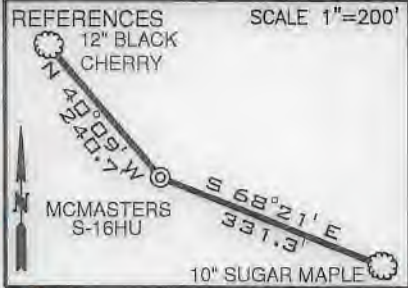


MCMASTERS LEASE WELL S-16HU 314.2124± ACRES



LINE	BEARING	DISTANCE
L1	N 73°54' W	1404.58'
L2	S 39°00' W	1343.18'
L3	S 60°58' W	225.35'
L4	S 81°23' W	1576.80'

TOP HOLE LATITUDE: 39°47'30"

BOTTOM HOLE LATITUDE: 39°45'00"

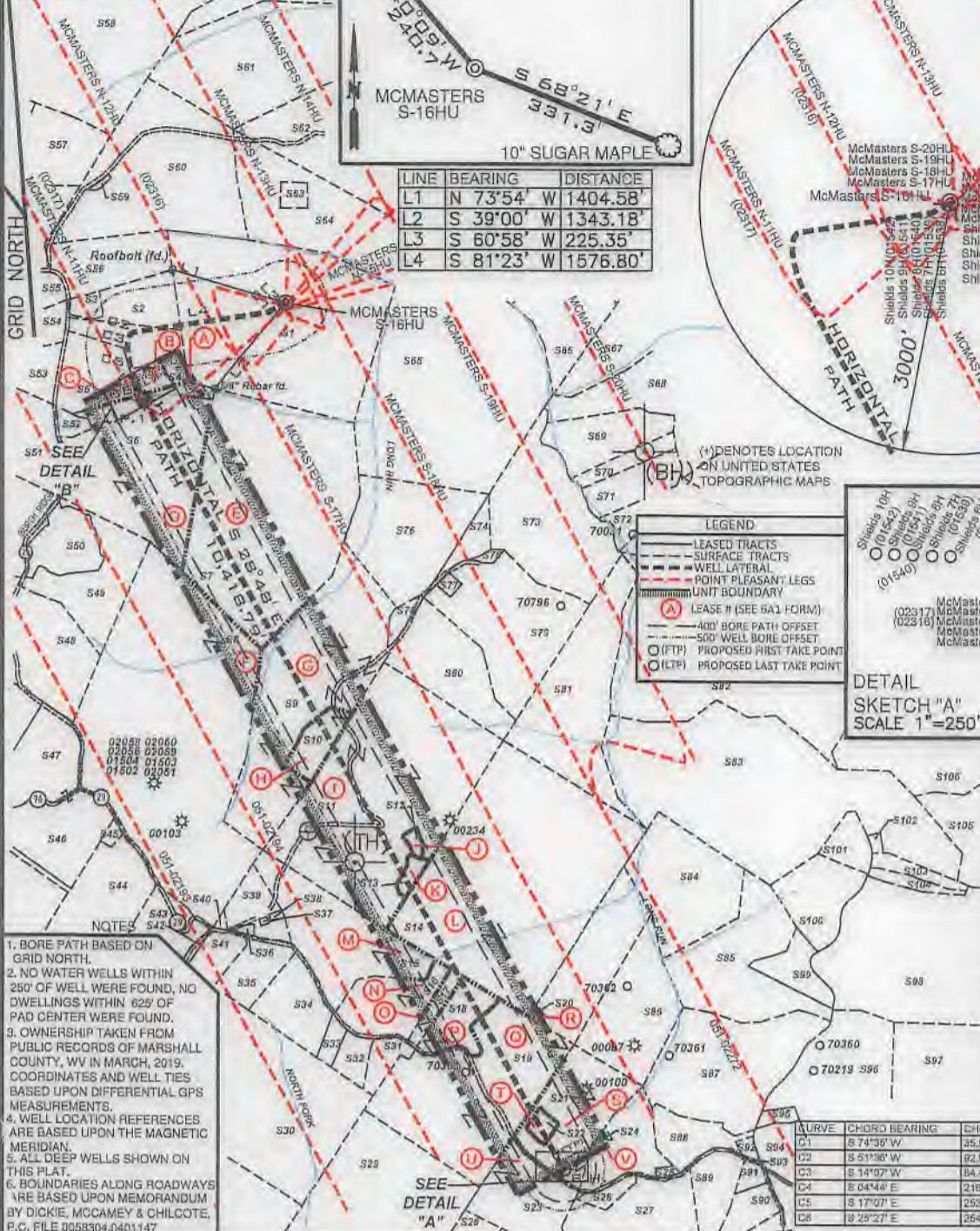


(BH) BOTTOM HOLE LONGITUDE: 80°45'00"

(TH) TOP HOLE LONGITUDE: 80°45'00"

(TH) 11,447'

(BH) 6,530'

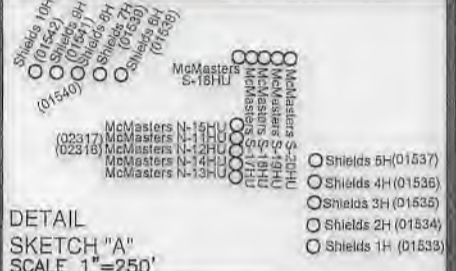


- BORE PATH BASED ON GRID NORTH.
- NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
- OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2019. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
- WELL LOCATION REFERENCES 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

(H) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

LEGEND

- LEASED TRACTS
- SURFACE TRACTS
- WELL LATERAL
- POINT PLEASANT LEGS
- UNIT BOUNDARY
- LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- (FTP) PROPOSED FIRST TAKE POINT
- (LTP) PROPOSED LAST TAKE POINT



SURFACE HOLE UTM. NAD83, ZONE 17 IN METERS N) 4,401,176.30 E) 518,197.28
LANDING POINT 1 UTM. NAD83, ZONE 17 IN METERS N) 4,400,806.89 E) 517,690.91
BOTTOM HOLE UTM. NAD83, ZONE 17 IN METERS N) 4,398,050.79 E) 519,266.30

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 74°30' W	35.98'	124.47'	36.70'
C2	S 51°38' W	92.03'	84.53'	95.12'
C3	S 14°07' W	84.44'	241.43'	84.88'
C4	S 04°44' E	216.17'	777.05'	218.87'
C5	S 17°07' E	253.12'	1379.64'	253.49'
C6	S 25°27' E	254.11'	2101.68'	254.27'

FILE NUMBER _____
DRAWING NUMBER _____
MCMASTERS_S-16HU_REV2

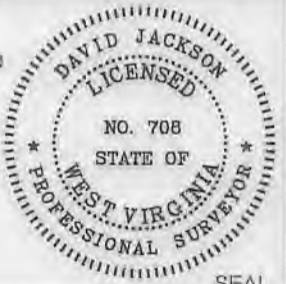
SCALE **1" = 2000'**

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: JANUARY 27, 2020
REVISED DATE: JULY 31, 2020
OPERATORS WELL NO. MCMASTERS S-16HU
API WELL NO. 47-051-02337 ^{H4A} _{Deep}
STATE WV COUNTY MARSHALL 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

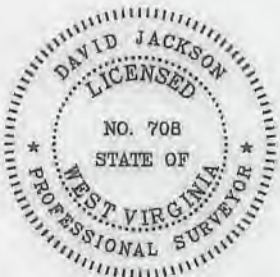
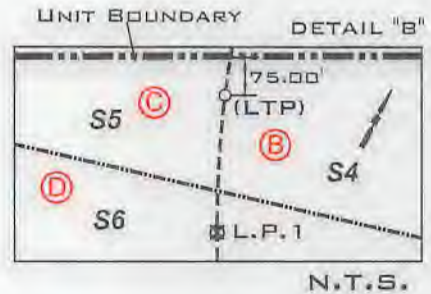
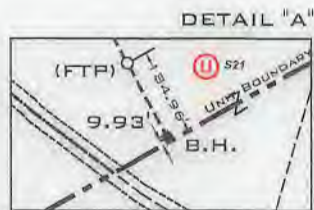
SURFACE OWNER ROBERT L. SHIELDS, ET AL ACREAGE 104.11
OIL & GAS ROYALTY OWNER ROBERT L. SHIELDS, ET AL LEASE ACREAGE 104.11
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE (SPECIFY) _____
TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,407' TMD: 22,277'
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

PG 2 OF 3
MCMASTERS LEASE
WELL S-16HU
314.2124± ACRES

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S1	A 05-18-02	Robert L. Shields, Et Al	104.11
S2	05-19-16	Robert L. Shields & Donald Shields	11.612
S3	05-19-16.1	Robert L. & Rebecca A. Shields	2.307
S4	B 05-19-17	Mark A. Yoho	15.263
S5	C 05-19-24	Mark E. Yoho	15.436
S6	D 05-19-18	Mark E. Yoho, Et Ux	55.948
S7	E 05-18-24	Duane Brunn	102.0
S8	F 05-23-01	Patricia Accetolo, Et Al	146.66
S9	G 05-23-02	Danielle D. Lilley	77.636
S10	H 05-23-2.2	Jessica N. & Andrew L. Jones	7.636
S11	I 05-23-4	Abe J. Hochstetler	100.7
S12	J 05-23-4.2	XCL Midstream Operating, LLC	1.17
S13	K 05-23-4.1	XCL Midstream Operating, LLC	2.16
S14	L 05-23-5	Daniel D. Rhyand	118.5
S15	M 05-23-18	Abe J. Hochstetler	35.38
S16	N 05-23-16	Roy Friend Yoho, Sr.	18.03
S17	O 05-23-16.1	Donald B. Henry	1.97
S18	P 05-23-15	Virginia Ethel Henry Estate	15.5
S19	Q 05-23-14	Dominion Transmission Inc.	59.5
S20	R 05-23-8	Carl David & Suzanne L. Guseman	29.5
S21	S 05-23-9.2	Linda D. Greathouse	25.58
S22	T 05-23-9.4	Jackson R. Davis, Sr. & Deanna L. Davis	2.087
S23	U 05-23-9.1	John W. Van Orden Et Ux	23.376
S24	V 05-23-13	Linda D. Greathouse	14.24
S25	05-23-13.1	James R. Ferrell & Pamela J. Ferrell	0.75
S26	05-23-12	Mark A. Yoho	3.05
S27	05-26-11	Mark A. Yoho	89.25
S28	05-26-22	Richard Joseph Otte	8.3
S29	05-26-7	Dominion Transmission, Inc.	71.0
S30	05-26-26	Michael J. Wiley Et Al	101.57
S31	05-23-17.3	William & Katherine Flewelling	5.018
S32	05-23-17	Tammy & Thomas E. Brown	4.62
S33	05-23-17.4	Tammy D. Meadows	2.605
S34	05-23-17.2	Dick Rowan Jr. & Carol J. Rowan	14.920
S35	05-23-17.1	Curtis E. Hall Et Ux	10.051
S36	05-23-21	Mark A. Yoho & Mark E. Yoho	0.588
S37	05-23-20	Christian Church	0.19
S38	05-23-19	Doty Cemetery	1.0
S39	05-23-18.1	Mark A. Yoho	7.8
S40	05-23-29	James Wiley	0.25
S41	05-23-22	Daniel D. Rhyand & Laurel R. Greene	6.25
S42	05-23-23	Michael J. Wiley Et Al	1.0
S43	05-23-28.2	Mark W. & Carolyn L. Tennant	10.8
S44	05-23-28	Gregg D. Minor	39.43
S45	05-23-28.1	Troy W. & Erin M. Thomas	1.0
S46	05-22-7	Patricia Accetolo Et Al	25.02
S47	05-22-7.1	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	20.68
S48	05-22-6	CNX Gas Company, LLC	64.70
S49	05-22-5	CNX Gas Company, LLC	134.425
S50	05-22-5.1	Williams Ohio Valley Midstream, LLC	12.875
S51	05-19-18.2	Paul V. & Carol Neely	32.672
S52	05-22-18.1	Mark E. Yoho Et Ux	2.57
S53	05-19-25	David E. Yoho & Mark E. Yoho	9.976

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S54	05-19-26	Roger J. & Beth E. James	9.977
S55	05-19-27	David E. Yoho & Mark E. Yoho	7.041
S56	05-19-14	James & Sherry Beegle	18.356
S57	05-19-30	Ernie & Tammy Anderson	19.037
S58	05-19-13	Rona Lee Rice & Charles Franklin McCardle	94.925
S59	05-18-1.1	Charles F. & Diana L. Haynes	0.392
S60	05-18-1	Diana Henry Haynes & Carol C. Henry	62.908
S61	05-15-11	Diana Henry Haynes & Carol C. Henry	65.59
S62	05-18-4	Olan V. & Patricia E. Rutan	65.89
S63	05-18-3.1	Nikki L. & Jonathan Stevens	2.223
S64	05-18-3	Olan V. & Patricia E. Rutan	43.677
S65	05-18-23	XCL Midstream Operating LLC	110
S66	05-18-7	Charles Yeater	24.22
S67	05-18-16	Charles Yeater	17.768
S68	05-18-13	Southern Country Farms, Inc.	11.054
S69	05-18-59	Southern Country Farms, Inc.	15.79
S70	05-18-30	Mary & Daniel Robinson	5.46
S71	05-18-13.10	Carl Berg	10.88
S72	05-18-29	Carl G. Berg	5.319
S73	05-18-20	Wayne E. Channing Et Al	75.60
S74	05-18-21.1	Wayne E. Channing Et Al	5.47
S75	05-18-21.3	Hilda M. Gilbertson-Wayt, Life	0.811
S76	05-18-22	Rodney & Rhonda Jackson	30.345
S77	05-18-21.2	David P. Lissan	1.0
S78	05-23-2.1	William L. & Janice M. Wayne	2.364
S79	05-23-21	Curtis E. & Michelle J. Hall	43.119
S80	05-23-3	Abe J. Hochstetler	50.0
S81	05-23-6	James A. Channing Et Al	48.0
S82	05-17-11	Kenneth N. Corley Et Ux	120.0
S83	05-23-7	Terry E. Simms Et Ux	123.09
S84	05-23-8.1	William & Virginia Roupe	34.0
S85	05-24-5.4	Thomas V. Tuttle Et Ux	38.224
S86	05-23-9.3	Linda D. Greathouse	17.5
S87	05-23-11.1	John H. & Sonya D. Holliday	46.482
S88	05-23-11.4	Kenneth L. Lemons, Trustee for Jeffrey G. Hudson	10.879
S89	05-23-11.3	Colin R. Yoho	11.29
S90	05-23-11.8	Zachary R. Stevey	7.00
S91	05-23-11.5	Roy F. Yoho	2.25
S92	05-23-11.2	Evelyn L. Hudson	1.154
S93	05-23-11.6	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	0.094
S94	05-23-11	Roy F. Yoho	9.745
S95	05-23-11.7	Brian L. Huggins	1.835
S96	05-23-10	Terry E. Simms Et Ux	38.95
S97	05-24-06	Terry E. Simms Et Ux	42.84
S98	05-24-05	Robert C. Francis Et Ux (Life)	145.78
S99	05-24-3.1	T.H. Exploration II, LLC	5.50
S100	05-24-5.5	Sonny & Linda Lou Tagg	17.194
S101	05-23-7.2	Florella Lou Weigand	6.354
S102	05-23-7.1	Florella Lou Weigand	0.549
S103	05-24-5.1	James D. Watkins Et Ux	4.60
S104	05-24-5.2	James D. Watkins Et Ux	3.151
S105	05-24-1	Linda L. Hendrickson	175.0
S106	05-17-11.1	Randy W. Francis Et Ux	67.0



P.S. 708

David L Jackson



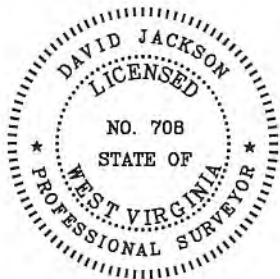
TUG HILL
OPERATING

OPERATOR'S
 WELL #: McMasters S-16HU
 DISTRICT: Franklin
 COUNTY: Marshall
 STATE: WV
 API #: 47-051-02337 Deep HUA

WELL PLAT
 PAGE 2 OF 3
 DATE: 01/27/20
 REVISED: 07/31/2020

PG 3 OF 3
MCMASTERS LEASE
WELL S-16HU
314.2124± ACRES

Lease No.	Tags	Parcel	Lessor	Book	Page
10*14116	A	5-18-2	DONALD SHIELDS	669	367
10*14295	B	5-19-17	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	C	5-19-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	D	5-19-18	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	E	5-18-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14129	F	5-23-1	LOUIS J ACCETTOLO & PATRICIA ACCETTOLO	703	283
10*14022	G	5-23-2	HOWARD N WAYNE SR AND DENISE D WAYNE	665	384
10*14022	H	5-23-2.2	HOWARD N WAYNE SR AND DENISE D WAYNE	665	384
10*14849	I	5-23-4	DAVID GUSTELY	806	265
10*14849	J	5-23-4.2	DAVID GUSTELY	806	265
10*14849	K	5-23-4.1	DAVID GUSTELY	806	265
10*14847	L	5-23-5	LETHA RUCKMAN	806	270
10*14849	M	5-23-18	DAVID GUSTELY	806	265
10*14847	N	5-23-16	LETHA RUCKMAN	806	270
10*14847	O	5-23-16.1	LETHA RUCKMAN	806	270
10*14665	P	5-23-15	DOROTHY TEDROW	781	539
10*18343	Q	5-23-14	DOMINION ENERGY TRANSMISSION INC	936	79
10*17192	R	5-23-8	ROBERT J HENRY	716	193
10*17189	S	5-23-9.2	ROBERT J HENRY	716	197
10*17189	T	5-23-9.4	ROBERT J HENRY	716	197
10*17189	U	5-23-9.1	ROBERT J HENRY	716	197
10*14786	V	5-23-13	TWILA O WHIPKEY	799	61



P.S.
708

David L Jackson



TUG HILL
OPERATING

OPERATOR'S

WELL #: McMasters S-16HU

DISTRICT: Franklin

COUNTY: Marshall

STATE: WV

API #: 47-051-02337 ^{HGA} _{Deep}

WELL PLAT

PAGE 3 OF 3

DATE: 01/27/20

REVISED: 07/31/2020