



OCD Received
7/31/2020

Well Name: VALDEZ A 1E; BHD
API #: API # 3004524445
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200092
Cust No: 35825-12430

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: VALDEZ A 1E; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: DAKOTA
Cust. Stn. No.: API # 3004524445

Source: BRADENHEAD
Well Flowing: Y
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/21/2020
Sample Time: 12.23 PM
Sampled By: BRIAN V.
Sampled by (CO): HILCORP

AREA 7 / RUN 704

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3195	0.3190	0.0350	0.00	0.0031
CO2	0.0023	0.0023	0.0000	0.00	0.0000
Methane	87.9067	87.7750	14.9440	887.86	0.4869
Ethane	6.5014	6.4916	1.7430	115.06	0.0675
Propane	2.9038	2.8994	0.8020	73.06	0.0442
Iso-Butane	0.5188	0.5180	0.1700	16.87	0.0104
N-Butane	0.7062	0.7051	0.2230	23.04	0.0142
I-Pentane	0.2650	0.2646	0.0970	10.60	0.0066
N-Pentane	0.2087	0.2084	0.0760	8.37	0.0052
Hexane Plus	0.6676	0.6666	0.2990	35.19	0.0221
Total	100.0000	99.8500	18.3890	1170.04	0.6602

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1172.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1176.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1155.8
DRY BTU @ 15.025: 1199.9
REAL SPECIFIC GRAVITY: 0.6619

CYLINDER #: 5027
CYLINDER PRESSURE: 65 PSIG
ANALYSIS DATE: 07/24/2020
ANALYSIS TIME: 01:02:15 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: 07/29/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: VALDEZ A 1E; BHD
Stn. No.: API # 3004524445
Mtr. No.:

BRADENHEAD
DAKOTA

07/29/2020
35825-12430

Smpl Date: 07/21/2020
Test Date: 07/24/2020
Run No: HS200092
Nitrogen: 0.3195
CO2: 0.0023
Methane: 87.9067
Ethane: 6.5014
Propane: 2.9038
I-Butane: 0.5188
N-Butane: 0.7062
I-Pentane: 0.2650
N-Pentane: 0.2087
Hexane+: 0.6676
BTU: 1176.3
GPM: 18.3890
SPG: 0.6619



OCD Received
7/31/2020

Well Name: VALDEZ A 1E; CSG
API #: API # 3004524445
Source: CASING
Sample Type: GAS
Analysis No: HS200093
Cust No: 35825-12435

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: VALDEZ A 1E; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA:
Formation: DAKOTA
Cust. Stn. No.: API # 3004524445

Source: CASING
Well Flowing: Y
Pressure: PSIG
Flow Temp: DEG. F
Ambient Temp: DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 07/21/2020
Sample Time: 1.22 PM
Sampled By: BRIAN V.
Sampled by (CO): HILCORP

AREA 7 / RUN 704

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4008	0.3920	0.0440	0.00	0.0039
CO2	0.4180	0.4089	0.0720	0.00	0.0064
Methane	85.6250	83.7554	14.5600	864.81	0.4743
Ethane	6.9838	6.8313	1.8730	123.59	0.0725
Propane	3.3832	3.3093	0.9350	85.12	0.0515
Iso-Butane	0.5272	0.5157	0.1730	17.14	0.0106
N-Butane	0.9178	0.8978	0.2900	29.94	0.0184
I-Pentane	0.3138	0.3069	0.1150	12.55	0.0078
N-Pentane	0.2601	0.2544	0.0950	10.43	0.0065
Hexane Plus	1.1703	1.1447	0.5230	61.69	0.0387
Total	100.0000	97.8164	18.6800	1205.28	0.6905

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0033
BTU/CU.FT IDEAL: 1208.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1212.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1191.0
DRY BTU @ 15.025: 1236.4
REAL SPECIFIC GRAVITY: 0.6926

CYLINDER #: 5012
CYLINDER PRESSURE: 56 PSIG
ANALYSIS DATE: 07/24/2020
ANALYSIS TIME: 01:11:40 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: 07/29/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease: VALDEZ A 1E; CSG
Stn. No.: API # 3004524445
Mtr. No.:

CASING
DAKOTA

07/29/2020
35825-12435

Smpl Date: 07/21/2020
Test Date: 07/24/2020
Run No: HS200093
Nitrogen: 0.4008
CO2: 0.4180
Methane: 85.6250
Ethane: 6.9838
Propane: 3.3832
I-Butane: 0.5272
N-Butane: 0.9178
I-Pentane: 0.3138
N-Pentane: 0.2601
Hexane+: 1.1703
BTU: 1212.1
GPM: 18.6800
SPG: 0.6926