

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

API 47-095-02193FH6A County Tyler District Centerville
Quad Shirley 7.5' Pad Name SHR3HS Field/Pool Name SHR3HS
Farm Name NOBLE ENERGY, INC. Well Number SHR3AHS - Fracture
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 4,362,757.85 m Easting 514,361.55 m
Landing Point of Curve Northing 4,362,411.84 m Easting 514,065.63 m
Bottom Hole Northing 4,359,975.84 m Easting 514,999.61 m

Elevation (ft) 751" 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)

Synthetic Oil Based.

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Date Permit Issued 08/03/2017 Date drilling commenced 09/20/2014 Date drilling ceased 05/09/2015
Date completion activities began 09/19/2017 Date completion activities ceased 10/01/2017
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 64', 94', 342' Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Noted for Offsets Void(s) encountered (Y/N) depths N
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: AS

Reviewed
JEB 3/14/2018

API 47-095-02193FH6A Farm name NOBLE ENERGY, INC. Well number SHR3AHS - Fracture

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"	40'	New	J-55 / 40'		
Surface	17 1/2"	16"	437.6	New	J-55 / 437.6'		
Coal							
Intermediate 1	13 3/8"	9 5/8"	2166'	New	K-55 / 2166'		Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	16397.4'	New	P-110 / 16397.4'		Y
Tubing	5 1/2"	2 3/8"	7052.20'	New	P-110 4.7# / 7052.20'		
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							
Surface	Class A	431 sks	15.60	1.18	508.58		8
Coal							
Intermediate 1	Class A	843 sks	15.60	1.18	997.74		8
Intermediate 2							
Intermediate 3							
Production	Class A	3196 sks	13.0	1.32	4218.72		8
Tubing							

Drillers TD (ft) 6647' Loggers TD (ft) 6664'

Deepest formation penetrated: Marcellus Plug back to (ft) _____

Plug back procedure: _____

Kick Off Depth (ft) 5731'

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

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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 _____
Conductor - No centralizers used. Intermediate - 26 centralizers used. Bow spring centralizers on the first two joints and then every third joint to 100' from surface. Production - 276 centralizers used. Rigid Bow spring centralizer every joint to KOP, rigid bow spring centralizer every third joint from KOP to top of cement.

WAS WELL COMPLETED AS SHOT HOLE Yes No JEB 3/14/2015 DETAILS Plug And Perforation Shot Hole

WAS WELL COMPLETED OPEN HOLE Yes No DETAILS _____

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

API 47-095-02193EH6A Farm name NOBLE ENERGY, INC. Well number SHR3AHS - Fracture

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number Of Perforations	Formation(s)
					SEE ATTACHED

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation 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)
								See Attached
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Please insert additional pages as applicable.

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number Of Perforations	Formation(s)
1	9/19/2017	16113	16231	40	Marcellus
2	9/20/2017	15888	16070	40	Marcellus
3	9/20/2017	15663	15845	40	Marcellus
4	9/20/2017	15438	15620	40	Marcellus
5	9/21/2017	15213	15395	40	Marcellus
6	9/22/2017	14988	15170	40	Marcellus
7	9/22/2017	14763	14945	40	Marcellus
8	9/22/2017	14538	14720	40	Marcellus
9	9/24/2017	14313	14495	40	Marcellus
10	9/25/2017	14088	14270	40	Marcellus
11	9/25/2017	13863	14045	40	Marcellus
12	9/25/2017	13638	13820	40	Marcellus
13	9/25/2017	13413	13595	40	Marcellus
17	9/25/2017	12513	12695	40	Marcellus
14	9/26/2017	13188	13370	40	Marcellus
15	9/26/2017	12963	13145	40	Marcellus
16	9/26/2017	12738	12920	40	Marcellus
18	9/26/2017	12288	12470	40	Marcellus
19	9/27/2017	12063	12245	40	Marcellus
20	9/27/2017	11838	12020	40	Marcellus
21	9/27/2017	11613	11795	40	Marcellus
22	9/27/2017	11388	11591	40	Marcellus
23	9/27/2017	11163	11345	40	Marcellus
24	9/28/2017	10938	11120	40	Marcellus
25	9/28/2017	10713	10895	40	Marcellus
26	9/28/2017	10488	10670	40	Marcellus
27	9/29/2017	10263	10445	40	Marcellus
28	9/29/2017	10038	10220	40	Marcellus
29	9/29/2017	9813	9995	40	Marcellus
30	9/29/2017	9588	9770	40	Marcellus
31	9/29/2017	9363	9545	40	Marcellus
32	9/30/2017	9138	9320	40	Marcellus
33	9/30/2017	8913	9095	40	Marcellus
34	9/30/2017	8688	8870	40	Marcellus
35	9/30/2017	8463	8645	40	Marcellus
36	9/30/2017	8238	8420	40	Marcellus
37	10/1/2017	8013	8195	40	Marcellus
38	10/1/2017	7788	7970	40	Marcellus
39	10/1/2017	7563	7745	40	Marcellus

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number Of Perforations	Formation(s)
40	10/1/2017	7338	7520	40	Marcellus
41	10/1/2017	7113	7295	40	Marcellus

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12/27/2017

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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	9/19/2017	83	7818	7135	3913	401420	8857	3603
2	9/20/2017	80	7953	5640	4677	402080	8244	440
3	9/20/2017	81	8150	6378	4181	402280	7797	3479
4	9/21/2017	76	7997	8146	5579	367080	1136	3736
5	9/22/2017	82	8142	7090	4563	404060	1095	6828
6	9/22/2017	78	7758	7452	4416	400980	8427	3792
7	9/22/2017	81	7760	6975	4371	374360	7673	3521
8	9/22/2017	81	7499	6730	4711	398980	8187	3564
9	9/24/2017	79	7511	6869	4242	400820	7710	3403
10	9/25/2017	82	7590	6629	4039	397020	7325	3411
11	9/25/2017	85	7914	6146	4589	402080	7826	3420
12	9/25/2017	81	7641	6793	4010	404380	7762	3340
13	9/25/2017	79	7727	7127	4184	397180	7767	3421
14	9/26/2017	80	7901	7005	4010	399380	7574	3283
15	9/26/2017	79	7760	7812	4334	399660	7830	3180
16	9/26/2017	85	7565	5974	4147	402480	7742	3499
17	9/26/2017	82	7287	5641	4089	401800	7548	3457
18	9/26/2017	81	7451	7404	4039	402760	7430	3380
19	9/27/2017	82	7546	6577	3981	394740	7483	3420
20	9/27/2017	86	7486	7039	4245	401320	8468	3508
21	9/27/2017	87	7271	6628	4098	399460	8554	3418
22	9/27/2017	88	7434	6324	4068	401360	7333	3304
23	9/28/2017	88	7551	6142	3923	395500	7745	3303
24	9/28/2017	86	7519	7291	3952	398380	8368	3368
25	9/28/2017	87	7063	6267	4010	400420	8449	3448
26	9/28/2017	89	7429	7374	4126	403900	7549	3393
27	9/29/2017	85	7564	7626	4155	399560	7505	3323
28	9/29/2017	87	7483	6761	4068	398300	8372	3420
29	9/29/2017	89	7357	6527	4278	401320	8477	3470
30	9/29/2017	88	7227	7319	4387	402520	7844	3352
31	9/29/2017	89	7313	5880	4039	397960	7418	3197
32	9/30/2017	89	7089	5767	4184	400760	7374	3309
33	9/30/2017	90	7132	5842	3932	399660	8058	3316
34	9/30/2017	89	7029	6332	4184	400780	7795	3379
35	9/30/2017	88	7189	6166	3923	403200	7570	3195
36	10/1/2017	88	7240	6725	4010	399880	7577	3346
37	10/1/2017	89	7045	5719	4039	404680	7477	3315
38	10/1/2017	89	7030	5564	3987	399640	7708	3333
39	10/1/2017	89	6920	5608	4020	401280	7312	3318

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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)
40	10/1/2017	93	7189	6138	3823	400860	7515	3145
41	10/1/2017	89	6926	5805	4010	385840	7037	3248

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PRODUCING FORMATION(S)	DEPTHS		
<u>MARCELLUS</u>	<u>6741'</u>	<u>TVD</u>	<u>11203'</u> <u>MD</u>

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas _____ Oil _____ NGL _____ Water _____ GAS MEASURED BY
 mcfpd bpd bpd bpd 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

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Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company
 Address 5400 D Big Tyler Road City Charleston State WV Zip 25313
 Logging Company Baker Hughes
 Address 400 Technology Drive City Canonsburg State PA Zip 15317
 Cementing Company Schlumberger
 Address 4600 J. Barry Ct., Suite 200 City Canonsburg State PA Zip 15317
 Stimulating Company Keane
 Address 14235 US Route 6 City Mansfield State PA Zip 16933

Please insert additional pages as applicable.

Completed by CNX Gas/WV Operations Company, LLC - Drilling and Completions Telephone 304-884-2000
 Signature AS/11 Title Adam Shuttler- Completions Superintendent-Gas WV Date 1/12/18

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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	
SHALE	0	766			
PITTSBURGH COAL	766	775			
SHALE/SANDSTONE	775	1222			
DUNKARD SAND	1222	1233			
SHALE	1233	1404			
GAS SAND	1404	1443			
SHALE	1443	1535			
1ST SALT SAND	1535	1559			
SHALE	1559	1568			
2ND SALT SAND	1568	1613			
SHALE	1613	1696			
MAXTON SAND	1696	1708			
SHALE	1708	1751			
BIG LIME	1751	1831			
BIG INJUN	1831	2025			
PRICE	2025	2383			
MURRYSVILLE	2383	2397			
SHALE	2397	2594			
50' SAND	2594	2596			
SHALE	2596	2649			
30' SAND	2649	2658			
SHALE	2658	2700			
GORDON STRAY	2700	2715			
SHALE	2715	2751			
GORDON	2751	2764			
SHALE	2764	2860			
FIFTH SAND	2860	2894			
SHALE	2894	3300			
SPEECHLEY SAND	3300	3328			
SHALE	3328	4336			
WARREN SAND	4336	4345			
SHALE	4345	5003			
JAVA SHALE	5003	5174			
PIPE CREEK SHALE	5174	5231			
ANGOLA SHALE	5231	5856			
RHINESTREET	5856	6272			
CASHAQUA	6272	6363			
MIDDLESEX	6363	6396			

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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 TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
WEST RIVER	6396	6440			
BURKETT	6440	6472			
TULLY LIMESTONE	6472	6503			
HAMILTON	6503	6614			
MARCELLUS	6614	6664			
ONONDAGA	6664	6667			

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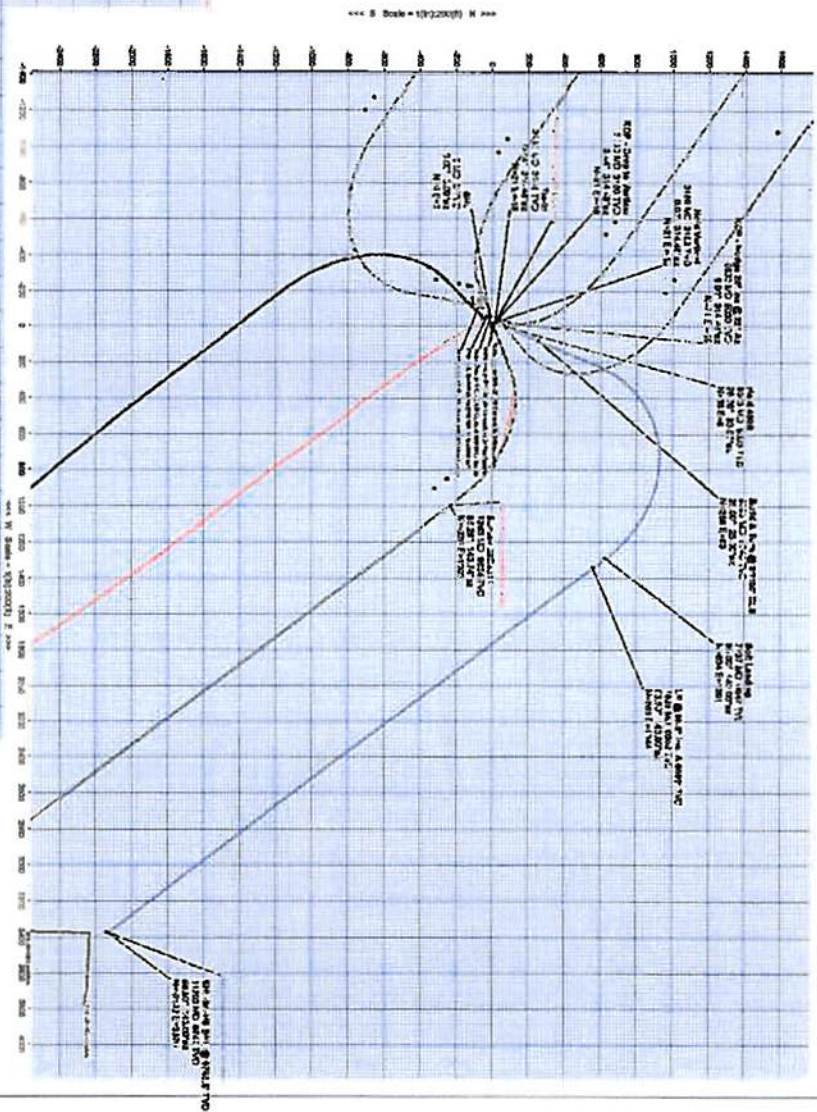
Well: SH-34H-16

Field: WV Marshall County (NAD 27)

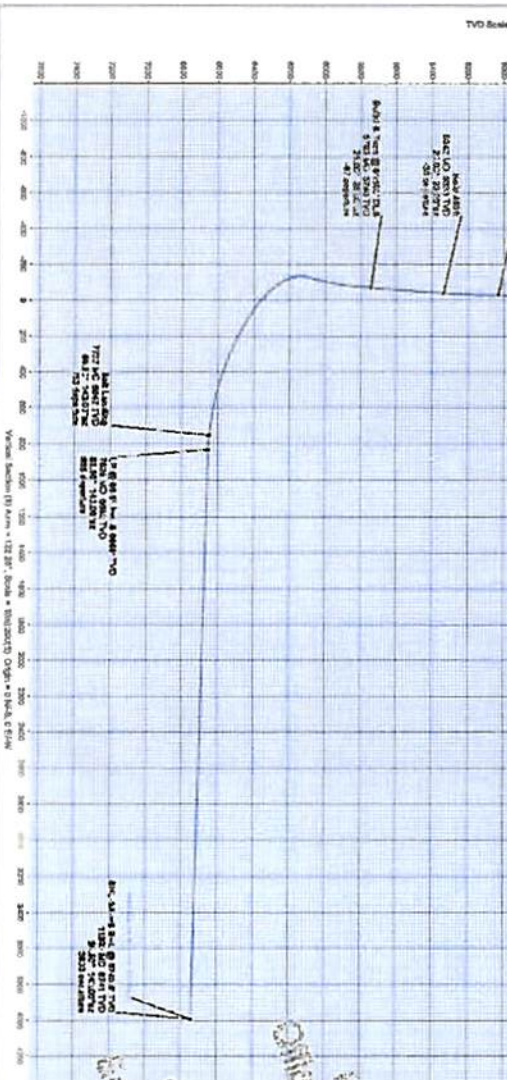
Wellowner: Nicos MGP

Section	Well Name	Well Type	Depth	Completion Date	Well Status	Well Depth	Well Type	Well Status	Well Depth	Well Type	Well Status
1	SH-34H-16	Oil	2750	11/15/11	Producing	2750	Oil	Producing	2750	Oil	Producing

NOTES:
1. This well is a directional well. The wellbore trajectory is shown on the well log. The well is completed in the 2nd zone.
2. The well is completed with a 2 1/2" casing.
3. The well is completed with a 2 1/2" tubing.
4. The well is completed with a 2 1/2" packer.
5. The well is completed with a 2 1/2" plug.
6. The well is completed with a 2 1/2" cement.
7. The well is completed with a 2 1/2" sand.
8. The well is completed with a 2 1/2" gravel.
9. The well is completed with a 2 1/2" sand.
10. The well is completed with a 2 1/2" gravel.



Depth (ft)	Gamma Ray (API)	Resistivity (ohm-ft)	Porosity (%)	Permeability (md)	Formation Volume Factor (FVF)	Shale Gas (scf/STB)	Shale Oil (bbl/STB)	Shale Water (bbl/STB)	Shale Gas (scf/STB)	Shale Oil (bbl/STB)	Shale Water (bbl/STB)
100	110	100	0.15	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
200	115	105	0.16	0.11	1.0	0.0	0.0	0.0	0.0	0.0	0.0
300	120	110	0.17	0.12	1.0	0.0	0.0	0.0	0.0	0.0	0.0
400	125	115	0.18	0.13	1.0	0.0	0.0	0.0	0.0	0.0	0.0
500	130	120	0.19	0.14	1.0	0.0	0.0	0.0	0.0	0.0	0.0
600	135	125	0.20	0.15	1.0	0.0	0.0	0.0	0.0	0.0	0.0
700	140	130	0.21	0.16	1.0	0.0	0.0	0.0	0.0	0.0	0.0
800	145	135	0.22	0.17	1.0	0.0	0.0	0.0	0.0	0.0	0.0
900	150	140	0.23	0.18	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	155	145	0.24	0.19	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1100	160	150	0.25	0.20	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1200	165	155	0.26	0.21	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1300	170	160	0.27	0.22	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1400	175	165	0.28	0.23	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1500	180	170	0.29	0.24	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1600	185	175	0.30	0.25	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1700	190	180	0.31	0.26	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1800	195	185	0.32	0.27	1.0	0.0	0.0	0.0	0.0	0.0	0.0
1900	200	190	0.33	0.28	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	205	195	0.34	0.29	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2100	210	200	0.35	0.30	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2200	215	205	0.36	0.31	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2300	220	210	0.37	0.32	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2400	225	215	0.38	0.33	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2500	230	220	0.39	0.34	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2600	235	225	0.40	0.35	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2700	240	230	0.41	0.36	1.0	0.0	0.0	0.0	0.0	0.0	0.0
2750	245	235	0.42	0.37	1.0	0.0	0.0	0.0	0.0	0.0	0.0



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Measured Depth	Inclination	Azimuth	Closure Distance	Planar VS	Course Length	Incr. VS	Dogleg	Position North	Vertical Depth	Position East
0	0	0	0	0	0	0	0	0	0	0
18.5	0	158.14	0	0	18.5	0	0	0	18.5	0
118.5	0.17	158.14	0.15	0.15	100	0.15	0.17	-0.14	118.5	0.06
218.5	0.17	306.18	0.19	0.17	100	0.23	0.33	-0.19	218.5	-0.01
318.5	0.42	66.64	0.21	0.03	100	0.55	0.53	0.05	318.5	0.21
418.5	0.54	73.75	1.05	0.04	100	1.38	0.13	0.32	418.5	1
518.5	0.34	115.83	1.75	0.28	100	2.1	0.37	0.32	518.49	1.72
618.5	0.24	147.67	2.09	0.7	100	2.59	0.19	0.02	618.49	2.09
718.5	0.21	81.16	2.39	0.94	100	2.92	0.25	-0.13	718.49	2.39
818.5	0.47	85.1	2.98	1.08	100	3.51	0.26	-0.07	818.49	2.98
918.5	0.48	127.97	3.73	1.54	100	4.28	0.35	-0.29	918.49	3.72
1018.5	0.18	247.63	3.95	1.9	100	4.65	0.59	-0.61	1018.48	3.9
1118.5	0.35	288.83	3.51	1.72	100	5.09	0.25	-0.57	1118.48	3.47
1218.5	0.28	279.65	2.97	1.41	100	5.64	0.09	-0.43	1218.48	2.94
1318.5	0.13	259.62	2.62	1.27	100	5.99	0.16	-0.41	1318.48	2.58
1418.5	0.35	143.26	2.74	1.54	100	6.26	0.42	-0.67	1418.48	2.66
1518.5	0.31	202.08	2.98	2.03	100	6.77	0.33	-1.17	1518.48	2.74
1618.5	0.26	173.02	3.13	2.46	100	7.25	0.15	-1.64	1618.48	2.66
1718.5	0.13	269.45	3.18	2.64	100	7.49	0.3	-1.87	1718.48	2.58
1818.5	0.15	270.93	2.99	2.56	100	7.73	0.02	-1.87	1818.48	2.33
1918.5	0.12	346.26	2.8	2.4	100	7.92	0.17	-1.77	1918.48	2.18
2018.5	0.33	130.59	3.01	2.55	100	8.13	0.43	-1.85	2018.48	2.37
2118.5	0.23	244.14	3.21	2.82	100	8.41	0.47	-2.13	2118.48	2.41
2175	0.18	134.29	3.26	2.91	56.5	8.53	0.6	-2.24	2174.98	2.37
2264	0.17	185.67	3.48	3.16	89	8.77	0.17	-2.47	2263.98	2.46
2354	0.15	167.76	3.67	3.4	90	9.02	0.06	-2.72	2353.98	2.47
2444	0.96	293.22	3.11	3	90	9.71	1.17	-2.53	2443.97	1.8
2533	1.11	290.89	1.96	1.92	89	11.32	0.18	-1.93	2532.96	0.31
2623	0.74	291.91	1.75	0.96	90	12.77	0.41	-1.4	2622.94	-1.04
2713	0.71	269.93	2.45	0.38	90	13.89	0.31	-1.19	2712.94	-2.14
2802	0.55	256.96	3.36	0.14	89	14.86	0.24	-1.28	2801.93	-3.11
2892	0.48	250.15	4.17	0.09	90	15.67	0.1	-1.51	2891.93	-3.88
2981	0.57	236.98	4.97	0.19	89	16.48	0.17	-1.88	2980.93	-4.6

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3071	0.62	26.11	5.05	-0.05	90	16.73	1.27	-1.68	3070.92	-4.77
3161	0.46	36.64	4.44	-0.58	90	17.58	0.21	-0.96	3160.92	-4.34
3251	0.38	47.94	3.93	-0.89	90	18.24	0.13	-0.47	3250.92	-3.9
3340	0.17	289.88	3.81	-1.09	89	18.5	0.54	-0.23	3339.92	-3.8
3430	2.88	290.86	6.07	-2.65	90	20.89	3.01	0.63	3429.88	-6.04
3519	5.61	289.33	12.57	-6.87	89	27.48	3.07	2.86	3518.62	-12.24
3609	7.79	282.24	23.04	-12.92	90	37.96	2.59	5.61	3608	-22.35
3698	8.23	281.44	35.44	-19.46	89	50.36	0.51	8.15	3696.14	-34.49
3788	9.92	276.77	49.59	-26.31	90	64.54	2.05	10.35	3785.01	-48.5
3877	13.33	275.56	67.45	-34.19	89	82.47	3.84	12.24	3872.17	-66.33
3967	15.97	276.47	90.16	-44.19	90	105.23	2.94	14.64	3959.24	-88.96
4066	19.75	281.16	120.49	-58.92	99	135.57	4.08	19.42	4053.45	-118.92
4156	27.8	282.43	156.72	-78.08	90	171.82	8.96	26.89	4135.75	-154.39
4245	33.41	285.21	201.91	-103.35	89	217.1	6.5	37.8	4212.32	-198.34
4335	33.89	284.44	251.68	-131.83	90	266.97	0.71	50.55	4287.24	-246.55
4424	33.75	283.03	301.19	-159.34	89	316.5	0.9	62.32	4361.18	-294.67
4514	33.79	284.24	351.19	-187.05	90	366.53	0.75	74.11	4436	-343.28
4604	33.85	286.1	401.22	-215.9	90	416.62	1.15	87.22	4510.77	-391.63
4693	33.86	285.36	450.73	-244.85	89	466.2	0.46	100.66	4584.68	-439.35
4783	33.81	286.21	500.79	-274.16	90	516.31	0.53	114.29	4659.44	-487.57
4872	33.81	286.58	550.24	-303.54	89	565.83	0.23	128.27	4733.39	-535.08
4962	33.83	287.08	600.25	-333.57	90	615.92	0.31	142.77	4808.16	-583.03
5051	33.82	287.67	649.7	-363.64	89	665.46	0.37	157.57	4882.1	-630.31
5141	33.78	285.6	699.72	-393.51	90	715.52	1.28	171.9	4956.89	-678.27
5231	33.9	284.63	749.83	-422.34	90	765.64	0.61	184.97	5031.64	-726.66
5320	33.87	286.8	799.43	-451.3	89	815.25	1.36	198.4	5105.53	-774.42
5410	33.85	287.1	849.52	-481.45	90	865.4	0.19	213.02	5180.27	-822.38
5499	33.76	284.19	899.02	-510.3	89	914.9	1.82	226.37	5254.22	-870.05
5589	33.77	283.2	949.03	-538.05	90	964.92	0.61	238.22	5329.04	-918.65
5678	30.69	284.02	996.49	-564.3	89	1012.38	3.5	249.37	5404.32	-964.78
5768	31.28	284.23	1042.82	-590.3	90	1058.71	0.67	260.68	5481.48	-1009.71
5858	31.34	283.3	1089.58	-616.29	90	1105.48	0.54	271.8	5558.37	-1055.14
5948	31.38	273.35	1136.02	-638.44	90	1152.18	5.75	278.56	5635.28	-1101.34
6037	31.3	261.65	1180.25	-652.31	89	1198.27	6.83	276.56	5711.36	-1147.39
6127	31.3	250.83	1221.82	-657.37	90	1244.85	6.24	265.48	5788.33	-1192.63
6217	31.32	236.36	1258.3	-652.19	90	1291.32	8.34	244.81	5865.33	-1234.25
6306	31.62	216.97	1285.44	-633.97	89	1337.24	11.34	213.28	5941.44	-1267.63
6396	34.38	199.12	1301.39	-601.31	90	1385.77	11.19	170.31	6017.09	-1290.2

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6486	38.73	187.79	1307.72	-556.62	90	1439.16	8.9	118.32	6089.45	-1302.36
6575	46.7	185.08	1310.31	-502.56	89	1499.48	9.19	58.37	6154.79	-1309.01
6665	55.79	181.91	1313.21	-438.23	90	1569.57	10.46	-11.6	6211.08	-1313.16
6754	63.76	176.97	1315.25	-365.76	89	1646.37	10.15	-88.4	6255.87	-1312.27
6844	70.69	172.19	1315.51	-285.5	90	1729.28	9.12	-170.92	6290.71	-1304.35
6933	76.71	168.51	1314.98	-201.52	89	1814.64	7.84	-255.07	6315.68	-1290
7023	82.9	163.35	1313.46	-113.49	90	1903.15	8.89	-340.91	6331.61	-1268.45
7113	89.88	158.98	1310.58	-23.76	90	1992.89	9.14	-425.84	6337.28	-1239.46
7202	89.91	158.66	1310.15	65.22	89	2081.89	0.36	-508.83	6337.44	-1207.31
7292	90.4	159.34	1316.14	155.21	90	2171.89	0.93	-592.85	6337.2	-1175.06
7381	90.31	160.04	1329.1	244.2	89	2260.89	0.79	-676.32	6336.65	-1144.16
7471	90.31	161.6	1349.79	334.19	90	2350.88	1.73	-761.32	6336.16	-1114.6
7561	90.46	162.09	1377.58	424.14	90	2440.88	0.57	-846.83	6335.56	-1086.56
7650	90.46	160.4	1409.32	513.11	89	2529.87	1.9	-931.1	6334.84	-1057.94
7740	90.4	160.29	1445.02	603.11	90	2619.87	0.14	-1015.86	6334.17	-1027.67
7829	90.55	159.84	1484.45	692.11	89	2708.87	0.53	-1099.52	6333.43	-997.33
7919	90.49	159.31	1527.91	782.1	90	2798.86	0.59	-1183.86	6332.61	-965.92
8008	90.12	159.47	1574.53	871.09	89	2887.86	0.45	-1267.16	6332.14	-934.59
8098	90.12	157.29	1623.98	961.05	90	2977.86	2.42	-1350.82	6331.95	-901.43
8187	90.22	157.88	1675.21	1049.97	89	3066.86	0.67	-1433.1	6331.69	-867.5
8277	90.25	158.7	1730.99	1139.93	90	3156.85	0.91	-1516.71	6331.32	-834.21
8367	89.51	154.87	1787.76	1229.77	90	3246.84	4.33	-1599.41	6331.51	-798.74
8456	89.75	157.02	1845.54	1318.54	89	3335.83	2.43	-1680.67	6332.08	-762.46
8545	89.75	162.22	1909.72	1407.51	89	3424.8	5.84	-1764.07	6332.47	-731.48
8635	89.63	164.41	1980.27	1497.35	90	3514.79	2.44	-1850.28	6332.96	-705.64
8724	89.48	163.52	2052.12	1586.13	89	3603.79	1.01	-1935.81	6333.65	-681.06
8814	90.09	161.43	2124.77	1676.04	90	3693.78	2.42	-2021.63	6333.99	-653.96
8903	90	161.25	2196.87	1765.02	89	3782.78	0.23	-2105.95	6333.92	-625.48
8993	90.03	162.31	2271.39	1854.97	90	3872.78	1.18	-2191.44	6333.89	-597.34
9082	90.37	160.59	2345.87	1943.94	89	3961.78	1.97	-2275.81	6333.58	-569.03
9172	90.46	157.8	2420.27	2033.92	90	4051.77	3.1	-2359.93	6332.93	-537.07
9261	90.43	158.13	2493.82	2122.86	89	4140.76	0.37	-2442.43	6332.24	-503.68
9351	90.46	161.65	2570.76	2212.85	90	4230.75	3.91	-2526.92	6331.54	-472.74
9440	90.74	162.57	2649.32	2301.78	89	4319.74	1.08	-2611.62	6330.61	-445.4
9530	90.92	160.48	2728.99	2391.73	90	4409.72	2.33	-2696.96	6329.3	-416.89
9619	90.8	160.78	2807.77	2480.72	89	4498.71	0.36	-2780.92	6327.97	-387.37
9709	90.8	161.51	2888.39	2570.69	90	4588.71	0.81	-2866.08	6326.71	-358.29
9798	90.83	159.98	2968.37	2659.67	89	4677.69	1.72	-2950.09	6325.44	-328.94

Top perf	Bottom per	LL	# of Stgs
6978	16416	9438	47.19

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9888	90.83	159.34	3049.03	2749.66	90	4767.68	0.71	-3034.47	6324.14	-297.66
9978	90.83	160.12	3130.25	2839.65	90	4857.67	0.87	-3118.88	6322.84	-266.49
10067	90.74	160.19	3211.29	2928.64	89	4946.67	0.13	-3202.59	6321.62	-236.28
10157	90.74	159.74	3293.55	3018.63	90	5036.66	0.5	-3287.14	6320.46	-205.45
10246	90.12	159.92	3375.2	3107.63	89	5125.65	0.73	-3370.68	6319.79	-174.76
10336	89.91	158.78	3457.85	3197.62	90	5215.65	1.29	-3454.89	6319.76	-143.02
10425	89.32	157.65	3539.24	3286.57	89	5304.65	1.43	-3537.53	6320.36	-109.99
10515	89.6	158.96	3621.96	3376.53	90	5394.64	1.49	-3621.15	6321.21	-76.72
10604	88.92	159.96	3704.76	3465.52	89	5483.63	1.36	-3704.49	6322.36	-45.5
10694	88.92	157.52	3788.36	3555.47	90	5573.61	2.71	-3788.34	6324.05	-12.88
10784	88.68	158.85	3871.93	3645.4	90	5663.59	1.5	-3871.87	6325.94	20.56
10873	87.88	162.84	3956.2	3734.34	89	5752.53	4.57	-3955.89	6328.61	49.75
10963	87.91	160.5	4042.01	3824.23	90	5842.46	2.6	-4041.26	6331.92	78.03
11053	87.88	160.5	4127.46	3914.17	90	5932.4	0.03	-4126.04	6335.22	108.05
11142	88.37	161.22	4212.31	4003.11	89	6021.35	0.98	-4210.08	6338.13	137.22
11232	88.86	159.58	4298.09	4093.08	90	6111.32	1.9	-4294.83	6340.31	167.4
11321	89.42	158.52	4382.47	4182.05	89	6200.31	1.35	-4377.94	6341.64	199.21
11411	89.94	159.2	4467.89	4272.03	90	6290.31	0.95	-4461.88	6342.15	231.67
11500	90.46	159.42	4552.75	4361.02	89	6379.31	0.63	-4545.14	6341.84	263.12
11590	90.43	161.92	4639.31	4451.01	90	6469.3	2.78	-4630.06	6341.14	292.9
11680	91.14	160.96	4726.32	4540.97	90	6559.29	1.33	-4715.37	6339.9	321.55
11769	90.71	159.05	4811.88	4629.95	89	6648.27	2.2	-4798.99	6338.47	351.97
11859	90.62	160.11	4898.35	4719.94	90	6738.27	1.18	-4883.32	6337.42	383.37
11949	90.71	160.88	4985.32	4809.93	90	6828.26	0.86	-4968.15	6336.38	413.42
12038	90.06	160.24	5071.46	4898.93	89	6917.26	1.02	-5052.08	6335.78	443.04
12128	90.03	159.43	5158.39	4988.93	90	7007.26	0.9	-5136.56	6335.71	474.07
12217	90.03	157.5	5243.88	5077.89	89	7096.25	2.17	-5219.34	6335.66	506.73
12307	89.97	157.17	5329.96	5167.79	90	7186.25	0.37	-5302.39	6335.66	541.41
12397	89.97	158.79	5416.45	5257.73	90	7276.25	1.8	-5385.82	6335.71	575.16
12486	89.91	160.23	5502.7	5346.73	89	7365.25	1.62	-5469.19	6335.8	606.31
12576	89.91	161.63	5590.51	5436.71	90	7455.24	1.56	-5554.25	6335.94	635.71
12665	89.82	162.46	5677.77	5525.66	89	7544.24	0.94	-5638.91	6336.15	663.15
12755	89.94	160.74	5765.93	5615.62	90	7634.24	1.92	-5724.31	6336.34	691.56
12844	90.18	159.58	5852.7	5704.62	89	7723.24	1.33	-5808.02	6336.25	721.76
12934	90.43	159.17	5940.23	5794.61	90	7813.24	0.53	-5892.25	6335.77	753.46
13023	90.98	159.44	6026.84	5883.59	89	7902.23	0.69	-5975.51	6334.68	784.91
13113	91.54	159.06	6114.45	5973.56	90	7992.21	0.75	-6059.65	6332.7	816.79
13202	91.82	159.34	6201.12	6062.52	89	8081.17	0.44	-6142.81	6330.09	848.38

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13292	91.91	162.61	6289.38	6152.44	90	8171.11	3.63	-6227.84	6327.16	877.7
13382	91.38	165.21	6378.46	6242.19	90	8261.06	2.95	-6314.27	6324.57	902.63
13472	90.8	162	6467.51	6331.98	90	8351.04	3.62	-6400.58	6322.86	928.03
13561	90.31	158.38	6554.71	6420.96	89	8440.02	4.1	-6484.3	6322	958.18
13650	89.51	159.34	6641.55	6509.94	89	8529.01	1.4	-6567.31	6322.14	990.28
13740	89.45	159.36	6729.58	6599.93	90	8619.01	0.07	-6651.52	6322.96	1022.02
13830	89.01	159.7	6817.71	6689.92	90	8709	0.62	-6735.83	6324.16	1053.49
13919	89.08	159.25	6904.9	6778.91	89	8797.99	0.51	-6819.17	6325.65	1084.69
14009	89.02	157.47	6992.74	6868.85	90	8887.97	1.98	-6902.81	6327.14	1117.87
14099	88.98	159.53	7080.68	6958.8	90	8977.95	2.29	-6986.53	6328.71	1150.85
14188	88.71	159.81	7168.06	7047.79	89	9066.94	0.44	-7069.97	6330.51	1181.77
14278	88.65	159.69	7256.47	7137.76	90	9156.91	0.15	-7154.38	6332.58	1212.91
14368	89.2	160.29	7345	7227.74	90	9246.9	0.9	-7238.93	6334.27	1243.7
14457	89.88	161.06	7432.77	7316.73	89	9335.89	1.15	-7322.92	6334.98	1273.15
14547	89.91	160.77	7521.62	7406.72	90	9425.89	0.32	-7407.97	6335.15	1302.58
14636	89.94	160.29	7609.41	7495.72	89	9514.89	0.54	-7491.88	6335.26	1332.24
14726	89.97	160.04	7698.12	7585.72	90	9604.89	0.28	-7576.54	6335.33	1362.78
14816	90.18	159.81	7786.81	7675.72	90	9694.89	0.35	-7661.07	6335.22	1393.67
14905	90.03	158.6	7874.33	7764.71	89	9783.89	1.37	-7744.27	6335.05	1425.27
14995	90.12	159.21	7962.8	7854.69	90	9873.89	0.69	-7828.24	6334.93	1457.66
15084	90.15	160.45	8050.56	7943.69	89	9962.89	1.39	-7911.78	6334.73	1488.35
15174	89.88	160.05	8139.44	8033.69	90	10052.89	0.54	-7996.49	6334.7	1518.76
15263	89.91	160.5	8227.36	8122.68	89	10141.89	0.5	-8080.26	6334.87	1548.8
15353	89.85	161.29	8316.44	8212.67	90	10231.89	0.88	-8165.31	6335.06	1578.25
15443	89.94	161.33	8405.62	8302.65	90	10321.88	0.11	-8250.56	6335.22	1607.09
15532	89.94	158.44	8493.51	8391.64	89	10410.88	3.25	-8334.12	6335.32	1637.7
15622	89.91	158.86	8582.09	8481.61	90	10500.88	0.47	-8417.95	6335.43	1670.46
15711	89.85	161.05	8670.04	8570.61	89	10589.87	2.46	-8501.55	6335.62	1700.97
15801	89.88	159.91	8759.13	8660.6	90	10679.87	1.27	-8586.38	6335.83	1731.04
15890	89.91	158.74	8846.97	8749.6	89	10768.87	1.32	-8669.64	6336	1762.46
15980	89.88	160.69	8935.92	8839.59	90	10858.86	2.17	-8754.06	6336.16	1793.66
16069	89.88	161.7	9024.22	8928.57	89	10947.86	1.13	-8838.3	6336.35	1822.35
16159	89.94	160.42	9113.5	9018.55	90	11037.86	1.42	-8923.43	6336.49	1851.56
16249	89.94	158.27	9202.41	9108.54	90	11127.85	2.39	-9007.64	6336.58	1883.31
16338	89.94	159.42	9290.24	9197.52	89	11216.85	1.29	-9090.64	6336.68	1915.43
16391	89.97	161.06	9342.74	9250.52	53	11269.85	3.09	-9140.52	6336.72	1933.34
16416	89.97	161.06	9367.56	9275.51	25	11294.85	0	-9164.16	6336.73	1941.46

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Hydraulic Fracturing Fluid Product Component Information Disclosure

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Environmental Protection

Job Start Date:	9/19/2017
Job End Date:	10/1/2017
State:	West Virginia
County:	Tyler
API Number:	47-095-02193-00-00
Operator Name:	CONSOL Energy Inc.
Well Name and Number:	SHRL3AHS
Latitude:	39.41421900
Longitude:	-80.83316900
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,647
Total Base Water Volume (gal):	14,203,266
Total Base Non Water Volume:	0



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	Ascent	Carrier/Base Fluid	Water	7732-18-5	100.00000	87.08750	None
Sand (Proppant)	Keane	Proppant	Crystalline silica: Quartz (SiO2)	14808-60-7	100.00000	11.99676	None
Hydrochloric Acid (7.5%)	Keane	Acid Inhibitor	Water	7732-18-5	92.50000	0.61656	None
			Hydrochloric Acid	7647-01-0	7.50000	0.04999	None
Hydrochloric Acid (15%)	Keane	Acidizing	Water	7732-18-5	85.00000	0.11831	None
			Hydrochloric Acid	7647-01-0	15.00000	0.02088	None
KFR-23	Keane	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8	45.00000	0.03741	None
			copolymer of 2-propenamide	Proprietary	10.00000	0.00831	None
			oleic acid diethanolamide	93-83-4	2.00000	0.00166	None
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000	0.00166	None
KFEAC-30	Keane	Iron Control					

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			acetic acid	64-19-7	60.00000	0.00303	None
			Citric acid	77-92-9	40.00000	0.00202	None
KWG-111LS	Keane	Gel					
			Guar gum	9000-30-0	55.00000	0.00184	None
			Distillates (petroleum), hydrotreated light	64742-47-8	55.00000	0.00184	None
MBC-516	Keane	Biocide					
			glutaral	111-30-8	26.70000	0.00228	None
			didecyldimethylammonium chloride	7173-51-5	8.00000	0.00068	None
			quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.30000	0.00045	None
KSI-19	Keane	Scale Inhibitor					
			Methanol	67-56-1	30.00000	0.00257	None
KAI-12	Keane	Acid Inhibitor					
			Methanol	67-56-1	90.00000	0.00121	None
			Fatty imidazoline	61790-69-0	5.00000	0.00007	None
			isoproyl alcohol	67-63-0	5.00000	0.00007	None
			xylene	1330-20-7	5.00000	0.00007	None
			Alcohols, C7-9-iso-, C8-rich	68526-83-0	5.00000	0.00007	None
			prop-2-yn-1-ol	107-19-7	5.00000	0.00007	None
			ethylbenzene	100-41-4	1.00000	0.00001	None
KWBO-2	Keane	Breaker					
			Sodium persulfate	7775-27-1	99.00000	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.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	92.50000	0.61656	
			Water	7732-18-5	85.00000	0.11831	
			copolymer of 2-propenamide	Proprietary	10.00000	0.00831	
			Citric acid	77-92-9	40.00000	0.00202	
			Distillates (petroleum), hydrotreated light	64742-47-8	55.00000	0.00184	
			oleic acid diethanolamide	93-83-4	2.00000	0.00166	
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000	0.00166	
			didecyldimethylammonium chloride	7173-51-5	8.00000	0.00068	
			quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.30000	0.00045	
			Alcohols, C7-9-iso-, C8-rich	68526-83-0	5.00000	0.00007	
			xylene	1330-20-7	5.00000	0.00007	
			isoproyl alcohol	67-63-0	5.00000	0.00007	
			Fatty imidazoline	61790-69-0	5.00000	0.00007	
			prop-2-yn-1-ol	107-19-7	5.00000	0.00007	
			ethylbenzene	100-41-4	1.00000	0.00001	

* 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)

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BHL is located on topo map 10,026 feet south of Latitude: 39° 25' 00"
 SHL is located on topo map 891 feet south of Latitude: 39° 25' 00"

BHL is located on topo map 9,652 feet west of Longitude: 80° 47' 30"
 SHL is located on topo map 11,725 feet west of Longitude: 80° 47' 30"

NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. 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.

AS DRILLED PLAT

LANDING POINT OF AS DRILLED LEG

AS DRILLED SURFACE HOLE LOCATION (SHL)

UTM 17-NAD83
 N:4362757.85
 E:514361.55
 NAD27, WV NORTH
 N:335743.440
 E:1823298.030
 LAT/LON DATUM-NAD83
 LAT:39.414219
 LON:-80.833169

AS DRILLED LANDING POINT

UTM 17-NAD83
 N:4362411.84
 E:514065.63
 NAD27, WV NORTH
 N:334624.241
 E:1822308.029
 LAT/LON DATUM-NAD83
 LAT:39.411106
 LON:-80.836614

AS DRILLED BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83
 N:4359975.84
 E:514999.61
 NAD27, WV NORTH
 N:326579.280
 E:1825239.490
 LAT/LON DATUM-NAD83
 LAT:39.389142
 LON:-80.825819

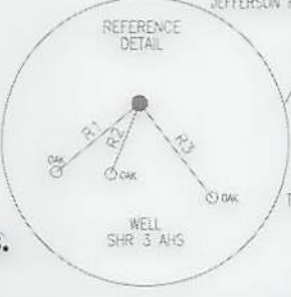
LINE	BEARING	DISTANCE
R1	S 50°30'18" W	187.87'
R2	S 22°15'30" W	132.54'
R3	S 37°33'41" E	206.62'
R4	N 72°14'50" E	1112.75'
R5	S 54°13'44" E	1194.27'
R6	S 14°46'24" E	914.21'

LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- WATER SOURCE
- LEASE NUMBER
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- AS DRILLED
- ROAD
- STREAM CENTER LINE

GAS WELLS

- EXISTING WELLS
- PLUGGED WELLS



Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

SEE PAGE 2 FOR OIL & GAS ROYALTY OWNERS

FILE #: SHR 3 AHS-AS DRILLED
 DRAWING #: SHR 3 AHS-AS DRILLED
 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: *George D. Six*
 R.P.E.: _____ L.L.S.: P.S. No. 2000

GEORGE D. SIX
 LICENSED
 No. 2000
 STATE OF WEST VIRGINIA
 PROFESSIONAL SURVEYOR

PLACE SEAL HERE

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



DATE: NOVEMBER 2, 2017
 OPERATOR'S WELL #: SHR 3 AHS-AS DRILLED
 API WELL #: 47 95 02193
 STATE COUNTY PERMIT

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

WATERSHED: HEADWATERS MIDDLE ISLAND CREEK ELEVATION: 751±
 COUNTY/DISTRICT: TYLER / CENTERVILLE QUADRANGLE: SHIRLEY, WV 7.5'
 SURFACE OWNER: NOBLE ENERGY INC. ACREAGE: 542.81±
 OIL & GAS ROYALTY OWNER: DANIEL A. WEEKLEY & SUZANNE L. WEEKLEY, AMP FUND III, LP ACREAGE: 1199.307±

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,741± TMD: 16,416±
 WELL OPERATOR CNX GAS COMPANY LLC DESIGNATED AGENT CHRIS TURNER
 Address 1000 CONSOL ENERGY DRIVE Address 1 DOMINION DR.
 City CANONSBURG State PA Zip Code 15317 City JANE LEW State WV Zip Code 26378

SHR 3 AHS

PAGE 2 OF 2

AS DRILLED PLAT

TRACT	PARCEL #	OIL & GAS ROYALTY OWNERS
1	1-8-10	DAVID H. WEEKLEY & LINDA C. WEEKLEY DANIEL A. WEEKLEY & SUZANNE L. WEEKLEY AMP FUND III, LP
2	1-9-4	DAVID H. WEEKLEY & LINDA C. WEEKLEY DANIEL A. WEEKLEY & SUZANNE L. WEEKLEY AMP FUND III, LP
3	1-9-4.1	DONALD J. TURNER & DELORES A. TURNER
4	1-9-4.7	WALTON SMITH & KAY SMITH ET AL
5	1-9-4.6	WALTON SMITH & KAY SMITH ET AL
6	5-15-40	JOSEPH CLIFFORD STRATON, ET AL
7	5-18-1	DONALD SECKMAN
8	5-18-3	MICHAEL PRATT, ET AL
9	5-18-4.5	TODD A. JAMES, ET AL
10	5-18-4.4	TODD A. JAMES, ET AL
11	5-18-4.3	TODD A. JAMES, ET AL
12	5-18-4	TODD A. JAMES, ET AL
13	5-18-4.2	TODD A. JAMES, ET AL
14	5-18-7.2	OK NAN KEYS, ET AL

NOVEMBER 2, 2017

AS DRILLED
SURFACE HOLE LOCATION (SHL)

UTM 17-NAD83
 N:4362757.85
 E:514361.55
NAD27, WV NORTH
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BOTTOM HOLE LOCATION (BHL)

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NAD27, WV NORTH
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