



LINE	BEARING	DISTANCE
L1	N 44°23' E	15.15'
L2	N 16°22' E	109.72'
L3	N 04°10' E	1155.51'
CURVE	ARC LENGTH	RADIUS
C1	58.17'	65.86'
C2	43.91'	56.75'
C3	132.02'	338.56'
C4	422.76'	1966.27'
CHORD BEARING	CHORD LENGTH	
C1	N 29°29' E	56.30'
C2	S 85°52' E	42.83'
C3	S 52°32' E	131.18'
C4	S 35°12' E	421.95'

SURFACE HOLE	UTM. NAD83, ZONE 17 IN METERS N) 4,403,406.88 E) 513,701.67
LANDING POINT 1	UTM. NAD83, ZONE 17 IN METERS N) 4,403,680.67 E) 513,862.69
BOTTOM HOLE	UTM. NAD83, ZONE 17 IN METERS N) 4,402,004.75 E) 514,830.28

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

TIE LINE TABLE	
BEARING	DISTANCE
N 45°54' E	1208.4'
N 84°01' E	2254.8'

- 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 MARCH, 2017. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 - WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.

FILE NUMBER YODER

DRAWING NUMBER YODER_WP_E-5HM

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



DATE: MARCH 22, 2017

OPERATORS WELL NO. YODER E-5HM

API WELL NO. 47-051-01921 HGA

STATE COUNTY PERMIT

LOCATION ELEVATION 1084' WATERSHED (HUC 10) FRENCH CREEK - OHIO RIVER

DISTRICT FRANKLIN COUNTY MARSHALL

QUADRANGLE POWHATAN POINT 7.5' LEASE NUMBER SEE ATTACHED PG 2 OF 2

SURFACE OWNER NATHAN D. YODER, et al ACREAGE 142.03

OIL & GAS ROYALTY OWNER NATHAN D. YODER, et al - SEE PG 2 LEASE ACREAGE 545.28

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 6,284' TMD:13,125'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
1320 SOUTH UNIVERSITY DRIVE, SUITE 500 CT CORPORATION SYSTEM
FORT WORTH, TX 76107 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

07/21/2017

COUNTY NAME PERMIT

**YODER WELL E-5HM
WELL PLAT LEASE INFORMATION**

LEASE NO.	TAG	PARCEL	Oil & Gas Royalty Owner	DEED BOOK / PG	
10*14701	A	5-13-33	ROSEITA THORNTON	885	600
10*14702	A	5-13-33	NATHAN D. YODER	708	71
10*16538	B	5-13-27	AMP FUND III LP	915	187
10*14942	C	5-13-28	AARON PAUL HOLDREN	720	132
10*14652	C	5-13-28	CANDICE GUTIERREZ	842	388
10*14644	C	5-13-28	CHERYL HILL	809	517
10*14651	C	5-13-28	DAVID V CALDWELL	842	386
10*14649	C	5-13-28	DONALD GARY GROVES II	842	382
10*14639	C	5-13-28	GARY PARSONS	794	521
10*14638	C	5-13-28	HUGH YOHO	794	478
10*14647	C	5-13-28	JAMES W ROBINSON III	836	102
10*14635	C	5-13-28	KATHY JO RUNYON & ROBERT PATRICK KIRWIN	775	21
10*14654	C	5-13-28	KATHY JO RUNYON & ROBERT PATRICK KIRWIN	854	607
10*14637	C	5-13-28	KIMBERLY S. DENNY	794	511
10*14653	C	5-13-28	KRISTIN DOUGLAS	842	390
10*14641	C	5-13-28	LORA LANGLEY	800	621
10*14648	C	5-13-28	LORI ANN ROBINSON	836	104
10*14643	C	5-13-28	MARTHA RENEE ROBINSON	809	541
10*14642	C	5-13-28	MARY B. FERRIS BY REBECCA R. F	808	457
10*14645	C	5-13-28	RANDY BERISFORD	810	328
10*14640	C	5-13-28	SHERRI SNYDER	799	545
10*14650	C	5-13-28	TIMOTHY DWIGHT GROVES	842	384
10*14636	C	5-13-28	WANDA RIDING	794	503
10*14699	D	5-12-23	CNX GAS COMPANY LLC AND NOBLE	833	514
10*14526	E	5-13-42	THOMAS WILLIAM BOWMAN	761	432
10*14527	E	5-13-42	VICTORIA BOWMAN	761	434
10*14461	F	5-13-41	RODNEY JACKSON	739	411
10*14040	G	5-19-2	MILTON R NEAL AND LINDA L NEAL	665	498
10*14041	G	5-19-2	SHIBEN ESTATES INC	718	496

07/21/2017

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

DESIGNATED AGENT DIANNA STAMPER
CT CORPORATION SYSTEM
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON WV, 25313