



Well Name: SAN JUAN 32-8 UNIT 33;
 API #: 3004510943
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230113
 Cust No: 35825-13225

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 32-8 UNIT 33; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	26 PSIG
Location:		Flow Temp:	102 DEG. F
Lease/PA/CA:		Ambient Temp:	80 DEG. F
Formation:	MV	Flow Rate:	3 MCF/D
Cust. Stn. No.:	3004510943	Sample Method:	Purge & Fill
	72--490-01	Sample Date:	06/28/2023
	AREA 5 / RUN 0500	Sample Time:	11.45 AM
Heat Trace:	N	Sampled By:	
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0667	0.0658	0.0070	0.00	0.0006
CO2	2.0001	1.9721	0.3420	0.00	0.0304
Methane	96.0715	94.7280	16.3170	970.32	0.5321
Ethane	1.5759	1.5539	0.4220	27.89	0.0164
Propane	0.1768	0.1743	0.0490	4.45	0.0027
Iso-Butane	0.0413	0.0407	0.0140	1.34	0.0008
N-Butane	0.0175	0.0173	0.0060	0.57	0.0004
I-Pentane	0.0112	0.0110	0.0040	0.45	0.0003
N-Pentane	0.0039	0.0038	0.0010	0.16	0.0001
Hexane Plus	0.0351	0.0346	0.0160	1.85	0.0012
Total	100.0000	98.6015	17.1780	1007.03	0.5849

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	2189
BTU/CU.FT IDEAL:	1009.4	CYLINDER PRESSURE:	20 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1011.5	ANALYSIS DATE:	07/11/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	993.9	ANALYSIS TIME:	04:25:33 PM
DRY BTU @ 15.025:	1031.8	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.5859		

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: 07/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 33; BHD	BRADENHEAD	07/17/2023
Stn. No.:	3004510943	MV	35825-13225
Mtr. No.:	72--490-01		

Smpl Date:	06/28/2023	08/26/2020
Test Date:	07/11/2023	09/04/2020
Run No:	HS20230113	HS200274
Nitrogen:	0.0667	0.2904
CO2:	2.0001	2.2925
Methane:	96.0715	95.5961
Ethane:	1.5759	1.5237
Propane:	0.1768	0.1985
I-Butane:	0.0413	0.0473
N-Butane:	0.0175	0.0203
I-Pentane:	0.0112	0.0102
N-Pentane:	0.0039	0.0037
Hexane+:	0.0351	0.0173
BTU:	1011.5	1005.6
GPM:	17.1780	17.1580
SPG:	0.5859	0.5893



Well Name: SAN JUAN 32-8 UNIT 33;
 API #: 3004510943
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230114
 Cust No: 35825-13230

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 32-8 UNIT 33; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	35 PSIG
Location:		Flow Temp:	102 DEG. F
Lease/PA/CA:		Ambient Temp:	79 DEG. F
Formation:	MV	Flow Rate:	3 MCF/D
Cust. Stn. No.:	3004510943	Sample Method:	Purge & Fill
	72-490-01	Sample Date:	06/28/2023
	AREA 5 / RUN 0500	Sample Time:	11.30 AM
Heat Trace:	N	Sampled By:	
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0654	0.0648	0.0070	0.00	0.0006
CO2	1.9942	1.9751	0.3410	0.00	0.0303
Methane	96.0711	95.1505	16.3170	970.32	0.5321
Ethane	1.5750	1.5599	0.4220	27.87	0.0164
Propane	0.1768	0.1751	0.0490	4.45	0.0027
Iso-Butane	0.0415	0.0411	0.0140	1.35	0.0008
N-Butane	0.0184	0.0182	0.0060	0.60	0.0004
I-Pentane	0.0115	0.0114	0.0040	0.46	0.0003
N-Pentane	0.0037	0.0037	0.0010	0.15	0.0001
Hexane Plus	0.0424	0.0420	0.0190	2.23	0.0014
Total	100.0000	99.0418	17.1800	1007.43	0.5851

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	1839
BTU/CU.FT IDEAL:	1009.8	CYLINDER PRESSURE:	28 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1011.9	ANALYSIS DATE:	07/11/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	994.3	ANALYSIS TIME:	04:32:44 PM
DRY BTU @ 15.025:	1032.2	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.5861		

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: 07/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 33; CSG	CASING	07/17/2023
Stn. No.:	3004510943	MV	35825-13230
Mtr. No.:	72-490-01		

Smpl Date:	06/28/2023	08/26/2020
Test Date:	07/11/2023	09/04/2020
Run No:	HS20230114	HS200275
Nitrogen:	0.0654	0.0934
CO2:	1.9942	2.0063
Methane:	96.0711	96.0884
Ethane:	1.5750	1.5420
Propane:	0.1768	0.1810
I-Butane:	0.0415	0.0413
N-Butane:	0.0184	0.0176
I-Pentane:	0.0115	0.0103
N-Pentane:	0.0037	0.0035
Hexane+:	0.0424	0.0162
BTU:	1011.9	1010.1
GPM:	17.1800	17.1680
SPG:	0.5861	0.5854

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

CONDITIONS

Action 241967

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 241967
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas	9/22/2023