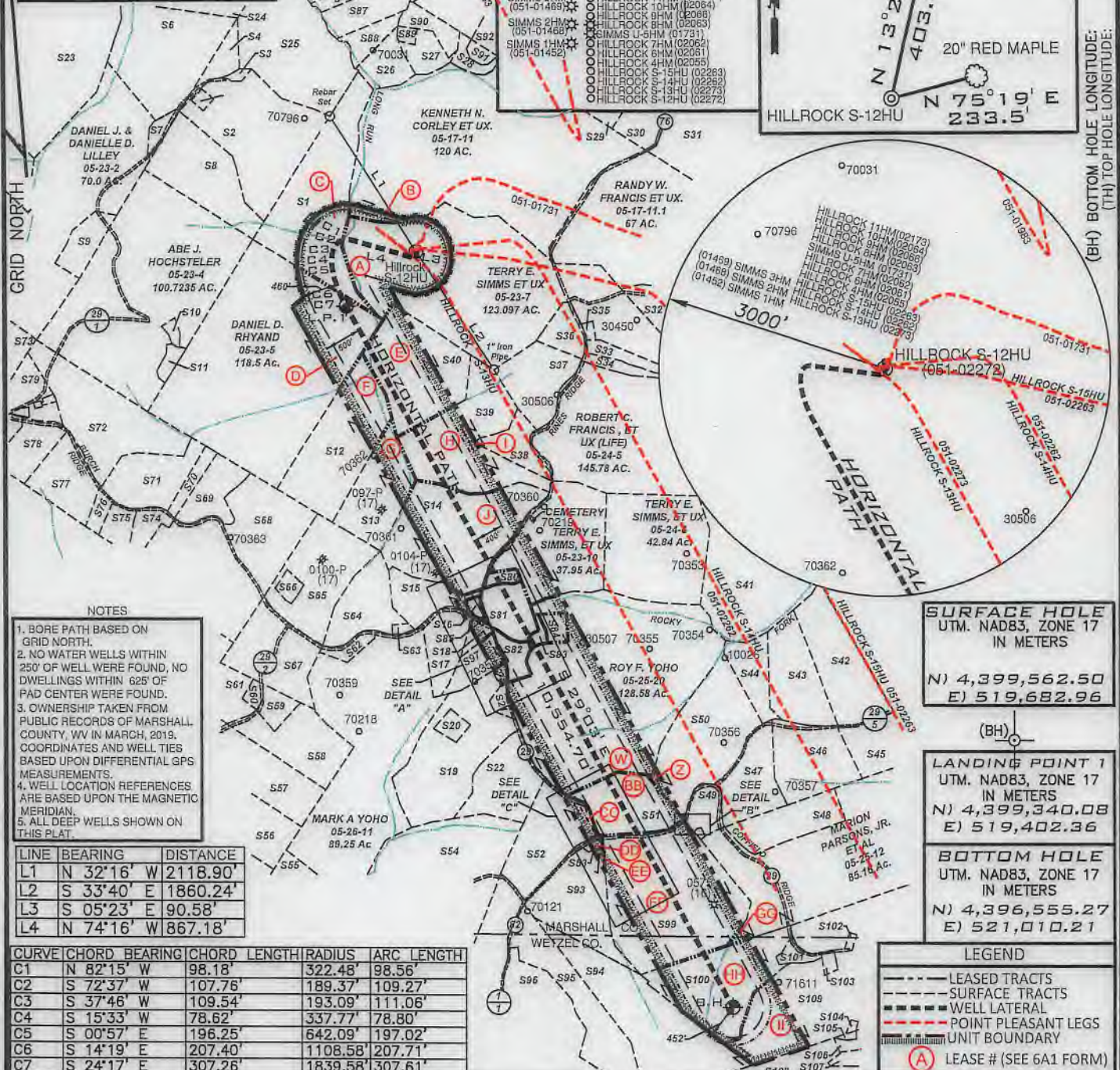
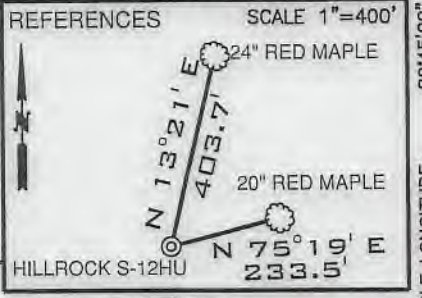
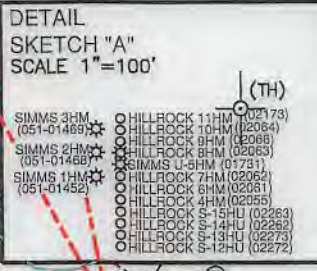


form ww6

HILLROCK LEASE
WELL S-12HU (+) DENOTES LOCATION ON
371.8352± ACRES UNITED STATES
TOPOGRAPHIC MAPS

--- 400' BORE PATH OFFSET
- - - 500' WELL BORE OFFSET



- NOTES**
- BORE PATH BASED ON GRID NORTH.
 - NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 - OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2019. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 - WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
 - ALL DEEP WELLS SHOWN ON THIS PLAT.

LINE	BEARING	DISTANCE
L1	N 32°16' W	2118.90'
L2	S 33°40' E	1860.24'
L3	S 05°23' E	90.58'
L4	N 74°16' W	867.18'

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 82°15' W	98.18'	322.48'	98.56'
C2	S 72°37' W	107.76'	189.37'	109.27'
C3	S 37°46' W	109.54'	193.09'	111.06'
C4	S 15°33' W	78.62'	337.77'	78.80'
C5	S 00°57' E	196.25'	642.09'	197.02'
C6	S 14°19' E	207.40'	1108.58'	207.71'
C7	S 24°17' E	307.26'	1839.58'	307.61'

SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,399,562.50
E) 519,682.96

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,399,340.08
E) 519,402.36

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,396,555.27
E) 521,010.21

LEGEND

- LEASE TRACTS
- - - SURFACE TRACTS
- - - WELL LATERAL
- - - POINT PLEASANT LEGS
- - - UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)

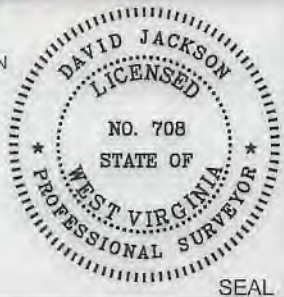
FILE NUMBER _____
DRAWING NUMBER: **HILLROCK S-12HU_REV 2**
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: **SUBMETER MAPPING**
GRADE GPS

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



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

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION STORAGE ___ DEEP SHALLOW ___

LOCATION ELEVATION 1219.5' WATERSHED (HUC 10) FISH CREEK
DISTRICT FRANKLIN COUNTY MARSHALL
QUADRANGLE NEW MARTINSVILLE 7.5' LEASE NUMBER SEE WW-6A1 Form

SURFACE OWNER TERRY E. & DEBORAH SIMMS ACREAGE 123.09
OIL & GAS ROYALTY OWNER TERRY E. & DEBORAH L. SIMMS, ET AL LEASE ACREAGE 123.09
PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION ___
PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) _____
PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,532' TMD: 22,620'
WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 ADDRESS CHARLESTON, WV 25313

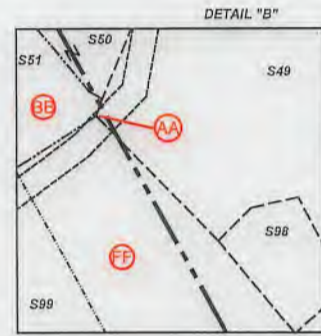
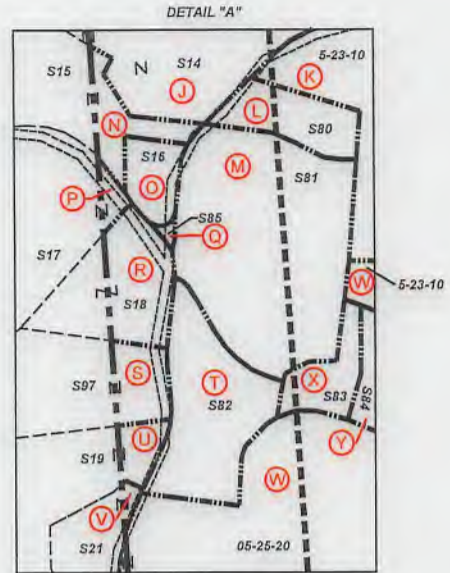
COUNTY NAME
PERMIT

DATE: SEPTEMBER 13, 2019
REVISED: NOVEMBER 18, 2019
OPERATORS WELL NO. HILLROCK S-12HU
API WELL NO. 47-051-02272
STATE WV COUNTY MARSHALL PERMIT 116A

form ww6

**HILLROCK LEASE
WELL S-12HU
371.8352± ACRES**

Number	TAX MAP-PARCEL	SURFACE OWNER	ACRES
S1	C 05-23-06	James A. Channing, et al	48.0
S2	05-18-21	Curtis E. & Michelle J. Hall	43.119
S3	05-18-21.3	XCL Midstream Operation, LLC	0.811
S4	05-18-21.1	Rodney & Rhonda Jackson	5.47
S5	05-18-21.2	David P. Lassan, Sr. (Life), David P. Lassan II & Julius L. Lassan	1.0
S6	05-18-22	Rodney & Rhonda Jackson	30.345
S7	05-23-2.1	William L. & Janice M. Wayne	2.364
S8	05-23-03	Abe J. Hochstetler	50.0
S9	05-23-2.2	Jessica N. & Andrew L. Jones	7.636
S10	05-23-4.2	XCL Midstream Operation, LLC	1.169
S11	05-23-4.1	XCL Midstream Operation, LLC	2.1575
S12	F 05-23-08	Carl David & Suzanne L. Guseman	29.5
S13	G 05-23-9.3	Linda D. Greathouse	17.5
S14	J 05-23-11.1	John H. & Sonya D. Holliday	46.482
S15	N 05-23-11.4	Evelyn L. Hudson	10.879
S16	O 05-23-11.2	Evelyn Hudson	1.154
S17	P 05-23-11.3	Colin R. Yoho	11.29
S18	R 05-23-11.5	Roy F. Yoho	2.25
S19	U 05-25-18	Joseph Johnson, et ux (Life)	37.746
S20	05-25-18.1	Pamela Joan Ferrell, et vir	2.491
S21	V 05-25-19	Joseph Johnson, et ux (Life)	1.973
S22	05-25-17	Craig R. & Ashley Ferrell	22.790
S23	05-18-24	Duane Brunn	102.0
S24	05-18-23	XCL Midstream Operation, LLC	110.0
S25	05-18-20	Wayne E. Channing, et al	75.60
S26	05-18-31	Kenneth E. Rastall	6.94
S27	05-18-32	Kenneth E. Rastall	5.335
S28	05-17-12	James A. & Jill C. Corley	3.33
S29	05-17-10	James A. Corley, et al	92.61
S30	05-17-9.3	James A. Corley, et ux	12.478
S31	05-17-9.4	Vicki L. Bowen	60.3
S32	05-24-01	Linda L. Hendrickson	175.0
S33	05-24-5.1	James D. Watkins, et ux	4.60
S34	05-24-5.2	James D. Watkins, et ux	3.151
S35	05-23-7.1	Lisa Ann Nelson	0.549
S36	05-23-7.2	Lisa Ann Nelson	6.354
S37	05-24-5.5	Linda Lou Tagg	17.194
S38	I 05-24-5.3	Thomas V. Tuttle, et ux	8.543
S39	H 05-24-5.4	Thomas V. Tuttle, et ux	38.224
S40	E 05-23-8.1	William & Virginia Roupe	34.0
S41	05-24-04	Terry E. Simms, et ux	84.05
S42	05-25-1.3	Michael E. & Annie A. Chapman	26.20
S43	05-25-1.2	William Jr. & Andrea J. Dubiel	20.10
S44	05-25-1.1	Ryan A. & Jacqueline E. Layman	9.79
S45	05-25-13.3	William M. Sr. & Cynthia A. Ferda	17.21
S46	05-25-1.5	Ryan J. Bratton	21.35
S47	05-25-13	William M. Ferda, Jr. & Stephanie L. Palicka	16.014
S48	05-25-12.1	Kent & Betty Mason	15.0
S49	AA 05-25-13.2	David A. Klug	5.89
S50	Z 05-25-01	Michael L. Mason	35.43
S51	BB 05-25-14	Roy F. Yoho	23.0
S52	CC 05-25-16	Craig R. & Ashley Ferrell	25.0
S53	DD 05-25-16.2	Rodney J. Loy	1.087
S54	05-26-12	Marjorie Ann Stoneking (Life)	153.969
S55	05-26-13	Marjorie Ann Stoneking (Life)	40.0
S56	05-26-10	Theresa H. Walton, as Trustee of Robert D. & Bonnie L. Oliver Family Trust	24.94
S57	05-26-09	Theresa H. Walton, as Trustee of Robert D. & Bonnie L. Oliver Family Trust	21.75



P.S.
708

David L Jackson

47-051-02772 H6A



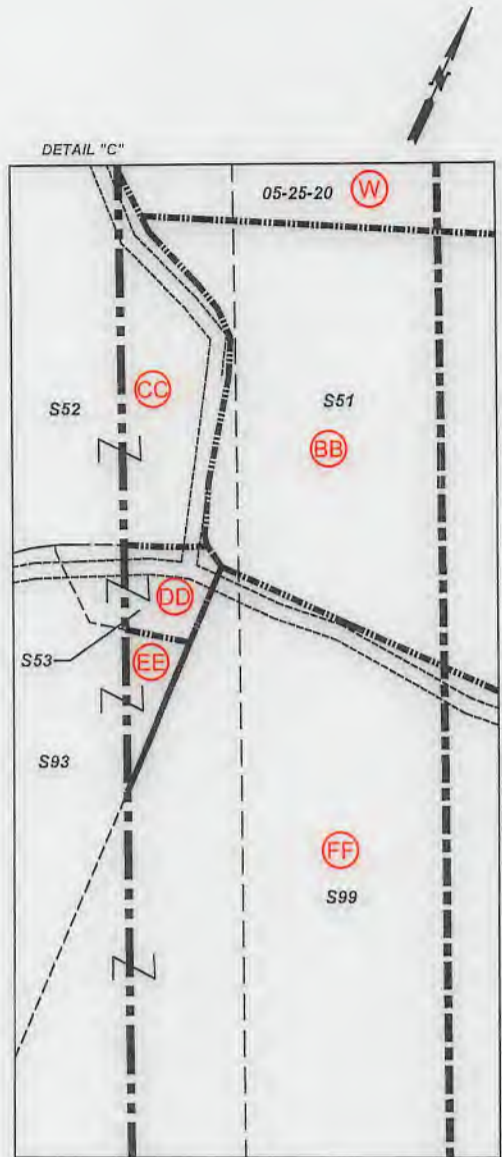
**TUG HILL
OPERATING**

OPERATOR'S
WELL #: HILLROCK S-12HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API#: 047-051-02272

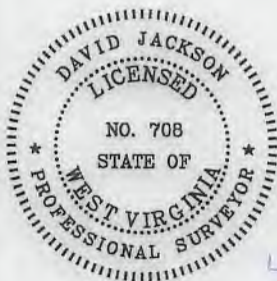
WELL PLAT
PAGE 2 OF 3
DATE: 09/13/2019
REVISED 11/18/2019

**HILLROCK LEASE
WELL S-12HU
371.8352± ACRES**

Number	TAX MAP-PARCEL	SURFACE OWNER	ACRES
S58	05-26-08	Richard Joseph Otte, et ux	18.27
S59	05-26-20	Donald Lee Anderson	4.2
S60	05-26-21	Richard Joseph Otte, et ux	1.25
S61	05-26-22	Richard Joseph Otte, et ux	8.3
S62	05-23-12	Mark A. Yoho	3.05
S63	05-23-13.1	James R. & Pamela J. Ferrell	0.7625
S64	05-23-13	Linda D. Greathouse	14.24
S65	05-23-9.2	Linda D. Greathouse	25.58
S66	05-23-9.4	Jackson R. Sr. & Deanna L. Davis	2.087
S67	05-23-9.1	John W. Van Orden, et ux	23.376
S68	05-23-14	Dominion Transmission, Inc.	59.5
S69	05-23-15	Virginia Ethel Henry Est.	15.5
S70	05-23-16.1	Donald B. Henry	1.97
S71	05-23-16	Roy Friend Yoho Sr.	18.03
S72	05-23-18	Abe J. Hochstetler	35.382
S73	05-23-01	Patricia Accettolo, et al	146.66
S74	05-23-17.3	William & Katherine Flewelling	5.018
S75	05-23-17	Tammy & Thomas E. Brown	4.62
S76	05-23-17.4	Tammy D. Meadows	2.605
S77	05-23-17.2	Dick Jr. & Carol J. Rowan	14.920
S78	05-23-17.1	Curtis E. Hall, et ux	10.051
S79	05-23-18.1	Mark A. Yoho	7.80
S80 L	05-23-11.7	Bryan L. Huggins	1.835
S81 M	05-23-11	Roy F. Yoho	9.475
S82 T	05-25-20.3	James A. & Jo C. Estep	4.49
S83 X	05-25-20.2	James M. Zombotti	1.347
S84 Y	05-25-20.1	James M. Zombotti	2.746
S85 Q	05-23-11.6	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	0.094
S86	05-18-30	Jon Schmidt, et al	5.46
S87	05-18-13.10	Carl Berg	10.88
S88	05-18-29	Carl B. Berg	5.319
S89	05-18-32.1	Lori D. Carpenter	1.165
S90	05-18-13.8	Lori D. Carpenter	5.545
S91	05-17-12.1	Williams Ohio Valley Midstream, LLC	1.67
S92	05-17-10.5	Williams Ohio Valley Midstream, LLC	4.24
S93 EE	05-25-16.1	David L. Cunningham	6.34
S94	12-02-14	David L. Cunningham	56.23
S95	12-02-14.2	John G. Jr. & Geraldine M. Rogers	25.1
S96	12-02-14.1	Sammy J. Greathouse, Sr. (Life) and Sammy J. Greathouse, Jr.	18.67
S97 S	05-23-11.8	Zachary R. Stevey	7.00
S98	05-25-13.4	Parsons Cemetery	0.38
S99 FF	05-25-14.1	Judith L. Weigand	65.0
S100 HH	05-25-11.4	Edward W. Klug et ux	32.787
S101	05-25-11.1	Edward W. Klug & Dianna Klug	2.343
S102	12-03-47	Wetzel County Emergency Ambulance	0.50
S103	12-03-44	James A. & Jo C. Estep	1.10
S104	12-03-01	James W. Klug	0.375
S105	12-03-4.5	Hazel M. Blair	0.451
S106	12-03-4.6	Steven P. Wayman	1.009
S107	12-03-4.3	Joseph P. & Barbara A. Cain	3.619
S108	12-03-4.7	Joseph P. & Barbara A. Cain	67.3
S109 II	05-25-11.2	James W. Klug	114.305



Lease ID	Tags	Parcel	Grantor, Lessor, Etc.	Book	Page
10*14140	A	5-23-7	TERRY E SIMMS AND DEBORAH L SIMMS	666	529
10*14728	AA	5-25-13.2	IRIS K MOELLENDICK, ET AL	839	509
10*14126	B	5-17-11	SHARON MIDCAP	697	152
10*19727	BB	5-25-14	S RICHARD MELLON, ET AL	944	465
10*17186	C	5-23-6	ROBERT J HENRY	708	51
10*27898	CC	5-25-16	PAUL G FOX AND CYNTHIA G FOX, ET AL	1064	145
10*14847	D	5-23-5	LETHA RUCKMAN, ET AL	806	270
10*27898	DD	5-25-16.2	PAUL G FOX AND CYNTHIA G FOX, ET AL	1064	145
10*17191	E	5-23-8.1	ROBERT J HENRY, ET AL	715	463
10*27898	EE	5-25-16.1	PAUL G FOX AND CYNTHIA G FOX, ET AL	1064	145
10*17192	F	5-23-8	ROBERT J HENRY, ET AL	716	193
10*19727	FF	5-25-14.1	S RICHARD MELLON, ET AL	944	465
10*17189	G	5-23-9.3	ROBERT J HENRY	716	197
10*14926	GG	5-25-12	NILA JUNE MASON, ET AL	842	394
10*14797	H	5-24-5.4	ORVILLE YOUNG, ET AL	800	598
10*22494	HH	5-25-11.4	EDWARD W KLUG & DIANNA KLUG	920	109
10*14797	I	5-24-5.3	ORVILLE YOUNG, ET AL	800	598
10*22496	II	5-25-11.2	JAMES W KLUG	923	543
10*14786	J	5-23-11.1	TWILA O WHIPKEY, ET AL	799	61
10*14786	K	5-23-10	TWILA O WHIPKEY, ET AL	799	61
10*14786	L	5-23-11.7	TWILA O WHIPKEY, ET AL	799	61
10*14786	M	5-23-11	TWILA O WHIPKEY, ET AL	799	61
10*14786	N	5-23-11.4	TWILA O WHIPKEY, ET AL	799	61
10*14786	O	5-23-11.2	TWILA O WHIPKEY, ET AL	799	61
10*14786	P	5-23-11.3	TWILA O WHIPKEY, ET AL	799	61
10*17195	Q	5-23-11.6	PATRICIA HARTMAN, ET AL	695	317
10*14786	R	5-23-11.5	TWILA O WHIPKEY, ET AL	799	61
10*14786	S	5-23-11.8	TWILA O WHIPKEY, ET AL	799	61
10*14786	T	5-25-20.3	TWILA O WHIPKEY, ET AL	799	61
10*14786	U	5-25-18	TWILA O WHIPKEY, ET AL	799	61
10*14786	V	5-25-19	TWILA O WHIPKEY, ET AL	799	61
10*14786	W	5-25-20	TWILA O WHIPKEY, ET AL	799	61
10*14786	X	5-25-20.2	TWILA O WHIPKEY, ET AL	799	61
10*14786	Y	5-25-20.1	TWILA O WHIPKEY, ET AL	799	61
10*14728	Z	5-25-1	IRIS K MOELLENDICK, ET AL	839	509



47-051-02272 H6A

P.S. 708

David L Jackson



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: HILLROCK S-12HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API#: 047-051-02272

WELL PLAT
PAGE 3 OF 3
DATE: 09/13/2019
REVISED 11/18/2019