

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

CONFIDENTIAL
TIGHT HOLE

Form C-103
June 19, 2008

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	WELL API NO. 30-045-35242
2. Name of Operator Energen Resources Corporation	5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
3. Address of Operator 2010 Afton Place, Farmington, NM 87401	6. State Oil & Gas Lease No. Fed NMSF077972
4. Well Location Unit Letter <u>N</u> : <u>1281</u> feet from the <u>South</u> line and <u>1385</u> feet from the <u>West</u> line Section <u>11</u> Township <u>27N</u> Range <u>13W</u> NMPM County <u>San Juan</u>	7. Lease Name or Unit Agreement Name: Richardson Navajo 27 13 10
	8. Well Number #4H
	9. OGRID Number 162928
	10. Pool name or Wildcat Basin Mancos
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5922' GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Inter-Well Communications ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Energen Resources Corporation conducted stimulation on the Richardson Navajo 27 13 10 #4H

Start Date: 11/29/15

End Date: 12/02/15

Type: Nitrogen Foam

Pressure: 5924.9

Volume: 52,532,194 scf N2

Results of any investigation conducted: Gas Analysis

Attached: Spreadsheet listing affected wells due to stimulation activity

OIL CONS. DIV DIST. 3

JAN 15 2016

Spud Date:

10/14/15

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Theresa McAndrews TITLE Production Supervisor DATE 1/15/16

tmcandre@energen.com

Type or print name Theresa McAndrews E-mail address: tmcandre@energen.com PHONE 505.325.6800

For State Use Only

APPROVED BY ACCEPTED FOR RECORD TITLE AV DATE 2/12/16

Conditions of Approval (if any):

5

[illegible]



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

Analysis No: EN160001
Cust No: 73500-14770

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: RICHARDSON #5
County/State: SAN JUAN NM
Location:
Field:
Formation: MANCOS/DAKOTA
Cust. Stn. No.: 94295

Source: METER
Pressure: 84 PSIG
Sample Temp: DEG. F
Well Flowing: Y
Date Sampled: 01/04/2016
Sampled By: EUGENE BURBANK
Foreman/Engr.: EUGENE BURBANK

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	47.976	5.2860	0.00	0.4640
CO2	0.538	0.0920	0.00	0.0082
Methane	40.778	6.9230	411.86	0.2259
Ethane	4.287	1.1480	75.87	0.0445
Propane	3.952	1.0900	99.44	0.0602
Iso-Butane	0.369	0.1210	12.00	0.0074
N-Butane	1.202	0.3790	39.21	0.0241
I-Pentane	0.236	0.0860	9.44	0.0059
N-Pentane	0.227	0.0820	9.10	0.0057
Hexane Plus	0.434	0.1940	22.88	0.0144
Total	100.000	15.4010	679.80	0.8602

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0017
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 682.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 670.6
REAL SPECIFIC GRAVITY: 0.8613

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

DRY BTU @ 14.650: 678.8
DRY BTU @ 14.696: 680.9
DRY BTU @ 14.730: 682.5
DRY BTU @ 15.025: 696.2

CYLINDER #: 055
CYLINDER PRESSURE: 93 PSIG
DATE RUN: 1/5/16 8:54 AM
ANALYSIS RUN BY: Shyann Elledge



CONFIDENTIAL
TIGHT HOLE

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

Analysis No: EN160002
Cust No: 73500-14775

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: RICHARDSON GAS COM B 1E
County/State: SAN JUAN NM
Location:
Field:
Formation: MANCOS/DAKOTA
Cust. Stn. No.: 94817

Source: METER
Pressure: 94 PSIG
Sample Temp: 32 DEG. F
Well Flowing: Y
Date Sampled: 01/06/2016
Sampled By: JMG
Foreman/Engr.: EUGENE BURBANK

Remarks:

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	34.214	3.7710	0.00	0.3309
CO2	0.547	0.0940	0.00	0.0083
Methane	53.519	9.0900	540.54	0.2964
Ethane	5.167	1.3840	91.44	0.0536
Propane	3.851	1.0630	96.90	0.0586
Iso-Butane	0.419	0.1370	13.63	0.0084
N-Butane	1.391	0.4390	45.38	0.0279
I-Pentane	0.324	0.1190	12.96	0.0081
N-Pentane	0.312	0.1130	12.51	0.0078
Hexane Plus	0.256	0.1140	13.49	0.0085
Total	100.000	16.3240	826.84	0.8086

* @ 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): 830.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 816.0
REAL SPECIFIC GRAVITY: 0.81

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

DRY BTU @ 14.650: 826.0
DRY BTU @ 14.696: 828.6
DRY BTU @ 14.730: 830.5
DRY BTU @ 15.025: 847.1

CYLINDER #: 6056
CYLINDER PRESSURE: 87 PSIG
DATE RUN: 1/8/16 12:00 AM
ANALYSIS RUN BY:



CONFIDENTIAL
TIGHT HOLE

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

Analysis No: EN160026
Cust No: 73500-14775

Well/Lease Information

Customer Name: ENERGEN RESOURCES CORP.
Well Name: RICHARDSON GAS COM B 1E
County/State: SAN JUAN NM
Location:
Field:
Formation: MANCOS/DAKOTA
Cust. Stn. No.: 94817

Source: METER
Pressure: 93 PSIG
Sample Temp: 28 DEG. F
Well Flowing: Y
Date Sampled: 01/12/2016
Sampled By: RICH F.
Foreman/Engr.: EUGENE BURBANK

Remarks: SAMPLE CONTAINED 1/4 CUP OF CONDENSATE

Analysis

Component::	Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	25.691	2.8370	0.00	0.2485
CO2	0.539	0.0920	0.00	0.0082
Methane	50.815	8.6470	513.24	0.2815
Ethane	6.641	1.7830	117.52	0.0689
Propane	6.898	1.9070	173.56	0.1050
Iso-Butane	1.137	0.3730	36.97	0.0228
N-Butane	3.880	1.2280	126.58	0.0779
I-Pentane	1.362	0.5000	54.49	0.0339
N-Pentane	1.615	0.5880	64.74	0.0402
Hexane Plus	1.422	0.6370	74.95	0.0471
Total	100.000	18.5920	1162.06	0.9340

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1169.4
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1149.1
REAL SPECIFIC GRAVITY: 0.9374

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

DRY BTU @ 14.650: 1163.0
DRY BTU @ 14.696: 1166.7
DRY BTU @ 14.730: 1169.4
DRY BTU @ 15.025: 1192.8

CYLINDER #: 7047
CYLINDER PRESSURE: 90 PSIG
DATE RUN: 1/13/16 12:00 AM
ANALYSIS RUN BY: PATRICIA KING