



Well Name: OHIO D GOVT 1A; BHD
 API #: 3004522998
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230089
 Cust No: 35825-15010

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: OHIO D GOVT 1A; BHD
 County/State:
 Location:
 Lease/PA/CA: 211
 Formation:
 Cust. Stn. No.: 3004522998
 22081

Source: BRADENHEAD
 Well Flowing: Y
 Pressure: 42 PSIG
 Flow Temp: DEG. F
 Ambient Temp: DEG. F
 Flow Rate: MCF/D
 Sample Method: Purge & Fill
 Sample Date: 06/23/2023
 Sample Time: 2.30 PM
 Sampled By: HILCORP
 Sampled by (CO): PETE JIM

AREA 2 / RUN 203

Heat Trace:
 Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	2.4305	2.3909	0.2680	0.00	0.0235
CO2	0.0173	0.0170	0.0030	0.00	0.0003
Methane	91.8072	90.3132	15.5960	927.25	0.5085
Ethane	3.3195	3.2655	0.8900	58.75	0.0345
Propane	1.4626	1.4388	0.4040	36.80	0.0223
Iso-Butane	0.3879	0.3816	0.1270	12.61	0.0078
N-Butane	0.2979	0.2931	0.0940	9.72	0.0060
I-Pentane	0.1199	0.1179	0.0440	4.80	0.0030
N-Pentane	0.0527	0.0518	0.0190	2.11	0.0013
Hexane Plus	0.1045	0.1028	0.0470	5.51	0.0035
Total	100.0000	98.3726	17.4920	1057.55	0.6105

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
 BTU/CU.FT IDEAL: 1060.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1062.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1043.9
 DRY BTU @ 15.025: 1083.7
 REAL SPECIFIC GRAVITY: 0.6117

CYLINDER #: 6212
 CYLINDER PRESSURE: 41 PSIG
 ANALYSIS DATE: 06/29/2023
 ANALYSIS TIME: 09:59:44 AM
 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: 07/06/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: OHIO D GOVT 1A; BHD
Stn. No.: 3004522998
Mtr. No.: 22081

BRADENHEAD

07/06/2023
35825-15010

Smpl Date: 06/23/2023
Test Date: 06/29/2023
Run No: HS20230089

Nitrogen: 2.4305
CO2: 0.0173
Methane: 91.8072
Ethane: 3.3195
Propane: 1.4626
I-Butane: 0.3879
N-Butane: 0.2979
I-Pentane: 0.1199
N-Pentane: 0.0527
Hexane+: 0.1045

BTU: 1062.4
GPM: 17.4920
SPG: 0.6117



Well Name: OHIO D GOVT 1A; CSG

API #: 3004522998

Source: CASING

Sample Type: GAS

Analysis No: HS20230090

Cust No: 35825-15015

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: OHIO D GOVT 1A; CSG

County/State:

Location:

Lease/PA/CA: 211

Formation:

Cust. Stn. No.: 3004522998
22081

AREA 2 / RUN 203

Heat Trace:

Remarks:

Source: CASING

Well Flowing: Y

Pressure: 42 PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 06/23/2023

Sample Time: 2.30 PM

Sampled By: PETER JIM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2476	0.2435	0.0270	0.00	0.0024
CO2	0.5306	0.5219	0.0910	0.00	0.0081
Methane	76.5291	75.2723	13.0280	772.94	0.4239
Ethane	9.9474	9.7840	2.6710	176.04	0.1033
Propane	6.5912	6.4830	1.8230	165.84	0.1004
Iso-Butane	1.3997	1.3767	0.4600	45.52	0.0281
N-Butane	1.8652	1.8346	0.5900	60.85	0.0374
I-Pentane	0.7478	0.7355	0.2750	29.92	0.0186
N-Pentane	0.6145	0.6044	0.2240	24.63	0.0153
Hexane Plus	1.5269	1.5018	0.6840	80.48	0.0505
Total	100.0000	98.3577	19.8730	1356.23	0.7880

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0044
 BTU/CU.FT IDEAL: 1359.4
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1365.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1341.6
 DRY BTU @ 15.025: 1392.7
 REAL SPECIFIC GRAVITY: 0.7911

CYLINDER #: 6004
 CYLINDER PRESSURE: 41 PSIG
 ANALYSIS DATE: 06/29/2023
 ANALYSIS TIME: 09:41:56 AM
 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: 07/06/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: OHIO D GOVT 1A; CSG
Stn. No.: 3004522998
Mtr. No.: 22081

CASING

07/06/2023
35825-15015

Smpl Date: 06/23/2023
Test Date: 06/29/2023
Run No: HS20230090

Nitrogen: 0.2476
CO2: 0.5306
Methane: 76.5291
Ethane: 9.9474
Propane: 6.5912
I-Butane: 1.3997
N-Butane: 1.8652
I-Pentane: 0.7478
N-Pentane: 0.6145
Hexane+: 1.5269

BTU: 1365.4
GPM: 19.8730
SPG: 0.7911



Well Name: OHIO D GOVT 1A; TBG

API #: 3004522998

Source: TUBING

Sample Type: GAS

Analysis No: HS20230091

Cust No: 35825-15020

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: OHIO D GOVT 1A; TBG

County/State:

Location:

Lease/PA/CA: 211

Formation:

Cust. Stn. No.: 3004522998
22081

AREA 2 / RUN 203

Heat Trace:

Remarks:

Source: TUBING

Well Flowing: Y

Pressure: 42 PSIG

Flow Temp: DEG. F

Ambient Temp: DEG. F

Flow Rate: MCF/D

Sample Method: Purge & Fill

Sample Date: 06/23/2023

Sample Time: 2.30 PM

Sampled By: PETE JIM

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1827	0.1853	0.0200	0.00	0.0018
CO2	0.8632	0.8756	0.1480	0.00	0.0131
Methane	78.9066	80.0390	13.4260	796.96	0.4371
Ethane	10.0660	10.2104	2.7020	178.14	0.1045
Propane	5.3816	5.4588	1.4880	135.41	0.0819
Iso-Butane	1.1207	1.1368	0.3680	36.44	0.0225
N-Butane	1.5612	1.5836	0.4940	50.93	0.0313
I-Pentane	0.5398	0.5475	0.1980	21.60	0.0134
N-Pentane	0.3956	0.4013	0.1440	15.86	0.0099
Hexane Plus	0.9826	0.9967	0.4400	51.79	0.0325
Total	100.0000	101.4350	19.4280	1287.12	0.7480

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0039
 BTU/CU.FT IDEAL: 1290.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1295.2
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1272.7
 DRY BTU @ 15.025: 1321.1
 REAL SPECIFIC GRAVITY: 0.7507

CYLINDER #: 6123
 CYLINDER PRESSURE: 40 PSIG
 ANALYSIS DATE: 06/29/2023
 ANALYSIS TIME: 09:49:32 AM
 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: 07/06/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: OHIO D GOVT 1A; TBG
Stn. No.: 3004522998
Mtr. No.: 22081

TUBING

07/06/2023
35825-15020

Smpl Date: 06/23/2023
Test Date: 06/29/2023
Run No: HS20230091

Nitrogen: 0.1827
CO2: 0.8632
Methane: 78.9066
Ethane: 10.0660
Propane: 5.3816
I-Butane: 1.1207
N-Butane: 1.5612
I-Pentane: 0.5398
N-Pentane: 0.3956
Hexane+: 0.9826

BTU: 1295.2
GPM: 19.4280
SPG: 0.7507

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 236743

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 236743
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	not similar	9/22/2023