

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

Analysis No: CP140720
Cust No: 18300-26525

30-045-35094

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: LUDWICK LS #19P INTRM
County/State: SAN JUAN
Location:
Field:
Formation: MV/DK
Cust. Stn. No.: 35852
AM02475955NO

Source: INTERMEDIATE
Pressure: 48 PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 08/20/2014
Sampled By: PAUL SIKORA
Foreman/Engr.:

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.224	0.0250	0.00	0.0022
CO2	0.005	0.0010	0.00	0.0001
Methane	77.148	13.1330	779.20	0.4273
Ethane	10.431	2.8010	184.60	0.1083
Propane	6.021	1.6660	151.49	0.0917
Iso-Butane	1.419	0.4660	46.14	0.0285
N-Butane	1.766	0.5590	57.61	0.0354
I-Pentane	0.766	0.2810	30.65	0.0191
N-Pentane	0.634	0.2310	25.41	0.0158
Hexane Plus	1.586	0.7100	83.60	0.0525
Total	100.000	19.8730	1358.70	0.7808

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0044

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1367.9

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1344.1

REAL SPECIFIC GRAVITY: 0.7839

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

DRY BTU @ 14.650: 1360.5

DRY BTU @ 14.696: 1364.7

DRY BTU @ 14.730: 1367.9

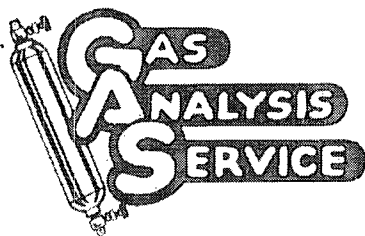
DRY BTU @ 15.025: 1395.3

CYLINDER #: 4124

CYLINDER PRESSURE: 48 PSIG

DATE RUN: 8/28/14 10:38 AM

ANALYSIS RUN BY: JENNIFER DEAN



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

Analysis No: CP140719
Cust No: 18300-26520

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: LUDWICK LS #19P CSG
County/State: SAN JUAN
Location:
Field:
Formation: MV/DK
Cust. Stn. No.: 35852
AM02475955NO

Source: CASING
Pressure: 131 PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 08/20/2014
Sampled By: PAUL SIKORA
Foreman/Engr.:

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.326	0.0360	0.00	0.0032
CO2	0.118	0.0200	0.00	0.0018
Methane	85.384	14.5180	862.38	0.4729
Ethane	8.163	2.1890	144.46	0.0847
Propane	3.016	0.8330	75.88	0.0459
Iso-Butane	0.609	0.2000	19.80	0.0122
N-Butane	0.784	0.2480	25.58	0.0157
I-Pentane	0.366	0.1340	14.64	0.0091
N-Pentane	0.288	0.1050	11.54	0.0072
Hexane Plus	0.946	0.4230	49.86	0.0313
Total	100.000	18.7060	1204.16	0.6841

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

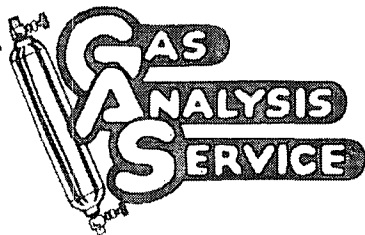
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0032
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1210.8
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1189.7
REAL SPECIFIC GRAVITY: 0.686

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

DRY BTU @ 14.650: 1204.2
DRY BTU @ 14.696: 1208.0
DRY BTU @ 14.730: 1210.8
DRY BTU @ 15.025: 1235.0

CYLINDER #: 4067
CYLINDER PRESSURE: 120 PSIG
DATE RUN: 8/28/14 10:36 AM
ANALYSIS RUN BY: JENNIFER DEAN



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

Analysis No: CP140721
Cust No: 18300-26530

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: LUDWICK LS 19P TBG
County/State: SAN JUAN
Location:
Field:
Formation: MV/DK
Cust. Stn. No.: 35852
AM02475955NO

Source: TUBING
Pressure: 96 PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 08/20/2014
Sampled By: PAUL SIKORA
Foreman/Engr.:

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.262	0.0290	0.00	0.0025
CO2	1.200	0.2050	0.00	0.0182
Methane	82.891	14.0970	837.20	0.4591
Ethane	9.025	2.4210	159.71	0.0937
Propane	3.594	0.9930	90.43	0.0547
Iso-Butane	0.695	0.2280	22.60	0.0139
N-Butane	0.875	0.2770	28.54	0.0176
I-Pentane	0.334	0.1230	13.36	0.0083
N-Pentane	0.242	0.0880	9.70	0.0060
Hexane Plus	0.882	0.3950	46.49	0.0292
Total	100.000	18.8560	1208.04	0.7034

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0034

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1215.0

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1193.9

REAL SPECIFIC GRAVITY: 0.7055

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

DRY BTU @ 14.650: 1208.4

DRY BTU @ 14.696: 1212.2

DRY BTU @ 14.730: 1215.0

DRY BTU @ 15.025: 1239.3

CYLINDER #: 7023

CYLINDER PRESSURE: 98 PSIG

DATE RUN: 8/28/14 10:40 AM

ANALYSIS RUN BY: JENNIFER DEAN