



Well Name: KAUFMAN IE; BHD
 API #: 3004525972
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20240026
 Cust No: 35825-14030

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	KAUFMAN IE; BHD	Well Flowing:	N
County/State:	SAN JUAN NM	Pressure:	26 PSIG
Location:		Flow Temp:	72 DEG. F
Lease/PA/CA:	SF-078463-A	Ambient Temp:	DEG. F
Formation:	GL / DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	3004525972	Sample Method:	Purge & Fill
	20007	Sample Date:	04/11/2024
	AREA 2 / RUN 0205	Sample Time:	1.45 PM
Heat Trace:	N	Sampled By:	ROGER TOM
Remarks:		Sampled by (CO):	HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.5159	0.5161	0.0570	0.00	0.0050
CO2	0.8872	0.8876	0.1520	0.00	0.0135
Methane	77.1948	77.2285	13.1370	779.67	0.4276
Ethane	11.0059	11.0107	2.9550	194.77	0.1143
Propane	5.4820	5.4844	1.5160	137.93	0.0835
Iso-Butane	0.5714	0.5716	0.1880	18.58	0.0115
N-Butane	1.8219	1.8227	0.5770	59.44	0.0366
I-Pentane	0.5020	0.5022	0.1840	20.08	0.0125
N-Pentane	0.5981	0.5984	0.2180	23.98	0.0149
Hexane Plus	1.4208	1.4214	0.6360	74.89	0.0470
Total	100.0000	100.0436	19.6200	1309.34	0.7662

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0041
BTU/CU.FT IDEAL:	1312.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1317.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1294.9
DRY BTU @ 15.025:	1344.2
REAL SPECIFIC GRAVITY:	0.7691

CYLINDER #:	1866
CYLINDER PRESSURE:	48 PSIG
ANALYSIS DATE:	04/16/2024
ANALYSIS TIME:	02:47:22 PM
ANALYSIS RUN BY:	SARAH BALLARD

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: 06/10/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	KAUFMAN IE; BHD	BRADENHEAD	06/10/2024
Stn. No.:	3004525972	GL / DK	35825-14030
Mtr. No.:	20007		

Smpl Date:	04/11/2024	08/30/2021
Test Date:	04/16/2024	09/10/2021
Run No:	HS20240026	HS2021233
Nitrogen:	0.5159	0.5097
CO2:	0.8872	0.0063
Methane:	77.1948	91.5374
Ethane:	11.0059	4.8176
Propane:	5.4820	2.0474
I-Butane:	0.5714	0.4961
N-Butane:	1.8219	0.4058
I-Pentane:	0.5020	0.1105
N-Pentane:	0.5981	0.0446
Hexane+:	1.4208	0.0246
BTU:	1317.8	1103.5
GPM:	19.6200	17.8250
SPG:	0.7691	0.6173



Well Name: KAUFMAN 1E; CSG

API #: 3004525972

Source: CASING

Sample Type: GAS

Analysis No: HS20240027

Cust No: 35825-14035

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: KAUFMAN 1E; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA: SF-078463-A

Formation: GL / DK

Cust. Stn. No.: 3004525972
20007

AREA 2 / RUN 0205

Heat Trace: N

Remarks: PRESSURED WITH HELIUM TO 30 LBS.

Source: CASING

Well Flowing: N

Pressure: 26 PSIG

Flow Temp: 72 DEG. F

Ambient Temp: DEG. F

Flow Rate: 0 MCF/D

Sample Method: Purge & Fill

Sample Date: 04/11/2024

Sample Time: 1.45 PM

Sampled By: ROGER TOM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4483	0.0904	0.0490	0.00	0.0043
CO2	0.0089	0.0018	0.0020	0.00	0.0001
Methane	92.0213	18.5544	15.6350	929.42	0.5097
Ethane	4.3480	0.8767	1.1650	76.95	0.0451
Propane	1.8692	0.3769	0.5160	47.03	0.0285
Iso-Butane	0.4786	0.0965	0.1570	15.56	0.0096
N-Butane	0.4424	0.0892	0.1400	14.43	0.0089
I-Pentane	0.1676	0.0338	0.0610	6.71	0.0042
N-Pentane	0.0858	0.0173	0.0310	3.44	0.0021
Hexane Plus	0.1299	0.0262	0.0580	6.85	0.0043
Total	100.0000	20.1632	17.8140	1100.38	0.6169

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025
 BTU/CU.FT IDEAL: 1102.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1105.7
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1086.5
 DRY BTU @ 15.025: 1127.8
 REAL SPECIFIC GRAVITY: 0.6182

CYLINDER #: 005
 CYLINDER PRESSURE: 2 PSIG
 ANALYSIS DATE: 04/16/2024
 ANALYSIS TIME: 02:31:35 PM
 ANALYSIS RUN BY: SARAH BALLARD

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: 06/10/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	KAUFMAN 1E; CSG	CASING	06/10/2024
Stn. No.:	3004525972	GL / DK	35825-14035
Mtr. No.:	20007		

Smpl Date:	04/11/2024	08/30/2021
Test Date:	04/16/2024	09/10/2021
Run No:	HS20240027	HS2021234
Nitrogen:	0.4483	0.5552
CO2:	0.0089	0.8704
Methane:	92.0213	77.7720
Ethane:	4.3480	11.3510
Propane:	1.8692	5.5232
I-Butane:	0.4786	0.5816
N-Butane:	0.4424	1.6724
I-Pentane:	0.1676	0.4190
N-Pentane:	0.0858	0.4447
Hexane+:	0.1299	0.8105
BTU:	1105.7	1284.0
GPM:	17.8140	19.4130
SPG:	0.6182	0.7474



Well Name: KAUFMAN 1E; TBG

API #: 3004525972

Source: TUBING

Sample Type: GAS

Analysis No: HS20240028

Cust No: 35825-14040

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: KAUFMAN 1E; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA: SF-078463-A

Formation:

Cust. Stn. No.: 3004525972
20007

AREA 2 / RUN 0205

Heat Trace: N

Remarks:

Source: TUBING

Well Flowing: N

Pressure: 26 PSIG

Flow Temp: 72 DEG. F

Ambient Temp: DEG. F

Flow Rate: 0 MCF/D

Sample Method: Purge & Fill

Sample Date: 04/11/2024

Sample Time: 1.45 PM

Sampled By: ROGER TOM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4025	0.4018	0.0440	0.00	0.0039
CO2	1.6628	1.6599	0.2850	0.00	0.0253
Methane	79.2580	79.1184	13.4840	800.51	0.4390
Ethane	9.9109	9.8934	2.6600	175.39	0.1029
Propane	4.6343	4.6261	1.2810	116.60	0.0706
Iso-Butane	0.7196	0.7183	0.2360	23.40	0.0144
N-Butane	1.3632	1.3608	0.4310	44.47	0.0274
I-Pentane	0.4484	0.4476	0.1650	17.94	0.0112
N-Pentane	0.4435	0.4427	0.1610	17.78	0.0110
Hexane Plus	1.1568	1.1548	0.5180	60.98	0.0383
Total	100.0000	99.8238	19.2650	1257.07	0.7439

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0038
 BTU/CU.FT IDEAL: 1260.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1264.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1242.8
 DRY BTU @ 15.025: 1290.1
 REAL SPECIFIC GRAVITY: 0.7465

CYLINDER #: 8003
 CYLINDER PRESSURE: 23 PSIG
 ANALYSIS DATE: 04/16/2024
 ANALYSIS TIME: 02:36:15 PM
 ANALYSIS RUN BY: SARAH BALLARD

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: 06/10/2024

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	KAUFMAN 1E; TBG	TUBING	06/10/2024
Stn. No.:	3004525972		35825-14040
Mtr. No.:	20007		

Smpl Date:	04/11/2024	08/30/2021
Test Date:	04/16/2024	09/10/2021
Run No:	HS20240028	HS2021235
Nitrogen:	0.4025	0.4666
CO2:	1.6628	1.1964
Methane:	79.2580	78.9029
Ethane:	9.9109	11.1958
Propane:	4.6343	5.0910
I-Butane:	0.7196	0.6013
N-Butane:	1.3632	1.3785
I-Pentane:	0.4484	0.2830
N-Pentane:	0.4435	0.2416
Hexane+:	1.1568	0.6429
BTU:	1264.8	1249.9
GPM:	19.2650	19.2020
SPG:	0.7465	0.7299

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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 355498

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 355498
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	bradenhead gas similar to tubing	8/27/2024