



OCD Received
8/24/2020

Well Name: DAVIS 10M; CSG
API #: API #3004533127
Source: CASING
Sample Type: GAS
Analysis No: HS200172
Cust No: 35825-12590

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: DAVIS 10M; CSG
County/State: SAN JUAN NM
Location:
Lease/PA/CA: USA SF-077648
Formation: DK / MV
Cust. Stn. No.: API #3004533127
3663730

Source: CASING
Well Flowing: Y
Pressure: 74 PSIG
Flow Temp: 107 DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: 0 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/07/2020
Sample Time: 9.45 AM
Sampled By:
Sampled by (CO):

AREA 1 / RUN 109

Heat Trace: N

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.2230	0.2138	0.0250	0.00	0.0022
CO2	0.4305	0.4128	0.0740	0.00	0.0065
Methane	81.6376	78.2740	13.8880	824.54	0.4522
Ethane	8.9647	8.5953	2.4060	158.65	0.0931
Propane	4.5815	4.3927	1.2670	115.28	0.0698
Iso-Butane	0.9728	0.9327	0.3190	31.63	0.0195
N-Butane	1.3342	1.2792	0.4220	43.53	0.0268
I-Pentane	0.5049	0.4841	0.1850	20.20	0.0126
N-Pentane	0.4170	0.3998	0.1520	16.72	0.0104
Hexane Plus	0.9338	0.8953	0.4180	49.22	0.0309
Total	100.0000	95.8797	19.1560	1259.76	0.7239

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
BTU/CU.FT IDEAL: 1262.7
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1267.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1245.2
DRY BTU @ 15.025: 1292.6
REAL SPECIFIC GRAVITY: 0.7262

CYLINDER #: 6243
CYLINDER PRESSURE: 90 PSIG
ANALYSIS DATE: 08/11/2020
ANALYSIS TIME: 04:33:58 PM
ANALYSIS RUN BY: SHYANN ELLEDGE

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 10M; CSG	CASING	08/13/2020
Stn. No.:	API #3004533127	DK / MV	35825-12590
Mtr. No.:	3663730		

Smpl Date:	08/07/2020	07/29/2020
Test Date:	08/11/2020	08/04/2020
Run No:	HS200172	HS200125
Nitrogen:	0.2230	0.2171
CO2:	0.4305	0.4339
Methane:	81.6376	82.3297
Ethane:	8.9647	8.7265
Propane:	4.5815	4.3685
I-Butane:	0.9728	0.9307
N-Butane:	1.3342	1.2680
I-Pentane:	0.5049	0.4876
N-Pentane:	0.4170	0.4011
Hexane+:	0.9338	0.8369
BTU:	1267.2	1254.5
GPM:	19.1560	19.0580
SPG:	0.7262	0.7180



Well Name: DAVIS 10M; TBG
 API #: API #3004533127
 Source: TUBING
 Sample Type: GAS
 Analysis No: HS200173
 Cust No: 35825-12595

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
 Well Name: DAVIS 10M; TBG
 County/State: SAN JUAN NM
 Location:
 Lease/PA/CA: USA SF-077648
 Formation: DK / MV
 Cust. Stn. No.: API #3004533127
 3663730

Source: TUBING
 Well Flowing: Y
 Pressure: 74 PSIG
 Flow Temp: 107 DEG. F
 Ambient Temp: 86 DEG. F
 Flow Rate: 0 MCF/D
 Sample Method: Purge & Fill
 Sample Date: 08/07/2020
 Sample Time: 9.30 AM
 Sampled By:
 Sampled by (CO):

Heat Trace: N
 Remarks: AREA 1 / RUN 109

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.3117	0.3081	0.0340	0.00	0.0030
CO2	1.4451	1.4286	0.2470	0.00	0.0220
Methane	79.1099	78.2064	13.4580	799.01	0.4382
Ethane	10.3868	10.2682	2.7870	183.82	0.1078
Propane	4.8493	4.7939	1.3410	122.01	0.0738
Iso-Butane	0.8219	0.8125	0.2700	26.73	0.0165
N-Butane	1.5159	1.4986	0.4800	49.45	0.0304
I-Pentane	0.5280	0.5220	0.1940	21.12	0.0132
N-Pentane	0.4201	0.4153	0.1530	16.84	0.0105
Hexane Plus	0.6113	0.6043	0.2740	32.22	0.0202
Total	100.0000	98.8579	19.2380	1251.21	0.7356

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0037
 BTU/CU.FT IDEAL: 1254.1
 BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1258.8
 BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1236.9
 DRY BTU @ 15.025: 1284.0
 REAL SPECIFIC GRAVITY: 0.738

CYLINDER #: 6116
 CYLINDER PRESSURE: 98 PSIG
 ANALYSIS DATE: 08/12/2020
 ANALYSIS TIME: 10:05:16 AM
 ANALYSIS RUN BY: SHYANN ELLEDGE

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 10M; TBG
Stn. No.: API #3004533127
Mtr. No.: 3663730

TUBING
DK / MV

08/13/2020
35825-12595

Smpl Date:	08/07/2020	07/29/2020
Test Date:	08/12/2020	08/04/2020
Run No:	HS200173	HS200126
Nitrogen:	0.3117	0.3104
CO2:	1.4451	1.4408
Methane:	79.1099	78.9830
Ethane:	10.3868	10.3220
Propane:	4.8493	4.8080
I-Butane:	0.8219	0.8151
N-Butane:	1.5159	1.5003
I-Pentane:	0.5280	0.5220
N-Pentane:	0.4201	0.4153
Hexane+:	0.6113	0.8831
BTU:	1258.8	1268.6
GPM:	19.2380	19.2980
SPG:	0.7380	0.7443



Well Name: DAVIS 10M; BHD
API #: API #3004533127
Source: BRADENHEAD
Sample Type: GAS
Analysis No: HS200203
Cust No: 35825-12585

Well/Lease Information

Customer Name: HILCORP (BHD PROJECT)
Well Name: DAVIS 10M; BHD
County/State: SAN JUAN NM
Location:
Lease/PA/CA: USA SF-077648
Formation: DK / MV
Cust. Stn. No.: API #3004533127
3663730
AREA 1 / RUN 0109
Heat Trace: N
Remarks:

Source: BRADENHEAD
Well Flowing: Y
Pressure: 75 PSIG
Flow Temp: 94 DEG. F
Ambient Temp: 95 DEG. F
Flow Rate: 281 MCF/D
Sample Method: Purge & Fill
Sample Date: 08/18/2020
Sample Time: 12.40 PM
Sampled By:
Sampled by (CO): HILCORP

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.1791	1.1731	0.1300	0.00	0.0114
CO2	0.0048	0.0048	0.0010	0.00	0.0001
Methane	88.0651	87.6181	14.9660	889.46	0.4878
Ethane	6.2699	6.2381	1.6810	110.96	0.0651
Propane	2.7054	2.6917	0.7470	68.07	0.0412
Iso-Butane	0.6045	0.6014	0.1980	19.66	0.0121
N-Butane	0.6403	0.6371	0.2020	20.89	0.0128
I-Pentane	0.2238	0.2227	0.0820	8.95	0.0056
N-Pentane	0.1378	0.1371	0.0500	5.52	0.0034
Hexane Plus	0.1693	0.1684	0.0760	8.92	0.0056
Total	100.0000	99.4925	18.1330	1132.43	0.6451

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027
BTU/CU.FT IDEAL: 1135.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1138.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1118.3
DRY BTU @ 15.025: 1160.9
REAL SPECIFIC GRAVITY: 0.6466

CYLINDER #: 4065
CYLINDER PRESSURE: 79 PSIG
ANALYSIS DATE: 08/21/2020
ANALYSIS TIME: 02:21:31 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: 08/24/2020

GC Method: C6+ Gas



HILCORP (BHD PROJECT)
WELL ANALYSIS COMPARISON

Lease:	DAVIS 10M; BHD	BRADENHEAD	08/24/2020
Stn. No.:	API #3004533127	DK / MV	35825-12585
Mtr. No.:	3663730		

Smpl Date:	08/18/2020	07/29/2020
Test Date:	08/21/2020	08/04/2020
Run No:	HS200203	HS200124
Nitrogen:	1.1791	1.1353
CO2:	0.0048	0.0038
Methane:	88.0651	87.8624
Ethane:	6.2699	6.4226
Propane:	2.7054	2.7338
I-Butane:	0.6045	0.5928
N-Butane:	0.6403	0.6522
I-Pentane:	0.2238	0.2377
N-Pentane:	0.1378	0.1501
Hexane+:	0.1693	0.2093
BTU:	1138.1	1142.8
GPM:	18.1330	18.1720
SPG:	0.6466	0.6491