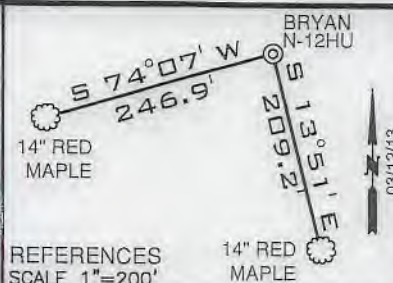
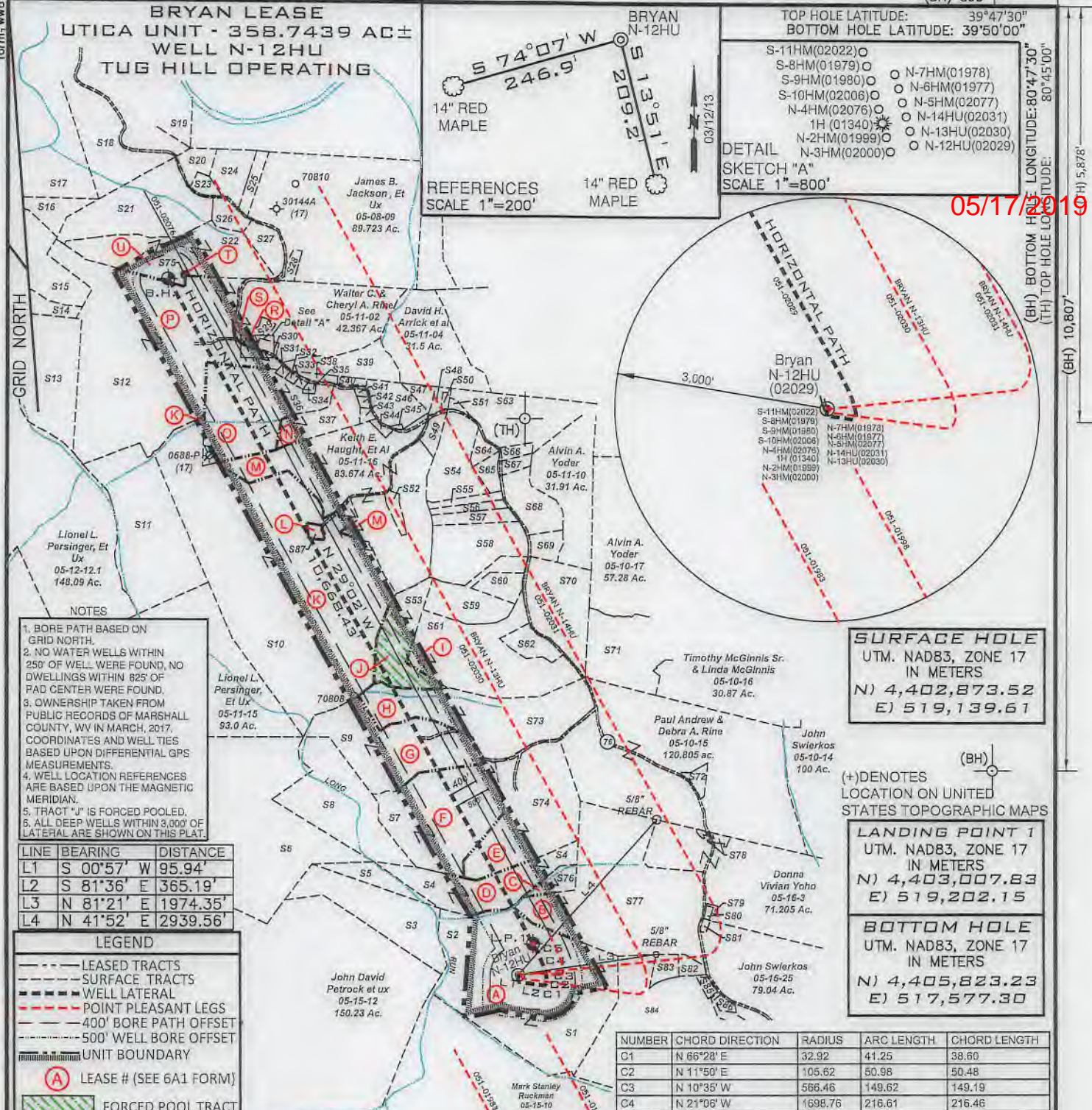


BRYAN LEASE  
UTICA UNIT - 358.7439 AC ±  
WELL N-12HU  
TUG HILL OPERATING



TOP HOLE LATITUDE: 39°47'30"  
BOTTOM HOLE LATITUDE: 39°50'00"  
S-11HM(02022) O  
S-8HM(01979) O  
S-9HM(01980) O  
S-10HM(02006) O  
N-4HM(02076) O  
1H (01340) O  
N-2HM(01999) O  
N-3HM(02000) O  
N-7HM(01978) O  
N-6HM(01977) O  
N-5HM(02077) O  
N-14HU(02031) O  
N-13HU(02030) O  
N-12HU(02029) O  
DETAIL  
SKETCH "A"  
SCALE 1"=800'

05/17/2019



- NOTES
- 1. BORE PATH BASED ON GRID NORTH.
  - 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 825' OF PAD CENTER WERE FOUND.
  - 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
  - 4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
  - 5. TRACT "J" IS FORCED POOLED.
  - 6. ALL DEEP WELLS WITHIN 3,000' OF LATERAL ARE SHOWN ON THIS PLAT.

LINE	BEARING	DISTANCE
L1	S 00°57' W	95.94'
L2	S 81°36' E	365.19'
L3	N 81°21' E	1974.35'
L4	N 41°52' E	2939.56'

LEGEND

- LEASED TRACTS
- SURFACE TRACTS
- WELL LATERAL
- POINT PLEASANT LEGS
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)
- FORCED POOL TRACT

SURFACE HOLE  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,402,873.52  
E) 519,139.61

LANDING POINT 1  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,403,007.83  
E) 519,202.15

BOTTOM HOLE  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,405,823.23  
E) 517,577.30

NUMBER	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
C1	N 66°28' E	32.92	41.25	38.60
C2	N 11°50' E	105.62	50.98	50.48
C3	N 10°35' W	566.46	149.62	149.19
C4	N 21°06' W	1698.76	216.61	216.46
C5	N 26°48' W	2448.96	194.08	194.03

FILE NUMBER \_\_\_\_\_  
DRAWING NUMBER BRYAN\_N-12HU\_REV 3  
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*  
JACKSON SURVEYING INC.  
P.O. Box 1460  
Clarksburg, WV 26302  
304-623-5851



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

DATE: DECEMBER 22, 2017  
REVISED DATE: SEPTEMBER 11, 2018  
OPERATORS WELL NO. BRYAN N-12HU  
API WELL NO. 47-051-02029 MOD  
STATE WV COUNTY MARSHALL PERMIT 47-051-02029 MOD

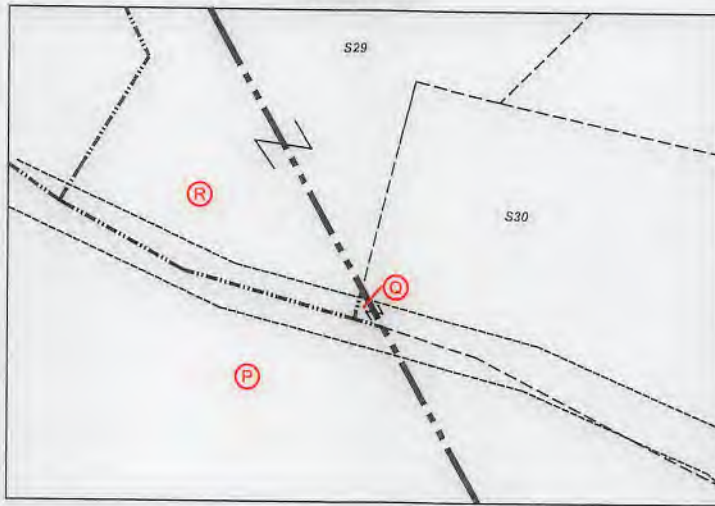
WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
LOCATION ELEVATION 1191.0' WATERSHED (HUC 10) Fish Creek  
DISTRICT Franklin COUNTY Marshall  
QUADRANGLE Powhatan Point 7.5' LEASE NUMBER SEE WW-6A1 ROYALTY OWNERS  
SURFACE OWNER CNX LAND RESOURCES, INC. ACREAGE 81.98  
OIL & GAS ROYALTY OWNER MICHAEL R. BRYAN - SEE WW-6A1 ROYALTY OWNERS LEASE ACREAGE 81.98  
PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_  
PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE (SPECIFY) \_\_\_  
TARGET FORMATION Point Pleasant ESTIMATED DEPTH TVD: 11,393' TMD: 22,268'  
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



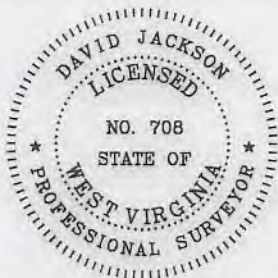
PG 2 OF 3  
**BRYAN LEASE**  
**UTICA UNIT - 358.7439 AC±**  
**WELL N-12HU**  
**TUG HILL OPERATING**

Detail "A"



05/17/2019

Number	TAX MAP -PARCEL	SURFACE OWNER	ACRES	Number	TAX MAP -PARCEL	SURFACE OWNER	ACRES
S1	05-15-9	CNX Land Resources	81.98	S45	05-11-5.1	James R. Anderson et ux	0.205
S2	05-15-13	CNX Land Resources	11.0	S46	05-11-5	(Part of S30) Kevin R. Corley et ux	10.36
S3	05-15-14	John David Petrock et ux	25.0	S47	05-11-5.3	Robert Harris Arrick et ux	3.0
S4	05-15-6.1	Joseph J. Kramar, et ux	39.40	S48	05-11-6	Robert & Rebecca Arrick	1.29
S5	05-15-2	John David Petrock et ux	5.0	S49	05-11-16.3	Kegan Michael Haught - Life	3.265
S6	05-15-1	Marcus Sharp & David Schlabach	121.0	S50	05-11-7	Baptist Cemetery	1.0
S7	05-15-5	Joseph J. Kramar, et ux	35.0	S51	05-11-8	Baptist Church	0.8
S8	05-15-3	Joseph J. Kramar et ux	36.10	S52	05-11-16.2	Joseph Haught	2.181
S9	05-15-4	Joseph J. Kramar, et ux	41.106	S53	05-11-13	Joy D. Gartman & Arlin Gatts	12.29
S10	05-11-14	Hiram's Est. Family LTD LLP	158.054	S54	05-11-9.3	Joseph M. Haught & Steven Haught	16.3
S11	05-12-11	Wesley Bryan & Wesley Bryan II	52.478	S55	05-11-9.5	Southern Country Farms, Inc	2.559
S12	05-11-21	Omar Rine, Est.	112.67	S56	05-11-9.6	Southern Country Farms, Inc	2.488
S13	05-12-12	Lionel L. Persinger et ux	45.0	S57	05-11-9.9	Leonard L. Parsons, et ux	5.89
S14	05-12-10	Murray Energy	13.76	S58	05-11-9	Edwin C. & Kimberly A. Miller	41.773
S15	05-12-10.1	Murray Energy	38.48	S59	05-11-11.4	Brad M. & Amanda J. Blake	15.193
S16	05-12-9	Lionel & Mary Lee Persinger	10.15	S60	05-11-11	Brad M. & Amanda J. Blake	5.0
S17	05-7-39	Lionel L. Persinger et ux	57.0	S61	05-11-11.3	Herman D. Lantz & Herman J. Lantz	43.96
S18	05-7-33	William N. Roupe	24.60	S62	05-11-11.1	Nellie Marie & Robert W. Spencer	5.813
S19	05-7-31	William N. Roupe	43.147	S63	05-11-9	(Part of S49) Edwin C. & Kimberly A. Miller	41.773
S20	05-11-1	William N. & Virginia A. Roupe	4.527	S64	05-11-9.10	John A. & Janet L. Beucke	2.348
S21	05-11-1.4	Larry W. Dunlap, et al	32.498	S65	05-11-9.2	Michael R. Bryan	3.143
S22	05-11-1.1	Larry W. Dunlap, et al	34.405	S66	05-11-9.8	Sean F. Moore	2.070
S23	05-11-1.6	Debra Morris	2.093	S67	05-11-9.7	Sean F. Moore	2.026
S24	05-11-1.7	William S. & Mary K. Adams	8.0	S68	05-11-9.1	Jack Shephard Huggins Jr., et al	10.92
S25	05-11-1.5	Paul & Sandy Whitt	3.507	S69	05-11-9.4	Jack S. Huggins et al	4.129
S26	05-11-1.3	Jay A. Conner, et ux	4.256	S70	05-11-11.2	Wesley R. Bryan & Wesley R. Bryan II	25.031
S27	05-11-1.2	Jay A. Conner, et ux	5.824	S71	05-10-16.4	Elizabeth & Melvin E. Ferguson Jr.	30.87
S28	05-8-9.1	Scott E. Jackson, Tammy S. South & Marion Jackson	1.957	S72	05-10-15.1	Donald T. Miller	2.095
S29	05-11-2.1	Walter C. & Cheryl A. Rine	1.19	S73	05-11-12	Joseph J. Kramar, et ux	43.2188
S30	05-11-2.2	Joshua A. Myers	2.193	S74	05-15-6	Joseph J. Kramar, et ux	42.5
S31	05-11-20	David E. Gray	0.569	S75	WITHIN 05-11-1.1	Cemetery	
S32	05-11-19	David E. Gray	0.532	S76	05-15-7	Terry D. Rose, et ux	4.5
S33	05-11-18	David E. Gray	0.569	S77	05-15-8	Terry D. Rose, et ux	77.11
S34	05-11-22	David E. Gray	0.353	S78	05-16-3.2	Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander, & Brody Ray Ostrander	1.435
S35	05-11-17.1	David Gray	0.297	S79	05-16-3.1	Dennis E. Jackson, et ux	0.27
S36	05-11-17	Kevin R. Corley, et ux	36.13	S80	05-16-2	Christian Church	0.19
S37	05-11-17.2	Brenda & Michael Bryan	11.504	S81	05-16-1	Christian Church	0.50
S38	05-11-5	Kevin R. Corley et ux	10.36	S82	05-16-23.1	Ray E. Minor, et ux	2.0
S39	05-11-3	Kevin R. Corley et ux	13.18	S83	05-16-23.4	Michael R. & Brenda K. Bryan	3.0
S40	05-11-5.2	Ricky Lynn & Victoria Rose Cross	1.0	S84	05-16-23	CNX Land Resources, Inc.	60.138
S41	05-11-24	Charles Edward Furbee et ux	0.603	S85	05-16-23.3	Greg & Christina Riddle	1.0
S42	05-11-23	Owen Michael Barr	0.845	S86	05-16-24	Alan M. Beyser, et ux	1.083
S43	05-11-25	Owen Michael Barr	0.598	S87	05-11-14.1	Dennis F. Moore, et ux	1.056
S44	05-11-16.1	Susan Marie Smith - Life	0.876				



47-051-02029 MOD

P.S. 708 *David L Jackson*



**TUG HILL**  
**OPERATING**

OPERATOR'S  
 WELL #: Bryan N-12HU  
 DISTRICT: Franklin  
 COUNTY: Marshall  
 STATE: WV

WELL PLAT  
 PAGE 2 OF 3  
 DATE: 12/22/2017  
 REVISED DATE:  
09/11/2018



PG 3 OF 3  
**BRYAN LEASE**  
**UTICA UNIT - 358.7439 AC±**  
**WELL N-12HU**  
**TUG HILL OPERATING**

05/17/2019

LEASE NO.	TAGS	PARCEL	OIL & GAS ROYALTY OWNER	DEED BOOK	PAGE
10*19294	A	5-15-9	BRENDA K BRYAN ET AL	666	289
10*19340	B	5-15-8	DONNA V YOHO	665	407
10*19340	C	5-15-7	DONNA VIVIAN YOHO	665	407
10*19293	D	5-15-6.1	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	655	566
10*19295	D	5-15-6.1	KEVIN J. KELLY PAMELA MARXEN-KELLY	858	381
10*19296	D	5-15-6.1	MARISSA C MARXEN	837	120
10*19297	D	5-15-6.1	PHILIP LEONARD MARXEN	839	410
10*19298	D	5-15-6.1	BETTY J MARXEN SLEZAK	822	351
10*19299	D	5-15-6.1	ANNETTE CONWAY MARXEN	817	512
10*19300	D	5-15-6.1	DEBORAH F HAGEMAN HUPPERT	815	145
10*19301	D	5-15-6.1	SANDRA HAGEMAN KANGAS	815	150
10*19302	D	5-15-6.1	JEFFREY C MARXEN SAMANTHA L MARXEN	817	506
10*19303	D	5-15-6.1	THOMAS O MARXEN	814	589
10*19304	D	5-15-6.1	DEAN L RINE, JR. PAMELA F. RINE	813	635
10*19305	D	5-15-6.1	KAREN MARXEN SONDRDL	813	605
10*19306	D	5-15-6.1	RICHARD L. TATE MARCELINE RINE TATE	814	594
10*19307	D	5-15-6.1	MARY SUE RINE-WALTER	815	155
10*19308	D	5-15-6.1	WILLIAM WEBER	817	646
10*19293	E	5-15-6	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	655	566
10*19295	E	5-15-6	KEVIN J. KELLY PAMELA MARXEN-KELLY	858	381
10*19296	E	5-15-6	MARISSA C MARXEN	837	120
10*19297	E	5-15-6	PHILIP LEONARD MARXEN	839	410
10*19298	E	5-15-6	BETTY J MARXEN SLEZAK	822	351
10*19299	E	5-15-6	ANNETTE CONWAY MARXEN	817	512
10*19300	E	5-15-6	DEBORAH F HAGEMAN HUPPERT	815	145
10*19301	E	5-15-6	SANDRA HAGEMAN KANGAS	815	150
10*19302	E	5-15-6	JEFFREY C MARXEN SAMANTHA L MARXEN	817	506
10*19303	E	5-15-6	THOMAS O MARXEN	814	589
10*19304	E	5-15-6	DEAN L RINE, JR. PAMELA F. RINE	813	635
10*19305	E	5-15-6	KAREN MARXEN SONDRDL	813	605
10*19306	E	5-15-6	RICHARD L. TATE MARCELINE RINE TATE	814	594
10*19307	E	5-15-6	MARY SUE RINE-WALTER	815	155
10*19308	E	5-15-6	WILLIAM WEBER	817	646
10*19293	F	5-15-5	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	655	566
10*19293	G	5-15-4	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	655	566
10*19293	H	5-11-12	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	655	566
10*19336	I	5-11-11.3	BONNIE JEAN DAWSON	665	397
10*19336	J	5-11-11.3	BONNIE JEAN DAWSON	665	397
10*18972	J	5-11-13	MARGARET CLICKNER	941	281
10*19224	J	5-11-13	AMYSUE G BAHL	731	166
10*19225	J	5-11-13	LOIS BURNS	731	174
10*19226	J	5-11-13	THOMAS RAY GATTS	731	162
10*19227	J	5-11-13	CONNIE KRESS KNAPP	734	451
10*19228	J	5-11-13	CAROLE J LAMBERT	737	225
10*19229	J	5-11-13	PATRICIA A LAMBERT	731	158
10*19230	J	5-11-13	MARIANN VIRGINIA MUNN	731	160
10*19231	J	5-11-13	DALE F RADCLIFF	734	462
10*19232	J	5-11-13	SANDRA J STOWE HARMON	731	149
10*19233	J	5-11-13	SHERLEY RAY STOWE	731	170
10*19234	J	5-11-13	STANLEY EUGENE STOWE	732	631
10*19235	J	5-11-13	ROSE EDGE	731	164
10*19244	J	5-11-13	JERRY L BLOOD	736	177
10*19247	J	5-11-13	JUANITA MCVEY	745	580
10*21009	J	5-11-13	JOY DENEAN GARTMAN	951	595
10*21042	J	5-11-13	REBECCA ASPERY	952	428
10*21046	J	5-11-13	KELLY R DUNN	951	591
10*21047	J	5-11-13	RACHEL D DONAHUE	951	589
10*21048	J	5-11-13	MICHAEL P OLSON	951	593
10*21253	J	5-11-13	MARY ANN STURGILL	952	430
***	J	5-11-13	WILLIAM J OLSON		
***	J	5-11-13	EVA PATTERSON		

LEASE NO.	TAGS	PARCEL	OIL & GAS ROYALTY OWNER	DEED BOOK	PAGE
10*19139	K	5-11-14	HIRAM V MOORE	699	53
10*19243	L	5-11-14.1	DENNIS F AND JOLENE A MOORE	736	1
10*19139	M	5-11-16	HIRAM V MOORE	699	53
10*19178	M	5-11-16	JOSEPH HAUGHT	710	69
10*19179	M	5-11-16	KEITH HAUGHT BEVERLY HAUGHT	710	587
10*19180	M	5-11-16	STEVEN HAUGHT	710	67
10*19176	N	5-11-17.2	MAUNA MAXINE BEYSER	710	602
10*19177	N	5-11-17.2	NINA L KOVACS	710	594
10*19185	N	5-11-17.2	HARRIETT LODUTH FOLEY	710	598
10*19186	N	5-11-17.2	JOEL GLOVER	710	600
10*19189	N	5-11-17.2	SHELLY ANN MCPHERON	710	606
10*19190	N	5-11-17.2	SALLY LEE RIVERA	710	590
10*19191	N	5-11-17.2	SHARLA BETH WEAVER	710	608
10*19192	N	5-11-17.2	JAMES E YOHO	714	129
10*19201	N	5-11-17.2	DANIEL K YOHO	714	125
10*19202	N	5-11-17.2	DEBORAH L WOOLEY	714	131
10*19203	N	5-11-17.2	CAROL M YOHO	713	205
10*19204	N	5-11-17.2	DAYNA MARLENE YOHO	714	127
10*19205	N	5-11-17.2	JEFFREY C YOHO	713	203
10*19251	N	5-11-17.2	RAE SUZETTE BAKER	748	315
10*19252	N	5-11-17.2	JOHN WILSON	749	522
10*19502	N	5-11-17.2	SUSAN BLANCHE BEYSER	942	623
10*19893	N	5-11-17.2	WINIFRED G AND EDDIE G TURNER	948	277
10*21041	N	5-11-17.2	SHERY AND RANDEN RITCHEA	949	365
10*19126	O	5-11-17	KEVIN R. CORLEY AND ANITA L. CORLEY	859	47
10*19176	O	5-11-17	MAUNA MAXINE BEYSER	710	602
10*19177	O	5-11-17	NINA L KOVACS	710	594
10*19185	O	5-11-17	HARRIETT LODUTH FOLEY	710	598
10*19186	O	5-11-17	JOEL GLOVER	710	600
10*19189	O	5-11-17	SHELLY ANN MCPHERON	710	606
10*19190	O	5-11-17	SALLY LEE RIVERA	710	590
10*19191	O	5-11-17	SHARLA BETH WEAVER	710	608
10*19192	O	5-11-17	JAMES E YOHO	714	129
10*19201	O	5-11-17	DANIEL K YOHO	714	125
10*19202	O	5-11-17	DEBORAH L WOOLEY	714	131
10*19203	O	5-11-17	CAROL M YOHO	713	205
10*19204	O	5-11-17	DAYNA MARLENE YOHO	714	127
10*19205	O	5-11-17	JEFFREY C YOHO	713	203
10*19251	O	5-11-17	RAE SUZETTE BAKER	748	315
10*19252	O	5-11-17	JOHN WILSON	749	522
10*19502	O	5-11-17	SUSAN BLANCHE BEYSER	942	623
10*19893	O	5-11-17	WINIFRED G AND EDDIE G TURNER	948	277
10*21041	O	5-11-17	SHERY AND RANDEN RITCHEA	949	365
Q088586011	P	5-11-21	KAREN SUE CLYDE REED	864	190
Q088586003	P	5-11-21	GENIE SUE THOMAS AND JOHN I. HOLMES	848	204
Q088586010	P	5-11-21	BRENDA FAYE AMD THOMAS PETRACK	850	161
Q088586002	P	5-11-21	GAIL ANN YATES AND WESLEY J WOOD	848	208
Q088586005	P	5-11-21	SHIRLEY YATES AND FREDDIE LEE HARTSELL	848	212
Q088586004	P	5-11-21	BOYD DAIL JR AND MARLA YATES	848	210
Q088586001	P	5-11-21	GUY YATES	848	206
Q088586007	P	5-11-21	REBEKAH DRAYER AND CHRISTOPHER ELDRIDGE	850	157
Q088586008	P	5-11-21	BOYD BUESKING	850	159
Q088586009	P	5-11-21	CHRISTA DRAYER AND JOSHUA STALEY	851	3
10*19127	Q	5-11-2.2	WALTER C. RINE AND CHERYL ANN RINE	859	49
10*19127	R	5-11-2.1	WALTER C. RINE AND CHERYL ANN RINE	859	49
10*19164	R	5-11-2.1	KATHERINE A STALNAKER	839	486
10*19169	R	5-11-2.1	DANIEL L RINE	839	260
10*19127	S	5-11-2	WALTER C. RINE AND CHERYL ANN RINE	859	49
10*47051.089.0	T	CEMETERY IN 5-11-1.1	LARRY W DUNLAP AND BARBARA E DUNLAP	864	148
10*47051.089.0	U	5-11-1.1	LARRY W DUNLAP AND BARBARA E DUNLAP	864	148

\*\*\* Force pool interest

47-051-02029MOD



P.S. 708 *David L Jackson*



**TUG HILL**  
**OPERATING**

OPERATOR'S  
 WELL #: Bryan N-12HU  
 DISTRICT: Franklin  
 COUNTY: Marshall  
 STATE: WV

WELL PLAT  
 PAGE 3 OF 3  
 DATE: 12/22/2017  
 REVISED DATE:  
09/11/2018