



Well Name: SAN JUAN 28-6 UNIT 138;
 API #: API # 3003920044
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220019
 Cust No: 35825-11350

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 28-6 UNIT 138; BHD	Well Flowing:	
County/State:	SAN JUAN NM	Pressure:	30 PSIG
Location:	23-028N-006W	Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	74 DEG. F
Formation:	DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3003920044	Sample Method:	Purge & Fill
	86565-01	Sample Date:	04/26/2022
	AREA 13 / RUN 1304	Sample Time:	2.30 PM
Heat Trace:		Sampled By:	R.D
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3306	0.0509	0.0360	0.00	0.0032
CO2	1.1744	0.1808	0.2010	0.00	0.0178
Methane	94.0540	14.4797	15.9780	949.95	0.5210
Ethane	3.2959	0.5074	0.8830	58.33	0.0342
Propane	0.5768	0.0888	0.1590	14.51	0.0088
Iso-Butane	0.1578	0.0243	0.0520	5.13	0.0032
N-Butane	0.0870	0.0134	0.0270	2.84	0.0017
I-Pentane	0.0617	0.0095	0.0230	2.47	0.0015
N-Pentane	0.0234	0.0036	0.0080	0.94	0.0006
Hexane Plus	0.2384	0.0367	0.1070	12.57	0.0079
Total	100.0000	15.3951	17.4740	1046.73	0.5999

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023	CYLINDER #:	5003
BTU/CU.FT IDEAL:	1049.1	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1051.6	ANALYSIS DATE:	04/30/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1033.3	ANALYSIS TIME:	03:48:54 AM
DRY BTU @ 15.025:	1072.7	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.6011		

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: 05/04/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-6 UNIT 138; BHD	BRADENHEAD	05/04/2022
Stn. No.:	API # 3003920044	DK	35825-11350
Mtr. No.:	86565-01		

Smpl Date:	04/26/2022	05/23/2019
Test Date:	04/30/2022	05/31/2019
Run No:	HS20220019	HS190100
Nitrogen:	0.3306	0.1089
CO2:	1.1744	1.3778
Methane:	94.0540	94.0373
Ethane:	3.2959	3.2131
Propane:	0.5768	0.6249
I-Butane:	0.1578	0.1914
N-Butane:	0.0870	0.1093
I-Pentane:	0.0617	0.0804
N-Pentane:	0.0234	0.0334
Hexane+:	0.2384	0.2235
BTU:	1051.6	1053.3
GPM:	17.4740	17.4960
SPG:	0.6011	0.6031



Well Name: SAN JUAN 28-6 UNIT 138;
 API #: API # 3003920044
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20220020
 Cust No: 35825-11355

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 28-6 UNIT 138; CSG	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	120 PSIG
Location:	23-028N-006W	Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	74 DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3003920044	Sample Method:	Purge & Fill
	86565-01	Sample Date:	04/26/2022
	AREA 13 / RUN 1304	Sample Time:	2.28 PM
Heat Trace:	N	Sampled By:	R.D
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0938	1.0840	0.1210	0.00	0.0106
CO2	1.3133	1.3015	0.2250	0.00	0.0200
Methane	92.2747	91.4444	15.6750	931.97	0.5111
Ethane	3.8837	3.8488	1.0410	68.73	0.0403
Propane	0.7679	0.7610	0.2120	19.32	0.0117
Iso-Butane	0.2281	0.2260	0.0750	7.42	0.0046
N-Butane	0.1294	0.1282	0.0410	4.22	0.0026
I-Pentane	0.0899	0.0891	0.0330	3.60	0.0022
N-Pentane	0.0361	0.0358	0.0130	1.45	0.0009
Hexane Plus	0.1831	0.1815	0.0820	9.65	0.0061
Total	100.0000	99.1003	17.5180	1046.36	0.6100

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023
BTU/CU.FT IDEAL:	1048.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1051.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1032.9
DRY BTU @ 15.025:	1072.3
REAL SPECIFIC GRAVITY:	0.6112

CYLINDER #:	6160
CYLINDER PRESSURE:	114 PSIG
ANALYSIS DATE:	04/30/2022
ANALYSIS TIME:	03:30:48 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: 05/04/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-6 UNIT 138; CSG	CASING	05/04/2022
Stn. No.:	API # 3003920044	DK	35825-11355
Mtr. No.:	86565-01		

Smpl Date:	04/26/2022	05/23/2019
Test Date:	04/30/2022	05/31/2019
Run No:	HS20220020	HS190101
Nitrogen:	1.0938	12.4415
CO2:	1.3133	1.2098
Methane:	92.2747	82.2745
Ethane:	3.8837	2.7762
Propane:	0.7679	0.5396
I-Butane:	0.2281	0.1741
N-Butane:	0.1294	0.0964
I-Pentane:	0.0899	0.0741
N-Pentane:	0.0361	0.0305
Hexane+:	0.1831	0.3833
BTU:	1051.2	930.9
GPM:	17.5180	16.7390
SPG:	0.6112	0.6532



Well Name: SAN JUAN 28-6 UNIT 138;
 API #: API # 3003920044
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20220021
 Cust No: 35825-11360

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 28-6 UNIT 138; TBG	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	120 PSIG
Location:	23-028N-006W	Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	72 DEG. F
Formation:	DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3003920044	Sample Method:	Purge & Fill
	86565-01	Sample Date:	04/26/2022
	AREA 13 / RUN 1304	Sample Time:	2.16 PM
Heat Trace:	N	Sampled By:	R.D
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5940	0.5882	0.0650	0.00	0.0057
CO2	1.3212	1.3082	0.2260	0.00	0.0201
Methane	92.7534	91.8432	15.7570	936.81	0.5138
Ethane	3.9267	3.8882	1.0520	69.49	0.0408
Propane	0.7743	0.7667	0.2140	19.48	0.0118
Iso-Butane	0.2301	0.2278	0.0750	7.48	0.0046
N-Butane	0.1304	0.1291	0.0410	4.25	0.0026
I-Pentane	0.0913	0.0904	0.0330	3.65	0.0023
N-Pentane	0.0354	0.0351	0.0130	1.42	0.0009
Hexane Plus	0.1432	0.1418	0.0640	7.55	0.0047
Total	100.0000	99.0187	17.5400	1050.14	0.6073

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023
BTU/CU.FT IDEAL:	1052.6
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1055.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1036.6
DRY BTU @ 15.025:	1076.1
REAL SPECIFIC GRAVITY:	0.6084

CYLINDER #:	7040
CYLINDER PRESSURE:	117 PSIG
ANALYSIS DATE:	04/30/2022
ANALYSIS TIME:	03:39:13 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: 05/04/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-6 UNIT 138; TBG	TUBING	05/04/2022
Stn. No.:	API # 3003920044	DK	35825-11360
Mtr. No.:	86565-01		

Smpl Date:	04/26/2022	05/23/2019
Test Date:	04/30/2022	05/31/2019
Run No:	HS20220021	HS190102
Nitrogen:	0.5940	0.1063
CO2:	1.3212	1.3678
Methane:	92.7534	94.0967
Ethane:	3.9267	3.2077
Propane:	0.7743	0.6160
I-Butane:	0.2301	0.1875
N-Butane:	0.1304	0.1073
I-Pentane:	0.0913	0.0817
N-Pentane:	0.0354	0.0343
Hexane+:	0.1432	0.1947
BTU:	1055.0	1052.0
GPM:	17.5400	17.4850
SPG:	0.6084	0.6021

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
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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 110327

COMMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 110327
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

COMMENTS

Created By	Comment	Comment Date
mkuehling	For record only	6/13/2022

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

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	Action Number: 110327
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	similar gas all strings	6/13/2022