



30-045-32617

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

Analysis No: SR170146
Cust No: 72550-10865

Well/Lease Information

Customer Name: SOUTHLAND ROYALTY
Well Name: HART CANYON 26 #1S; CSG
County/State:
Location:
Field:
Formation:
Cust. Stn. No.:

Source: CASING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 04/17/2017
Sampled By: JEFF GRAHAM
Foreman/Engr.: ERIC THOMAS

Remarks: SHUT DOWN COMPRESSOR TO BUILD CASING PSI.
PRESSURED WITH HELIUM TO 30 LBS.

Analysis

Component:	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.169	0.0190	0.00	0.0016
CO2	1.174	0.2010	0.00	0.0178
Methane	86.704	14.7380	875.71	0.4803
Ethane	6.623	1.7760	117.21	0.0688
Propane	3.593	0.9920	90.40	0.0547
Iso-Butane	0.602	0.1980	19.58	0.0121
N-Butane	0.495	0.1560	16.15	0.0099
I-Pentane	0.154	0.0560	6.16	0.0038
N-Pentane	0.085	0.0310	3.41	0.0021
Hexane Plus	0.401	0.1790	21.14	0.0133
Total	100.000	18.3460	1149.75	0.6644

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1155.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1135.7
REAL SPECIFIC GRAVITY: 0.6661

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

DRY BTU @ 14.650: 1149.5
DRY BTU @ 14.696: 1153.1
DRY BTU @ 14.730: 1155.8
DRY BTU @ 15.025: 1178.9

CYLINDER #: 6146
CYLINDER PRESSURE: 3 PSIG
DATE RUN: 4/20/17 12:00 AM
ANALYSIS RUN BY: Shyann Elledge



SOUTHLAND ROYALTY
WELL ANALYSIS COMPARISON

Lease: HART CANYON 26 #1S; CSG
Stn. No.:
Mtr. No.:

CASING

04/27/2017
72550-10865

Smpl Date: 04/17/2017
Test Date: 04/20/2017
Run No: SR170146

Nitrogen: 0.169
CO2: 1.174
Methane: 86.704
Ethane: 6.623
Propane: 3.593
I-Butane: 0.602
N-Butane: 0.495
I-Pentane: 0.154
N-Pentane: 0.085
Hexane+: 0.401

BTU: 1155.8
GPM: 18.3460
SPG: 0.6661



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

Analysis No: SR170145
Cust No: 72550-10860

Well/Lease Information

Customer Name: SOUTHLAND ROYALTY
Well Name: HART CANYON 26 #1S; BHD
County/State:
Location:
Field:
Formation:
Cust. Stn. No.:

Source: BRADENHEAD
Pressure: 97 PSIA
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 04/17/2017
Sampled By: JEFF GRAHAM
Foreman/Engr.: ERIC THOMAS

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.609	0.0670	0.00	0.0059
CO2	0.006	0.0010	0.00	0.0001
Methane	90.823	15.4320	917.31	0.5031
Ethane	5.591	1.4990	98.94	0.0580
Propane	2.005	0.5540	50.45	0.0305
Iso-Butane	0.303	0.0990	9.85	0.0061
N-Butane	0.394	0.1240	12.85	0.0079
I-Pentane	0.101	0.0370	4.04	0.0025
N-Pentane	0.061	0.0220	2.45	0.0015
Hexane Plus	0.107	0.0480	5.64	0.0035
Total	100.000	17.8830	1101.54	0.6192

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0025

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1106.9

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1087.6

REAL SPECIFIC GRAVITY: 0.6205

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

DRY BTU @ 14.650: 1100.9

DRY BTU @ 14.696: 1104.3

DRY BTU @ 14.730: 1106.9

DRY BTU @ 15.025: 1129.1

CYLINDER #: 4245

CYLINDER PRESSURE: 96 PSIG

DATE RUN: 4/20/17 1:49 PM

ANALYSIS RUN BY: Shyann Elledge



SOUTHLAND ROYALTY
WELL ANALYSIS COMPARISON

Lease: HART CANYON 26 #1S; BHD
Stn. No.:
Mtr. No.:

BRADENHEAD

04/27/2017
72550-10860

Smpl Date: 04/17/2017
Test Date: 04/20/2017
Run No: SR170145

Nitrogen: 0.609
CO2: 0.006
Methane: 90.823
Ethane: 5.591
Propane: 2.005
I-Butane: 0.303
N-Butane: 0.394
I-Pentane: 0.101
N-Pentane: 0.061
Hexane+: 0.107

BTU: 1106.9
GPM: 17.8830
SPG: 0.6205