



Well Name: SHOOTIST FEDERAL 19
 API #: 3004534280
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230019
 Cust No: 35825-14740

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	SHOOTIST FEDERAL 19 #16; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	51 PSIG
Location:		Flow Temp:	75.9 DEG. F
Lease/PA/CA:	NMSF-078244	Ambient Temp:	68 DEG. F
Formation:		Flow Rate:	63 MCF/D
Cust. Stn. No.:	3004534280	Sample Method:	Purge & Fill
		Sample Date:	04/27/2023
		Sample Time:	1.30 PM
		Sampled By:	SHAWN FINCHER
		Sampled by (CO):	HILCORP

Heat Trace: N

Remarks:

AREA 2 / RUN 0203

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.8493	1.8145	0.2040	0.00	0.0179
CO2	0.6005	0.5892	0.1030	0.00	0.0091
Methane	97.0271	95.2037	16.4780	979.97	0.5374
Ethane	0.2087	0.2048	0.0560	3.69	0.0022
Propane	0.1556	0.1527	0.0430	3.92	0.0024
Iso-Butane	0.0693	0.0680	0.0230	2.25	0.0014
N-Butane	0.0409	0.0401	0.0130	1.33	0.0008
I-Pentane	0.0243	0.0238	0.0090	0.97	0.0006
N-Pentane	0.0091	0.0089	0.0030	0.36	0.0002
Hexane Plus	0.0152	0.0149	0.0070	0.80	0.0005
Total	100.0000	98.1206	16.9390	993.31	0.5725

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.002	CYLINDER #:	4187
BTU/CU.FT IDEAL:	995.6	CYLINDER PRESSURE:	38 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	997.6	ANALYSIS DATE:	05/03/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	980.2	ANALYSIS TIME:	03:50:38 PM
DRY BTU @ 15.025:	1017.6	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5734		

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: 05/05/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SHOOTIST FEDERAL 19 #16; BHD	BRADENHEAD	05/05/2023
Stn. No.:	3004534280		35825-14740
Mtr. No.:			

Smpl Date: 04/27/2023
Test Date: 05/03/2023
Run No: HS20230019

Nitrogen:	1.8493
CO2:	0.6005
Methane:	97.0271
Ethane:	0.2087
Propane:	0.1556
I-Butane:	0.0693
N-Butane:	0.0409
I-Pentane:	0.0243
N-Pentane:	0.0091
Hexane+:	0.0152

BTU:	997.6
GPM:	16.9390
SPG:	0.5734



Well Name: SHOOTIST FEDERAL 19

API #: 3004534280

Source: CASING

Sample Type: GAS

Analysis No: HS20230020

Cust No: 35825-14745

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: SHOOTIST FEDERAL 19 #16; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: NMSF-078244
 Formation:
 Cust. Stn. No.: 3004534280

Source: CASING
 Well Flowing:
 Pressure: 51 PSIG
 Flow Temp: 75.9 DEG. F
 Ambient Temp: 68 DEG. F
 Flow Rate: 63 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/27/2023
 Sample Time: 1.30 PM
 Sampled By: SHAWN FINCHER
 Sampled by (CO): HILCORP

AREA 2 / RUN 0203

Heat Trace:

Remarks:

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.9298	1.8938	0.2130	0.00	0.0187
CO2	0.5846	0.5737	0.1000	0.00	0.0089
Methane	97.0032	95.1910	16.4740	979.73	0.5373
Ethane	0.1923	0.1887	0.0520	3.40	0.0020
Propane	0.1409	0.1383	0.0390	3.55	0.0021
Iso-Butane	0.0607	0.0596	0.0200	1.97	0.0012
N-Butane	0.0345	0.0339	0.0110	1.13	0.0007
I-Pentane	0.0238	0.0234	0.0090	0.95	0.0006
N-Pentane	0.0081	0.0079	0.0030	0.32	0.0002
Hexane Plus	0.0221	0.0217	0.0100	1.16	0.0007
Total	100.0000	98.1320	16.9310	992.22	0.5724

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.002
 BTU/CU.FT IDEAL: 994.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 996.5
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 979.2
 DRY BTU @ 15.025: 1016.5
 REAL SPECIFIC GRAVITY: 0.5733

CYLINDER #: 6089
 CYLINDER PRESSURE: 51 PSIG
 ANALYSIS DATE: 05/03/2023
 ANALYSIS TIME: 03:46:37 PM
 ANALYSIS RUN BY: RICHARD WILSON

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: 05/05/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	SHOOTIST FEDERAL 19 #16; CSG	CASING	05/05/2023
Stn. No.:	3004534280		35825-14745
Mtr. No.:			

Smpl Date: 04/27/2023
Test Date: 05/03/2023
Run No: HS20230020

Nitrogen: 1.9298
CO2: 0.5846
Methane: 97.0032
Ethane: 0.1923
Propane: 0.1409
I-Butane: 0.0607
N-Butane: 0.0345
I-Pentane: 0.0238
N-Pentane: 0.0081
Hexane+: 0.0221

BTU: 996.5
GPM: 16.9310
SPG: 0.5733

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 215108

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 215108
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas all strings	10/6/2023