



Well Name: SHARP 2A; TBG
 API #: API # 3004523815
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS2021091
 Cust No: 35825-13675

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SHARP 2A; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF079205
 Formation:
 Cust. Stn. No.: API # 3004523815

Source: TUBING
 Well Flowing: Y
 Pressure: 24 PSIG
 Flow Temp: 84 DEG. F
 Ambient Temp: 74 DEG. F
 Flow Rate: 190 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/04/2021
 Sample Time: 3.00 PM
 Sampled By: JUSTIN A.
 Sampled by (CO): HILCORP

Heat Trace: N
 Remarks: AREA 8 / RUN 0803

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3369	0.3401	0.0370	0.00	0.0033
CO2	0.8758	0.8840	0.1500	0.00	0.0133
Methane	77.5173	78.2454	13.1890	782.92	0.4294
Ethane	11.2100	11.3153	3.0090	198.38	0.1164
Propane	5.8177	5.8723	1.6090	146.38	0.0886
Iso-Butane	0.8850	0.8933	0.2910	28.78	0.0178
N-Butane	1.6037	1.6188	0.5070	52.32	0.0322
I-Pentane	0.5166	0.5215	0.1900	20.67	0.0129
N-Pentane	0.4061	0.4099	0.1480	16.28	0.0101
Hexane Plus	0.8309	0.8387	0.3720	43.80	0.0275
Total	100.0000	100.9393	19.5020	1289.53	0.7513

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1292.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1297.6
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1275.0
 DRY BTU @ 15.025: 1323.6
 REAL SPECIFIC GRAVITY: 0.754

CYLINDER #: 4089
 CYLINDER PRESSURE: 25 PSIG
 ANALYSIS DATE: 05/12/2021
 ANALYSIS TIME: 08:40:58 AM
 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: 05/17/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SHARP 2A; TBG	TUBING	05/17/2021
Stn. No.:	API # 3004523815		35825-13675
Mtr. No.:			

Smpl Date: 05/04/2021
Test Date: 05/12/2021
Run No: HS2021091

Nitrogen: 0.3369
CO2: 0.8758
Methane: 77.5173
Ethane: 11.2100
Propane: 5.8177
I-Butane: 0.8850
N-Butane: 1.6037
I-Pentane: 0.5166
N-Pentane: 0.4061
Hexane+: 0.8309

BTU: 1297.6
GPM: 19.5020
SPG: 0.7540



Well Name: SHARP 2A; CSG
 API #: API # 3004523815
 Source: CASING
 Sample Type: GAS
 Analysis No: HS2021090
 Cust No: 35825-13670

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SHARP 2A; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF079205
 Formation:
 Cust. Stn. No.: API # 3004523815

Source: CASING
 Well Flowing: Y
 Pressure: 20 PSIG
 Flow Temp: 84 DEG. F
 Ambient Temp: 74 DEG. F
 Flow Rate: 190 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 05/04/2021
 Sample Time: 2.45 PM
 Sampled By: JUSTIN A.
 Sampled by (CO): HILCORP

Heat Trace: AREA 8 / RUN 0803
 N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1867	0.1865	0.0210	0.00	0.0018
CO2	0.6915	0.6907	0.1180	0.00	0.0105
Methane	86.4351	86.3308	14.6940	872.99	0.4788
Ethane	7.3955	7.3866	1.9830	130.88	0.0768
Propane	3.0443	3.0406	0.8410	76.60	0.0463
Iso-Butane	0.4103	0.4098	0.1350	13.34	0.0082
N-Butane	0.7755	0.7746	0.2450	25.30	0.0156
I-Pentane	0.2334	0.2331	0.0860	9.34	0.0058
N-Pentane	0.1877	0.1875	0.0680	7.52	0.0047
Hexane Plus	0.6400	0.6392	0.2860	33.73	0.0212
Total	100.0000	99.8794	18.4770	1169.71	0.6697

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
 BTU/CU.FT IDEAL: 1172.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1175.9
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1155.4
 DRY BTU @ 15.025: 1199.4
 REAL SPECIFIC GRAVITY: 0.6714

CYLINDER #: 6218
 CYLINDER PRESSURE: 25 PSIG
 ANALYSIS DATE: 05/12/2021
 ANALYSIS TIME: 08:27:08 AM
 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: 05/17/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SHARP 2A; CSG	CASING	05/17/2021
Stn. No.:	API # 3004523815		35825-13670
Mtr. No.:			

Smpl Date: 05/04/2021
Test Date: 05/12/2021
Run No: HS2021090

Nitrogen: 0.1867
CO2: 0.6915
Methane: 86.4351
Ethane: 7.3955
Propane: 3.0443
I-Butane: 0.4103
N-Butane: 0.7755
I-Pentane: 0.2334
N-Pentane: 0.1877
Hexane+: 0.6400

BTU: 1175.9
GPM: 18.4770
SPG: 0.6714

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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 29071

CONDITIONS OF APPROVAL

Operator:	HILCORP ENERGY COMPANY	1111 Travis Street	Houston, TX77002	OGRID:	372171	Action Number:	29071	Action Type:	GAS ANALYSIS
OCD Reviewer	Condition								
mkuehling	None								