



OIL CONS. DIV DIST. 3

MAR 18 2016

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

30-045-25311

Analysis No: AR160001
Cust No: 99035-10000

Well/Lease Information

Customer Name: ARAPAHOE DRILLING, CO.
Well Name: CHARLEY HOSH #1E; BHD
County/State:
Location:
Field:
Formation:
Cust. Stn. No.:Source: BRADENHEAD
Pressure: 47 PSIG
Sample Temp: 51 DEG. F
Well Flowing: Y
Date Sampled: 03/07/2016
Sampled By: JACK EVANS
Foreman/Engr.:

Remarks:

Analysis

Component:	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.430	0.0470	0.00	0.0042
CO2	0.025	0.0040	0.00	0.0004
Methane	89.664	15.2380	905.61	0.4966
Ethane	6.024	1.6150	106.61	0.0625
Propane	2.344	0.6470	58.98	0.0357
Iso-Butane	0.417	0.1370	13.56	0.0084
N-Butane	0.538	0.1700	17.55	0.0108
I-Pentane	0.200	0.0730	8.00	0.0050
N-Pentane	0.134	0.0490	5.37	0.0033
Hexane Plus	0.224	0.1000	11.81	0.0074
Total	100.000	18.0800	1127.48	0.6343

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0027

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1133.2

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1113.5

REAL SPECIFIC GRAVITY: 0.6358

GPM, BTU, and SPG calculations as shown
above are based on current GPA factors.

DRY BTU @ 14.650: 1127.0

DRY BTU @ 14.696: 1130.6

DRY BTU @ 14.730: 1133.2

DRY BTU @ 15.025: 1155.9

CYLINDER #: 4204

CYLINDER PRESSURE: 66 PSIG

DATE RUN: 3/8/16 12:46 PM

ANALYSIS RUN BY: PATRICIA KING



ARAPAHOE DRILLING, CO.
WELL ANALYSIS COMPARISON

Lease: CHARLEY HOSH #1E; BHD
Stn. No.:
Mtr. No.:

BRADENHEAD

03/18/2016
99035-10000

Smpl Date: 03/07/2016
Test Date: 03/08/2016
Run No: AR160001

Nitrogen: 0.430
CO2: 0.025
Methane: 89.664
Ethane: 6.024
Propane: 2.344
I-Butane: 0.417
N-Butane: 0.538
I-Pentane: 0.200
N-Pentane: 0.134
Hexane+: 0.224

BTU: 1133.2
GPM: 18.0800
SPG: 0.6358



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

Analysis No: AR160002
Cust No: 99035-10005

Well/Lease Information

Customer Name: ARAPAHOE DRILLING, CO.
Well Name: CHARLIE HOSH #1E; CSG
County/State:
Location:
Field:
Formation:
Cust. Str. No.:

Source: CASING
Pressure: 137 PSIG
Sample Temp: 51 DEG. F
Well Flowing: Y
Date Sampled: 03/07/2016
Sampled By: JACK EVANS
Foreman/Engr.:

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.163	0.1280	0.00	0.0112
CO2	0.784	0.1340	0.00	0.0119
Methane	86.054	14.6300	869.14	0.4767
Ethane	6.687	1.7930	118.34	0.0694
Propane	2.542	0.7020	63.96	0.0387
Iso-Butane	0.360	0.1180	11.71	0.0072
N-Butane	0.785	0.2480	25.61	0.0158
I-Pentane	0.279	0.1020	11.16	0.0070
N-Pentane	0.259	0.0940	10.38	0.0065
Hexane Plus	1.087	0.4860	57.30	0.0360
Total	100.000	18.4350	1167.60	0.6803

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1173.9
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1153.5
REAL SPECIFIC GRAVITY: 0.6821

GPM, BTU, and SPG calculations as shown
above are based on current GPA factors.

DRY BTU @ 14.650: 1167.5
DRY BTU @ 14.696: 1171.2
DRY BTU @ 14.730: 1173.9
DRY BTU @ 15.025: 1197.4

CYLINDER #: 4240A
CYLINDER PRESSURE: 99 PSIG
DATE RUN: 3/8/16 12:47 PM
ANALYSIS RUN BY: JENNIFER DEAN



ARAPAHOE DRILLING, CO.

WELL ANALYSIS COMPARISON

Lease: CHARLIE HOSH #1E; CSG
Stn. No.:
Mtr. No.:

CASING

03/18/2016
99035-10005

Smpl Date: 03/07/2016
Test Date: 03/08/2016
Run No: AR160002

Nitrogen: 1.163
CO2: 0.784
Methane: 86.054
Ethane: 6.687
Propane: 2.542
I-Butane: 0.360
N-Butane: 0.785
I-Pentane: 0.279
N-Pentane: 0.259
Hexane+: 1.087

BTU: 1173.9
GPM: 18.4350
SPG: 0.6821