



320 O'Bryan Lane • Van Buren, AR 72956
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Surveying • handa-inc.com

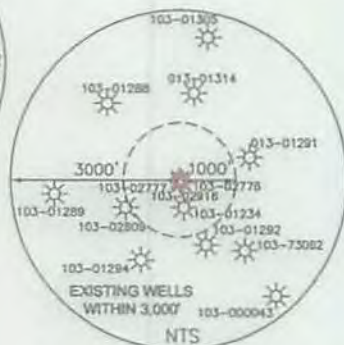
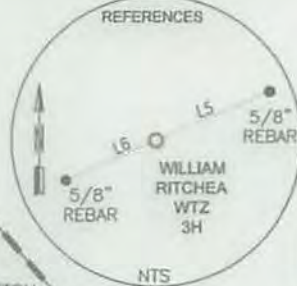
LINE	DESCRIPTION	DISTANCE	DESCRIPTION	MONUMENT
L1	N 73°37'23" W	1320.66'	SHL TO LANDMARK	5/8" REBAR
L2	S 47°43'14" W	855.75'	SHL TO LANDMARK	5/8" REBAR
L3	N 83°59'15" W	564.20'	SHL TO TPL	
L4	N 45°06'42" W	7598.35'	TPL TO BHL	
L5	N 66°30'17" E	298.77'	SHL TO REF. PNT.	5/8" REBAR
L6	S 66°18'02" W	239.24'	SHL TO REF. PNT.	5/8" REBAR

TRACT	SURFACE OWNER(S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES	LEASE NUMBER
1	WILLIAM D RITCHEA & SHIRLEY E RITCHEA (S/R)	12-15-21	62.00	WV-0000113-000
3	WILLIAM R PITOSCA (S) TASA CORPORATION (R) HERBERT W LINDSAY & MARIE LINDSAY (R) RUSSELL RAND & GWENDOLYN RAND (R)	12-14-16	104.01	WV-0000109-001 WV-0000109-002 WV-0000109-003
2	LEMASTERS CEMETERY (S)	12-15-2	0.35	UNLEASED
6	WILLIAM D RITCHEA & SHIRLEY E RITCHEA (S/R) LEWIS F BLAKE & OPAL M BLAKE (R) ALBERT WOODSTUFF (R)	12-14-9	88.37	WV-0000129-002 WV-0000129-001 WV-0000129-003
5	WAYNE HUGGINS & SANDRA HUGGINS (S) LEWIS F BLAKE & OPAL M BLAKE (R) ALBERT WOODSTUFF (R)	12-14-9.1	12.69	WV-0000130-001 WV-0000130-002
4	WAYNE L GODDARD (S) LEWIS F BLAKE & OPAL M BLAKE (R) ALBERT WOODSTUFF (R)	12-14-9.3	0.16	WV-0000130-001 WV-0000130-002
7	MICHAEL E LASURE & VELVA C LASURE (S) RAY C HERMAN & ROSE HERMAN (R) DARL A HERMAN (R) RAY C HERMAN & DARL A HERMAN (R)	12-14-6	52.89	WV-0000128-000 1-254831-000
8	WAYNE HUGGINS & SANDRA M HUGGINS (S) F E BUCHNER (R), WILLARD HERMAN (R), DALE A HERMAN (R), RAY C HERMAN (R), DORA HALL PALMER (R), & FRANKIE E WOODSTUFF & ALBERT WOODSTUFF (R)	12-9-46.1	25.00	1-264519-000
9	NORMAN E KEENEY JR & NANCY M KEENEY (S) OTIS SIMMONS & MABEL SIMMONS (R) ETHEL RAMSEY & ELMER RAMSEY (R) HAROLD SIMMONS & ROXIE SIMMONS (R)	12-9-45	100.00	1-254812-000
10	VERIL JEROME BLAKE, RODNEY BLAKE & JEROME MICHAEL (S) EDWARD A NEUMAN & ISABELLE NEUMAN (R), FRANCES ALMA EMMERT (R), MARY A BARNES (R), LORETTA M SAPPINGTON (R), & JOHN A NOON & ALISON NOON (R) THE MARY E TRACY TRUST DATED APRIL 6, 1910 (R)	12-9-4	50.00	1-254866-000 1-298009-001

NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 1000 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

REFERENCES



SURFACE HOLE LOCATION (SHL):	
GEOGRAPHIC (NAD83): LATITUDE: 39.669598° LONGITUDE: -80.659338°	
UTM (NAD83, ZONE 17, FEET): NORTHING: 14,406,606.134 EASTING: 1,736,277.689	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,391,142.332 EASTING: 529,218.498	
TURNING POINT LOCATION (TPL):	
GEOGRAPHIC (NAD83): LATITUDE: 39.669766° LONGITUDE: -80.661330°	
UTM (NAD83, ZONE 17, FEET): NORTHING: 14,406,665.205 EASTING: 1,735,716.853	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,391,160.337 EASTING: 529,047.555	
BOTTOM HOLE LOCATION (BHL):	
GEOGRAPHIC (NAD83): LATITUDE: 39.684540° LONGITUDE: -80.680384°	
UTM (NAD83, ZONE 17, FEET): NORTHING: 14,412,025.028 EASTING: 1,730,336.079	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,392,794.014 EASTING: 527,407.492	



SWN PRODUCTION COMPANY, LLC
"WILLIAM RITCHEA WTZ 3H"
SURFACE HOLE
ELEV: 1563.4'

SURVEYED BY TRIPLE H ENTERPRISES, WEST UNION, WV.



GRAPHIC SCALE IN FEET

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 667 *Darrell R. Boice*

	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	WILLIAM RITCHEA WTZ
	WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	PROVEN SURVEY SOURCE OF ELEVATION: GRADE GPS (NAVD 88, US FT)	OPERATOR'S WELL #: 3H API WELL #: 47 103 03129 HGA

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: LITTLE FISHING CREEK ELEVATION: 1563.4'

DISTRICT: PROCTOR COUNTY: WETZEL QUADRANGLE: WILEYVILLE, WV

SURFACE OWNER: WILLIAM D & SHIRLEY E RITCHEA ACREAGE: ±62.00

OIL & GAS ROYALTY OWNER: WILLIAM D & SHIRLEY E RITCHEA ACREAGE: ±62.00

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,556' TVD 16,067' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL

ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300

CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

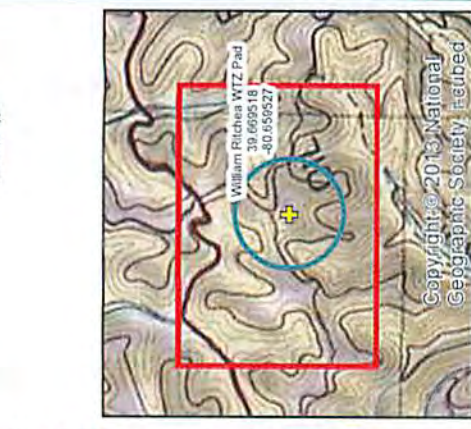
LEGEND:	REVISIONS:	DATE: 05-14-2015
○ PROPOSED SURFACE HOLE / BOTTOM HOLE		
⊙ EXISTING / PRODUCING WELLHEAD	--- LEASE BOUNDARY	
⊗ ABANDONED WELL	--- 500' DHP BUFFER	
⊕ PLUGGED & ABANDONED WELL	- - - MAR 1 > - MARCELLUS DHP	
△ CUT CONDUCTOR	- - - ABANDONED PATH	
		DRAWN BY: S. HUTSON
		SCALE: 1" = 200'
		DRAWING NO: 58712
		WELL LOCATION PLAT

Legend

- William Ritchea WTZ Pad
- USGS NURE Well
- Streams
- 1,500' Radius of Site
- Parcel Outside the Radius
- Parcel Within 1,500' of Site - 10 parcels highlighted

Baseline Sample Location

- Spring
- Stream
- Water Well
- Baseline Sample Location labeled with:
 - Parcel Number
 - System Location Code
 - Sample Date
 - Location Type



William Ritchea WTZ Pad
39.669518
-80.659527

Map Coordinate System:
NAD 1983 StatePlane West Virginia North FIPS 4701 Feet
Projection: Lambert Conformal Conic
Datum: North American 1983
False Easting: 1,968,500.0000

Notes:
1. SWN is abbreviation for SWN Production Company, LLC
2. The stream and surface water data were obtained from:
<http://wgis.wvu.edu/data/dataset.php?ID=265>

0 350 700 1,400 Feet
1 inch = 700 feet

SWN Production Company, LLC
William Ritchea WTZ Pad
Welzel County, WV

Permit Map

Drawn	TAJ	checked	Figure no.
DATE	08/08/2013	DATE	1
JOB no.	313738100000100001000	REV no.	William_Ritchea_Permitting
DATE		REVISION	

leidos

