

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 #: 47-033-05542

Farm name: Salerno, Albert, ET AL Operator Well No.: Harbert East A 2H

LOCATION: Elevation: 1243' Quadrangle: Shinnston 7.5'

District: Eagle County: Harrison
Latitude: 11.610 Feet South of 39 Deg. 25 Min. 00 Sec.
Longitude 3.550 Feet West of 80 Deg. 20 Min. 00 Sec.

Company: XTO Energy, Inc.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>PO Box 1008, Jane Lew, WV 26378</u>	<u>20"</u>	<u>108'</u>	<u>108'</u>	<u>300 sks</u>
Agent: <u>Gary Beall</u>	<u>13 3/8"</u>	<u>529'</u>	<u>529'</u>	<u>454 sks - CTS</u>
Inspector: <u>Tristan Jenkins</u>	<u>9 5/8"</u>	<u>2786'</u>	<u>2786'</u>	<u>209 sks</u>
Date Permit Issued: <u>6/09/2011</u>	<u>5 1/2"</u>	<u>10515'</u>	<u>10515'</u>	<u>1468 sks</u>
Date Well Work Commenced: <u>7/16/2011</u>				
Date Well Work Completed: <u>4/30/2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7183'</u>				
Total Measured Depth (ft): <u>10515'</u>				
Fresh Water Depth (ft.): <u>None Noted</u>				
Salt Water Depth (ft.): <u>None Noted</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None Noted</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7171-7183

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

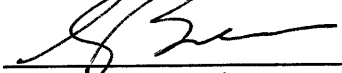
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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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; 10,273'-10,427'; 72 shots; Slick water frac; Avg treating 7020 psi@78 bpm; 91,009#s 100 mesh; 310,459#s 30/50 mesh; 8,315 bbl water, 733 bbl treated water

- Stg 2 Marcellus; 10,018'-10,192'; 72 shots; Slick water frac; Avg treating 6932 psi@86 bpm; 92,067#s 100 mesh; 309,629#s 30/50 mesh; 8,575 bbl water, 920 bbl treated water

- Stg 3 Marcellus; 9,763'-9,937'; 72 shots; Slick water frac; Avg treating 6843 psi@85 bpm; 91,318#s 100 mesh; 301,431#s 30/50 mesh; 8,554 bbl water, 842 bbl treated water

- Stg 4 Marcellus; 9,508'-9,682'; 72 shots; Slick water frac; Avg treating 6799 psi@83 bpm; 88,261#s 100 mesh; 306,523#s 30/50 mesh; 8,507 bbl water, 905 bbl treated water

- Stg 5 Marcellus; 9,253'-9,427'; 72 shots; Slick water frac; Avg treating 6818 psi@85 bpm; 100,758#s 100 mesh; 302,619#s 30/50 mesh; 8,344 bbl water, 1300 bbl treated water

- Stg 6 Marcellus; 8,998'-9,172'; 72 shots; Slick water frac; Avg treating 6932 psi@85 bpm; 75,453#s 100 mesh; 269,755#s 30/50 mesh; 7,741 bbl water, 851 bbl treated water

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

See additional pages

Formations Encountered: _____ Top Depth _____ / _____ Bottom Depth
Surface:

Surface	0/2800
SH, SLTST	2800/2890
SLTST, SH	2890/2950
SH, SLTST	2950/3010
SLTST, SS, SH	3010/3100
SLTST, SS, SH, LS	3100/3120
SH, SLTST	3120/3160
SH, SLTST, SS	3160/3220
SH, SLTST	3220/3250
SLTST, SH, LS	3250/3280
SLTST, SH	3280/3310
SH, SLTST	3310/3430
SLTST, SH, SS	3430/3510
SH, SLTST, SS	3510/3580

See additional pages

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Additional Stages

Stg 7 Marcellus; 8,743'-8,917'; 72 shots; Slick water frac; Avg treating 6749 psi@85 bpm; 76,040#s 100 mesh; 268,423#s 30/50 mesh; 7,529 bbl water, 1001 bbl treated water
Stg 8 Marcellus; 8,488'-8,662'; 72 shots; Slick water frac; Avg treating 6615 psi@84 bpm; 75,244#s 100 mesh; 267,180#s 30/50 mesh; 8,524 bbl water
Stg 9 Marcellus; 8,233'-8,407'; 72 shots; Slick water frac; Avg treating 6708 psi@85 bpm; 75,356#s 100 mesh; 267,402#s 30/50 mesh; 8,540 bbl water
Stg 10 Marcellus; 7,978'-8,152'; 72 shots; Slick water frac; Avg treating 7221 psi@76 bpm; 75,011#s 100 mesh; 267,347#s 30/50 mesh; 9,536 bbl water
Stg 11 Marcellus; 7,723'-7,897'; 72 shots; Slick water frac; Avg treating 6698 psi@84 bpm; 49,943#s 100 mesh; 278,688#s 30/50 mesh; 8,263 bbl water

Additional Formation Log

SH,SS,SLTST	0	3640
SH,SS	3640	3720
SH,SLTST,SS	3720	3910
SH, SLTST	3910	4050
SH,SS,SLTST	4050	4090
SH,SLTST,SS	4090	4150
SH, SLTST	4150	4480
SH	4480	4510
SH, SLTST	4510	4540
SH,SLTST,SS	4540	4600
SH,SLTST	4600	4810
SH,SLTST,SS	4810	4840
SH,SLTST	4840	4870
SH	4870	4990
SH, SLTST	4990	5830
SH	5830	7060
SH,LS	7060	7080
SH	7080	7180
LS,SH	7180	7300
SH	7300	7360
SH,LS	7360	7370
SH	7370	7440
SH,LS	7440	7460
SH	7460	7600
SH,LS	7600	7650
SH	7650	10515

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Additional Formation Log

FORMATION	TVD Tops
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	6898
TULLY LIMESTONE	6941
HAMILTON SHALE	6994
MARCELLUS SHALE	7052
PURCELL LIMESTONE	7158

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

Tully	7204 MD
	6941 TVD
Hamilton	7279 MD
	6994 TVD
Marcellus	7362 MD
	7052 TVD

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Hydraulic Fracturing Fluid Product Component Information Disclosure

033-05542

Fracture Date:	3/26/2012
State:	West Virginia
County:	Harrison
API Number:	47-033-05542
Operator Name:	XTO Energy
Well Name and Number:	Harbert 2H
Longitude:	-80.346031
Latitude:	39.384808
Long/Lat-Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	7,169
Total Water Volume (gal)*:	4,510,632

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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%	0.8912	
Sand		Proppant	sand	14808-60-7	100.00000%	0.1038	
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 de	7647-01-0	7.50000%	0.0003	
			Other -(non hazardous)		92.50000%	0.0038	

* 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 2H	Units	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9
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
Biocide	gal	92.00	98.00	97.00	98.00	100.00	88.00	71.00	71.00	71.00
Fresh Water	gal	8,315.00	8,575.00	8,554.00	8,507.00	8,344.00	7,741.00	7,529.00	8,524.00	8,540.00
Friction Reducer	gal	213.00	247.00	224.00	224.00	226.00	202.00	200.00	202.00	202.00
Sand	bbl	91,009.00	309,629.00	91,318.00	306,523.00	302,619.00	269,755.00	268,423.00	267,180.00	267,402.00
Sand	gal	310,459.00	92,067.00	301,431.00	88,261.00	100,758.00	75,453.00	76,040.00	75,244.00	75,356.00
Scale Inhibitor	lb	37.00	39.00	38.00	40.00	40.00	35.00	35.00	35.00	36.00
Water - Recycled	lb	733.00	920.00	842.00	905.00	1,300.00	851.00	1,001.00	0.00	0.00

Harbert East A 2H	Units	Stage 10	Stage 11	Stage 12	Total
Iron Control	gal				0.00
Acid	gal	1,500.00	1,500.00	1,500.00	18,000.00
Biocide	gal	80.00	67.00	70.00	911.00
Fresh Water	gal	9,536.00	8,263.00	8,416.00	100,844.00
Friction Reducer	gal	254.00	175.00	174.00	2,543.00
Sand	bbl	267,347.00	278,688.00	266,198.00	2,986,091.00
Sand	gal	75,011.00	49,943.00	76,069.00	1,396,092.00
Scale Inhibitor	lb	40.00	34.00	34.00	443.00
Water - Recycled	lb	0.00	0.00	0.00	6,552.00

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