



30-045-29998

2030 Afton Place
Farmington, NM 87401
(505) 325-6622Analysis No: CP140216
Cust No: 18300-23625**Well/Lease Information**Customer Name: CONOCO PHILLIPS COMPANY
Well Name: HELMS FEDERAL 1 B CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: MV
Cust. Stn. No.: 98012
9241779Source:
Pressure: 82 PSIG
Sample Temp: DEG. F
Well Flowing:
Date Sampled: 03/05/2014
Sampled By: DONNY THOMPSON
Foreman/Engr.:

OIL CONS. DIV DIST. 3

MAY 14 2014

Remarks:

Analysis

Component:	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.664	0.0730	0.00	0.0064
CO2	0.081	0.0140	0.00	0.0012
Methane	96.617	16.4100	975.83	0.5352
Ethane	2.385	0.6390	42.21	0.0248
Propane	0.217	0.0600	5.46	0.0033
Iso-Butane	0.015	0.0050	0.49	0.0003
N-Butane	0.017	0.0050	0.55	0.0003
I-Pentane	0.004	0.0010	0.16	0.0001
N-Pentane	0.000	0.0000	0.00	0.0000
Hexane Plus	0.000	0.0000	0.00	0.0000
Total	100.000	17.2070	1024.70	0.5716

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0021

BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1029.2

BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1011.3

REAL SPECIFIC GRAVITY: 0.5726

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

DRY BTU @ 14.650: 1023.6

DRY BTU @ 14.696: 1026.8

DRY BTU @ 14.730: 1029.2

DRY BTU @ 15.025: 1049.8

CYLINDER #: GAS 225

CYLINDER PRESSURE: 80 PSIG

DATE RUN: 3/27/14 12:13 PM

ANALYSIS RUN BY: AMANDA ARMENTA



CONOCO PHILLIPS COMPANY
WELL ANALYSIS COMPARISON

Lease: HELMS FEDERAL 1 B CSG
Stn. No.: 98012
Mtr. No.: A724375SM

MV

03/31/2014
18300-23625

Smpl Date:	03/05/2014	08/02/2012
Test Date:	03/27/2014	08/03/2012
Run No:	CP140216	CP120642
Nitrogen:	0.664	0.529
CO2:	0.081	0.261
Methane:	96.617	93.907
Ethane:	2.385	3.305
Propane:	0.217	0.698
I-Butane:	0.015	0.108
N-Butane:	0.017	0.164
I-Pentane:	0.004	0.068
N-Pentane:	0.000	0.059
Hexane+:	0.000	0.901
BTU:	1029.2	1091.2
GPM:	17.2070	17.6740
SPG:	0.5726	0.6139



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

Analysis No: CP140217
Cust No: 18300-23050

Well/Lease Information

Customer Name: CONOCO PHILLIPS COMPANY
Well Name: HELMS FEDERAL #1B INTRM
County/State: SAN JUAN NM
Location: M22-30N-10W
Field:
Formation: MV
Cust. Stn. No.: 98012
9241779

Source:
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing:
Date Sampled: 03/05/2014
Sampled By: DONNY THOMPSON
Foreman/Engr.:

Remarks:

OIL CONS. DIV DIST. 3
MAY 14 2014

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.237	0.0260	0.00	0.0023
CO2	0.343	0.0590	0.00	0.0052
Methane	90.969	15.4580	918.79	0.5039
Ethane	5.376	1.4410	95.14	0.0558
Propane	1.845	0.5090	46.42	0.0281
Iso-Butane	0.304	0.1000	9.89	0.0061
N-Butane	0.443	0.1400	14.45	0.0089
I-Pentane	0.142	0.0520	5.68	0.0035
N-Pentane	0.101	0.0370	4.05	0.0025
Hexane Plus	0.240	0.1070	12.65	0.0079
Total	100.000	17.9290	1107.07	0.6243

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1112.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1093.1
REAL SPECIFIC GRAVITY: 0.6257

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

DRY BTU @ 14.650: 1106.5
DRY BTU @ 14.696: 1109.9
DRY BTU @ 14.730: 1112.5
DRY BTU @ 15.025: 1134.8

CYLINDER #: GAS 199
CYLINDER PRESSURE: 423 PSIG
DATE RUN: 3/27/14 12:17 PM
ANALYSIS RUN BY: AMANDA ARMENTA



CONOCO PHILLIPS COMPANY
WELL ANALYSIS COMPARISON

Lease: HELMS FEDERAL #1B INTRM
Stn. No.: 98012
Mtr. No.: 9241779

MV

03/31/2014
18300-23050

Smpl Date:	03/05/2014	07/22/2013	08/02/2012	03/28/2012
Test Date:	03/27/2014	07/23/2013	08/03/2012	04/03/2012
Run No:	CP140217	CP130717	CP120643	CP120169
Nitrogen:	0.237	0.239	0.201	0.212
CO2:	0.343	0.318	0.375	0.370
Methane:	90.969	88.518	82.545	87.691
Ethane:	5.376	5.855	8.560	6.905
Propane:	1.845	3.013	4.618	3.077
I-Butane:	0.304	0.545	0.902	0.445
N-Butane:	0.443	0.819	1.376	0.646
I-Pentane:	0.142	0.253	0.435	0.209
N-Pentane:	0.101	0.172	0.307	0.144
Hexane+:	0.240	0.268	0.681	0.301
BTU:	1112.5	1154.9	1248.5	1156.9
GPM:	17.9290	18.2420	19.0060	18.3080
SPG:	0.6257	0.6525	0.7130	0.6542