

**MICHTER LEASE  
WELL N-3HM  
969.8489± ACRES**

**REFERENCES**

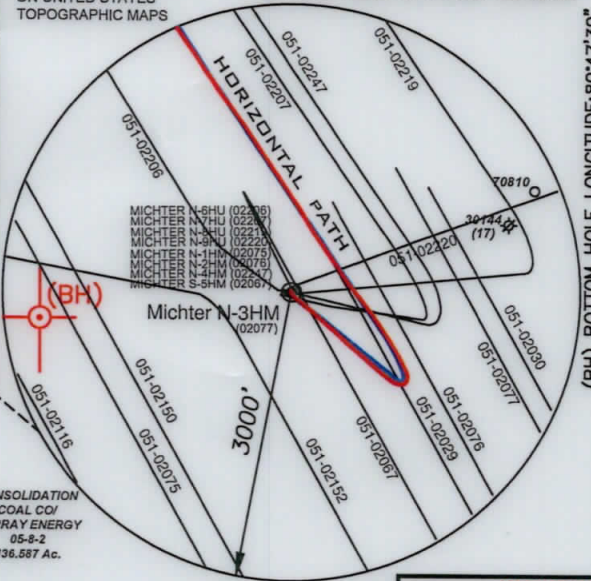
SCALE 1"=500'

(\*) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

TOP HOLE LATITUDE: 39°50'00"  
BOTTOM HOLE LATITUDE: 39°50'00"



| LINE | BEARING    | DISTANCE |
|------|------------|----------|
| L1   | N 72°28' W | 865.25'  |
| L2   | N 78°18' E | 1858.58' |
| L3   | S 42°47' E | 58.49'   |
| L4   | S 49°15' E | 1265.95' |



ASDRILLED LEG  
PERMITTED LEG

**LEGEND**

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

DETAIL SKETCH "A" SCALE 1"=100'

**SURFACE HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
(TH)  $N) 4,405,905.82$   
 $E) 517,342.83$

**LANDING POINT 1**  
UTM. NAD83, ZONE 17  
IN METERS  
 $N) 4,405,799.59$   
 $E) 517,628.50$

**BOTTOM HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
 $N) 4,408,130.06$   
 $E) 515,990.61$

| CURVE | CHORD BEARING | CHORD LENGTH | RADIUS   | ARC LENGTH |
|-------|---------------|--------------|----------|------------|
| C1    | S 37°26'41" E | 41.65'       | 66.35'   | 42.37'     |
| C2    | S 69°45'30" E | 126.49'      | 187.42'  | 129.02'    |
| C3    | N 51°05'59" E | 76.77'       | 56.19'   | 84.51'     |
| C4    | N 08°58'41" W | 88.41'       | 135.63'  | 90.05'     |
| C5    | N 26°25'02" W | 163.84'      | 2307.21' | 163.87'    |

- 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, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
- WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
- BOUNDARIES ALONG ROADWAYS ARE BASED UPON MEMORANDUM BY DICKIE, MCCAMEY & CHILCOTE, P.C. FILE 0058304.0401147.

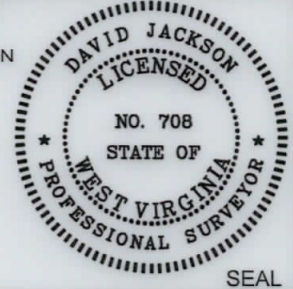
FILE NUMBER \_\_\_\_\_  
DRAWING NUMBER **MICHTER\_N-3HM\_REV1**  
SCALE **1" = 2000'**  
MINIMUM DEGREE OF ACCURACY **1/200**  
PROVEN SOURCE OF ELEVATION **SUBMETER MAPPING**  
**GRADE GPS**

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW

LOCATION ELEVATION **1126.1'** WATERSHED (HUC 10) **FISH CREEK**

DISTRICT **FRANKLIN** COUNTY **MARSHALL**  
QUADRANGLE **POWHATAN POINT 7.5'** LEASE NUMBER **SEE WW-6A1 FORM**

SURFACE OWNER **LARRY W. DUNLAP, ET AL** ACREAGE **34.405**

OIL & GAS ROYALTY OWNER **LARRY W. DUNLAP, ET AL** LEASE ACREAGE **34.405**

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_  
PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE (SPECIFY) **ASDRILLED**

TARGET FORMATION **MARCELLUS** ESTIMATED DEPTH **TVD: 6,260' TMD: 16,428'**

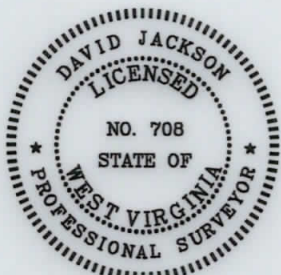
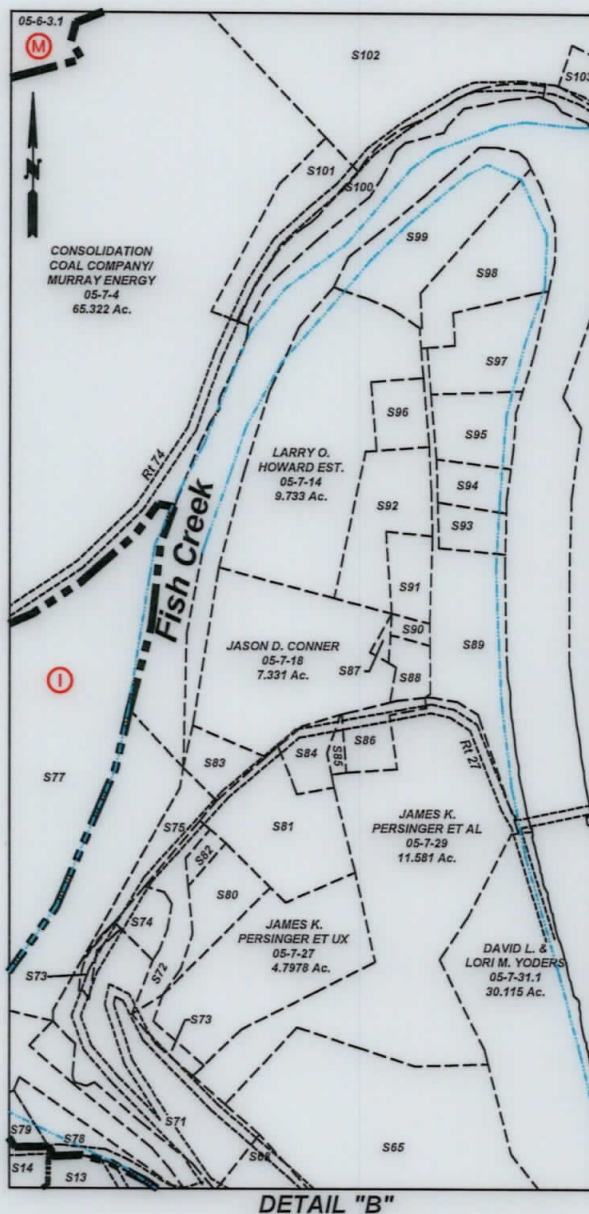
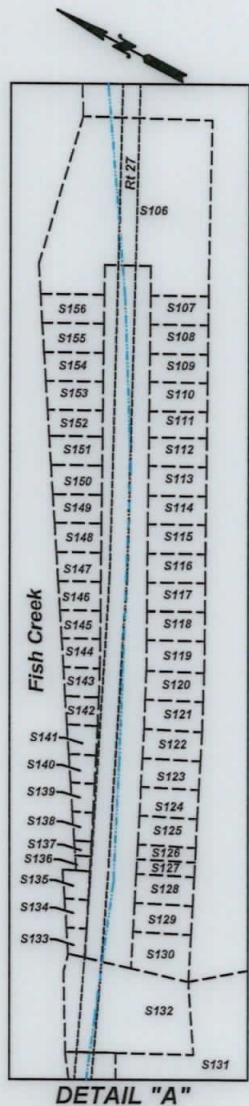
WELL OPERATOR **TUG HILL OPERATING, LLC** DESIGNATED AGENT **DIANNA STAMPER**  
ADDRESS **1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107** ADDRESS **5400 D BIG TYLER ROAD CHARLESTON, WV 25313**

DATE: **APRIL 22, 2021**  
OPERATORS WELL NO. **MICHTER N-3HM**  
API WELL NO. **47-051-02277**  
STATE **COUNTY** PERMIT

**08/27/2021**

COUNTY NAME  
PERMIT

PG 2 OF 3  
**MICHTER LEASE**  
**WELL N-3HM**  
**969.8489± ACRES**



P.S. 708

*David L Jackson*

|  |
|--|
| <b>SURFACE HOLE</b><br>UTM. NAD83, ZONE 17<br>IN METERS<br><b>N) 4,405,905.76</b><br><b>E) 517,342.85</b>    |
| <b>LANDING POINT 1</b><br>UTM. NAD83, ZONE 17<br>IN METERS<br><b>N) 4,405,796.86</b><br><b>E) 517,624.95</b> |
| <b>BOTTOM HOLE</b><br>UTM. NAD83, ZONE 17<br>IN METERS<br><b>N) 4,408,131.79</b><br><b>E) 515,993.07</b>     |

08/27/2021



**TUG HILL**  
**OPERATING**

OPERATOR'S  
WELL #: Michter N-3HM  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV  
API #: 47-051-02277

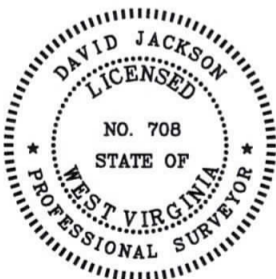
**WELL PLAT**  
**PAGE 2 OF 3**  
**DATE: 04/22/2021**

PG 3 OF 3 **MICHTER LEASE**  
**WELL N-3HM**  
**969.8489± ACRES**

| Number | TAX MAP -PARCEL | ADJOINER OWNER  | ACRES       |
|--------|-----------------|---|-------------|
| S1     | 05-12-11        | Wesley Bryan & Wesley Bryan II                          | 52.478      |
| S2     | 05-12-10        | Consolidation Coal Company/ Murray Energy c/o Land Dept | 13.76       |
| S3     | 05-12-10.1      | Consolidation Coal Company/ Murray Energy               | 38.48       |
| S4     | 05-07-42.4      | Jason Reed Hartley                                      | 0.94        |
| S5     | 05-07-42.3      | Joshua David Hartley                                    | 0.886       |
| S6     | 05-07-42.2      | Steven & Rhonda Lloyd                                   | 0.85        |
| S7     | 05-07-44        | Crystal B. Darrah                                       | 1.726       |
| S8     | 05-07-42        | Tracy M. Kesterson                                      | 0.54        |
| S9     | 05-07-42.5      | Matthew V. Conner, et al                                | 3.791       |
| S10    | 05-07-41        | James A. Wade   | 1.00        |
| S11    | 05-12-09        | Lionel & Mary Lee Persinger                             | 10.15       |
| S12    | 05-07-42.1      | Lionel L. & Mary Lee Persinger                          | 5.99        |
| S13 F  | 05-07-35        | Samuel L. Persinger                                     | 10.708      |
| S14 G  | 05-07-36        | John Persinger  | 4.329       |
| S15    | 05-07-38        | John K. Persinger, et ux                                | 2.65        |
| S16    | 05-07-37        | John K. Persinger, et ux                                | 0.133       |
| S17    | 05-07-43.3      | M. Frank Mason  | 0.327       |
| S18    | 05-7B-48        | Cassidy Rain Carpenter                                  | 1.325       |
| S19    | 05-7B-49        | Cassidy Rain Carpenter                                  | 1.1441      |
| S20    | 05-07-43.4      | Ida L. Campbell   | 0.403       |
| S21    | 05-07-43.1      | WV DOH  | 1.48        |
| S22    |                 | State Road Commission                                   | 17.62 Calc. |
| S23    | 05-7A-32        | Dawn Thompson Tennant                                   | 0.3091      |
| S24    | 05-7A-31        | WV Dept. of Natural Resources                           | 3.18        |
| S25    | 05-07-03        | Consolidation Coal Company/ Murray Energy               | 12.2641     |
| S26    | 05-07-3.5       | Wheeling Power Company                                  | 1.5004      |
| S27 C  | 05-11-1.4       | Larry Dunlap, et al                                     | 32.493      |
| S28    | 05-07-3.1       | Ohio Power Co.  | 28.9966     |
| S29    | 05-06-16        | Appalachian Power CP                                    | 0.61        |
| S30    | 05-06-11        | Consolidation Coal Company/ Murray Energy               | 1.05        |
| S31    | 05-06-14        | Cil Carbon, LLC   | 1.408       |
| S32    | 05-06-13        | Cil Carbon, LLC   | 0.318       |
| S33    | 05-06-09        | Cil Carbon, LLC   | 1.15        |
| S34    | 05-06-12        | Cil Carbon, LLC   | 0.43458     |
| S35    | 05-06-18        | Cil Carbon, LLC   | 0.2754      |
| S36    | 05-06-1.2       | Ohio Power Co.  | 0.693       |
| S37    | 05-06-1.1       | Cil Carbon, LLC   | 13.269      |
| S38    | 05-06-06        | Consolidation Coal Company/ Murray Energy               | 18.50       |
| S39    | 05-06-05        | Consolidation Coal Company/ Murray Energy               | 17.159      |
| S40    | 05-06-04        | Consolidation Coal Company/ Murray Energy               | 5.47        |
| S41    | 05-8A-39        | Barbara L. Daniels & Elaine Wills                       | 3.223       |
| S42    | 05-8A-40        | Barbara L. Daniels & Elaine Wills                       | 0.627       |
| S43    | 05-8A-42        | Robert M. White   | 7.23        |
| S44    | 05-8A-46        | Barbara L. Rose & Mary L. Rose                          | 1.5         |
| S45    | 05-8A-47        | Barbara L. Rose & Mary L. Rose                          | 3.0         |
| S46    | 05-8A-45        | Raymond A. Jr. & Larriette Scott                        | 0.305       |
| S47    | 05-11-01        | William N. & Virginia A. Roupe                          | 4.527       |
| S48    | 05-11-1.6       | Debra Morris  | 2.093       |
| S49    | 05-11-1.7       | William S. & Mary K. Adams                              | 8.00        |
| S50    | 05-11-1.3       | Jay A. Conner, et ux                                    | 4.256       |
| S51    | 05-11-1.5       | Paul & Sandy Witt                                       | 3.507       |
| S52    | 05-11-1.2       | Jay A. Conner, et ux                                    | 5.824       |
| S53    | 05-08-9.1       | Scott E. Jackson, Tammy S. South & Marion Jackson       | 1.957       |
| S54    | 05-11-02        | Walter C. & Cheryl A. Rine                              | 42.36       |
| S55    | 05-11-2.2       | Joshua A. Myers   | 2.193       |
| S56    | 05-11-2.1       | Walter C. & Cheryl A. Rine                              | 1.19        |
| S57    | 05-11-20        | David E. Gray   | 0.569       |
| S58    | 05-11-19        | David E. Gray   | 0.532       |
| S59    | 05-11-03        | Kevin R. Corley, et ux                                  | 13.18       |
| S60    | 05-11-17        | Kevin R. Corley, et ux                                  | 36.13       |
| S61    | 05-11-14        | Hiram's Estate Family, LTD LLP                          | 158.054     |
| S62 A  | 05-11-1.1       | Larry W. Dunlap, et al                                  | 34.405      |
| S63 D  | 05-07-33        | William N. Roupe  | 24.60       |
| S64    | 05-07-32        | William N. & Virginia A. Roupe                          | 4.2         |

| Number | TAX MAP -PARCEL | ADJOINER OWNER                            | ACRES        |
|--------|-----------------|---|--------------|
| S65    | 05-07-31        | William N. Roupe, et ux                   | 43.147       |
| S66    | 05-07-31.4      | Grandview-Doolen PSD                      | 0.23         |
| S67    | 05-07-31.2      | William N. Roupe, et ux                   | 3.304        |
| S68    | 05-07-34        | WV DOH                                    | 10.88        |
| S69    | 05-07-31.3      | William N. & Virginia A. Roupe            | 0.230        |
| S70    | 05-07-43.2      | M. Frank Mason                            | 1.36         |
| S71    | 05-07-26        | James A. Wade                             | 7.80         |
| S72    | 05-07-23.1      | WV DOH                                    | 2.37         |
| S73    | 05-07-25        | WV DOH                                    | 0.50         |
| S74    | 05-07-24        | James A. Wade                             | 0.578        |
| S75    | 05-07-45        | Robert L. Henry (Life) & Jeffrey S. Henry | 0.65         |
| S76 H  | Fish Creek      | State of WV                               | 5.5388 Calc. |
| S77 I  | 05-07-3.2       | Ohio Power Company                        | 45.5348      |
| S78    | 05-07-35.1      | Lionel L. & Marylee Persinger             | 0.812        |
| S79    | 05-07-36.1      | Lionel L. & Mary Lee Persinger            | 0.5579       |
| S80    | 05-07-23        | Arlie L. Powell                           | 1.435        |
| S81    | 05-07-27.1      | Mark L. Riter, et ux                      | 3.427        |
| S82    | 05-07-23.2      | Robert L. Henry (Life) & Jeffrey S. Henry | 0.256        |
| S83    | 05-07-21        | Aaron S. Meyer                            | 1.775        |
| S84    | 05-07-22        | Jesus & Mary Bustamante                   | 0.782        |
| S85    | 05-07-28.1      | Jesus & Mary Bustamante                   | 0.200        |
| S86    | 05-07-28        | Thelma M. Roupe                           | 0.940        |
| S87    | 05-07-18.1      | Debra L. Bennett                          | 0.13         |
| S88    | 05-07-17        | Debra L. Bennett                          | 0.614        |
| S89    | 05-07-15        | William Roupe, et ux                      | 6.631        |
| S90    | 05-07-16        | Debra L. Bennett                          | 0.235        |
| S91    | 05-07-14.2      | Robert L. Eyer, Sr. & Jessica L. Bennett  | 0.998        |
| S92    | 05-07-14.3      | Steven H. Howard                          | 2.669        |
| S93    | 05-07-15.1      | Woodland Hills Recreation Club            | 1.016        |
| S94    | 05-07-13        | Woodland Hills Recreation Club            | 1.109        |
| S95    | 05-07-12        | Carol A. & Shelva G. Smith                | 2.01         |
| S96    | 05-07-14.1      | Larry O. Howard, Est.                     | 1.00         |
| S97    | 05-07-11        | Roy S. & Cynthia M. Meadows               | 2.90         |
| S98    | 05-07-10.1      | Sandra Kay Beymer & Chad M. Wright        | 4.237        |
| S99    | 05-07-10        | Darren Edward Thacker                     | 4.737        |
| S100   | 05-07-5.1       | George A. Knuth                           | 2.95         |
| S101   | 05-07-05        | CNX Gas Company, LLC                      | 1.407        |
| S102   | 05-07-06        | CNX Gas Company, LLC                      | 21.171       |
| S103   | 05-07-07        | Consolidation Coal Company/ Murray Energy | 1.00         |
| S104 L | 05-07-02        | Consolidation Coal Company/ Murray Energy | 46.46        |
| S105   | 05-06-03        | Ohio Power Co.                            | 281.046      |
| S106   | 05-7B-01        | Patricia L. Robinson                      | 1.257        |
| S107   | 05-7B-47        | Daniel D. Robinson, et ux                 | 0.1148       |
| S108   | 05-7B-46        | Daniel D. Robinson, et ux                 | 0.1148       |
| S109   | 05-7B-45        | Daniel D. & Mary E. Robinson              | 0.1148       |
| S110   | 05-7B-44        | Daniel D. & Mary E. Robinson              | 0.1148       |
| S111   | 05-7B-43        | Teresa & Thomas Gouldsberry               | 0.1148       |
| S112   | 05-7B-42        | Teresa & Thomas Gouldsberry               | 0.1194       |
| S113   | 05-7B-41        | Teresa & Thomas Gouldsberry               | 0.1148       |
| S114   | 05-7B-40        | Teresa & Thomas Gouldsberry               | 0.1148       |
| S115   | 05-7B-39        | Teresa & Thomas Gouldsberry               | 0.1148       |
| S116   | 05-7B-38        | Teresa & Thomas Gouldsberry               | 0.1148       |
| S117   | 05-7B-37        | Teresa & Thomas Gouldsberry               | 0.1148       |
| S118   | 05-7B-36        | Albert J. Anderson, Jr.                   | 0.1148       |
| S119   | 05-7B-35        | Albert J. Anderson, Jr.                   | 0.1217       |
| S120   | 05-7B-34        | Albert J. Anderson, Jr.                   | 0.1148       |
| S121   | 05-7B-33        | Albert J. Anderson, Jr.                   | 0.1182       |
| S122   | 05-7B-32        | Albert J. Anderson, Jr.                   | 0.1148       |
| S123   | 05-7B-31        | Cindy D. Aliff, et al                     | 0.1148       |
| S124   | 05-7B-30        | Cindy D. Aliff, et al                     | 0.1148       |
| S125   | 05-7B-29        | Cindy D. Aliff                            | 0.1148       |
| S126   | 05-7B-28.1      | Cindy D. Aliff                            | 0.0574       |
| S127   | 05-7B-28        | Cindy D. Aliff                            | 0.0574       |
| S128   | 05-7B-27        | Patricia A. Johnson                       | 0.1148       |
| S129   | 05-7B-26        | Cindy D. Aliff                            | 0.1148       |
| S130   | 05-7B-25        | Cindy D. Aliff                            | 0.1673       |
| S131   | 05-7A-02        | Raymond M. & Amy A. Litman                | 2.23         |
| S132   | 05-7A-01        | Lucille Myers                             | 0.529        |
| S133   | 05-7B-24        | Cindy D. Aliff                            | 0.0354       |
| S134   | 05-7B-23        | Cindy D. Aliff                            | 0.0471       |
| S135   | 05-7B-22        | Cindy D. Aliff                            | 0.0505       |
| S136   | 05-7B-21        | Cindy D. Aliff                            | 0.0287       |
| S137   | 05-7B-21.1      | Cindy D. Aliff                            | 0.0296       |
| S138   | 05-7B-20        | Cindy D. Aliff                            | 0.0626       |
| S139   | 05-7B-19        | Cindy D. Aliff                            | 0.0712       |
| S140   | 05-7B-18        | Cindy D. Aliff                            | 0.0763       |
| S141   | 05-7B-17        | Albert J. Anderson, Jr.                   | 0.0849       |
| S142   | 05-7B-16        | Albert J. Anderson, Jr.                   | 0.0903       |
| S143   | 05-7B-15        | Albert J. Anderson, Jr.                   | 0.0970       |
| S144   | 05-7B-14        | Albert J. Anderson, Jr.                   | 0.0991       |
| S145   | 05-7B-13        | Albert J. Anderson, Jr.                   | 0.1067       |
| S146   | 05-7B-12        | Teresa & Thomas Gouldsberry               | 0.1113       |
| S147   | 05-7B-11        | Teresa & Thomas Gouldsberry               | 0.1159       |
| S148   | 05-7B-10        | Teresa & Thomas Gouldsberry               | 0.1199       |
| S149   | 05-7B-09        | Teresa & Thomas Gouldsberry               | 0.1240       |
| S150   | 05-7B-08        | Teresa & Thomas Gouldsberry               | 0.1286       |
| S151   | 05-7B-07        | Teresa & Thomas Gouldsberry               | 0.1331       |
| S152   | 05-7B-06        | Teresa & Thomas Gouldsberry               | 0.1377       |
| S153   | 05-7B-05        | Daniel D. & Mary E. Robinson              | 0.1418       |
| S154   | 05-7B-04        | Daniel D. & Mary E. Robinson              | 0.1458       |
| S155   | 05-7B-03        | Daniel D. Robinson, et ux                 | 0.1504       |
| S156   | 05-7B-02        | Daniel D. Robinson, et ux                 | 0.1550       |
| S157   | Railroad        | CSX Transportation                        |              |

08/27/2021



P.S. 708

*David L Jackson*



**TUG HILL**  
**OPERATING**

OPERATOR'S  
WELL #: Michter N-3HM  
DISTRICT: Franklin  
COUNTY: Marshall  
STATE: WV  
API #: 47-051-02277

**WELL PLAT**  
**PAGE 3 OF 3**  
**DATE: 04/22/2021**