



Well Name: SAN JUAN 28-5 UNIT 96E;
 API #: 3003923864
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220152
 Cust No: 35825-14645

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 28-5 UNIT 96E; BHD	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	1 PSIG
Location:		Flow Temp:	73 DEG. F
Lease/PA/CA:		Ambient Temp:	73 DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3003923864	Sample Method:	Purge & Fill
	95-594-01	Sample Date:	08/24/2022
	AREA 13 / RUN 1308	Sample Time:	10.25 AM
Heat Trace:	N	Sampled By:	ROBIN DANELS
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	98.4099	19.6132	10.8280	0.00	0.9518
CO2	0.1826	0.0364	0.0310	0.00	0.0028
Methane	0.1903	0.0379	0.0320	1.92	0.0011
Ethane	0.0100	0.0020	0.0030	0.18	0.0001
Propane	0.0030	0.0006	0.0010	0.08	0.0000
Iso-Butane	0.0000	0.0000	0.0000	0.00	0.0000
N-Butane	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	1.2042	0.2400	0.5370	63.47	0.0399
Total	100.0000	19.9301	11.4320	65.65	0.9957

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0004	CYLINDER #:	4034
BTU/CU.FT IDEAL:	65.8	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	65.8	ANALYSIS DATE:	08/29/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	64.7	ANALYSIS TIME:	03:04:44 AM
DRY BTU @ 15.025:	67.1	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.9957		

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: 09/01/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-5 UNIT 96E; BHD	BRADENHEAD	09/01/2022
Stn. No.:	3003923864	DK	35825-14645
Mtr. No.:	95-594-01		

Smpl Date: 08/24/2022
Test Date: 08/29/2022
Run No: HS20220152

Nitrogen: 98.4099
CO2: 0.1826
Methane: 0.1903
Ethane: 0.0100
Propane: 0.0030
I-Butane: 0.0000
N-Butane: 0.0000
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 1.2042

BTU: 65.8
GPM: 11.4320
SPG: 0.9957



Well Name: SAN JUAN 28-5 UNIT 96E;
 API #: 3003923864
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS20220154
 Cust No: 35825-14655

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 28-5 UNIT 96E; INTRM	Well Flowing:	N
County/State:	RIO ARRIB NM	Pressure:	223 PSIG
Location:		Flow Temp:	75 DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:	DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	3003923864	Sample Method:	Purge & Fill
	95-564-01	Sample Date:	08/24/2022
	AREA 13 / RUN 1308	Sample Time:	10.50 AM
Heat Trace:	N	Sampled By:	ROBIN DANELS
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.8916	0.8975	0.0980	0.00	0.0086
CO2	0.0043	0.0043	0.0010	0.00	0.0001
Methane	84.8238	85.3825	14.4210	856.72	0.4698
Ethane	7.1912	7.2386	1.9290	127.26	0.0747
Propane	4.7073	4.7383	1.3010	118.44	0.0717
Iso-Butane	0.4805	0.4837	0.1580	15.63	0.0096
N-Butane	1.0768	1.0839	0.3400	35.13	0.0216
I-Pentane	0.2549	0.2566	0.0930	10.20	0.0063
N-Pentane	0.2351	0.2366	0.0850	9.42	0.0059
Hexane Plus	0.3345	0.3367	0.1500	17.63	0.0111
Total	100.0000	100.6587	18.5760	1190.43	0.6794

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	6019
BTU/CU.FT IDEAL:	1193.2	CYLINDER PRESSURE:	202 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1196.9	ANALYSIS DATE:	08/29/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1176.1	ANALYSIS TIME:	02:35:11 AM
DRY BTU @ 15.025:	1220.9	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.6812		

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: 09/01/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-5 UNIT 96E; INTRM	INTERMEDIATE CASING	09/01/2022
Stn. No.:	3003923864	DK	35825-14655
Mtr. No.:	95-564-01		

Smpl Date: 08/24/2022
Test Date: 08/29/2022
Run No: HS20220154

Nitrogen:	0.8916
CO2:	0.0043
Methane:	84.8238
Ethane:	7.1912
Propane:	4.7073
I-Butane:	0.4805
N-Butane:	1.0768
I-Pentane:	0.2549
N-Pentane:	0.2351
Hexane+:	0.3345
BTU:	1196.9
GPM:	18.5760
SPG:	0.6812



Well Name: SAN JUAN 28-5 UNIT 96E;
 API #: 3003923864
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20220153
 Cust No: 35825-14650

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 28-5 UNIT 96E; CSG
 County/State: RIO ARRIBA NM
 Location:
 Lease/PA/CA:
 Formation: DK
 Cust. Stn. No.: 3003923864
 95-594-01

Source: CASING
 Well Flowing: N
 Pressure: 58 PSIG
 Flow Temp: 25 DEG. F
 Ambient Temp: 25 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/24/2022
 Sample Time: 11.00 AM
 Sampled By: ROBIN DANELS
 Sampled by (CO): HILCORP

Heat Trace: AREA 13 / RUN 1308

Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1331	0.1330	0.0150	0.00	0.0013
CO2	1.5868	1.5858	0.2710	0.00	0.0241
Methane	94.0630	94.0057	15.9790	950.04	0.5210
Ethane	2.9941	2.9923	0.8020	52.99	0.0311
Propane	0.5267	0.5264	0.1450	13.25	0.0080
Iso-Butane	0.1660	0.1659	0.0540	5.40	0.0033
N-Butane	0.1227	0.1226	0.0390	4.00	0.0025
I-Pentane	0.0869	0.0868	0.0320	3.48	0.0022
N-Pentane	0.0428	0.0428	0.0160	1.72	0.0011
Hexane Plus	0.2779	0.2777	0.1240	14.65	0.0092
Total	100.0000	99.9390	17.4770	1045.52	0.6037

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
 BTU/CU.FT IDEAL: 1047.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1050.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1032.1
 DRY BTU @ 15.025: 1071.4
 REAL SPECIFIC GRAVITY: 0.6049

CYLINDER #: 4187
 CYLINDER PRESSURE: 54 PSIG
 ANALYSIS DATE: 08/29/2022
 ANALYSIS TIME: 02:43:24 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: 09/01/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-5 UNIT 96E; CSG	CASING	09/01/2022
Stn. No.:	3003923864	DK	35825-14650
Mtr. No.:	95-594-01		

Smpl Date: 08/24/2022
Test Date: 08/29/2022
Run No: HS20220153

Nitrogen: 0.1331
CO2: 1.5868
Methane: 94.0630
Ethane: 2.9941
Propane: 0.5267
I-Butane: 0.1660
N-Butane: 0.1227
I-Pentane: 0.0869
N-Pentane: 0.0428
Hexane+: 0.2779

BTU: 1050.4
GPM: 17.4770
SPG: 0.6049



Well Name: SAN JUAN 28-5 UNIT 96E;
 API #: 3003923864
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20220155
 Cust No: 35825-14660

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 28-5 UNIT 96E; TBG	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	58 PSIG
Location:		Flow Temp:	76 DEG. F
Lease/PA/CA:		Ambient Temp:	76 DEG. F
Formation:	DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	3003923864	Sample Method:	Purge & Fill
	95-594-01	Sample Date:	08/24/2022
	AREA 13 / RUN 1308	Sample Time:	11.25 AM
Heat Trace:	N	Sampled By:	ROBIN DANELS
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1380	0.1378	0.0150	0.00	0.0013
CO2	1.5857	1.5837	0.2710	0.00	0.0241
Methane	94.0639	93.9468	15.9790	950.05	0.5210
Ethane	2.9979	2.9942	0.8030	53.05	0.0311
Propane	0.5261	0.5254	0.1450	13.24	0.0080
Iso-Butane	0.1623	0.1621	0.0530	5.28	0.0033
N-Butane	0.1188	0.1187	0.0380	3.88	0.0024
I-Pentane	0.0867	0.0866	0.0320	3.47	0.0022
N-Pentane	0.0448	0.0447	0.0160	1.80	0.0011
Hexane Plus	0.2758	0.2755	0.1230	14.54	0.0091
Total	100.0000	99.8755	17.4750	1045.29	0.6036

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023
BTU/CU.FT IDEAL:	1047.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1050.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1031.8
DRY BTU @ 15.025:	1071.1
REAL SPECIFIC GRAVITY:	0.6048

CYLINDER #:	7004
CYLINDER PRESSURE:	51 PSIG
ANALYSIS DATE:	08/29/2022
ANALYSIS TIME:	02:52:02 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: 09/01/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 28-5 UNIT 96E; TBG	TUBING	09/01/2022
Stn. No.:	3003923864	DK	35825-14660
Mtr. No.:	95-594-01		

Smpl Date: 08/24/2022
Test Date: 08/29/2022
Run No: HS20220155

Nitrogen: 0.1380
CO2: 1.5857
Methane: 94.0639
Ethane: 2.9979
Propane: 0.5261
I-Butane: 0.1623
N-Butane: 0.1188
I-Pentane: 0.0867
N-Pentane: 0.0448
Hexane+: 0.2758

BTU: 1050.1
GPM: 17.4750
SPG: 0.6048

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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 140521

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 140521
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	for record only - intermediate had 223 psi at time of sampling	9/13/2022