



Well Name: REID B 2E; BHD

API #: 3004524433

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS20230104

Cust No: 35825-15070

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: REID B 2E; BHD

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation: CH/DK

Cust. Stn. No.: 3004524433

14633266

AREA 7 / RUN 705

Heat Trace: N

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Source: BRADENHEAD

Well Flowing: Y

Pressure: 7 PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method:

Sample Date: 06/28/2023

Sample Time: 2.02 PM

Sampled By:

Sampled by (CO):

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	99.3767	34.6961	10.9340	0.00	0.9612
CO2	0.0636	0.0222	0.0110	0.00	0.0010
Methane	0.2710	0.0946	0.0460	2.74	0.0015
Ethane	0.0103	0.0036	0.0030	0.18	0.0001
Propane	0.0112	0.0039	0.0030	0.28	0.0002
Iso-Butane	0.0040	0.0014	0.0010	0.13	0.0001
N-Butane	0.0109	0.0038	0.0030	0.36	0.0002
I-Pentane	0.0080	0.0028	0.0030	0.32	0.0002
N-Pentane	0.0060	0.0021	0.0020	0.24	0.0001
Hexane Plus	0.2383	0.0832	0.1060	12.56	0.0079
Total	100.0000	34.9137	11.1120	16.81	0.9725

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0003
 BTU/CU.FT IDEAL: 16.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 16.9
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 16.6
 DRY BTU @ 15.025: 17.2
 REAL SPECIFIC GRAVITY: 0.9724

CYLINDER #: 6020
 CYLINDER PRESSURE: PSIG
 ANALYSIS DATE: 07/06/2023
 ANALYSIS TIME: 02:26:35 PM
 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: 08/04/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	REID B 2E; BHD	BRADENHEAD	08/04/2023
Stn. No.:	3004524433	CH/DK	35825-15070
Mtr. No.:	14633266		

Smpl Date: 06/28/2023
Test Date: 07/06/2023
Run No: HS20230104

Nitrogen: 99.3767
CO2: 0.0636
Methane: 0.2710
Ethane: 0.0103
Propane: 0.0112
I-Butane: 0.0040
N-Butane: 0.0109
I-Pentane: 0.0080
N-Pentane: 0.0060
Hexane+: 0.2383

BTU: 16.9
GPM: 11.1120
SPG: 0.9724



Well Name: REID B 2E; CSG
 API #: API # 3004524433
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230105
 Cust No: 35825-12310

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: REID B 2E; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NM000702
 Formation: CH/DK
 Cust. Stn. No.: API # 3004524433
 14633266

Source: CASING
 Well Flowing:
 Pressure: 39 PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/28/2023
 Sample Time: 2.12 PM
 Sampled By:
 Sampled by (CO):

AREA 7 / RUN 705

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4966	0.4763	0.0550	0.00	0.0048
CO2	0.0227	0.0218	0.0040	0.00	0.0003
Methane	82.4229	79.0514	14.0240	832.47	0.4565
Ethane	6.9419	6.6579	1.8630	122.85	0.0721
Propane	4.4897	4.3060	1.2410	112.97	0.0684
Iso-Butane	0.8946	0.8580	0.2940	29.09	0.0180
N-Butane	1.6507	1.5832	0.5220	53.85	0.0331
I-Pentane	0.7692	0.7377	0.2820	30.77	0.0192
N-Pentane	0.6428	0.6165	0.2340	25.77	0.0160
Hexane Plus	1.6689	1.6006	0.7470	87.97	0.0552
Total	100.0000	95.9094	19.2660	1295.74	0.7436

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1298.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1303.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1281.1
 DRY BTU @ 15.025: 1329.9
 REAL SPECIFIC GRAVITY: 0.7462

CYLINDER #: 6002
 CYLINDER PRESSURE: 33 PSIG
 ANALYSIS DATE: 07/06/2023
 ANALYSIS TIME: 02:14:56 PM
 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: 08/04/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	REID B 2E; CSG	CASING	08/04/2023
Stn. No.:	API # 3004524433	CH/DK	35825-12310
Mtr. No.:	14633266		

Smpl Date:	06/28/2023	07/10/2020
Test Date:	07/06/2023	07/14/2020
Run No:	HS20230105	HS200068
Nitrogen:	0.4966	0.6403
CO2:	0.0227	0.0066
Methane:	82.4229	80.9798
Ethane:	6.9419	6.7377
Propane:	4.4897	4.5070
I-Butane:	0.8946	0.9856
N-Butane:	1.6507	1.8828
I-Pentane:	0.7692	1.0017
N-Pentane:	0.6428	0.8878
Hexane+:	1.6689	2.3707
BTU:	1303.8	1353.6
GPM:	19.2660	19.5860
SPG:	0.7462	0.7795



Well Name: REID B 2E; TBG
 API #: API # 3004524433
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20230106
 Cust No: 35825-12315

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: REID B 2E; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NM000702
 Formation: CH/DK
 Cust. Stn. No.: API # 3004524433
 14633266

Source: TUBING
 Well Flowing: N
 Pressure: 38 PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/28/2023
 Sample Time: 2.32 PM
 Sampled By:
 Sampled by (CO): HILCORP

AREA 7 / RUN 705

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3376	0.3308	0.0370	0.00	0.0033
CO2	1.4445	1.4155	0.2470	0.00	0.0219
Methane	81.1960	79.5659	13.8110	820.08	0.4497
Ethane	9.0651	8.8831	2.4320	160.43	0.0941
Propane	4.1418	4.0586	1.1450	104.21	0.0631
Iso-Butane	0.7563	0.7411	0.2480	24.59	0.0152
N-Butane	1.2100	1.1857	0.3830	39.47	0.0243
I-Pentane	0.4766	0.4670	0.1750	19.07	0.0119
N-Pentane	0.3660	0.3587	0.1330	14.67	0.0091
Hexane Plus	1.0061	0.9859	0.4500	53.03	0.0333
Total	100.0000	97.9923	19.0610	1235.56	0.7259

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0036
 BTU/CU.FT IDEAL: 1238.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1242.9
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1221.3
 DRY BTU @ 15.025: 1267.8
 REAL SPECIFIC GRAVITY: 0.7282

CYLINDER #: 6239
 CYLINDER PRESSURE: 36 PSIG
 ANALYSIS DATE: 07/06/2023
 ANALYSIS TIME: 02:06:57 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: 08/04/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	REID B 2E; TBG	TUBING	08/04/2023
Stn. No.:	API # 3004524433	CH/DK	35825-12315
Mtr. No.:	14633266		

Smpl Date:	06/28/2023	07/10/2020
Test Date:	07/06/2023	07/14/2020
Run No:	HS20230106	HS200069
Nitrogen:	0.3376	0.3414
CO2:	1.4445	1.9186
Methane:	81.1960	79.4697
Ethane:	9.0651	9.5291
Propane:	4.1418	4.1310
I-Butane:	0.7563	0.8436
N-Butane:	1.2100	1.3315
I-Pentane:	0.4766	0.6064
N-Pentane:	0.3660	0.4628
Hexane+:	1.0061	1.3659
BTU:	1242.9	1268.6
GPM:	19.0610	19.2890
SPG:	0.7282	0.7525

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District III
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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 255459

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 255459
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	9/15/2023