

Farm Name: Kenneth Meadows, ET AL Operator Well No: NORM-1C-HS

LOCATION: Normantown 1 Elevation: 810.00 Quadrangle: Normantown

District: Center County: Gilmer
Latitude: _____ Feet South of _____ Deg. _____ Min. _____ Sec. 38.84881700
Longitude: _____ Feet South of _____ Deg. _____ Min. _____ Sec. -80.94578600

Company: CNX Gas Company LLC	Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
Address: 200 Evergreene Drive Waynesburg, PA 15370	20	64	64	Cemented In
Agent: Bill Hendershot	13 3/8	480.1	480.1	500sxs - 106.8bbbls 42 bbbls cement to surface
Inspector: Steven Haught	9 5/8	5,861	5,861	825 sxs (216 bbbls) lead - 292 sxs (62bbbls) tail - no cement to surface
Date Permit Issued: 7/25/2012	5 1/2	11,660.3	11,660.3	529 sxs of lead cement - 1317 sxs of tail cement
Date Well Work Commenced:	11/6/2012			
Date Well Work Completed:	8/8/13			
Verbal Plugging:				
Date Permission granted on:	11/6/2012			
Rotary Cable Rig X				
Total Vertical Depth (ft): Original Hole - 5,905.0				
Total Measured Depth (ft): 11,680.0				
Fresh Water Depth (ft): 192'				
Salt Water Depth (ft): 1482'				
Is coal being mined in the area (N/Y)? N				
Coal Depths (ft.): 332'				
Void(s) encountered (N/Y) Depth(s) N/A				

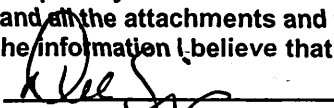
OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation: Marcellus Pay zone depth (ft) N/A
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A 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

RECEIVED
Office of Oil and Gas
Office of Oil and Gas
OCT 30 2013
NOV 18 2013
WV Department of
Environmental Protection
Environmental Protection

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
10/28/13
Date

12/13/2013

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: Bond Log, Gamma Ray Log

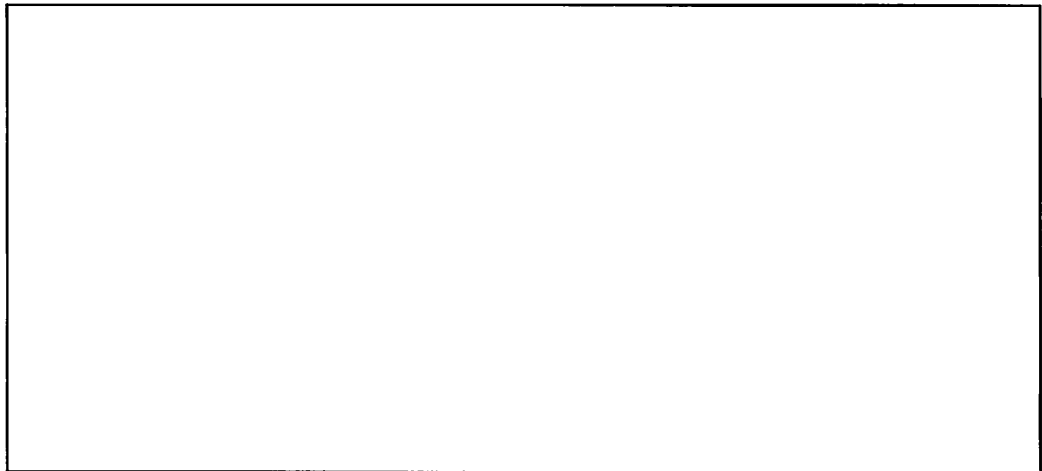
NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing or Stimulating: Please See Attached

Plug Back Details including Plug Type and Depth(s): Please See Attached

Surface:

Formations Encountered: Please See Attached



RECEIVED
Office of Oil and Gas

NOV 10 2013

WV Department of
Environmental Protection

12/13/2013

NRM 1C
47-021-05747

Formations	Top TVD	Base TVD	Top MD	Base MD	Fluid	Source
Sandstone and Shale, Undif.	0	472	0	472		MWD
Shale	472	533	472	533		MWD
Sandstone	533	656	533	656		MWD
Shale	656	723	656	724		MWD
Sandstone	723	769	724	770		MWD
Shale	769	788	770	789		MWD
Sandstone	788	906	789	907		MWD
Shale	906	955	907	956		MWD
Sandstone	955	989	956	991		MWD
Shale	989	1105	991	1107		MWD
Sandstone	1105	1150	1107	1152		MWD
Shale	1150	1270	1152	1273		MWD
Sandstone	1270	1305	1273	1308		MWD
Shale	1305	1463	1308	1466		MWD
Big Lime	1463	1720	1466	1724		MWD
Shale	1720	1910	1724	1915		MWD
Weir	1910	1962	1915	1967		MWD
Upper Devonian Undif.	1962	3197	1967	3239		MWD
Lower Huron	3197	4346	3239	4441		elog
Benson	4346	4366	4441	4742		elog
Angola	4632	4703	4742	4816		elog
Alexander	4703	4797	4816	5020		elog
Rheinstreet	4899	5496	5020	5641		elog
Sycamore	5496	5528	5641	5676		elog
Cashagua	5528	5762	5676	5971		elog
Middlesex	5762	5804	5971	6037		elog
West River	5804	5869	6037	6154		elog
Burkett	5869	5895	6154	6218		elog
Tully Limestone	5895	5897	6218	6224		elog
Hamilton	5897	5899	6224	6230		elog
Marcellus	5899	5947	6230	not encountered	Gas	elog
Onondaga	5947	5952	not encountered	not encountered		elog
Huntersville	5952	not encountered	not encountered	not encountered		elog

RECEIVED
Office of Oil and Gas
Office of Oil and Gas
NOV 18 2013
OCT 30 2013
WV Department of
Environmental Protection
WV Department of
Environmental Protection

12/13/2013

NORM 1C
47-021-05747

Date	Stage #	Formation	Frac Type	Top Perf	Bottom Perf	# of Perfs	BD Press (psi)	ATP (psi)	Avg Rate (bbl/d)	Flow (psi)	Frac Gradient	Sand (lb)	Acid (gals)	Water (gals)
7/24/2013	1	Marcellus	Slickwater	11,376	11,561	48	5587	7,920	76.9	4,286	1.16	357,487	3,000	355,093
7/24/2013	2	Marcellus	Slickwater	11,124	11,327	40	5572	7,732	76.3	4,293	1.16	363,823	3,000	358,933
7/24/2013	3	Marcellus	Slickwater	10,874	11,077	40	6085	8,223	78.5	5,186	1.42	297,423	3,000	358,348
7/25/2013	4	Marcellus	Slickwater	10,624	10,827	40	5372	7,941	88.9	5,739	1.41	337,238	3,000	358,255
7/25/2013	5	Marcellus	Slickwater	10,326	10,577	40	5503	7,552	76.7	4,584	1.21	411,037	3,000	490,718
7/26/2013	6	Marcellus	Slickwater	10,026	10,277	40	5933	7,352	77.3	4,278	1.16	434,825	3,000	419,654
7/26/2013	7	Marcellus	Slickwater	9,774	9,977	40	6423	7,287	72.6	5,752	1.41	253,220	3,000	459,564
7/27/2013	7RP	Marcellus	Slickwater	9,764	9,838	40	6315	7,879	71.4	4,379	1.18	363,278	3,000	412,760
7/27/2013	8	Marcellus	Slickwater	9,524	9,727	40	5823	8,116	79.3	5,307	1.34	360,072	3,000	601,119
7/27/2013	9	Marcellus	Slickwater	9,276	9,477	40	6550	7,790	80.2	5,641	1.39	357,169	3,000	369,659
7/27/2013	10	Marcellus	Slickwater	8,976	9,227	40	5925	7,139	76.6	3,051	0.95	435,399	3,000	424,784
7/28/2013	11	Marcellus	Slickwater	8,676	8,927	40	6132	7,112	81.8	3,607	1.05	434,406	3,000	421,585
7/28/2013	12	Marcellus	Slickwater	8,424	8,627	40	6294	7,709	76.4	9,789	2.10	157,596	9,000	289,667
7/28/2013	12inj	Marcellus	Slickwater	8,424	8,627	40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15,666
8/3/2013	13	Marcellus	Slickwater	8,126	8,377	40	6237	7,784	74.6	3,435	1.02	436,863	3,000	442,825
8/4/2013	14	Marcellus	Slickwater	7,874	8,077	40	7341	7,509	78.9	5,353	1.34	338,791	3,000	353,959
8/4/2013	15	Marcellus	Slickwater	7,624	7,827	40	5981	7,035	80.4	3,437	1.02	362,127	3,000	357,651
8/4/2013	16	Marcellus	Slickwater	7,326	7,577	40	5473	6,822	82.9	5,180	1.31	439,401	3,000	422,392
8/5/2013	17	Marcellus	Slickwater	7,026	7,277	40	6933	7,829	79.6	5,844	1.42	284,173	3,000	390,879
8/5/2013	17RP	Marcellus	Slickwater	7,068	7,235	40	6651	7,935	59.9	6,229	1.49	272,971	6,000	489,861
8/5/2013	18	Marcellus	Slickwater	6,726	6,977	40	6062	7,336	80	3,195	0.97	413,817	3,000	408,218
8/6/2013	19	Marcellus	Slickwater	6,426	6,677	40	6534	7,326	82	5,330	1.33	436,945	3,000	420,563

RECEIVED
Office of Oil and Gas
August 18 2013

WV Department of Environmental Protection

RECEIVED
Office of Oil and Gas
OCT 0 2013

WV Department of Environmental Protection

NORM 1C
47-021-05747

Stage #	Plug Type	Plug Depth	PBTD: 11,565'
1	No Plug	No Plug	
2	Composite Flow Throug Plug	11,350	
3	Composite Flow Throug Plug	11,100	
4	Composite Flow Throug Plug	10,850	
5	Composite Flow Throug Plug	10,600	
6	Composite Flow Throug Plug	10,300	
7, 7RP	Composite Flow Throug Plug	10,000	
8	Composite Flow Throug Plug	9,750	
9	Composite Flow Throug Plug	9,500	
10	Composite Flow Throug Plug	9,250	
11	Composite Flow Throug Plug	8,950	
12	Composite Flow Throug Plug	8,650	
13	Composite Flow Throug Plug	8,410	
14	Composite Flow Throug Plug	8,100	
15	Composite Flow Throug Plug	7,850	
16	Composite Flow Throug Plug	7,600	
17, 17RP	Composite Flow Throug Plug	7,300	
18	Composite Flow Throug Plug	6,978	
19	Composite Flow Throug Plug	6,700	

RECEIVED
Office of Oil and Gas

NOV 18 2013

WV Department of
Environmental Protection

RECEIVED
Office of Oil and Gas

OCT 30 2013

WV Department of
Environmental Protection

12/13/2013

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstracts Number (CAS #)	Maximum Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Fresh Water	Operator	Base Fluid	Fresh Water				= 8.340
SAND - PREMIUM WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00000	5.27706	
SAND - COMMON WHITE	Halliburton	Proppant	Crystalline silica, quartz	14808-60-7	100.00000	4.08895	
HYDROCHLORIC ACID 5-10%	Halliburton	Acid	Hydrochloric acid	7647-01-0	10.00000	0.07779	
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100.00000	0.03058	
FR-66	Halliburton	Friction Reducer	Hydrated light petroleum distillate	64742-47-6	30.00000	0.01426	
FE-1A ACIDIZING COMPOSITION	Halliburton	Additive	Acetic anhydride	108-24-7	100.00000	0.00403	
			Acetic acid	64-19-7	60.00000	0.00242	
BE-9	Halliburton	Biocide	Tributyl tetradecyl phosphonium chloride	81741-28-6	10.00000	0.00398	
Scalecheck® LP-65 Scale Inhibitor	Halliburton	Scale Inhibitor	Ammonium chloride	12125-02-9	10.00000	0.00255	
LSurf-3000	Halliburton	Non-ionic Surfactant	Ethanol	64-17-5	60.00000	0.00081	
			Heavy aromatic petroleum naphtha	64742-94-5	30.00000	0.00041	
			Naphthalene	91-20-3	5.00000	0.00007	
			Poly(oxy-1,2-ethanediyl, alpha-(4-nonylphenyl)-omethylhydroxy-, branched)	127087-87-0	5.00000	0.00007	
			1,2,4 Trimethylbenzene	95-63-6	1.00000	0.00001	
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100.00000	0.00126	
HA-10S Acid Inhibitor	Halliburton	Corrosion Inhibitor	Methanol	67-56-1	60.00000	0.00040	
			Propargyl alcohol	107-19-7	10.00000	0.00007	
Ingredients shown above are subject to SDS Form 10.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
			Water	7732-18-5		0.86153	
			Other Ingredient(s)				
			Organic phosphonate	Confidential		0.01528	
			Polyacrylamide copolymer	Confidential		0.01426	
			Other Ingredient(s)				
			Alcohols, C12-16, ethoxylated	68851-12-2		0.00238	
			Other Ingredient(s)				

Department of Environmental Protection
Office of Oil and Gas
RECEIVED
03 22 2013

RECEIVED
Office of Oil and Gas
11 8 2013
Department of Environmental Protection

WV Department of Environmental Protection

NOV 18 2013

RECEIVED
Office of Oil and Gas

	Other Ingredient(s)	Fatty acid tall oil amide	Confidential	0.000238	
	Other Ingredient(s)	Sodium chloride	7647-14-5	0.000238	
	Other Ingredient(s)	Ammonium chloride	12125-02-9	0.000238	
	Other Ingredient(s)	Bentonite, benzylhydrogenated tallow alkyl dimethylammonium stearate complex	121888-89-4	0.001153	
	Other Ingredient(s)	Sorbitan, mono-9'-octadecenoate, (Z)	1338-43-8	0.000048	
	Other Ingredient(s)	Sorbitan monooleate polyoxoethylene derivative	9005-65-6	0.000048	
	Other Ingredient(s)	Oxyalkylated phenolic resin	Confidential	0.000041	
	Other Ingredient(s)	Surfactant mixture	Confidential	0.000031	
	Other Ingredient(s)	Surfactant mixture	Confidential	0.000031	
	Other Ingredient(s)	Silica gel	112926-00-8	0.000031	
	Other Ingredient(s)	Formaldehyde	50-00-0	0.000025	
	Other Ingredient(s)	Alcohols, C14-C15, ethoxylated	68951-67-7	0.000020	
	Other Ingredient(s)	Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	86527-49-1	0.000020	
	Other Ingredient(s)	Fatty acids, tall oil	Confidential	0.000020	
	Other Ingredient(s)	Oxyalkylated phenolic resin	Confidential	0.000014	
	Other Ingredient(s)	Qlefrs	Confidential	0.000003	
	Other Ingredient(s)	Qlefrs	Confidential	0.000003	
	Other Ingredient(s)	Crystalline Silica Quartz	14898-60-7	0.000003	
	Other Ingredient(s)	Qlefrs	Confidential	0.000001	
	Other Ingredient(s)	Qlefrs	Confidential	0.000001	
	Other Ingredient(s)	Sodium sulfate	7757-82-6	0.000000	

RECEIVED
Office of Oil and Gas
WV Department of Environmental Protection
OCT 30 2013