



Well Name: SAN JUAN 30-5 UNIT 51;
 API #: API # 3003922447
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220022
 Cust No: 35825-11065

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 30-5 UNIT 51; BHD
 County/State: RIO ARRIBA NM
 Location: 21-030N-005W
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: API # 3003922447

Source: BRADENHEAD
 Well Flowing:
 Pressure: 34 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 73 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/22/2022
 Sample Time: 1.38 PM
 Sampled By: CALEN WILKINS
 Sampled by (CO): HILCORP

AREA 12 / RUN 1204

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.0658	1.0149	0.1170	0.00	0.0103
CO2	0.0336	0.0320	0.0060	0.00	0.0005
Methane	93.3429	88.8863	15.8550	942.76	0.5170
Ethane	4.9836	4.7457	1.3350	88.19	0.0517
Propane	0.3294	0.3137	0.0910	8.29	0.0050
Iso-Butane	0.1105	0.1052	0.0360	3.59	0.0022
N-Butane	0.0356	0.0339	0.0110	1.16	0.0007
I-Pentane	0.0349	0.0332	0.0130	1.40	0.0009
N-Pentane	0.0045	0.0043	0.0020	0.18	0.0001
Hexane Plus	0.0592	0.0564	0.0260	3.12	0.0020
Total	100.0000	95.2256	17.4920	1048.70	0.5905

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
 BTU/CU.FT IDEAL: 1051.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1053.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1035.1
 DRY BTU @ 15.025: 1074.5
 REAL SPECIFIC GRAVITY: 0.5915

CYLINDER #: 5018
 CYLINDER PRESSURE: 12 PSIG
 ANALYSIS DATE: 04/30/2022
 ANALYSIS TIME: 01:20:21 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 30-5 UNIT 51; BHD	BRADENHEAD	05/04/2022
Stn. No.:	API # 3003922447	DK	35825-11065
Mtr. No.:			

Smpl Date:	04/22/2022	05/07/2019
Test Date:	04/30/2022	05/10/2019
Run No:	HS20220022	HS190038
Nitrogen:	1.0658	1.0558
CO2:	0.0336	0.0103
Methane:	93.3429	93.4281
Ethane:	4.9836	4.8894
Propane:	0.3294	0.3236
I-Butane:	0.1105	0.1194
N-Butane:	0.0356	0.0448
I-Pentane:	0.0349	0.0342
N-Pentane:	0.0045	0.0054
Hexane+:	0.0592	0.0890
BTU:	1053.4	1054.7
GPM:	17.4920	17.4950
SPG:	0.5915	0.5918



Well Name: SAN JUAN 30-5 UNIT 51;
 API #: API # 3003922447
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20220023
 Cust No: 35825-11070

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 30-5 UNIT 51; CSG
 County/State: RIO ARRIBA NM
 Location: 21-030N-005W
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: API # 3003922447

Source: CASING
 Well Flowing: Y
 Pressure: 200 PSIG
 Flow Temp: 73 DEG. F
 Ambient Temp: 73 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/22/2022
 Sample Time: 1.20 PM
 Sampled By: CALEN WILKINS
 Sampled by (CO): HILCORP

Heat Trace: AREA 12 / RUN 1204
 N
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0826	0.0817	0.0090	0.00	0.0008
CO2	2.6963	2.6661	0.4610	0.00	0.0410
Methane	96.9046	95.8201	16.4590	978.74	0.5368
Ethane	0.2799	0.2768	0.0750	4.95	0.0029
Propane	0.0196	0.0194	0.0050	0.49	0.0003
Iso-Butane	0.0092	0.0091	0.0030	0.30	0.0002
N-Butane	0.0046	0.0045	0.0010	0.15	0.0001
I-Pentane	0.0032	0.0032	0.0010	0.13	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	98.8809	17.0140	984.76	0.5821

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 987.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 989.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 971.9
 DRY BTU @ 15.025: 1008.9
 REAL SPECIFIC GRAVITY: 0.5831

CYLINDER #: 4190
 CYLINDER PRESSURE: 44 PSIG
 ANALYSIS DATE: 04/30/2022
 ANALYSIS TIME: 12:51:26 AM
 ANALYSIS RUN BY: KERRA GONZALEZ

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 30-5 UNIT 51; CSG	CASING	05/04/2022
Stn. No.:	API # 3003922447	DK	35825-11070
Mtr. No.:			

Smpl Date:	04/22/2022	05/07/2019
Test Date:	04/30/2022	05/13/2019
Run No:	HS20220023	HS190039
Nitrogen:	0.0826	0.1601
CO2:	2.6963	2.4238
Methane:	96.9046	97.0833
Ethane:	0.2799	0.2814
Propane:	0.0196	0.0198
I-Butane:	0.0092	0.0102
N-Butane:	0.0046	0.0052
I-Pentane:	0.0032	0.0035
N-Pentane:	0.0000	0.0000
Hexane+:	0.0000	0.0127
BTU:	989.1	991.7
GPM:	17.0140	17.0130
SPG:	0.5831	0.5812



Well Name: SAN JUAN 30-5 UNIT 51;
 API #: API # 3003922447
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20220024
 Cust No: 35825-11075

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 30-5 UNIT 51; TBG	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	200 PSIG
Location:	21-030N-005W	Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	73 DEG. F
Formation:	DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3003922447	Sample Method:	Purge & Fill
		Sample Date:	04/22/2022
		Sample Time:	1.30 PM
		Sampled By:	CALEN WILKINS
		Sampled by (CO):	HILCORP

Heat Trace: N

Remarks:

AREA 12 / RUN 1204

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0880	0.0869	0.0100	0.00	0.0009
CO2	2.7054	2.6726	0.4630	0.00	0.0411
Methane	96.8906	95.7164	16.4560	978.60	0.5367
Ethane	0.2801	0.2767	0.0750	4.96	0.0029
Propane	0.0195	0.0193	0.0050	0.49	0.0003
Iso-Butane	0.0091	0.0090	0.0030	0.30	0.0002
N-Butane	0.0039	0.0039	0.0010	0.13	0.0001
I-Pentane	0.0034	0.0034	0.0010	0.14	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	98.7882	17.0140	984.60	0.5822

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	4107
BTU/CU.FT IDEAL:	986.9	CYLINDER PRESSURE:	50 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	989.0	ANALYSIS DATE:	04/30/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	971.8	ANALYSIS TIME:	01:02:19 PM
DRY BTU @ 15.025:	1008.8	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.5832		

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 30-5 UNIT 51; TBG	TUBING	05/04/2022
Stn. No.:	API # 3003922447	DK	35825-11075
Mtr. No.:			

Smpl Date:	04/22/2022	05/07/2019
Test Date:	04/30/2022	05/13/2019
Run No:	HS20220024	HS190040
Nitrogen:	0.0880	0.1053
CO2:	2.7054	2.7665
Methane:	96.8906	96.8044
Ethane:	0.2801	0.2801
Propane:	0.0195	0.0182
I-Butane:	0.0091	0.0103
N-Butane:	0.0039	0.0043
I-Pentane:	0.0034	0.0031
N-Pentane:	0.0000	0.0000
Hexane+:	0.0000	0.0078
BTU:	989.0	988.5
GPM:	17.0140	17.0150
SPG:	0.5832	0.5841

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District III
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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 136899

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 136899
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	9/20/2022