



Well Name: SAN JUAN 30-5 UNIT 87;
 API #: 3003923157
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20220076
 Cust No: 35825-14415

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SAN JUAN 30-5 UNIT 87; BHD	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	58 PSIG
Location:		Flow Temp:	75 DEG. F
Lease/PA/CA:		Ambient Temp:	75 DEG. F
Formation:	DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	3003923157	Sample Method:	Purge & Fill
		Sample Date:	05/11/2022
		Sample Time:	11.00 AM
		Sampled By:	CALEN WILKINS
		Sampled by (CO):	HILCORP

Heat Trace: N

Remarks:

AREA 12 / RUN 1202

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4768	0.4670	0.0530	0.00	0.0046
CO2	0.0110	0.0108	0.0020	0.00	0.0002
Methane	96.4527	94.4625	16.3820	974.17	0.5343
Ethane	3.0317	2.9691	0.8120	53.65	0.0315
Propane	0.0069	0.0068	0.0020	0.17	0.0001
Iso-Butane	0.0050	0.0049	0.0020	0.16	0.0001
N-Butane	0.0010	0.0010	0.0000	0.03	0.0000
I-Pentane	0.0011	0.0011	0.0000	0.04	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0138	0.0135	0.0060	0.73	0.0005
Total	100.0000	97.9367	17.2590	1028.96	0.5712

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	4171
BTU/CU.FT IDEAL:	1031.3	CYLINDER PRESSURE:	21 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1033.5	ANALYSIS DATE:	05/19/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1015.5	ANALYSIS TIME:	03:49:51 PM
DRY BTU @ 15.025:	1054.2	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.5722		

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: 05/24/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-5 UNIT 87; BHD	BRADENHEAD	05/24/2022
Stn. No.:	3003923157	DK	35825-14415
Mtr. No.:			

Smpl Date: 05/11/2022
Test Date: 05/19/2022
Run No: HS20220076

Nitrogen: 0.4768
CO2: 0.0110
Methane: 96.4527
Ethane: 3.0317
Propane: 0.0069
I-Butane: 0.0050
N-Butane: 0.0010
I-Pentane: 0.0011
N-Pentane: 0.0000
Hexane+: 0.0138

BTU: 1033.5
GPM: 17.2590
SPG: 0.5722



Well Name: SAN JUAN 30-5 UNIT 87;
 API #: 3003923157
 Source: INTERMEDIATE CASING
 Sample Type: GAS
 Analysis No: HS20220112
 Cust No: 35825-14420

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE CASING
Well Name:	SAN JUAN 30-5 UNIT 87; INTRM CSG	Well Flowing:	Y
County/State:	RIO ARRIBA NM	Pressure:	8 PSIG
Location:		Flow Temp:	87 DEG. F
Lease/PA/CA:		Ambient Temp:	94 DEG. F
Formation:	DK	Flow Rate:	145 MCF/D
Cust. Stn. No.:	3003923157	Sample Method:	Purge & Fill
		Sample Date:	06/08/2022
		Sample Time:	1.27 PM
	AREA 12 / RUN 1202	Sampled By:	MIKEY MCCONKIE
Heat Trace:	N	Sampled by (CO):	
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.		

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5313	0.2593	0.0590	0.00	0.0051
CO2	0.0125	0.0061	0.0020	0.00	0.0002
Methane	96.6368	47.1677	16.4130	976.03	0.5353
Ethane	2.7343	1.3346	0.7330	48.39	0.0284
Propane	0.0162	0.0079	0.0040	0.41	0.0002
Iso-Butane	0.0078	0.0038	0.0030	0.25	0.0002
N-Butane	0.0029	0.0014	0.0010	0.09	0.0001
I-Pentane	0.0037	0.0018	0.0010	0.15	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0545	0.0266	0.0240	2.87	0.0018
Total	100.0000	48.8092	17.2400	1028.20	0.5713

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	4003
BTU/CU.FT IDEAL:	1030.6	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1032.7	ANALYSIS DATE:	06/15/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1014.7	ANALYSIS TIME:	09:02:38 AM
DRY BTU @ 15.025:	1053.4	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.5723		

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: 06/21/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 30-5 UNIT 87; INTRM CSG	INTERMEDIATE CASING	06/21/2022
Stn. No.:	3003923157	DK	35825-14420
Mtr. No.:			

Smpl Date:	06/08/2022	05/11/2022
Test Date:	06/15/2022	05/19/2022
Run No:	HS20220112	HS20220077
Nitrogen:	0.5313	12.9780
CO2:	0.0125	0.9145
Methane:	96.6368	82.3492
Ethane:	2.7343	2.8705
Propane:	0.0162	0.4444
I-Butane:	0.0078	0.1227
N-Butane:	0.0029	0.0812
I-Pentane:	0.0037	0.0485
N-Pentane:	0.0000	0.0153
Hexane+:	0.0545	0.1757
BTU:	1032.7	916.0
GPM:	17.2400	16.6300
SPG:	0.5723	0.6446



Well Name: SJ 30-5 #87; CSG

API #: 3003923157

Source: CASING

Sample Type: GAS

Analysis No: HS20220111

Cust No: 35825-14485

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: SJ 30-5 #87; CSG

County/State: RIO ARRIBA NM

Location:

Lease/PA/CA:

Formation: DK

Cust. Stn. No.: 3003923157

Source: CASING

Well Flowing: Y

Pressure: 61 PSIG

Flow Temp: 87 DEG. F

Ambient Temp: 94 DEG. F

Flow Rate: 145 MCF/D

Sample Method: Purge & Fill

Sample Date: 06/08/2022

Sample Time: 1.18 PM

Sampled By: MIKEY MCCONKIE

Sampled by (CO):

Heat Trace: AREA 12 / RUN 1202

Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1129	0.1120	0.0120	0.00	0.0011
CO2	2.9738	2.9490	0.5080	0.00	0.0452
Methane	96.6677	95.8613	16.4180	976.34	0.5354
Ethane	0.2280	0.2261	0.0610	4.03	0.0024
Propane	0.0133	0.0132	0.0040	0.33	0.0002
Iso-Butane	0.0022	0.0022	0.0010	0.07	0.0000
N-Butane	0.0021	0.0021	0.0010	0.07	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	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	99.1659	17.0050	980.85	0.5844

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 983.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 985.2
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 968.1
 DRY BTU @ 15.025: 1004.9
 REAL SPECIFIC GRAVITY: 0.5854

CYLINDER #: 4097
 CYLINDER PRESSURE: 65 PSIG
 ANALYSIS DATE: 06/15/2022
 ANALYSIS TIME: 09:11:09 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 06/21/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SJ 30-5 #87; CSG	CASING	06/21/2022
Stn. No.:	3003923157	DK	35825-14485
Mtr. No.:			

Smpl Date: 06/08/2022
Test Date: 06/15/2022
Run No: HS20220111

Nitrogen: 0.1129
CO2: 2.9738
Methane: 96.6677
Ethane: 0.2280
Propane: 0.0133
I-Butane: 0.0022
N-Butane: 0.0021
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 985.2
GPM: 17.0050
SPG: 0.5854



Well Name: SJ 30-5 #87; TBG

API #: 3003923157

Source: TUBING

Sample Type: GAS

Analysis No: HS20220113

Cust No: 35825-14490

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: SJ 30-5 #87; TBG

County/State: RIO ARRIBA NM

Location:

Lease/PA/CA:

Formation: DK

Cust. Stn. No.: 3003923157

Source: TUBING

Well Flowing: Y

Pressure: 41 PSIG

Flow Temp: 87 DEG. F

Ambient Temp: 94 DEG. F

Flow Rate: 145 MCF/D

Sample Method: Purge & Fill

Sample Date: 06/08/2022

Sample Time: 1.00 PM

Sampled By: MIKEY MCCONKIE

Sampled by (CO):

Heat Trace: AREA 12 / RUN 1202

Remarks: N

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0947	0.0938	0.0100	0.00	0.0009
CO2	3.0278	3.0001	0.5180	0.00	0.0460
Methane	96.5886	95.7044	16.4050	975.54	0.5350
Ethane	0.2548	0.2525	0.0680	4.51	0.0026
Propane	0.0149	0.0148	0.0040	0.37	0.0002
Iso-Butane	0.0028	0.0028	0.0010	0.09	0.0001
N-Butane	0.0024	0.0024	0.0010	0.08	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	0.0140	0.0139	0.0060	0.74	0.0005
Total	100.0000	99.0847	17.0130	981.34	0.5854

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 983.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 985.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 968.5
 DRY BTU @ 15.025: 1005.4
 REAL SPECIFIC GRAVITY: 0.5864

CYLINDER #: 6122
 CYLINDER PRESSURE: 55 PSIG
 ANALYSIS DATE: 06/15/2022
 ANALYSIS TIME: 09:24:44 AM
 ANALYSIS RUN BY: KERRA GONZALEZ

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: 06/21/2022

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SJ 30-5 #87; TBG	TUBING	06/21/2022
Stn. No.:	3003923157	DK	35825-14490
Mtr. No.:			

Smpl Date: 06/08/2022
Test Date: 06/15/2022
Run No: HS20220113

Nitrogen: 0.0947
CO2: 3.0278
Methane: 96.5886
Ethane: 0.2548
Propane: 0.0149
I-Butane: 0.0028
N-Butane: 0.0024
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0140

BTU: 985.7
GPM: 17.0130
SPG: 0.5864

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 136892

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 136892
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	similar gas	9/20/2022