



Well Name: SAN JUAN 32-7 #11; BHD

API #: 3004511344

Source: BRADENHEAD

Sample Type: GAS

Analysis No: HS20230233

Cust No: 35825-15430

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: SAN JUAN 32-7 #11; BHD

County/State: SAN JUAN NM

Location:

Lease/PA/CA: NMSF-078460

Formation:

Cust. Stn. No.: 3004511344
8608301

AREA 5 / RUN 0504

Heat Trace:

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Source: BRADENHEAD

Well Flowing:

Pressure: 1 PSIG

Flow Temp: DEG. F

Ambient Temp: 82 DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 08/15/2023

Sample Time: 5:17 PM

Sampled By: BRANDON NOBLE

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	97.5461	4.7623	10.7320	0.00	0.9435
CO2	0.2089	0.0102	0.0360	0.00	0.0032
Methane	1.9807	0.0967	0.3360	20.01	0.0110
Ethane	0.0471	0.0023	0.0130	0.83	0.0005
Propane	0.0287	0.0014	0.0080	0.72	0.0004
Iso-Butane	0.0574	0.0028	0.0190	1.87	0.0012
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	0.1311	0.0064	0.0580	6.91	0.0043
Total	100.0000	4.8821	11.2020	30.34	0.9640

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0003
 BTU/CU.FT IDEAL: 30.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 30.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 29.9
 DRY BTU @ 15.025: 31.0
 REAL SPECIFIC GRAVITY: 0.9639

CYLINDER #: 1887
 CYLINDER PRESSURE: PSIG
 ANALYSIS DATE: 08/18/2023
 ANALYSIS TIME: 12:14:09 AM
 ANALYSIS RUN BY: ACEDA GOODNOH

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: 08/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 32-7 #11; BHD
Stn. No.: 3004511344
Mtr. No.: 8608301

BRADENHEAD

08/24/2023
35825-15430

Smpl Date: 08/15/2023
Test Date: 08/18/2023
Run No: HS20230233

Nitrogen: 97.5461
CO2: 0.2089
Methane: 1.9807
Ethane: 0.0471
Propane: 0.0287
I-Butane: 0.0574
N-Butane: 0.0000
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.1311

BTU: 30.4
GPM: 11.2020
SPG: 0.9639



Well Name: SAN JUAN 32-7 UNIT 11;
 API #: 3004511344
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS20230235
 Cust No: 35825-13155

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 32-7 UNIT 11; INT CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	119 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	NMSF-078460	Ambient Temp:	82 DEG. F
Formation:	MV/DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3004511344	Sample Method:	Purge & Fill
	8608301	Sample Date:	08/15/2023
		Sample Time:	12.07 PM
	AREA 5 / RUN 0504	Sampled By:	BRANDON NOBLE
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1275	0.1271	0.0140	0.00	0.0012
CO2	2.2780	2.2711	0.3890	0.00	0.0346
Methane	95.7618	95.4719	16.2640	967.19	0.5304
Ethane	1.6155	1.6106	0.4330	28.59	0.0168
Propane	0.1272	0.1268	0.0350	3.20	0.0019
Iso-Butane	0.0195	0.0194	0.0060	0.63	0.0004
N-Butane	0.0121	0.0121	0.0040	0.39	0.0002
I-Pentane	0.0059	0.0059	0.0020	0.24	0.0001
N-Pentane	0.0030	0.0030	0.0010	0.12	0.0001
Hexane Plus	0.0495	0.0494	0.0220	2.61	0.0016
Total	100.0000	99.6973	17.1700	1002.98	0.5875

* @ 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:	1005.3	CYLINDER PRESSURE:	98 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1007.4	ANALYSIS DATE:	08/18/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	989.9	ANALYSIS TIME:	11:03:41 AM
DRY BTU @ 15.025:	1027.6	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.5885		

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: 08/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT 11; INT CSG	INTERMEDIATE CASING	08/24/2023
Stn. No.:	3004511344	MV/DK	35825-13155
Mtr. No.:	8608301		

Smpl Date:	08/15/2023	08/27/2020
Test Date:	08/18/2023	09/02/2020
Run No:	HS20230235	HS200256
Nitrogen:	0.1275	0.1666
CO2:	2.2780	1.2727
Methane:	95.7618	95.8119
Ethane:	1.6155	2.2452
Propane:	0.1272	0.3075
I-Butane:	0.0195	0.0470
N-Butane:	0.0121	0.0444
I-Pentane:	0.0059	0.0204
N-Pentane:	0.0030	0.0120
Hexane+:	0.0495	0.0723
BTU:	1007.4	1027.9
GPM:	17.1700	17.2700
SPG:	0.5885	0.5857



Well Name: SAN JUAN 32-7 UNIT 11;
 API #: 3004511344
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230234
 Cust No: 35825-13160

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 32-7 UNIT 11; PRD CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	117 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:	NMSF-078460	Ambient Temp:	82 DEG. F
Formation:	MV/DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3004511344	Sample Method:	Purge & Fill
	8608301	Sample Date:	08/15/2023
		Sample Time:	12.00 PM
	AREA 5 / RUN 0504	Sampled By:	BRANDON NOBLE
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0771	0.0770	0.0080	0.00	0.0007
CO2	2.2636	2.2598	0.3870	0.00	0.0344
Methane	95.8663	95.7036	16.2820	968.25	0.5310
Ethane	1.6136	1.6109	0.4320	28.56	0.0168
Propane	0.1233	0.1231	0.0340	3.10	0.0019
Iso-Butane	0.0194	0.0194	0.0060	0.63	0.0004
N-Butane	0.0096	0.0096	0.0030	0.31	0.0002
I-Pentane	0.0055	0.0055	0.0020	0.22	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0216	0.0216	0.0100	1.14	0.0007
Total	100.0000	99.8305	17.1640	1002.21	0.5862

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	1862
BTU/CU.FT IDEAL:	1004.5	CYLINDER PRESSURE:	98 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1006.6	ANALYSIS DATE:	08/18/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	989.1	ANALYSIS TIME:	11:57:43 AM
DRY BTU @ 15.025:	1026.8	ANALYSIS RUN BY:	ACEDA GOODNOH
REAL SPECIFIC GRAVITY:	0.5872		

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: 08/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT 11; PRD CSG	CASING	08/24/2023
Stn. No.:	3004511344	MV/DK	35825-13160
Mtr. No.:	8608301		

Smpl Date:	08/15/2023	08/27/2020
Test Date:	08/18/2023	09/02/2020
Run No:	HS20230234	HS200257
Nitrogen:	0.0771	0.1425
CO2:	2.2636	1.4477
Methane:	95.8663	95.9880
Ethane:	1.6136	2.0866
Propane:	0.1233	0.2306
I-Butane:	0.0194	0.0317
N-Butane:	0.0096	0.0268
I-Pentane:	0.0055	0.0110
N-Pentane:	0.0000	0.0058
Hexane+:	0.0216	0.0293
BTU:	1006.6	1020.8
GPM:	17.1640	17.2270
SPG:	0.5872	0.5838



Well Name: SAN JUAN 32-7 UNIT 11;
 API #: 3004511344
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20230236
 Cust No: 35825-13165

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 32-7 UNIT 11; PRD TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMFS-078460
 Formation: MV/DK
 Cust. Stn. No.: 3004511344
 8608301

Source: TUBING
 Well Flowing: Y
 Pressure: 68 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 82 DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/15/2023
 Sample Time: 11.50 AM
 Sampled By: BRANDON NOBLE
 Sampled by (CO): HILCORP

AREA 5 / RUN 0504

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0646	0.0645	0.0070	0.00	0.0006
CO2	2.2997	2.2954	0.3930	0.00	0.0349
Methane	95.8646	95.6845	16.2820	968.23	0.5310
Ethane	1.6105	1.6075	0.4320	28.50	0.0167
Propane	0.1275	0.1273	0.0350	3.21	0.0019
Iso-Butane	0.0201	0.0201	0.0070	0.65	0.0004
N-Butane	0.0089	0.0089	0.0030	0.29	0.0002
I-Pentane	0.0041	0.0041	0.0020	0.16	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	99.8123	17.1610	1001.05	0.5859

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 1003.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1005.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 988.0
 DRY BTU @ 15.025: 1025.6
 REAL SPECIFIC GRAVITY: 0.5869

CYLINDER #: 1822
 CYLINDER PRESSURE: 89 PSIG
 ANALYSIS DATE: 08/18/2023
 ANALYSIS TIME: 12:05:30 AM
 ANALYSIS RUN BY: ACEDA GOODNOH

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: 08/24/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT 11; PRD TBG	TUBING	08/24/2023
Stn. No.:	3004511344	MV/DK	35825-13165
Mtr. No.:	8608301		

Smpl Date:	08/15/2023	08/27/2020
Test Date:	08/18/2023	09/02/2020
Run No:	HS20230236	HS200258
Nitrogen:	0.0646	0.1387
CO2:	2.2997	2.2907
Methane:	95.8646	95.7809
Ethane:	1.6105	1.6209
Propane:	0.1275	0.1339
I-Butane:	0.0201	0.0206
N-Butane:	0.0089	0.0083
I-Pentane:	0.0041	0.0034
N-Pentane:	0.0000	0.0000
Hexane+:	0.0000	0.0026
BTU:	1005.5	1005.1
GPM:	17.1610	17.1580
SPG:	0.5869	0.5873

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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 265725

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 265725
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas intermediate and production casing	9/15/2023