



Well Name: VAUGHN 10; BHD  
 API #: 30-039-20258  
 Source: BRADENHEAD  
 Sample Type: GAS  
 Analysis No: HS20250115  
 Cust No: 35825-16530

**Well/Lease Information**

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	VAUGHN 10; BHD	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	10 PSIG
Location:		Flow Temp:	83 DEG. F
Lease/PA/CA:	NMSF079266	Ambient Temp:	85 DEG. F
Formation:	CH	Flow Rate:	0 MCF/D
Cust. Stn. No.:	30-039-20258	Sample Method:	Purge & Fill
	87-117-01	Sample Date:	09/15/2025
	AREA 14 / RUN 1404	Sample Time:	2.00 PM
Heat Trace:	N	Sampled By:	KADEN PEACE
Remarks:	PRESSURED WITH HELIUM TO 30 LBS.	Sampled by (CO):	HILCORP

**Analysis**

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	10.2839	10.2839	1.1340	0.00	0.0995
CO2	0.0861	0.0861	0.0150	0.00	0.0013
Methane	78.5887	78.5889	13.3540	793.75	0.4353
Ethane	5.8876	5.8876	1.5780	104.19	0.0611
Propane	3.0081	3.0081	0.8310	75.69	0.0458
Iso-Butane	0.4848	0.4848	0.1590	15.77	0.0097
N-Butane	0.7422	0.7422	0.2350	24.21	0.0149
I-Pentane	0.2505	0.2505	0.0920	10.02	0.0062
N-Pentane	0.1709	0.1709	0.0620	6.85	0.0043
Hexane Plus	0.4972	0.4972	0.2220	26.21	0.0165
<b>Total</b>	<b>100.0000</b>	<b>100.0002</b>	<b>17.6820</b>	<b>1056.68</b>	<b>0.6946</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0026	CYLINDER #:	5026
BTU/CU.FT IDEAL:	1059.1	CYLINDER PRESSURE:	PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1061.9	ANALYSIS DATE:	09/22/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1043.4	ANALYSIS TIME:	12:33:22 AM
DRY BTU @ 15.025:	1083.2	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6961		

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: 09/22/2025

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

<b>Lease:</b>	VAUGHN 10; BHD	BRADENHEAD	09/22/2025
<b>Stn. No.:</b>	30-039-20258	CH	35825-16530
<b>Mtr. No.:</b>	87-117-01		

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<b>Smpl Date:</b>	09/15/2025
<b>Test Date:</b>	09/22/2025
<b>Run No:</b>	HS20250115
<b>Nitrogen:</b>	10.2839
<b>CO2:</b>	0.0861
<b>Methane:</b>	78.5887
<b>Ethane:</b>	5.8876
<b>Propane:</b>	3.0081
<b>I-Butane:</b>	0.4848
<b>N-Butane:</b>	0.7422
<b>I-Pentane:</b>	0.2505
<b>N-Pentane:</b>	0.1709
<b>Hexane+:</b>	0.4972
<b>BTU:</b>	1061.9
<b>GPM:</b>	17.6820
<b>SPG:</b>	0.6961



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

Analysis No: HS20250116  
 Cust No: 35825-16535

**Well/Lease Information**

Customer Name:	HILCORP (BHD PROJECT)	Source:	METER RUN
Well Name:	VAUGHN 10; TBG	Well Flowing:	N
County/State:	RIO ARRIBA NM	Pressure:	44 PSIG
Location:		Flow Temp:	83 DEG. F
Lease/PA/CA:	NMSF079266	Ambient Temp:	85 DEG. F
Formation:	CH	Flow Rate:	0 MCF/D
Cust. Stn. No.:	30-039-20258	Sample Method:	Purge & Fill
	87-117-01	Sample Date:	09/15/2025
	AREA 14 / RUN 1404	Sample Time:	1.51 PM
Heat Trace:	N	Sampled By:	KADEN PEACE
Remarks:		Sampled by (CO):	HILCORP

**Analysis**

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.6581	0.6581	0.0730	0.00	0.0064
CO2	0.2776	0.2776	0.0480	0.00	0.0042
Methane	85.7849	85.7850	14.5850	866.43	0.4752
Ethane	6.9960	6.9960	1.8760	123.81	0.0726
Propane	3.6291	3.6291	1.0030	91.31	0.0553
Iso-Butane	0.6100	0.6100	0.2000	19.84	0.0122
N-Butane	0.9142	0.9142	0.2890	29.82	0.0183
I-Pentane	0.3089	0.3089	0.1130	12.36	0.0077
N-Pentane	0.2140	0.2140	0.0780	8.58	0.0053
Hexane Plus	0.6072	0.6072	0.2720	32.01	0.0201
<b>Total</b>	<b>100.0000</b>	<b>100.0001</b>	<b>18.5370</b>	<b>1184.15</b>	<b>0.6773</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0031	CYLINDER #:	6205
BTU/CU.FT IDEAL:	1186.9	CYLINDER PRESSURE:	41 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1190.6	ANALYSIS DATE:	09/22/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1169.9	ANALYSIS TIME:	12:46:24 AM
DRY BTU @ 15.025:	1214.4	ANALYSIS RUN BY:	SARAH BALLARD
REAL SPECIFIC GRAVITY:	0.6792		

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: 09/22/2025

GC Method: C6+ Gas



HILCORP (BHD PROJECT)  
WELL ANALYSIS COMPARISON

<b>Lease:</b>	VAUGHN 10; TBG	METER RUN	09/22/2025
<b>Stn. No.:</b>	30-039-20258	CH	35825-16535
<b>Mtr. No.:</b>	87-117-01		

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<b>Smpl Date:</b>	09/15/2025
<b>Test Date:</b>	09/22/2025
<b>Run No:</b>	HS20250116
<b>Nitrogen:</b>	0.6581
<b>CO2:</b>	0.2776
<b>Methane:</b>	85.7849
<b>Ethane:</b>	6.9960
<b>Propane:</b>	3.6291
<b>I-Butane:</b>	0.6100
<b>N-Butane:</b>	0.9142
<b>I-Pentane:</b>	0.3089
<b>N-Pentane:</b>	0.2140
<b>Hexane+:</b>	0.6072
<b>BTU:</b>	1190.6
<b>GPM:</b>	18.5370
<b>SPG:</b>	0.6792

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 508110

**CONDITIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 508110
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

**CONDITIONS**

Created By	Condition	Condition Date
jagarcia	Accepted for record	4/9/2026