



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

Analysis No: CP170180
Cust No: 18300-21615

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: **SUNRAY K COM #1 BHD**
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: A722050NO
300452117000S01

Source: **BRADENHEAD**
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/03/2017
Sampled By: WAYNE SHELBY
Foreman/Engr.: CHRIS N.

OIL CONS. DIV DIST. 3

MAY 25 2017

Remarks: W/O# 9245366
NO PRESSURED RECORDED ON CARD, 0 PRESSURE IN CYLINDER

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	1.258	0.1390	0.00	0.0122
CO2	0.023	0.0040	0.00	0.0003
Methane	90.530	15.3820	914.35	0.5014
Ethane	5.620	1.5060	99.46	0.0583
Propane	1.784	0.4930	44.89	0.0272
Iso-Butane	0.215	0.0710	6.99	0.0043
N-Butane	0.328	0.1040	10.70	0.0066
I-Pentane	0.100	0.0370	4.00	0.0025
N-Pentane	0.030	0.0110	1.20	0.0007
Hexane Plus	0.112	0.0500	5.90	0.0037
Total	100.000	17.7970	1087.50	0.6173

* @ 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): 1092.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1073.7
REAL SPECIFIC GRAVITY: 0.6186

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

DRY BTU @ 14.650: 1086.8
DRY BTU @ 14.696: 1090.2
DRY BTU @ 14.730: 1092.7
DRY BTU @ 15.025: 1114.6

CYLINDER #: 4135
CYLINDER PRESSURE: 57 PSIG
DATE RUN: 5/12/17 12:00 AM
ANALYSIS RUN BY: CAMERON MANGAN

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CONOCO PHILLIPS COMPANY
WELL ANALYSIS COMPARISON

Lease: SUNRAY K COM #1 BHD
Stn. No.: A722050NO
Mtr. No.: 300452117000S01

BRADENHEAD

05/18/2017
18300-21615

Smpl Date:	05/03/2017	08/08/2011
Test Date:	05/12/2017	08/09/2011
Run No:	CP170180	CP110739
Nitrogen:	1.258	1.027
CO2:	0.023	0.004
Methane:	90.530	90.896
Ethane:	5.620	5.677
Propane:	1.784	1.652
I-Butane:	0.215	0.200
N-Butane:	0.328	0.297
I-Pentane:	0.100	0.094
N-Pentane:	0.030	0.028
Hexane+:	0.112	0.125
BTU:	1092.7	1093.0
GPM:	17.7970	17.7960
SPG:	0.6186	0.6160



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

Analysis No: CP170181
Cust No: 18300-21620

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: SUNRAY K COM #1 CSG
County/State:
Location:
Field:
Formation: MV
Cust. Str. No.: A722050NO
300452117000S01

Source: CASING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/03/2017
Sampled By: WAYNE SHELBY
Foreman/Engr.: CHRIS N.

Remarks: W/O 9245366

OIL CONS. DIV DIST. 3
MAY 25 2017

Analysis

Component:	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.229	0.0250	0.00	0.0022
CO2	0.865	0.1480	0.00	0.0131
Methane	82.673	14.0610	835.00	0.4579
Ethane	9.047	2.4270	160.10	0.0939
Propane	3.780	1.0450	95.11	0.0575
Iso-Butane	0.596	0.1960	19.38	0.0120
N-Butane	1.031	0.3260	33.63	0.0207
I-Pentane	0.384	0.1410	15.36	0.0096
N-Pentane	0.321	0.1170	12.87	0.0080
Hexane Plus	1.074	0.4810	56.61	0.0355
Total	100.000	18.9670	1228.07	0.7105

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0035
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1235.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1213.7
REAL SPECIFIC GRAVITY: 0.7127

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

DRY BTU @ 14.650: 1228.5
DRY BTU @ 14.696: 1232.3
DRY BTU @ 14.730: 1235.2
DRY BTU @ 15.025: 1259.9

CYLINDER #: 4119
CYLINDER PRESSURE: 82 PSIG
DATE RUN: 5/12/17 12:00 AM
ANALYSIS RUN BY: CAMERON MANGAN



CONOCO PHILLIPS COMPANY
WELL ANALYSIS COMPARISON

Lease: SUNRAY K COM #1 CSG
Stn. No.: A722050NO
Mtr. No.: 300452117000S01

CASING
MV

05/18/2017
18300-21620

Smpl Date:	05/03/2017	08/08/2011
Test Date:	05/12/2017	08/09/2011
Run No:	CP170181	CP110740
Nitrogen:	0.229	0.363
CO2:	0.865	1.109
Methane:	82.673	85.817
Ethane:	9.047	7.114
Propane:	3.780	2.689
I-Butane:	0.596	0.525
N-Butane:	1.031	0.770
I-Pentane:	0.384	0.346
N-Pentane:	0.321	0.270
Hexane+:	1.074	0.997
BTU:	1235.2	1186.2
GPM:	18.9670	18.5580
SPG:	0.7127	0.6868



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

Analysis No: CP170182
Cust No: 18300-21625

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: SUNRAY K COM #1 INT
County/State:
Location:
Field:
Formation:
Cust. Stn. No.: A722050NO
300452117000S01

Source: INTERMEDIATE
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 05/03/2017
Sampled By: WAYNE SHELBY
Foreman/Engr.: CHRIS N.

OIL CONS. DIV DIST. 3

Remarks: PRESSURED WITH HELIUM TO 30 LBS.
W/O# 9245366

MAY 25 2017

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	94.437	10.3910	0.00	0.9134
CO2	0.761	0.1300	0.00	0.0116
Methane	4.255	0.7210	42.98	0.0236
Ethane	0.081	0.0220	1.43	0.0008
Propane	0.042	0.0120	1.06	0.0006
Iso-Butane	0.016	0.0050	0.52	0.0003
N-Butane	0.031	0.0100	1.01	0.0006
I-Pentane	0.029	0.0110	1.16	0.0007
N-Pentane	0.037	0.0130	1.48	0.0009
Hexane Plus	0.311	0.1390	16.39	0.0103
Total	100.000	11.4540	66.03	0.9629

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0004
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 66.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 65.0
REAL SPECIFIC GRAVITY: 0.9629

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

DRY BTU @ 14.650: 65.8
DRY BTU @ 14.696: 66.0
DRY BTU @ 14.730: 66.2
DRY BTU @ 15.025: 67.5

CYLINDER #: 4193
CYLINDER PRESSURE: 0 PSIG
DATE RUN: 5/12/17 12:00 AM
ANALYSIS RUN BY: CAMERON MANGAN



CONOCO PHILLIPS COMPANY
WELL ANALYSIS COMPARISON

Lease: SUNRAY K COM #1 INT
Stn. No.: A722050NO
Mtr. No.: 300452117000S01

INTERMEDIATE

05/18/2017
18300-21625

Smpl Date:	05/03/2017	08/08/2011
Test Date:	05/12/2017	08/09/2011
Run No:	CP170182	CP110741
Nitrogen:	94.437	66.812
CO2:	0.761	0.372
Methane:	4.255	25.051
Ethane:	0.081	1.977
Propane:	0.042	0.581
I-Butane:	0.016	0.108
N-Butane:	0.031	0.230
I-Pentane:	0.029	0.159
N-Pentane:	0.037	0.152
Hexane+:	0.311	4.558
BTU:	66.2	568.7
GPM:	11.4540	14.6260
SPG:	0.9629	0.9867