WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 8/03/2012
API #: 47-049-02129

Farm name: Cain, Richard Operator Well No.: Fenn A 1H

LOCATION: Elevation: 1,251' Quadrangle: Shinnston

District: Lincoln County: Marion
Latitude: 610' Feet South of 39 Deg. 27 Min. 30 Sec.
Longitude 7,330' Feet West of 80 Deg. 17 Min. 30 Sec.

RECEIVED
AUG 6 2012
WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Company: XTO Energy, Inc.

Address: PO Box 1008, Jane Lew, WV 26378	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	20"	120'	114'	C.T.S.
Agent: Gary Beall	13 3/8"	462'	462'	401.2 cuft
Inspector: Tristan Jenkins	9 5/8"	3,046'	3,046'	1020 cuft
Date Permit Issued: 12/27/2010	5 1/2"	12,700'	12,670'	2634.72 cuft
Date Well Work Commenced: 5/30/2011				
Date Well Work Completed: 10/28/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7,490'				
Total Measured Depth (ft): 12,700'				
Fresh Water Depth (ft.): 406'				
Salt Water Depth (ft.): None Noted				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None Noted				
Void(s) encountered (N/Y) Depth(s) 412'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7464'-7490'
Gas: Initial open flow Show MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow Show MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests ---------- Hours
Static rock Pressure ---------- psig (surface pressure) after ---------- Hours

Second producing formation ---------- Pay zone depth (ft) ----------
Gas: Initial open flow ---------- MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow ---------- MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests ---------- Hours
Static rock Pressure ---------- psig (surface pressure) after ---------- Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

8-3-12
Date

049-02129

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MWD, GR, ROP, VS, TVD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Stg 1 Marcellus; 12,418'-12,596; 72 shots; Slick water frac; Avg treating 7047 psi@79 bpm; 75,977#s 100 mesh; 269,851#s 30/50 mesh; 7,052 bbl water, 961 bbl treated water

Stg 2 Marcellus; 12,159'-12,337; 72 shots; Slick water frac; Avg treating 7151 psi@74 bpm; 74,374#s 100 mesh; 267,916#s 30/50 mesh; 7,118 bbl water, 637 bbl treated water

Stg 3 Marcellus; 11,900'-12,078; 72 shots; Slick water frac; Avg treating 7249 psi@77 bpm; 74,001#s 100 mesh; 263,863#s 30/50 mesh; 6,824 bbl water, 969 bbl treated water

Stg 4 Marcellus; 11,641'-11,819; 72 shots; Slick water frac; Avg treating 7280 psi@76 bpm; 75,791#s 100 mesh; 174,457#s 30/50 mesh; 6,134 bbl water, 778 bbl treated water

Stg 5 Marcellus; 11,382'-11,560; 72 shots; Slick water frac; Avg treating 7251 psi@81 bpm; 78,427#s 100 mesh; 265,678#s 30/50 mesh; 8,168 bbl water

Stg 6 Marcellus; 11,123'-11,301; 72 shots; Slick water frac; Avg treating 7100 psi@81 bpm; 75,500#s 100 mesh; 265,305#s 30/50 mesh; 7,878 bbl water

Plug Back Details Including Plug Type and Depth(s):

See addtional page

Formations Encountered: Top Depth / Bottom Depth
Surface:

Little Lime	1710
Big Lime	1741
Big Injun	1836
5th Sand	2809
Balltown	3709
Geneseo Shale	7197 - 7241
Tully Limestone	7241 - 7291
Hamilton Shale	7291 - 7349
Marcellus Shale	7349 - 7450
Purcell Limestone	7450 - 7490

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Stg 7 Marcellus; 10,864'-11,042; 72 shots; Slick water frac; Avg treating 7119 psi@83 bpm; 76,002#s 100 mesh; 269,516#s 30/50 mesh; 7,972 bbl water
Stg 8 Marcellus; 10,605'-10,783; 72 shots; Slick water frac; Avg treating 7133 psi@81 bpm; 76,408#s 100 mesh; 264,614#s 30/50 mesh; 6,985 bbl water, 1,001 bbl treated water
Stg 9 Marcellus; 10,346'-10,524; 72 shots; Slick water frac; Avg treating 6916 psi@80 bpm; 77,797#s 100 mesh; 277,104#s 30/50 mesh; 6,712 bbl water, 1,507 bbl treated water
Stg 10 Marcellus;10,087'-10,265; 72 shots; Slick water frac; Avg treating 6982psi@82 bpm; 77,192#s 100 mesh; 213,482#s 30/50 mesh; 5,981 bbl water, 1,279 bbl treated water
Stg 11 Marcellus; 9,828'-10,006; 72 shots; Slick water frac; Avg treating 6992 psi@83 bpm; 76,655#s 100 mesh; 260,928#s 30/50 mesh; 6,744 bbl water, 1,104 bbl treated water
Stg 12 Marcellus; 9,569'-9,747; 72 shots; Slick water frac; Avg treating 7118 psi@84 bpm; 75,386#s 100 mesh; 265,523#s 30/50 mesh; 6,412 bbl water, 1,314 bbl treated water
Stg 13 Marcellus; 9,310'-9,488; 72 shots; Slick water frac; Avg treating 7796 psi@81 bpm; 75,141#s 100 mesh; 266,485#s 30/50 mesh; 6,694 bbl water, 1,102 bbl treated water
Stg 14 Marcellus; 9,051'-9,229; 72 shots; Slick water frac; Avg treating 6905 psi@85 bpm; 77,458#s 100 mesh; 267,732#s 30/50 mesh; 6,490 bbl water, 1,261 bbl treated water
Stg 15 Marcellus; 8,792'-8,970; 72 shots; Slick water frac; Avg treating 6896 psi@86 bpm; 80,090#s 100 mesh; 266,624#s 30/50 mesh; 6,503 bbl water, 1,278 bbl treated water
Stg 16 Marcellus; 8,533'-8,711; 72 shots; Slick water frac; Avg treating 6891 psi@86 bpm; 77,736#s 100 mesh; 265,838#s 30/50 mesh; 6,551 bbl water, 1,207 bbl treated water
Stg 17 Marcellus; 8,274'-8,452; 72 shots; Slick water frac; Avg treating 6746 psi@80 bpm; 76,509#s 100 mesh; 268,087#s 30/50 mesh; 6,322 bbl water, 1,401 bbl treated water
Stg 18 Marcellus; 8,015'-8,452; 72 shots; Slick water frac; Avg treating 6969 psi@83 bpm; 74,250#s 100 mesh; 199,780#s 30/50 mesh; 6,636 bbl water, 1,067 bbl treated water
Stg 19 Marcellus; 7,756'-7,934; 72 shots; Slick water frac; Avg treating 6668 psi@87 bpm; 75,457#s 100 mesh; 268,222#s 30/50 mesh; 6,059 bbl water, 1,579 bbl treated water

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	10/3/2011
State:	WV
County:	Marion
API Number:	47-049-02129
Operator Name:	XTO Energy
Well Name and Number:	Fenn 1H
Longitude:	-80.31775
Latitude:	39.45681
Long/Lat Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	7,476
Total Water Volume (gal)*:	6,202,560

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water				7732-18-5	100.00%	88.580	
Sand		Proppant	Crystaline Silica	14808-60-7	100.00%	10.807	
Biocide EC 6116A	Universal	Biocide					
			Dibromoacetonitrile	3252-43-5	5.00%	0.002	
			2,2-Dibromo-3-nitrilopropionamide	10222-01-2	30.00%	0.010	
			Polyethylene Glycol	25322-68-3	60.00%	0.021	
			Other - unspecified		5.00%	0.002	
Unislik ST 50	Universal	Friction Reducer					
			Hydrotreated light distillates	64742-47-8	30.00%	0.021	
			Polyacrylamide powder and other		70.00%	0.048	
EC 6486A	Universal	Scale Inhibitor					
			Ethylene glycol	107-21-1	30.00%	0.011	
			Other - unspecified		70.00%	0.025	
7.5% HCl Acid	Universal	Cleaning					
			Hydrogen Chloride	7647-01-0	7.50%	0.036	
			Water	7732-18-5	92.50%	0.439	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier' s Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration' s (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.

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	Units	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9	Stage 10
Iron Control	gal										
Acid	gal	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Biocide	gal	102	103	97	87	106	101	97	107	117	96
Fresh Water	gal	7,052.00	7,118.00	6,824.00	6,134.00	8,168.00	7,878.00	7,972.00	6,985.00	6,712.00	5,981.00
Friction Reducer	gal	267	253	256	233	254	176	194	196	256	224
Sand	bbl	75,977.00	74,374.00	263,863.00	75,791.00	265,678.00	265,305.00	269,516.00	76,408.00	277,104.00	77,192.00
Sand	gal	269,851.00	267,916.00	74,001.00	174,457.00	78,427.00	75,500.00	76,002.00	264,614.00	77,797.00	213,482.00
Scale Inhibitor	lb	102	105	95	86	101	102	99	110	116	91
Water - Recycled	lb	961	637	969	778				1,001.00	1,507.00	1,279.00
	Units										
Iron Control	gal	Stage 11	Stage 12	Stage 13	Stage 14	Stage 15	Stage 16	Stage 17	Stage 18	Stage 19	Total
Acid	gal										0.00
Biocide	gal	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	28,500.00
Fresh Water	gal	105	105	102	100	99	104	103	95	98	1,924.00
Friction Reducer	gal	6,744.00	6,412.00	6,694.00	6,490.00	6,503.00	6,551.00	6,322.00	6,636.00	6,059.00	129,235.00
Sand	bbl	242	237	267	230	261	256	267	231	248	4,548.00
Sand	gal	260,928.00	75,386.00	266,485.00	267,732.00	80,090.00	77,736.00	76,509.00	199,780.00	268,222.00	3,294,076.00
Scale Inhibitor	lb	76,655.00	265,523.00	75,141.00	77,458.00	266,624.00	265,838.00	268,087.00	74,250.00	75,457.00	3,017,080.00
Water - Recycled	lb	104	97	92	103	101	104	113	102	100	1,923.00
		1,104.00	1,314.00	1,102.00	1,261.00	1,278.00	1,207.00	1,401.00	1,067.00	1,579.00	18,445.00