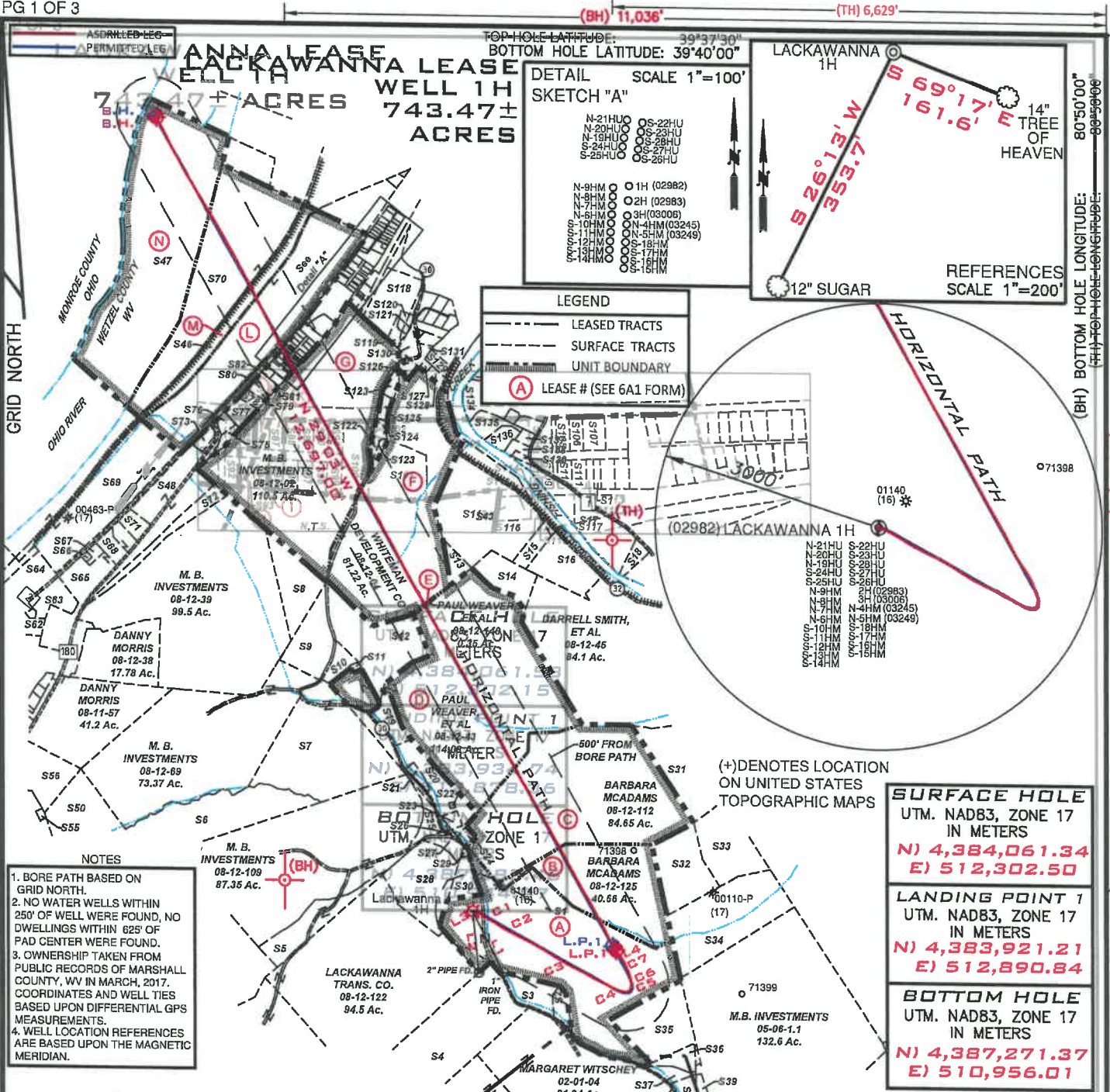
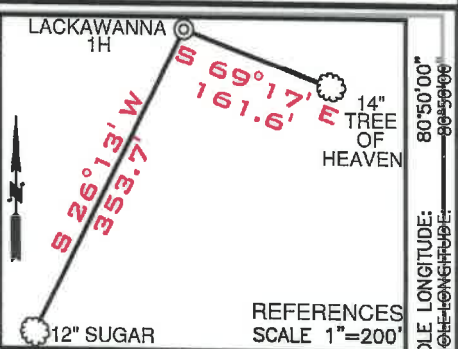


form wv6  
form wv6b



TOP HOLE LATITUDE: 39°37'30"  
BOTTOM HOLE LATITUDE: 39°40'00"  
DETAIL SCALE 1"=100'  
SKETCH "A"  
N-21HU OS-22HU  
N-20HU OS-23HU  
N-19HU OS-24HU  
S-24HU OS-27HU  
S-25HU OS-26HU  
N-9HM O1H (02982)  
N-9HM O2H (02983)  
N-7HM O3H (03006)  
N-6HM O4HM (03245)  
N-5HM O5HM (03249)  
N-4HM O6HM (03249)  
N-3HM O7HM (03249)  
N-2HM O8HM (03249)  
N-1HM O9HM (03249)  
N-0HM O10HM (03249)  
N-0HM O11HM (03249)  
N-0HM O12HM (03249)  
N-0HM O13HM (03249)  
N-0HM O14HM (03249)  
N-0HM O15HM (03249)



LEGEND  
--- LEASED TRACTS  
--- SURFACE TRACTS  
--- UNIT BOUNDARY  
A LEASE # (SEE 6A1 FORM)

**SURFACE HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,384,061.34  
E) 512,302.50

**LANDING POINT 1**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,383,921.21  
E) 512,890.84

**BOTTOM HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,387,271.37  
E) 510,956.01

NOTES  
1. BORE PATH BASED ON GRID NORTH.  
2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.  
3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN MARCH, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.  
4. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

NOTE: PERMITTED COORDINATES ARE ON PAGE 2.

LINE	BEARING	DISTANCE
L1	N 26°43' W	903.74
L2	N 05°37' W	824.07
L3	S 71°14' E	91.99
L4	N 34°09' W	154.89

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 60°43' E	265.69	2687.93'	285.80'
C2	S 61°58' E	502.16	3301.66'	502.85'
C3	S 61°25' E	1209.36	16630.75'	1209.63'
C4	S 69°43' E	248.93	581.90'	250.87'
C5	N 45°29' E	98.19	69.80'	108.91'
C6	N 08°59' W	173.05	333.27'	175.05'
C7	N 24°18' W	220.09	1014.32'	220.52'

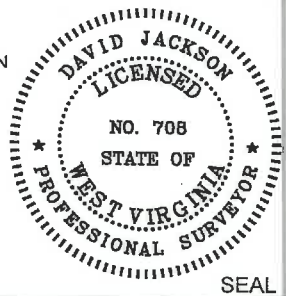
FILE NUMBER \_\_\_\_\_  
DRAWING NUMBER LACKAWANNA\_1H\_REV 1  
SCALE 1" = 2000'  
MINIMUM DEGREE OF ACCURACY 1/200  
PROVEN SOURCE OF ELEVATION SUBMETER MAPPING GRADE GPS

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*

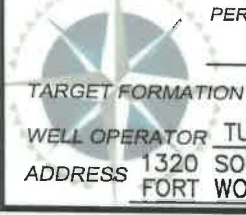
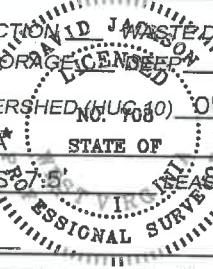
JACKSON SURVEYING INC.  
P.O. Box 1460  
Clarksburg, WV 26302  
304-623-5851



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

DATE: MAY 26, 2021  
OPERATOR'S WELL NO. LACKAWANNA 1H  
Office of Oil and Gas  
API WELL NO. 43830222 02982  
STATE WV COUNTY WETZEL PERMIT  
WV Department of Environmental Protection  
LOCATION ELEVATION 1305.32' WATERSHED MUG 10 OUTLET MIDDLE ISLAND  
DISTRICT MAGNOEIA STATE OF WEST VIRGINIA COUNTY WETZEL  
QUADRANGLE PORTER FALLS 7.5' LEASE NUMBER SEE WW-6A1 Form

S. David L Jackson  
SURFACE OWNER M. B. INVESTMENTS ACREAGE 88.09 10/14/2022  
OIL & GAS ROYALTY OWNER M. B. INVESTMENTS, ET AL LEASE ACREAGE 88.09  
PROPOSED WORK: DRILL ASDRILLED CONVERT ASDRILLED DRILL DEEPER ASDRILLED REDRILL ASDRILLED  
PERFORATE NEW FORMATION ASDRILLED OTHER PHYSICAL CHANGE (SPECIFY) ASDRILLED  
TARGET FORMATION MARCELLUS COUNTY Wetzel ESTIMATED DEPTH TVD-6,542' TMD: 20,684'  
WELL OPERATOR TUG HILL OPERATING, LLC STATE: WV DESIGNED AGENT DIANNA STAMPER  
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313



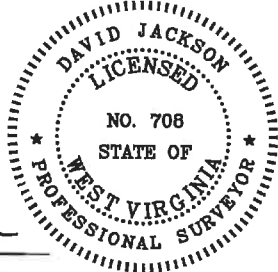
COUNTY NAME  
PERMIT

form: wv6

**LACKAWANNA LEASE  
WELL 1H  
743.47± ACRES**

Number	TAX MAP-PARCEL	SURFACE OWNER	ACRES
S1	08-12-134	M. B. Investments	88.09
S2	08-12-134.1	Raymond L. & Elizabeth Pibble	2.14
S3	08-12-134.3	M. B. Investments	5.55
S4	08-17-04	M. B. Investments	46.75
S5	08-12-109.1	M. B. Investments	10.0019
S6	08-12-108	M. B. Investments	24.0
S7	08-12-70	M. B. Investments	50.37
S8	08-12-14	Thomas & Helena McLaughlin	10.5
S9	08-12-40	Timothy Doty & Helena McLaughlin	8.83
S10	08-12-41	Michael A. & Annabelle Corbin & Paul E. & Christine Weaver	3.39
S11	08-12-42	Shriver Cemetery	1.0
S12	08-12-43.1	Michael A. & Annabelle Corbin & Paul E. & Christine Weaver	22.25
S13	08-12-15	Michael A. & Annabelle Corbin & Paul E. & Christine Weaver	2.6
S14	08-12-44	Richard L. Armstrong	8.0
S15	08-12-5.1	Michael & Joyce Durig	4.0
S16	08-12-16	Russell Dalrymple, et al	11.87
S17	08-12-08	Calvin Dean Cross	14.96
S18	08-12-17	Virgie E. Kuhns	1.25
S19	08-12-43.2	Michael A. & Annabelle Corbin & Paul E. & Christine Weaver	7.25
S20	08-12-43.5	M. B. Investments	8.774
S21	08-12-43.4	Michael A. & Annabelle Corbin & Paul E. & Christine Weaver	0.996
S22	08-12-43.3	Geraldine C. Cross	0.13
S23	08-12-111	WV Conservation Comm.	1.0
S24	08-12-112.1	M. B. Investments	0.82
S25	08-12-110	Lackawanna Transport Company	3.59
S26	08-12-72	Paul E. & Christine Weaver	0.50
S27	08-12-124	M. B. Investments	2.23
S28	08-12-123	Lackawanna Transport Company	18.55
S29	08-12-134.2	M. B. Investments	0.23
S30	08-12-134.4	M. B. Investments	3.51
S31	08-12-113	Jacob Presley Morgan III	16.30
S32	08-12-126	Jacob Presley Morgan III	16.06
S33	08-12-127	Jacob Presley Morgan III	10.0
S34	08-12-136	Jacob Presley Morgan III	28.25
S35	08-12-135	Timothy J. Haynes & Gary W. Woofter	21.0
S36	02-01-5.2	Mark K. & Teresa J. Loy	2.94
S37	02-01-5.3	Mark K. & Teresa J. Loy	1.939
S38	02-01-5.1	Mark K. & Teresa J. Loy	4.56
S39	05-06-01	Mark K. & Teresa J. Loy	2.37
S40	02-01-05	Daniel A. Witschey	21.5
S41	08-12-121	Charles E. & Mary Elizabeth Clegg	31.94
S42	08-12-129	Charles E. & Mary Elizabeth Clegg	20.0
S43	08-12-05	Michael Lloyd & Joyce Diana Durig	30.5
S44	08-17-07	Lackawanna Transport Company	21.37
S45	08-17-7.1	Lackawanna Transport Company	25.64
S46		CSX Railroad	
S47	Ohio River	State of WV, Department of Commerce, Division of Natural Resources	
S48	Rt 180	State Road Commission	15.96
S49	08-12-106	Thomas C. Pennell	15.96
S50	08-12-106.1	Thomas R. & Tamera D. Pennell	14.04
S56	08-11-61	Hunter B. McAdams & Doug McAdams	7.61
S61	08-11-19	Lisa Straight & Edwin Rial	6.3
S62	08-11-39.1	William L. & Beulah Talkington	1.83
S63	08-11-41	A+A Supply, LLC	1.63
S64	08-11-35	Lisa Straight & Edwin Rial	5.9
S65	08-12-11	Calvin T. Hedrick	6.64
S66	08-12-11.1	Larry D. McCaman	0.25
S67	08-12-11.3	Larry McCaman	0.807
S68	08-12-11.4	Paul Andrew James Simmons, Jr.	1.94
S69	08-12-01	Mount Clare Properties, Inc	50.71
S70	08-07-105	Mount Clare Properties, Inc	116.08
S71	08-12-11.2	Ascent Resources Marcellus Minerals, LLC	1.811
S72	08-12-13	M. B. Investments	8.18
S73	08-12-139	Department of Public Safety	1.37
S75	08-07-87.2	H. Lee Scott Jr.	1.110
S76	08-07-87.1	H. Lee Scott Jr.	0.95
S77	08-07-87	H. Lee Scott Jr. & Stephen A. & Betty A. Davis	2.221

Number	TAX MAP-PARCEL	SURFACE OWNER	ACRES
S78	08-07-88	Living Quarters, LLC	1.08
S79	08-07-89.3	Living Quarters, LLC	0.94
S80	08-07-89.2	Barbara S. Nice	0.89
S81	08-07-89	Barbara S. Nice	0.40
S82	08-07-89.1	Barbara S. Nice	0.40
S83	08-07-90	Barbara Shank	0.70
S84	08-07-91	Dennis Phillips	0.20
S85	08-07-92	Karen D. Pugh	0.20
S86	08-07-93	Darrell S. & Diana Lynn Hartwig	0.20
S87	08-07-94	Ronald D. & Carole Dawson	0.21
S88	08-07-95	Debra Barrille, (Leslie L. Debolt, land contract)	0.21
S89	08-07-96	Rita E. Barrick	0.21
S90	08-07-102	Michael Vaughn Skeen & Patricia Ann Sawyer	0.22
S91	08-07-103.1	Charlotte M. Adams	0.22
S92	08-07-97	David Roy Christian	0.20
S93	08-07-98	David Roy Christian	0.20
S94	08-07-98.1	Lionel Kent, Helen A. Potts & Deloris Potts (Life)	0.20
S95	08-07-99	Lionel Kent, Helen A. Potts & Deloris Potts (Life)	0.20
S96	08-07-100	James J. & Carol Clark	0.21
S97	08-07-101	Doris A. Fannin & Richard S. Williamson	0.21
S98	08-07-102.1	Ronald E. Jr. & Lori J McCoy	0.21
S99	08-07-103	Michael L. & Joyce D. Durig	0.21
S100	08-07-104	Lisa Denise Bridge	0.12
S101	08-07-106.1	Tiona Henthorn	1.49
S102	08-07-104.1	Lisa Denise Bridge	0.06
S103	08-07-106	Route 2 South, LLC	4.33
S104	08-07-107	Route 2 South, LLC	0.36
S105	08-07-108	Donald W. Owens, Jr.	0.21
S106	08-07-109	Douglas E. & Amber L. Straight	0.21
S107	08-07-110	Allen R. & Malinda J. Lough	0.34
S108	08-07-114	William & Ruth Leek	0.14
S109	08-07-115	William J. Leek	0.14
S110	08-07-116	Betty J. Yoho (Life), Sandra M. Hardman	0.20
S111	08-07-117	Jerry W. & Elizabeth Southerly	0.21
S112	08-07-123.1	William & Ruth Ann Leek	0.23
S113	08-07-123.2	William & Ruth Ann Leek	0.01
S114	08-07-124	William & Ruth Ann Leek	0.08
S115	08-07-125	William & Ruth Ann Leek	0.07
S116	08-07-129	Mary Burton, et al	1.10
S117	08-07-127	William Sherman & Ruth Ann Leek	0.49
S118	08-07-131.3	Nancy J. Todd	9.726
S119	08-07-131.1	Edgar W. Whiteman, Jr.	1.25
S120	08-07-131.4	Nancy J. Todd	0.989
S121			
S122	08-12-03	O. Terrell Coffield Family Trust	0.98
S123	08-12-4.1	Whiteman Development Co., LLC & PRN, LLC	2.59
S124	08-07-142	Pamela E. Weisenbarger	1.35
S125	08-07-142.1	Thomas W, II & Teena B. Emch	1.35
S126	08-07-160	Frank L. Price, Jr.	1.28
S127	08-07-144	Roger Hall, et al	5.58
S128	08-07-143	Dominic D. Yost	1.0
S129	08-07-144.1	Donald J. & Debby J. Powell	2.25
S130	08-07-137	462 Properties, LLC	1.836
S131	08-07-137.1	Anna E. McPeak	0.94
S134	08-07-145	Lois J. Day	8.008
S135	08-07-145.5	Jodi Forni	3.65
S136	08-07-145.3	Jodi Forni	2.641
S137	08-07-145.2	David J. Jackson,(Life), James & Ruth Jackson	0.813
S138	08-12-06	David J. Jackson,(Life), James & Ruth Jackson	1.74
S139	08-12-07	David J. Jackson,(Life), James & Ruth Jackson	0.35
S140	08-07-126	William Sherman & Ruth Ann Leek	0.30
S141	08-07-117.1	Donald L. Larsen, Jr.	0.21
S142	08-07-119	Joshua D. Larsen, Jr.	0.22
S143	08-07-111	Allen R. & Malinda J. Lough	0.34
S144	08-07-120	William D. Lawrence	1.51
S145	08-07-112	Charles D. & Shirley L. White	0.17
S146	08-07-113	Joe's Tire III, LLC	0.60
S147	08-07-122	Moser & Moser Associates, Inc.	0.50
S148	08-07-121	Moser & Moser Associates, Inc.	0.10
S149	08-07-123	M.B. Investments	8.50



P.S. 708 *David L Jackson*

RECEIVED  
Office of Oil and Gas

SEP 30 2022

WV Department of  
Environmental Protection

10/14/2022



**TUG HILL**  
OPERATING

OPERATOR'S  
WELL #: LACKAWANNA 1H  
DISTRICT: Maqolia  
COUNTY: Wetzel  
STATE: WV  
API #: 47-103-02982

WELL PLAT  
PAGE 3 OF 3  
DATE: 05/26/2021