Well Name: SAN JUAN 32-7 UNIT 43M;
API #: API # 3004534076
Source: BRADENHEAD
Sample Type: GAS

Analysis No: HS200244
Cust No: 35825-10030

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 32-7 UNIT 43M; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	107 PSIG
Location:		Flow Temp:	84 DEG. F
Lease/PA/CA:		Ambient Temp:	89 DEG. F
Formation:	MV/DK	Flow Rate:	111 MCF/D
Cust. Stn. No.:	API # 3004534076	Sample Method:	
	8323201	Sample Date:	08/25/2020
		Sample Time:	2.52 PM
	AREA 5 / RUN 0504	Sampled By:	TERRY G.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:	PRESSURED WITH HELIUM TO 30LBS.		

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.3274	0.6489	0.2570	0.00	0.0225
CO2	0.0283	0.0079	0.0050	0.00	0.0004
Methane	80.3806	22.4108	13.6710	811.84	0.4452
Ethane	9.7719	2.7245	2.6220	172.93	0.1015
Propane	3.6211	1.0096	1.0010	91.11	0.0551
Iso-Butane	0.7546	0.2104	0.2480	24.54	0.0151
N-Butane	0.9587	0.2673	0.3030	31.28	0.0192
I-Pentane	0.4907	0.1368	0.1800	19.63	0.0122
N-Pentane	0.3393	0.0946	0.1230	13.60	0.0085
Hexane Plus	1.3274	0.3701	0.5940	69.97	0.0439
Total	100.0000	27.8809	19.0040	1234.90	0.7237

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0035	CYLINDER #:	4236
BTU/CU.FT IDEAL:	1237.8	CYLINDER PRESSURE:	3 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1242.1	ANALYIS DATE:	08/28/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1220.5	ANALYIS TIME:	04:02:12 PM
DRY BTU @ 15.025:	1267.0	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.726		

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 32-7 UNIT 43M; BHD	BRADENHEAD	09/03/2020
Stn. No.:	API # 3004534076	MV/DK	35825-10030
Mtr. No.:	8323201		

Smpl Date:	08/25/2020	10/13/2017
Test Date:	08/28/2020	10/13/2017
Run No:	HS200244	HS170007
Nitrogen:	2.3274	43.3048
CO2:	0.0283	2.7837
Methane:	80.3806	44.8215
Ethane:	9.7719	5.1472
Propane:	3.6211	1.8868
I-Butane:	0.7546	0.3592
N-Butane:	0.9587	0.4928
I-Pentane:	0.4907	0.2313
N-Pentane:	0.3393	0.1578
Hexane+:	1.3274	0.8149
BTU:	1242.1	680.3
GPM:	19.0040	15.5370
SPG:	0.7260	0.8464

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

GAS

Analysis No: HS200245
Cust No: 35825-10000

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	PRODUCTION CASING
Well Name:	SAN JUAN 32-7 UNIT 43M; PRD CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	145 PSIG
Location:		Flow Temp:	85 DEG. F
Lease/PA/CA:		Ambient Temp:	89 DEG. F
Formation:	MV/DK	Flow Rate:	110 MCF/D
Cust. Stn. No.:	API # 3004534076	Sample Method:	
	8323201	Sample Date:	08/25/2020
		Sample Time:	2.47 PM
	AREA 5 / RUN 0504	Sampled By:	TERRY G.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1240	0.1205	0.0140	0.00	0.0012
CO2	0.0814	0.0791	0.0140	0.00	0.0012
Methane	86.2218	83.7552	14.6570	870.84	0.4776
Ethane	8.6431	8.3958	2.3180	152.96	0.0897
Propane	2.8287	2.7478	0.7810	71.17	0.0431
Iso-Butane	0.5411	0.5256	0.1780	17.60	0.0109
N-Butane	0.6182	0.6005	0.1950	20.17	0.0124
I-Pentane	0.2583	0.2509	0.0950	10.33	0.0064
N-Pentane	0.1674	0.1626	0.0610	6.71	0.0042
Hexane Plus	0.5160	0.5012	0.2310	27.20	0.0171
Total	100.0000	97.1392	18.5440	1176.98	0.6638

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.003	CYLINDER #:	4149
BTU/CU.FT IDEAL:	1179.7	CYLINDER PRESSURE:	140 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1183.2	ANALYIS DATE:	08/28/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1162.6	ANALYIS TIME:	03:52:16 PM
DRY BTU @ 15.025:	1206.9	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6655		

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 32-7 UNIT 43M; PRD CSG	PRODUCTION CASING	09/03/2020
Stn. No.:	API # 3004534076	MV/DK	35825-10000
Mtr. No.:	8323201		

Smpl Date:	08/25/2020	08/17/2017
Test Date:	08/28/2020	08/17/2017
Run No:	HS200245	HS170001
Nitrogen:	0.1240	0.1309
CO2:	0.0814	1.9287
Methane:	86.2218	91.1439
Ethane:	8.6431	4.8169
Propane:	2.8287	1.1739
I-Butane:	0.5411	0.2056
N-Butane:	0.6182	0.2236
I-Pentane:	0.2583	0.0955
N-Pentane:	0.1674	0.0603
Hexane+:	0.5160	0.2207
BTU:	1183.2	1072.3
GPM:	18.5440	17.7390
SPG:	0.6655	0.6244

Well Name: SAN JUAN 32-7 UNIT 43M;
API #: API # 3004534076
Source: INTERMEDIATE CASING
Sample Type: GAS

Analysis No: HS200246
Cust No: 35825-10005

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 32-7 UNIT 43M; INT CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	110 PSIG
Location:		Flow Temp:	82 DEG. F
Lease/PA/CA:		Ambient Temp:	89 DEG. F
Formation:	MV/DK	Flow Rate:	110 MCF/D
Cust. Stn. No.:	API # 3004534076	Sample Method:	
	8323201	Sample Date:	08/25/2020
		Sample Time:	2.00 PM
	AREA 5 / RUN 0504	Sampled By:	TERRY G.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:	PRESSURED WITH HELIUM TO 30LBS.		

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2237	0.0794	0.0250	0.00	0.0022
CO2	0.0000	0.0000	0.0000	0.00	0.0000
Methane	83.7903	29.7434	14.2540	846.28	0.4641
Ethane	8.5882	3.0486	2.3050	151.99	0.0892
Propane	3.0563	1.0849	0.8450	76.90	0.0465
Iso-Butane	0.6530	0.2318	0.2140	21.23	0.0131
N-Butane	0.7860	0.2790	0.2490	25.64	0.0158
I-Pentane	0.4243	0.1506	0.1560	16.98	0.0106
N-Pentane	0.3065	0.1088	0.1110	12.29	0.0076
Hexane Plus	2.1717	0.7709	0.9720	114.47	0.0719
Total	100.0000	35.4974	19.1310	1265.78	0.7209

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0037	CYLINDER #:	5041
BTU/CU.FT IDEAL:	1268.7	CYLINDER PRESSURE:	2 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1273.4	ANALYIS DATE:	08/28/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1251.2	ANALYIS TIME:	04:13:12 PM
DRY BTU @ 15.025:	1298.9	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7233		

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 32-7 UNIT 43M; INT CSG	INTERMEDIATE CASING	09/03/2020
Stn. No.:	API # 3004534076	MV/DK	35825-10005
Mtr. No.:	8323201		

Smpl Date:	08/25/2020	08/17/2017
Test Date:	08/28/2020	08/17/2017
Run No:	HS200246	HS170002
Nitrogen:	0.2237	0.1721
CO2:	0.0000	0.0012
Methane:	83.7903	86.2482
Ethane:	8.5882	8.8621
Propane:	3.0563	2.8935
I-Butane:	0.6530	0.5273
N-Butane:	0.7860	0.6146
I-Pentane:	0.4243	0.2472
N-Pentane:	0.3065	0.1544
Hexane+:	2.1717	0.2794
BTU:	1273.4	1174.9
GPM:	19.1310	18.4960
SPG:	0.7233	0.6593

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

Analysis No: HS200247
Cust No: 35825-13115

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	PRODUCTION TUBING
Well Name:	SAN JUAN 32-7 UNIT 43M; PRD TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	144 PSIG
Location:		Flow Temp:	82 DEG. F
Lease/PA/CA:		Ambient Temp:	91 DEG. F
Formation:	MV/DK	Flow Rate:	110 MCF/D
Cust. Stn. No.:	API # 3004534076	Sample Method:	
	8323201	Sample Date:	08/25/2020
		Sample Time:	3.00 PM
	AREA 5 / RUN 0504	Sampled By:	TERRY G.
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0705	0.0698	0.0080	0.00	0.0007
CO2	2.6352	2.6108	0.4510	0.00	0.0400
Methane	95.6658	94.7810	16.2480	966.22	0.5299
Ethane	1.4531	1.4397	0.3890	25.72	0.0151
Propane	0.1376	0.1363	0.0380	3.46	0.0021
Iso-Butane	0.0224	0.0222	0.0070	0.73	0.0004
N-Butane	0.0089	0.0088	0.0030	0.29	0.0002
I-Pentane	0.0034	0.0034	0.0010	0.14	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0031	0.0031	0.0010	0.16	0.0001
Total	100.0000	99.0751	17.1460	996.72	0.5886

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0021	CYLINDER #:	4217
BTU/CU.FT IDEAL:	999.0	CYLINDER PRESSURE:	143 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1001.1	ANALYIS DATE:	08/28/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	983.7	ANALYIS TIME:	03:15:31 PM
DRY BTU @ 15.025:	1021.1	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5896		

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 32-7 UNIT 43M; PRD TBG	PRODUCTION TUBING	09/03/2020
Stn. No.:	API # 3004534076	MV/DK	35825-13115
Mtr. No.:	8323201		

Smpl Date:	08/25/2020
Test Date:	08/28/2020
Run No:	HS200247
Nitrogen:	0.0705
CO2:	2.6352
Methane:	95.6658
Ethane:	1.4531
Propane:	0.1376
I-Butane:	0.0224
N-Butane:	0.0089
I-Pentane:	0.0034
N-Pentane:	0.0000
Hexane+:	0.0031
BTU:	1001.1
GPM:	17.1460
SPG:	0.5896