

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

API 47-051-02031 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-14HU  
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 4,402,881.00 Easting 519,137.48  
Landing Point of Curve Northing 4,403,283.95 Easting 519,925.56  
Bottom Hole Northing 4,406,154.28 Easting 518,244.11

Elevation (ft) 1191.5' 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

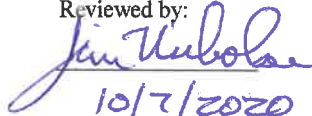
Drilling Media Surface hole ☒ Air ☐ Mud ☐ Fresh Water Intermediate hole ☒ Air ☐ Mud ☐ Fresh Water ☐ Brine  
Production hole ☐ Air ☒ Mud ☐ Fresh Water ☐ Brine

Mud Type(s) and Additive(s)  
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 9/5/2018 Date drilling commenced 9/19/2018 Date drilling ceased 11/13/2019  
Date completion activities began 4/17/2020 Date completion activities ceased 5/1/2020  
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 828' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1595' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 726-732', 821-827' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:  
  
10/7/2020

API 47- 051 - 02031 Farm name CNX Land Resources, Inc. Well number Bryan N-14HU

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"	100'	NEW	94.5#	N/A	Y
Surface	26"	20"	938'	NEW	106.5#	N/A	Y
Coal							
Intermediate 1	17 1/2"	13 3/8"	2,774'	NEW	54.5#	N/A	Y
Intermediate 2	12 1/4"	9 5/8"	10,703'	NEW	47#	N/A	Y
Intermediate 3							
Production	8 3/4"	5 1/2"	23,785'	NEW	20#	N/A	Y
Tubing		2 7/8"	11,893'	NEW	4.7#	N/A	
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	A		15.6	1.19		0	8
Surface	A	1660	15.6	1.19	1983	0	8
Coal							
Intermediate 1	A	1957	15.6	1.19	2577	0	8
Intermediate 2	A	5129	14.5	1.19	5975	0	8
Intermediate 3							
Production	A	5559	14.5	1.17	6224	0	
Tubing							

Drillers TD (ft) 23,723' Loggers TD (ft) n/a  
 Deepest formation penetrated Trenton Plug back to (ft) n/a  
 Plug back procedure n/a

Kick off depth (ft) 11,164'

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.

WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS \_\_\_\_\_

WERE TRACERS USED ☐ Yes ☒ No TYPE OF TRACER(S) USED \_\_\_\_\_

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API 47-051 - 02031

Farm name CNX Land Resources, Inc.

Well number Bryan N-14HU

## PERFORATION RECORD

[illegible]

Please insert additional pages as applicable.

### STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
POINT PLEASANT	11255' - 11050'	TVD 12734' - 23785' MD

GAS TEST    ☐ Build up    ☐ Drawdown    ☒ Open Flow                      OIL TEST    ☒ Flow    ☐ Pump

SHUT-IN PRESSURE    Surface 8000 psi    Bottom Hole \_\_\_\_\_ psi    DURATION OF TEST 24 hrs

OPEN FLOW            Gas                      Oil                      NGL                      Water                      GAS MEASURED BY

                            500                      mcfpd    0                      bpd    0                      bpd    550                      bpd    ☐ Estimated    ☒ Orifice    ☐ Pilot

[illegible]

Drilling Contractor Helmerich & Payne International Drilling Co.  
 Address 1437 S. Boulder Avenue City Tulsa State OK Zip 74119  
 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 Halliburton Energy Services, Inc.  
 Address 121 Champion Way, Suite 200 City Canonsburg State PA Zip 15317

Completed by Amy L. Morris Telephone 304-376-0111  
Signature Amy L. Morris Title Permitting Specialist Date 8-13-2020

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

**BRYAN N-14HU**

**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	88	11550	8818	6485	249900	6649	0
2	89.8	12180	8490	7111	500227	10196	0
3	90.3	11881	8477	7006	499724	10243	0
4	89.6	11573	9966	7560	499901	10221	0
5	89.3	11621	9655	7393	500196	10131	0
6	89.8	11666	9321	7252	500433	10305	0
7	89.8	11224	9174	7296	500491	10242	0
8	90.4	11642	10058	7832	500128	10162	0
9	89.3	11637	9717	7370	500048	9904	0
10	89.1	11564	8456	7075	500072	10129	0
11	89	11564	8555	6931	500694	9056	0
12	88.9	11542	8433	7430	503187	9093	0
13	89	11299	8480	8084	500098	8949	0
14	90.6	11220	8261	8291	500090	8972	0
15	90.6	11261	8588	8207	501585	8990	0
16	88.9	10963	9077	8292	501983	9052	0
17	90.4	11082	9010	8350	501147	9074	0
18	89.9	10823	9311	8701	500100	8920	0
19	90.1	10753	8916	8660	500004	8907	0
20	89.6	10969	9174	7480	501451	11625	0
21	90.5	10780	9231	6871	501416	9008	0
22	90.6	10930	9053	7482	500277	8993	0
23	90.5	10697	8524	8583	500108	8943	0
24	90.4	10689	9888	8323	499944	11107	0
25	90.9	10882	9006	7277	501916	8936	0
26	89.2	10863	9985	6565	499716	8925	0
27	89.5	10830	7579	6206	499997	8957	0
28	90	10807	9177	8530	500242	8884	0
29	90.4	10928	10142	8201	500215	8922	0
30	90.3	10964	9733	9144	502063	8910	0
31	90.3	11166	9139	9106	502420	8913	0
32	89.5	10776	9187	8309	500313	8919	0

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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	90.3	10767	8633	8638	501162	8931	0
34	90.4	10623	9265	8580	501014	8917	0
35	90.5	10790	9280	9125	501232	8854	0
36	90.7	10438	9168	9158	689412	8855	0
37	89.6	10089	7905	8863	501617	8865	0
38	90.4	10373	8900	8459	499251	8822	0
39	90	10431	8821	8473	500348	8894	0
40	90.3	10711	9140	7374	500071	8800	0
41	89.9	10466	9210	9093	500116	8850	0
42	90.3	10370	8788	6749	499343	8838	0
43	90	10591	8167	8294	499036	8785	0
44	89.6	10376	8386	8634	500530	8628	0
45	90	10104	8299	9146	501499	8744	0
46	89.7	10164	8170	8746	499927	8770	0
47	0	0	0	0	501048	8866	0
48	90.3	10059	7829	6798	502476	8731	0
49	90.4	10067	7924	6623	500507	8738	0
50	89.8	9988	8478	7078	500837	8764	0
51	90.1	9977	8291	9276	500061	8692	0
52	90.5	9837	8173	9234	500016	8704	0
53	89.4	10101	9075	8271	500249	8692	0
54	90.8	10117	8304	6735	501987	8714	0
55	90.7	9969	8224	6606	500752	8683	0

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**Bryan N-14HU**  
**PEFORATION RECORD**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD. Ft.	Number of Perforations	Formation(s)
1	4/16/2020	23535	23582	282	Utica
2	4/17/2020	23308	23484	48	Utica
3	4/17/2020	23109	23284	48	Utica
4	4/17/2020	22910	23085	48	Utica
5	4/17/2020	22711	22886	48	Utica
6	4/20/2020	22512	22687	48	Utica
7	4/20/2020	22313	22489	48	Utica
8	4/20/2020	22114	22289	48	Utica
9	4/20/2020	21915	22090	48	Utica
10	4/21/2020	21716	21891	48	Utica
11	4/21/2020	21516	21692	48	Utica
12	4/21/2020	21317	21492	48	Utica
13	4/21/2020	21118	21293	48	Utica
14	4/21/2020	20919	21094	48	Utica
15	4/21/2020	20720	20895	48	Utica
16	4/22/2020	20521	20696	48	Utica
17	4/22/2020	20322	20497	48	Utica
18	4/22/2020	20123	20298	48	Utica
19	4/22/2020	19924	20099	48	Utica
20	4/23/2020	19725	19900	48	Utica
21	4/23/2020	19525	19701	48	Utica
22	4/23/2020	19326	19502	48	Utica
23	4/23/2020	19127	19302	48	Utica
24	4/23/2020	18928	19103	48	Utica
25	4/24/2020	18729	18904	48	Utica
26	4/24/2020	18530	18705	48	Utica
27	4/24/2020	18331	18506	48	Utica
28	4/24/2020	18132	18307	48	Utica
29	4/24/2020	17933	18108	48	Utica
30	4/27/2020	17734	17909	48	Utica
31	4/27/2020	17534	17710	48	Utica
32	4/27/2020	17335	17511	48	Utica
33	4/27/2020	17136	17311	48	Utica
34	4/27/2020	16937	17112	48	Utica
35	4/28/2020	16738	16913	48	Utica
36	4/28/2020	16539	16714	48	Utica
37	4/28/2020	16340	16515	48	Utica
38	4/28/2020	16141	16316	48	Utica
39	4/28/2020	15942	16117	48	Utica
40	4/29/2020	15743	15918	48	Utica
41	4/29/2020	15543	15719	48	Utica

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42	4/29/2020	15344	15520	48	Utica
43	4/29/2020	15145	15320	48	Utica
44	4/29/2020	14946	15121	48	Utica
45	4/30/2020	14747	14922	48	Utica
46	4/30/2020	14548	14723	48	Utica
47	4/30/2020	14349	14524	48	Utica
48	4/30/2020	14150	14325	48	Utica
49	4/30/2020	13951	14126	48	Utica
50	4/30/2020	13752	13927	48	Utica
51	5/1/2020	13552	13728	48	Utica
52	5/1/2020	13353	13529	48	Utica
53	5/1/2020	13154	13329	48	Utica
54	5/1/2020	12955	13130	48	Utica
55	5/1/2020	12756	12931	48	Utica

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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	1956	2046	1957	2047	Sandstone
Big Lime	2046	2116	2047	2117	Limestone
Big Injun	2116	2400	2117	2402	Sandstone
Weir	2400	2595	2402	2597	Sandstone
Berea	2595	2940	2597	2942	Sandstone
Gordon	2940	2994	2942	2996	Sandstone
Fifty Foot	2994	3542	2996	3544	Sandstone
Speechley	3542	4964	3544	4967	Sandstone
Benson	4964	5319	4967	5322	Sandstone
Alexander	5319	5913	5322	5916	Siltstone
Rhinestreet	5913	6337	5916	6341	Black shale
Middlesex	6337	6403	6341	6407	Black shale
Geneseo/Burkett	6403	6438	6407	6442	Black shale
Tully	6438	6473	6442	6477	Limestone
Hamilton	6473	6519	6477	6523	Grey shale
Marcellus	6519	6572	6523	6576	Black shale
Onondaga	6572	6799	6576	6803	Limestone
Oriskany	6799	6900	6803	6904	Sandstone
Helderberg	6900	7262	6904	7268	Limestone
Salina	7262	8287	7268	8411	Salt/Anhydrite/LS
Lockport	8287	8654	8411	8854	Dolomite
Rose Hill	8654	8920	8854	9206	Shale
Packer Shell	8920	9121	9206	9484	Limestone
Clinton/Tuscarora	9121	9225	9484	9627	Sandstone
Juniata/Queenston	9225	9997	9627	10713	Red Shale
Reedsville	9997	10946	10713	11984	Grey Shale
Utica	10946	11255	11984	12757	Black Shale
Point Pleasant	11255	-	12757	-	Shale/Limestone

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/16/2020
Job End Date:	5/1/2020
State:	West Virginia
County:	Marshall
API Number:	47-051-02031-00-00
Operator Name:	Tug Hill Operating, LLC
Well Name and Number:	Bryan N 14HU
Latitude:	39.77564911
Longitude:	-80.77653187
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	11,251
Total Base Water Volume (gal):	21,090,350
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	Tug Hill Operating	Carrier/Base Fluid	Water	7732-18-5	100.00000	86.16222	None
Sand (40/70 White Proppant)	ProFrac	Proppant					
Sand (100 Mesh Proppant)	ProFrac	Proppant	Silica Substrate	14808-60-7	100.00000	10.62909	None
Hydrochloric Acid (7.5%)	PVS	Acidizing	Silica Substrate	14808-60-7	100.00000	2.82041	None
			Water	7732-18-5	85.00000	0.22740	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.09899	None
StimStream FR 9800	Chemstream	Friction Reducer	Butene, homopolymer	9003-29-6	25.00000	0.01834	None
			Alkanes, C16-20-iso-	90622-59-6	25.00000	0.01834	None
MC MX 9-4743	Multi-Chem	Biocide	Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00220	None
LD-7750W	Multi-Chem	Scale Inhibitor	Sodium Nitrate	7631-99-	60.00000	0.02225	None

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			Methanol	67-56-1	60.00000	0.00503	None
ProFE 105	ProFrac	Iron Control	Phosphonic Acid Salt	Proprietary	5.00000	0.00042	None
ProHib 100	ProFrac	Acid Inhibitor	Citric Acid	77-92-9	100.00000	0.00103	None
			2-Propyn-1-ol compound w/ methyloxirane	38172-91-7	15.00000	0.00013	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	0.22740	
			Butene, homopolymer	9003-29-6	25.00000	0.01834	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00220	
			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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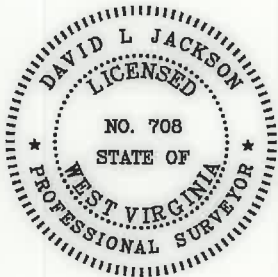
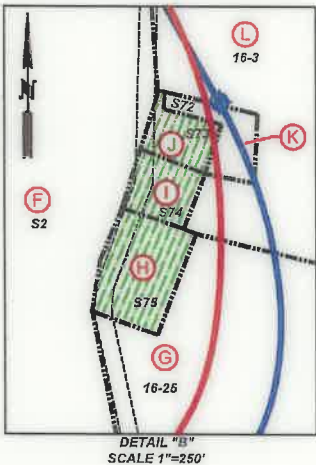
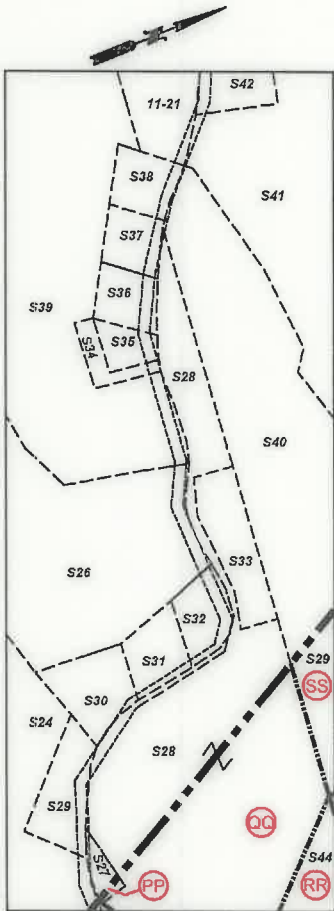


DESIGNATED AGENT DIANNA STAMPER  
CT CORPORATION SYSTEM  
ADDRESS 5400 D BIG TYLER ROAD  
CHARLESTON WV 25313

NUMBER	CHORD DIRECTION	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 86°34' E	105.90'	105.76'	587.01'
C2	N 84°39' E	260.02'	259.95'	3241.25'
C3	N 80°34' E	514.54'	511.03'	1270.38'
C4	N 68°38' E	371.22'	364.40'	557.21'
C5	N 24°15' E	320.54'	313.47'	439.07'
C6	N 03°22' W	374.64'	372.89'	1118.13'
C7	N 21°48' W	185.13'	184.80'	902.60'



BRYAN LEASE  
UTICA UNIT - 424.581 AC±  
WELL N-14HU  
TUG HILL OPERATING



SURFACE HOLE	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,402,880.82
E)	519,137.46
LANDING POINT 1	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,403,190.72
E)	519,976.13
BOTTOM HOLE	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,406,234.82
E)	518,219.39

P.S.  
708

David L Jackson

Number	TAX MAP -PARCEL	SURFACE OWNER	ACRES
S1	A 15-9	CNX Land Resources, Inc.	81.98
S2	F 15-8	Terry D. Rose, et ux	77.1
S3	15-7	Terry D. Rose, et ux	4.5
S4	15-6.1	Joseph J. Kramar, et ux	39.40
S5	15-6	Joseph J. Kramar, et ux	42.5
S6	15-13	CNX Land Resources	11.0
S7	15-14	John David Petrock, et ux	25.0
S8	15-2	John David Petrock, et ux	5.0
S9	15-1	Marcus Sharp & David Schlabach	121.0
S10	15-3	Joseph J. Kramar, et ux	36.10
S11	P 11-12	Joseph J. Kramar, et ux	43.2188
S12	11-13	Joy D. Gartman & Arlin Gatts	12.29
S13	Q 11-11.3	Herman D. & Herman J. Lantz	43.96
S14	T 11-11.1	Nellie Marie & Robert W. Spencer	5.813
S15	V 11-11.4	Brad M. & Amanda J. Blake	15.193
S16	W 11-11	Brad M. & Amanda J. Blake	5.0
S17	X 11-9	Edwin C. & Kimberly A. Miller	41.773
S18	BB 11-9.9	Leonard L. Parsons, et ux	5.89
S19	CC 11-9.6	Southern Country Farms, Inc	2.488
S20	DD 11-9.5	Southern Country Farms, Inc	2.559
S21	EE 11-9.3	Joseph M. Haught & Steven Haught	16.3
S22	11-16.2	Joseph Haught	2.181
S23	11-14.1	Dennis F. Moore, et ux	1.056
S24	OO 11-16	Keith E. Haught, et al	83.674
S25	12-11	Wesley Bryan & Wesley Bryan II	52.478
S26	11-17.2	Brenda & Michael Bryan	11.504
S27	PP 11-5.1	James R. Anderson, et ux	0.205
S28	QQ 11-5	Kevin R. Corley, et ux	10.36
S29	11-16.1	Susan Smith, LE	0.876
S30	11-25	Owen Michael Barr	0.598
S31	11-23	Owen Michael Barr	0.845
S32	11-24	Charles Edward Furbree, et ux	0.603
S33	11-5.2	Rickey & Victoria Cross	1.0
S34	11-17.1	David Gray	0.297
S35	11-22	David Gray	0.353
S36	11-18	David E. Gray	0.569
S37	11-19	David E. Gray	0.532
S38	11-20	David E. Gray	0.569
S39	11-17	Kevin R. Corley, et ux	36.13
S40	SS 11-3	Kevin R. Corley, et al	13.18
S41	UU 11-2	Walter C. Cheryl A. Rine	42.367
S42	11-2.2	Joshua A. Myers	2.193
S43	11-2.1	Walter C. & Cheryl A. Rine	1.19
S44	RR 11-5.3	Robert Harris Arrick, et ux	3.0
S45	11-1.1	Larry W. Dunlap, et al	34.405
S46	11-1.2	Jay A. Conner, et ux	5.824
S47	8-9.1	Scott E. Jackson, Tammy S. South & Marion Jackson	1.957
S48	11-1.4	Larry W. Dunlap, et al	32.493
S49	7-39	Lionel L. Persinger, et ux	57.0
S50	7-33	William N. Roupe	24.60
S51	7-31	William N. Roupe	43.147
S52	11-1	William N. & Virginia A. Roupe	4.527
S53	11-1.6	Debra Morris	2.093
S54	11-1.7	William S. & Mary K. Adams	8.0
S55	11-1.5	Paul White	3.507
S56	TT 11-4	David H. Arrick, et ux	31.5
S57	NN 11-16.3	Kegan Michael Haught - Life	3.265
S58	MM 11-6	Robert & Rebecca Arrick	1.29
S59	LL 11-7	Baptist Cemetery	1.0
S60	KK 11-8	Baptist Church	0.8
S61	JJ 11-9	Edwin C. & Kimberly A. Miller	41.773
S62	II 11-9.10	John A. & Janet L. Beucke	2.348
S63	FF 11-9.2	Michael R. Bryan	3.143
S64	HH 11-9.8	Sean F. Moore	2.070
S65	GG 11-9.7	Sean F. Moore	2.026
S66	AA 11-9.1	Jack Shepard Huggins Jr., et al	10.92
S67	Y 11-9.4	Jack S. Huggins, et al	4.129
S68	R 11-11.2	Wesley R. Bryan & Wesley R. Bryan II	25.031
S69	S 10-16.4	Melvin E. Ferguson & Elizabeth Ferguson	30.87
S70	O 10-15.1	Donald T. Miller	2.095
S71	M 16-3.2	Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander	1.435
S72	K 16-3.1	Dennis E. Jackson, et ux	0.27
S73	J 16-2	Cemetery - No Deed	
S74	I 16-2	Christian Church	0.19
S75	H 16-1	Christian Church	0.50
S76	D 16-23.1	Ray E. Minor, et ux	2.0
S77	C 16-23.4	Michael R. & Brenda K. Bryan	3.0
S78	E 16-23.3	Greg & Christina Riddle	1.0
S79	16-24	Alan M. Beyser, et ux	1.083
S80	16-23.2	Alan M. Beyser, et ux	1.726
S81	B 16-23	CNX Land Resources, Inc.	60.138

OPERATOR'S

WELL #: Bryan N-14HU  
API #: 47-051-02031  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV

WELL PLAT

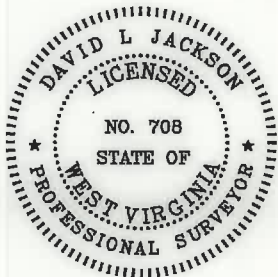
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DATE: 08/13/2020



TUG HILL  
OPERATING

BRYAN LEASE  
UTICA UNIT - 424.581 AC±  
WELL N-14HU  
TUG HILL OPERATING

Lease No.	TAGS	PARCEL	OIL & GAS ROYALTY OWNER	DEED	PAGE
10*19294	A	5-15-9	BRENDA K BRYAN ET AL	666	289
10*19294	B	5-16-23	BRENDA K BRYAN ET AL	666	289
10*19294	C	5-16-23.4	BRENDA K BRYAN ET AL	666	289
10*19146	D	5-16-23.1	RAY E MINOR CATHY L MINOR	706	293
10*19144	E	5-16-23.3	GREG A RIDDLE CHRISTINA L RIDDLE	704	364
10*19340	F	5-15-8	DONNA V YOHO	665	407
10*21468	G	5-16-25	JOHN A SWIERKOS	772	21
10*21468	H	5-16-1	JOHN A SWIERKOS	772	21
***	H	5-16-1	CHURCH AND CEMETERY		
***	I	5-16-2	CHURCH AND CEMETERY		
***	J		CEMETERY-N ADJOIN TO 5-16-2		
10*21044	K	5-16-3.1	RITA COX	951	600
10*21043	K	5-16-3.1	BRENDA HOYLE	951	598
10*19473	K	5-16-3.1	DANIEL JACOB ALLMAN	942	567
10*19340	L	5-16-3	DONNA V YOHO	665	407
10*19340	M	5-16-3.2	DONNA V YOHO	665	407
10*19017	N	5-10-15	PAUL A RINE AND DEBRA A RINE	796	24
10*19223	O	5-10-15.1	DONALD T MILLER	737	284
10*19293	P	5-11-12	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	655	566
10*19336	Q	5-11-11.3	BONNIE JEAN DAWSON	665	397
10*19336	Q	5-11-11.3	BONNIE JEAN DAWSON	665	397
10*19336	R	5-11-11.2	BONNIE JEAN DAWSON	665	397
10*19109	S	5-10-16.4	HUSBAND AND WIFE	863	275
10*19141	T	5-11-11.1	SPENCER	706	468
10*19021	U	5-10-17	MARCELLUS TX MINERAL PARTNERS LTD	800	216
10*19034	U	5-10-17	JMK IRREVOCABLE TRUST	813	145
10*19035	U	5-10-17	PURPLEBURGH VENTURES, LLC	813	138
10*19336	V	5-11-11.4	BONNIE JEAN DAWSON	665	397
10*19336	W	5-11-11	BONNIE JEAN DAWSON	665	397
10*14099	X	5-11-9	SOUTHERN COUNTRY FARMS INC	666	489
10*19153	Y	5-11-9.4	JACK S HUGGINS JR	700	396
10*19021	Z	5-11-10	MARCELLUS TX MINERAL PARTNERS LTD	800	216
10*19034	Z	5-11-10	JMK IRREVOCABLE TRUST	813	145
10*19035	Z	5-11-10	PURPLEBURGH VENTURES, LLC	813	138
10*19153	AA	5-11-9.1	JACK S HUGGINS JR	700	396
10*19158	BB	5-11-9.9	LEONARD PARSONS CONNIE R PARSONS	705	125
10*14099	CC	5-11-9.6	SOUTHERN COUNTRY FARMS INC	666	489
10*14099	DD	5-11-9.5	SOUTHERN COUNTRY FARMS INC	666	489
10*18339	EE	5-11-9.3	RESOURCE MINERALS HEADWATER I, LP	940	448
10*18339	FF	5-11-9.2	RESOURCE MINERALS HEADWATER I, LP	940	448
10*14099	GG	5-11-9.7	SOUTHERN COUNTRY FARMS INC	666	489
10*19172	GG	5-11-9.7	SEAN F MOORE UNDA MOORE	706	581
10*19172	HH	5-11-9.8	SEAN F MOORE UNDA MOORE	706	581
10*18339	II	5-11-9.10	RESOURCE MINERALS HEADWATER I, LP	940	448
10*14099	JJ	5-11-9	SOUTHERN COUNTRY FARMS INC	666	489
***	KK	5-11-8	CHURCH		
10*19502	LL	5-11-7	SUSAN BLANCHE BEYSER	942	623
10*19893	LL	5-11-7	WINIFRED G AND EDDIE G TURNER	948	277
10*21041	LL	5-11-7	SHERY AND RANDEN RITCHEA	949	365
10*19221	MM	5-11-6	ROBERT H ARRICK REBECCA L ARRICK	737	240
10*19502	MM	5-11-6	SUSAN BLANCHE BEYSER	942	623
10*19893	MM	5-11-6	WINIFRED G AND EDDIE G TURNER	948	277
10*21041	MM	5-11-6	SHERY AND RANDEN RITCHEA	949	365
10*19139	NN	5-11-16.3	HIRAM V MOORE	699	53
10*19179	NN	5-11-16.3	KEITH HAUGHT BEVERLY HAUGHT	710	587
10*19139	OO	5-11-16	HIRAM V MOORE	699	53
10*19178	OO	5-11-16	JOSEPH HAUGHT	710	69
10*19179	OO	5-11-16	KEITH HAUGHT BEVERLY HAUGHT	710	587
10*19180	OO	5-11-16	STEVEN HAUGHT	710	67
	PP	5-11-5.1	JAMES R AND MELODY A ANDERSON	812	31
			KEVIN R. CORLEY AND ANITA L. CORLEY, HUSBAND AND WIFE	859	47
10*19126	QQ	5-11-5	MAUNA MAXINE BEYSER	710	602
10*19176	QQ	5-11-5	NINA L KOVACS	710	594
10*19185	QQ	5-11-5	HARRIETT LODUTH FOLEY	710	598
10*19186	QQ	5-11-5	JOEL GLOVER	710	600
10*19189	QQ	5-11-5	SHERRY ANN MCPHERON	710	606
10*19190	QQ	5-11-5	SALLY LEE RIVERA	710	590
10*19191	QQ	5-11-5	SHARLA BETH WEAVER	710	608
10*19192	QQ	5-11-5	JAMES E YOHO	714	129
10*19201	QQ	5-11-5	DANIEL K YOHO	714	125
10*19202	QQ	5-11-5	DEBORAH L WOOLEY	714	131
10*19203	QQ	5-11-5	CAROL M YOHO	713	205
10*19204	QQ	5-11-5	DAYNA MARLENE YOHO	714	127
10*19205	QQ	5-11-5	JEFFREY C YOHO	713	203
10*19251	QQ	5-11-5	RAE SUZETTE BAKER	748	315
10*19252	QQ	5-11-5	JOHN WILSON	749	522
10*19502	QQ	5-11-5	SUSAN BLANCHE BEYSER	942	623
10*19893	QQ	5-11-5	WINIFRED G AND EDDIE G TURNER	948	277
10*21041	QQ	5-11-5	SHERY AND RANDEN RITCHEA	949	365
10*19176	RR	5-11-5.3	MAUNA MAXINE BEYSER	710	602
10*19177	RR	5-11-5.3	NINA L KOVACS	710	594
10*19185	RR	5-11-5.3	HARRIETT LODUTH FOLEY	710	598
10*19186	RR	5-11-5.3	JOEL GLOVER	710	600
10*19189	RR	5-11-5.3	SHERRY ANN MCPHERON	710	606
10*19190	RR	5-11-5.3	SALLY LEE RIVERA	710	590
10*19191	RR	5-11-5.3	SHARLA BETH WEAVER	710	608
10*19192	RR	5-11-5.3	JAMES E YOHO	714	129
10*19201	RR	5-11-5.3	DANIEL K YOHO	714	125
10*19202	RR	5-11-5.3	DEBORAH L WOOLEY	714	131
10*19203	RR	5-11-5.3	CAROL M YOHO	713	205
10*19204	RR	5-11-5.3	DAYNA MARLENE YOHO	714	127
10*19205	RR	5-11-5.3	JEFFREY C YOHO	713	203
10*19221	RR	5-11-5.3	ROBERT H ARRICK REBECCA L ARRICK	737	240
10*19251	RR	5-11-5.3	RAE SUZETTE BAKER	748	315
10*19252	RR	5-11-5.3	JOHN WILSON	749	522
10*19502	RR	5-11-5.3	SUSAN BLANCHE BEYSER	942	623
10*19893	RR	5-11-5.3	WINIFRED G AND EDDIE G TURNER	948	277
10*21041	RR	5-11-5.3	SHERY AND RANDEN RITCHEA	949	365
			HIRAMS ESTATE FAMILY LIMITED LIABILITY LIMITED PARTNERSHIP	938	523
10*19126	SS	5-11-3	KEVIN R. CORLEY AND ANITA L. CORLEY, HUSBAND AND WIFE	859	47
10*19098	TT	5-11-4	DAVID H ARRICK LELAH M ARRICK	800	505
10*19127	UU	5-11-2	WALTER C. RINE AND CHERYL ANN RINE	859	49
10*47051.105.0	VV	5-8-9	JAMES B JACKSON JR AND MARION L JACKSON	859	478



P.S.  
708

David L Jackson



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OPERATOR'S

WELL #: Bryan N-14HU

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