



Well Name: SAN JUAN 32-7 UNIT 31;
 API #: API # 3004533488
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS210003
 Cust No: 35825-13435

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT) Source: TUBING
 Well Name: SAN JUAN 32-7 UNIT 31; TBG Well Flowing:
 County/State: SAN JUAN NM Pressure: PSIG
 Location: Flow Temp: DEG. F
 Lease/PA/CA: Ambient Temp: DEG. F
 Formation: MV/DK Flow Rate: MCF/D
 Cust. Stn. No.: API # 3004533488 Sample Method:
 8402601 Sample Date: 01/06/2021
 AREA 5 / RUN 0505 Sample Time: 8.18 AM
 Sampled By: SHAD BROWN
 Heat Trace: Sampled by (CO): HILCORP
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0720	0.0716	0.0080	0.00	0.0007
CO2	2.6492	2.6362	0.4530	0.00	0.0403
Methane	95.3295	94.8617	16.1930	962.83	0.5280
Ethane	1.5903	1.5825	0.4260	28.14	0.0165
Propane	0.2416	0.2404	0.0670	6.08	0.0037
Iso-Butane	0.0516	0.0513	0.0170	1.68	0.0010
N-Butane	0.0290	0.0289	0.0090	0.95	0.0006
I-Pentane	0.0146	0.0145	0.0050	0.58	0.0004
N-Pentane	0.0050	0.0050	0.0020	0.20	0.0001
Hexane Plus	0.0172	0.0171	0.0080	0.91	0.0006
Total	100.0000	99.5092	17.1880	1001.37	0.5918

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0022	CYLINDER #:	6129
BTU/CU.FT IDEAL:	1003.7	CYLINDER PRESSURE:	116 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1005.9	ANALYSIS DATE:	01/07/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	988.4	ANALYSIS TIME:	08:03:57 AM
DRY BTU @ 15.025:	1026.0	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5929		

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: 01/07/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT 31; TBG	TUBING	01/07/2021
Stn. No.:	API # 3004533488	MV/DK	35825-13435
Mtr. No.:	8402601		

Smpl Date: 01/06/2021
Test Date: 01/07/2021
Run No: HS210003

Nitrogen: 0.0720
CO2: 2.6492
Methane: 95.3295
Ethane: 1.5903
Propane: 0.2416
I-Butane: 0.0516
N-Butane: 0.0290
I-Pentane: 0.0146
N-Pentane: 0.0050
Hexane+: 0.0172

BTU: 1005.9
GPM: 17.1880
SPG: 0.5929



Well Name: SAN JUAN 32-7 UNIT 31;
 API #: API # 3004533488
 Source: CASING
 Sample Type: GAS
 Analysis No: HS210001
 Cust No: 35825-13430

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 32-7 UNIT 31; CSG	Well Flowing:	
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV/DK	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004533488	Sample Method:	Purge & Fill
	8402601	Sample Date:	01/06/2021
	AREA 5 / RUN 0505	Sample Time:	8.16 AM
Heat Trace:		Sampled By:	SHAD BROWN
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2474	0.2423	0.0270	0.00	0.0024
CO2	2.2170	2.1717	0.3790	0.00	0.0337
Methane	93.8827	91.9622	15.9490	948.22	0.5200
Ethane	2.7093	2.6539	0.7260	47.95	0.0281
Propane	0.5225	0.5118	0.1440	13.15	0.0080
Iso-Butane	0.1340	0.1313	0.0440	4.36	0.0027
N-Butane	0.0929	0.0910	0.0290	3.03	0.0019
I-Pentane	0.0511	0.0501	0.0190	2.04	0.0013
N-Pentane	0.0238	0.0233	0.0090	0.95	0.0006
Hexane Plus	0.1193	0.1169	0.0530	6.29	0.0039
Total	100.0000	97.9545	17.3790	1025.98	0.6025

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023	CYLINDER #:	6004
BTU/CU.FT IDEAL:	1028.4	CYLINDER PRESSURE:	111 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1030.7	ANALYSIS DATE:	01/07/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1012.8	ANALYSIS TIME:	07:49:41 AM
DRY BTU @ 15.025:	1051.3	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6037		

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: 01/07/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT 31; CSG	CASING	01/07/2021
Stn. No.:	API # 3004533488	MV/DK	35825-13430
Mtr. No.:	8402601		

Smpl Date: 01/06/2021
Test Date: 01/07/2021
Run No: HS210001

Nitrogen: 0.2474
CO2: 2.2170
Methane: 93.8827
Ethane: 2.7093
Propane: 0.5225
I-Butane: 0.1340
N-Butane: 0.0929
I-Pentane: 0.0511
N-Pentane: 0.0238
Hexane+: 0.1193

BTU: 1030.7
GPM: 17.3790
SPG: 0.6037



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HS210002
Cust No: 35825-13110

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE
Well Name:	SAN JUAN 32-7 UNIT 31; INT	Well Flowing:	
County/State:	SAN JUAN NM	Pressure:	PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	MV/DK	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004533488	Sample Method:	Purge & Fill
	8402601	Sample Date:	01/06/2021
		Sample Time:	8.17 AM
	AREA 5 / RUN 0505	Sampled By:	SHAD BROWN
Heat Trace:		Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2520	0.2472	0.0280	0.00	0.0024
CO2	2.2595	2.2164	0.3860	0.00	0.0343
Methane	93.8775	92.0872	15.9480	948.16	0.5200
Ethane	2.7047	2.6531	0.7250	47.87	0.0281
Propane	0.5206	0.5107	0.1440	13.10	0.0079
Iso-Butane	0.1325	0.1300	0.0430	4.31	0.0027
N-Butane	0.0906	0.0889	0.0290	2.96	0.0018
I-Pentane	0.0487	0.0478	0.0180	1.95	0.0012
N-Pentane	0.0224	0.0220	0.0080	0.90	0.0006
Hexane Plus	0.0915	0.0898	0.0410	4.82	0.0030
Total	100.0000	98.0931	17.3700	1024.06	0.6020

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0023	CYLINDER #:	6072
BTU/CU.FT IDEAL:	1026.4	CYLINDER PRESSURE:	95 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1028.8	ANALYSIS DATE:	01/07/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1010.9	ANALYSIS TIME:	07:40:21 AM
DRY BTU @ 15.025:	1049.4	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6032		

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: 01/07/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT 31; INT	INTERMEDIATE	01/07/2021
Stn. No.:	API # 3004533488	MV/DK	35825-13110
Mtr. No.:	8402601		

Smpl Date:	01/06/2021	08/20/2020
Test Date:	01/07/2021	08/26/2020
Run No:	HS210002	HS200243
Nitrogen:	0.2520	0.0764
CO2:	2.2595	2.5394
Methane:	93.8775	95.3991
Ethane:	2.7047	1.6258
Propane:	0.5206	0.2491
I-Butane:	0.1325	0.0500
N-Butane:	0.0906	0.0272
I-Pentane:	0.0487	0.0125
N-Pentane:	0.0224	0.0050
Hexane+:	0.0915	0.0155
BTU:	1028.8	1007.1
GPM:	17.3700	17.1910
SPG:	0.6032	0.5920

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 14264

CONDITIONS OF APPROVAL

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX77002			OGRID: 372171	Action Number: 14264	Action Type: GAS ANALYSIS
OCD Reviewer		Condition			
mkuehling		intermediate and production casing are same gas			