



NEW MEXICO ENERGY, MINERALS
AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NM 87410
(505) 334-6178 FAX: (505) 334-6170
<http://www.emnrd.state.nm.us/ocd/>

OIL CONS. DIV DIST. 3

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

APR 17 2014

Date of Test 3/18/2014 Operator Energen Resources API # 30-039-25937

Property Name San Juan 30-4 #41 Location: Unit 0 Section 18 Township 30 Range 4
(Well Name and Number)

Pressure (Shut-in or Producing) Tubing 105 Intermediate 215 Casing 121 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Time	Bradenhead			Intermediate		Bradenhead Flowed	Intermediate Flowed
	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor		
5 minutes	<u>0</u>	<u>121</u>		<u>15</u>	<u>121</u>		
10 minutes	<u>0</u>	<u>121</u>		<u>1.5</u>	<u>121</u>		
15 minutes	<u>0</u>	<u>121</u>		<u>.2</u>	<u>121</u>		☒
20 minutes	<u>0</u>	<u>121</u>		<u>0</u>	<u>121</u>	☒	
25 minutes	<u>0</u>	<u>121</u>		<u>0</u>	<u>121</u>		☒
30 minutes	<u>0</u>	<u>121</u>		<u>0</u>	<u>121</u>		
5 minute SI	<u>0</u>	<u>121</u>		<u>.2</u>	<u>121</u>		

Steady Flow		
Surges		
Down to Nothing		☒
No Flow	☒	
Gas		☒
Gas and Water		
Water		

If bradenhead flowed water, check all of the descriptions that apply below:

Clear _____ Fresh _____ Salty _____ Sulfur _____ Black _____

5 Minute Shut-in Bradenhead 0 Intermediate .2

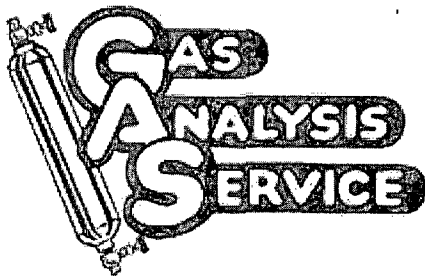
REMARKS:

Intermediate Blew down to nothing in 18 minutes.

By Danny Putton
Field Foreman
(Position)

Witness

John Smith



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

Analysis No: EN140167
Cust No: 73500-14410

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: SAN JUAN 30-4-41; METER
County/State: RIO ARRIBA NM
Location: O18-30N-04W
Field:
Formation: BLANCO MV
Cust. Stn. No.: 3198009B

Source: METER
Pressure: 68 PSIA
Sample Temp: DEG. F
Well Flowing:
Date Sampled: 03/06/2014
Sampled By: DAN BUTTON
Foreman/Engr.: JOHN HAMPTON

Remarks: SAMPLE TAKEN UP STREAM OF METER

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.083	0.0090	0.00	0.0008
CO2	1.762	0.3010	0.00	0.0268
Methane	93.571	15.8960	945.07	0.5183
Ethane	3.334	0.8930	59.00	0.0346
Propane	0.772	0.2130	19.42	0.0118
Iso-Butane	0.132	0.0430	4.29	0.0026
N-Butane	0.133	0.0420	4.34	0.0027
I-Pentane	0.051	0.0190	2.04	0.0013
N-Pentane	0.028	0.0100	1.12	0.0007
Hexane Plus	0.134	0.0600	7.06	0.0044
Total	100.000	17.4860	1042.35	0.6040

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0023
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1047.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1029.0
REAL SPECIFIC GRAVITY: 0.6051

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

DRY BTU @ 14.650: 1041.5
DRY BTU @ 14.696: 1044.8
DRY BTU @ 14.730: 1047.2
DRY BTU @ 15.025: 1068.2

CYLINDER #: 4214
CYLINDER PRESSURE: 60 PSIG
DATE RUN: 3/26/14 1:43 PM
ANALYSIS RUN BY: LOGAN CHENEY



ENERGEN RESOURCES CORP.
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-4-41; METER
Stn. No.: 3198009B
Mtr. No.:

METER
BLANCO MV

03/31/2014
73500-14410

Smpl Date: 03/06/2014
Test Date: 03/26/2014
Run No: EN140167
Nitrogen: 0.083
CO2: 1.762
Methane: 93.571
Ethane: 3.334
Propane: 0.772
I-Butane: 0.132
N-Butane: 0.133
I-Pentane: 0.051
N-Pentane: 0.028
Hexane+: 0.134
BTU: 1047.2
GPM: 17.4860
SPG: 0.6051



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

Analysis No: EN140166
Cust No: 73500-14405

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: SAN JUAN 30-4-41; CSG
County/State: RIO ARRIBA NM
Location: O18-30N-04W
Field:
Formation: BLANCO MV
Cust. Stn. No.: 3198009B

Source: CASING
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing:
Date Sampled: 03/06/2014
Sampled By:
Foreman/Engr.: JOHN HAMPTON

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.133	0.0150	0.00	0.0013
CO2	1.756	0.3000	0.00	0.0267
Methane	88.245	14.9980	891.27	0.4888
Ethane	6.587	1.7660	116.57	0.0684
Propane	1.869	0.5160	47.03	0.0285
Iso-Butane	0.269	0.0880	8.75	0.0054
N-Butane	0.391	0.1240	12.76	0.0078
I-Pentane	0.150	0.0550	6.00	0.0037
N-Pentane	0.104	0.0380	4.17	0.0026
Hexane Plus	0.496	0.2220	26.14	0.0164
Total	100.000	18.1220	1112.69	0.6496

* @ 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): 1118.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1098.9
REAL SPECIFIC GRAVITY: 0.6512

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

DRY BTU @ 14.650: 1112.3
DRY BTU @ 14.696: 1115.8
DRY BTU @ 14.730: 1118.4
DRY BTU @ 15.025: 1140.8

CYLINDER #: 7048
CYLINDER PRESSURE: 105 PSIG
DATE RUN: 3/27/14 1:42 PM
ANALYSIS RUN BY: LOGAN CHENEY



ENERGEN RESOURCES CORP.
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-4-41; CSG
Stn. No.: 3198009B
Mtr. No.:

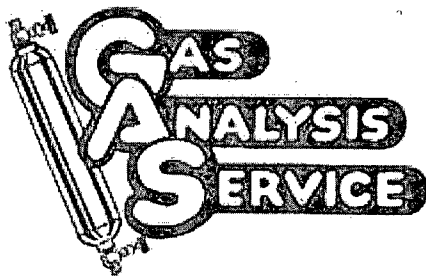
CASING
BLANCO MV

03/31/2014
73500-14405

Smpl Date: 03/06/2014
Test Date: 03/27/2014
Run No: EN140166

Nitrogen: 0.133
CO2: 1.756
Methane: 88.245
Ethane: 6.587
Propane: 1.869
I-Butane: 0.269
N-Butane: 0.391
I-Pentane: 0.150
N-Pentane: 0.104
Hexane+: 0.496

BTU: 1118.4
GPM: 18.1220
SPG: 0.6512



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

Analysis No: EN140165
Cust No: 73500-14400

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: SAN JUAN 30-4 -41; INTRM
County/State: RIO ARriba NM
Location: O18-30N-04W
Field:
Formation: BLANCO MV
Cust. Stn. No.: 3198009B

Source: INTERMEDIATE
Pressure: PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 03/06/2014
Sampled By: DAN BUTTON
Foreman/Engr.: JOHN HAMPTON

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.243	0.0270	0.00	0.0024
CO2	0.003	0.0010	0.00	0.0000
Methane	85.510	14.5350	863.65	0.4736
Ethane	9.607	2.5760	170.02	0.0997
Propane	3.248	0.8970	81.72	0.0495
Iso-Butane	0.343	0.1130	11.15	0.0069
N-Butane	0.604	0.1910	19.70	0.0121
I-Pentane	0.163	0.0600	6.52	0.0041
N-Pentane	0.110	0.0400	4.41	0.0027
Hexane Plus	0.169	0.0760	8.91	0.0056
Total	100.000	18.5160	1166.09	0.6566

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

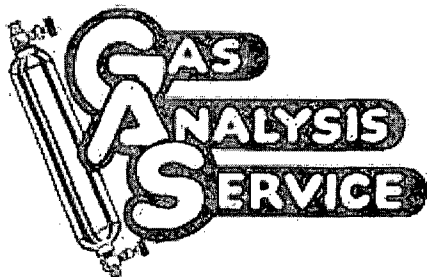
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0029
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1172.2
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1151.8
REAL SPECIFIC GRAVITY: 0.6583

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

DRY BTU @ 14.650: 1165.8
DRY BTU @ 14.696: 1169.5
DRY BTU @ 14.730: 1172.2
DRY BTU @ 15.025: 1195.7

CYLINDER #: 6124
CYLINDER PRESSURE: 304 PSIG
DATE RUN: 3/27/14 12:00 AM
ANALYSIS RUN BY: LOGAN CHENEY



ENERGEN RESOURCES CORP.
WELL ANALYSIS COMPARISON

Lease: SAN JUAN 30-4 -41; INTRM
Stn. No.: 3198009B
Mtr. No.:

INTERMEDIATE
BLANCO MV

03/31/2014
73500-14400

Smpl Date: 03/06/2014
Test Date: 03/27/2014
Run No: EN140165

Nitrogen: 0.243
CO2: 0.003
Methane: 85.510
Ethane: 9.607
Propane: 3.248
I-Butane: 0.343
N-Butane: 0.604
I-Pentane: 0.163
N-Pentane: 0.110
Hexane+: 0.169

BTU: 1172.2
GPM: 18.5160
SPG: 0.6583