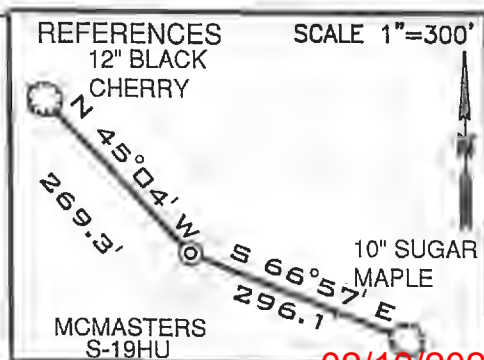
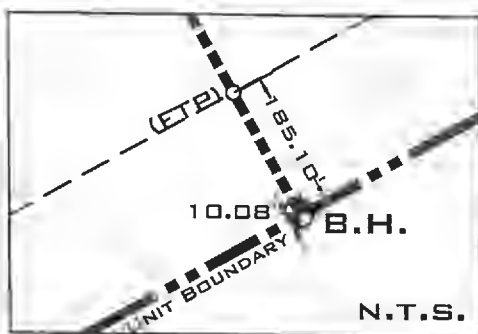


MCMASTERS S-19HU
UTICA UNIT - 539.1576± ACRES
TUG HILL OPERATING

TOP HOLE LATITUDE: 39°47'30"
BOTTOM HOLE LATITUDE: 39°45'00"

SEE DETAIL "A"

LINE	BEARING	DISTANCE
L1	N 74°15' W	1439.44'
L2	S 40°12' W	1365.44'
L3	N 38°33' E	1530.43'

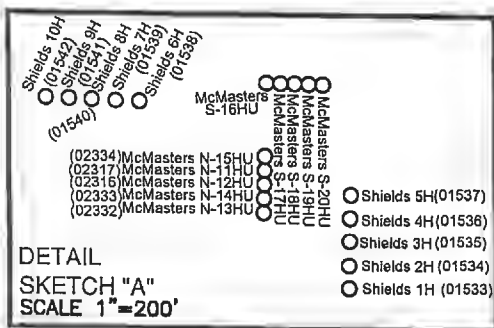


02/10/2023

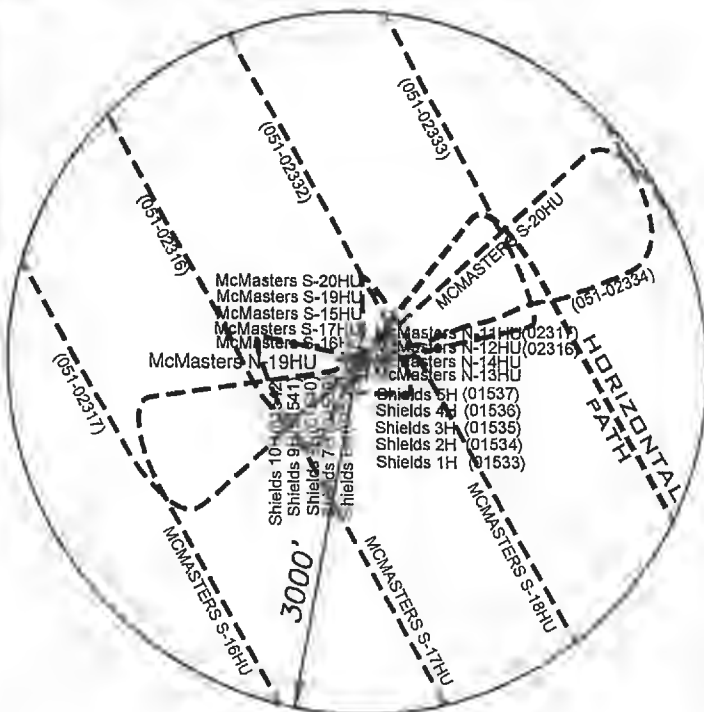
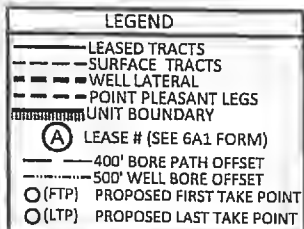
(BH) BOTTOM HOLE LONGITUDE: 80°45'00"
(TH) TOP HOLE LONGITUDE: 80°45'00"

(BH) 1,621'

(TH) 11,447'



(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS



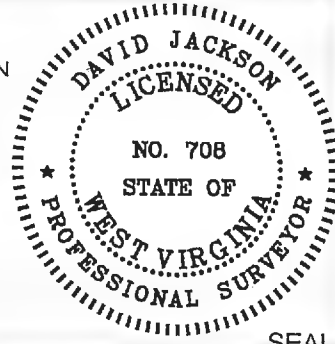
SURFACE HOLE	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,401,175.20
E)	518,208.25
LANDING POINT 1	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,401,378.38
E)	518,680.82
BOTTOM HOLE	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,399,547.59
E)	519,721.51

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 62°57' E	80.59'	92.01'	83.41'
C2	S 76°15' E	73.89'	161.04'	74.56'
C3	S 54°49' E	129.98'	429.96'	130.48'
C4	S 41°33' E	214.74'	1107.01'	215.08'
C5	S 32°27' E	402.49'	2674.49'	402.87'

- 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.
 - BOUNDARIES ALONG ROADWAYS ARE BASED UPON MEMORANDUM BY DICKIE, MCCAMEY & CHILCOTE, P.C. FILE 0058304.0401147

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 1480
Clarksburg, WV 26302
304-623-5851



FILE NUMBER _____
DRAWING NUMBER: MCMASTERS S-19HU_REV2
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING
GRADE GPS

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

DATE: JANUARY 06, 2023
OPERATORS WELL NO. MCMASTERS S-19HU
API WELL NO. 47-051-02488
STATE COUNTY PERMIT

LOCATION ELEVATION 1207.50' WATERSHED (HUC 10) FISH CREEK (HUC-10)
DISTRICT FRANKLIN COUNTY MARSHALL
QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER SEE WW-6A1 FORM

SURFACE OWNER ROBERT L. SHIELDS ET AL ACREAGE 104.11
OIL & GAS ROYALTY OWNER ROBERT L. SHIELDS ET AL LEASE ACREAGE 104.11
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____

TARGET FORMATION POINT PLEASANT PLUG & ABANDON CLEAN OUT & REPLUG
ESTIMATED DEPTH TVD: 11,441' TMD: 18,789'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN, CT CORP
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5098 WASHINGTON STREET WEST, SUITE 407 CHARLESTON WV 25313-1561

COUNTY NAME PERMIT

MCMASTERS S-19HU
UTICA UNIT - 539.1576± ACRES
TUG HILL OPERATING

Parcels within Unit Boundary				
Trp	Number	Tax Map - Parcel	Surface Owner	Acres
A	S15	05-18-02	ROBERT L. SHIELDS & DONALD SHIELDS	204.11
B	S16	05-18-03	OLAN V. & PATRICIA E. RUTAN	43.677
C	S14	05-18-25	XCL MIDSTREAM OPERATING, LLC	110.0
D	S17	05-18-05	ADAM & JESSE L. ROBINSON	26.0
E	S18	05-18-05	TERRY MELOTT	8.14
F	S19	05-18-04	OLAN V. & PATRICIA E. RUTAN	65.89
G	S20	05-15-11	DIANA HENRY HAYNES & CAROL HENRY	65.58
H	S21	05-15-12	JOHN DAVID PETROCK & THOMAS ANDREW PETROCK	150.23
I	S22	05-15-13	RONA LEE RICE & CHARLES FRANKLIN MCCARDLE	94.925
J	S24	05-15-15	ROBERT L. SHIELDS & DONALD SHIELDS	49
K	S25	05-15-01	MARCUS SHARP	121.0
L	S26	05-14-13	RALPH D. & SALLY JANE HOYT	222.18
M	S27	05-13-15	LIONEL L. PERSINGER, ET UX	93.0
N	S28	05-12-12.1	LIONEL L. PERSINGER, ET UX	148.09
O	S11	05-18-13	SOUTHERN COUNTRY FARMS, INC.	11.054
P	S10	05-18-59	SOUTHERN COUNTRY FARMS, INC.	35.79
Q	S5	05-18-20	WAYNE E. CHANNING, ET AL	44.47
R	S9	05-18-30	MARY & DANIEL ROBINSON	3.46
S	S8	05-18-13.10	CARL BERG	10.88
T	S7	05-18-29	CARL G. BERG	5.319
U	S6	05-18-31	JACOB RASTALL	6.94
V	S4	05-18-21	CLIRTIS E. & MICHELLE J. HALL	32.569
W	S3	05-23-06	JAMES A. CHANNING, ET AL	48.0
X	S2	05-17-11	KENNETH N. CORLEY, ET UX	120.0
Y	S1	05-23-07	TERRY E. SIMMS, ET UX	123.097

Adjoining Parcel Ownership Table			
Number	Tax Map - Parcel	Surface Owner	Acres
S12	05-18-16	ADAM & JESSE L. ROBINSON	17.768
S13	05-18-07	ADAM & JESSE L. ROBINSON	24.22
S23	05-14-15	ROBERT L. SHIELDS & DONALD SHIELDS	53.0
S29	05-12-14	LINDA HAMILTON, ET AL	117.895
S30	05-12-13	LINDA HAMILTON, ET AL	61.887
S31	05-12-08	ANITA RAY MILLER-LIFE	200.95
S32	05-12-12	LIONEL L. PERSINGER, ET UX	45.0
S33	05-13-21	KAREN REED, ET AL	36.13
S34	05-11-17	KEVIN CORLEY, ET UX	36.13
S35	05-13-14	HIRAMS ESTATE FAMILY, LTD, LLP	158.054
S36	05-12-11	WESLEY R. BRYAN & WESLEY R. BRYAN II	52.478
S37	05-15-03	MARK S. & LINDA K. RUCKMAN	36.10
S38	05-15-05	MARK S. & LINDA K. RUCKMAN	35.0
S39	05-15-06	MARK S. & LINDA K. RUCKMAN	42.3
S40	05-15-02	JOHN DAVID PETROCK & THOMAS ANDREW PETROCK	5.0
S41	05-15-6.1	MARK S. & LINDA K. RUCKMAN	39.40
S42	05-15-07	XCL MIDSTREAM OPERATING, LLC	4.5
S43	05-15-08	XCL MIDSTREAM OPERATING, LLC	77.11
S44	05-15-23.5	MARSHALL COUNTY COAL RESOURCES, INC	15.09
S45	05-15-09	CNX LAND RESOURCES, INC	81.98
S46	05-15-13	CNX LAND RESOURCES, INC	11.0
S47	05-15-14	JOHN DAVID PETROCK & THOMAS ANDREW PETROCK	25.0
S48	05-15-10	MARK STANLEY RUCKMAN	153.75
S49	05-18-15.3	ADAM & JESSE L. ROBINSON	26.44
S50	05-18-15.4	DAVID R. ANDERSON	22.34
S51	05-18-15	NANCY MARIE ANDERSON & DAVID VESPER ANDERSON	2.495
S52	05-18-11.1	NANCY MARIE ANDERSON & DAVID VESPER ANDERSON	18.0
S53	05-18-11.2	EDWARD LEE BURGE JR.	2.0
S54	05-18-10.1	DAVID V. ANDERSON, ET UX	1.65
S55	05-18-10.2	DAVID ANDERSON, ET UX	1.377
S56	05-18-10	DAVID & NANCY ANDERSON	0.907
S57	05-18-12	JOSEPH E. SR. & MELANIE S. BECK	2.270
S58	05-18-15.3	JASON BLAIR	5.948
S59	05-18-15.5	DARRELL BOLEY	23.547
S60	05-18-13.3	ROBERT G. CLOSTERMAN	9.813
S61	05-18-14	MICHAEL FINCHAM & KEZIA WINTERS	6.385
S62	05-18-17	MICHAEL FINCHAM & KEZIA WINTERS	6.585
S63	05-18-13.1	CORY A. HOLT	9.248
S64	05-18-34	JODI A. & GARY A. HALL	3.002
S65	05-18-13.13	GLENN E. & SANDRA K. WHISLER	5.59
S66	05-18-13.6	GLENN EUGENE WHISLER, ET UX	5.384
S67	05-18-33	SANDRA & GLENN WHISLER	5.343
S68	05-18-13.14	GLENN E. & SANDRA K. WHISLER	2.11
S69	05-17-10.3	JAMES A. & JILL C. CORLEY	37.39
S70	05-17-09	LLOYD RICHARD OLIVER, ET UX	61.6
S71	05-17-8.1	JERI J. WHITE	1.0
S72	05-17-8.2	JERI J. WHITE	7.136
S73	05-17-8.3	JAMES A. CORLEY, ET UX	12.478
S74	05-17-9.4	VICKI L. BOWEN HRS. JEREMY S. BOWEN -LIFE	60.3
S75	05-17-11.1	RANDY W. FRANCIS, ET UX	67.0
S76	05-24-01	LINDA L. HENDRICKSON	175.0
S77	05-17-10.1	JAMES A. & JILL C. CORLEY	4.51
S78	05-17-10	JAMES A. CORLEY, ET AL	92.61

02/10/2023



P.S. 708 *David L Jackson*



TUG HILL
OPERATING

OPERATOR'S
 WELL #: MCMMASTER S-19HU
 DISTRICT: Franklin
 COUNTY: Marshall
 STATE: WV
 API #: 47-051-

WELL PLAT
PAGE 3 OF 4
DATE: 12/21/2022

Form: WV6

MCMASTERS S-19HU
UTICA UNIT - 539.1576± ACRES
TUG HILL OPERATING

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Deed Book/Page
10*14116	5-18-2	A	DONALD SHIELDS, ET AL	669 367
10*14109	5-18-3	B	MARTHA M RUTAN, ET AL	668 836
10*14030	5-18-23	C	LORIS V YOHO, ET AL	665 332
10*12454	5-18-6	D	MARGARET A BONNETT, ET AL	940 431
10*19140	5-18-5	F	TERRELL MELDITT	794 26
10*19093	5-18-4	F	IAN I ARNOLD MARSHA A ARNOLD, ET AL	813 111
10*19018	5-15-11	G	BENJAMIN FRANKLIN HENRY FREDRICK ALLEN HENRY	746 5
10*13337	5-15-12	H	JACK PETROCK HATTIE PETROCK	741 66
10*14110	5-19-13	I	RONA LEE MCCARDLE, ET AL	870 472
10*14116	5-19-15	J	DONALD SHIELDS, ET AL	869 367
10*14042	5-15-1	K	RALPH B TAYLOR, ET AL	665 487
10*14067	5-14-13	L	REVA FRANZE	866 31
10*14911	5-11-15	M	FORREST MILLER, ET AL	819 316
10*16918	5-12-12.1	N	LOMELL AND MARY LEE PERSINGER	978 617
10*14099	5-18-13	O	SOUTHERN COUNTRY FARMS INC, ET AL	666 489
10*14099	5-18-13	P	SOUTHERN COUNTRY FARMS INC, ET AL	666 489
10*17145	5-18-20	Q	JAMES J. CAMPBELL AND BETTY J CAMPBELL, ET AL	683 458
10*17433	5-18-30	R	SOUTHERN COUNTRY FARMS INC	938 446
10*17431	5-18-13.10	S	SOUTHERN COUNTRY FARMS INC	938 446
10*17431	5-18-29	T	SOUTHERN COUNTRY FARMS INC	938 446
10*17780	5-18-31	U	KENNETH E RASTALL, ET AL	937 434
10*17145	5-18-21	V	JAMES J. CAMPBELL AND BETTY J CAMPBELL, ET AL	685 458
10*17186	5-23-5	W	ROBERT J HENRY	706 51
10*18126	5-17-11	X	SHARON MIDCAP	697 152
10*14140	5-23-7	Y	TERRY E SIMMS AND DEBORAH L SIMMS	686 528

RECEIVED
Office of Oil and Gas
DEC 27 2022
WV Department of
Environmental Protection



David L Jackson

Adjoining Parcels Ownership Table			
Number	Tax Map (Parcel)	Surface Owner	Acres
578	05-17-10.5	WILLIAMS OHIO VALLEY MIDSTREAM, LLC	8.74
580	05-17-12.1	WILLIAMS OHIO VALLEY MIDSTREAM, LLC	1.67
581	05-17-12	JAMES A. & JILL C. CORLEY	3.33
582	05-18-13.8	LORI D. CARPENTER	3.546
583	05-18-12.1	LORI D. CARPENTER	3.545
584	05-18-37	JACOB RASTALL	3.335
585	05-23-7.1	RANDY W. & JESSICA L. FRANCIS	0.549
586	05-17-7.2	FLORELLA LOU WEIGER	4.69
587	05-24-5.1	JAMES D. WATKINS, ET UX	3.151
588	05-24-5.2	JAMES D. WATKINS, ET UX	3.151
589	05-24-5.3	SONNY & LINDA TAGG	17.194
590	05-24-05	ROBERT C. FRANCIS, ET UX-LIFE	148.78
591	05-24-8.1	T.H. EXPLORATION II, LLC	5.50
592	05-24-5.4	THOMAS V. TUTTLE, ET LOI	38.224
593	05-23-6.1	WILLIAM & VIRGINIA ROUPE	34.0
594	05-23-6.3	LINDA D. GREATHOUSE	17.5
595	05-23-08	CARL DAVID & SUZANNE L. GUSEMAN	26.3
596	05-23-05	DANIEL D. RHYAND	118.5
597	05-23-16	ROY FRIEND YOHO SR.	18.03
598	05-23-18	PROCTOR RIDGE, LLC	35.34
599	05-25-18.1	MARK A. YOHO	7.6
5100	05-23-04	PROCTOR RIDGE, LLC	100.7
5101	05-23-4.1	XCL MIDSTREAM OPERATING, LLC	2.16
5102	05-23-4.2	XCL MIDSTREAM OPERATING, LLC	1.17
5103	05-23-03	PROCTOR RIDGE, LLC	50.0
5104	05-23-2.1	WILLIAM L. & JANICE M. WAYNE	2.564
5105	05-18-23.2	DAVID P. LASSAN - LIFE	1.0
5106	05-18-21.1	JASON PALERMO & WENDY MOORE	5.47
5107	05-18-21.3	XCL MIDSTREAM OPERATING, LLC	0.811
5108	05-18-22	JASON PALERMO & WENDY MOORE	30.345
5109	05-23-07	DANIEL J. & DANIELLE D. LILEY	70
5110	05-23-2.2	JESSICA N. & ANDREW L. JONES	7.436
5111	05-23-01	PATRICIA ACCETTOLLO, ET AL	146.66
5112	05-18-24	DUANE BRUNN	102.0
5113	05-19-18	MARK E. YOHO, ET UX	55.648
5114	05-22-5.1	WILLIAMS OHIO VALLEY MIDSTREAM, LLC	13.875
5115	05-22-05	CNX RCPIC, LLC	134.425
5116	05-19-18.2	PAUL V. & CAROL NEELY	32.672
5117	05-19-18.1	MARK E. YOHO, ET UX	2.57
5118	05-19-25	DAVID E. YOHO & MARK E. YOHO	8.976
5119	05-19-24	DAVID E. YOHO	15.436
5120	05-19-26	ROGER J. & BETH E. JAMES	8.977
5121	05-19-17	MARK A. YOHO	15.263
5122	05-19-16	ROBERT L. SHIELDS & DONALD SHIELDS	11.612
5123	05-19-16.1	ROBERT L. SHIELDS, REBECCA A. SHIELDS & ROBERTA CAMPBELL	7.307
5124	05-19-14	JAMES & SHERRY BEEGLE	18.356
5125	05-19-17	DAVID E. YOHO	7.041
5126	05-19-28	DAVID E. YOHO	56.899
5127	05-19-19	RUSSELL & MARY BLAKE	54.148
5128	05-19-30.1	ERIC R.W. & ASHLEY A. HUGGINS	2.911
5129	05-19-32	JASPER N. BURCH, ET AL - TRUSTEES	0.397
5130	05-19-31	CHARLES F. & DIANA L. HAYNES	0.779
5131	05-18-01	DIANA HENRY HAYNES & CAROL C. HENRY	62.908
5132	05-19-30	ERNIE & TAMMY ANDERSON	19.037
5133	05-19-15	CARLY HERRAN	0.72
5134	05-19-29	ERNIE L. & TAMMY L. ANDERSON	10.961
5135	05-19-12	ERNIE L. ANDERSON, ET UX	5.33
5136	05-14-13.1	DONALD SHIELDS	0.8
5137	05-19-11	ERNIE L. ANDERSON, ET UX	0.08
5138	05-19-10	ERNIE L. ANDERSON, ET UX	0.8125
5139	05-19-09	FENNY ELAINE ASHCRAFT	10.44
5140	05-18-20	WILBERT H. BUNGARD, ET UX	114.989
5141	05-19-20.3	SIDNEY HARMON	1.715
5142	05-19-20.1	JOHN J. EBERT-LIFE	1.848
5143	05-19-7.2	ADAM T. & JESSE L. ROBINSON	2.64
5144	05-18-1.1	CHARLES F. & DIANA L. HAYNES	0.352
5145	05-19-08	CNX RCPIC, LLC	40.0
5146	05-14-07	OLAN V. RUTAN, ET UX	37.4801
5147	05-19-7.4	OLAN V. RUTAN, ET UX	1.787
5148	05-19-7.3	OLAN V. RUTAN, ET UX	0.341
5149	05-19-7.2	OLAN V. RUTAN	2.783
5150	05-19-7.1	ROBERT L. SHIELDS, ET UX	3.398
5151	05-19-20.2	CASANDRA L. HARMON	7.848
5152	05-19-05	MARGRENE KEEFE	126.03
5153	05-19-08	BELUNDA KAY MEADOWS, REBECCA ANN SHIELDS & OLAN V. RUTAN	5.1099
5154	05-14-11	DALE R. GALLAHER & HARRY E. GALLAHER	12.0
5155	05-14-10.4	ADAM T. & JESSE L. ROBINSON	3.343
5157	05-14-12	DALE R. GALLAHER & HARRY E. GALLAHER	135.10
5158	05-14-1A	ROBERT L. SHIELDS & DONALD SHIELDS	29.05
5159	05-14-12.1	HENRY WILSON PLUNKERT JR.	5.0
5160	05-14-10	WANDA P. RINE-LIFE	107.373
5161	05-18-3.1	NIKO L. & JONATHAN STEVENS	2.223
5162	05-18-19.1	RUSSELL & MARY BLAKE	2.252
5163	05-18-21.4	DYLAN TYLAR HALL	10.55

02/10/2023



OPERATOR'S WELL #: MCMMASTER S-19HU WELL PLAT
DISTRICT: Franklin PAGE 4 OF 4
COUNTY: Marshall DATE: 12/21/2022
STATE: WV
API #: 47-051-


WW-9

PROPOSED McMASTERS S-19HU

SUPPLEMENT PG 2



NOTE: CLOSEST WATER PURVEYOR
GRANDVIEW - DOOLIN PUBLIC SERVICE
DISTRICT PROCTOR, WV
LAT 39 7138943
LON -80.5220157
LOCATED S 33-25 W AT 22.147 FROM
McMASTERS S-19HU
SURFACE LOCATION

 TUG HILL OPERATING	OPERATOR	494510851	TOPO SECTION	LEASE NAME
	TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD SUITE 200 CANONSBURG, PA 15317		POWHATAN POINT 7.5'	McMASTERS
			SCALE:	DATE:
			1" = 2000'	DATE: 6-4-2020