



Well Name: SAN JUAN 27-5 UNIT 103;
 API #: 3003920032
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220072
 Cust No: 35825-14395

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 27-5 UNIT 103; BHD
 County/State: RIO ARRIBA NM
 Location:
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: 3003920032

Source: BRADENHEAD
 Well Flowing:
 Pressure: 149 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 58 DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 05/11/2022
 Sample Time: 8.30 AM
 Sampled By: TOM STABLE
 Sampled by (CO): HILCORP

AREA 14 / RUN 1410

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1621	0.1588	0.0180	0.00	0.0016
CO2	1.1983	1.1741	0.2050	0.00	0.0182
Methane	82.8817	81.2060	14.0920	837.11	0.4591
Ethane	9.7587	9.5614	2.6180	172.70	0.1013
Propane	3.4599	3.3899	0.9560	87.05	0.0527
Iso-Butane	0.6600	0.6467	0.2170	21.46	0.0132
N-Butane	0.8721	0.8545	0.2760	28.45	0.0175
I-Pentane	0.3650	0.3576	0.1340	14.60	0.0091
N-Pentane	0.2438	0.2389	0.0890	9.77	0.0061
Hexane Plus	0.3984	0.3903	0.1780	21.00	0.0132
Total	100.0000	97.9782	18.7830	1192.15	0.6919

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
 BTU/CU.FT IDEAL: 1194.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1198.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1177.8
 DRY BTU @ 15.025: 1222.7
 REAL SPECIFIC GRAVITY: 0.6939

CYLINDER #: 4245
 CYLINDER PRESSURE: 151 PSIG
 ANALYSIS DATE: 05/17/2022
 ANALYSIS TIME: 10:21:19 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: 06/28/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 27-5 UNIT 103; BHD	BRADENHEAD	06/28/2022
Stn. No.:	3003920032	DK	35825-14395
Mtr. No.:			

Smpl Date: 05/11/2022
Test Date: 05/17/2022
Run No: HS20220072

Nitrogen: 0.1621
CO2: 1.1983
Methane: 82.8817
Ethane: 9.7587
Propane: 3.4599
I-Butane: 0.6600
N-Butane: 0.8721
I-Pentane: 0.3650
N-Pentane: 0.2438
Hexane+: 0.3984

BTU: 1198.7
GPM: 18.7830
SPG: 0.6939



Well Name: SAN JUAN 27-5 UNIT 103;
 API #: 3003920032
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20220073
 Cust No: 35825-14400

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 27-5 UNIT 103; CSG
 County/State: RIO ARRIBA NM
 Location:
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: 3003920032

Source: CASING
 Well Flowing:
 Pressure: 215 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 55 DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 05/11/2022
 Sample Time: 8.30 AM
 Sampled By: TOM STABLE
 Sampled by (CO): HILCORP

AREA 14 / RUN 1410

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1585	0.1553	0.0170	0.00	0.0015
CO2	1.1920	1.1681	0.2040	0.00	0.0181
Methane	82.3725	80.7178	14.0090	831.96	0.4563
Ethane	9.7485	9.5527	2.6150	172.52	0.1012
Propane	3.5037	3.4333	0.9680	88.16	0.0533
Iso-Butane	0.6868	0.6730	0.2250	22.33	0.0138
N-Butane	0.9337	0.9149	0.2950	30.46	0.0187
I-Pentane	0.4341	0.4254	0.1590	17.37	0.0108
N-Pentane	0.2978	0.2918	0.1080	11.94	0.0074
Hexane Plus	0.6724	0.6589	0.3010	35.44	0.0223
Total	100.0000	97.9912	18.9010	1210.18	0.7035

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034
 BTU/CU.FT IDEAL: 1213.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1217.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1195.9
 DRY BTU @ 15.025: 1241.5
 REAL SPECIFIC GRAVITY: 0.7056

CYLINDER #: 6093
 CYLINDER PRESSURE: 216 PSIG
 ANALYSIS DATE: 05/17/2022
 ANALYSIS TIME: 10:10:53 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: 06/28/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 27-5 UNIT 103; CSG	CASING	06/28/2022
Stn. No.:	3003920032	DK	35825-14400
Mtr. No.:			

Smpl Date: 05/11/2022
Test Date: 05/17/2022
Run No: HS20220073

Nitrogen: 0.1585
CO2: 1.1920
Methane: 82.3725
Ethane: 9.7485
Propane: 3.5037
I-Butane: 0.6868
N-Butane: 0.9337
I-Pentane: 0.4341
N-Pentane: 0.2978
Hexane+: 0.6724

BTU: 1217.1
GPM: 18.9010
SPG: 0.7056

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

COMMENTS

Action 124061

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 124061
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

COMMENTS

Created By	Comment	Comment Date
mkuehling	gas appears to be the same on production casing and bradenhead	7/11/2022

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

Created By	Condition	Condition Date
mkuehling	accepted for record	7/11/2022