



Well Name: ALLISON #39; BHD
 API #: 3004529615
 Source: BRADENHEAD
 Sample Type: GAS
 Analysis No: HS20230072
 Cust No: 35825-14925

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	BRADENHEAD
Well Name:	ALLISON #39; BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	72.5 PSIG
Location:		Flow Temp:	101 DEG. F
Lease/PA/CA:		Ambient Temp:	81 DEG. F
Formation:	MV/DK	Flow Rate:	27 MCF/D
Cust. Stn. No.:	3004529615	Sample Method:	Purge & Fill
	82429	Sample Date:	06/21/2023
		Sample Time:	12.45 PM
	AREA 5/RUN 508	Sampled By:	MICHAEL WALDREN
Heat Trace:	N	Sampled by (CO):	HILCORP
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	4.4973	4.4705	0.4960	0.00	0.0435
CO2	0.0324	0.0322	0.0060	0.00	0.0005
Methane	94.6314	94.0665	16.0690	955.78	0.5242
Ethane	0.7651	0.7605	0.2050	13.54	0.0079
Propane	0.0630	0.0626	0.0170	1.59	0.0010
Iso-Butane	0.0090	0.0089	0.0030	0.29	0.0002
N-Butane	0.0018	0.0018	0.0010	0.06	0.0000
I-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
N-Pentane	0.0000	0.0000	0.0000	0.00	0.0000
Hexane Plus	0.0000	0.0000	0.0000	0.00	0.0000
Total	100.0000	99.4030	16.7970	971.25	0.5773

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0019	CYLINDER #:	4153
BTU/CU.FT IDEAL:	973.5	CYLINDER PRESSURE:	45 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	975.4	ANALYSIS DATE:	06/28/2023
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	958.4	ANALYSIS TIME:	09:48:23 AM
DRY BTU @ 15.025:	994.9	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.5781		

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: 06/29/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	ALLISON #39; BHD	BRADENHEAD	06/29/2023
Stn. No.:	3004529615	MV/DK	35825-14925
Mtr. No.:	82429		

Smpl Date: 06/21/2023
Test Date: 06/28/2023
Run No: HS20230072

Nitrogen: 4.4973
CO2: 0.0324
Methane: 94.6314
Ethane: 0.7651
Propane: 0.0630
I-Butane: 0.0090
N-Butane: 0.0018
I-Pentane: 0.0000
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 975.4
GPM: 16.7970
SPG: 0.5781



Well Name: ALLISON #39; CSG

API #: 3004529615

Source: CASING

Sample Type: GAS

Analysis No: HS20230073

Cust No: 35825-14930

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: ALLISON #39; CSG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation: MV/DK

Cust. Stn. No.: 3004529615
82429

AREA 5/RUN 508

Heat Trace: N

Remarks:

Source: CASING

Well Flowing: Y

Pressure: 73 PSIG

Flow Temp: 96.5 DEG. F

Ambient Temp: 78 DEG. F

Flow Rate: 67 MCF/D

Sample Method: Purge & Fill

Sample Date: 06/22/2023

Sample Time: 11.40 AM

Sampled By: MICHAEL WALDREN

Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0628	0.0631	0.0070	0.00	0.0006
CO2	2.3282	2.3410	0.3980	0.00	0.0354
Methane	95.8698	96.3951	16.2830	968.28	0.5310
Ethane	1.5067	1.5150	0.4040	26.66	0.0156
Propane	0.1623	0.1632	0.0450	4.08	0.0025
Iso-Butane	0.0276	0.0278	0.0090	0.90	0.0006
N-Butane	0.0175	0.0176	0.0060	0.57	0.0004
I-Pentane	0.0063	0.0063	0.0020	0.25	0.0002
N-Pentane	0.0022	0.0022	0.0010	0.09	0.0001
Hexane Plus	0.0166	0.0167	0.0070	0.87	0.0005
Total	100.0000	100.5480	17.1620	1001.72	0.5868

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 1004.0
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1006.1
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 988.6
 DRY BTU @ 15.025: 1026.2
 REAL SPECIFIC GRAVITY: 0.5878

CYLINDER #: 7020
 CYLINDER PRESSURE: 61 PSIG
 ANALYSIS DATE: 06/28/2023
 ANALYSIS TIME: 09:44:31 AM
 ANALYSIS RUN BY: ALEXIS MITCHELL

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: 06/29/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON #39; CSG
Stn. No.: 3004529615
Mtr. No.: 82429

CASING
MV/DK

06/29/2023
35825-14930

Smpl Date: 06/22/2023
Test Date: 06/28/2023
Run No: HS20230073

Nitrogen: 0.0628
CO2: 2.3282
Methane: 95.8698
Ethane: 1.5067
Propane: 0.1623
I-Butane: 0.0276
N-Butane: 0.0175
I-Pentane: 0.0063
N-Pentane: 0.0022
Hexane+: 0.0166

BTU: 1006.1
GPM: 17.1620
SPG: 0.5878



Well Name: ALLISON #39; TBG

API #: 3004529615

Source: TUBING

Sample Type: GAS

Analysis No: HS20230074

Cust No: 35825-14935

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)

Well Name: ALLISON #39; TBG

County/State: SAN JUAN NM

Location:

Lease/PA/CA:

Formation: MV/DK

Cust. Stn. No.: 3004529615
82429

AREA 5/RUN 508

Heat Trace: N

Remarks:

Source: TUBING

Well Flowing: Y

Pressure: 73 PSIG

Flow Temp: 96.5 DEG. F

Ambient Temp: 78 DEG. F

Flow Rate: 67 MCF/D

Sample Method: Purge & Fill

Sample Date: 06/22/2023

Sample Time: 11.30 AM

Sampled By: MICHAEL WALDREN

Sampled by (CO): HILCORP

Analysis

Component:	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0774	0.0771	0.0090	0.00	0.0007
CO2	2.1708	2.1627	0.3710	0.00	0.0330
Methane	93.9850	93.6323	15.9640	949.25	0.5206
Ethane	3.1856	3.1736	0.8540	56.38	0.0331
Propane	0.4146	0.4130	0.1140	10.43	0.0063
Iso-Butane	0.0632	0.0630	0.0210	2.06	0.0013
N-Butane	0.0376	0.0375	0.0120	1.23	0.0008
I-Pentane	0.0157	0.0156	0.0060	0.63	0.0004
N-Pentane	0.0060	0.0060	0.0020	0.24	0.0001
Hexane Plus	0.0441	0.0439	0.0200	2.32	0.0015
Total	100.0000	99.6247	17.3730	1022.53	0.5977

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0022
 BTU/CU.FT IDEAL: 1024.9
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1027.2
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1009.3
 DRY BTU @ 15.025: 1047.8
 REAL SPECIFIC GRAVITY: 0.5988

CYLINDER #: 4114
 CYLINDER PRESSURE: 71 PSIG
 ANALYSIS DATE: 06/28/2023
 ANALYSIS TIME: 09:34:28 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: 06/29/2023

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	ALLISON #39; TBG	TUBING	06/29/2023
Stn. No.:	3004529615	MV/DK	35825-14935
Mtr. No.:	82429		

Smpl Date: 06/22/2023
Test Date: 06/28/2023
Run No: HS20230074

Nitrogen: 0.0774
CO2: 2.1708
Methane: 93.9850
Ethane: 3.1856
Propane: 0.4146
I-Butane: 0.0632
N-Butane: 0.0376
I-Pentane: 0.0157
N-Pentane: 0.0060
Hexane+: 0.0441

BTU: 1027.2
GPM: 17.3730
SPG: 0.5988

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 234874

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 234874
	Action Type: [UF-GA] Gas Analysis (GAS ANALYSIS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	same gas - nitrogen high on bradenhead sample	9/22/2023