



Well Name: STATE G.C. BI 1E; BHD

API #: 3004525252

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS2021216

Cust No: 35825-13970

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: STATE G.C. BI 1E; BHD

County/State: SAN JUAN NM

Location:

Lease/PA/CA: E-8279

Formation: DK

Cust. Stn. No.: 3004525252

FROOO7A

AREA 2 / RUN 0205

Heat Trace:

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Source: BRADENHEAD

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 08/20/2021

Sample Time: 3.00 PM

Sampled By: JOHN RUSSELL

Sampled by (CO):

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4245	0.1791	0.0470	0.00	0.0041
CO2	0.1097	0.0463	0.0190	0.00	0.0017
Methane	93.6059	39.4945	15.9050	945.42	0.5185
Ethane	3.2399	1.3670	0.8680	57.34	0.0336
Propane	0.8284	0.3495	0.2290	20.84	0.0126
Iso-Butane	0.4842	0.2043	0.1590	15.75	0.0097
N-Butane	0.4264	0.1799	0.1350	13.91	0.0086
I-Pentane	0.2709	0.1143	0.0990	10.84	0.0067
N-Pentane	0.2005	0.0846	0.0730	8.04	0.0050
Hexane Plus	0.4096	0.1728	0.1830	21.59	0.0136
Total	100.0000	42.1923	17.7170	1093.72	0.6141

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
 BTU/CU.FT IDEAL: 1096.3
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1099.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1079.9
 DRY BTU @ 15.025: 1121.0
 REAL SPECIFIC GRAVITY: 0.6154

CYLINDER #: 7023
 CYLINDER PRESSURE: 5 PSIG
 ANALYSIS DATE: 09/01/2021
 ANALYSIS TIME: 04:19:39 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: 09/07/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: STATE G.C. BI 1E; BHD
Stn. No.: 3004525252
Mtr. No.: FROOO7A

BRADENHEAD
DK

09/07/2021
35825-13970

Smpl Date: 08/20/2021
Test Date: 09/01/2021
Run No: HS2021216

Nitrogen: 0.4245
CO2: 0.1097
Methane: 93.6059
Ethane: 3.2399
Propane: 0.8284
I-Butane: 0.4842
N-Butane: 0.4264
I-Pentane: 0.2709
N-Pentane: 0.2005
Hexane+: 0.4096

BTU: 1099.0
GPM: 17.7170
SPG: 0.6154



Well Name: STATE G.C. BI 1E; CSG

API #: 3004525252

Source: CASING

Sample Type: GAS

Analysis No: HS2021217

Cust No: 35825-13975

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: STATE G.C. BI 1E; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA: E-8279

Formation:

Cust. Stn. No.: 3004525252

FR0007A

AREA 2 / RUN 0205

Heat Trace:

Remarks:

Source: CASING

Well Flowing: Y

Pressure: PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 08/20/2021

Sample Time: 3.00 PM

Sampled By: JOHN RUSSELL

Sampled by (CO):

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5318	0.5248	0.0590	0.00	0.0051
CO2	1.2925	1.2754	0.2210	0.00	0.0196
Methane	77.1598	76.1409	13.1290	779.31	0.4274
Ethane	11.3055	11.1562	3.0350	200.07	0.1174
Propane	5.6090	5.5349	1.5510	141.13	0.0854
Iso-Butane	0.8794	0.8678	0.2890	28.60	0.0176
N-Butane	1.5902	1.5692	0.5030	51.88	0.0319
I-Pentane	0.5111	0.5044	0.1880	20.45	0.0127
N-Pentane	0.4361	0.4303	0.1590	17.48	0.0109
Hexane Plus	0.6846	0.6756	0.3060	36.09	0.0227
Total	100.0000	98.6795	19.4400	1275.01	0.7508

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1278.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1283.0
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1260.7
 DRY BTU @ 15.025: 1308.7
 REAL SPECIFIC GRAVITY: 0.7534

CYLINDER #: 4127
 CYLINDER PRESSURE: 135 PSIG
 ANALYSIS DATE: 09/01/2021
 ANALYSIS TIME: 04:39:08 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: 09/07/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: STATE G.C. BI 1E; CSG
Stn. No.: 3004525252
Mtr. No.: FR0007A

CASING

09/07/2021
35825-13975

Smpl Date: 08/20/2021
Test Date: 09/01/2021
Run No: HS2021217

Nitrogen: 0.5318
CO2: 1.2925
Methane: 77.1598
Ethane: 11.3055
Propane: 5.6090
I-Butane: 0.8794
N-Butane: 1.5902
I-Pentane: 0.5111
N-Pentane: 0.4361
Hexane+: 0.6846

BTU: 1283.0
GPM: 19.4400
SPG: 0.7534



Well Name: STATE G.C. BI 1E; TBG

API #: 3004525252

Source: TUBING

Sample Type: GAS

Analysis No: HS2021218

Cust No: 35825-13980

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: STATE G.C. BI 1E; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: E-8279
 Formation: DK
 Cust. Stn. No.: 3004525252

Source: TUBING
 Well Flowing: Y
 Pressure: PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/20/2021
 Sample Time: 3.00 PM
 Sampled By: JOHN RUSSELL
 Sampled by (CO):

AREA 2 / RUN 0205

Heat Trace:

Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5167	0.5151	0.0570	0.00	0.0050
CO2	1.3907	1.3864	0.2380	0.00	0.0211
Methane	75.9473	75.7129	12.9250	767.07	0.4207
Ethane	11.6144	11.5786	3.1180	205.54	0.1206
Propane	6.1074	6.0886	1.6890	153.67	0.0930
Iso-Butane	0.8423	0.8397	0.2770	27.39	0.0169
N-Butane	1.5109	1.5062	0.4780	49.29	0.0303
I-Pentane	0.4272	0.4259	0.1570	17.09	0.0106
N-Pentane	0.3840	0.3828	0.1400	15.39	0.0096
Hexane Plus	1.2591	1.2552	0.5640	66.37	0.0417
Total	100.0000	99.6914	19.6430	1301.81	0.7695

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0041
 BTU/CU.FT IDEAL: 1304.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1310.2
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1287.4
 DRY BTU @ 15.025: 1336.4
 REAL SPECIFIC GRAVITY: 0.7723

CYLINDER #: 6241
 CYLINDER PRESSURE: 53 PSIG
 ANALYSIS DATE: 09/01/2021
 ANALYSIS TIME: 04:16:24 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: 09/07/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: STATE G.C. BI 1E; TBG
Stn. No.: 3004525252
Mtr. No.:

TUBING
DK

09/07/2021
35825-13980

Smpl Date: 08/20/2021
Test Date: 09/01/2021
Run No: HS2021218

Nitrogen: 0.5167
CO2: 1.3907
Methane: 75.9473
Ethane: 11.6144
Propane: 6.1074
I-Butane: 0.8423
N-Butane: 1.5109
I-Pentane: 0.4272
N-Pentane: 0.3840
Hexane+: 1.2591

BTU: 1310.2
GPM: 19.6430
SPG: 0.7723

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District IV
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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 46772

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 46772
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	10/18/2021