



Well Name: ZACHRY #5; TBG
 API #: API# 3004560308
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS2021024
 Cust No: 35825-13500

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: ZACHRY #5; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF080724
 Formation:
 Cust. Stn. No.: API# 3004560308

Source: TUBING
 Well Flowing: Y
 Pressure: 45 PSIG
 Flow Temp: 80 DEG. F
 Ambient Temp: 72 DEG. F
 Flow Rate: 155 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/22/2021
 Sample Time: 1.30 PM
 Sampled By: LAWRENCE L.
 Sampled by (CO): HILCORP

Heat Trace: N
 Remarks: AREA 08 / RUN 0806

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1985	0.1935	0.0220	0.00	0.0019
CO2	1.2541	1.2227	0.2150	0.00	0.0191
Methane	86.2374	84.0797	14.6570	871.00	0.4777
Ethane	8.6541	8.4376	2.3200	153.15	0.0898
Propane	2.5438	2.4802	0.7030	64.00	0.0387
Iso-Butane	0.3971	0.3872	0.1300	12.91	0.0080
N-Butane	0.3717	0.3624	0.1170	12.13	0.0075
I-Pentane	0.1190	0.1160	0.0440	4.76	0.0030
N-Pentane	0.0630	0.0614	0.0230	2.53	0.0016
Hexane Plus	0.1613	0.1573	0.0720	8.50	0.0053
Total	100.0000	97.4980	18.3030	1128.98	0.6525

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
 BTU/CU.FT IDEAL: 1131.6
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1134.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1115.1
 DRY BTU @ 15.025: 1157.5
 REAL SPECIFIC GRAVITY: 0.6541

CYLINDER #: 6040
 CYLINDER PRESSURE: 31 PSIG
 ANALYSIS DATE: 04/27/2021
 ANALYSIS TIME: 03:09:57 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: 05/04/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ZACHRY #5; TBG
Stn. No.: API# 3004560308
Mtr. No.:

TUBING

05/04/2021
35825-13500

Smpl Date: 04/22/2021
Test Date: 04/27/2021
Run No: HS2021024

Nitrogen: 0.1985
CO2: 1.2541
Methane: 86.2374
Ethane: 8.6541
Propane: 2.5438
I-Butane: 0.3971
N-Butane: 0.3717
I-Pentane: 0.1190
N-Pentane: 0.0630
Hexane+: 0.1613

BTU: 1134.8
GPM: 18.3030
SPG: 0.6541



Well Name: ZACHRY #5; CSG
 API #: API# 3004560308
 Source: CASING
 Sample Type: GAS
 Analysis No: HS2021023
 Cust No: 35825-13495

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: ZACHRY #5; CSG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: SF08724
 Formation:
 Cust. Stn. No.: API# 3004560308

Source: CASING
 Well Flowing: Y
 Pressure: 45 PSIG
 Flow Temp: 80 DEG. F
 Ambient Temp: 72 DEG. F
 Flow Rate: 155 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 04/22/2021
 Sample Time: 1.45 PM
 Sampled By: LAWRENCE L.
 Sampled by (CO): HILCORP

Heat Trace: N
 Remarks: AREA 08 / RUN 0806

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1450	0.1415	0.0160	0.00	0.0014
CO2	0.4175	0.4074	0.0710	0.00	0.0063
Methane	92.3823	90.1511	15.6950	933.06	0.5117
Ethane	4.8972	4.7789	1.3130	86.67	0.0508
Propane	1.4400	1.4052	0.3980	36.23	0.0219
Iso-Butane	0.2855	0.2786	0.0940	9.28	0.0057
N-Butane	0.2111	0.2060	0.0670	6.89	0.0042
I-Pentane	0.0801	0.0782	0.0290	3.20	0.0020
N-Pentane	0.0410	0.0400	0.0150	1.64	0.0010
Hexane Plus	0.1003	0.0979	0.0450	5.29	0.0033
Total	100.0000	97.5848	17.7430	1082.26	0.6085

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0024
 BTU/CU.FT IDEAL: 1084.8
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1087.4
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1068.5
 DRY BTU @ 15.025: 1109.2
 REAL SPECIFIC GRAVITY: 0.6097

CYLINDER #: 7032
 CYLINDER PRESSURE: 38 PSIG
 ANALYSIS DATE: 04/27/2021
 ANALYSIS TIME: 03:23:35 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: 05/04/2021

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ZACHRY #5; CSG
Stn. No.: API# 3004560308
Mtr. No.:

CASING

05/04/2021
35825-13495

Smpl Date: 04/22/2021
Test Date: 04/27/2021
Run No: HS2021023

Nitrogen: 0.1450
CO2: 0.4175
Methane: 92.3823
Ethane: 4.8972
Propane: 1.4400
I-Butane: 0.2855
N-Butane: 0.2111
I-Pentane: 0.0801
N-Pentane: 0.0410
Hexane+: 0.1003

BTU: 1087.4
GPM: 17.7430
SPG: 0.6097

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1000 Rio Brazos Rd., Aztec, NM 87410
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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 32982

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 32982
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	6/23/2021