



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

Analysis No: CP170093  
Cust No: 18300-25775

### Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY  
Well Name: **SAN JUAN 28-7 #23 BHD**  
County/State: SAN JUAN  
Location: A15-28N-07W  
Field:  
Formation: PC/MV  
Cust. Stn. No.: 71016  
**300390743300C01**

Source: **BRADENHEAD**  
Pressure: 0 PSIG  
Sample Temp: 47 DEG. F  
Well Flowing: Y  
Date Sampled: 03/02/2017  
Sampled By: L. L.  
Foreman/Engr.: R. POYTHRESS

Remarks: PRESSURED WITH HELIUM TO 30LBS. W/O # 21972300

### Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	98.297	10.8150	0.00	0.9507
CO2	0.354	0.0600	0.00	0.0054
Methane	1.213	0.2060	12.25	0.0067
Ethane	0.000	0.0000	0.00	0.0000
Propane	0.000	0.0000	0.00	0.0000
Iso-Butane	0.000	0.0000	0.00	0.0000
N-Butane	0.000	0.0000	0.00	0.0000
I-Pentane	0.000	0.0000	0.00	0.0000
N-Pentane	0.000	0.0000	0.00	0.0000
Hexane Plus	0.136	0.0610	7.17	0.0045
<b>Total</b>	<b>100.000</b>	<b>11.1420</b>	<b>19.42</b>	<b>0.9673</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0003  
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 19.5  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 19.2  
REAL SPECIFIC GRAVITY: 0.9672

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

DRY BTU @ 14.650: 19.4  
DRY BTU @ 14.696: 19.5  
DRY BTU @ 14.730: 19.5  
DRY BTU @ 15.025: 19.9

CYLINDER #: 4209  
CYLINDER PRESSURE: PSIG  
DATE RUN: **3/7/17** 12:00 AM  
ANALYSIS RUN BY: PATRICIA KING

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CONOCO PHILLIPS COMPANY  
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 28-7 #23 BHD  
 Stn. No.: 71016  
 Mtr. No.: 300390743300C01

BRADENHEAD  
 PC/MV

03/07/2017  
 18300-25775

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<b>Smpl Date:</b>	03/02/2017	12/21/2016	08/18/2016	03/12/2014
<b>Test Date:</b>	03/07/2017	12/22/2016	08/19/2016	03/28/2014
<b>Run No:</b>	CP170093	CP160809	CP160484	CP140226
<b>Nitrogen:</b>	98.297	96.669	98.450	97.276
<b>CO2:</b>	0.354	0.147	0.100	0.134
<b>Methane:</b>	1.213	2.110	1.043	1.775
<b>Ethane:</b>	0.000	0.282	0.033	0.135
<b>Propane:</b>	0.000	0.145	0.032	0.071
<b>I-Butane:</b>	0.000	0.026	0.026	0.000
<b>N-Butane:</b>	0.000	0.049	0.039	0.022
<b>I-Pentane:</b>	0.000	0.022	0.000	0.000
<b>N-Pentane:</b>	0.000	0.019	0.000	0.000
<b>Hexane+:</b>	0.136	0.531	0.277	0.587
<b>BTU:</b>	19.5	62.2	28.7	53.9
<b>GPM:</b>	11.1420	11.4110	11.1890	11.3530
<b>SPG:</b>	0.9672	0.9741	0.9707	0.9751



2030 Afton Place  
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Analysis No: CP170095  
Cust No: 18300-25165

### Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY  
Well Name: **SAN JUAN 28-7 #23 INTRM**  
County/State: SAN JUAN  
Location: A15-28N-07W  
Field:  
Formation: PC/MV  
Cust. Stn. No.: 71016  
**30039073300**C01

Source: **INTERMEDIATE**  
Pressure: 20 PSIA  
Sample Temp: 47 DEG. F  
Well Flowing: Y  
Date Sampled: 03/02/2017  
Sampled By: L.L.  
Foreman/Engr.: R. POYTHRESS

Remarks: W/O # 21972300

### Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	10.015	1.1050	0.00	0.0969
CO2	0.321	0.0550	0.00	0.0049
Methane	80.661	13.7150	814.68	0.4468
Ethane	3.181	0.8530	56.29	0.0330
Propane	1.392	0.3850	35.02	0.0212
Iso-Butane	0.211	0.0690	6.86	0.0042
N-Butane	0.295	0.0930	9.62	0.0059
I-Pentane	0.189	0.0690	7.56	0.0047
N-Pentane	0.162	0.0590	6.49	0.0040
Hexane Plus	3.573	1.5980	188.33	0.1182
<b>Total</b>	<b>100.000</b>	<b>18.0010</b>	<b>1124.87</b>	<b>0.7399</b>

\* @ 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): 1131.1  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1111.4  
REAL SPECIFIC GRAVITY: 0.742

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

DRY BTU @ 14.650: 1125.0  
DRY BTU @ 14.696: 1128.5  
DRY BTU @ 14.730: 1131.1  
DRY BTU @ 15.025: 1153.8

CYLINDER #: 4205  
CYLINDER PRESSURE: 8 PSIG  
DATE RUN: **3/6/17** 9:11 AM  
ANALYSIS RUN BY: DAWN BLASSINGAME



CONOCO PHILLIPS COMPANY  
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 28-7 #23 INTRM  
 Stn. No.: 71016  
 Mtr. No.: 30039073300C01

INTERMEDIATE  
 PC/MV

03/07/2017  
 18300-25165

<b>Smpl Date:</b>	03/02/2017	12/21/2016	08/18/2016	03/12/2014	07/28/2013
<b>Test Date:</b>	03/06/2017	12/22/2016	08/19/2016	03/27/2014	08/01/2013
<b>Run No:</b>	CP170095	CP160811	CP160486	CP140228	CP130742
<b>Nitrogen:</b>	10.015	24.429	80.642	84.758	85.662
<b>CO2:</b>	0.321	0.286	0.016	0.034	0.016
<b>Methane:</b>	80.661	65.099	16.330	13.254	12.090
<b>Ethane:</b>	3.181	3.972	0.557	0.399	0.373
<b>Propane:</b>	1.392	2.524	0.661	0.477	0.515
<b>I-Butane:</b>	0.211	0.473	0.500	0.323	0.384
<b>N-Butane:</b>	0.295	0.613	0.710	0.429	0.526
<b>I-Pentane:</b>	0.189	0.374	0.171	0.095	0.132
<b>N-Pentane:</b>	0.162	0.318	0.110	0.059	0.084
<b>Hexane+:</b>	3.573	1.912	0.303	0.172	0.218
<b>BTU:</b>	1131.1	959.8	258.8	193.2	192.0
<b>GPM:</b>	18.0010	17.0230	12.6060	12.1940	12.1900
<b>SPG:</b>	0.7420	0.7848	0.9281	0.9299	0.9385



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Analysis No: CP170094  
Cust No: 18300-25160

### Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY  
Well Name: **SAN JUAN 28-7 #23 CSG**  
County/State: SAN JUAN NM  
Location: A15-28N-07W  
Field:  
Formation: PC/MV  
Cust. Stn. No.: 71016  
**300390743300**C01

Source: **CASING**  
Pressure: 90 PSIA  
Sample Temp: 47 DEG. F  
Well Flowing: Y  
Date Sampled: 03/02/2017  
Sampled By: L.L.  
Foreman/Engr.: R. POYTHRESS

Remarks: W/O # 21972300

### Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.474	0.0520	0.00	0.0046
CO2	0.123	0.0210	0.00	0.0019
Methane	88.600	15.0590	894.86	0.4908
Ethane	5.905	1.5830	104.50	0.0613
Propane	3.170	0.8760	79.76	0.0483
Iso-Butane	0.556	0.1820	18.08	0.0112
N-Butane	0.573	0.1810	18.69	0.0115
I-Pentane	0.173	0.0630	6.92	0.0043
N-Pentane	0.113	0.0410	4.53	0.0028
Hexane Plus	0.313	0.1400	16.50	0.0104
<b>Total</b>	<b>100.000</b>	<b>18.1980</b>	<b>1143.84</b>	<b>0.6469</b>

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0028  
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1149.7  
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1129.7  
REAL SPECIFIC GRAVITY: 0.6485

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

DRY BTU @ 14.650: 1143.5  
DRY BTU @ 14.696: 1147.0  
DRY BTU @ 14.730: 1149.7  
DRY BTU @ 15.025: 1172.7

CYLINDER #: 4171  
CYLINDER PRESSURE: 96 PSIG  
DATE RUN: **3/6/17** 9:10 AM  
ANALYSIS RUN BY: Shyann Elledge



CONOCO PHILLIPS COMPANY  
WELL ANALYSIS COMPARISON

<b>Lease:</b>	SAN JUAN 28-7 #23 CSG	<b>CASING</b>	03/07/2017
<b>Stn. No.:</b>	71016	PC/MV	18300-25160
<b>Mtr. No.:</b>	300390743300C01		

	03/02/2017	12/21/2016	08/18/2016	03/12/2014	07/28/2013
<b>Smpl Date:</b>	03/02/2017	12/21/2016	08/18/2016	03/12/2014	07/28/2013
<b>Test Date:</b>	03/06/2017	12/22/2016	08/19/2016	03/27/2014	08/01/2013
<b>Run No:</b>	CP170094	CP160810	CP160485	CP140227	CP130741
<b>Nitrogen:</b>	0.474	0.465	0.473	0.668	0.448
<b>CO2:</b>	0.123	0.238	0.007	1.030	0.919
<b>Methane:</b>	88.600	88.757	88.212	87.255	86.957
<b>Ethane:</b>	5.905	5.894	6.053	5.847	5.928
<b>Propane:</b>	3.170	3.095	3.206	3.281	3.256
<b>I-Butane:</b>	0.556	0.534	0.564	0.574	0.566
<b>N-Butane:</b>	0.573	0.545	0.609	0.653	0.657
<b>I-Pentane:</b>	0.173	0.155	0.194	0.200	0.208
<b>N-Pentane:</b>	0.113	0.097	0.135	0.136	0.152
<b>Hexane+:</b>	0.313	0.220	0.547	0.356	0.909
<b>BTU:</b>	1149.7	1141.3	1165.0	1145.4	1173.6
<b>GPM:</b>	18.1980	18.1490	18.2990	18.2300	18.4120
<b>SPG:</b>	0.6485	0.6448	0.6564	0.6625	0.6765