



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

Analysis No: HS20230128
Cust No: 35825-15125

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	INTERMEDIATE HEAD
Well Name:	SAN JUAN 32-7 UNIT COM 39; INT	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	55 PSIG
Location:		Flow Temp:	83 DEG. F
Lease/PA/CA:		Ambient Temp:	85 DEG. F
Formation:	MV/DK	Flow Rate:	30 MCF/D
Cust. Stn. No.:	3004511298	Sample Method:	Purge & Fill
	73644-01	Sample Date:	07/06/2023
	AREA 5/ RUN 0506	Sample Time:	11.52 AM
Heat Trace:	N	Sampled By:	JUSTIN ARINDER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0673	0.0653	0.0070	0.00	0.0007
CO2	2.6780	2.5991	0.4580	0.00	0.0407
Methane	95.9417	93.1138	16.2950	969.01	0.5314
Ethane	1.1846	1.1497	0.3170	20.96	0.0123
Propane	0.0901	0.0874	0.0250	2.27	0.0014
Iso-Butane	0.0139	0.0135	0.0050	0.45	0.0003
N-Butane	0.0057	0.0055	0.0020	0.19	0.0001
I-Pentane	0.0023	0.0022	0.0010	0.09	0.0001
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0164	0.0159	0.0070	0.86	0.0005
Total	100.0000	97.0524	17.1170	993.84	0.5874

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	6176
BTU/CU.FT IDEAL:	996.1	CYLINDER PRESSURE:	39 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	998.2	ANALYSIS DATE:	07/12/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	980.8	ANALYSIS TIME:	01:15:09 PM
DRY BTU @ 15.025:	1018.2	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.5884		

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: 07/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT COM 39; INT	INTERMEDIATE HEAD	07/17/2023
Stn. No.:	3004511298	MV/DK	35825-15125
Mtr. No.:	73644-01		

Smpl Date: 07/06/2023
Test Date: 07/12/2023
Run No: HS20230128

Nitrogen: 0.0673
CO2: 2.6780
Methane: 95.9417
Ethane: 1.1846
Propane: 0.0901
I-Butane: 0.0139
N-Butane: 0.0057
I-Pentane: 0.0023
N-Pentane: 0.0000
Hexane+: 0.0164

BTU: 998.2
GPM: 17.1170
SPG: 0.5884



Well Name: SAN JUAN 32-7 UNIT COM
 API #: 3004511298
 Source: CASING
 Sample Type: GAS
 Analysis No: HS20230127
 Cust No: 35825-15120

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	SAN JUAN 32-7 UNIT COM 39; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	55 PSIG
Location:		Flow Temp:	83 DEG. F
Lease/PA/CA:		Ambient Temp:	85 DEG. F
Formation:	MV/DK	Flow Rate:	30 MCF/D
Cust. Stn. No.:	3004511298	Sample Method:	Purge & Fill
	73644-01	Sample Date:	07/06/2023
	AREA 5 / RUN 0506	Sample Time:	11.31 AM
Heat Trace:	N	Sampled By:	JUSTIN ARINDER
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0603	0.0598	0.0070	0.00	0.0006
CO2	2.6102	2.5891	0.4460	0.00	0.0397
Methane	96.0541	95.2757	16.3140	970.15	0.5320
Ethane	1.1512	1.1419	0.3080	20.37	0.0120
Propane	0.0868	0.0861	0.0240	2.18	0.0013
Iso-Butane	0.0142	0.0141	0.0050	0.46	0.0003
N-Butane	0.0061	0.0061	0.0020	0.20	0.0001
I-Pentane	0.0038	0.0038	0.0010	0.15	0.0001
N-Pentane	0.0014	0.0014	0.0010	0.06	0.0000
Hexane Plus	0.0119	0.0118	0.0050	0.63	0.0004
Total	100.0000	99.1898	17.1130	994.20	0.5865

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	6156
BTU/CU.FT IDEAL:	996.5	CYLINDER PRESSURE:	38 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	998.6	ANALYSIS DATE:	07/12/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	981.2	ANALYSIS TIME:	11:33:58 AM
DRY BTU @ 15.025:	1018.6	ANALYSIS RUN BY:	ALEXIS MITCHELL
REAL SPECIFIC GRAVITY:	0.5875		

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: 07/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT COM 39; CSG	CASING	07/17/2023
Stn. No.:	3004511298	MV/DK	35825-15120
Mtr. No.:	73644-01		

Smpl Date: 07/06/2023
Test Date: 07/12/2023
Run No: HS20230127

Nitrogen: 0.0603
CO2: 2.6102
Methane: 96.0541
Ethane: 1.1512
Propane: 0.0868
I-Butane: 0.0142
N-Butane: 0.0061
I-Pentane: 0.0038
N-Pentane: 0.0014
Hexane+: 0.0119

BTU: 998.6
GPM: 17.1130
SPG: 0.5875



Well Name: SAN JUAN 32-7 UNIT COM

API #: 3004511298

Source: TUBING

Sample Type: GAS

Analysis No: HS20230129

Cust No: 35825-15130

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SAN JUAN 32-7 UNIT COM 39; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV/DK
 Cust. Stn. No.: 3004511298
 73644-01

Source: TUBING
 Well Flowing: Y
 Pressure: 55 PSIG
 Flow Temp: 83 DEG. F
 Ambient Temp: 85 DEG. F
 Flow Rate: 30 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 07/06/2023
 Sample Time: 11.46 AM
 Sampled By: JUSTIN ARINDER
 Sampled by (CO): HILCORP

AREA 5 / RUN 0506

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0606	0.0603	0.0070	0.00	0.0006
CO2	2.7063	2.6922	0.4630	0.00	0.0411
Methane	96.0142	95.5153	16.3070	969.74	0.5318
Ethane	1.1053	1.0996	0.2960	19.56	0.0115
Propane	0.0872	0.0867	0.0240	2.19	0.0013
Iso-Butane	0.0138	0.0137	0.0050	0.45	0.0003
N-Butane	0.0058	0.0058	0.0020	0.19	0.0001
I-Pentane	0.0027	0.0027	0.0010	0.11	0.0001
N-Pentane	0.0041	0.0041	0.0010	0.16	0.0001
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	99.4804	17.1060	992.41	0.5869

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 994.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 996.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 979.5
 DRY BTU @ 15.025: 1016.8
 REAL SPECIFIC GRAVITY: 0.5879

CYLINDER #: 7027
 CYLINDER PRESSURE: 38 PSIG
 ANALYSIS DATE: 07/12/2023
 ANALYSIS TIME: 01:25:00 PM
 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: 07/17/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT COM 39; TBG	TUBING	07/17/2023
Stn. No.:	3004511298	MV/DK	35825-15130
Mtr. No.:	73644-01		

Smpl Date: 07/06/2023
Test Date: 07/12/2023
Run No: HS20230129

Nitrogen: 0.0606
CO2: 2.7063
Methane: 96.0142
Ethane: 1.1053
Propane: 0.0872
I-Butane: 0.0138
N-Butane: 0.0058
I-Pentane: 0.0027
N-Pentane: 0.0041
Hexane+: 0.0000

BTU: 996.8
GPM: 17.1060
SPG: 0.5879



Well Name: SAN JUAN 32-7 UNIT COM
 API #: 3004511298
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS20230138
 Cust No: 35825-15155

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	SAN JUAN 32-7 UNIT COM 39; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	95 PSIG
Location:		Flow Temp:	77 DEG. F
Lease/PA/CA:		Ambient Temp:	82 DEG. F
Formation:	MV/DK	Flow Rate:	30 MCF/D
Cust. Stn. No.:	3004511298	Sample Method:	
	73643-01	Sample Date:	07/07/2023
		Sample Time:	11.08 AM
	AREA 5 / RUN 0506	Sampled By:	JUSTIN ARINDER
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0735	0.0728	0.0080	0.00	0.0007
CO2	4.6786	4.6364	0.8000	0.00	0.0711
Methane	95.1141	94.2559	16.1540	960.65	0.5268
Ethane	0.1232	0.1221	0.0330	2.18	0.0013
Propane	0.0079	0.0078	0.0020	0.20	0.0001
Iso-Butane	0.0014	0.0014	0.0000	0.05	0.0000
N-Butane	0.0013	0.0013	0.0000	0.04	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	99.0977	16.9970	963.12	0.6001

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0021	CYLINDER #:	6078
BTU/CU.FT IDEAL:	965.3	CYLINDER PRESSURE:	74 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	967.4	ANALYSIS DATE:	07/13/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	950.6	ANALYSIS TIME:	11:27:39 AM
DRY BTU @ 15.025:	986.8	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6011		

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: 07/18/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SAN JUAN 32-7 UNIT COM 39; TBG	TUBING	07/18/2023
Stn. No.:	3004511298	MV/DK	35825-15155
Mtr. No.:	73643-01		

Smpl Date: 07/07/2023
Test Date: 07/13/2023
Run No: HS20230138

Nitrogen: 0.0735
CO2: 4.6786
Methane: 95.1141
Ethane: 0.1232
Propane: 0.0079
I-Butane: 0.0014
N-Butane: 0.0013
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 967.4
GPM: 16.9970
SPG: 0.6011

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 241988

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 241988
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas all strings	9/22/2023