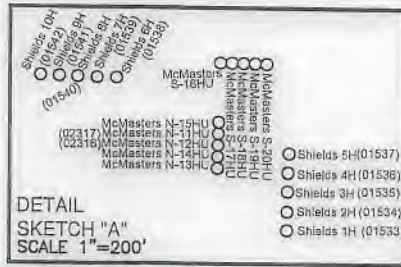
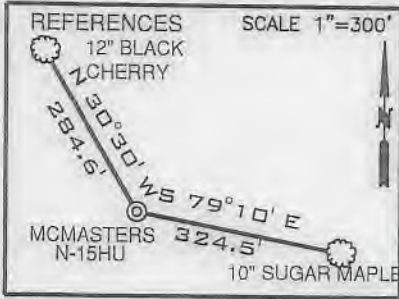
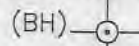


MCMASTERS LEASE WELL N-15HU 553.1085± ACRES

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

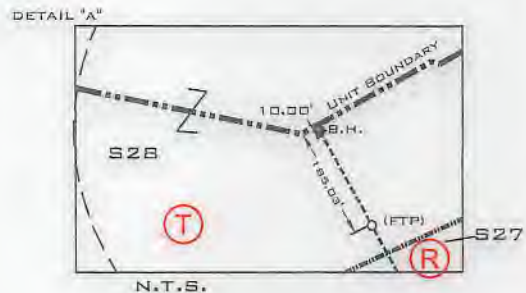
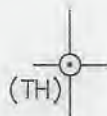


LINE	BEARING	DISTANCE
L1	N 71°28' W	1421.61'
L2	S 40°41' W	1294.45'
L3	N 70°48' E	2522.69'

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



SURFACE HOLE	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,401,156.35
E)	518,197.12
LANDING POINT 1	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,401,693.52
E)	518,904.15
BOTTOM HOLE	
UTM. NAD83, ZONE 17 IN METERS	
N)	4,404,404.76
E)	517,359.73



- 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 0058904.0401147

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 50°55' E	137.64'	201.17'	140.48'
C2	N 14°14' E	195.23'	381.39'	197.42'
C3	N 09°36' W	310.00'	914.95'	311.50'
C4	N 23°30' W	341.10'	1796.61'	341.62'

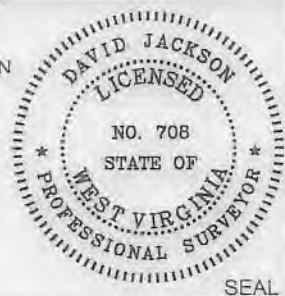
FILE NUMBER _____
DRAWING NUMBER: MCMASTERS_N-15HU_REV2
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING
GRADE GPS

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



David L. Jackson

JACKSON SURVEYING INC.
P.O. Box 1480
Clarksburg, WV 26302
304-823-5851



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

DATE: FEBRUARY 10, 2020
REVISED DATE: JULY 29, 2020

OPERATORS WELL NO. MCMASTERS N-15HU
API WELL NO. _____

47-051-02334 ^{HGA} Deep
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 ESTIMATED DEPTH TVD: 11,484' TMD: 22,491'
PLUG & ABANDON CLEAN OUT & REPLUG

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

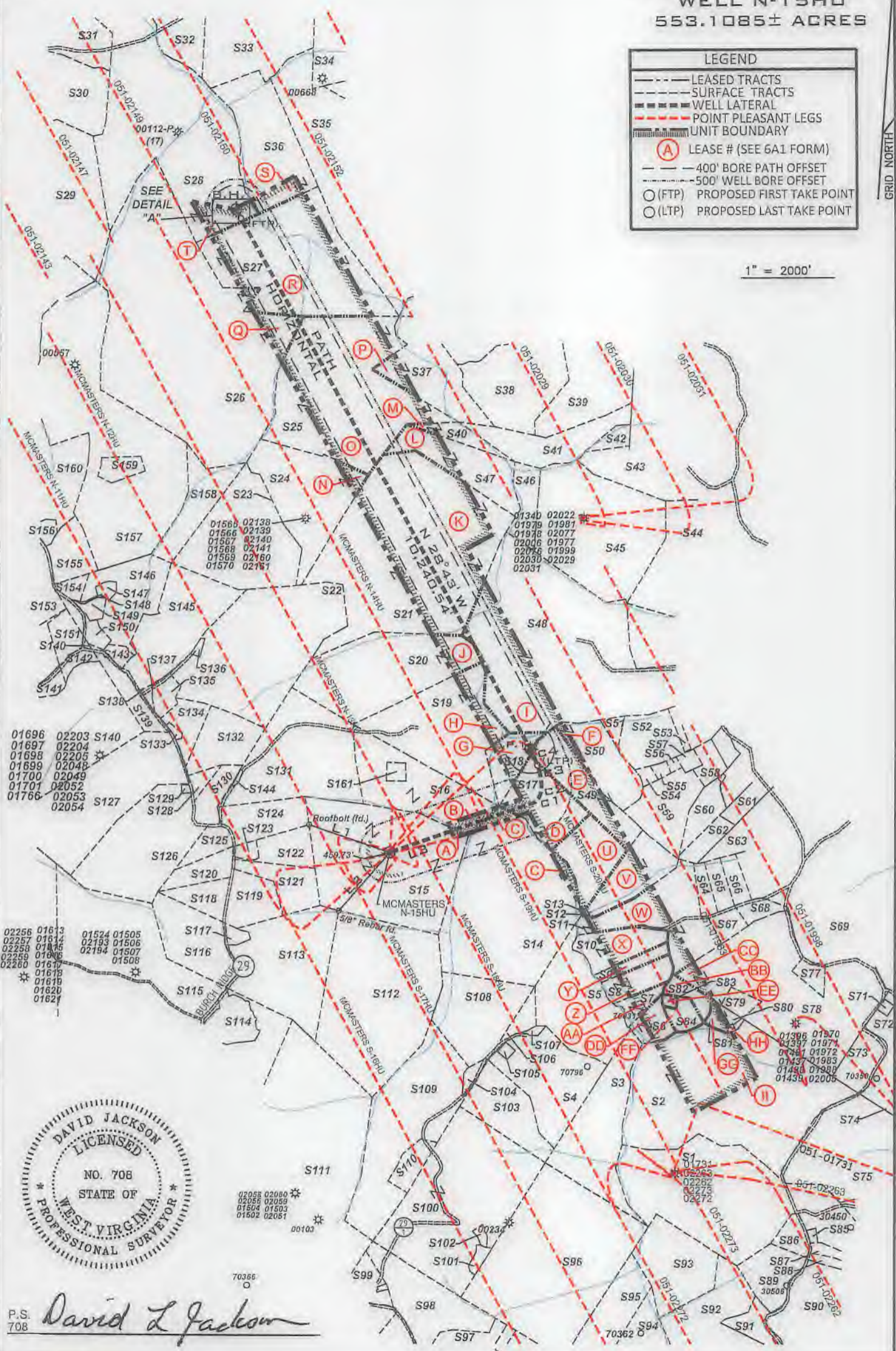
COUNTY NAME
PERMIT

MCMASTERS LEASE WELL N-15HU 553.1085± ACRES

LEGEND

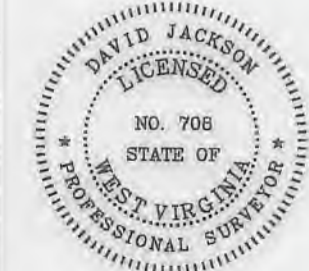
- LEASE TRACTS
- SURFACE TRACTS
- WELL LATERAL
- POINT PLEASANT LEGS
- UNIT BOUNDARY
- LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- (FTP) PROPOSED FIRST TAKE POINT
- (LTP) PROPOSED LAST TAKE POINT

1" = 2000'



01696 02203 S140
01697 02204
01698 02205
01699 02048
01700 02049
01701 02052
01766 02053
02054 S127

01340 02022
01979 01981
01978 02077
02006 01977
02076 01999
02030 02029
02031



P.S. 708 *David L Jackson*



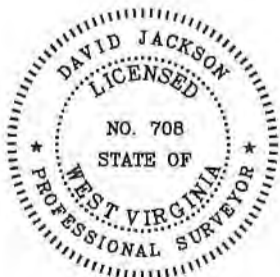
**TUG HILL
OPERATING**

OPERATOR'S
WELL #: MCMASTERS N-15HU
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API #: 47-051-

WELL PLAT
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REVISED: 07/29/2020

**MCMASTERS LEASE
WELL N-15HU
553.1085± ACRES**

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES	Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S1	05-23-07	Terry E. Simms Et Ux	123.09	S68	05-18-48	Marvin Dean Roberts Et Ux & Brad & Bridget Williams	2.92
S2	05-17-11	Kenneth N. Corley Et Ux	120.0	S69	05-17-10.3	James A. & Jill C. Corley	37.39
S3	05-23-06	James A. Channing Et Al	48.0	S70	05-17-09	Lloyd Richard Oliver Et Ux	61.6
S4	05-18-21	Curtis E. & Michelle J. Hall	43.119	S71	05-17-9.1	Jeri J. White	1.0
S5	05-18-20	Wayne E. Channing Et Al	75.60	S72	05-17-9.2	Jeri J. White	7.136
S6	05-18-31	Kenneth E. Rastall	6.94	S73	05-17-9.3	James A. Corley Et Ux	12.478
S7	05-18-29	Carl G. Berg	5.319	S74	05-17-9.4	Vick L. Bowen	60.3
S8	05-18-13.10	Carl Berg	10.88	S75	05-17-11.1	Randy W. Francis Et Ux	67.0
S9	05-18-30	Mary & Daniel Robinson	5.46	S76	05-24-01	Linda L. Hendrickson	175.0
S10	05-18-59	Southern Country Farms Inc.	15.79	S77	05-17-10.1	James A. & Jill C. Corley	4.51
S11	05-18-13	Southern Country Farms Inc.	11.054	S78	05-17-10	James A. Corley Et Al	92.61
S12	05-18-16	Charles Yeater	17.768	S79	05-17-10.5	Williams Ohio Valley Midstream LLC	4.24
S13	05-18-07	Charles Yeater	24.22	S80	05-17-12.1	Williams Ohio Valley Midstream LLC	1.67
S14	05-18-23	XCL Midstream Operating LLC	110.0	S81	05-17-12	James A. & Jill C. Corley	3.33
S15	05-18-02	Robert L. Shields Et Al	104.11	S82	05-18-13.8	Lori D. Carpenter	5.545
S16	05-18-03	Olan V. & Patricia E. Rutan	43.677	S83	05-18-32.1	Lori D. Carpenter	5.545
S17	05-18-06	Charles Yeater	26.0	S84	05-18-32	Kenneth E. Rastall	5.335
S18	05-18-05	Terry Melott	8.14	S85	05-23-7.1	Florella Lou Weigand	0.549
S19	05-18-04	Olan & Patricia Rutan	65.89	S86	05-23-7.2	Florella Lou Weigand	6.354
S20	05-15-11	Diana Henry Haynes & Carol Henry	65.59	S87	05-24-5.1	James D. Watkins Et Ux	4.60
S21	05-15-12	John David Petrock & Thomas Andrew Petrock	150.23	S88	05-24-5.2	James D. Watkins Et Ux	3.151
S22	05-19-13	Rona Lee Rice & Charles Franklin McCordle	94.925	S89	05-24-5.5	Sonny & Linda Lou Tagg	17.194
S23	05-14-15	Robert L. Shields Et Al	53.0	S90	05-24-05	Robert C. Francis, Et Ux-Life	145.78
S24	05-15-15	Robert L. Shields Et Al	49.0	S91	05-24-3.1	T.H. Exploration II LLC	5.50
S25	05-15-01	Marcus Sharp & Anglea R. Schlabach	121.0	S92	05-24-5.4	Thomas V. Tuttle Et Ux	38.224
S26	05-14-13	Ralph D. & Sally Jane Hoyt	222.18	S93	05-23-8.1	William & Virginia Roupe	34.0
S27	05-11-15	Lionel L. Persinger Et Ux	93.0	S94	05-23-9.3	Linda D. Grealhouse	17.5
S28	05-12-12.1	Lionel L. Persinger Et Ux	148.09	S95	05-23-08	Carl David & Suzanne L. Guseman	29.5
S29	05-12-14	Linda Hamilton Et Al	117.495	S96	05-23-05	Daniel D. Rhyand	118.5
S30	05-12-13	Linda Hamilton Et Al	41.887	S97	05-23-16	Roy Friend Yoho Sr.	18.03
S31	05-12-08	Anita Ray Miller-Life	100.35	S98	05-23-18	Abe J. Hochstetler	35.38
S32	05-12-12	Lionel L. Persinger Et Ux	45.0	S99	05-23-18.1	Mark A. Yoho	7.8
S33	05-11-21	Karen Reed Et Al	112.67	S100	05-23-04	Abe J. Hochstetler	100.7
S34	05-11-17	Kevin Corley Et Ux	36.13	S101	05-23-4.1	XCL Midstream Operating LLC	2.16
S35	05-11-14	Hiram Estate Family LTD LLP	158.054	S102	05-23-4.2	XCL Midstream Operating LLC	1.17
S36	05-12-11	Wesley R. Bryan & Wesley R. Bryan II	52.478	S103	05-23-03	Abe J. Hochstetler	50.0
S37	05-15-03	Joseph J. Kramer Et Ux	36.10	S104	05-23-2.1	William L. & Janice M. Wayne	2.364
S38	05-15-05	Joseph J. Kramer Et Ux	35.0	S105	05-18-21.2	David P. Lissan	1.0
S39	05-15-06	Joseph J. Kramer Et Ux	42.5	S106	05-18-21.1	Rodney & Rhonda Jackson	5.47
S40	05-15-02	John David Petrock & Thomas Andrew Petrock	5.0	S107	05-18-21.3	Hilda M. Gilberson-Wayt - Life	0.811
S41	05-15-6.1	Joseph J. Kramer Et Ux	39.40	S108	05-18-22	Rodney & Rhonda Jackson	30.345
S42	05-15-07	XCL Midstream Operating LLC	4.5	S109	05-23-02	Danielle D. Lilley	77.636
S43	05-15-08	XCL Midstream Operating LLC	77.11	S110	05-23-2.2	Jessica N. & Andrew L. Jones	7.636
S44	05-16-23.5	Marshall County Coal Company	15.09	S111	05-23-01	Patricia Accattolo Et Al	146.66
S45	05-15-09	CNX Land Resources Inc.	81.98	S112	05-18-24	Duane Brunn	102.0
S46	05-15-13	CNX Land Resources Inc.	11.0	S113	05-19-18	Mark E. Yoho Et Ux	55.948
S47	05-15-14	John David Petrock & Thomas Andrew Petrock	25.0	S114	05-22-5.1	Williams Ohio Valley Midstream LLC	12.875
S48	05-15-10	Mark Stanley Ruckman	153.75	S115	05-22-05	CNX Gas Company LLC	134.425
S49	05-18-15.3	Charles Yeater	26.44	S116	05-19-18.2	Paul V. & Carol Neely	32.672
S50	05-18-15.4	Edward Lee Burge Jr.	22.34	S117	05-19-18.1	Mark E. Yoho Et Ux	2.57
S51	05-18-15	Edward Lee Burge Jr.	2.495	S118	05-19-25	David E. Yoho & Mark E. Yoho	9.976
S52	05-18-11.1	Edward Lee Burge Jr.	18.0	S119	05-19-24	Mark E. Yoho	15.436
S53	05-18-11.2	Edward Lee Burge Jr.	2.0	S120	05-19-26	Roger J. & Beth E. James	9.977
S54	05-18-10.1	David V. Anderson Et Ux	1.65	S121	05-19-17	Mark A. Yoho	15.263
S55	05-18-10.2	David Anderson Et Ux	1.377	S122	05-19-16	Robert L. Shields & Donald Shields	11.612
S56	05-18-10	David & Nancy Anderson	0.907	S123	05-19-16.1	Robert L. & Rebecca A. Shields	2.307
S57	05-18-12	William L. Wayne Et Ux	2.270	S124	05-19-14	James & Sherry Beegle	18.356
S58	05-18-15.1	Jason Blair	5.948	S125	05-19-27	David E. Yoho & Mark E. Yoho	7.041
S59	05-18-15.5	Teresa South	23.547	S126	05-19-28	David E. Yoho & Mark E. Yoho	56.899
S60	05-18-13.3	Robert G. Closterman	9.813	S127	05-19-19	Russell Blake Et Ux	66.4
S61	05-18-14	Michael Fincham & Kezia Winters	6.386	S128	05-19-30.1	Eric R.W. & Ashley A. Huggins	2.911
S62	05-18-17	Michael Fincham & Kezia Winters	6.555	S129	05-19-32	Jaspern Burch, Et Al Trustees	0.397
S63	05-18-13.1	Cory A. Holt	9.248	S130	05-19-31	Charles F. & Diana L. Haynes	8.779
S64	05-18-34	Jodi & Gary Hall	5.002	S131	05-18-01	Diana Henry Haynes & Carol C. Henry	62.908
S65	05-18-13.13	Glenn E. & Sandra K. Whisler	5.59	S132	05-19-30	Ernie & Tammy Anderson	19.037
S66	05-18-13.6	Glenn Eugene Whisler Et Ux	5.384	S133	05-19-15	Carly Herran	0.72
S67	05-18-33	Sandra & Glenn Whisler	5.343	S134	05-19-29	Ernie L. & Tammy L. Anderson	10.961
				S135	05-19-12	Ernie L. Anderson Et Ux	5.33
				S136	05-14-13.1	Donald Shields	0.8



P.S. 708

David L Jackson



**TUG HILL
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**MCMASTERS LEASE
WELL N-15HU
553.1085± ACRES**

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S137	05-19-11	Ernie L. Anderson Et Ux	0.08
S138	05-19-10	Ernie L. Anderson Et Ux	0.8125
S139	05-19-09	Penny Elaine Ashcraft	10.44
S140	05-19-20	Wilbert H. Bungard Et Ux	114.989
S141	05-19-20.3	Sidney Harmon	3.715
S142	05-19-20.1	John J. Ebert-Life	3.848
S143	05-19-7.5	Adam T. & Jesse L. Robinson	2.64
S144	05-18-1.1	Charles F. & Diana L. Haynes	0.392
S145	05-19-08	CNX Gas Company LLC	40.0
S146	05-14-07	Olan V. Rutan Et Ux	32.4801
S147	05-19-7.4	Olan V. Rutan Et Ux	1.787
S148	05-19-7.3	Olan V. Rutan Et Ux	0.341
S149	05-19-7.2	Olan Rutan	2.783
S150	05-19-7.1	Robert L. Shields Et Ux	3.399
S151	05-19-20.2	Cassandra L. Harmon	7.448
S153	05-19-05	Margirene Keefe	126.03
S154	05-19-06	Belinda Kay Meadows, Rebecca Ann Shields & Olan V. Rutan	5.1099
S155	05-14-11	Dale R. Gallaher Et Al	12.0
S156	05-14-10.4	Adam R. & Jesse L. Robinson	3.343
S157	05-14-12	Dale R. Gallaher Et Al	135.10
S158	05-14-14	Robert L. Shields Et Al	29.05
S159	05-14-12.1	Henry Wilson Plunkert Jr.	5.0
S160	05-14-10	Wanda P. Rine-Life	107.372
S161	05-18-3.1	Nikki L. & Jonathan Stevens	2.223

Lease No.	Tract	Parcel	Lessor	Book	Page
10*14116	A	5-18-2	DONALD SHIELDS	669	367
10*14030	B	5-18-23	LOIS V YOHO	665	351
10*14109	C	5-18-3	MARTHA M RUTAN	668	636
10*17454	D	5-18-6	MARGARET A BONNETT	940	431
10*17222	E	5-18-15.3	JAMES W AND DOLLIE M ROSTER	940	429
10*22432	F	5-18-15.4	EDWARD LEE BURGES SR	961	413
10*10140	G	5-18-5	TERRELL M PLOTT	704	26
10*19032	H	5-18-4	JAN I ARNOLD AND MARSHAA ARNOLD	813	111
10*19339	I	5-15-10	MARK STANLEY RUCKMAN	741	75
10*19018	J	5-15-11	BENJAMIN FRANKLIN HENRY FREDRICK ALLEN HENRY	746	5
10*19237	K	5-15-12	JACK PETROCK HATTIE PETROCK	741	68
10*19337	L	5-15-14	JACK PETROCK HATTIE PETROCK	741	68
10*19309	M	5-15-2	KAREN I DENNY	798	551
10*14216	N	5-15-15	DONALD S-H ELDG	669	367
10*14042	O	5-15-1	RALPH D TAYLOR	665	487
10*19030	P	5-15-3	KATHLEEN R CUSTAD	806	39
10*14067	Q	5-14-13	REVA FRANZE	666	51
10*16913	R	5-11-15	LIONEL LAND MARY LEE PERSINGER	976	616
10*16009	S	5-17-11	LAMOYNE BAKER	665	554
10*16918	T	5-12-12.1	LIONEL LAND MARY LEE PERSINGER	976	617
10*14503	U	5-18-7	IMA LEE YOHO	756	85
10*14503	V	5-18-16	IMA LEE YOHO	756	85
10*14099	W	5-18-13	SOUTHERN COUNTRY FARMS INC	666	489
10*14099	X	5-18-39	SOUTHERN COUNTRY FARMS INC	666	489
10*14099	Y	5-18-30	SOUTHERN COUNTRY FARMS INC	666	489
10*14099	Z	5-18-13.10	SOUTHERN COUNTRY FARMS INC	666	489
10*17431	AA	5-18-29	SOUTHERN COUNTRY FARMS INC	938	448
10*17456	BB	5-18-13.B	LORI D CARPENTER	941	223
10*14095	CC	5-17-10	JAMES A AND JILL C CORLEY	666	345
10*17780	DD	5-18-31	KENNETH E RASTALL	932	434
10*17456	EE	5-18-32.1	LORI D CARPENTER	941	223
10*17780	FF	5-18-32	KENNETH E RASTALL	932	434
10*14134	GG	5-17-12	JAMES A AND JILL C CORLEY	706	130
10*14134	HH	5-17-12.1	JAMES A AND JILL C CORLEY	706	130
10*14126	II	5-17-11	SHARON MIDGAF	697	152



P.S. 708

David L Jackson



**TUG HILL
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