



NMOCD REC'D
7-1-20

Well Name: SAN JUAN 32-7 37M; CSG
API #: API # 3004532566
Source: CASING
Sample Type: GAS
Analysis No: HS200057
Cust No: 35825-12285

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: SAN JUAN 32-7 37M; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: API # 3004532566

Source: CASING
Well Flowing: Y
Pressure: 142 PSIG
Flow Temp: 78 DEG. F
Ambient Temp: 91 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 06/24/2020
Sample Time: 11.10 AM
Sampled By: TERRY GOMEZ
Sampled by (CO): HILCORP

Heat Trace: AREA 5 / RUN 504
N
Remarks: PRODUCTION CASING

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1088	0.1074	0.0120	0.00	0.0011
CO2	1.5245	1.5048	0.2610	0.00	0.0232
Methane	90.1594	88.9946	15.3210	910.61	0.4994
Ethane	5.7444	5.6702	1.5400	101.66	0.0596
Propane	1.4774	1.4583	0.4080	37.17	0.0225
Iso-Butane	0.2714	0.2679	0.0890	8.83	0.0054
N-Butane	0.2514	0.2482	0.0790	8.20	0.0050
I-Pentane	0.1312	0.1295	0.0480	5.25	0.0033
N-Pentane	0.0655	0.0647	0.0240	2.63	0.0016
Hexane Plus	0.2660	0.2626	0.1190	14.02	0.0088
Total	100.0000	98.7082	17.9010	1088.36	0.6299

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 1090.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1093.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1074.7
DRY BTU @ 15.025: 1115.6
REAL SPECIFIC GRAVITY: 0.6313

CYLINDER #: 6048
CYLINDER PRESSURE: 140 PSIG
ANALYSIS DATE: 06/26/2020
ANALYSIS TIME: 03:30:05 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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: 06/30/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 32-7 37M; CSG
Stn. No.: API # 3004532566
Mtr. No.:

CASING
MV/DK

06/30/2020
35825-12285

Smpl Date: 06/24/2020
Test Date: 06/26/2020
Run No: HS200057

Nitrogen: 0.1088
CO2: 1.5245
Methane: 90.1594
Ethane: 5.7444
Propane: 1.4774
I-Butane: 0.2714
N-Butane: 0.2514
I-Pentane: 0.1312
N-Pentane: 0.0655
Hexane+: 0.2660

BTU: 1093.7
GPM: 17.9010
SPG: 0.6313



Well Name: SAN JUAN 32-7 37M; INT.
API #: API # 3004532566
Source: INTERMEDIATE CASING
Sample Type: GAS
Analysis No: HS200056
Cust No: 35825-12280

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 32-7 37M; INT. CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	84 PSIG
Location:		Flow Temp:	68 DEG. F
Lease/PA/CA:		Ambient Temp:	80 DEG. F
Formation:	MV/DK	Flow Rate:	MCF/D
Cust. Stn. No.:	API # 3004532566	Sample Method:	
		Sample Date:	06/24/2020
		Sample Time:	9.30 AM
		Sampled By:	TERRY GOMEZ
		Sampled by (CO):	HILCORP
Heat Trace:	N		
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0869	0.0855	0.0100	0.00	0.0008
CO2	0.0055	0.0054	0.0010	0.00	0.0001
Methane	85.8169	84.4292	14.5870	866.75	0.4753
Ethane	10.3133	10.1465	2.7650	182.51	0.1071
Propane	2.3637	2.3255	0.6530	59.47	0.0360
Iso-Butane	0.3633	0.3574	0.1190	11.81	0.0073
N-Butane	0.3912	0.3849	0.1240	12.76	0.0079
I-Pentane	0.1882	0.1852	0.0690	7.53	0.0047
N-Pentane	0.0977	0.0961	0.0360	3.92	0.0024
Hexane Plus	0.3733	0.3673	0.1670	19.68	0.0124
Total	100.0000	98.3830	18.5310	1164.44	0.6539

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0029	CYLINDER #:	4128
BTU/CU.FT IDEAL:	1167.1	CYLINDER PRESSURE:	76 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1170.5	ANALYSIS DATE:	06/26/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1150.1	ANALYSIS TIME:	03:48:03 PM
DRY BTU @ 15.025:	1193.9	ANALYSIS RUN BY:	SHYANN ELLEDGE
REAL SPECIFIC GRAVITY:	0.6556		

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: 06/30/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 37M; INT. CSG	INTERMEDIATE CASING	06/30/2020
Stn. No.:	API # 3004532566	MV/DK	35825-12280
Mtr. No.:			

Smpl Date: 06/24/2020
Test Date: 06/26/2020
Run No: HS200056

Nitrogen: 0.0869
CO2: 0.0055
Methane: 85.8169
Ethane: 10.3133
Propane: 2.3637
I-Butane: 0.3633
N-Butane: 0.3912
I-Pentane: 0.1882
N-Pentane: 0.0977
Hexane+: 0.3733

BTU: 1170.5
GPM: 18.5310
SPG: 0.6556



Well Name: SAN JUAN 32-7 37M; TBG
 API #: API # 3004532566
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200058
 Cust No: 35825-12290

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 32-7 37M; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV/DK
 Cust. Stn. No.: API # 3004532566

Source: TUBING
 Well Flowing: Y
 Pressure: 151 PSIG
 Flow Temp: 78 DEG. F
 Ambient Temp: 91 DEG. F
 Flow Rate: MCF/D
 Sample Method:
 Sample Date: 06/24/2020
 Sample Time: 10.03 AM
 Sampled By: TERRY GOMEZ
 Sampled by (CO): HILCORP

Heat Trace: AREA 5 / RUN 504
 N
 Remarks: PRODUCTION TUBING

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0779	0.0772	0.0090	0.00	0.0008
CO2	3.3990	3.3690	0.5810	0.00	0.0516
Methane	95.0515	94.2115	16.1450	960.02	0.5265
Ethane	1.2749	1.2636	0.3420	22.56	0.0132
Propane	0.1441	0.1428	0.0400	3.63	0.0022
Iso-Butane	0.0276	0.0274	0.0090	0.90	0.0006
N-Butane	0.0126	0.0125	0.0040	0.41	0.0003
I-Pentane	0.0044	0.0044	0.0020	0.18	0.0001
N-Pentane	0.0017	0.0017	0.0010	0.07	0.0000
Hexane Plus	0.0063	0.0062	0.0030	0.33	0.0002
Total	100.0000	99.1163	17.1360	988.09	0.5955

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
 BTU/CU.FT IDEAL: 990.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 992.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 975.2
 DRY BTU @ 15.025: 1012.4
 REAL SPECIFIC GRAVITY: 0.5965

CYLINDER #: 6244
 CYLINDER PRESSURE: 152 PSIG
 ANALYSIS DATE: 06/26/2020
 ANALYSIS TIME: 03:17:51 PM
 ANALYSIS RUN BY: SHYANN ELLEDGE

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: 06/30/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 32-7 37M; TBG
Stn. No.: API # 3004532566
Mtr. No.:

TUBING
MV/DK

06/30/2020
35825-12290

Smpl Date: 06/24/2020
Test Date: 06/26/2020
Run No: HS200058
Nitrogen: 0.0779
CO2: 3.3990
Methane: 95.0515
Ethane: 1.2749
Propane: 0.1441
I-Butane: 0.0276
N-Butane: 0.0126
I-Pentane: 0.0044
N-Pentane: 0.0017
Hexane+: 0.0063
BTU: 992.5
GPM: 17.1360
SPG: 0.5965