



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

Analysis No: HS180215
Cust No: 35825-10280

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)	Source: BRADENHEAD
Well Name: HUERFANO NP #219; BHD	Well Flowing: Y
County/State: SAN JUAN NM	Pressure: 32 PSIG
Location: O29-26N-10W	Flow Temp: DEG. F
Field: AREA 6 / RUN 600	Ambient Temp: 70 DEG. F
Formation: GALLUP	Flow Rate: MCF/D
Cust. Stn. No.:	Sample Method: Purge & Fill
	Sample Date: 09/26/2018
	Sample Time: 12.00 PM
	Sampled By: CHORINA R.
	Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2753	1.2675	0.1410	0.00	0.0123
CO2	0.9236	0.9179	0.1580	0.00	0.0140
Methane	74.5825	74.1243	12.6940	753.28	0.4131
Ethane	11.3673	11.2975	3.0520	201.17	0.1180
Propane	6.9008	6.8584	1.9090	173.63	0.1051
Iso-Butane	0.6836	0.6794	0.2250	22.23	0.0137
N-Butane	2.1637	2.1504	0.6850	70.59	0.0434
I-Pentane	0.4751	0.4722	0.1740	19.01	0.0118
N-Pentane	0.5496	0.5462	0.2000	22.03	0.0137
Hexane Plus	1.0785	1.0719	0.4830	56.85	0.0357
Total	100.0000	99.3857	19.7210	1318.79	0.7809

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0042	CYLINDER #:	5040
BTU/CU.FT IDEAL:	1321.8	CYLINDER PRESSURE:	30 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1327.4	ANALYSIS DATE:	09/27/2018
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1304.3	ANALYSIS TIME:	02:46:13 AM
DRY BTU @ 15.025:	1354.0	ANALYSIS RUN BY:	Celia Lobato
REAL SPECIFIC GRAVITY:	0.7839		

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: 10/03/2018

GC Method: C6+ Gas

NMOC
OCT 11 2018
DISTRICT III



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: HUERFANO NP #219; BHD
Stn. No.:
Mtr. No.:

BRADENHEAD
GALLUP

10/03/2018
35825-10280

Smpl Date:	09/26/2018	07/19/2018
Test Date:	09/27/2018	07/24/2018
Run No:	HS180215	HS180072
Nitrogen:	1.2753	1.1274
CO2:	0.9236	0.8035
Methane:	74.5825	74.9193
Ethane:	11.3673	11.8032
Propane:	6.9008	6.9019
I-Butane:	0.6836	0.6645
N-Butane:	2.1637	2.0701
I-Pentane:	0.4751	0.4270
N-Pentane:	0.5496	0.4738
Hexane+:	1.0785	0.8093
BTU:	1327.4	1315.5
GPM:	19.7210	19.6550
SPG:	0.7839	0.7727



2030 Afton Place
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Analysis No: HS180216
Cust No: 35825-10285

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)	Source: CASING
Well Name: HUERFANO NP #219; CSG	Well Flowing: Y
County/State: SAN JUAN NM	Pressure: 60 PSIG
Location: O29-26N-10W	Flow Temp: DEG. F
Field: AREA 6 / RUN 600	Ambient Temp: 72 DEG. F
Formation: GALLUP	Flow Rate: 5 MCF/D
Cust. Stn. No.:	Sample Method: Purge & Fill
	Sample Date: 09/26/2018
	Sample Time: 12.10 PM
	Sampled By: CHORINA R.
	Sampled by (CO): HILCORP

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.2776	1.2722	0.1410	0.00	0.0124
CO2	0.9245	0.9206	0.1580	0.00	0.0140
Methane	74.5849	74.2703	12.6940	753.31	0.4131
Ethane	11.3117	11.2640	3.0370	200.18	0.1174
Propane	6.9021	6.8730	1.9090	173.66	0.1051
Iso-Butane	0.6864	0.6835	0.2260	22.32	0.0138
N-Butane	2.1833	2.1741	0.6910	71.23	0.0438
I-Pentane	0.4794	0.4774	0.1760	19.18	0.0119
N-Pentane	0.5552	0.5529	0.2020	22.26	0.0138
Hexane Plus	1.0949	1.0903	0.4900	57.71	0.0362
Total	100.0000	99.5783	19.7240	1319.85	0.7817

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0042	CYLINDER #:	4222
BTU/CU.FT IDEAL:	1322.9	CYLINDER PRESSURE:	54 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1328.5	ANALYSIS DATE:	09/27/2018
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1305.4	ANALYSIS TIME:	02:32:59 AM
DRY BTU @ 15.025:	1355.1	ANALYSIS RUN BY:	Celia Lobato
REAL SPECIFIC GRAVITY:	0.7846		

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: 10/03/2018

GC Method: C6+ Gas

NMOC
OCT 11 2018
DISTRICT III



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: HUERFANO NP #219; CSG
Stn. No.:
Mtr. No.:

CASING
GALLUP

10/03/2018
35825-10285

Smpl Date:	09/26/2018	07/19/2018
Test Date:	09/27/2018	07/24/2018
Run No:	HS180216	HS180073
Nitrogen:	1.2776	5.8108
CO2:	0.9245	0.6880
Methane:	74.5849	72.4223
Ethane:	11.3117	10.5212
Propane:	6.9021	6.3236
I-Butane:	0.6864	0.5883
N-Butane:	2.1833	1.8978
I-Pentane:	0.4794	0.4060
N-Pentane:	0.5552	0.4568
Hexane+:	1.0949	0.8852
BTU:	1328.5	1246.5
GPM:	19.7240	19.1570
SPG:	0.7846	0.7766