

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

API 47-051-02077 County Marshall District Franklin
Quad Powhatan Point 7.5' Pad Name Bryan Field/Pool Name _____
Farm name CNX Land Resources, Inc. Well Number Bryan N-5HM
Operator (as registered with the OOG) Tug Hill Operating, LLC
Address 380 Southpointe Boulevard, Plaza II, Suite 200 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 4,402,884.43 Easting 519,136.40
Landing Point of Curve Northing 4,403,163.07 Easting 519,469.15
Bottom Hole Northing 4,405,912.56 Easting 517,888.63

Elevation (ft) 1191.6' 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

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Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
SOBM; Base oil, osmotic inhibitor, weighting agent, viscosifier, emulsifier, hardness buffer, fluid loss additive, LCM, Shale inhibitor, de-foamer, soaping agent, coagulant, flocculant; specific additives per WSSP and Permit.

Date permit issued 9/11/2018 Date drilling commenced 9/20/2018 Date drilling ceased 10/15/2019
Date completion activities began 5/27/2020 Date completion activities ceased 8/26/2020
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 831' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1595' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 729-735', 824-830' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

API 47-051 - 02077 Farm name CNX Land Resources, Inc. Well number Bryan N-5HM

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	36"	30"	120'	NEW	94.5#	N/A	Y
Surface	17 1/2"	13 3/8"	934'	NEW	54.5#	N/A	Y
Coal	17 1/2"	13 3/8"	934'	NEW	54.5#	N/A	Y
Intermediate 1	12 1/4"	9 5/8"	2,669'	NEW	36#	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	17,539'	NEW	20#	N/A	Y
Tubing		2 3/8"	8,770'	NEW	4.7#	N/A	Y
Packer type and depth set							

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	A		15.6	1.19		0	8
Surface	A	964	15.6	1.19	1153	0	8
Coal	A	964	15.6	1.19	1153	0	8
Intermediate 1	A	1075	15.6	1.19	1274	0	8
Intermediate 2							
Intermediate 3							
Production	A	4143	14.5	1.17	4866	0	8
Tubing							

Drillers TD (ft) 17,594' Loggers TD (ft) n/a
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

Kick off depth (ft) 6,031'

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 3 centralizers on surface casing at equal distance.
Intermediate - 1 centralizer every other joint.
 Production - one centralizer every other joint in lateral, one centralizer every joint through curve, one centralizer every other joint to surface.

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 051 - 02077

Farm name CNX Land Resources, Inc.

Well number Bryan N-5HM

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	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)
	attached							

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Please insert additional pages as applicable.

API 47- 051 - 02077 Farm name CNX Land Resources, Inc. Well number Bryan N-5HM

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	6509' - 6391' TVD	6890' - 16956' MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1300 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 0 mcfpd Oil 0 bpd NGL 0 bpd Water 600 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
see attached	0		0		

Please insert additional pages as applicable.

Drilling Contractor Precision
Address 10350 Richmond Avenue, Suite 700 City Houston State TX Zip 77042

Logging Company n/a
Address _____ City _____ State _____ Zip _____

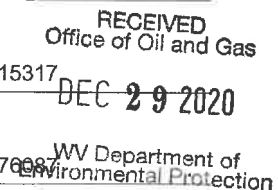
Cementing Company BJ Cementing Services
Address 4000 Town Center Boulevard City Canonsburg State PA Zip 15317

Stimulating Company PRO-FRAC
Address 333 Shops Boulevard City Willow Park State TX Zip 76087

Please insert additional pages as applicable.

Completed by Amy L. Morris Telephone 304-376-0111
Signature Amy L. Morris Title Permitting Specialist Date 10-27-2020

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry



**Bryan N-5HM
PEFORATION RECORD**

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Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	5/27/2020	17350	17398	48	Marcellus
2	5/27/2020	17151	17296	48	Marcellus
3	5/27/2020	16977	17122	48	Marcellus
4	5/27/2020	16803	16948	48	Marcellus
5	5/27/2020	16629	16774	48	Marcellus
6	5/28/2020	16455	16600	48	Marcellus
7	5/28/2020	16281	16426	48	Marcellus
8	5/28/2020	16107	16252	48	Marcellus
9	5/28/2020	15933	16078	48	Marcellus
10	5/28/2020	15759	15904	48	Marcellus
11	5/28/2020	15585	15730	48	Marcellus
12	5/29/2020	15411	15556	48	Marcellus
13	5/29/2020	15237	15382	48	Marcellus
14	5/29/2020	15063	15208	48	Marcellus
15	5/29/2020	14889	15034	48	Marcellus
16	5/29/2020	14715	14860	48	Marcellus
17	5/29/2020	14541	14686	48	Marcellus
18	5/30/2020	14367	14512	48	Marcellus
19	5/30/2020	14193	14338	48	Marcellus
20	5/30/2020	14019	14164	48	Marcellus
21	5/30/2020	13845	13990	48	Marcellus
22	5/30/2020	13671	13816	48	Marcellus
23	5/30/2020	13497	13642	48	Marcellus
24	5/30/2020	13323	13468	48	Marcellus
25	5/31/2020	13149	13294	48	Marcellus
26	5/31/2020	12975	13120	48	Marcellus
27	5/31/2020	12801	12946	48	Marcellus
28	5/31/2020	12627	12772	48	Marcellus
29	6/1/2020	12453	12598	48	Marcellus
30	6/1/2020	12279	12424	48	Marcellus
31	6/1/2020	12105	12250	48	Marcellus
32	6/1/2020	11931	12076	48	Marcellus
33	6/1/2020	11757	11902	48	Marcellus
34	6/1/2020	11583	11728	48	Marcellus
35	6/1/2020	11409	11554	48	Marcellus
36	6/2/2020	11235	11380	48	Marcellus
37	6/2/2020	11061	11206	48	Marcellus
38	6/2/2020	10887	11032	48	Marcellus
39	6/2/2020	10713	10858	48	Marcellus
40	6/2/2020	10539	10684	48	Marcellus
41	6/2/2020	10365	10510	48	Marcellus

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42	8/22/2020	10191	10336	48	Marcellus
43	8/22/2020	10017	10162	48	Marcellus
44	8/22/2020	9843	9988	48	Marcellus
45	8/22/2020	9669	9814	48	Marcellus
46	8/23/2020	9495	9640	48	Marcellus
47	8/23/2020	9321	9466	48	Marcellus
48	8/23/2020	9147	9292	48	Marcellus
49	8/23/2020	8973	9118	48	Marcellus
50	8/24/2020	8799	8944	48	Marcellus
51	8/24/2020	8625	8770	48	Marcellus
52	8/24/2020	8451	8596	48	Marcellus
53	8/24/2020	8277	8422	48	Marcellus
54	8/24/2020	8103	8248	48	Marcellus
55	8/25/2020	7929	8074	48	Marcellus
56	8/25/2020	7755	7900	48	Marcellus
57	8/25/2020	7581	7726	48	Marcellus
58	8/25/2020	7407	7552	48	Marcellus
59	8/25/2020	7233	7378	48	Marcellus
60	8/26/2020	7059	7204	48	Marcellus

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Bryan N-5HM

STIMULATION INFORMATION PER STAGE

Stage No.	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	65	8540	6856	4958	5436	2301	0
2	90	7748	5765	4014	441029	8778	0
3	90	7647	6293	4203	440955	8645	0
4	90	7697	5969	4578	439974	8599	0
5	88	7579	6051	4890	440773	8644	0
6	90	7657	5364	4613	440101	8558	0
7	90	7722	5151	4714	440133	8511	0
8	90	7806	5955	4464	440376	7701	0
9	90	7671	6051	4644	440824	7670	0
10	89	7622	6080	4307	442682	7686	0
11	90	7649	6026	4553	440708	7628	0
12	88	7642	6311	4880	440210	7646	0
13	90	7732	5886	4769	441117	7627	0
14	90	7538	5992	4450	441067	7710	0
15	91	7401	6079	4877	440864	7661	0
16	90	7239	5835	4781	441270	7667	0
17	90	7208	6026	4826	440253	7806	0
18	90	7151	5990	5138	440270	7709	0
19	90	7244	5864	4861	439476	7635	0
20	90	7142	5806	4903	441463	7656	0
21	90	7181	5629	5044	440536	7596	0
22	90	7254	5820	4737	441545	7615	0
23	90	7275	5871	4321	441606	7566	0
24	90	7163	5923	5208	439600	7542	0
25	90	7140	5745	5067	440183	7573	0
26	90	7121	5830	4795	440407	9767	0
27	90	7031	6338	4675	439767	7582	0
28	90	7200	6288	4609	442738	7548	0
29	90	7224	5845	4677	441331	7491	0
30	89	7174	5897	4822	440287	7492	0
31	90	6890	5866	4677	440037	7485	0
32	90	7010	6055	4990	440043	7460	0

Stage No.	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)
33	90	7067	5794	4534	440017	7522	0
34	90	7497	6106	4522	440048	7504	0
35	89	7063	6160	4585	440402	7496	0
36	89	7236	6410	4556	440884	7512	0
37	90	6965	6379	4533	440479	7498	0
38	90	6847	5496	4155	441191	7456	0
39	90	6702	5729	4414	402331	7540	0
40	90	6690	5864	4929	314534	7463	0
41	90	6766	6339	5113	331000	7450	0
42	90	6799	5628	5044	452580	8235	0
43	90	6745	5855	5116	437080	8273	0
44	90	6859	5994	4819	440520	8263	0
45	89	6572	5443	4906	429980	8109	0
46	90	6879	5870	6971	440040	9035	0
47	90	6737	6678	5098	443280	8279	0
48	83	6376	6006	5307	440720	8245	0
49	90	6483	5605	5061	443520	8413	0
50	90	6507	5000	4918	439440	8118	0
51	90	6217	5656	4899	439078	8127	0
52	91	6275	5848	4913	446660	9268	0
53	90	6243	5000	5255	438620	8126	0
54	89	6168	6219	4945	438300	8205	0
55	90	6334	5712	5143	435020	8059	0
56	90	6289	5000	5133	438820	8055	0
57	90	6203	5830	4918	437220	8092	0
58	90	6196	6005	4049	452280	8322	0
59	89	6193	6438	5240	439180	8196	0
60	91	6150	5000	5410	433600	7969	0

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LITHOLOGY/FORMATION	TOP DEPTH IN FT/ Name TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID
Maxton	1921	2011	1922	2013	Sandstone
Big Lime	2011	2081	2013	2083	Limestone
Big Injun	2081	2365	2083	2367	Sandstone
Weir	2365	2560	2367	2562	Sandstone
Berea	2560	2905	2562	2908	Sandstone
Gordon	2905	2959	2908	2962	Sandstone
Fifty Foot	2959	3507	2962	3511	Sandstone
Speechley	3507	4929	3511	5001	Sandstone
Benson	4929	5284	5001	5424	Sandstone
Alexander	5284	5878	5424	6112	Siltstone
Rhinestreet	5878	6288	6112	6626	Black shale
Middlesex	6288	6363	6626	6739	Black shale
Geneseo/Burkett	6363	6388	6739	6783	Black shale
Tully	6388	6426	6783	6858	Limestone
Hamilton	6426	6472	6858	6959	Grey shale
Marcellus	6472	-	6959	-	Black shale

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TUG HILL
OPERATING

Well: Bryan N-05HM (slot C)
Site: Bryan Pad
Project: Marshall County, West Virginia.
Design: rev5
Rig: H&P 611

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Annotation
1	16151.00	90.11	329.28	6385.09	8701.08	-3349.93	0.00	0.000	9321.38	Tie in survey @ 16151 MD
2	16224.00	90.96	328.66	6384.41	8763.63	-3387.56	1.44	-36.104	9393.54	S/T Begin 2°/100' drop/turn (135L)
3	16254.00	90.54	328.24	6384.02	8789.20	-3403.26	2.00	-135.000	9423.15	Begin 2°/100' turn (90L)
4	16284.00	90.54	327.64	6383.74	8814.62	-3419.18	2.00	-90.000	9452.71	Begin 2°/100' build/turn (45L)
5	16314.00	90.96	327.21	6383.35	8839.90	-3435.33	2.00	-45.000	9482.23	Begin 2°/100' build
6	16414.00	92.96	327.21	6379.93	8923.91	-3489.45	2.00	0.000	9580.51	Begin 92.96° lateral
7	16764.00	92.96	327.21	6361.85	9217.75	-3678.74	0.00	0.000	9924.23	Begin 2°/100' turn
8	16963.93	92.96	331.21	6351.53	9389.24	-3780.92	2.00	90.000	10121.68	Begin 92.96° lateral
9	17023.93	92.96	331.21	6348.43	9441.76	-3809.78	0.00	0.000	10181.22	Begin 2°/100' drop/turn
10	17121.79	91.00	331.22	6345.05	9527.47	-3856.88	2.00	179.822	10278.40	Begin 91.00° lateral
11	17597.72	91.00	331.22	6337.00	9930.50	-4078.30	0.00	0.000	10735.33	PBHL/TD 17597.72 MD/6337.00 TVD

ANNOTATIONS SURVEYS ORIGINAL HOLE

MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Annotation
173.00	0.30	311.34	173.00	0.30	-0.34	0.41	MWD surveys
16719.00	90.11	330.42	6372.00	9190.19	-3638.16	9893.31	Survey @ 16719.00 MD 6372.00 TVD
16797.00	90.11	330.42	6371.85	9258.03	-3676.66	9960.69	Survey projected to 16797.00 MD 6371.85 TVD OH

ANNOTATIONS SURVEYS SIDETRACK 01

MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Annotation
16151.00	90.11	329.28	6385.09	8701.08	-3349.93	9321.92	Tie into original hole @ 16151 MD
17546.00	93.19	332.35	6367.55	8992.34	-4071.49	10697.38	Survey @ 17546.00 MD 6367.55 TVD
17594.00	93.19	332.35	6364.87	8934.79	-4093.73	10745.09	Survey projected to 17594.00 MD 6364.87 TVD ST1

Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD83 West Virginia - HARN
Ellipsoid: GRS 1980
Zone: Zone 17N (84 W to 78 W)

System Datum: Mean Sea Level
Depth Reference: RKB=1191+25 @ 1216.00usft (H&P 611)
Surface location

Northing	Easting	Latitude	Longitude
14445130.16	1703199.97	39.77568207	-80.77654430

Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.84°



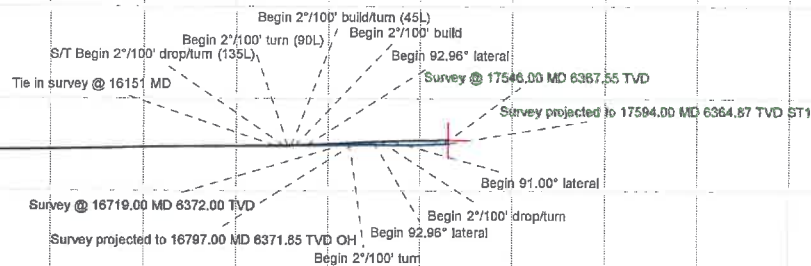
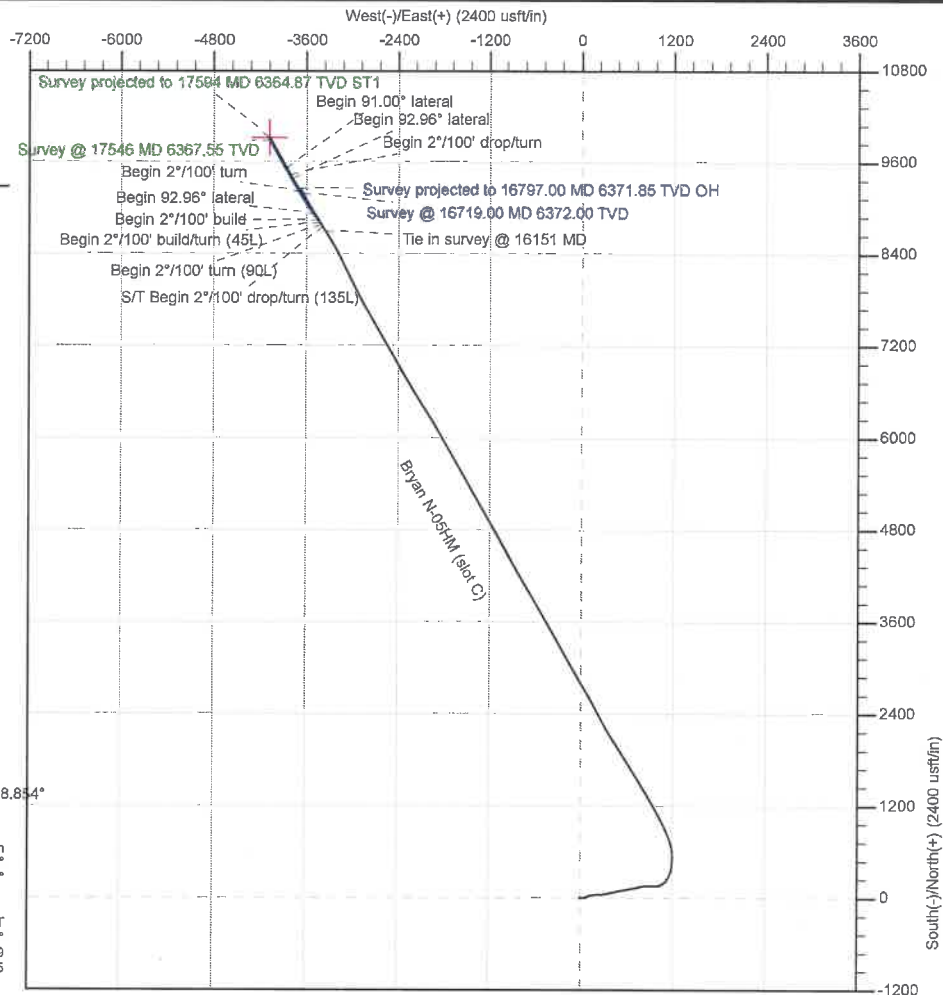
Azimuths to Grid North
True North: -0.14°
Magnetic North: -8.85°

Magnetic Field
Strength: 51910.0nsT
Dip Angle: 66.76°
Date: 10/7/2019
Model: IGRF2015

True Vertical Depth (1500 usft/in)

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Vertical Section at 337.67° (1500 usft/in)



Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/27/2020
Job End Date:	8/26/2020
State:	West Virginia
County:	Marshall
API Number:	47-051-02077-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Bryan N 5HM
Latitude:	39.77568207
Longitude:	-80.77654430
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,431
Total Base Water Volume (gal):	19,798,027
Total Base Non Water Volume:	0



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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	Tug Hill Operating	Carrier/Base Fluid	Water	7732-18-5	100.00000	86.06578	None
Sand (40/70 White Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	10.28592	None
Sand (100 Mesh Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	3.11452	None
Hydrochloric Acid (7.5%)	PVS	Acidizing	Water	7732-18-5	85.00000	0.35258	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.15348	None
StimStream FR 9800	Chemstream	Friction Reducer	Alkanes, C16-20-iso-	90622-59-6	25.00000	0.01785	None
			Butene, homopolymer	9003-29-6	25.00000	0.01785	None
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00214	None
MC MX 9-4743	Multi-Chem	Biocide	Sodium Nitrate	7631-99-4	60.00000	0.02184	None
LD-7750W	Multi-Chem	Scale Inhibitor					

			Methanol	67-56-1	60.00000	0.00499	None
			Phosphonic Acid Salt	Proprietary	5.00000	0.00042	None
ProFE 105	ProFrac	Iron Control					
			Citric Acid	77-92-9	100.00000	0.00156	None
ProHib 100	ProFrac	Acid Inhibitor					
			2-Propyn-1-ol compound w/ methyloxirane	38172-91-7	15.00000	0.00020	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	85.00000	0.35258	
			Butene, homopolymer	9003-29-6	25.00000	0.01785	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00214	
			Phosphonic Acid Salt	Proprietary	5.00000	0.00042	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

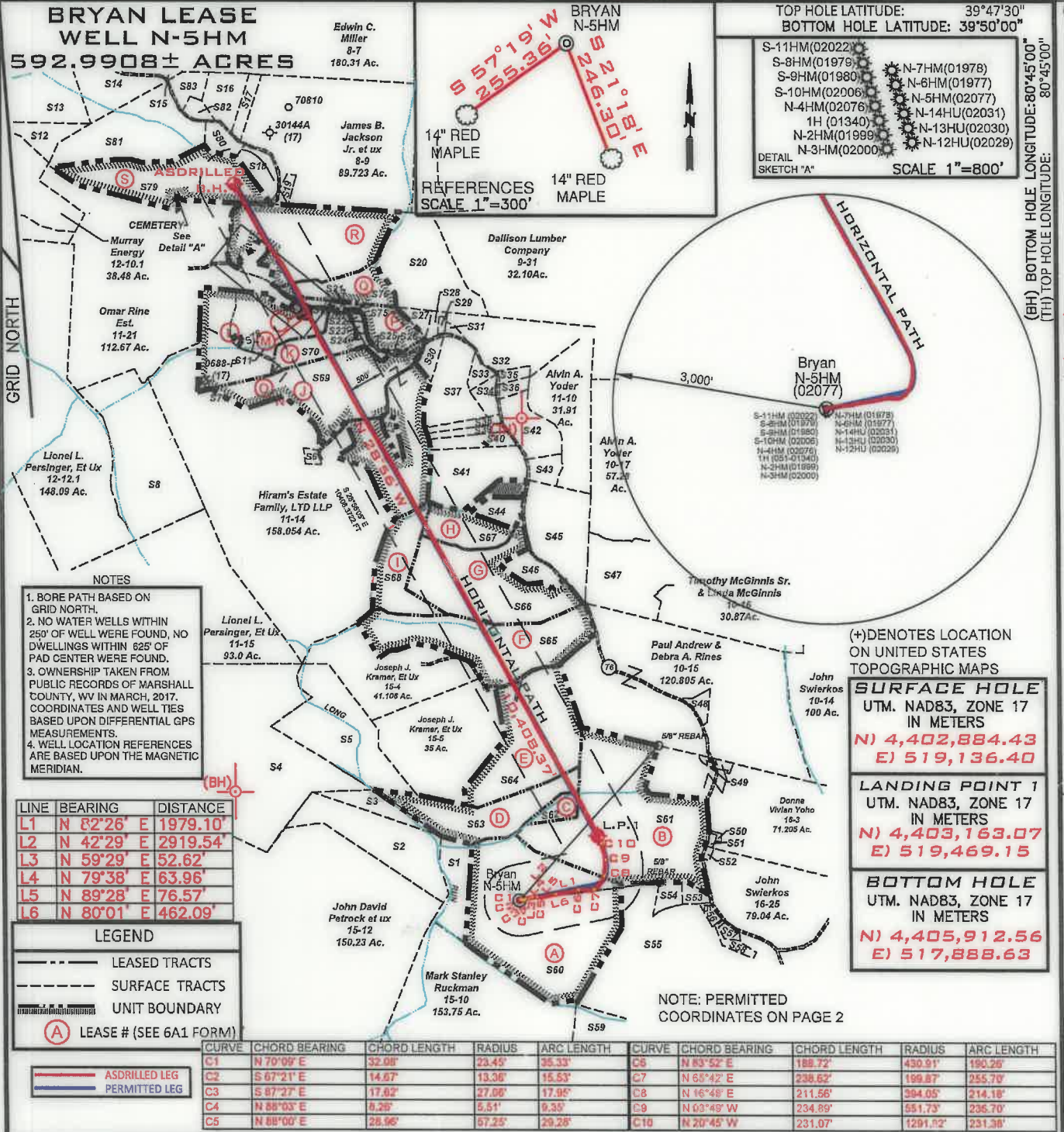
** Information is based on the maximum potential for concentration and thus the total may be over 100%

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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form: wwg6



FILE NUMBER _____

DRAWING NUMBER BRYAN_WP_N-5HM

SCALE 1" = 2000'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

P.S. 708

David L Jackson



WVDEP
OFFICE OF OIL & GAS
601 57TH STREET, SE
CHARLESTON, WV 25304



JACKSON SURVEYING INC.
P.O. Box 1460
Clarksburg, WV 26302
304-623-5851

DATE: OCTOBER 20, 2020

OPERATORS WELL NO. BRYAN N-5HM

API WELL NO. 47-051-02077

STATE COUNTY PERMIT

LOCATION ELEVATION 1191.6' WATERSHED (HUC 10) Fish Creek

DISTRICT Franklin COUNTY Marshall

QUADRANGLE Powhatan Point 7.5' LEASE NUMBER SEE WW-6A1 Form

SURFACE OWNER CNX LAND RESOURCES, INC. ACREAGE 81.98

OIL & GAS ROYALTY OWNER MICHAEL R. BRYAN - SEE WW 6A1 LEASE ACREAGE 81.98

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) **ASDRILLED**

TARGET FORMATION Marcellus ESTIMATED DEPTH TVD: 6,365' TMD: 17,594'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM

ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 CHARLESTON, WV 25313

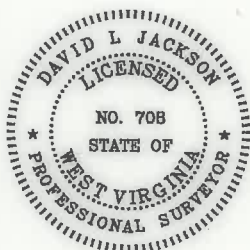
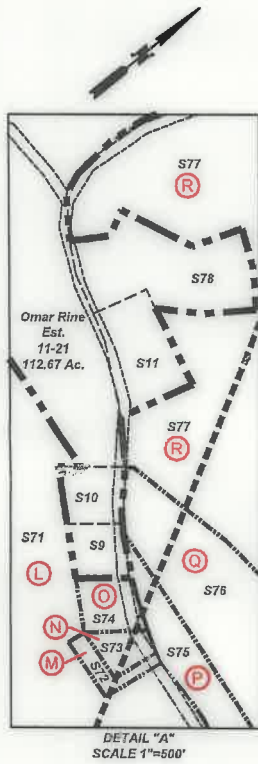
COUNTY NAME
PERMIT

**BRYAN LEASE
WELL N-5HM
592.9908± ACRES**

SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,402,884.48
E) 519,136.39

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,403,161.68
E) 519,468.65

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,405,911.30
E) 517,893.32



P.S.
708

David L Jackson

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S1	15-13	CNX Land Resources	11.0
S2	15-14	John David Petrock Et Ux	25.0
S3	15-2	John David Petrock Et Ux	5.0
S4	15-1	Marcus Sharp & David Schlabach	121.0
S5	15-3	Joseph J. Kramer et ux	36.10
S6	11-14.1	Dennis F. Moore et ux	1.056
S7	11-16.2	Joseph Haught	2.181
S8	12-11	Wesley Bryan & Wesley Bryan II	52.478
S9	11-19	David E. Gray	0.532
S10	11-20	David E. Gray	0.569
S11	11-2.2	Joshua A. Myers	2.193
S12	12-9	Lionel & Mary Lee Persinger	10.15
S13	7-39	Lionel L. Persinger et ux	57.0
S14	7-33	William N. Roupe	24.60
S15	7-31	William N. Roupe	43.147
S16	11-1.7	William S. & Mary K. Adams	8.0
S17	11-1.5	Paul & Sandy Whitt	3.507
S18	11-1.2	Jay A. Conner, et ux	5.824
S19	8-9.1	Scott E. Jackson, Tammy S. South & Marion Jackson	1.957
S20	11-4	David H. Arrick, et ux	31.5
S21	11-5.2	Rickey Lynn & Victoria Rose Cross	1.0
S22	11-24	Charles Edward Furbee Et Ux	0.603
S23	11-23	Owen Michael Barr	0.845
S24	11-25	Owen Michael Barr	0.598
S25	11-16.1	Susan Marie Smith- Life	0.876
S26	11-5.1	James R. Anderson, et ux	0.205
S27	11-5.3	Robert Harris Arrick, et ux	3.0
S28	11-6	Robert & Rebecca Arrick	1.29
S29	11-7	Baptist Cemetery	1.0
S30	11-16.3	Kegan Michael Haught - Life	3.265
S31	11-8	Baptist Church	0.8
S32	11-9	Edwin C. & Kimberly A. Miller	41.773
S33	11-9.10	John A. & Janet L. Beucke	2.348
S34	11-9.2	Michael R. Bryan	3.143
S35	11-9.8	Sean F. Moore	2.070
S36	11-9.7	Sean F. Moore	2.026
S37	11-9.3	Joseph M. Haught & Steven Haught	16.3
S38	11-9.5	Southern Country Farms, Inc	2.559
S39	11-9.6	Southern Country Farms, Inc	2.488
S40	11-9.9	Leonard L. Parsons, et ux	5.89
S41	11-9	Edwin C. & Kimberly A. Miller	41.773
S42	11-9.1	Jack Shepard Huggins Jr., et al	10.92
S43	11-9.4	Jack S. Huggins, et al	4.129
S44	11-11	Brad M. & Amanda J. Blake	5.0
S45	11-11.2	Wesley R. Bryan & Wesley R. Bryan II	25.031
S46	11-11.1	Nellie Marie & Robert W. Spencer	5.813
S47	10-16.4	Melvin E. Ferguson Jr. & Elizabeth Ferguson	30.87
S48	10-15.1	Donald T. Miller	2.095
S49	16-3.2	Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander	1.435
S50	16-3.1	Dennis E. Jackson, et ux	0.27
S51	16-2	Christian Church	0.19
S52	16-1	Christian Church	0.50
S53	16-23.1	Ray E. Minor et ux	2.0
S54	16-23.4	Michael R. & Brenda K. Bryan	3.0
S55	16-23	CNX Land Resources, Inc	60.138
S56	16-23.3	Greg & Christina Riddle	1.0
S57	16-24	Alan M. Beyser, et ux	1.083
S58	16-23.2	Alan M. Beyser, et ux	1.726
S59	16-22	James M. Ruckman, et ux	54.605
S60	15-9	CNX Land Resources Inc.	81.98
S61	15-8	Terry D. Rose et ux	77.11
S62	15-7	Terry D. Rose et ux	4.50
S63	15-6.1	Joseph J. Kramer et ux	39.40
S64	15-6	Joseph J. Kramer et ux	42.50
S65	11-12	Joseph J. Kramer et ux	43.2188
S66	11-11.3	Herman D. & Herman J. Lantz	43.96
S67	11-11.4	Brad M. & Amanda J. Blake	15.193
S68	11-13	Joy D. Gartman & Arlin Gatts	12.29
S69	11-16	Keith E. Haught et al	83.674
S70	11-17.2	Brenda & Michael Bryan	11.504
S71	11-17	Kevin R. Corley et ux	36.13
S72	11-17.1	David Gray	0.297
S73	11-22	David Gray	0.353
S74	11-18	David Gray	0.569
S75	11-5	Kevin R. Corley et ux	10.36
S76	11-3	Kevin R. Corley et ux	13.18
S77	11-2	Walter C. & Cheryl A. Rine	42.367
S78	11-2.1	Walter C. & Cheryl A. Rine	1.19
S79	11-1.1	Larry W. Dunlap et al	34.405
S80	11-1.3	Joy A. Conner et ux	4.256
S81	11-1.4	Larry W. Dunlap et al	32.493
S82	11-1.6	Deborah Morris	2.093
S83	11-1	William N. & Virginia A. Roupe	4.527



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: Bryan N-5HM
API #: 47-051-02077
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV

WELL PLAT
PAGE 2 OF 2
DATE: 10/20/2020