #: 7039
 CYLINDER PRESSURE: 107 PSIG
 ANALYSIS DATE: 06/07/2023
 ANALYSIS TIME: 08:29:11 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 06/07/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	STATE N 1M; CSG	CASING	06/07/2023
Stn. No.:	94827		35825-14850
Mtr. No.:	3004525419		

Smpl Date: 06/05/2023
Test Date: 06/07/2023
Run No: HS20230053

Nitrogen: 0.4137
CO2: 0.5904
Methane: 75.0321
Ethane: 10.7925
Propane: 7.7020
I-Butane: 1.7706
N-Butane: 1.7826
I-Pentane: 0.6138
N-Pentane: 0.4266
Hexane+: 0.8757

BTU: 1355.1
GPM: 19.8650
SPG: 0.7872



Well Name: STATE N 1M; TBG

API #: 94827

Source: TUBING

Sample Type: GAS

Analysis No: HS20230054

Cust No: 35825-14855

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: STATE N 1M; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA: E10405

Formation:

Cust. Stn. No.: 94827
3004525419

AREA 8 / RUN 0804

Heat Trace: N

Remarks:

Source: TUBING

Well Flowing: Y

Pressure: 80 PSIG

Flow Temp: 62 DEG. F

Ambient Temp: 55 DEG. F

Flow Rate: 0 MCF/D

Sample Method: Purge & Fill

Sample Date: 06/05/2023

Sample Time: 7.20 AM

Sampled By: BRIAN EVERETT

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3573	0.3603	0.0390	0.00	0.0035
CO2	0.7770	0.7835	0.1330	0.00	0.0118
Methane	76.0185	76.6524	12.9370	767.79	0.4211
Ethane	11.7864	11.8847	3.1640	208.58	0.1224
Propane	6.5584	6.6131	1.8140	165.02	0.0999
Iso-Butane	1.2406	1.2509	0.4080	40.34	0.0249
N-Butane	1.6221	1.6356	0.5130	52.92	0.0326
I-Pentane	0.5369	0.5414	0.1970	21.48	0.0134
N-Pentane	0.3903	0.3936	0.1420	15.65	0.0097
Hexane Plus	0.7125	0.7184	0.3190	37.56	0.0236
Total	100.0000	100.8339	19.6660	1309.33	0.7627

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0041
 BTU/CU.FT IDEAL: 1312.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1317.6
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1294.7
 DRY BTU @ 15.025: 1344.0
 REAL SPECIFIC GRAVITY: 0.7654

CYLINDER #: 6010
 CYLINDER PRESSURE: 104 PSIG
 ANALYSIS DATE: 06/07/2023
 ANALYSIS TIME: 08:36:44 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 06/07/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	STATE N 1M; TBG	TUBING	06/07/2023
Stn. No.:	94827		35825-14855
Mtr. No.:	3004525419		

Smpl Date: 06/05/2023
Test Date: 06/07/2023
Run No: HS20230054

Nitrogen: 0.3573
CO2: 0.7770
Methane: 76.0185
Ethane: 11.7864
Propane: 6.5584
I-Butane: 1.2406
N-Butane: 1.6221
I-Pentane: 0.5369
N-Pentane: 0.3903
Hexane+: 0.7125

BTU: 1317.6
GPM: 19.6660
SPG: 0.7654

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

CONDITIONS

Action 228853

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 228853
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	for record only	7/3/2023