



Well Name: SAN JUAN 30-6 UNIT 41;
 API #: 3003918201
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230118
 Cust No: 35825-12830

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 30-6 UNIT 41; BHD	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	3003918201	Sample Method:	Purge & Fill
	7195001	Sample Date:	07/05/2023
	AREA 12 / RUN 1201	Sample Time:	4.15 PM
Heat Trace:		Sampled By:	RYLEY HARRISON
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	47.0986	16.1143	5.1860	0.00	0.4555
CO2	0.0395	0.0135	0.0070	0.00	0.0006
Methane	51.2403	17.5314	8.6940	517.53	0.2838
Ethane	1.2521	0.4284	0.3350	22.16	0.0130
Propane	0.2169	0.0742	0.0600	5.46	0.0033
Iso-Butane	0.0386	0.0132	0.0130	1.26	0.0008
N-Butane	0.0319	0.0109	0.0100	1.04	0.0006
I-Pentane	0.0120	0.0041	0.0040	0.48	0.0003
N-Pentane	0.0035	0.0012	0.0010	0.14	0.0001
Hexane Plus	0.0666	0.0228	0.0300	3.51	0.0022
Total	100.0000	34.2140	14.3400	551.57	0.7603

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0011	CYLINDER #:	031
BTU/CU.FT IDEAL:	552.8	CYLINDER PRESSURE:	1 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	553.5	ANALYSIS DATE:	07/12/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	543.9	ANALYSIS TIME:	09:40:28 AM
DRY BTU @ 15.025:	564.6	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.7608		

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 30-6 UNIT 41; BHD	BRADENHEAD	07/17/2023
Stn. No.:	3003918201	MV	35825-12830
Mtr. No.:	7195001		

Smpl Date:	07/05/2023	08/10/2020
Test Date:	07/12/2023	08/14/2020
Run No:	HS20230118	HS200186
Nitrogen:	47.0986	0.1022
CO2:	0.0395	0.3489
Methane:	51.2403	95.5673
Ethane:	1.2521	3.1075
Propane:	0.2169	0.5951
I-Butane:	0.0386	0.0974
N-Butane:	0.0319	0.0789
I-Pentane:	0.0120	0.0322
N-Pentane:	0.0035	0.0135
Hexane+:	0.0666	0.0570
BTU:	553.5	1050.5
GPM:	14.3400	17.4000
SPG:	0.7608	0.5846



Well Name: SAN JUAN 30-6 UNIT 41;
 API #: 3003918201
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230119
 Cust No: 35825-12835

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 30-6 UNIT 41; CSG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	3003918201	Sample Method:	
	7195001	Sample Date:	07/05/2023
		Sample Time:	4.16 PM
	AREA 12 / RUN 1201	Sampled By:	RYLEY HARRISON
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0986	0.0983	0.0110	0.00	0.0010
CO2	1.6305	1.6252	0.2790	0.00	0.0248
Methane	92.7135	92.4100	15.7510	936.41	0.5135
Ethane	4.0255	4.0123	1.0790	71.24	0.0418
Propane	0.9372	0.9341	0.2590	23.58	0.0143
Iso-Butane	0.1252	0.1248	0.0410	4.07	0.0025
N-Butane	0.1728	0.1722	0.0550	5.64	0.0035
I-Pentane	0.0587	0.0585	0.0220	2.35	0.0015
N-Pentane	0.0396	0.0395	0.0140	1.59	0.0010
Hexane Plus	0.1984	0.1978	0.0890	10.46	0.0066
Total	100.0000	99.6727	17.6000	1055.33	0.6103

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0024	CYLINDER #:	048
BTU/CU.FT IDEAL:	1057.8	CYLINDER PRESSURE:	34 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1060.3	ANALYSIS DATE:	07/12/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1041.9	ANALYSIS TIME:	09:31:21 AM
DRY BTU @ 15.025:	1081.5	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.6115		

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 30-6 UNIT 41; CSG	CASING	07/17/2023
Stn. No.:	3003918201	MV	35825-12835
Mtr. No.:	7195001		

Smpl Date:	07/05/2023	08/10/2020
Test Date:	07/12/2023	08/14/2020
Run No:	HS20230119	HS200187
Nitrogen:	0.0986	0.1130
CO2:	1.6305	2.3418
Methane:	92.7135	88.5287
Ethane:	4.0255	6.4329
Propane:	0.9372	1.6978
I-Butane:	0.1252	0.1968
N-Butane:	0.1728	0.3089
I-Pentane:	0.0587	0.0910
N-Pentane:	0.0396	0.0651
Hexane+:	0.1984	0.2240
BTU:	1060.3	1090.6
GPM:	17.6000	17.9690
SPG:	0.6115	0.6425



Well Name: SAN JUAN 30-6 UNIT 41;
 API #: 3003918201
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20230120
 Cust No: 35825-12845

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 30-6 UNIT 41; TBG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV	Flow Rate:	MCF/D
Cust. Stn. No.:	3003918201	Sample Method:	
	7195001	Sample Date:	07/05/2023
		Sample Time:	4.17 PM
	AREA 12 / RUN 1201	Sampled By:	RYLEY HARRISON
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0779	0.0776	0.0090	0.00	0.0008
CO2	2.0742	2.0661	0.3550	0.00	0.0315
Methane	93.4232	93.0562	15.8700	943.57	0.5175
Ethane	3.3888	3.3755	0.9080	59.97	0.0352
Propane	0.6793	0.6766	0.1880	17.09	0.0103
Iso-Butane	0.1017	0.1013	0.0330	3.31	0.0020
N-Butane	0.1047	0.1043	0.0330	3.42	0.0021
I-Pentane	0.0383	0.0381	0.0140	1.53	0.0010
N-Pentane	0.0223	0.0222	0.0080	0.89	0.0006
Hexane Plus	0.0896	0.0892	0.0400	4.72	0.0030
Total	100.0000	99.6071	17.4580	1034.51	0.6039

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023	CYLINDER #:	1011
BTU/CU.FT IDEAL:	1036.9	CYLINDER PRESSURE:	24 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1039.3	ANALYSIS DATE:	07/12/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1021.2	ANALYSIS TIME:	09:23:24 AM
DRY BTU @ 15.025:	1060.1	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.605		

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 30-6 UNIT 41; TBG	TUBING	07/17/2023
Stn. No.:	3003918201	MV	35825-12845
Mtr. No.:	7195001		

Smpl Date:	07/05/2023	08/10/2020
Test Date:	07/12/2023	08/14/2020
Run No:	HS20230120	HS200189
Nitrogen:	0.0779	0.0966
CO2:	2.0742	2.0512
Methane:	93.4232	93.3695
Ethane:	3.3888	3.3953
Propane:	0.6793	0.7234
I-Butane:	0.1017	0.1079
N-Butane:	0.1047	0.1148
I-Pentane:	0.0383	0.0388
N-Pentane:	0.0223	0.0229
Hexane+:	0.0896	0.0796
BTU:	1039.3	1040.0
GPM:	17.4580	17.4620
SPG:	0.6050	0.6053

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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

CONDITIONS

Action 265724

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 265724
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	casing was cut 12/2021 - three tests have been ran - pressure still on bradenhead at 22 - 5 minute shut in 9 - check pressure on bradenhead - do not blow down - please email results	9/15/2023