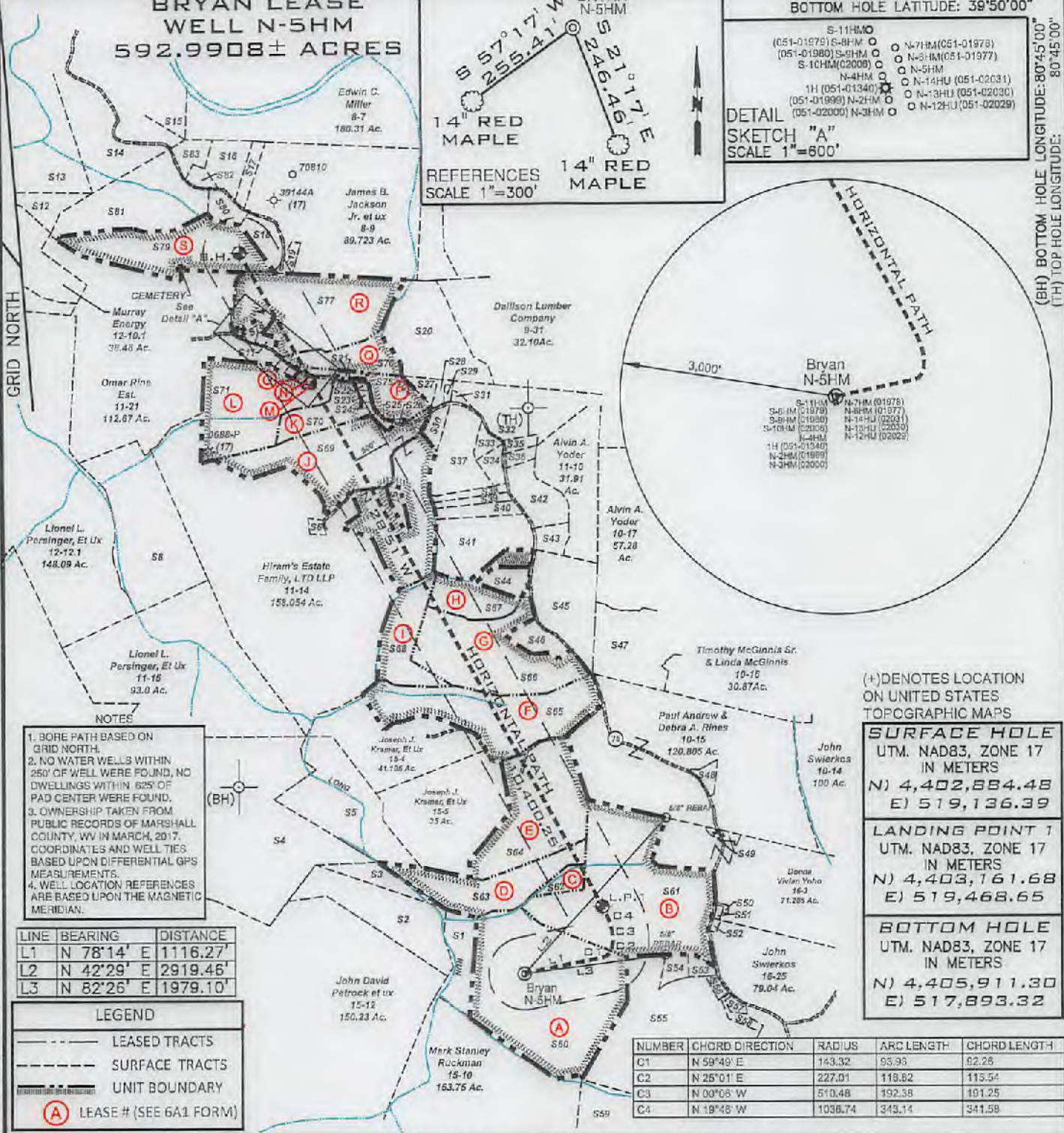
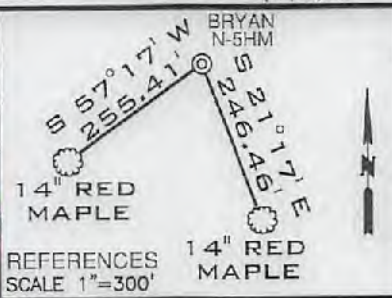


# BRYAN LEASE WELL N-5HM 592.9908± ACRES

TOP HOLE LATITUDE: 39°47'30"  
BOTTOM HOLE LATITUDE: 39°50'00"

DETAIL SKETCH "A"  
SCALE 1"=600'

S-11HM (051-01975) S-8HM (051-01980) S-9HM (051-01980) S-10HM (02008) N-4HM 1H (051-01340) (051-01998) N-2HM (051-02000) N-3HM (051-01975) N-6HM (051-01977) N-7HM (051-01978) N-8HM (051-01977) N-14HM (051-02031) N-13HU (051-02030) N-12HU (051-02029)



- 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.

LINE	BEARING	DISTANCE
L1	N 78°14' E	1116.27'
L2	N 42°29' E	2919.46'
L3	N 82°26' E	1979.10'

LEGEND

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

NUMBER	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
C1	N 59°49' E	143.32	95.95	82.28
C2	N 25°01' E	227.01	119.82	115.54
C3	N 00°08' W	510.48	192.38	191.25
C4	N 19°48' W	1036.74	343.14	341.58

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

**SURFACE HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,402,884.48  
E) 519,136.39

**LANDING POINT 1**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,403,161.68  
E) 519,468.65

**BOTTOM HOLE**  
UTM. NAD83, ZONE 17  
IN METERS  
N) 4,405,911.30  
E) 517,893.32

FILE NUMBER \_\_\_\_\_

DRAWING NUMBER BRYAN\_WP\_N-5HM

SCALE 1" = 2000'

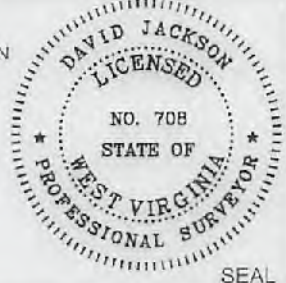
MINIMUM DEGREE OF ACCURACY 1/200

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*

P.S. 708



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: OCTOBER 25, 2017

REVISED DATE: May 09, 2018

OPERATORS WELL NO. BRYAN N-5HM

API WELL NO. 47-051-02077 HoA

STATE WV COUNTY Marshall PERMIT SEE WW-8A1 Form

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

LOCATION ELEVATION 1191.0' WATERSHED (HUC 10) Fish Creek

DISTRICT Franklin COUNTY Marshall

QUADRANGLE Powhatan Point 7.5' LEASE NUMBER SEE WW-8A1 Form

SURFACE OWNER CNX LAND RESOURCES, INC. ACREAGE 81.98

OIL & GAS ROYALTY OWNER MICHAEL R. BRYAN - SEE WW 6A1 LEASE ACREAGE 81.98

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

TARGET FORMATION Marcellus PLUG & ABANDON \_\_\_ CLEAN OUT & REPLUG \_\_\_

ESTIMATED DEPTH TVD: 6,597' TMD: 17,557'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER  
CT CORPORATION SYSTEM

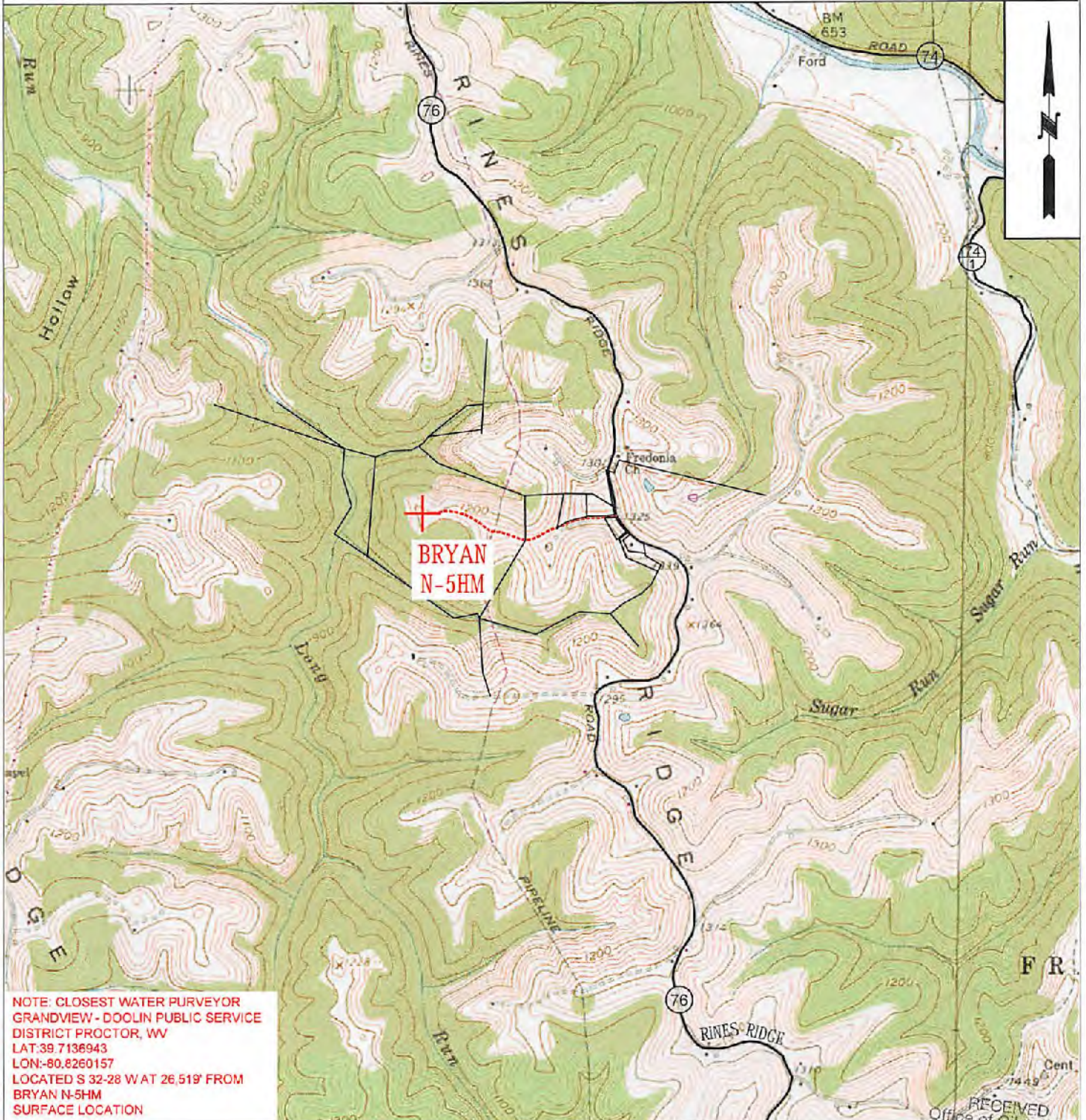
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD  
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME  
PERMIT

WW-9


# PROPOSED BRYAN N-5HM

SUPPLEMENT PG 2



NOTE: CLOSEST WATER PURVEYOR  
GRANDVIEW - DOOLIN PUBLIC SERVICE  
DISTRICT PROCTOR, WV  
LAT: 39.7136943  
LON: -80.8260157  
LOCATED S 32-28 W AT 26,519' FROM  
BRYAN N-5HM  
SURFACE LOCATION

RECEIVED  
Office of Oil and Gas

 <b>TUG HILL OPERATING</b>	OPERATOR	494510851	TOPO SECTION	LEASE NAME
	TUG HILL OPERATING, LLC 380 SOUTHPOINTE BLVD SUITE 200 CANONSBURG, PA 15317		POWHATAN POINT 7.5'	BRYAN
	SCALE:		1" = 2000'	DATE: 10/25/17
				DATE: 11 2018