

-890'

form 4466

PG 1 OF 3 NOTES

- 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 JULY, 2016.
- COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
- WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
- ROYALTY OWNERSHIP PROVIDED BY TUG HILL OPERATING, LLC.
- SURFACE OWNERSHIP WAS NOT ADDRESSED.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.

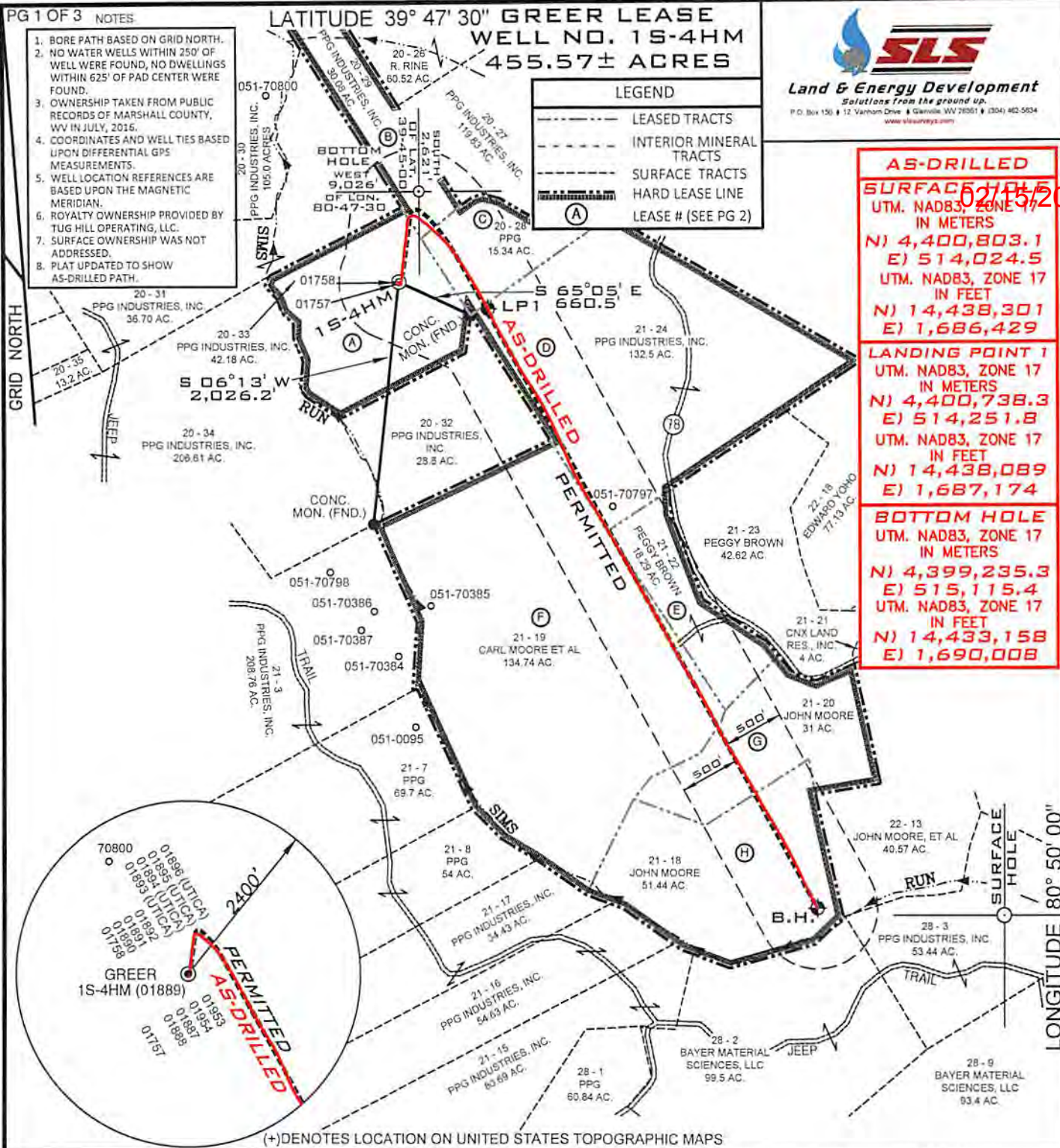
LATITUDE 39° 47' 30" GREER LEASE
WELL NO. 1S-4HM
455.57± ACRES



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

| |
|------------------------|
| AS-DRILLED |
| SURFACE HOLE |
| UTM. NAD83, ZONE 17 |
| IN METERS |
| N) 4,400,803.1 |
| E) 514,024.5 |
| UTM. NAD83, ZONE 17 |
| IN FEET |
| N) 14,438,301 |
| E) 1,686,429 |
| LANDING POINT 1 |
| UTM. NAD83, ZONE 17 |
| IN METERS |
| N) 4,400,738.3 |
| E) 514,251.8 |
| UTM. NAD83, ZONE 17 |
| IN FEET |
| N) 14,438,089 |
| E) 1,687,174 |
| BOTTOM HOLE |
| UTM. NAD83, ZONE 17 |
| IN METERS |
| N) 4,399,235.3 |
| E) 515,115.4 |
| UTM. NAD83, ZONE 17 |
| IN FEET |
| N) 14,433,158 |
| E) 1,690,008 |

GRID NORTH



(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS

FILE NUMBER **8837**

DRAWING NUMBER **8837ADG1S4HM.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

DATE: July 17, 2018

OPERATORS WELL NO. GREER 1S-4HM (AS-DRILLED)

API WELL NO. 47-051-01889

STATE COUNTY PERMIT STATE COUNTY PERMIT

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

DISTRICT FRANKLIN COUNTY MARSHALL

QUADRANGLE POWHATAN POINT 7.5' (SH) NEW MARTINSVILLE 7.5' (BH) LEASE NUMBER SEE ATTACHED PG 2 OF 3 AND PG 3 OF 3

SURFACE OWNER PPG INDUSTRIES, INC. ACREAGE 42.18

OIL & GAS ROYALTY OWNER PPG INDUSTRIES, INC., ET AL LEASE ACREAGE 455.57

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 6,477' TMD:12,925'

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