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

API 47-017-06413H6A County Doddridge District Southwest
Quad Oxford 7.5' Pad Name OXFD11HS Field/Pool Name Oxford
Farm Name MORRIS, I. L. Well Number OXFD11EHS
Operator (as registered with the OOG) CNX Gas Company LLC
Address P.O. Box 1248 City Jane Lew State WV Zip 26378

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top Hole Northing 4,335,760.00 m Easting 520,432.00 m
Landing Point of Curve Northing 4,336,068.66 m Easting 520,853.80 m
Bottom Hole Northing 4,338,248.07 m Easting 520,010.07 m

Elevation (ft) 1340' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilled Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Mineral Oil Based Mud, Bactericide, Polymers and Weighting Agents.

Date Permit Issued 02/12/2014 Date drilling commenced 07/15/2014 Date drilling ceased 10/17/2014
Date completion activities began 02/27/2015 Date completion activities ceased 03/30/2015
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 50', 620' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,645' Void(s) encountered (Y/N) depths N
Coal depth(s) ft None Reported Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:
Gorr, Kevin
WS AX : 02/12/2016

APPROVED
NAME: Jacquelin Shornton
DATE: 2/11/2016

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CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement Circulate (Y/N) * Provide details to the right *
Conductor	24"	20"	100'	N	J-55 94# / 100'	N/A	Y
Surface	17 1/2"	13 3/8"	1224'	N	J-55 54.5# / 1224'	N/A	Y
Coal	-	-	-	-	-	-	-
Intermediate 1	12 1/4"	9 5/8"	2810'	N	J-55 36# / 2810'	N/A	Y
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	8 3/4"	5 1/2"	15569'	N	P-110 20# / 15569'	N/A	N
Tubing	5 1/2"	2 3/8"	7383.1'	N	P-110 4.7# / 7383.1'	N/A	N
Packer Type and Depth Set		None					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft 3/sks)	Volume (ft 3)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	127	15.2	1.18	150	Surface	24
Surface	Class A	985	15.6	1.18	1162	Surface	8
Coal	-	-	-	-	-	-	-
Intermediate 1	Class A	933	15.6	1.2	1120	Surface	8
Intermediate 2	-	-	-	-	-	-	-
Intermediate 3	-	-	-	-	-	-	-
Production	Class A (Lead) / Class A (Tail)	765 / 2170	14.2 / 14.8	1.24 / 1.25	948 / 2712	940'	8
Tubing	-	-	-	-	-	-	-

Drillers TD (ft) 6937' Loggers TD (ft) 6923'

Deepest formation penetrated: Marcellus Plug back to (ft) N/A

Plug back procedure: N/A

Kick Off Depth (ft) 2900'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well Cored Yes No Conventional Sidewall Were Cuttings Collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING
Conductor - No centralizers used. Fresh Water - Bow spring centralizers on first joint then every fourth joint to 100 feet from surface.
Intermediate - Bow spring centralizers one on the first two joints and every fourth joint until inside surface casing. Production - Rigid bow spring centralizer on first joint then every 2 casing joints (free floating) through the lateral and the curve. (Note: cementing the 5 1/2" casing completely in open hole lateral and curve.)

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Plug and Perforation Shot Hole

WAS WELL COMPLETED OPEN HOLE Yes No DETAILS _____

WERE TRACERS USE Yes No TYPES OF TRACER(S) USED _____

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number Of Perforations	Formation(s)
1	2/27/2015	15510	15508	12	Marcellus
2	2/28/2015	15443	15300	40	Marcellus
3	2/28/2015	15266	15123	40	Marcellus
4	2/28/2015	15089	14946	40	Marcellus
5	3/1/2015	14912	14769	40	Marcellus
6	3/1/2015	14735	14592	40	Marcellus
7	3/1/2015	14558	14415	40	Marcellus
8	3/2/2015	14381	14238	40	Marcellus
9	3/2/2015	14204	14061	40	Marcellus
10	3/3/2015	14027	13884	40	Marcellus
11	3/3/2015	13850	13707	40	Marcellus
12	3/3/2015	13673	13530	40	Marcellus
13	3/4/2015	13496	13354	40	Marcellus
14	3/4/2015	13319	13176	40	Marcellus
15	3/6/2015	13142	12999	40	Marcellus
16	3/7/2015	12965	12822	40	Marcellus
17	3/11/2015	12788	12533	80	Marcellus
18	3/18/2015	12500	12359	40	Marcellus
19	3/18/2015	12327	12186	40	Marcellus
20	3/18/2015	12260	12013	40	Marcellus
21	3/20/2015	11981	11840	40	Marcellus
22	3/21/2015	11808	11667	64	Marcellus
23	3/22/2015	11635	11494	40	Marcellus
24	3/22/2015	11462	11321	40	Marcellus
25	3/23/2015	11289	11148	40	Marcellus
26	3/23/2015	11116	10975	40	Marcellus
27	3/24/2015	10943	10802	40	Marcellus
28	3/24/2015	10770	10636	40	Marcellus
29	3/24/2015	10597	10456	40	Marcellus
30	3/25/2015	10424	10283	40	Marcellus
31	3/25/2015	10251	10116	40	Marcellus
32	3/25/2015	10078	9937	40	Marcellus
33	3/26/2015	9905	9764	40	Marcellus
34	3/26/2015	9732	9591	40	Marcellus
35	3/27/2015	9562	9418	40	Marcellus
36	3/27/2015	9381	9245	40	Marcellus
37	3/28/2015	9213	9073	40	Marcellus
38	3/28/2015	9040	8901	40	Marcellus
39	3/28/2015	8867	8729	40	Marcellus

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Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number Of Perforations	Formation(s)
40	3/28/2015	8697	8557	40	Marcellus
41	3/29/2015	8525	8385	40	Marcellus
42	3/29/2015	8353	8213	40	Marcellus
43	3/29/2015	8181	8041	40	Marcellus
44	3/29/2015	8036	7894	40	Marcellus
45	3/29/2015	7837	7697	40	Marcellus
46	3/30/2015	7665	7525	40	Marcellus

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STIMULATION INFORMATION PER STAGE

Stage No.	Stimulations Date	Avg Pump Rate (BPM)	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen / other (gals)
1	2/27/2015	57.9	7924	6865	4198	101250	3422	3152
2	2/28/2015	68.4	8427	6955	4808	231700	8940	3499
3	2/28/2015	68.8	8182	6525	5777	234750	6828	3255
4	2/28/2015	78.9	8323	6656	5767	234850	6576	3250
5	3/1/2015	65.2	7852	6491	5810	233900	7513	3817
6	3/1/2015	73	8155	6470	5413	234700	6694	3296
7	3/1/2015	76.2	8493	6247	5827	235650	6227	3236
8	3/2/2015	74	8311	6215	5410	234700	6066	3223
9	3/2/2015	71.9	8348	6456	5801	232500	6593	3229
10	3/3/2015	73	8049	6347	5518	233800	6948	3234
11	3/3/2015	73.1	8095	6051	5577	234450	6680	3240
12	3/3/2015	72.1	8195	6939	5916	234650	6263	3188
13	3/4/2015	72.3	8112	6452	5987	234200	6345	3187
14	3/4/2015	74	8306	6525	5854	233700	6335	3254
15	3/6/2015	72	8381	6830	4887	231950	6662	3193
16	3/7/2015	73.2	8283	7439	5200	214300	8697	6254
17	3/11/2015	76	8586	0	5888	234150	9179	6413
18	3/18/2015	77.4	8571	5881	5636	232700	6612	3233
19	3/18/2015	71.8	8540	7005	5642	224000	7827	3347
20	3/18/2015	76.5	8473	6817	6353	227650	7188	3421
21	3/20/2015	83.5	8440	7347	5742	234100	8994	3417
22	3/21/2015	60.8	8557	6720	5441	102400	11226	9329
23	3/22/2015	88.7	8468	7158	5643	218950	7219	3545
24	3/22/2015	86	8290	6598	5565	235350	7162	3569
25	3/23/2015	85.2	8299	6624	5665	236600	7026	3567
26	3/23/2015	86	8445	6857	5186	234950	6762	3700
27	3/24/2015	92	8260	6653	5426	235150	7294	3537
28	3/24/2015	85.4	8521	6673	5472	223150	6813	3524
29	3/24/2015	90.6	8250	6576	5615	236700	7621	3524
30	3/25/2015	90.6	8257	6308	5728	234850	6600	3380
31	3/25/2015	92.6	8358	6483	5328	234350	6373	3481
32	3/25/2015	66.2	7994	6257	5107	177900	6684	3405
33	3/26/2015	91.6	8417	6808	5630	234700	6459	3457
34	3/26/2015	96.5	8286	6569	5286	234050	6561	3506
35	3/27/2015	91.9	8227	6722	5130	233250	6641	3459
36	3/27/2015	98.6	8531	7031	4750	233300	6224	3400
37	3/28/2015	89.3	8153	6532	4957	234600	6814	3457
38	3/28/2015	90.2	8267	7409	5265	235000	6249	3337
39	3/28/2015	93	8281	6822	5403	233700	6257	3369

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40	3/28/2015	89.5	8104	6660	5422	233650	6330	3404
41	3/29/2015	90.2	8159	6704	5421	233950	6002	3288
42	3/29/2015	92	8497	7048	5165	234000	6157	3330
43	3/29/2015	97.7	8495	6649	5159	234500	6234	3338
44	3/29/2015	94.7	8285	6783	5273	233900	6416	3430
45	3/29/2015	0	0	6687	5205	234450	6565	3416
46	3/30/2015	95.6	8207	6418	4884	234550	6690	3395

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PRODUCING FORMATION(S)	DEPTHS	TVD	MD
MARCELLUS	6918'- 6923'	7524'- 7552'	

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 2900 psi Bottom Hole 1350 psi DURATION OF TEST 161.5 hrs
 OPEN FLOW Gas 4319.99 mcfpd Oil 48 bpd NGL 0 bpd Water 672 bpd GAS MEASURED BY
 Estimated Orifice Pilot

LITHOLOGY / FORMATION	TOP DEPTH IN FT TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY TYPE OF FLUID (FRESHWATER, BRINE, GAS, H2S, ETC)
					SEE ATTACHED

Please insert additional pages as applicable.

Drilling Contractor Patterson UTI
 Address 207 Carlton Drive City Eighty Four State PA Zip 15330
 Logging Company Horizon
 Address 7136 South Yale, Suite 414 City Tulsa State OK Zip 74136-6378
 Cementing Company CalFrac
 Address 2001 Summit View Rd City Smithfield State PA Zip 15478
 Stimulating Company CalFrac
 Address 2001 Summit View Rd City Smithfield State PA Zip 15478

Please insert additional pages as applicable.

Completed by CNX Gas WV Operations Company, LLC - Drilling and Completions
 Signature Steve Spittler Title Steve Spittler - Completions Manager-Gas WV

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 Telephone: 304-884-2000
 Attach copy of FRACTURE Registry

Submittal of Hydraulic Fracturing Chemical Disclosure Information

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LITHOLOGY / FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY TYPE OF FLUID (FRESHWATER,BRINE,GAS,H2S, ETC)
	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	
	TVD	TVD	MD	MD	
FILL	0	100	0	100	
GRAVEL	100	200	100	200	
REDROCK/SHALE	200	550	200	550	
LIME/ SS	550	580	550	580	
GREY SHALE	580	730	580	730	
LIME/ SS	730	800	730	800	
GREY SHALE	800	1030	800	1030	
SS	1030	1270	1030	1270	
SS/ SHALE/ COAL	1270	1470	1270	1470	
SS	1470	1570	1470	1570	
SS/ SHALE/ SILTSTONE	1570	1770	1570	1770	
SS/ SHALE	1770	2100	1770	2100	
SS	2100	2200	2100	2200	
SILTSTONE	2200	2430	2200	2430	
SS	2430	2525	2430	2525	
SHALE	2525	3157	2525	3160	
SILTSTONE/ SHALE	3157	3740	3160	3800	
RED SHALE/ SILTSTONE/ GREY SH	3740	3930	3800	4000	
SHALE/ SS	3930	4145	4000	4250	
SS	4145	4200	4250	4300	
SILTSTONE/ SHALE	4200	4335	4300	4450	
SS/ SHALE/ SILTSTONE	4335	4470	4450	4600	
SHALE/ SILTSTONE	4470	4565	4600	4700	
SHALE	4565	5010	4700	5200	
SS/ SHALE/ SILTSTONE	5010	5110	5200	5300	
SHALE	5110	5190	5300	5400	
SAND/ SILTSTONE	5190	5857	5400	6149	
BURKETT	6841	6866	7272	7334	
TULLY	6866	6891	7334	7406	
HAMILTON	6891	6918	7406	7524	
UPPER MARCELLUS	6918	6923	7524	7552	
MIDDLE MARCELLUS	6923		7552		

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