WR-35 Rev (9-11)

Farm name: Salemo, Albert, ET AL

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

Operator Well No.: Harbert East A 2H

DATE:	5/16/2012	
API #:	47-033-05542	

02/01/2013

Latitude: 11,610 Feet South of 39 Deg.		1. 00 Se		
Longitude 3,550 Feet West of 80 Deg	. <u>20</u> Mir	1. <u>00</u> Se	c.	
Company XTO Energy, Inc.				
Company.	Casing &	Used in	Left in well	Cement fill
Address: PO Box 1008, Jane Lew, WV 26378	Tubing	drilling		up Cu. Ft.
	20"	108'	108'	300 sks
Agent: Gary Beall	13 3/8"	529'	529'	454 sks - CTS
Inspector: Tristan Jenkins	9 5/8"	2786'	2786'	209 sks
Date Permit Issued: 6/09/2011	5 1/2"	10515'	10515'	1468 sks
Date Well Work Commenced: 7/16/2011				
Date Well Work Completed: 4/30/2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 7183'				
Total Measured Depth (ft): 10515'				
Fresh Water Depth (ft.): None Noted				
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		<u> </u>		
		da additional	doto on canarate	cheet)
N FLOW DATA (If more than two producing format Producing formation Marcellus Pay	ons please inci zone depth (ft)	7171-7183	uata on separate	3.1001)
Gas: Initial open flow Show MCF/d Oil: Initial open				<b>~</b>
Final open flow Show MCF/d Final open flo	owB	bl/d	. ••	
Time of open flow between initial and final tests	Hou	-		
static rock Pressurepsig (surface pressure)	afterHo	urs		
Second producing formationPay 2	one depth (ft)			
Gas: Initial open flow MCF/d Oil: Initial open	flow	Bbl/d		
Final open flowMCF/d Final open flo	owE	3bl/d		
Time of open flow between initial and final tests	Hou	rs		
Static rock Pressurepsig (surface pressure)	afterHo	ours		
y under penalty of law that I have personally examine	d and am famili	or with the info	rmation submitte	ed on this docum

Signature

Were core samples taken?	Yes	No_X	Were	e cuttings caught	t during drillir	ng? Yes_X	No
Were Electrical, Mechanica							
GR, ROP, VS, TVD, MWD, Mudlogs							
NOTE: IN THE AREA FRACTURING OR STIN DETAILED GEOLOGIC COAL ENCOUNTERED Perforated Intervals, Fractu	MULATING CAL RECO BY THE W	G, PHYSICA ORD OF TH VELLBORE	AL CHANGE, ETC HE TOPS AND B	C. 2). THE WEL BOTTOMS OF	LL LOG WH ALL FORM	ICH IS A SY	STEMATIC
Stg 1 Marcellus; 10,273'-10,427'; 72 sh	ots; Slick water fra	ac; Avg treating 70	020 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 sh	ots; Slick water fra	ac; Avg treating 69	932 psi@86 bpm; 92,067#s	100 mesh; 309,629#s	30/50 mesh; 8,575	bbl water, 920 bbl t	treated water
Stg 3 Marcellus; 9,763'-9,937'; 72 shot	s; Slick water frac	; Avg treating 684	43 psi@85 bpm; 91,318#s 1	100 mesh; 301,431#s 3	30/50 mesh; 8,554	bbi water, 842 bbi t	realed water
Stg 4 Marcellus; 9,508'-9,682'; 72 shot	s; Slick water frac	; Avg treating 679	99 psi@83 bpm; 88,261#s 1	100 mesh; 306,523#s	30/50 mesh; 8,507	bbl water, 905 bbl t	reated water
Stg 5 Marcellus; 9,253'-9,427'; 72 shots	s; Slick water frac;	Avg treating 6818	8 psi@85 bpm; 100,758#s 1	100 mesh; 302,619#s 3	0/50 mesh; 8,344 b	obl water, 1300 bbl t	treated water
Stg 6 Marcellus; 8,998'-9,172'; 72 shot	s; Slick water frac	; Avg treating 693	32 psi@85 bpm; 75,453#s 1	100 mesh; 269,755#s 3	30/50 mesh; 7,741	bbl water, 851 bbl t	lreated water
Plug Back Details Includin	g Plug Type	and Depth(s)	): 				
See additional page	s						
Formations Encountered: Surface:			Top Depth			Bottom I	<u>Depth</u>
Surface	0/2800						
SH, SLTST	2800/289	90					
SLTST, SH	2890/295	50					
SH, SLTST	2950/301	10					
SLTST, SS, SH	3010/310	00					<del> </del>
SLTST, SS, SH, LS	3100/31	20					
SH, SLTST	3120/310	60					
SH, SLTST, SS	3160/322	20					
SH, SLTST	3220/32	50					
SLTST, SH, LS	3250/32	80					
SLTST, SH	3280/33	10					
SH, SLTST	3310/34						
SLTST, SH, SS	3430/35						
SH, SLTST, SS	3510/35	80					
See additional pages							

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#### **\dditional Stages**

3tg 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

3tg 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

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

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
	7440	7460
	7460	7600
	7600	7650
	7650	10515
SH,LS SH SH,LS SH	7460 7600	7600 7650

## larbert East A 2H Additional Formation Log

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FORMATION	TVD Tops
3IG 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
1 4.1.9	6941 TVD
Hamilton	7279 MD
1 (dillineon	6994 TVD
Marcellus	7362 MD
	7052 TVD