Date December 4, 2009 API # 47-05101241

State of West Virginia Division of Environmental Protection Section of Oil and Gas Well Operator's Report of Well Work

Farm Name: Randy and Lisa McDowell B 10H

Operator Well No.: 627054

LOCATION

Elevation:

1356'

Quadrangle:

Wileyville

District:

Meade

Quadrangie County:

Marshall

Latitude:

1200 ft

South of West of 39° 45' 00"

Longitude:

4600ft

80°

40' 00"

Company: Chesapeake Appalachia, L.L.C.

P.O. Box 18496 OKC, OK 73154-0496

Agent: James E. Grey
Inspector: Bill Hendershot
Date Permit Issued: 05/20/2009

Date Well work commenced: 07/16/2009 Date Well Work completed: 08/06/2009

Verbal Plugging Permission

Granted on / /

Rotary ⊠ Cable Rig

Total Depth (ft): 11,385 TVD (ft):7,135

Fresh Water Depth (ft): N/A Salt Water Depth (ft.): N/A

Is coal being mined in area (Yes \(\subseteq \) No \(\subseteq \))

Coal Depths (ft):

Was this well logged and plugged back?

Yes No X if yes – depth cement plug set _____

| | , | · | |
|----------|----------|---------|----------------|
| Casing & | Used in | Left in | Cement Fill-Up |
| Tubing | Drilling | Well | Cu.Ft. |
| 13 3/8 | 1,230' | 1,230' | CTS |
| 9 5/8 | 2,668' | 2,668' | CTS |
| 5 1/2 | 11,453' | 11,453' | 1,546 sks |
| | | | |
| | | | in the South |
| | ļ | | Office of |

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Open Flow Data

1st Producing Formation

Pay Zone Depth 7,646 ft to 11,248 ft

hours

Gas: Initial Open Flow Final Open Flow

2,111 Mcf/day N/A Mcf/day Oil: Initial Open Flow Final Open Flow

N/A bb

bbl/day bbl/day

Time of Open Flow between Initial and Final Tests In

Line

Static Rock Pressure

3,924 psig after

hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: I). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Chesapeake Energy Well No.: 627054

Perforated Intervals

| I CITOI ALC | T TITEGE A MIC | | | |
|-----------------------|----------------|----|------------|------------------------|
| 1 st Stage | Marcellus | 10 | holes from | 10,926 ft to 11,248 ft |
| 2 nd Stage | Marcellus | 10 | holes from | 10526 ft to 10,848 ft |
| 3 rd Stage | Marcellus | 10 | holes from | 10,126 ft to 10,448 ft |
| 4th Stage | Marcellus | 10 | holes from | 9,646 ft to 10,048 ft |
| 5th Stage | Marcellus | 10 | holes from | 9,246 ft to 9,568 ft |
| 6 th Stage | Marcellus | 10 | holes from | 8,846 ft to 9,168 ft |
| 7 th Stage | Marcellus | 10 | holes from | 8,446 ft to 8,768 ft |
| 8th Stage | Marcellus | 10 | holes from | 8,046 ft to 8,368 ft |
| 9th Stage | Marcellus | 10 | holes from | 7,646 ft to 7,968 ft |

Fracturing / Stimulation

| 1 st Stage | Ty | pe of Treatment Slickwater | . 1 | | |
|-----------------------|----------------------------|--|-------------|---|--|
| 1 Stage | Total Acid 5,000 Gal of 1 | | | Draceura 6 560 nei | |
| | Average Rate 100 scf/min | | | kdown Pressure 6,569 psi 8,840 psi MTP 9,328 psi | |
| | Total Fluid 16,925 bbl | Total Nitrogen 0 scf | | Sand 301,540 lb 100 mesh | |
| | 101411141410,925001 | Total Millogen O Set | | Sand 303,563 lb of 40/70 | |
| | ISIP 5,564 psi | 5 min 4,451 psi | Total | 1 | |
| 2nd Stage | 1011 3,304 psi | Type of Treatment Slick | water | | |
| ziid Stage | Total Acid 2,500 Gal of 15 | | | Draggura 5 995 noi | |
| | Average Rate 100 scf/min | | | akdown Pressure 5,885 psi PP 7,956 psi MTP 9,250 psi | |
| | Total Fluid 12,151 bbl | Total Nitrogen 0 scf | | Sand 303, 125 lb 100 mesh | |
| | Total Fluid 12,151 001 | Total Milogen o sel | | Sand 320,220 lb of 40/70 | |
| | ISIP 4,925 psi | 5 min 4,118 psi | Total | Jana 320,220 10 01 40/70 | |
| 3rd Stage | 1311 4,925 psi | Type of Treatment Slickwater | | | |
| Jid Stage | Total Acid 2,500 Gal of 15 | 0% LICI | Breskdoum I | Pressure 7,033 psi | |
| | Average Rate 100 scf/min | or hour M | | 3 psi MTP 9,812 psi | |
| | Total Fluid 13,292 bbl | Total Nitrogen 0 scf | | Sand 301,342 lb 100 mesh | |
| | 10ta Fiuld 13,272 001 | Total Millogell V Sci | | Sand 313,637 lb of 40/70 | |
| | ISIP 4,596 psi | 5 min 3,743 psi | 1 10(8) 2 | 70 10 01 70 70 70 70 70 70 70 70 70 70 70 70 70 | |
| 4th Stage | 131F 4,370 psi | Type of Treatment Slick | vater | | |
| TIII DIABC | Total Acid 2,500 Gal of 15 | | | Pressure 5,946 psi | |
| | Average Rate 100 scf/min | or hom | |) psi MTP 9,542 psi | |
| | Total Fluid 12,081 bbl | Total Nitrogen 0 scf | | Sand 304,836 lb 100 mesh | |
| | 10(a) 11(d) 12,001 001 | Total Milogen V ser | | Sand 312,522 lb of 40/70 | |
| | ISIP 5,188 psi | 5 min 3,767 psi | 1 Total C | June 512,522 10 01 10/10 | |
| 5th Stage | 1311 3,166 psi | Type of Treatment Slicky | vater | | |
| Jili Stage | Total Acid 2 500 Gal of 15 | Total Acid 2,500 Gal of 15% HCl Breakdown Pressure 5,798 psi | | | |
| | Average Rate 100 scf/min | | | si MTP 9,456 psi | |
| | Total Fluid 11,921 bbl | Total Nitrogen 0 scf | | Sand 301,088 lb 100 mesh | |
| | 101411141411,521001 | | | Sand 313,950 lb of 40/70 | |
| | ISIP 4,969 psi | 5 min 3,935 psi | | | |
| 6th Stage | 1011 1,202 por | Type of Treatment Slickwater | | | |
| om brago | Total Acid 2,500 Gal of 15 | % HCl | Breakdown I | Pressure 6,545 psi | |
| | Average Rate 100 scf/min | or bpm 🛛 | | si MTP 9,695 psi | |
| | Total Fluid 13,241 bbl | Total Nitrogen 0 scf | | Sand 308,522 lb 100 mesh | |
| | 10 | | | Sand 253,348 lb of 40/70 | |
| | ISIP 4,162 psi | 5 min 3,485 psi | | | |
| 7th Stage | 1012 1,3100 por | Type of Treatment Slick | Slickwater | | |
| 7111 011180 | Total Acid 2,500 Gal of 15 | | Breakdown I | Pressure 6,838 psi | |
| | Average Rate 100 scf/min | or bpm 🛛 | ATP 8,135 p | si MTP 8,721 psi | |
| | Total Fluid 11,795 bbl | Total Nitrogen 0 scf | Total S | and 300,048 lb 100 mesh | |
| | | | Total S | Sand 309,897 lb of 40/70 | |
| | ISIP 4,736 psi | 5 min 3,922 psi | | | |
| 8th Stage | | Type of Treatment Slickwater | | | |
| | Total Acid 2,500 Gal of 15 | % HCl | | Pressure 6,545 psi | |
| | Average Rate 100 scf/min | or bpm 🛛 | | si MTP 9,502 psi | |
| | Total Fluid 11,982 bbl | Total Nitrogen 0 scf | | Sand 302,011 lb 100 mesh | |
| | | | Total S | Sand 308,492 lb of 40/70 | |
| | ISIP 4,875 psi | 5 min 3,982 psi | | | |
| 9th Stage | | Type of Treatment Slicks | vater | | |
| | Total Acid 2,500 Gal of 15 | % HCl | | Pressure 6,300 psi | |
| | Average Rate 100 scf/min | or bpm 🛛 | | si MTP 8,210 psi | |
| | Total Fluid 12,017 bbl | Total Nitrogen 0 scf | | Sand 310,202 lb 100 mesh | |
| | | | Total S | Sand 301,434 lb of 40/70 | |
| | ISIP 4,519 psi | 5 min 3,825 psi | | | |

57-01241

Well Log

| Formation Name Top Bottom Comments Pittsburgh Coal 1141 1148 Big Dunkard 1645 1681 Freeport Coal 1700 1706 Gas Sands 1714 1837 Salt Sands 1851 2000 Maxtons 2037 2235 | |
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| Big Dunkard 1645 1681 Freeport Coal 1700 1706 Gas Sands 1714 1837 Salt Sands 1851 2000 | |
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| | |
| Maxtons 2037 2235 | |
| | |
| Big Lime 2235 2290 | |
| Big Injun 2290 2556 | |
| Gordon 3115 3124 From mudlog | |
| Geneseo 6980 7002 | |
| Tully 7002 7024 | |
| Hamilton 7024 7111 | |
| Marcellus 7111 NR | |
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| Signed: | De Orle |
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| | CHESAPEAKE APPALACHIA, LLC |
| By: | TAL ODEN |
| Date: | 1:-5-110 |