

form wv6

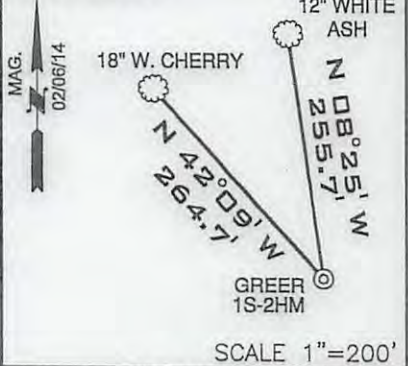
←910'

PG 1 OF 2 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.

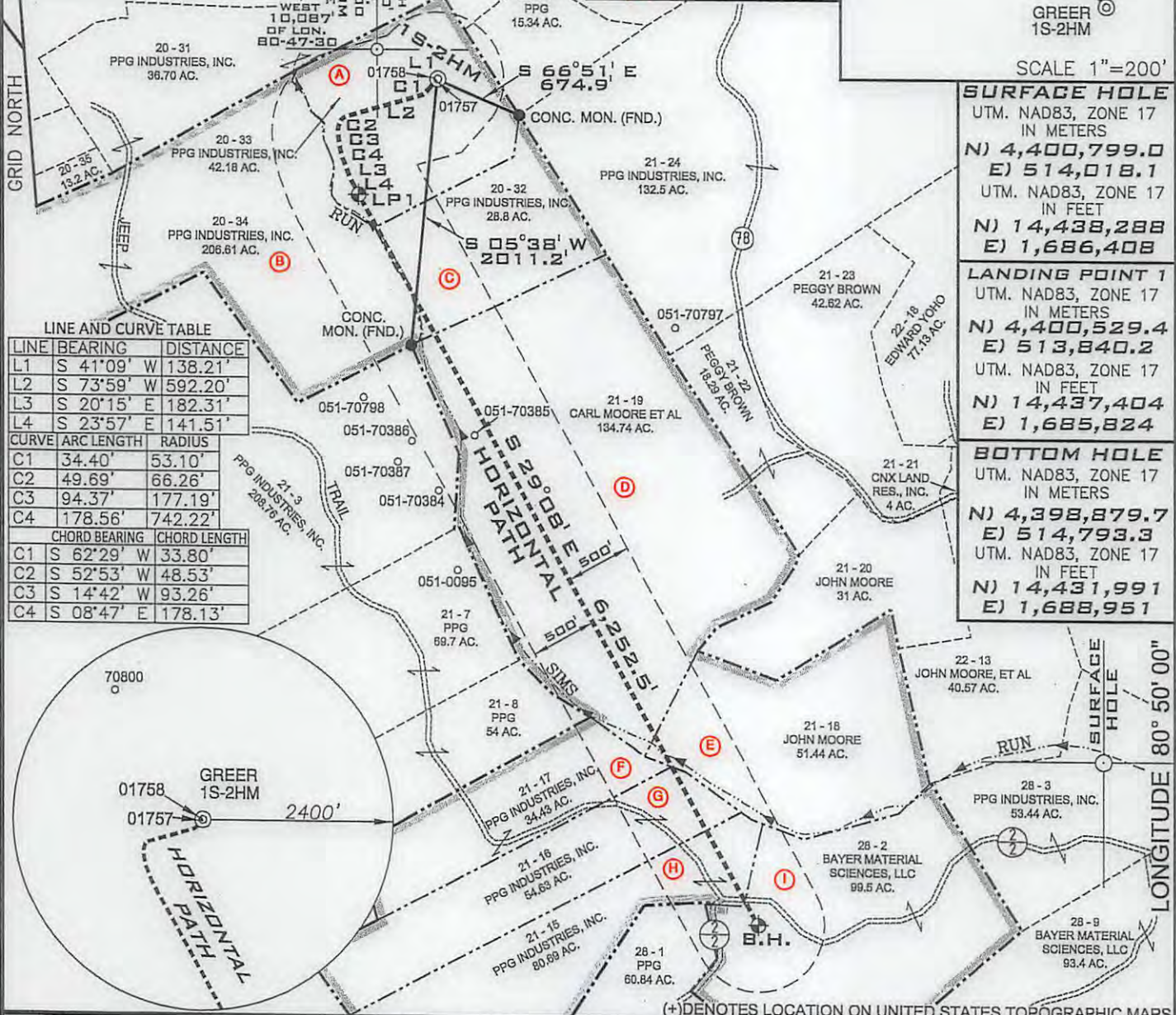
LATITUDE 39° 47' 30" **GREER LEASE**
WELL NO. 1S-2HM
733.02± ACRES

REFERENCES



LEGEND

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



LINE AND CURVE TABLE

LINE	BEARING	DISTANCE
L1	S 41°09' W	138.21'
L2	S 73°59' W	592.20'
L3	S 20°15' E	182.31'
L4	S 23°57' E	141.51'

CURVE	ARC LENGTH	RADIUS
C1	34.40'	53.10'
C2	49.69'	66.26'
C3	94.37'	177.19'
C4	178.56'	742.22'

CHORD BEARING	CHORD LENGTH
C1	S 62°29' W 33.80'
C2	S 52°53' W 48.53'
C3	S 14°42' W 93.26'
C4	S 08°47' E 178.13'

SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
N) 4,400,799.0
E) 514,018.1

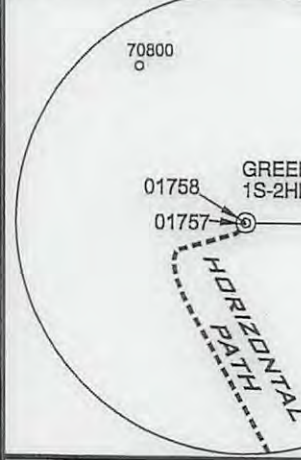
UTM. NAD83, ZONE 17
 IN FEET
N) 14,438,288
E) 1,686,408

LANDING POINT 1
 UTM. NAD83, ZONE 17
 IN METERS
N) 4,400,529.4
E) 513,840.2

UTM. NAD83, ZONE 17
 IN FEET
N) 14,437,404
E) 1,685,824

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
N) 4,398,879.7
E) 514,798.3

UTM. NAD83, ZONE 17
 IN FEET
N) 14,431,991
E) 1,688,951



FILE NUMBER W0120319 (WB1-76)

DRAWING NUMBER GREER_WP_1S-2HM

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. 2122 *Jonathan N. White*



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

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

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 OF 2

SURFACE OWNER PPG INDUSTRIES, INC. ACREAGE 42.18

OIL & GAS ROYALTY OWNER PPG INDUSTRIES, INC., ET AL LEASE ACREAGE 733.02

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 ESTIMATED DEPTH TVD 6,506' TMD:13,094'

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

01/27/2017

COUNTY NAME PERMIT

**GREER WELL NO. 18-2HM
WELL PLAT LEASE INFORMATION**

Lease No.	Tag	Parcel	Oil & Gas Royalty Owner	DEED BOOK/PG	
10*14300	A	5-20-33	PPG INDUSTRIES, INC.	725	123
10*14312	A	5-20-33	JAMIE LU BENSON	790	531
10*14313	A	5-20-33	TERRI JEAN GODDARD	790	585
10*14314	A	5-20-33	RALPH BLACHLY	790	529
10*14315	A	5-20-33	MARGARET ROSS	790	527
10*14316	A	5-20-33	ANDREW GERST	791	645
10*14317	A	5-20-33	HAROLD BLACHLY	791	643
10*14318	A	5-20-33	MARTHA BLACHLY-CROSS	792	112
10*14319	A	5-20-33	JACK J. PFALZGRAF	792	118
10*14320	A	5-20-33	SANDRA CHEYNEY	792	91
10*14321	A	5-20-33	HERBERT BLACHLY	792	102
10*14322	A	5-20-33	LOIS KAY MORFORD	792	110
10*14327	A	5-20-33	ROBERT D. OKEY	792	646
10*14328	A	5-20-33	RAE ELLEN STUART	796	38
10*14329	A	5-20-33	TONDA ROTHENBUHLER	796	40
10*14331	A	5-20-33	CHRISTINA JEAN RIOUX	796	70
10*14332	A	5-20-33	MICHAEL EDWARD BARTH	796	68
10*14333	A	5-20-33	DEAN ROTHENBUHLER	796	42
10*14355	A	5-20-33	DEWAYNE STARKEY	815	228
10*14356	A	5-20-33	FREDRIC RICHTER & BETTY RICHTER	822	270
10*14362	A	5-20-33	CAROLYN STARKEY	827	226
10*14368	A	5-20-33	JOSEPH LONG	836	106
10*14371	A	5-20-33	THOMAS F LONG AND JENNIFER LONG	842	398
10*14372	A	5-20-33	UNITED CHURCH HOMES INC	846	408
10*14377	A	5-20-33	JOSEPH A LONG	849	519
10*14387	A	5-20-33	JOHN F LONG AND PAM LONG	849	542
10*14388	A	5-20-33	IMMANUEL CHURCH OF THE UNITED CHURCH OF CHRIST	849	513
10*14398	A	5-20-33	JAN KAFFENBERGER	860	434
10*14399	A	5-20-33	RITA ANN DOEBERT AND RONALD DOEBERT	860	437
10*14400	A	5-20-33	COLEEN SLAGLE AND FRANKLIN SLAGLE	860	440
10*14401	A	5-20-33	IMELDA J SCURLOCK	860	443
10*14402	A	5-20-33	CAROL F WILSON AND RICHARD WILSON	860	446
10*14403	A	5-20-33	SUE WHITE	862	429
10*14404	A	5-20-33	DON FORGRAVES	862	426
10*14405	A	5-20-33	JOHN WHITE	862	423
10*14395	A	5-20-33	WILLIAM V BUCKNOR	862	421
10*14394	A	5-20-33	LESLIE F BUCKNOR	862	419
10*14408	A	5-20-33	LORNA M LONG MORGAN	864	323
10*14409	A	5-20-33	JAMES C LONG AND PATTI LONG	864	326
10*14410	A	5-20-33	HENRY T LONG	867	385
10*14411	A	5-20-33	THOMAS WHITE, ESQ., SPECIAL COMMISSIONER	870	34
10*14412	A	5-20-33	THE VILLAGE NETWORK	872	203
10*14413	A	5-20-33	JUANITA SANDIFER	872	206
10*14416	A	5-20-33	KATHERINE ANN WILLIAMS COTHRAN	879	1
10*14419	A	5-20-33	CROSSROAD CHILD AND FAMILY SERVICES	887	105
10*15734	A	5-20-33	GENEVIEVE L LONG	904	13
10*16358	A	5-20-33	ANNE MARIE KRAMER	903	648
10*15763	A	5-20-33	BONNIE J. SELTERS	904	34
10*15761	A	5-20-33	CAMERON CEMETERY ASSOCIATION	903	642
10*16356	A	5-20-33	DARYL S. BUCKNOR	904	31
10*15762	A	5-20-33	DAWN PETROVICH	904	4
10*16357	A	5-20-33	DEANNA M. CAMPBELL	904	1
10*15760	A	5-20-33	DIEDRE WINGER	903	645
10*15764	A	5-20-33	JAMES E BUCKNOR	904	28
10*16355	A	5-20-33	JAMES P LONG AND LINDA LONG	904	10
10*15765	A	5-20-33	JOHN A BUCKNOR	904	16
10*15766	A	5-20-33	JOHN J. POZENEL	904	7
10*16230	A	5-20-33	TH Exploration, LLC	900	134
10*14381	A	5-20-33	WILLIAM LONG	792	95
10*14300	B	5-20-34	PPG INDUSTRIES, INC.	725	123
10*14300	B	5-20-34	PPG INDUSTRIES, INC.	725	123
10*14300	C	5-20-32	PPG INDUSTRIES, INC.	725	123
10*14933	D	5-21-19	CLARA LOU HERRICK AND EDWIN A HERRICK	850	531
10*14934	D	5-21-19	GLENDA ROSE MOORE	849	564
10*14935	D	5-21-19	JOHN M MOORE AND MELANIE A MOORE	849	562
10*14936	D	5-21-19	LINDA LORRAINE MOORE	850	533
10*14937	E	5-21-18	JOHN M MOORE AND MELANIE A MOORE	850	524
10*14300	F	5-21-17	PPG INDUSTRIES, INC.	725	123
10*14300	G	5-21-16	PPG INDUSTRIES, INC.	725	123
10*14300	H	5-21-15	PPG INDUSTRIES, INC.	725	123
10*14498	I	5-28-2	BAYER MATERIALSCIENCE LLC	757	340

01/27/2017

WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

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CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313