



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170
[http://emnr.state.nm.us/ocd/District III3district.htm](http://emnr.state.nm.us/ocd/District%20III3district.htm)

OIL CONS. DIV DIST. 3

APR 17 2014

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 3-19-14 Operator Energen Resources API #30-0 3905621

Property Name Cullins Federal Well No. 1 Location: Unit M Section 4 Township 24 Range 3

Well Status(Shut-In or Producing) Initial PSI: Tubing 90 Intermediate N/A Casing 160 Bradenhead 37

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE				
	Bradenhead			INTERM	
	BH	Int	Csg	Int	Csg
TIME					
5 min	0		160		
10 min	0		160		
15 min	0		160		
20 min					
25 min					
30 min					

FLOW CHARACTERISTICS	
BRADENHEAD	INTERMEDIATE
Steady Flow	
Surges	
Down to Nothing	X
Nothing	
Gas	X
Gas & Water	
Water	

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

CLEAR _____ FRESH _____ SALTY _____ SULFUR _____ BLACK _____

5 MINUTE SHUT-IN PRESSURE BRADENHEAD 0 INTERMEDIATE _____

REMARKS:

Blew to nothing in 1 to 2 sec.

By MICHAEL L DEAN

Witness _____

PRODUCTION FOREMAN
(Position)

E-mail address _____



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

Analysis No: EN140203
Cust No: 73500-14435

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: CULLINS FED #1 BHD
County/State: RIO ARRIBA
Location:
Field:
Formation: PICTURED CLIFF
Cust. Stn. No.: 87916

Source: BRADENHEAD
Pressure: 35 PSIG
Sample Temp: 46 DEG. F
Well Flowing: Y
Date Sampled: 03/19/2014
Sampled By: MICHAEL DEAN
Foreman/Engr.: MICHAEL DEAN

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	10.702	1.1810	0.00	0.1035
CO2	0.041	0.0070	0.00	0.0006
Methane	72.617	12.3460	733.43	0.4022
Ethane	7.877	2.1130	139.40	0.0818
Propane	4.986	1.3780	125.45	0.0759
Iso-Butane	1.203	0.3950	39.12	0.0241
N-Butane	1.333	0.4210	43.49	0.0268
I-Pentane	0.502	0.1840	20.08	0.0125
N-Pentane	0.316	0.1150	12.67	0.0079
Hexane Plus	0.423	0.1890	22.30	0.0140
Total	100.000	18.3290	1135.94	0.7493

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0031
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1142.1
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1122.2
REAL SPECIFIC GRAVITY: 0.7513

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

DRY BTU @ 14.650: 1135.9
DRY BTU @ 14.696: 1139.5
DRY BTU @ 14.730: 1142.1
DRY BTU @ 15.025: 1165.0

CYLINDER #: 6114
CYLINDER PRESSURE: 31 PSIG
DATE RUN: 4/2/14 12:53 PM
ANALYSIS RUN BY: LOGAN CHENEY



ENERGEN RESOURCES CORP.
WELL ANALYSIS COMPARISON

Lease: CULLINS FED #1 BHD
Stn. No.: 87916
Mtr. No.:

BRADENHEAD
PICTURED CLIFF

04/07/2014
73500-14435

Smpl Date: 03/19/2014
Test Date: 04/02/2014
Run No: EN140203

Nitrogen: 10.702
CO2: 0.041
Methane: 72.617
Ethane: 7.877
Propane: 4.986
I-Butane: 1.203
N-Butane: 1.333
I-Pentane: 0.502
N-Pentane: 0.316
Hexane+: 0.423

BTU: 1142.1
GPM: 18.3290
SPG: 0.7513



☐ Helium

☐ Hydrogen

☐ Oxygen

☐ C6+

☐ C9+

☐ BTEX

2030 Afton Place, Farmington, NM 87401 • 505/325-6622

Company Emergen Resources

Pressure(PSIG) 35

Well Name Cullins Fed #1

Sample Temp (Deg. F) AMB 46°

Location/Source Bradenhead

Well Flowing ☒ Yes ☐ No

Lease/County Rio Arriba

Date Sampled 3-19-14

Formation PC

Sampled By Michael Dean

Meter No 87916

Cylinder No. 6114

Contact Michael Dean

Remarks BRADENHEAD