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

DATE: 12/13/2011 API #: 4707700563

RECEIVED

Well Operator's Report of Well Work

DEC 2 2 2011

farm name: H	EBB, DOUG	GLAS	Operator	Well	No.:			V GEO MDR	LOGICA GANTOW	L SUF N. WV
OCATION: Elevation:		1428'	_Quadrang	le:		F	ELLOW	SVILL	E	
District:	R	ENO	County:]	PRESTO	N		
Latitude:	12,980	Feet South of		Deg.	20	Min.		Sec.		
Longitude:	10,470	Feet West of		Deg.		Min.	0	Sec.		
Company: Texas Keyston	e, Inc.									
Address: 560 Epsilon Dr	rive		Casing & Tubing	;	Used in drilling		Left in	well	Cement Cu. Ft.	fill up
Pittsburgh, PA	15238									
gent: Jon Farmer			13 3/8	3"	42	,	42	2	Sande	d In
nspector: Bryan Harris										
ate Permit Issued:	10/1	8/10	9 5/8	**	46	4	46	54	180)
ate Well Work Commen	ced: 10/0	4/11								
ate Well Work Complete			7"		131	1	13:	11	180)
erbal Plugging:										
ate Permission granted o	on:		4 1/2'	,	0		594	43	375	5
otary X Cable	Rig									
otal Vertical Depth (ft.):										
otal Measured Depth(ft.										
resh Water Depth (ft.):		675								
alt Water Depth (ft.):										
coal being mined in the										
	105, 590				,					
oid(s) encountered (N/Y) Depth(s):	N								
PEN FLOW DATA (If Producing form Gas: Initial ope Final open flow	nation: en flow: w low betweer	7TH ELK G/S TSTM 1,189 1 initial and final te			Pay zon MCF/D MCF/D Hours psig(sur	e Deptl Oil: l Oil: l	h (ft) Initial op Final ope	en flow	5821 - 582 7: 0	
Time of open f Static rock Pre	ssure:	12.0								
_	•				Pay zon	e Dept	h (ft)	4	5150 - 51	73
Static rock Pre	ing formatio					-	h (ft) Initial op			73 _Bbl/c
Static rock Pre	cing formation	on: 3RD ELK			MCF/D	Oil:		en flow	v: <u>0</u>	Bbl/
Static rock Pre Second Produc Gas: Initial ope Final open flov	cing formation of the contraction of the contractio	on: 3RD ELK Co-mingled	ests:		MCF/D	Oil:	Initial op	en flow	v: <u>0</u>	

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.

Were co	ore samp	oles taken?	Yes	No _X_	Were	cuttings caught during drilling?	Yes	No X
Were	N	Electrical,	N	Mechanical,	Y	or Geophysical logs recorded on	this well?	
	Y/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 7th Elk 5821' - 5827' (18 shots). BD 3880 #. 200 sks 40/70 & 108 sks 20/40. 559 bbl. Gel Frac.

Perfed 3rd Elk 5150' - 5173' (24 shots). BD 2400 #. 200 sks 40/70 & 111 sks 20/40. 655 bbl. Gel Frac.

Perfed 1st Elk 4614' - 4668' (22 shots). BD 2500 #. 200 sks 40/70 & 110 sks 20/40. 630 bbl. Gel Frac.

Perfed 2nd Alexander 4435' - 4449' (16 shots). BD 4131 #. 100 sks 40/70 & 110 sks 20/40. 475 bbl. Gel Frac.

Perfed Upper Riley 3970' - 3975' (15 shots). BD 3579 #. 100 sks 40/70 & 106 sks 20/40. 418 bbl. Gel Frac.

Perfed Balltown A & B 3085' - 3142' (30 shots). BD 3136 #. 200 sks 40/70 & 120 sks 20/40. 562 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:
FILL	0	20	
SANDY SHALE	20	35	
SANDSTONE	35	42	
SHALE	42	82	
SANDY SHALE	82	105	
COAL	105	110	
SANDY SHALE	110	142	
SANDSTONE	142	264	
RED ROCK	264	310	
SANDSTONE	310	385	
SANDY SHALE	385	442	1 II ENV. (2) 4201
SANDSTONE	442	472	1" FW @ 430'
SHALE	472	560	
SANDSTONE	560		1/04 1717 🔾 5001
COAL	590	590 505	1/2" FW @ 590'
SANDSTONE	595	595	111 777 0 60 61
RED ROCK	730	730	1" FW @ 675'
SANDY SHALE		790	
SHALE	790	910	
SANDSTONE	910	1055	
SANDY SHALE	1055	1140	
LITTLE LIME	1140	1200	
PENCIL CAVE SHALE	1200	1215	
BIG LIME	1215	1239	
SHALE	1239	1452	
WEIR SANDSTONE	1452	1351	
SHALE	1351	1575	
BEREA SANDSTONE	1575	1676	
UPPER GANTZ SANDSTONE	1676	1694	
SHALE	1694	1718	
GANTZ SANDSTONE	1718	1741	
SHALE	1741	1758	
LOWER GANTZ SANDSTONE	1758	1780	•
SHALE	1780	1805	
LOWER FOURTH SAND	1805	2250	
SANDY SHALE	2250	2330	·
BAYARD SANDSTONE	2330	2450	
SHALE	2450	2482	
SPEECHLEY A SANDSTONE	2482	2516	•
SANDY SHALE	2516	2529	
BALLTOWN A SANDSTONE	2529	3048	
SANDY SHALE	3048	3148	
UPPER RILEY SILTSTONE	3148	3970	
SHALE	3970	3977	
ALEXANDER SILTSTONE	3977	4421	
SANDY SHALE	4421	4449	
1ST ELK SILTSTONE	4449 4605	4605	
SANDY SHALE	4605	4668	
3RD ELK SILTSTONE	4668	5143	
SHALE	5143	5172	
7TH ELK SILTSTONE	5172	5821	
SHALE	5821	5827	
	5827	6000	TD

Third Producing formation		Pay zone Depth (ft) 4614 - 4668
Gas: Initial open flow:		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	en initial and final tests:	Hours
Static rock Pressure:	Co-mingled	psig(surface pressure) after Hours
Fourth Producing formati	on: 2ND ALEXANDER	Pay zone Depth (ft) 4435 - 4449
Gas: Initial open flow:	Co-mingled	MCF/D Oil: Initial open flow: 0 Bbl/d
Final open flow		MCF/D Oil: Final open flow: 0 Bbl/d
Time of open flow between	en initial and final tests:	Hours
Static rock Pressure:	Co-mingled	psig(surface pressure) after Hours
Fifth Producing formation		Pay zone Depth (ft) 3970 - 3975
Gas: Initial open flow:	Co-mingled	Pay zone Depth (ft) 3970 - 3975 MCF/D Oil: Initial open flow: 0 Bbl/d
	Co-mingled	MCF/D Oil: Initial open flow: 0 Bbl/d
Gas: Initial open flow:	Co-mingled Co-mingled	
Gas: Initial open flow: Final open flow	Co-mingled Co-mingled	MCF/D Oil: Initial open flow: 0 Bbl/d MCF/D Oil: Final open flow: 0 Bbl/d
Gas: Initial open flow: Final open flow Time of open flow betwee Static rock Pressure: Sixth Producing formation	Co-mingled Co-mingled en initial and final tests: Co-mingled n: BALLTOWN A & B	MCF/D Oil: Initial open flow: 0 Bbl/d MCF/D Oil: Final open flow: 0 Bbl/d Hours psig(surface pressure) after - Hours
Gas: Initial open flow: Final open flow Time of open flow betwee Static rock Pressure: Sixth Producing formation Gas: Initial open flow:	Co-mingled Co-mingled en initial and final tests: Co-mingled n: BALLTOWN A & B Co-mingled	MCF/D Oil: Initial open flow: 0 Bbl/d MCF/D Oil: Final open flow: 0 Bbl/d Hours psig(surface pressure) after - Hours Pay zone Depth (ft) 3085 - 3142
Gas: Initial open flow: Final open flow Time of open flow betwee Static rock Pressure: Sixth Producing formation	Co-mingled Co-mingled en initial and final tests: Co-mingled n: BALLTOWN A & B Co-mingled	MCF/D Oil: Initial open flow: 0 Bbl/d MCF/D Oil: Final open flow: 0 Bbl/d Hours psig(surface pressure) after - Hours Pay zone Depth (ft) 3085 - 3142 MCF/D Oil: Initial open flow: 0 Bbl/d
Gas: Initial open flow: Final open flow Time of open flow betwee Static rock Pressure: Sixth Producing formation Gas: Initial open flow:	Co-mingled Co-mingled en initial and final tests: Co-mingled n: BALLTOWN A & B Co-mingled Co-mingled	MCF/D Oil: Initial open flow: 0 Bbl/d MCF/D Oil: Final open flow: 0 Bbl/d Hours psig(surface pressure) after - Hours Pay zone Depth (ft) 3085 - 3142 MCF/D Oil: Initial open flow: 0 Bbl/d