



Well Name: SAN JUAN 32-8 UNIT 17C;
 API #: API # 3004533681
 Source: CASING
 Sample Type: GAS
 Analysis No: HS200233
 Cust No: 35825-13060

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 32-8 UNIT 17C; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV/DK
 Cust. Stn. No.: API # 3004533681
 8191801
 AREA 4 / RUN 0406
 Heat Trace: N
 Remarks:

Source: CASING
 Well Flowing: Y
 Pressure: 120 PSIG
 Flow Temp: 89 DEG. F
 Ambient Temp: 82 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method:
 Sample Date: 08/25/2020
 Sample Time: 10.30 AM
 Sampled By: TC SCANLAN
 Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2270	0.2156	0.0250	0.00	0.0022
CO2	0.5222	0.4959	0.0890	0.00	0.0079
Methane	92.3496	87.7029	15.6900	932.73	0.5115
Ethane	4.9623	4.7126	1.3300	87.82	0.0515
Propane	1.3826	1.3130	0.3820	34.79	0.0211
Iso-Butane	0.1866	0.1772	0.0610	6.07	0.0037
N-Butane	0.2129	0.2022	0.0670	6.95	0.0043
I-Pentane	0.0537	0.0510	0.0200	2.15	0.0013
N-Pentane	0.0280	0.0266	0.0100	1.12	0.0007
Hexane Plus	0.0751	0.0713	0.0340	3.96	0.0025
Total	100.0000	94.9683	17.7080	1075.58	0.6068

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
 BTU/CU.FT IDEAL: 1078.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1080.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1061.9
 DRY BTU @ 15.025: 1102.3
 REAL SPECIFIC GRAVITY: 0.608

CYLINDER #: 4155
 CYLINDER PRESSURE: 114 PSIG
 ANALYSIS DATE: 08/28/2020
 ANALYSIS TIME: 02:12:58 PM
 ANALYSIS RUN BY: RICHARD WILSON

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: 09/03/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 17C; CSG	CASING	09/03/2020
Stn. No.:	API # 3004533681	MV/DK	35825-13060
Mtr. No.:	8191801		

Smpl Date: 08/25/2020
Test Date: 08/28/2020
Run No: HS200233

Nitrogen: 0.2270
CO2: 0.5222
Methane: 92.3496
Ethane: 4.9623
Propane: 1.3826
I-Butane: 0.1866
N-Butane: 0.2129
I-Pentane: 0.0537
N-Pentane: 0.0280
Hexane+: 0.0751

BTU: 1080.7
GPM: 17.7080
SPG: 0.6080



Well Name: SAN JUAN 32-8 UNIT 17C;
 API #: API # 3004533681
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS200234
 Cust No: 35825-13065

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 32-8 UNIT 17C; INT	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	54 PSIG
Location:		Flow Temp:	89 DEG. F
Lease/PA/CA:		Ambient Temp:	82 DEG. F
Formation:	MV/DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3004533681 8191801	Sample Method:	
	AREA 4 / RUN 0406	Sample Date:	08/25/2020
		Sample Time:	10.30 AM
Heat Trace:	N	Sampled By:	TC SCANLAN
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1502	0.1495	0.0170	0.00	0.0015
CO2	7.3933	7.3602	1.2650	0.00	0.1123
Methane	84.1491	83.7729	14.3010	849.91	0.4661
Ethane	5.1218	5.0989	1.3730	90.64	0.0532
Propane	2.5550	2.5436	0.7060	64.29	0.0389
Iso-Butane	0.2509	0.2498	0.0820	8.16	0.0050
N-Butane	0.2980	0.2967	0.0940	9.72	0.0060
I-Pentane	0.0441	0.0439	0.0160	1.76	0.0011
N-Pentane	0.0231	0.0230	0.0080	0.93	0.0006
Hexane Plus	0.0145	0.0144	0.0060	0.76	0.0005
Total	100.0000	99.5529	17.8680	1026.17	0.6851

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0027	CYLINDER #:	6244
BTU/CU.FT IDEAL:	1028.5	CYLINDER PRESSURE:	53 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1031.3	ANALYSIS DATE:	08/28/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1013.4	ANALYSIS TIME:	01:02:47 AM
DRY BTU @ 15.025:	1052.0	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6867		

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: 09/03/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 17C; INT	INTERMEDIATE CASING	09/03/2020
Stn. No.:	API # 3004533681	MV/DK	35825-13065
Mtr. No.:	8191801		

Smpl Date:	08/25/2020
Test Date:	08/28/2020
Run No:	HS200234
Nitrogen:	0.1502
CO2:	7.3933
Methane:	84.1491
Ethane:	5.1218
Propane:	2.5550
I-Butane:	0.2509
N-Butane:	0.2980
I-Pentane:	0.0441
N-Pentane:	0.0231
Hexane+:	0.0145
BTU:	1031.3
GPM:	17.8680
SPG:	0.6867



Well Name: SAN JUAN 32-8 UNIT 17C;
 API #: API # 3004533681
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200235
 Cust No: 35825-13070

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 32-8 UNIT 17C; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	120 PSIG
Location:		Flow Temp:	89 DEG. F
Lease/PA/CA:		Ambient Temp:	82 DEG. F
Formation:	MV/DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API # 3004533681 8191801	Sample Method:	
	AREA 4 / RUN 0406	Sample Date:	08/25/2020
		Sample Time:	10.30 AM
Heat Trace:	N	Sampled By:	TC SCANLAN
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0845	0.0839	0.0090	0.00	0.0008
CO2	1.7842	1.7723	0.3050	0.00	0.0271
Methane	92.1039	91.4881	15.6480	930.25	0.5102
Ethane	4.2669	4.2384	1.1440	75.51	0.0443
Propane	1.1085	1.1011	0.3060	27.89	0.0169
Iso-Butane	0.1782	0.1770	0.0580	5.79	0.0036
N-Butane	0.2017	0.2004	0.0640	6.58	0.0040
I-Pentane	0.0718	0.0713	0.0260	2.87	0.0018
N-Pentane	0.0414	0.0411	0.0150	1.66	0.0010
Hexane Plus	0.1589	0.1578	0.0710	8.38	0.0053
Total	100.0000	99.3314	17.6460	1058.93	0.6150

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0024	CYLINDER #:	6194
BTU/CU.FT IDEAL:	1061.4	CYLINDER PRESSURE:	120 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1063.9	ANALYSIS DATE:	08/28/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1045.4	ANALYSIS TIME:	02:03:53 PM
DRY BTU @ 15.025:	1085.2	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6162		

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: 09/03/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-8 UNIT 17C; TBG	TUBING	09/03/2020
Stn. No.:	API # 3004533681	MV/DK	35825-13070
Mtr. No.:	8191801		

Smpl Date:	08/25/2020
Test Date:	08/28/2020
Run No:	HS200235
Nitrogen:	0.0845
CO2:	1.7842
Methane:	92.1039
Ethane:	4.2669
Propane:	1.1085
I-Butane:	0.1782
N-Butane:	0.2017
I-Pentane:	0.0718
N-Pentane:	0.0414
Hexane+:	0.1589
BTU:	1063.9
GPM:	17.6460
SPG:	0.6162