

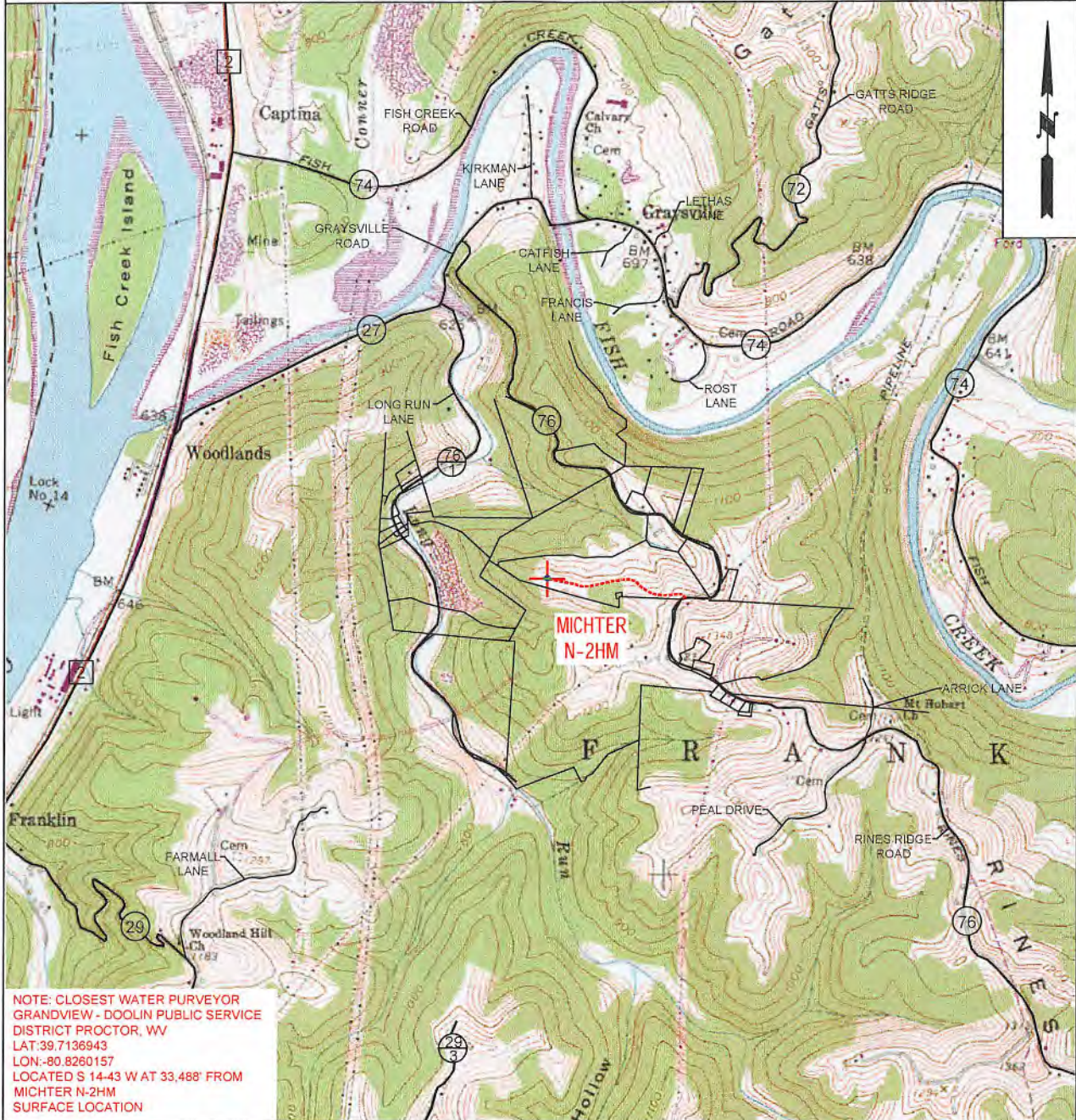
OCT 02 2019

WV Department of
Environmental Protection

WW-9

PROPOSED MICHTER N-2HM

SUPPLEMENT PG 2



NOTE: CLOSEST WATER PURVEYOR
GRANDVIEW - DOOLIN PUBLIC SERVICE
DISTRICT PROCTOR, WV
LAT: 39.7136943
LON: -80.8260157
LOCATED S 14-43 W AT 33.488' FROM
MICHTER N-2HM
SURFACE LOCATION



TUG HILL
OPERATING

OPERATOR 494510851
TUG HILL OPERATING, LLC
380 SOUTHPONTE BLVD
SUITE 200
CANONSBURG, PA 15317

TOPO SECTION

POWHATAN POINT 7.5'

SCALE:

1" = 2000'

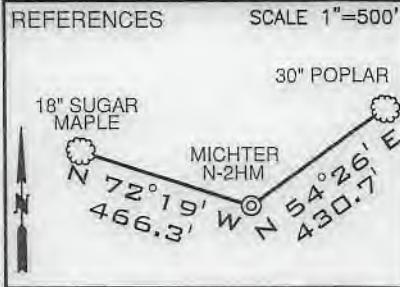
LEASE NAME

MICHTER

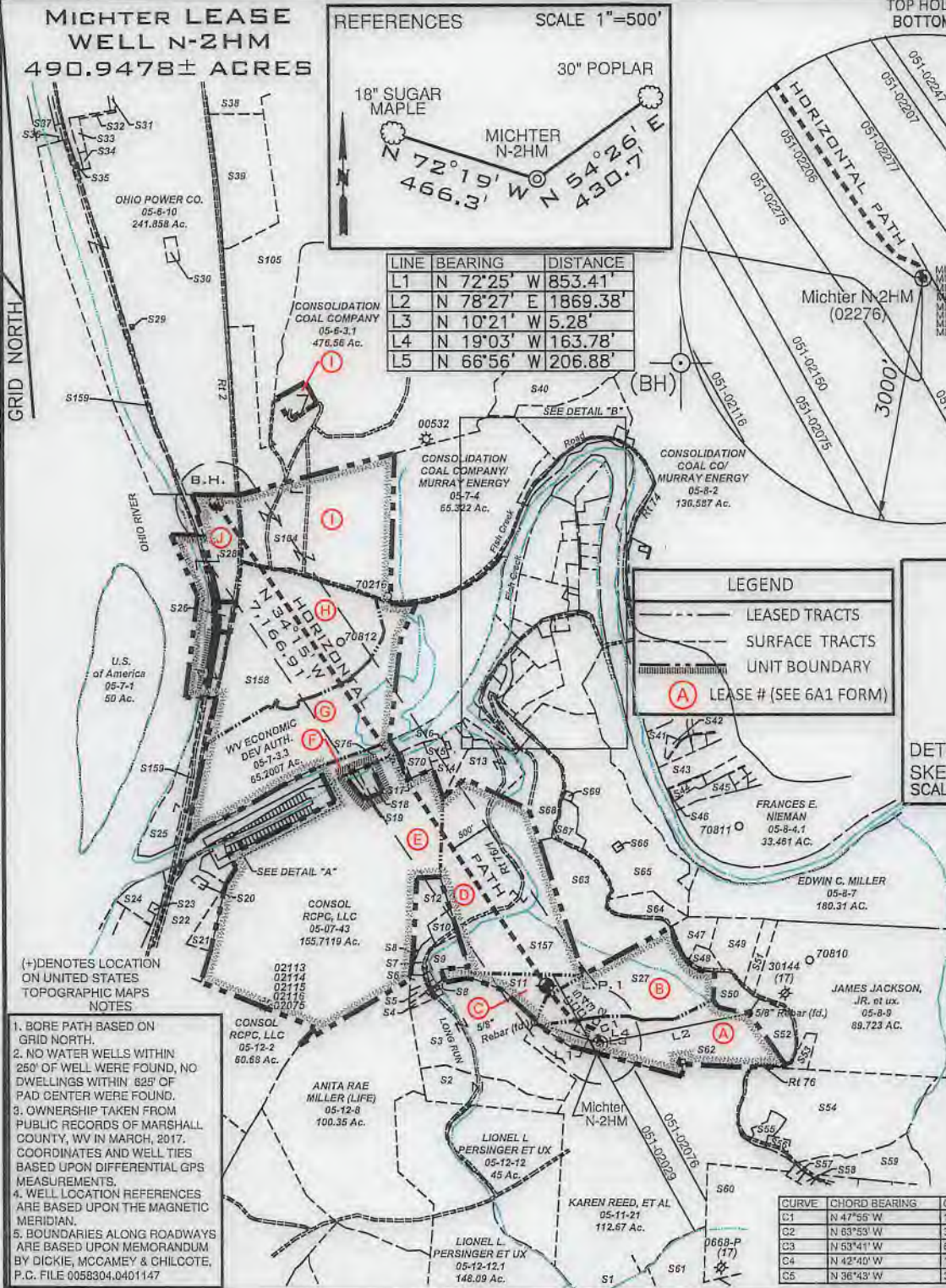
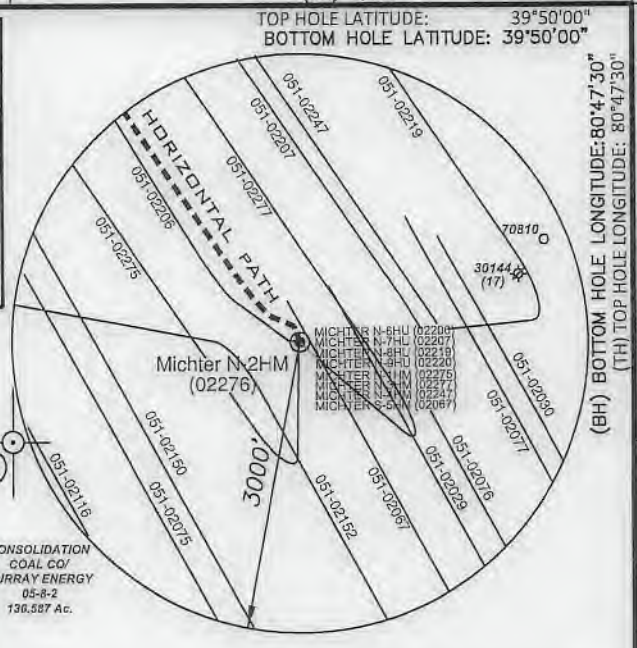
DATE:

DATE: 08-26-2019

MICHTER LEASE WELL N-2HM
490.9478± ACRES



LINE	BEARING	DISTANCE
L1	N 72°25' W	853.41'
L2	N 78°27' E	1869.38'
L3	N 10°21' W	5.28'
L4	N 19°03' W	163.78'
L5	N 66°56' W	206.88'



LEGEND

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

DETAIL SKETCH "A" SCALE 1"=100'

- MICHTER N-6HU (02206)
- MICHTER N-7HU (02207)
- MICHTER N-8HU (02216)
- MICHTER N-9HU (02220)
- MICHTER N-1HM (02275)
- MICHTER N-2HM (02276)
- MICHTER N-3HM (02277)
- MICHTER N-4HM (02247)
- MICHTER S-5HM (02067)

SURFACE HOLE
UTM. NAD83, ZONE 17 IN METERS
(TH) \odot

N) 4,405,906.58
E) 517,339.29

LANDING POINT 1
UTM. NAD83, ZONE 17 IN METERS

N) 4,406,118.77
E) 517,133.35

BOTTOM HOLE
UTM. NAD83, ZONE 17 IN METERS

N) 4,407,903.18
E) 515,874.56

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	N 47°55' W	27.66'	23.99'	17.92'
C2	N 63°53' W	38.05'	278.26'	38.08'
C3	N 63°41' W	65.74'	205.68'	65.03'
C4	N 42°40' W	167.35'	1251.87'	167.50'
C5	N 36°43' W	344.17'	3534.47'	344.31'

- (+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS NOTES
- BORE PATH BASED ON GRID NORTH.
 - NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 825' 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

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

David L Jackson



FILE NUMBER _____

DRAWING NUMBER MICHTER_N-2HM_REV2

SCALE 1" = 2000'

MINIMUM DEGREE OF ACCURACY 1/200

PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS



JACKSON SURVEYING INC.
P.O. Box 1480
Clarksburg, WV 26302
304-623-5851

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

DATE: SEPTEMBER 27, 2019

REVISED: OCTOBER 08, 2019

OPERATORS WELL NO. MICHTER N-2HM

API WELL NO. 47-051-02276

STATE WV COUNTY MARSHALL PERMIT SEE WW-6A1 FORM

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION ELEVATION 1127.11' 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) _____

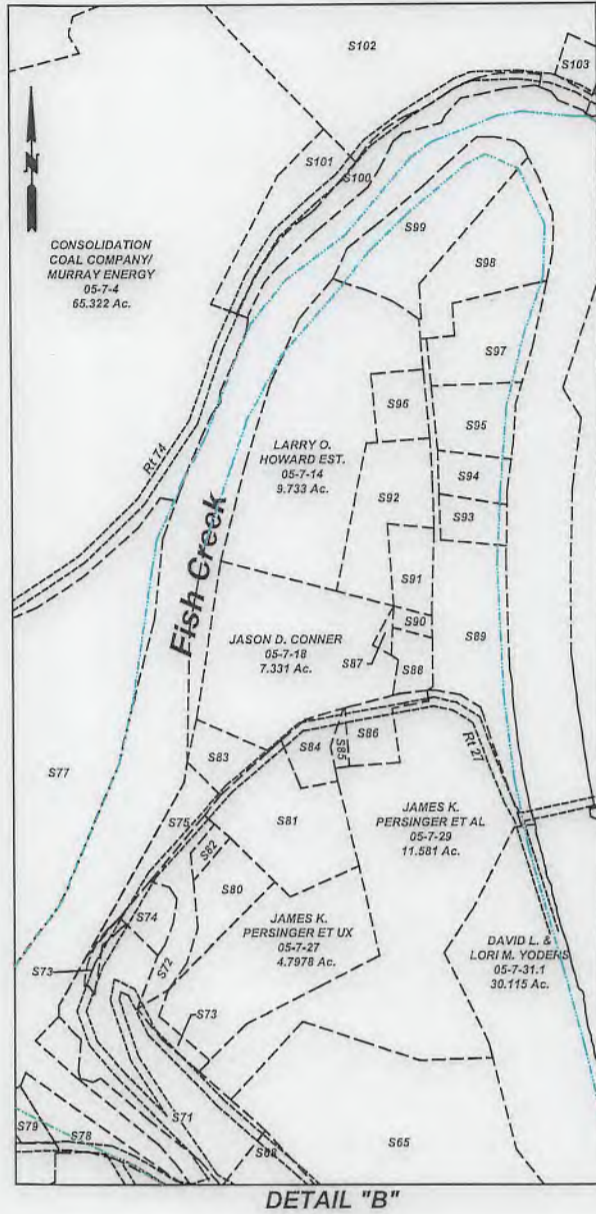
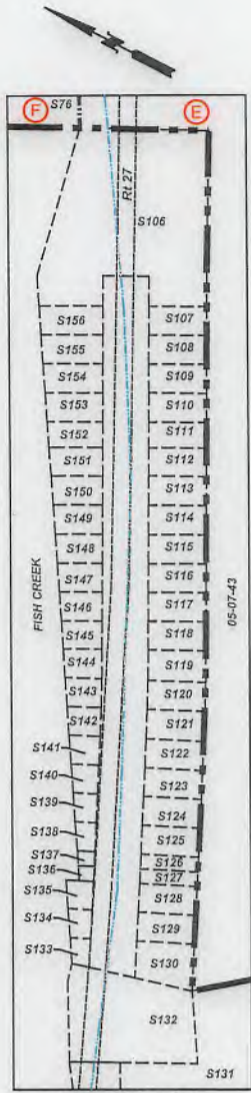
TARGET FORMATION MARCELLUS ESTIMATED DEPTH TVD: 6,411' TMD: 13,832'

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

COUNTY NAME
PERMIT

PG 2 OF 3 MICTHER LEASE
WELL N-2HM
490.9478± ACRES



P.S. 708 *David L Jackson*



TUG HILL
OPERATING

OPERATOR'S
WELL #: Michter N-2HM
DISTRICT: Franklin
COUNTY: Marshall
STATE: WV
API #: 47-051-02276

WELL PLAT
PAGE 2 OF 3
DATE: 09/27/2019
REVISED; 10/08/19