



SURFACE HOLE
 UTM. NAD83, ZONE 17
 IN METERS
N)4,403,413.06
E)513,697.22

LANDING POINT 1
 UTM. NAD83, ZONE 17
 IN METERS
N)4,403,177.56
E)513,147.47

BOTTOM HOLE
 UTM. NAD83, ZONE 17
 IN METERS
N)4,400,940.79
E)514,438.86

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 86°10' W	148.31'
L2	S 87°16' W	1621.02'

CURVE	ARC LENGTH	RADIUS
C1	220.59'	177.60'
C2	540.97'	727.73'

CHORD BEARING	CHORD LENGTH
C1 S 48°18' W	206.68'
C2 S 11°25' E	528.60'

- 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_W-1HM

SCALE 1" = 1600'

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: APRIL 9, 2017

OPERATORS WELL NO. YODER W-1HM

API WELL NO. 47-051-01924 HGA

STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

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 SEE PAGE 2 LEASE ACREAGE 591.33

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:15,550'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER

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

07/21/2017

COPY NAME PERMIT

**YODER WELL W-1HM
WELL PLAT LEASE INFORMATION**

Lease No.	TAG	Parcel	Oil & Gas Royalty Owner	Deed Book / Pg	
10*14702	A	5-13-33	NATHAN D. YODER	708	71
10*14701	A	5-13-33	ROSEITA THORNTON	885	600
10*14754	B	5-13-26	BERNARD KNOLLINGER	794	472
10*14763	B	5-13-26	BETTY J. MCKINLEY	815	240
10*14768	B	5-13-26	BONNIE DGINTO	844	77
10*14752	B	5-13-26	CHARLES BOWEN	792	648
10*14757	B	5-13-26	DOUGLAS W. KNOLLINGER	794	487
10*14771	B	5-13-26	ERIC W THORNGATE	846	464
10*14758	B	5-13-26	GARY R. KNOLLINGER	795	154
10*14759	B	5-13-26	GLORIA J. LUIKART BY MARK LUIK	804	245
10*14751	B	5-13-26	GRACE E. LUIKART	792	642
10*14772	B	5-13-26	GREG E THORNGATE	846	436
10*14749	B	5-13-26	JANICE E. FUTEY	792	116
10*14766	B	5-13-26	JANICE M. SANDERS	827	527
10*14769	B	5-13-26	JAYNE S KISSEL	844	79
10*14760	B	5-13-26	JEFFREY M. BROWN	809	535
10*14753	B	5-13-26	JERRY SMOYER	794	474
10*14755	B	5-13-26	JUDITH A. MCGRAIL	794	517
10*14773	B	5-13-26	JUSTIN J ANTHONY	846	438
10*14776	B	5-13-26	KAREN M SMOYER	876	457
10*14748	B	5-13-26	MARJORIE K. NIGHTENGALE	790	541
10*14764	B	5-13-26	MARY B. KNOLLINGER	821	40
10*14770	B	5-13-26	MARY M HALL	846	413
10*14750	B	5-13-26	MARY SUE ANTHONY	792	114
10*14549	B	5-13-26	REBECCA PAUKNER	829	603
10*14761	B	5-13-26	RONALD E CLARK	809	571
10*14765	B	5-13-26	RUTH A. KINNEY	821	42
10*14774	B	5-13-26	THOMAS R KNOLLINGER	846	406
10*14775	B	5-13-26	TODD HANNIG	849	522
10*14762	B	5-13-26	WILLIAM CARL KNOLLINGER	815	238
10*14767	B	5-13-26	WILLIAM J. SMOYER	829	332
10*14756	B	5-13-26	WOODROW J. KNOLLINGER	794	515
10*14700	C	5-13-23	DAVID J MAST AND MIRIAM A MAST	708	239
10*14701	C	5-13-23	ROSEITA THORNTON	885	600
10*14618	D	5-13-35	DAVID J MAST AND MIRIAM A MAST	707	645
10*14701	D	5-13-35	ROSEITA THORNTON	885	600
10*14526	E	5-13-38	THOMAS WILLIAM BOWMAN	761	432
10*14527	E	5-13-38	VICTORIA BOWMAN	761	434
10*14615	F	5-20-24	ROBERT E RINE	708	251
10*14685	G	5-20-25	ROBERT E RINE AND DONNA M RINE	708	253
10*14616	H	5-20-26	ROBERT E RINE AND DONNA M RINE	708	250
10*14325	I	5-20-27	ELIZABETH ANN STRAUSBAUGH	792	104
10*14326	I	5-20-27	JANET LEA BLANKENSHIP	792	580
10*14310	I	5-20-27	JEAN C. THOMAS	781	614
10*14308	I	5-20-27	MARY E. BASSETT	779	492
10*14300	I	5-20-27	PPG INDUSTRIES, INC.	725	123
10*14309	I	5-20-27	ROBERT B. THOMAS	779	484
10*14324	I	5-20-27	RUTH E. BASSETT MEADOWS	792	100
10*14307	I	5-20-27	SALLY CYNTHIA HOPKINS	777	572
10*14325	J	5-20-28	ELIZABETH ANN STRAUSBAUGH	792	104
10*14326	J	5-20-28	JANET LEA BLANKENSHIP	792	580
10*14310	J	5-20-28	JEAN C. THOMAS	781	614
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 CT CORPORATION SYSTEM
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