



Well Name: TAFOYA 1C;BHD
 API #: 3004532187
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS2021165
 Cust No: 35825-11820

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	TAFOYA 1C;BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	119 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004532187	Sample Method:	
	85974-01	Sample Date:	07/28/2021
	AREA 2 / RUN 0211	Sample Time:	2.23 PM
Heat Trace:	N	Sampled By:	
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2468	0.2418	0.0270	0.00	0.0024
CO2	0.0015	0.0015	0.0000	0.00	0.0000
Methane	90.2892	88.4478	15.3440	911.92	0.5001
Ethane	5.9348	5.8138	1.5910	105.03	0.0616
Propane	2.0055	1.9646	0.5540	50.46	0.0305
Iso-Butane	0.4437	0.4347	0.1460	14.43	0.0089
N-Butane	0.4809	0.4711	0.1520	15.69	0.0097
I-Pentane	0.2173	0.2129	0.0800	8.69	0.0054
N-Pentane	0.0914	0.0895	0.0330	3.66	0.0023
Hexane Plus	0.2889	0.2830	0.1290	15.23	0.0096
Total	100.0000	97.9607	18.0560	1125.11	0.6305

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
 BTU/CU.FT IDEAL: 1127.7
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1130.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1111.1
 DRY BTU @ 15.025: 1153.4
 REAL SPECIFIC GRAVITY: 0.6319

CYLINDER #: 055
 CYLINDER PRESSURE: 91 PSIG
 ANALYSIS DATE: 08/04/2021
 ANALYSIS TIME: 02:55:04 PM
 ANALYSIS RUN BY: PATRICIA KING

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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	TAFOYA 1C;BHD	BRADENHEAD	08/06/2021
Stn. No.:	3004532187		35825-11820
Mtr. No.:	85974-01		

Smpl Date:	07/28/2021	07/25/2019
Test Date:	08/04/2021	08/07/2019
Run No:	HS2021165	HS190214
Nitrogen:	0.2468	0.3255
CO2:	0.0015	0.0088
Methane:	90.2892	92.3358
Ethane:	5.9348	5.4244
Propane:	2.0055	1.0239
I-Butane:	0.4437	0.2435
N-Butane:	0.4809	0.2473
I-Pentane:	0.2173	0.1217
N-Pentane:	0.0914	0.0500
Hexane+:	0.2889	0.2191
BTU:	1130.8	1093.9
GPM:	18.0560	17.7830
SPG:	0.6319	0.6092



Well Name: TAFOYA 1C; CSG
 API #: 3004532187
 Source: CASING
 Sample Type: GAS
 Analysis No: HS2021166
 Cust No: 35825-12015

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	CASING
Well Name:	TAFOYA 1C; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	70 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:	DK	Flow Rate:	MCF/D
Cust. Stn. No.:	3004532187	Sample Method:	
	85974-01	Sample Date:	07/28/2021
	AREA 2 / RUN 0211	Sample Time:	2.56 PM
Heat Trace:	N	Sampled By:	
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1430	0.1418	0.0160	0.00	0.0014
CO2	2.3973	2.3766	0.4110	0.00	0.0364
Methane	80.8721	80.1722	13.7600	816.81	0.4480
Ethane	7.7536	7.6865	2.0810	137.22	0.0805
Propane	3.7091	3.6770	1.0260	93.32	0.0565
Iso-Butane	0.8431	0.8358	0.2770	27.42	0.0169
N-Butane	1.3505	1.3388	0.4270	44.06	0.0271
I-Pentane	0.7372	0.7308	0.2710	29.49	0.0184
N-Pentane	0.6644	0.6587	0.2420	26.63	0.0166
Hexane Plus	1.5297	1.5165	0.6850	80.63	0.0506
Total	100.0000	99.1347	19.1960	1255.58	0.7523

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0039	CYLINDER #:	013
BTU/CU.FT IDEAL:	1258.5	CYLINDER PRESSURE:	63 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1263.4	ANALYSIS DATE:	08/04/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1241.4	ANALYSIS TIME:	03:48:31 PM
DRY BTU @ 15.025:	1288.7	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7549		

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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	TAFOYA 1C; CSG	CASING	08/06/2021
Stn. No.:	3004532187	DK	35825-12015
Mtr. No.:	85974-01		

Smpl Date:	07/28/2021	08/14/2019
Test Date:	08/04/2021	08/26/2019
Run No:	HS2021166	HS190252
Nitrogen:	0.1430	0.2049
CO2:	2.3973	0.0562
Methane:	80.8721	81.9949
Ethane:	7.7536	8.1366
Propane:	3.7091	4.1633
I-Butane:	0.8431	1.0279
N-Butane:	1.3505	1.6307
I-Pentane:	0.7372	0.8265
N-Pentane:	0.6644	0.6552
Hexane+:	1.5297	1.3038
BTU:	1263.4	1299.6
GPM:	19.1960	19.2980
SPG:	0.7549	0.7409



Well Name: TAFOYA 1C; TBG
 API #: 3004532187
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS2021167
 Cust No: 35825-11825

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	TAFOYA 1C; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	70 PSIG
Location:		Flow Temp:	DEG. F
Lease/PA/CA:		Ambient Temp:	DEG. F
Formation:		Flow Rate:	MCF/D
Cust. Stn. No.:	3004532187	Sample Method:	
	85974-01	Sample Date:	07/28/2021
	AREA 2 / RUN 0211	Sample Time:	2.47 PM
Heat Trace:	N	Sampled By:	
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1562	0.1542	0.0170	0.00	0.0015
CO2	0.7070	0.6981	0.1210	0.00	0.0107
Methane	84.7093	83.6381	14.4030	855.56	0.4692
Ethane	8.1807	8.0773	2.1940	144.77	0.0849
Propane	3.3490	3.3067	0.9250	84.26	0.0510
Iso-Butane	0.6911	0.6824	0.2270	22.47	0.0139
N-Butane	0.9311	0.9193	0.2940	30.38	0.0187
I-Pentane	0.3517	0.3473	0.1290	14.07	0.0088
N-Pentane	0.2353	0.2323	0.0860	9.43	0.0059
Hexane Plus	0.6886	0.6799	0.3080	36.30	0.0228
Total	100.0000	98.7356	18.7040	1197.25	0.6873

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0032	CYLINDER #:	006
BTU/CU.FT IDEAL:	1200.0	CYLINDER PRESSURE:	30 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1203.9	ANALYSIS DATE:	08/04/2021
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1183.0	ANALYSIS TIME:	03:40:07 PM
DRY BTU @ 15.025:	1228.0	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.6893		

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: 08/06/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	TAFOYA 1C; TBG	TUBING	08/06/2021
Stn. No.:	3004532187		35825-11825
Mtr. No.:	85974-01		

Smpl Date:	07/28/2021	07/25/2019
Test Date:	08/04/2021	08/07/2019
Run No:	HS2021167	HS190215
Nitrogen:	0.1562	0.1637
CO2:	0.7070	0.7867
Methane:	84.7093	83.4794
Ethane:	8.1807	8.1561
Propane:	3.3490	3.8633
I-Butane:	0.6911	0.7961
N-Butane:	0.9311	1.1430
I-Pentane:	0.3517	0.4325
N-Pentane:	0.2353	0.3238
Hexane+:	0.6886	0.8554
BTU:	1203.9	1230.2
GPM:	18.7040	18.8880
SPG:	0.6893	0.7076

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District III
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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 44337

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 44337
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	gas does not appear to be the same	10/18/2021