

**HILLROCK LEASE  
WELL S-13HU**

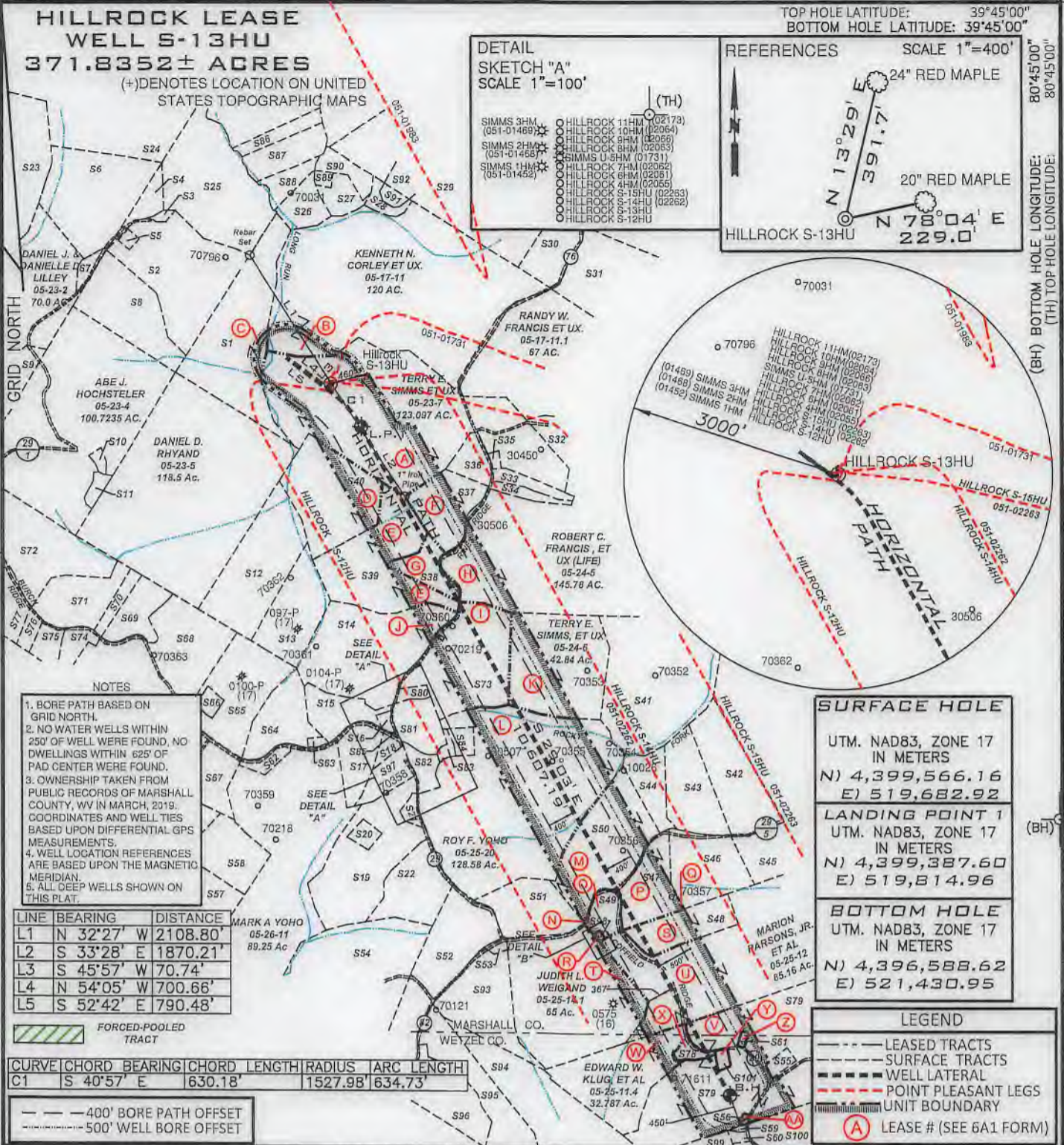
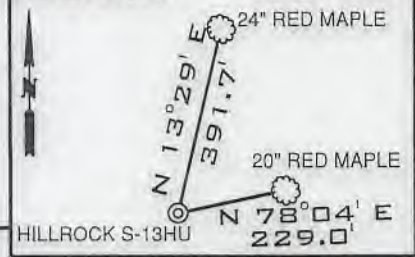
**371.8352± ACRES**

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

**DETAIL SKETCH "A" SCALE 1"=100'**

- SIMMS 3HM (051-01468)
- SIMMS 2HM (051-01468)
- SIMMS 1HM (051-01452)
- HILLROCK 11HM (02173)
- HILLROCK 10HM (02064)
- HILLROCK 9HM (02058)
- HILLROCK 8HM (02055)
- SIMMS U-5HM (01731)
- HILLROCK 7HM (02052)
- HILLROCK 6HM (02051)
- HILLROCK 5HM (02055)
- HILLROCK S-15HU (02283)
- HILLROCK S-14HU (02262)
- HILLROCK S-13HU
- HILLROCK S-12HU

TOP HOLE LATITUDE: 39°45'00"  
BOTTOM HOLE LATITUDE: 39°45'00"



- 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°27' W	2108.80'
L2	S 33°28' E	1870.21'
L3	S 45°57' W	70.74'
L4	N 54°05' W	700.66'
L5	S 52°42' E	790.48'

FORCED-POOLED TRACT

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 40°57' E	630.18'	1527.98'	634.73'

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

**SURFACE HOLE**  
UTM. NAD83, ZONE 17 IN METERS  
N) 4,399,566.16  
E) 519,682.92

**LANDING POINT 1**  
UTM. NAD83, ZONE 17 IN METERS  
N) 4,399,387.60  
E) 519,814.96

**BOTTOM HOLE**  
UTM. NAD83, ZONE 17 IN METERS  
N) 4,396,588.62  
E) 521,430.95

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

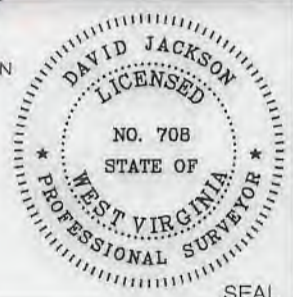
FILE NUMBER \_\_\_\_\_  
DRAWING NUMBER: **HILLROCK S-13HU REV 2**  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1/200  
PROVEN SOURCE OF ELEVATION: **SUBMETER MAPPING**  
**GRADE GPS**

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 X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
DATE: SEPTEMBER 13, 2019  
OPERATORS WELL NO. HILLROCK S-13HU  
API WELL NO. 47-051-02273 H6A  
LOCATION ELEVATION 1219.5' WATERSHED (HUC 10) FISH CREEK  
STATE COUNTY PERMIT

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 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: 11,540' TMD: 23,057'  
PLUG & ABANDON \_\_\_ CLEAN OUT & REPLUG \_\_\_

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER  
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD  
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME  
PERMIT

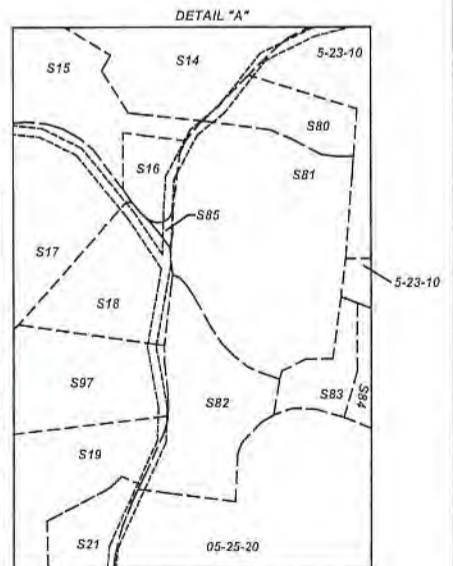
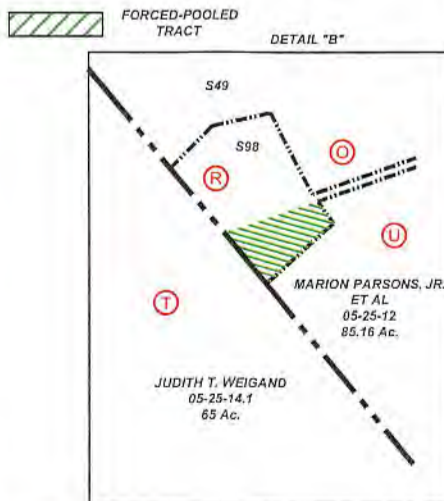
form wv6

**HILLROCK LEASE  
WELL S-13HU  
371.8352± ACRES**

47-051-02273-H6A

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 J	05-23-4.1	XCL Midstream Operation, LLC	2.1575
S12	05-23-08	Carl David & Suzanne L. Guseman	29.5
S13	05-23-9.3	Linda D. Greathouse	17.5
S14	05-23-11.1	John H. & Sonya D. Holliday	46.482
S15	05-23-11.4	Evelyn L. Hudson	10.879
S16	05-23-11.2	Evelyn Hudson	1.154
S17	05-23-11.3	Colin R. Yoho	11.29
S18	05-23-11.5	Roy F. Yoho	2.25
S19	05-25-18	Joseph Johnson, et ux (Life)	37.746
S20	05-25-18.1	Pamela Joan Ferrell, et vir	2.491
S21	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 F	05-24-5.5	Linda Lou Tagg	17.194
S38 G	05-24-5.3	Thomas V. Tuttle, et ux	8.543
S39 E	05-24-5.4	Thomas V. Tuttle, et ux	38.224
S40 D	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 Q	05-25-1.5	Ryan J. Bratton	21.35
S47 P	05-25-13	William M. Ferda, Jr. & Stephanie L. Palicka	16.014
S48 S	05-25-12.1	Kent & Betty Mason	15.0
S49 O	05-25-13.2	David A. Klug	5.89
S50 M	05-25-01	Michael L. Mason	35.43
S51 N	05-25-14	Roy F. Yoho	23.0

Number	TAX MAP-PARCEL	SURFACE OWNER	ACRES
S52	05-25-16	Craig R. & Ashley Ferrell	23.5
S53	05-25-16.2	Rodney J. Loy	1.087
S54	05-26-12	Marjorie Ann Stoneking (Life)	153.969
S55	12-03-43	Adam W. Ferrell & Brittany M. Loy	1.97
S56 AA	12-03-01	James W. Klug	0.375
S57	05-26-09	Theresa H. Walton, as Trustee of Robert D. & Bonnie L. Oliver Family Trust	21.75
S58	05-26-08	Richard Joseph Otte, et ux	18.27
S59	12-03-4.5	Hazel M. Blair	0.451
S60	12-03-4.6	Steven P. Wayman	1.009
S61 Z	12-03-47	Wetzel County Emergency Ambulance	0.50
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 I	05-23-10	Terry E. Simms, et ux	37.95
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 X	05-25-11.1	Edward W. & Dianna Klug	2.343
S79 V	05-25-11.2	Edward W. Klug	114.305
S80	05-23-11.7	Bryan L. Huggins	1.835
S81	05-23-11	Roy F. Yoho	9.475
S82	05-25-20.3	James A. & Jo C. Estep	4.49
S83	05-25-20.2	James M. Zombotti	1.347
S84	05-25-20.1	James M. Zombotti	2.746
S85	05-23-11.6	T.H. Exploration II, LLC & Atinum Schmelius 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	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	05-23-11.8	Zachary R. Stevey	7.00
S98 R	05-25-13.4	Parsons Cemetery	0.38
S99	12-03-4.7	Joseph P. & Barbara A. Cain	67.3
S100	12-03-04	Albert L. & Mary Hohman, et al	85.0
S101 Y	12-03-44	James A. & Jo C. Estep	1.10



P.S. 708 *David L Jackson*



**TUG HILL  
OPERATING**

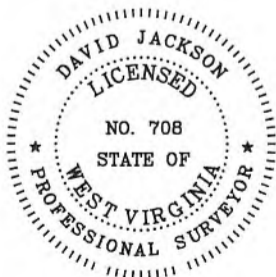
OPERATOR'S  
WELL #: HILLROCK S-13HU  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV

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

**HILLROCK LEASE  
WELL S-13HU  
371.8352± ACRES**

Lessee No.	Tags	Parcel	Grantor, Lessor, Etc.	Book	Page
10*14140	A	5-23-7	TERRY E SIMMS AND DEBORAH L SIMMS	666	529
10*22496	AA	12-3-1	JAMES W KLUG	923	543
10*14126	B	5-17-11	SHARON MIDCAP	697	152
10*17186	C	5-23-6	ROBERT J HENRY	708	51
10*17191	D	5-23-8.1	ROBERT J HENRY ET AL	715	463
10*14797	E	5-24-5.4	ORVILLE YOUNG ET AL	800	598
10*14797	F	5-24-5.5	ORVILLE YOUNG ET AL	800	598
10*14797	G	5-24-5.3	ORVILLE YOUNG ET AL	800	598
10*14797	H	5-24-5	ORVILLE YOUNG ET AL	800	598
10*14786	I	5-23-10	TWILA O WHIPKEY ET AL	799	61
10*14786	J	5-23-11.1	TWILA O WHIPKEY ET AL	799	61
10*14558	K	5-24-6	KLOVA ANN MORRIS ET AL	765	434
10*14786	L	5-25-20	TWILA O WHIPKEY ET AL	799	61
10*14728	M	5-25-1	IRIS K MOELLENDICK ET AL	839	509
10*19727	N	5-25-14	S RICHARD MELLON ET AL	944	465
10*14728	O	5-25-13.2	IRIS K MOELLENDICK ET AL	839	509
10*14728	P	5-25-13	IRIS K MOELLENDICK ET AL	839	509
10*14728	Q	5-25-1.5	IRIS K MOELLENDICK ET AL	839	509
10*27612	R	5-25-13.4	HELEN M THAYER ET AL	1060	566
10*18120	S	5-25-12.1	KENT & BETTY MASON	927	75
10*19727	T	5-25-14.1	S RICHARD MELLON ET AL	944	465
10*14926	U	5-25-12	NILA JUNE MASON ET AL	842	394
10*22496	V	5-25-11.2	JAMES W KLUG	923	543
10*22494	W	5-25-11.4	EDWARD W KLUG & DIANNA KLUG	920	109
10*22494	X	5-25-11.1	EDWARD W KLUG & DIANNA KLUG	920	109
10*23287	Y	12-3-44	JAMES A ESTEP AND JO C ESTEP	211A	221
10*22984	Z	12-3-47	WETZEL COUNTY EMERGENCY AMBULANCE AUTHORITY INC	209A	748

47-051-02273 H6A



P.S.  
708

*David L Jackson*



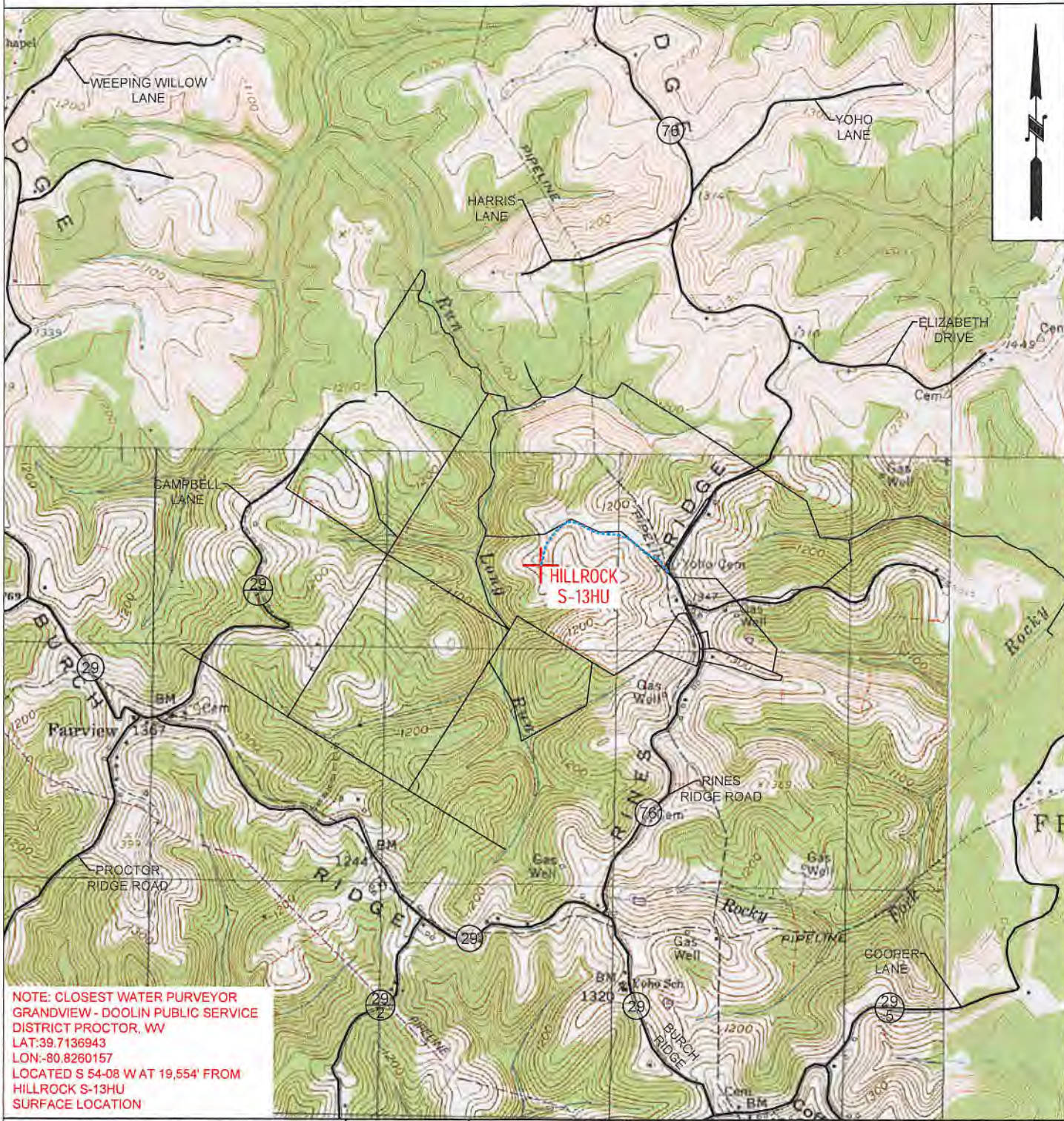
**TUG HILL**  
**OPERATING**

OPERATOR'S  
WELL #: HILLROCK S-13HU  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV

WELL PLAT  
PAGE 3 OF 3  
DATE: 09/13/2019

4705102273

# PROPOSED HILLROCK S-13HU



NOTE: CLOSEST WATER PURVEYOR  
GRANDVIEW - DOOLIN PUBLIC SERVICE  
DISTRICT PROCTOR, WV  
LAT: 39.7136943  
LON: -80.8260157  
LOCATED S 54-08 W AT 19,554' FROM  
HILLROCK S-13HU  
SURFACE LOCATION



**TUG HILL**  
OPERATING

**OPERATOR** 494510851  
TUG HILL OPERATING, LLC  
380 SOUTHPOINTE BLVD  
SUITE 200  
CANONSBURG, PA 15317

**TOPO SECTION**  
NEW MARTINSVILLE 7.5'  
**SCALE:**  
1" = 2000'

**LEASE NAME** HILLROCK  
**DATE:** SEP 16 2013  
RECEIVED  
Office of Oil and Gas  
WV Department of Environmental Protection