

LATITUDE 39° 47' 30" GREER LEASE WELL NO. 1N-8HM 489.798± ACRES

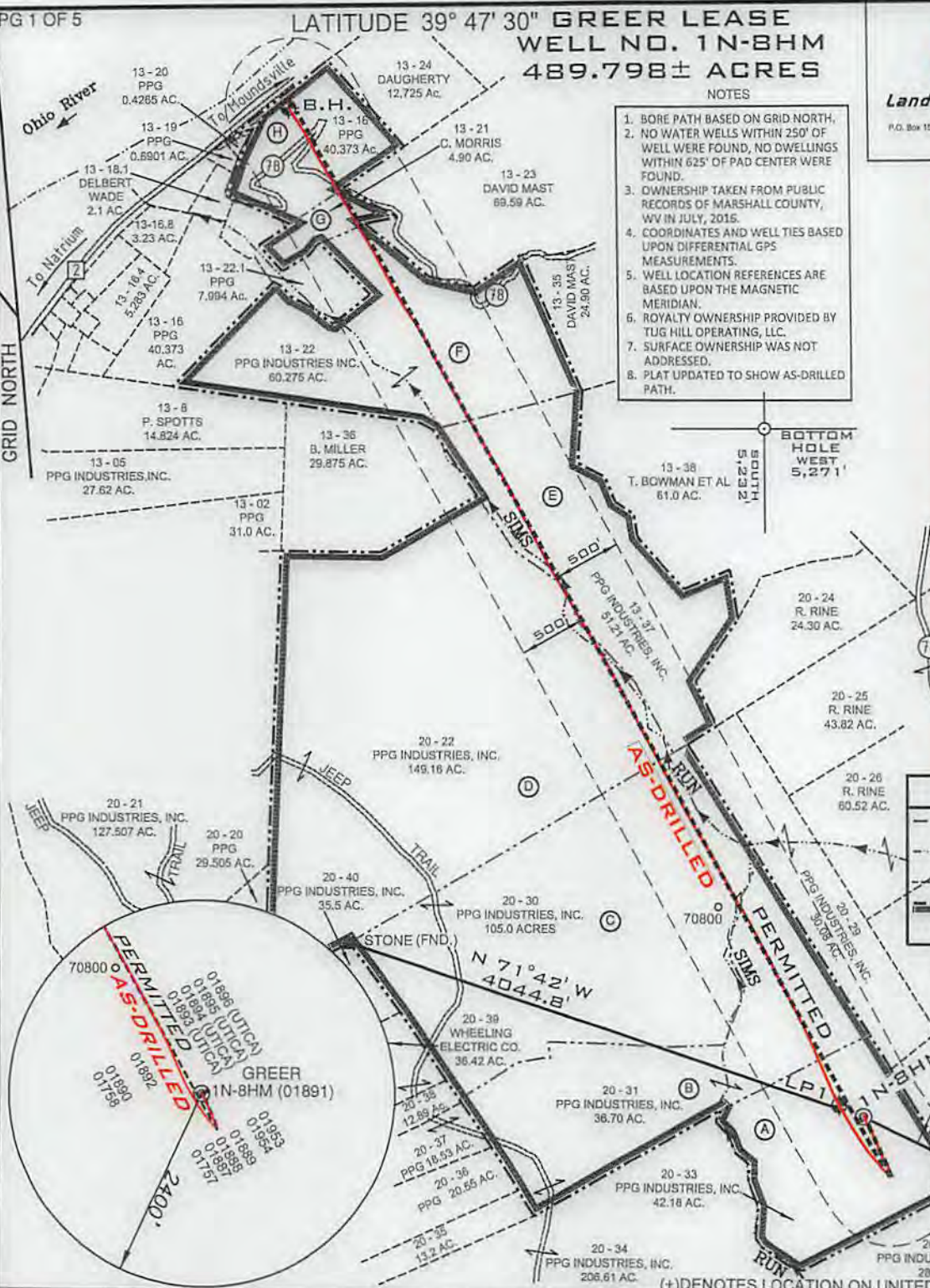


- NOTES
1. BORE PATH BASED ON GRID NORTH.
 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF MARSHALL COUNTY, WV IN JULY, 2015.
 4. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 5. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
 6. ROYALTY OWNERSHIP PROVIDED BY TUG HILL OPERATING, LLC.
 7. SURFACE OWNERSHIP WAS NOT ADDRESSED.
 8. PLAT UPDATED TO SHOW AS-DRILLED PATH.

AS-DRILLED
SURFACE HOLE
UTM. NAD83, ZONE 17 IN METERS
N) 4,400,806.2
E) 514,018.1
UTM. NAD83, ZONE 17 IN FEET
N) 14,438,312
E) 1,686,408
LANDING POINT 1
UTM. NAD83, ZONE 17 IN METERS
N) 4,400,830.8
E) 513,962.4
UTM. NAD83, ZONE 17 IN FEET
N) 14,438,392
E) 1,686,225
BOTTOM HOLE
UTM. NAD83, ZONE 17 IN METERS
N) 4,403,059.5
E) 512,682.4
UTM. NAD83, ZONE 17 IN FEET
N) 14,445,704
E) 1,682,025

LEGEND

- LEASED TRACTS
- - - INTERIOR MINERAL TRACTS
- - - SURFACE TRACTS
- HARD LEASE LINE
- (A) LEASE # (SEE PG 2)



FILE NUMBER	8837
DRAWING NUMBER	8837ADG1N8HM.dwg
SCALE	1" = 1200'
MINIMUM DEGREE OF ACCURACY	1/2500
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. 677
Gregory A. Smith



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 1251' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER (UNDEFINED)

DISTRICT FRANKLIN COUNTY MARSHALL

QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER SEE ATTACHED PG 2 THROUGH 5

SURFACE OWNER PPG INDUSTRIES, INC. ACREAGE 42.18

OIL & GAS ROYALTY OWNER PPG INDUSTRIES, INC., ET AL LEASE ACREAGE 489.798

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 6,396' TMD:15,205'

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

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

COUNTY NAME
PERMIT