State of West Virginia Department of Environmental Protection Office of Oil and Gas

DATE: 9/28/2011 API#: 4709101199

Well Operator's Report of Well Work

LOCATION: Elevat		ALTER, ARTHUR		Operator Well No.:		2	
	ion:	1333'	Quadrangle:		THORNTON		
District:	KNOT	TSVILLE	County:		TAYLOR		
Latitude:	280			. 20 Min.			
Longitude	6,780		79 Deg.		30 Sec.		
Company: Texas Key	stone Inc.						
company romacing	otone, me.		Casing &	Used in	Left in well	Cement fill up	
Address: 560 Epsilo	n Drive		Tubing	drilling		Cu. Ft.	
	PA 15238						
Agent: Jon Farme			13 3/8"	42	42	Sanded In	
Inspector: Bryan Har							
Date Permit Issued:	09/27	//10	9 5/8"	465	465	205	
Date Well Work Com	menced: 07/21	/11					
Date Well Work Com	pleted: 07/27	/11	7"	1438	1438	200	
Verbal Plugging:							
Date Permission gran			4 1/2"	0	5161	237	
Rotary X Cable	Rig						
Total Vertical Depth	(ft.): 5610				New N	CENTED	
Total Measured Dept	h(ft.):5610				1-11	FOIL O C	
Fresh Water Depth (f					Office	OI CITOL S	
Salt Water Depth (ft.)						7 2011	
Is coal being mined in		N			0	CT 7 ZUII	
Coal Depths (ft.):	290						
Void(s) encountered (N/Y) Depth(s):	N			WVIS	jopanmen	
		o producing form	ations please in	clude additional	data on separa	te sheet)	
OPEN FLOW DATA	(If more than tw	o producing form	and the state of the			te sheet)	
OPEN FLOW DATA Producing	(If more than tw	3RD ELK		Pay zone Dept	h (ft)	5003 - 5045	
Producing	formation:			Pay zone Dept	h (ft)	5003 - 5045	
Producing Gas: Initia Final open	formation: l open flow: flow 1	3RD ELK G/S TSTM 89		Pay zone Dept MCF/D Oil:		5003 - 5045 v: 0 Bbl/d	
Producing Gas: Initia Final open	formation: I open flow: C	3RD ELK G/S TSTM 89		Pay zone Dept MCF/D Oil: MCF/D Oil: Hours	h (ft) Initial open flow Final open flow	5003 - 5045 v: 0 Bbl/d : 0 Bbl/d	
Producing Gas: Initia Final open	formation: I open flow: flow en flow between	3RD ELK G/S TSTM 89		Pay zone Dept MCF/D Oil: MCF/D Oil: Hours	h (ft) Initial open flov	5003 - 5045 v: 0 Bbl/d : 0 Bbl/d	
Producing Gas: Initia Final open Time of op Static rock	formation: l open flow: C flow 1 pen flow between Pressure: 6	3RD ELK 6/S TSTM 89 initial and final te 80	sts: N/A	Pay zone Dept MCF/D Oil: MCF/D Oil: Hours psig(surface pr	h (ft) Initial open flow Final open flow ressure) after	5003 - 5045 v: 0 Bbl/d : 0 Bbl/d	
Producing Gas: Initia Final open Time of op Static rock Second Pro	formation: I open flow: C flow 1 oen flow between Pressure: 6 oducing formation	3RD ELK 6/S TSTM 89 initial and final te 80	sts: N/A	Pay zone Dept MCF/D Oil: MCF/D Oil: Hours psig(surface pr Pay zone Dept	h (ft) Initial open flow Final open flow ressure) after	5003 - 5045 v: 0 Bbl/d : 0 Bbl/d 96 Hours 2823 - 2830	
Producing Gas: Initia Final open Time of op Static rock Second Pro Gas: Initia	formation: I open flow: C flow I oen flow between Pressure: 6 oducing formation I open flow: C	3RD ELK 6/S TSTM 89 initial and final te 80 a: BALLTOWN Co-mingled	sts: N/A	Pay zone Dept MCF/D Oil: MCF/D Oil: Hours psig(surface pr Pay zone Dept MCF/D Oil:	h (ft) Initial open flow Final open flow ressure) after h (ft)	5003 - 5045 v: 0 Bbl/d : 0 Bbl/d 96 Hours 2823 - 2830 v: 0 Bbl/d	
Producing Gas: Initia Final open Time of op Static rock Second Pro Gas: Initia Final open	formation: I open flow: C flow I oen flow between Pressure: 6 oducing formation I open flow: C	3RD ELK 6/S TSTM 89 initial and final te 80 a: BALLTOWN Co-mingled Co-mingled	sts: <u>N/A</u> A	Pay zone Dept MCF/D Oil: MCF/D Oil: Hours psig(surface pr Pay zone Dept MCF/D Oil:	h (ft) Initial open flow Final open flow ressure) after h (ft) Initial open flow	5003 - 5045 v: 0 Bbl/d : 0 Bbl/d 96 Hours 2823 - 2830 v: 0 Bbl/d	

Were core samples taken?		Yes	res No _X V		cuttings caught during drilling?	Yes	No X	
Were	N	_Electrical,	N	_Mechanical,	Y	or Geophysical logs recorded or	this well?	
	V/N	_	Y/N	_	Y/N			

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

Perforated Intervals, Fracturing, or Stimulating:

Perfed 3rd Elk 5003' - 5045' (24 shots). BD 2160 #. 250 sks 40/70 & 105 sks 20/40. 755 bbl. Gel Frac.

Perfed Balltown A 2823' - 2830' (21 shots). BD 4250 #. 150 sks 40/70 & 110 sks 20/40. 524 bbl. Gel Frac.

Perfed Bayard & Speechley A 2235' - 2299' (24 shots). BD 4320 #. 200 sks 40/70 & 110 sks 20/40. 536 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:
FILL	0	15	
SANDY SHALE	15	25	
SANDSTONE	25	45	
SANDY SHALE	45	145	DAMP FW @ 90'
SANDSTONE	145	205	3.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
SANDY SHALE	205	290	1" FW @ 210'
COAL	290	300	1" FW @ 300'
SANDY SHALE	300	365	1 1/2" FW @ 350'
SANDSTONE	365	425	3" FW @ 400'
SANDY SHALE	425	740	1/2" FW @ 508'
REDROCK SHALE	740	795	
SANDY SHALE	795	945	
REDROCK SHALE	945	980	
SANDY SHALE	980	987	
LITTLE LIME	987	1001	
PENCIL CAVE SHALE	1001	1023	
BIG LIME	1023	1226	
SHALE	1226	1260	
SQUAW SANDSTONE	1260	1280	
SHALE	1280	1312	
WEIR SANDSTONE	1312	1379	
SHALE	1379	1460	
BEREA SANDSTONE	1460	1481	
UPPER GANTZ SANDSTONE	1481	1492	
SHALE	1492	1517	
GANTZ SANDSTONE	1517	1546	
SHALE	1546	1563	
LOWER GANTZ SANDSTONE	1563	1581	
SHALE	1581	2027	
LOWER FOURTH SAND	2027	2040	
SANDY SHALE	2040	2222	
BAYARD SANDSTONE	2222	2253	GAS SHOW @ 2237' TSTM
SHALE	2253	2282	
SPEECHLEY A SANDSTONE	2282	2305	GAS SHOW @ 2300' TSTM
SANDY SHALE	2305	2364	
SPEECHLEY B SANDSTONE	2364	2375	
SANDY SHALE	2375	2818	
BALLTOWN A SANDSTONE	2818	2837	
SANDY SHALE	2837	3944	
LOWER RILEY SILTSTONE	3944	3962	
SHALE	3962	4309	
ALEXANDER SILTSTONE	4309	4357	
SANDY SHALE	4357	4503	
1ST ELK SILTSTONE	4503	4543	
SANDY SHALE	4543	5004	
3RD ELK SILTSTONE	5004	5045	GAS SHOW @ 50074 TSJV 4/2011
SHALE	5045	5610	TD

Third Producing formation	on: BAYARD & SPEECHLE	EY A Pay zone	e Depth (ft) 22	3 <i>5</i> ' - 22	99'
Gas: Initial open flow:	Co-mingled	MCF/D	Oil: Initial open flow:	0	Bbl/d
Final open flow	Co-mingled	MCF/D	Oil: Final open flow:	0	_Bbl/d
Time of open flow between initial and final tests:					_
Static rock Pressure:	Co-mingled	psig(sur	face pressure) after		_Hours