



Well Name: SAN JUAN 29-6 UNIT 8M;
 API #: 3003929751
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240003
 Cust No: 35825-14765

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 29-6 UNIT 8M; BHD	Well Flowing:	
County/State:	RIO ARRIBA NM	Pressure:	174 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	NM-012698	Ambient Temp:	DEG. F
Formation:	MESA VERDE	Flow Rate:	MCF/D
Cust. Stn. No.:	3003929751	Sample Method:	Purge & Fill
	83001	Sample Date:	01/30/2024
	WIH83001	Sample Time:	12.14 PM
	AREA 12 / RUN 1205	Sampled By:	KYLE SMITH
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6842	0.6721	0.0750	0.00	0.0066
CO2	0.0000	0.0000	0.0000	0.00	0.0000
Methane	86.6551	85.1257	14.7310	875.22	0.4800
Ethane	6.6919	6.5738	1.7950	118.43	0.0695
Propane	3.8322	3.7646	1.0590	96.42	0.0583
Iso-Butane	0.7856	0.7717	0.2580	25.55	0.0158
N-Butane	0.7453	0.7321	0.2360	24.31	0.0150
I-Pentane	0.2112	0.2075	0.0770	8.45	0.0053
N-Pentane	0.1289	0.1266	0.0470	5.17	0.0032
Hexane Plus	0.2656	0.2609	0.1190	14.00	0.0088
Total	100.0000	98.2350	18.3970	1167.54	0.6624

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.003	CYLINDER #:	4232
BTU/CU.FT IDEAL:	1170.2	CYLINDER PRESSURE:	173 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1173.6	ANALYSIS DATE:	01/31/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1153.2	ANALYSIS TIME:	10:03:19 AM
DRY BTU @ 15.025:	1197.1	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6641		

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: 01/31/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 8M; BHD	BRADENHEAD	01/31/2024
Stn. No.:	3003929751	MESA VERDE	35825-14765
Mtr. No.:	83001		

Smpl Date:	01/30/2024	05/04/2023
Test Date:	01/31/2024	05/10/2023
Run No:	HS20240003	HS20230036
Nitrogen:	0.6842	0.6521
CO2:	0.0000	0.0051
Methane:	86.6551	81.3196
Ethane:	6.6919	7.9386
Propane:	3.8322	5.8704
I-Butane:	0.7856	1.3609
N-Butane:	0.7453	1.3361
I-Pentane:	0.2112	0.4339
N-Pentane:	0.1289	0.3047
Hexane+:	0.2656	0.7786
BTU:	1173.6	1275.6
GPM:	18.3970	19.1480
SPG:	0.6641	0.7293



Well Name: SAN JUAN 29-6 UNIT 8M;
 API #: 3003929751
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS20240005
 Cust No: 35825-12325

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 29-6 UNIT 8M; INT	Well Flowing:	
County/State:	RIO ARRIBA NM	Pressure:	501 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	NM-012698	Ambient Temp:	DEG. F
Formation:	MESA VERDE	Flow Rate:	MCF/D
Cust. Stn. No.:	3003929751	Sample Method:	Purge & Fill
	WIH83001	Sample Date:	01/30/2024
		Sample Time:	1.00 PM
	AREA 12 / RUN 1205	Sampled By:	KYLE SMITH
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6738	0.6619	0.0740	0.00	0.0065
CO2	0.0000	0.0000	0.0000	0.00	0.0000
Methane	86.7056	85.1799	14.7380	875.73	0.4803
Ethane	6.7095	6.5914	1.7990	118.74	0.0697
Propane	3.8642	3.7962	1.0670	97.23	0.0588
Iso-Butane	0.7941	0.7801	0.2610	25.82	0.0159
N-Butane	0.7453	0.7322	0.2360	24.31	0.0150
I-Pentane	0.2056	0.2020	0.0750	8.23	0.0051
N-Pentane	0.1223	0.1201	0.0440	4.90	0.0030
Hexane Plus	0.1796	0.1764	0.0800	9.47	0.0059
Total	100.0000	98.2402	18.3740	1164.42	0.6603

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0029	CYLINDER #:	5012
BTU/CU.FT IDEAL:	1167.1	CYLINDER PRESSURE:	462 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1170.5	ANALYSIS DATE:	01/31/2024
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1150.1	ANALYSIS TIME:	10:03:00 AM
DRY BTU @ 15.025:	1193.9	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6619		

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: 01/31/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 8M; INT	INTERMEDIATE CASING	01/31/2024
Stn. No.:	3003929751	MESA VERDE	35825-12325
Mtr. No.:	WIH83001		

Smpl Date:	01/30/2024	05/04/2023	07/09/2020
Test Date:	01/31/2024	05/10/2023	07/14/2020
Run No:	HS20240005	HS20230039	HS200083
Nitrogen:	0.6738	0.5101	0.5911
CO2:	0.0000	0.0022	0.0027
Methane:	86.7056	68.6049	85.1792
Ethane:	6.7095	11.6468	7.0871
Propane:	3.8642	11.7007	4.2037
I-Butane:	0.7941	2.9025	0.8959
N-Butane:	0.7453	2.8432	0.8623
I-Pentane:	0.2056	0.7806	0.2843
N-Pentane:	0.1223	0.4773	0.1923
Hexane+:	0.1796	0.5317	0.7014
BTU:	1170.5	1469.8	1211.5
GPM:	18.3740	20.6660	18.6660
SPG:	0.6619	0.8523	0.6874



Well Name: SAN JUAN 29-6 UNIT 8M;
 API #: 3003929751
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20240004
 Cust No: 35825-12320

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 29-6 UNIT 8M;CSG	Well Flowing:	
County/State:	RIO ARRIBA NM	Pressure:	87 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	NM-012698	Ambient Temp:	DEG. F
Formation:	MESA VERDE	Flow Rate:	MCF/D
Cust. Stn. No.:	3003929751	Sample Method:	Purge & Fill
	83001	Sample Date:	01/30/2024
	WIH83001	Sample Time:	12.30 PM
	AREA 12 / RUN 1205	Sampled By:	KYLE SMITH
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6828	0.6696	0.0750	0.00	0.0066
CO2	0.0023	0.0023	0.0000	0.00	0.0000
Methane	86.8233	85.1392	14.7580	876.92	0.4809
Ethane	6.6886	6.5589	1.7940	118.37	0.0694
Propane	3.8031	3.7293	1.0510	95.69	0.0579
Iso-Butane	0.7699	0.7550	0.2530	25.04	0.0155
N-Butane	0.7239	0.7099	0.2290	23.62	0.0145
I-Pentane	0.1974	0.1936	0.0720	7.90	0.0049
N-Pentane	0.1182	0.1159	0.0430	4.74	0.0029
Hexane Plus	0.1905	0.1868	0.0850	10.04	0.0063
Total	100.0000	98.0605	18.3600	1162.30	0.6590

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0029
BTU/CU.FT IDEAL:	1165.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1168.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1148.1
DRY BTU @ 15.025:	1191.8
REAL SPECIFIC GRAVITY:	0.6607

CYLINDER #:	11
CYLINDER PRESSURE:	89 PSIG
ANALYSIS DATE:	01/31/2024
ANALYSIS TIME:	09:55:08 AM
ANALYSIS RUN BY:	SARAH BALLARD

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: 01/31/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 29-6 UNIT 8M;CSG	CASING	01/31/2024
Stn. No.:	3003929751	MESA VERDE	35825-12320
Mtr. No.:	83001		

Smpl Date:	01/30/2024	05/04/2023	07/09/2020
Test Date:	01/31/2024	05/10/2023	07/14/2020
Run No:	HS20240004	HS20230037	HS200082
Nitrogen:	0.6828	0.6772	0.6472
CO2:	0.0023	0.0162	0.0055
Methane:	86.8233	84.7106	86.2449
Ethane:	6.6886	7.1920	6.5682
Propane:	3.8031	4.6145	3.8540
I-Butane:	0.7699	1.0152	0.8345
N-Butane:	0.7239	0.9679	0.8037
I-Pentane:	0.1974	0.2810	0.2854
N-Pentane:	0.1182	0.1780	0.1930
Hexane+:	0.1905	0.3474	0.5636
BTU:	1168.4	1206.9	1192.9
GPM:	18.3600	18.6470	18.5170
SPG:	0.6607	0.6856	0.6762

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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 310334

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 310334
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas all strings	2/1/2024