



OCD Received
8/17/2020

Well Name: DAVIS 13; BHD
API #: API #3004511085
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200174
Cust No: 35825-12600

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: DAVIS 13; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA: SF-077648
Formation: MV
Cust. Stn. No.: API #3004511085
3426430

Source: BRADENHEAD
Well Flowing: Y
Pressure: 64 PSIG
Flow Temp: 85 DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/07/2020
Sample Time: 10.45 AM
Sampled By:
Sampled by (CO):

AREA 1 / 109

Heat Trace:

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.9598	1.7297	0.2160	0.00	0.0190
CO2	0.0105	0.0093	0.0020	0.00	0.0002
Methane	84.6416	74.7027	14.3860	854.88	0.4688
Ethane	8.6693	7.6513	2.3240	153.42	0.0900
Propane	3.1530	2.7828	0.8710	79.33	0.0480
Iso-Butane	0.4523	0.3992	0.1480	14.71	0.0091
N-Butane	0.6912	0.6100	0.2180	22.55	0.0139
I-Pentane	0.1910	0.1686	0.0700	7.64	0.0048
N-Pentane	0.1212	0.1070	0.0440	4.86	0.0030
Hexane Plus	0.1101	0.0972	0.0490	5.80	0.0036
Total	100.0000	88.2578	18.3280	1143.19	0.6603

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028
BTU/CU.FT IDEAL: 1145.8
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1149.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1129.1
DRY BTU @ 15.025: 1172.1
REAL SPECIFIC GRAVITY: 0.6619

CYLINDER #: 5015
CYLINDER PRESSURE: 44 PSIG
ANALYSIS DATE: 08/11/2020
ANALYSIS TIME: 04:25:38 PM
ANALYSIS RUN BY: PATRICIA KING

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: 08/13/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	DAVIS 13; BHD	BRADENHEAD	08/13/2020
Stn. No.:	API #3004511085	MV	35825-12600
Mtr. No.:	3426430		

Smpl Date:	08/07/2020	07/29/2020
Test Date:	08/11/2020	08/04/2020
Run No:	HS200174	HS200127
Nitrogen:	1.9598	1.9668
CO2:	0.0105	0.0113
Methane:	84.6416	84.6629
Ethane:	8.6693	8.6725
Propane:	3.1530	3.1324
I-Butane:	0.4523	0.4440
N-Butane:	0.6912	0.6831
I-Pentane:	0.1910	0.1890
N-Pentane:	0.1212	0.1215
Hexane+:	0.1101	0.1165
BTU:	1149.1	1148.5
GPM:	18.3280	18.3250
SPG:	0.6619	0.6617



Well Name: DAVIS 13; CSG
API #: API #3004511085
Source: CASING
Sample Type: GAS
Analysis No: HS200175
Cust No: 35825-12605

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: DAVIS 13; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA: SF-077648
Formation: MV / DK
Cust. Stn. No.: API #3004511085
3426430

Source: CASING
Well Flowing: Y
Pressure: 64 PSIG
Flow Temp: 85 DEG. F
Ambient Temp: 83 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/07/2020
Sample Time: 10.45 AM
Sampled By:
Sampled by (CO):

Heat Trace: AREA 1 / RUN 109
N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.7397	0.7290	0.0820	0.00	0.0072
CO2	0.0528	0.0520	0.0090	0.00	0.0008
Methane	88.4997	87.2249	15.0400	893.85	0.4902
Ethane	6.3196	6.2286	1.6940	111.84	0.0656
Propane	2.7606	2.7208	0.7620	69.46	0.0420
Iso-Butane	0.5286	0.5210	0.1730	17.19	0.0106
N-Butane	0.6120	0.6032	0.1930	19.97	0.0123
I-Pentane	0.2037	0.2008	0.0750	8.15	0.0051
N-Pentane	0.1242	0.1224	0.0450	4.98	0.0031
Hexane Plus	0.1591	0.1568	0.0710	8.39	0.0053
Total	100.0000	98.5595	18.1440	1133.81	0.6421

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1136.4
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1139.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1119.7
DRY BTU @ 15.025: 1162.3
REAL SPECIFIC GRAVITY: 0.6436

CYLINDER #: 4201
CYLINDER PRESSURE: 82 PSIG
ANALYSIS DATE: 08/11/2020
ANALYSIS TIME: 04:12:30 PM
ANALYSIS RUN BY: PATRICIA KING

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: 08/13/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	DAVIS 13; CSG	CASING	08/13/2020
Stn. No.:	API #3004511085	MV / DK	35825-12605
Mtr. No.:	3426430		

Smpl Date:	08/07/2020	07/29/2020
Test Date:	08/11/2020	08/04/2020
Run No:	HS200175	HS200128
Nitrogen:	0.7397	0.7364
CO2:	0.0528	0.0560
Methane:	88.4997	88.4749
Ethane:	6.3196	6.3577
Propane:	2.7606	2.7723
I-Butane:	0.5286	0.5308
N-Butane:	0.6120	0.6039
I-Pentane:	0.2037	0.1972
N-Pentane:	0.1242	0.1170
Hexane+:	0.1591	0.1538
BTU:	1139.5	1139.2
GPM:	18.1440	18.1460
SPG:	0.6436	0.6434



Well Name: DAVIS 13; TBG
 API #: API #3004511085
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200176
 Cust No: 35825-12610

Well/Lease Information

Customer Name:	HILCORP (BHD PROJECT)	Source:	TUBING
Well Name:	DAVIS 13; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	64 PSIG
Location:		Flow Temp:	85 DEG. F
Lease/PA/CA:	SF-077648	Ambient Temp:	83 DEG. F
Formation:	MV / DK	Flow Rate:	0 MCF/D
Cust. Stn. No.:	API #3004511085	Sample Method:	Purge & Fill
	3426430	Sample Date:	08/07/2020
		Sample Time:	10.45 AM
	AREA 1 / RUN 109	Sampled By:	
Heat Trace:	N	Sampled by (CO):	
Remarks:			

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2214	0.2220	0.0240	0.00	0.0021
CO2	1.3786	1.3823	0.2360	0.00	0.0209
Methane	80.2143	80.4311	13.6460	810.16	0.4443
Ethane	9.7735	9.7999	2.6230	172.96	0.1015
Propane	4.6238	4.6363	1.2780	116.34	0.0704
Iso-Butane	0.8801	0.8825	0.2890	28.62	0.0177
N-Butane	1.2785	1.2820	0.4040	41.71	0.0257
I-Pentane	0.4627	0.4640	0.1700	18.51	0.0115
N-Pentane	0.3465	0.3474	0.1260	13.89	0.0086
Hexane Plus	0.8206	0.8228	0.3670	43.25	0.0272
Total	100.0000	100.2703	19.1630	1245.45	0.7299

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	1.0037	CYLINDER #:	4011
BTU/CU.FT IDEAL:	1248.3	CYLINDER PRESSURE:	81 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1252.8	ANALYSIS DATE:	08/11/2020
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1231.0	ANALYSIS TIME:	03:59:55 PM
DRY BTU @ 15.025:	1277.9	ANALYSIS RUN BY:	PATRICIA KING
REAL SPECIFIC GRAVITY:	0.7322		

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: 08/13/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	DAVIS 13; TBG	TUBING	08/13/2020
Stn. No.:	API #3004511085	MV / DK	35825-12610
Mtr. No.:	3426430		

Smpl Date:	08/07/2020	07/29/2020
Test Date:	08/11/2020	08/04/2020
Run No:	HS200176	HS200129
Nitrogen:	0.2214	0.1694
CO2:	1.3786	2.7669
Methane:	80.2143	88.4099
Ethane:	9.7735	5.3229
Propane:	4.6238	1.6098
I-Butane:	0.8801	0.3931
N-Butane:	1.2785	0.3805
I-Pentane:	0.4627	0.2021
N-Pentane:	0.3465	0.1117
Hexane+:	0.8206	0.6337
BTU:	1252.8	1104.4
GPM:	19.1630	18.0370
SPG:	0.7322	0.6591