

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

API 47-095-02668 County TYLER District CENTERVILLE
Quad WEST UNION Pad Name SHR37 Field/Pool Name _____
Farm name CNX GAS COMPANY LLC Well Number SHR37EHSM
Operator (as registered with the OOG) CNX GAS COMPANY LLC
Address 1000 CONSOL ENERGY DRIVE City CANONSBURG State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4356985.39 Easting 513309.74
Landing Point of Curve Northing 4356988.77 Easting 513005.38
Bottom Hole Northing 4359487.82 Easting 511733.55

Elevation (ft) 828' 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

Drilling 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)
SYNTHETIC BASED FLUID

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ADDITIVES: ABS MUL (EMULSIFIER), CALCIUM CHLORIDE, FLR PLUS (GILSONITE), CLAYTONE EM (SUSPENSION AGENT), AES WA II (WETTING AGENT), LIME

Date permit issued 01.08.2020 Date drilling commenced 03.08.2020 Date drilling ceased 03.18.2020
Date completion activities began 3/30/2021 Date completion activities ceased 4/13/2021
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 92', 126', 144', 148', 150', 176', 220' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,748' 2,458' Void(s) encountered (Y/N) depths N
Coal depth(s) ft No mineable seams; trace @ 154', 526', 618', 966', 992, 1044, Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
DMH

08/27/2021

API 47-095 - 02668

Farm name CNX GAS COMPANY LLC

Well number SHR37EHSM

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	100'	NEW	94 lb/ft	N/A	GROUT TO SURFACE
Surface	17.5"	13.375"	432'	NEW	J-55 54.5 lb/ft	N/A	Y - CEMENT TO SURFACE
Coal							
Intermediate 1	12.25"	9.625"	2,261'	NEW	J-55 36 lb/ft	N/A	Y - CEMENT TO SURFACE
Intermediate 2							
Intermediate 3							
Production	8.75" & 8.5"	5.5"	19,131'	NEW	VAEP P-110Y 20 lb/R	N/A	Y - TOC @ 3,393'
Tubing	5.5"	2.875	6,672.2	NEW	P-110 6.5 LB/FT	N/A	N/A
Packer type and depth set							

Comment Details ALL DEPTHS ARE REFERENCE TO GROUND LEVEL (-29' KB)

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							
Surface	HALCEM	355	15.8	1.18	419	0	8
Coal							
Intermediate 1	HALCEM	855	15.8	1.15	983	0	8
Intermediate 2							
Intermediate 3							
Production	EXP NEOCEM / NEOCEM	925 (L) / 3,110 (T)	15	1.14 (L) / 1.13 (T)	1,095 (L) / 3,614 (T)	3,393'	8
Tubing							

Drillers TD (ft) 19,183' (MD @GL)

Loggers TD (ft) 19,183' (MD @GL)

Deepest formation penetrated MARCELLUS

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 5,399' (MD @GL)

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Check all wireline logs run

- caliper density deviated/directional induction
 neutron resistivity gamma ray temperature

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Well cored Yes No

Conventional Sidewall

Were cuttings collected Yes No

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DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

SURFACE = 6: Centralize every other joint from shoe to surface

INTERMEDIATE = 28: Centralize every other joint from shoe to surface

PRODUCTION = 447: Centralize every joint from shoe to TOC

WAS WELL COMPLETED AS SHOT HOLE Yes No

DETAILS Plug and Perforation

WAS WELL COMPLETED OPEN HOLE? Yes No

DETAILS _____

WERE TRACERS USED Yes No

TYPE OF TRACER(S) USED _____

08/27/2021

SHR37EHSM – PERFORATION RECORD – ATTACHMENT 1

Stage No.	Perforation Date	Perforation from MD ft.	Perforation to MD ft.	Number of Perforations	Formation(s)
1	3/30/2021	19,015.8	19,106.0	24	Marcellus Shale
2	3/30/2021	18,770.5	18,954.0	40	Marcellus Shale
3	3/31/2021	18,543.5	18,727.0	40	Marcellus Shale
4	3/31/2021	18,316.5	18,500.0	40	Marcellus Shale
5	3/31/2021	18,089.5	18,273.0	40	Marcellus Shale
6	3/31/2021	17,862.5	18,046.0	40	Marcellus Shale
7	4/1/2021	17,635.5	17,819.0	40	Marcellus Shale
8	4/1/2021	17,408.5	17,592.0	40	Marcellus Shale
9	4/2/2021	17,181.5	17,365.0	40	Marcellus Shale
10	4/2/2021	16,954.5	17,138.0	40	Marcellus Shale
11	4/2/2021	16,727.5	16,911.0	40	Marcellus Shale
12	4/2/2021	16,500.5	16,684.0	40	Marcellus Shale
13	4/2/2021	16,273.5	16,457.0	40	Marcellus Shale
14	4/3/2021	16,046.5	16,230.0	40	Marcellus Shale
15	4/3/2021	15,819.5	16,003.0	40	Marcellus Shale
16	4/3/2021	15,592.5	15,776.0	40	Marcellus Shale
17	4/4/2021	15,365.5	15,549.0	40	Marcellus Shale
18	4/4/2021	15,138.5	15,322.0	40	Marcellus Shale
19	4/4/2021	14,911.5	15,095.0	40	Marcellus Shale
20	4/4/2021	14,684.5	14,868.0	40	Marcellus Shale
21	4/5/2021	14,457.5	14,641.0	40	Marcellus Shale
22	4/5/2021	14,230.5	14,414.0	40	Marcellus Shale
23	4/5/2021	14,003.5	14,187.0	40	Marcellus Shale
24	4/6/2021	13,776.5	13,960.0	40	Marcellus Shale
25	4/6/2021	13,549.5	13,733.0	40	Marcellus Shale
26	4/6/2021	13,322.5	13,506.0	40	Marcellus Shale
27	4/7/2021	13,095.5	13,279.0	40	Marcellus Shale
28	4/7/2021	12,868.5	13,052.0	40	Marcellus Shale
29	4/7/2021	12,641.5	12,825.0	40	Marcellus Shale
30	4/7/2021	12,414.5	12,598.0	40	Marcellus Shale
31	4/8/2021	12,187.5	12,371.0	40	Marcellus Shale
32	4/8/2021	11,961.4	12,144.0	40	Marcellus Shale
33	4/8/2021	11,735.4	11,918.0	40	Marcellus Shale
34	4/8/2021	11,509.4	11,692.0	40	Marcellus Shale
35	4/8/2021	11,283.4	11,466.0	40	Marcellus Shale
36	4/9/2021	11,057.4	11,240.0	40	Marcellus Shale
37	4/9/2021	10,831.4	11,014.0	40	Marcellus Shale
38	4/9/2021	10,605.4	10,788.0	40	Marcellus Shale
39	4/9/2021	10,379.4	10,562.0	40	Marcellus Shale
40	4/10/2021	10,153.4	10,336.0	40	Marcellus Shale
41	4/10/2021	9,927.4	10,110.0	40	Marcellus Shale
42	4/10/2021	9,701.4	9,884.2	40	Marcellus Shale
43	4/11/2021	9,475.4	9,658.2	40	Marcellus Shale
44	4/11/2021	9,249.4	9,432.2	40	Marcellus Shale
45	4/11/2021	9,023.4	9,206.2	40	Marcellus Shale
46	4/11/2021	8,797.4	8,980.2	40	Marcellus Shale
47	4/11/2021	8,571.4	8,754.2	40	Marcellus Shale
48	4/11/2021	8,345.4	8,528.2	40	Marcellus Shale
49	4/11/2021	8,119.4	8,302.2	40	Marcellus Shale
50	4/12/2021	7,893.4	8,076.2	40	Marcellus Shale
51	4/12/2021	7,667.4	7,850.2	40	Marcellus Shale
52	4/12/2021	7,441.4	7,624.2	40	Marcellus Shale
53	4/12/2021	7,215.4	7,398.2	40	Marcellus Shale
54	4/12/2021	6,989.4	7,172.2	40	Marcellus Shale
55	4/13/2021	6,763.4	6,946.2	40	Marcellus Shale

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SHR37EHSM – STIMULATION INFORMATION PER STAGE – ATTACHMENT 2

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen /Other (Units)
1	3/30/2021	85	9,362.0	9,755.0	3,336.0	398,000.00	7,092.55	N/A
2	3/30/2021	93	9,360.0	9,747.0	3,497.0	400,000.00	6,841.69	N/A
3	3/31/2021	96	9,429.0	9,743.0	3,661.0	400,000.00	6,735.67	N/A
4	3/31/2021	99	9,559.0	9,780.0	3,817.0	404,000.00	6,816.83	N/A
5	3/31/2021	97	9,368.0	9,741.0	4,082.0	400,000.00	7,061.90	N/A
6	4/1/2021	99	9,479.0	9,730.0	3,741.0	400,000.00	6,318.00	N/A
7	4/1/2021	96	9,368.0	9,773.0	4,718.0	397,000.00	6,233.38	N/A
8	4/2/2021	99	9,408.0	9,735.0	4,126.0	400,000.00	6,129.69	N/A
9	4/2/2021	98	9,437.0	9,785.0	4,330.0	397,000.00	6,287.45	N/A
10	4/2/2021	98	9,446.0	9,830.0	4,180.0	403,000.00	6,399.98	N/A
11	4/2/2021	99	9,448.0	9,792.0	4,384.0	403,000.00	6,077.69	N/A
12	4/2/2021	99	9,413.0	9,712.0	3,828.0	400,000.00	6,148.55	N/A
13	4/3/2021	97	9,394.0	9,833.0	4,129.0	400,000.00	6,098.43	N/A
14	4/3/2021	86	8,975.0	9,540.0	4,350.0	422,000.00	9,088.10	N/A
15	4/3/2021	101	9,276.0	9,780.0	4,816.0	400,000.00	5,932.00	N/A
16	4/4/2021	96	9,263.0	9,761.0	3,861.0	400,000.00	7,205.52	N/A
17	4/4/2021	96	9,072.0	9,545.0	3,886.0	400,000.00	6,319.26	N/A
18	4/4/2021	99	9,278.0	9,711.0	4,189.0	400,000.00	6,255.21	N/A
19	4/4/2021	99	9,249.0	9,725.0	4,257.0	400,000.00	6,132.36	N/A
20	4/5/2021	102	9,332.0	9,695.0	4,702.0	400,000.00	6,213.05	N/A
21	4/5/2021	95	9,049.0	9,517.0	3,916.0	396,000.00	6,170.26	N/A
22	4/5/2021	95	9,032.0	9,958.0	4,906.0	380,000.00	6,021.14	N/A
23	4/6/2021	102	8,979.0	9,435.0	3,966.0	400,000.00	6,132.95	N/A
24	4/6/2021	100	9,147.0	9,566.0	4,246.0	404,000.00	6,189.07	N/A
25	4/6/2021	97	8,731.0	9,689.0	4,643.0	400,000.00	6,172.40	N/A
26	4/6/2021	101	8,996.0	9,800.0	4,913.0	400,000.00	6,169.31	N/A
27	4/7/2021	99	8,975.0	10,696.0	10,437.0	394,000.00	5,890.38	N/A
28	4/7/2021	100	8,559.0	8,940.0	4,879.0	400,000.00	6,224.33	N/A
29	4/7/2021	102	8,926.0	9,472.0	4,553.0	400,000.00	6,171.31	N/A
30	4/7/2021	99	9,066.0	9,450.0	4,461.0	400,000.00	6,136.88	N/A
31	4/8/2021	103	9,006.0	9,488.0	4,176.0	400,000.00	6,114.31	N/A
32	4/8/2021	104	8,713.0	9,221.0	4,922.0	370,000.00	5,809.79	N/A
33	4/8/2021	103	8,540.0	8,991.0	4,289.0	360,000.00	5,842.33	N/A
34	4/8/2021	104	8,608.0	9,470.0	4,480.0	400,000.00	5,896.52	N/A
35	4/9/2021	104	8,759.0	9,610.0	4,045.0	400,000.00	6,081.12	N/A
36	4/9/2021	104	8,390.0	8,885.0	3,952.0	400,000.00	5,978.64	N/A
37	4/9/2021	104	8,391.0	9,186.0	3,846.0	400,000.00	5,986.10	N/A
38	4/9/2021	104	8,381.0	9,407.0	4,427.0	400,000.00	5,958.79	N/A
39	4/10/2021	104	8,511.0	9,330.0	3,885.0	395,000.00	5,962.90	N/A
40	4/10/2021	103	8,050.0	8,740.0	3,721.0	400,000.00	5,999.95	N/A
41	4/10/2021	104	8,285.0	8,795.0	4,046.0	400,000.00	5,965.10	N/A
42	4/10/2021	101	8,106.0	9,217.0	3,977.0	411,000.00	7,263.29	N/A
43	4/11/2021	104	8,340.0	9,189.0	4,421.0	400,000.00	5,902.45	N/A
44	4/11/2021	104	8,141.0	8,853.0	3,662.0	400,000.00	5,944.98	N/A
45	4/11/2021	104	8,218.0	9,282.0	4,948.0	380,000.00	5,765.07	N/A
46	4/11/2021	104	8,048.0	9,020.0	4,476.0	372,000.00	5,809.26	N/A
47	4/11/2021	104	8,119.0	8,537.0	4,015.0	400,000.00	6,373.55	N/A
48	4/11/2021	104	7,932.0	9,090.0	3,757.0	400,000.00	5,902.07	N/A
49	4/12/2021	104	8,007.0	8,981.0	3,684.0	400,000.00	6,014.69	N/A
50	4/12/2021	104	7,973.0	8,800.0	4,113.0	400,000.00	6,034.95	N/A
51	4/12/2021	104	7,703.0	8,766.0	3,712.0	400,000.00	5,909.00	N/A
52	4/12/2021	103	7,795.0	8,270.0	4,084.0	400,000.00	5,964.79	N/A
53	4/12/2021	104	7,822.0	9,121.0	4,413.0	380,000.00	5,900.07	N/A
54	4/13/2021	103	7,480.0	9,578.0	3,826.0	429,938.00	6,589.76	N/A
55	4/13/2021	103	7,402.0	8,045.0	4,036.0	403,830.00	6,497.88	N/A

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API: 47-095-02668

FARM NAME: CNX GAS COMPANY LLC

WELL NUMBER: SHR37EHSM

Lithologies

LITHOLOGY / FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT NAME TVD	TOP DEPTH IN FT NAME MD	BOTTOM DEPTH IN FT NAME MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC)
UNDIFFERENTIATED SAND	0	456	0	456	SANDSTONE / TRACES OF SILTSTONE & LIMESTONE & COAL
HARLEM COAL	456	459	456	459	COAL
UNDIFFERENTIATED SAND & SILTSTONE	459	1,621	459	1,621	SANDSTONE / TRACES OF GRAY SHALE, COAL, QUARTZ & SILTSTONE
BIG LIME	1,621	1,740	1,621	1,741	LIMESTONE / TRACES OF SILTSTONE
BIG INJUN SAND	1,740	1,980	1,741	1,981	SANDSTONE & LIMESTONE / TRACES OF SILTSTONE
PRICE FORMATION	1,980	2,130	1,981	2,131	SILTSTONE / TRACES OF RED SHALE
BEREA SAND	2,130	2,220	2,131	2,221	SANDSTONE / TRACES OF SILTSTONE & PYRITE
GORDON SAND	2,220	3,128	2,221	2,231	SANDSTONE / TRACES OF SILTSTONE & PYRITE
WARREN SAND	3,128	3,198	3,130	3,201	SANDSTONE AND SILTSTONE
UNDIFFERENTIATED SHALE	3,198	4,721	3,201	4,998	GRAY SHALE
BENSON	4,721	4,909	4,998	5,256	SANDSTONE
ALEXANDER	4,909	5,014	5,256	5,361	SANDSTONE AND SILTSTONE
UNDIFFERENTIATED SHALE	5,014	6,116	5,361	6,836	GRAY SHALE
MIDDLESEX	6,105	6,147	6,298	6,371	GRAY SHALE / TRACES OF SILTSTONE
WEST RIVER	6,147	6,215	6,371	6,506	GRAY SHALE
BURKET SHALE	6,215	6,250	6,506	6,592	BLACK SHALE, GAS SHOW
TULLY LIMESTONE	6,250	6,272	6,592	6,669	GRAY SHALE
HAMILTON SHALE	6,272	6,284	6,669	6,733	GRAY SHALE & LIMESTONE
UPPER MARCELLUS SHALE	6,284	6,301	6,733	6,845	BLACK SHALE
MIDDLE MARCELLUS SHALE	6,301	TD	6,845	TD	BLACK SHALE, GAS SHOW
TD - MARCELLUS		6,336		19,192	

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DRILLING CONTRACTOR

PATTERSON-UTI DRILLING COMPANY
4000 TOWN CENTER BOULEVARD SUITE 240
CANONSBURG, PA 15317

CEMENTING COMPANY

HALLIBURTON
121 CHAMPION WAY SUITE #210
CANONSBURG, PA 15317

Vertical text from the reverse side of the page, including 'Environmental Protection' and 'WV Department of'.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/30/2021
Job End Date:	4/13/2021
State:	West Virginia
County:	Tyler
API Number:	47-095-02668-00-00
Operator Name:	CNX Gas Company LLC
Well Name and Number:	SHR37 M1 EHSM
Latitude:	39.35313000
Longitude:	-80.84569390
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,300
Total Base Water Volume (gal):	15,164,928
Total Base Non Water Volume:	

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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier/Base Fluid	Water	7732-18-5	100.00000	84.64583	None
Proppant (Sand)	Nextier	Proppant	Crystalline silica: Quartz (SiO2)	14808-60-7	100.00000	14.64800	None
7.5% HCl	NexTier	Acid	Water	7732-18-5	92.50000	0.55327	None
7.5% HCl	NexTier	Acid	Hydrochloric Acid	7647-01-0	7.50000	0.04486	None
StimStream FR 9800	Chemstream	Friction Reducer	Water	7732-18-5	47.00000	0.03372	None
StimStream FR 9800	Chemstream	Friction Reducer	butene, homopolymer	9003-29-6	25.00000	0.01793	None
StimStream FR 9800	Chemstream	Friction Reducer	alkanes, C16-20-iso-	90622-59-6	25.00000	0.01793	None
StimStream SC-398	Chemstream	Scale Inhibitor	Non-Hazardous substances	Proprietary	90.00000	0.01154	None
Clearal 268	Chemstream	Biocide	Non-Hazardous substances	Proprietary	80.00000	0.00818	None

CoilStream VB 625	Chemstream	Gelling Agent					
			Heavy Aliphatic Naphtha	64742-96-7	60.00000	0.00652	None
CoilStream VB 625	Chemstream	Gelling Agent					
			Guara Gum	9000-30-0	50.00000	0.00543	None
StimStream FR 9800	Chemstream	Friction Reducer					
			Alcohols, C12-18, ethoxylated	68213-23-0	3.00000	0.00215	None
Clearal 268	Chemstream	Biocide					
			Glutaraldehyde	111-30-8	20.00000	0.00204	None
StimStream SC-398	Chemstream	Scale Inhibitor					
			Bis(HexaMethylene Triamone Penta(Methylene Phosphonic Acid) (BHMT))	34690-00-1	10.00000	0.00128	None
Ammonium Persulfate	Chemstream	Breaker					
			Ammonium persulfate	7727-54-0	100.00000	0.00056	None
CoilStream VB 625	Chemstream	Gelling Agent					
			Trade Secret	Proprietary	5.00000	0.00054	None
PVS Iron Control 1	Chemstream	Iron Control					
			Citric Acid	77-92-9	50.50000	0.00053	None
PVS Iron Control 1	Chemstream	Iron Control					
			Water	7732-18-5	49.50000	0.00052	None
ACI-250	Chemstream	Acid Inhibitor					
			Methyl Alcohol	67-56-1	45.00000	0.00035	None
CoilStream VB 625	Chemstream	Gelling Agent					
			Trade Secret	Proprietary	3.00000	0.00033	None
CoilStream VB 625	Chemstream	Gelling Agent					
			Trade Secret	Proprietary	3.00000	0.00033	None
Clearal 268	Chemstream	Biocide					
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00031	None
Clearal 268	Chemstream	Biocide					
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00031	None
ACI-250	Chemstream	Acid Inhibitor					
			Ethylene Glycol	107-21-1	20.00000	0.00015	None
Clearal 268	Chemstream	Biocide					
			Ethanol	64-17-5	1.50000	0.00015	None
ACI-250	Chemstream	Acid Inhibitor					
			Trade Secret	Proprietary	15.00000	0.00012	None
ACI-250	Chemstream	Acid Inhibitor					
			N, N-Dimethylformamide	68-12-2	10.00000	0.00008	None
ACI-250	Chemstream	Acid Inhibitor					
			Water	7732-18-5	10.00000	0.00008	None
ACI-250	Chemstream	Acid Inhibitor					
			2-Butoxyethanol	111-76-2	5.00000	0.00004	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

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 Environmental Protection
 Division
 21

* Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

WV Department of
Environmental Protection

JUL 12 2021

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Office of Oil and Gas

BHL is located on topo map 11,609 feet south of Latitude: 39°25'00"
 SHL is located on topo map 7,936 feet south of Latitude: 39°22'30"

SEE PAGE 2 FOR PLAT DUE TO LENGTH OF LATERAL

SEE PAGE 3 FOR SURFACE OWNERS AND LESSORS

AS DRILLED PLAT

BHL is located on topo map 8,596 feet west of Longitude: 80°50'00"
 SHL is located on topo map 3,447 feet west of Longitude: 80°50'00"

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NAD83, WV NORTH
N:313612.142
E:1588034.457
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NAD83, WV NORTH
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LAT:39°23'05.257"
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FILE #: SHR 37 EHSM
 DRAWING #: SHR 37 EHSM
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *Joseph H. Lowther*
 R.P.E.: _____ L.L.S.: P.S. No. 2346



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



DATE: MAY 14, 2020
 OPERATOR'S WELL #: SHR 37 EHSM
 API WELL #: 47 95 02668
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: HEADWATERS MIDDLE ISLAND CREEK ELEVATION: 828.57'±

COUNTY/DISTRICT: TYLER / CENTERVILLE QUADRANGLE: WEST UNION, WV 7.5'

SURFACE OWNER: CNX GAS COMPANY ACREAGE: 18±

OIL & GAS ROYALTY OWNER: ELEANOR V. & DEAN A. EARNHEART, ET AL ACREAGE: 816.645±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

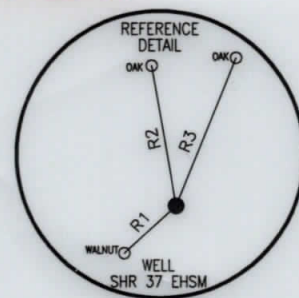
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,302'± TMD: 19,242'±

WELL OPERATOR CNX GAS COMPANY LLC DESIGNATED AGENT ANTHONY KENDZIORA
 Address 1000 CONSOL ENERGY DRIVE Address 1000 CONSOL ENERGY DRIVE
 City CANONSBURG State PA Zip Code 15317 City CANONSBURG State PA Zip Code 15317

08/27/2021

SHR 37 EHSM PAGE 2 OF 3

AS DRILLED PLAT



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LEGEND	
	- TOPO MAP POINT
	- WELL
	- ALL ARE POINTS, UNLESS OTHERWISE NOTED.
	- LEASE NUMBER
	- MINERAL TRACT BOUNDARY
	- PARCEL LINES
	- LEASE BOUNDARY
	- WELL REFERENCE
	- PROPOSED HORIZONTAL WELL
	- AS-DRILLED
	- ROAD
	- STREAM CENTER LINE
GAS WELLS	
	- EXISTING WELLS
	- PLUGGED WELLS
	- ABANDON WELLS

LINE	BEARING	DISTANCE
R1	S 47°17'06" W	131.44'
R2	N 09°54'40" W	265.64'
R3	N 21°54'41" E	298.02'
R4	N 29°09'29" W	673.10'
R5	N 21°19'23" E	523.64'
R6	S 20°35'57" E	735.67'

NOTES:

- There are water wells or developed springs within 250' of proposed well.
- There is an existing house and buildings within 625' of proposed well.
- Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
- There are no native trout streams within 300' of proposed well.
- Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

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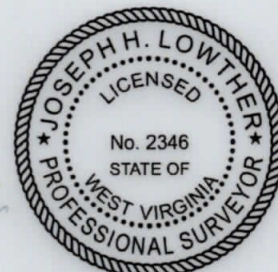
API WELL #: 47 95 02668
STATE COUNTY PERMIT

MAY 14, 2020

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08/27/2021



Joseph H. Lowther

SHR 37 EHSM PAGE 3 OF 3 AS DRILLED PLAT

	SURFACE OWNER	LESSOR	DIST-TM/PAR
1	CNX GAS COMPANY	ELEANOR V. EARNHEART AND DEAN A. EARNHEART, W/H CLELLA BOICE, WIDOW LUELLA I. MCCONNELL, WIDOW AGNES GODWIN, WIDOW NANCY P. MCCLAIN AND RALPH E. MCCLAIN, W/H GEORGIA P. SNYDER, DIVORCED BRADIE PIPES AND GOLDIE PIPES, H/W PURSIE PIPES AND NORMA J. PIPES, H/W DOROTHY BELLE WELLS AND BYRON WELLS, W/H MYRNA MORGAN AND DAVID MORGAN, H/W	1-17/5
2	GAIL WILLIAMSON	ELEANOR V. EARNHEART AND DEAN A. EARNHEART, W/H CLELLA BOICE, WIDOW LUELLA I. MCCONNELL, WIDOW AGNES GODWIN, WIDOW NANCY P. MCCLAIN AND RALPH E. MCCLAIN, W/H GEORGIA P. SNYDER, DIVORCED BRADIE PIPES AND GOLDIE PIPES, H/W PURSIE PIPES AND NORMA J. PIPES, H/W DOROTHY BELLE WELLS AND BYRON WELLS, W/H MYRNA MORGAN AND DAVID MORGAN, W/H REVA ROWLAND AND RONALD ROYCE ROWLAND	1-17/6
3A	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	MIDDLE ISLAND CREEK
3B	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	MIDDLE ISLAND CREEK
3C	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	MIDDLE ISLAND CREEK
10	ELDEN L. PRATT & CHRISTINE LEASURE TIMOTHY R. PRATT ELDEN L. , RODNEY DEAN & TIMOTHY RAY PRATT THOMAS D. II & CONNIE S. SNYDER ROGNEY D. PRATT WAYNE C. & RHONDA G. MUMBAUER WAYNE C. & RHONDA G. MUMBAUER STATE OF WEST VIRGINIA FORREST G. POWELL ROGER L. & MARJORIE P. WILLIAMS JASON L. & REBECCA M. PRATT	ARTIS HOPE JACK PARKER, ATTORNEY-IN-FACT FOR COLEN C. JACK	1-15/38 1-15/39 1-17/11 1-17/11.1 1-17/11.2 1-17/11.3 1-17/11.4 1-17/11.5 1-17/11.6 1-17/11.7 1-17/11.8
22	MARY J. KAHLER (LIFE)	JACOB C. COTTRILL, ATTORNEY-IN-FACT FOR CHARLES D. COTTRILL HEIRS; JACOB C. COTTRILL AND SHIRLEY A. COTTRILL, H/W	1-15/15
23	DAVID J. PRICE	AMANDA GREGG ET AL	1-15/19
25	JOHN SR., & TINA B. JACENKIW	NANCY B. WESTFALL	1-15/18
26	JAMIE M. FERGUSON & MICHAEL NEELEY	THELMA FERGUSON ET AL	P/O 1-15/35
30	DONALD FERGUSON		P/O 1-15/36
32	GLADYS V. GREGG	DAVID C. GREGG GLADYS V. GREGG	1-15-10.2
44	EUGENE W. & LESLIE BENNETT JOHN JR., & TANYA LYNN JACENKIW	BARBARA ANN PARKER, FORMERLY BARBARA ANN FERGUSON BETTY SUE EAKLE, FORMERLY, BETTY SUE FERGUSON AND HOWARD EAKLE, SR., W/H PATRICIA ANN GORDON, FORMERLY PATRICIA ANN FERGUSON DONALD L. SECKMAN AND DORA OLIVE SECKMAN, H/W HUGH EDWIN FERGUSON MARY ELIZABETH DEARTH, FORMERLY MARY ELIZABETH FERGUSON ROGER L. FERGUSON DONALD FERGUSON VIRGINIA LYNN FERGUSON, WIDOW OF JAMES FERGUSON MELVIN EUGENE FERGUSON AND SANDRA K. FERGUSON, H/W LEE ROY FERGUSON AND TRACY FERGUSON, H/W ROSEMARY DAVIS, FORMERLY ROSEMARY FERGUSON RICHARD O. FERGUSON, JR. RONALD H. WOODBURN MARGARET E. OLEXA BARBARA R. NELSON, F/K/A RENEE F. COLLINSWORTH, F/K/A RENEE MERRICK JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15/9 1-15/9.1
45	HERBERT L. & DIXIE S. BUCKLEY	BETTY SUE EAKLE, FORMERLY, BETTY SUE FERGUSON AND HOWARD EAKLE, SR., W/H RONALD H. WOODBURN MARGARET E. OLEXA JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15-37
46	EUGENE W. & LESLIE BENNETT LORETTA L. HAUGHT HERBERT L. & DIXIE S. BUCKLEY	DONALD L. SECKMAN AND DORA OLIVE SECKMAN, H/W ROGER L. FERGUSON MELVIN EUGENE FERGUSON AND SANDRA K. FERGUSON, H/W LEE ROY FERGUSON AND TRACY FERGUSON, H/W RICHARD O. FERGUSON, JR. RONALD H. WOODBURN MARGARET E. OLEXA JAMES E. ULLOM WILLIAM STEVEN MORRIS JOHN ANDREW MORRIS DEBRA G. KYLE DAVID D. HULL	1-15/9 1-15/9.2 1-15/9.3
48	CONRAD E. COSTILOW	CONRAD E. COSTILOW ANN LENZ DENLINGER, F/K/A, ANN HOKMAN LENZ DENLINGER, F/K/A, ANN HOKMAN LENZ	1-15/8
50	ROBERT W. GRAHAM WILLIAM C. HENTHORN	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH	1-15/2 1-15/2.4
51	MICHAEL SHEPHERD	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH ROBERT A. JOHNSON AND EVELYN F. JOHNSON, H/W JOE H. AND LINDEL M. LANTZ, H/W JACK EDWARD AND BETTY JUNE LANTZ	1-15/2.3
57	ROBERT W. GRAHAM	ERNEST LANTZ RONALD LEE ASH RALPH ARNOLD ASH RANDALL DALE ASH AND DORETTA LYNN ASH	P/O 1-15/2
80	ROBERT C. & JAMES L. SINCLAIR ROSE MCCGRATH & JAMES T. EDGAR	SANDRA L. SPENCE BARBARA J. DRUCHNIAK PATTY L. BUTERBAUGH RICHARD B. SMITH CHARLES ALAN MCCULLOUGH AND FRED A. MCCULLOUGH DONALD BURL SMITH RONALD CARLETON MOORE JR. CHERYL ANN CALKINS BENJAMIN EDWIN SMITH ROY LEE SMITH JEREMY JOE LOPEZ MARIAH FAYE RITTMANN	1-12/18 1-12/18.2
83	ROBERT C. & JAMES L. SINCLAIR	SANDRA L. SPENCE BARBARA J. DRUCHNIAK PATTY L. BUTERBAUGH RICHARD B. SMITH	P/O 1-12/19
84			
88	SAMUEL V. ASH & DENISE RULE	A. E. AND CALLIE DOAK	1-17/4

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