



NMOCD REC'D
9/29/20

Well Name: ALLISON UNIT 61N; CSG
API #: API # 3004534408
Source: CASING
Sample Type: GAS
Analysis No: HS200248
Cust No: 35825-13120

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: ALLISON UNIT 61N; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: API # 3004534408
8103701

Source: CASING
Well Flowing: Y
Pressure: 125 PSIG
Flow Temp: DEG. F
Ambient Temp: 85 DEG. F
Flow Rate: 116 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/27/2020
Sample Time: 2.25 PM
Sampled By: ROBERT P.
Sampled by (CO): HILCORP

AREA 5 / RUN 0509

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0682	0.0678	0.0080	0.00	0.0007
CO2	2.8487	2.8337	0.4870	0.00	0.0433
Methane	95.8028	95.2983	16.2710	967.61	0.5307
Ethane	1.1709	1.1647	0.3140	20.72	0.0122
Propane	0.0902	0.0897	0.0250	2.27	0.0014
Iso-Butane	0.0123	0.0122	0.0040	0.40	0.0002
N-Butane	0.0055	0.0055	0.0020	0.18	0.0001
I-Pentane	0.0014	0.0014	0.0010	0.06	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	99.4733	17.1120	991.23	0.5885

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
BTU/CU.FT IDEAL: 993.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 995.6
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 978.3
DRY BTU @ 15.025: 1015.5
REAL SPECIFIC GRAVITY: 0.5895

CYLINDER #: 6205
CYLINDER PRESSURE: 122 PSIG
ANALYSIS DATE: 09/02/2020
ANALYSIS TIME: 01:52:08 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: 09/08/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON UNIT 61N; CSG
Stn. No.: API # 3004534408
Mtr. No.: 8103701

CASING
MV/DK

09/08/2020
35825-13120

Smpl Date: 08/27/2020
Test Date: 09/02/2020
Run No: HS200248

Nitrogen: 0.0682
CO2: 2.8487
Methane: 95.8028
Ethane: 1.1709
Propane: 0.0902
I-Butane: 0.0123
N-Butane: 0.0055
I-Pentane: 0.0014
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 995.6
GPM: 17.1120
SPG: 0.5895



2030 Afton Place
Farmington, NM 87401
(505) 325-6622
GAS

Analysis No: HS200249
Cust No: 35825-13125

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: ALLISON UNIT 61N; INT
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: MV/DK
Cust. Stn. No.: API # 3004534408
8103701

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 182 PSIG
Flow Temp: DEG. F
Ambient Temp: 85 DEG. F
Flow Rate: 116 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/27/2020
Sample Time: 2.15 PM
Sampled By: ROBERT P.
Sampled by (CO): HILCORP

AREA 5 / RUN 0509

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0811	0.0791	0.0090	0.00	0.0008
CO2	0.0025	0.0024	0.0000	0.00	0.0000
Methane	88.3589	86.2081	15.0160	892.42	0.4894
Ethane	8.7959	8.5818	2.3580	155.66	0.0913
Propane	1.9537	1.9061	0.5400	49.16	0.0297
Iso-Butane	0.3640	0.3551	0.1190	11.84	0.0073
N-Butane	0.2135	0.2083	0.0670	6.97	0.0043
I-Pentane	0.1021	0.0996	0.0370	4.08	0.0025
N-Pentane	0.0358	0.0349	0.0130	1.44	0.0009
Hexane Plus	0.0925	0.0902	0.0410	4.88	0.0031
Total	100.0000	97.5656	18.2000	1126.44	0.6294

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1129.0
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1132.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1112.4
DRY BTU @ 15.025: 1154.8
REAL SPECIFIC GRAVITY: 0.6308

CYLINDER #: 5007
CYLINDER PRESSURE: 117 PSIG
ANALYSIS DATE: 09/02/2020
ANALYSIS TIME: 02:11:12 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: 09/08/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON UNIT 61N; INT
Stn. No.: API # 3004534408
Mtr. No.: 8103701

INTERMEDIATE
MV/DK

09/08/2020
35825-13125

Smpl Date: 08/27/2020
Test Date: 09/02/2020
Run No: HS200249
Nitrogen: 0.0811
CO2: 0.0025
Methane: 88.3589
Ethane: 8.7959
Propane: 1.9537
I-Butane: 0.3640
N-Butane: 0.2135
I-Pentane: 0.1021
N-Pentane: 0.0358
Hexane+: 0.0925
BTU: 1132.1
GPM: 18.2000
SPG: 0.6308



Well Name: ALLISON UNIT 61N ; TBG
 API #: API # 3004534408
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200250
 Cust No: 35825-13130

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: ALLISON UNIT 61N ; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA:
 Formation: MV/DK
 Cust. Stn. No.: API # 3004534408
 8103701

Source: TUBING
 Well Flowing: Y
 Pressure: 124 PSIG
 Flow Temp: DEG. F
 Ambient Temp: 85 DEG. F
 Flow Rate: 116 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/27/2020
 Sample Time: 2.20 PM
 Sampled By: ROBERT P.
 Sampled by (CO): HILCORP

AREA 5 / RUN 0509

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0692	0.0686	0.0080	0.00	0.0007
CO2	2.8523	2.8295	0.4880	0.00	0.0433
Methane	95.8000	95.0338	16.2710	967.58	0.5306
Ethane	1.1680	1.1587	0.3130	20.67	0.0121
Propane	0.0912	0.0905	0.0250	2.29	0.0014
Iso-Butane	0.0121	0.0120	0.0040	0.39	0.0002
N-Butane	0.0053	0.0053	0.0020	0.17	0.0001
I-Pentane	0.0019	0.0019	0.0010	0.08	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	99.2003	17.1120	991.19	0.5886

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021
 BTU/CU.FT IDEAL: 993.5
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 995.6
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 978.3
 DRY BTU @ 15.025: 1015.5
 REAL SPECIFIC GRAVITY: 0.5896

CYLINDER #: 5036
 CYLINDER PRESSURE: 120 PSIG
 ANALYSIS DATE: 09/02/2020
 ANALYSIS TIME: 04:12:44 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: 09/08/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: ALLISON UNIT 61N ; TBG
Stn. No.: API # 3004534408
Mtr. No.: 8103701

TUBING
MV/DK

09/08/2020
35825-13130

Smpl Date: 08/27/2020
Test Date: 09/02/2020
Run No: HS200250

Nitrogen: 0.0692
CO2: 2.8523
Methane: 95.8000
Ethane: 1.1680
Propane: 0.0912
I-Butane: 0.0121
N-Butane: 0.0053
I-Pentane: 0.0019
N-Pentane: 0.0000
Hexane+: 0.0000

BTU: 995.6
GPM: 17.1120
SPG: 0.5896