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: 5/16/2012
API #: 47-033-05543

Farm name: Salerno, Albert, ET AL Operator Well No.: Harbert East A 3H

LOCATION: Elevation: 1243' Quadrangle: Shinnston 7.5'

District: Eagle County: Harrison
Latitude: 11,610 Feet South of 39 Deg. 25 Min. 00 Sec.
Longitude 3,560 Feet West of 80 Deg. 20 Min. 00 Sec.

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"	112'	112'	300 sks
Agent: Gary Beall	13 3/8"	529'	529'	464 sks
Inspector: Tristan Jenkins	9 5/8"	2757'	2757'	750 sks
Date Permit Issued: 6/09/2011	5 1/2"	10765'	10765'	1482 sks
Date Well Work Commenced: 8/4/2011				
Date Well Work Completed: 4/30/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7205'				
Total Measured Depth (ft): 10744'				
Fresh Water Depth (ft.): 268'				
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) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7160-7204
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

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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

6/14/12
Date

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 GR, ROP, VS, TVD, MWD, Mudlogs

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; 10,506'-10,692'; 72 shots; Slick water frac; Avg treating 7278 psi@85 bpm; 75,808#s 100 mesh; 217,963#s 30/50 mesh; 7,129 bbl water, 760 bbl treated water

Stg 2 Marcellus; 10,237'-10,423'; 72 shots; Slick water frac; Avg treating 7112 psi@84 bpm; 76,148#s 100 mesh; 265,327#s 30/50 mesh; 7,705 bbl water, 751 bbl treated water

Stg 3 Marcellus; 9,968'-10,154'; 72 shots; Slick water frac; Avg treating 7148 psi@82 bpm; 77,008#s 100 mesh; 265,662#s 30/50 mesh; 7,709 bbl water, 825 bbl treated water

Stg 4 Marcellus; 9,699'-9,885'; 72 shots; Slick water frac; Avg treating 7060 psi@83 bpm; 74,357#s 100 mesh; 269,799#s 30/50 mesh; 7,754 bbl water, 825 bbl treated water

Stg 5 Marcellus; 9,430'-9,616'; 72 shots; Slick water frac; Avg treating 7044 psi@85 bpm; 75,085#s 100 mesh; 265,294#s 30/50 mesh; 7,642 bbl water, 853 bbl treated water

Stg 6 Marcellus; 9,161'-9,347'; 72 shots; Slick water frac; Avg treating 7079 psi@85 bpm; 76,395#s 100 mesh; 269,952#s 30/50 mesh; 7,586 bbl water, 1000 bbl treated water

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

See additional pages

Formations Encountered: Surface:	Top Depth / Bottom Depth	
SS	0/140	
SH	140/200	
SS	200/212	
SH	212/240	
SH, SS	240/320	1/4" stream H2O@ 268'
SH	320/325	
SS	325/330	
SH	330/340	
SH, SS	340/410	
SH	410/500	
SS, SH	500/550	
SH	550/1092	
SS, SH	1092/1543	
SH	1543/2127	

See additional pages

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Additional Stages

Stg 7 Marcellus; 8,892'-9,078'; 72 shots; Slick water frac; Avg treating 7186 psi@82 bpm; 75;423#s 100 mesh; 118,976#s 30/50 mesh; 8,795 bbl water
Stg 8 Marcellus; 8,623'-8,809'; 72 shots; Slick water frac; Avg treating 6845 psi@86 bpm; 75,818#s 100 mesh; 265,117#s 30/50 mesh; 8,499 bbl water
Stg 9 Marcellus; 8,354'-8,540'; 72 shots; Slick water frac; Avg treating 6879 psi@85 bpm; 74,813#s 100 mesh; 265,981#s 30/50 mesh; 8,513 bbl water
Stg 10 Marcellus; 8,131'-8,271'; 72 shots; Slick water frac; Avg treating 6908 psi@86 bpm; 75,657#s 100 mesh; 268,135#s 30/50 mesh; 8,570 bbl water
Stg 11 Marcellus; 7,862'-8,048'; 72 shots; Slick water frac; Avg treating 6784 psi@84 bpm; 73,325#s 100 mesh; 266,172#s 30/50 mesh; 8,540 bbl water
Stg 11 Marcellus; 7,593'-7,779'; 72 shots; Slick water frac; Avg treating 6356 psi@83 bpm; 76,377#s 100 mesh; 265,447#s 30/50 mesh; 8,494 bbl water

Additional Formation Log

SS,SH	**2127**	**2322**
SH	**2322**	**2770**
SLTST,SH	**2770**	**2880**
SH, SLTST	**2880**	**2890**
SLTST, SH	**2890**	**2920**
SLTST,SH,SS	**2920**	**2950**
SH,SLTST	**2950**	**3070**
SH,SLTST,SS	**3070**	**3280**
SLTST,SH	**3280**	**3310**
SH,SLTST	**3310**	**3400**
SLTST,SH,SS	**3400**	**3490**
SH,SS,SLTST	**3490**	**3700**
SH,SLTST	**3700**	**3970**
SH,SLTST,SS	**3970**	**4000**
SH	**4000**	**4030**
SH,SLTST	**4030**	**4090**
SH	**4090**	**4180**
SH,SLTST	**4180**	**4210**
SH	**4210**	**4270**
SLTST,SS,SH	**4270**	**4300**
SH,SLTST	**4300**	**4390**
SH	**4390**	**4430**
SH,SLTST,SS	**4430**	**4510**
SH,SLTST	**4510**	**4780**
SH,SLTST,SS	**4780**	**4810**
SH,SLTST	**4810**	**5410**
SH	**5410**	**6970**
SH,LS	**6970**	**7030**
LS,SH	**7030**	**7070**
SH,LS	**7070**	**7100**
SH	**7100**	**7350**

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Additional Formation Log

SH,LS	**7350**	**7440**
SH	**7440**	**7660**
LS,SH	**7660**	**7750**
SH,LS	**7750**	**7780**
SH	**7780**	**8800**
SH,LS	**8800**	**8840**
SH	**8840**	**9170**
SH,LS	**9170**	**9200**
SH	**9200**	**10744**

FORMATION	TVD
BIG INJUN*	1533
SQUAW SAND*	1623
GANTZ SAND*	2003
50FT SAND*	2054
30FT SAND*	2146
GORDON SAND*	2219
LWR GORDON *	2330
4TH SAND*	2422
5TH SAND*	2490
UPPER BALLTOWN*	3323
BALLTOWN*	3409
LOWER BALLTOWN*	3500
GENESEO SHALE	6895
TULLY LIMESTONE	6935
HAMILTON SHALE	6987
MARCELLUS SHALE	7052
PURCELL LIMESTONE	7156
ONONDAGA LIMESTONE	7205

* Tops projected from offset log due to air drilling and therefore not logging this section

Tully	**6993 MD**
	6935 TVD
Hamilton	**7062 MD**
	6987 TVD
Marcellus	**7155 MD**
	7052 TVD

Hydraulic Fracturing Fluid Product Component Information Disclosure

033-05543

Fracture Date:	3/26/2012
State:	West Virginia
County:	Harrison
API Number:	47-033-05543
Operator Name:	XTO Energy
Well Name and Number:	Harbert 3H
Longitude:	-80.346094
Latitude:	39.384782
Long/Lat Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	7,159
Total Water Volume (gal)*:	4,363,464

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			water	7732-18-5	100.00000%	0.8978	
Sand		Proppant	sand	14808-60-7	100.00000%	0.0967	
Biocide - MC 8520	Multi-Chem	Biocide	Whole Product				
			4,4 -Dimethyloxazolidine	51200-87-4	95.00000%	0.0001	
			3,4,4-Trimethyloxazolidine	75673-43-7	4.50000%	0.0000	
			2-Amino-2-Methyl-1-Propanol	124-68-5	0.50000%	0.0000	
Biocide - MC 8650	Multi-Chem	Biocide	Whole Product				
			Glutaraldehyde	111-30-8	60.00000%	0.0000	
			Other -(non hazardous)		40.00000%	0.0000	
Friction Reducer - M	Multi-Chem	Friction Reducer	Whole Product				
			Hydrotreated light distillates (10-30%)	64742-47-8	30.00000%	0.0002	
			Other -(non hazardous)		70.00000%	0.0004	
Scale Inhibitor - MC-	Multi-Chem	Scale Inhibitor	Whole Product				
			Other -(non hazardous)		100.00000%	0.0001	
Acid - 7.5% HCl Acid	Universal	Acid	Whole Product				
			Hydrochloric Acid (15-40%) blended dc	7647-01-0	7.50000%	0.0004	
			Other -(non hazardous)		92.50000%	0.0043	

* 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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Harbert East A 3H	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	3,000.00	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	100.00	87.00	91.00	90.00	88.00	72.00	73.00	71.00	72.00	70.00
Fresh Water	gal	8,961.00	7,705.00	7,709.00	7,754.00	7,642.00	7,586.00	8,795.00	8,499.00	8,513.00	8,570.00
Friction Reducer	gal	252.00	196.00	206.00	202.00	201.00	200.00	242.00	200.00	201.00	197.00
Sand	bbl	223,063.00	76,148.00	265,662.00	269,799.00	265,294.00	76,395.00	75,423.00	75,818.00	74,813.00	268,135.00
Sand	gal	81,137.00	265,327.00	77,008.00	74,357.00	75,085.00	269,952.00	118,976.00	265,117.00	265,981.00	75,657.00
Scale Inhibitor	lb	40.00	35.00	36.00	36.00	36.00	36.00	37.00	35.00	36.00	35.00
Water - Recycled	lb	870.00	751.00	825.00	825.00	853.00	1,000.00	0.00	0.00	0.00	0.00

Harbert East A 3H	Units	Stage 11	Stage 12	Total
Iron Control	gal			0.00
Acid	gal	1,500.00	1,500.00	19,500.00
Biocide	gal	71.00	71.00	956.00
Fresh Water	gal	8,540.00	8,494.00	98,768.00
Friction Reducer	gal	208.00	178.00	2,483.00
Sand	bbl	266,172.00	76,377.00	2,013,099.00
Sand	gal	73,325.00	265,447.00	1,907,369.00
Scale Inhibitor	lb	35.00	35.00	432.00
Water - Recycled	lb	0.00	0.00	5,124.00