

JACKSON SURVEYING INC.

P.O. Box 1460
677 W. Main St.
Clarksburg, WV 26302
304-623-5851

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,395,819.694 EASTING: 533,488.444
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,395,918.770 EASTING: 533,454.925
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,865.142 EASTING: 532,368.226

Latitude: 39°45'00" SURFACE HOLE 7306'

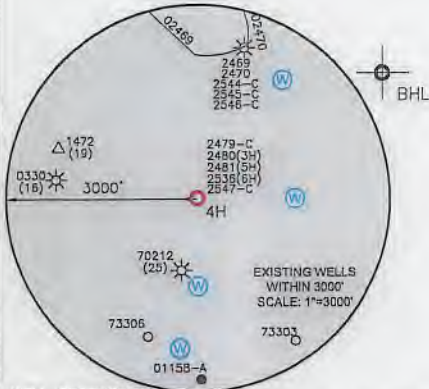
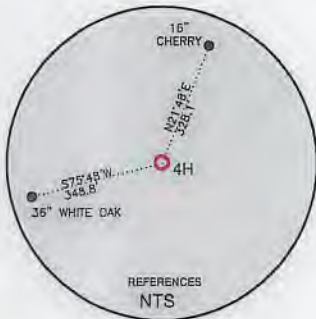
Latitude: 39°45'00" BOTTOM HOLE 10,967'

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	LARRY G. RINE & JANA L. RINE (S) / VERN STANSBURY & BESSIE L. STANSBERRY (R)	01-05-01
TRACT	SURFACE OWNER	TAX PARCEL
2	SHAWN D. HARLAN & VENCIN HARLAN (S)	01-01-08
3	THOMAS J. BILINOVICH (S)	01-01-04
4	MASON DIXON FARMS, LLC (S)	07-28-15

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	LARRY G. RINE & JANA L. RINE	01-05-3.1
B	VENCIN HARLAN	01-04-13
C	VENCIN HARLAN	01-04-10
D	VENCIN HARLAN	01-04-09
E	MARTIN R. WHITEMAN & LISA K. WHITEMAN	01-04-06
F	MARTIN R. WHITEMAN & LISA K. WHITEMAN	01-04-04
G	ROBERT R. REYNOLDS & DONNA D. REYNOLDS	01-01-03
H	MASON DIXON FARMS, LLC	07-28-10
I	UNKNOWN HEIRS OR ASSIGNS OF J.J. JOHNSON & ROSA MILLER	01-01-5
J	VERNA LOUISE WYKERT	01-01-7
K	MARY E. PYLES	01-02-7

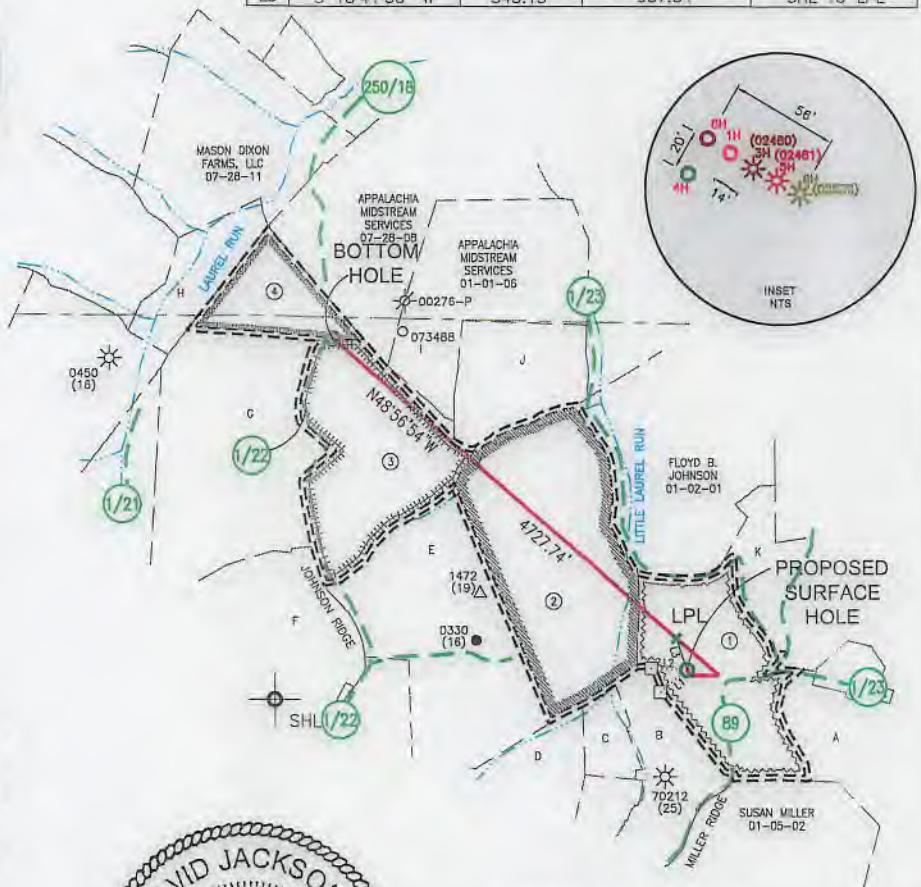
03/29/2019

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 87°43'16" W	374.47'	SHL TO LANDMARK	20" BLACK CHERRY
L2	S 50°23'29" W	360.98'	SHL TO LANDMARK	STONE FOUND

LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 18°41'30" W	343.15'	957.54'	SHL TO LPL

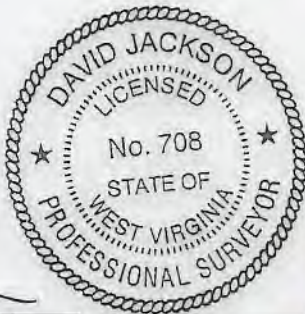


WELL RESTRICTIONS

- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

NOTES ON SURVEY

- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.
- 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. 708

David L Jackson



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC

OPERATOR'S WELL #: RINE UD WTZ 4H
API WELL #: 47 103 03284
STATE COUNTY PERMIT

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

WATERSHED: LITTLE LAURAL RUN OF FISH CREEK (HUC-10) ELEVATION: 1327.7' STAKED

DISTRICT: CENTER COUNTY: WETZEL QUADRANGLE: LITTLETON, WV

SURFACE OWNER: LARRY G. RINE & JANA L. RINE ACREAGE: ±60.80

OIL & GAS ROYALTY OWNER: VERN STANSBURY & BESSIE L. STANSBERRY ACREAGE: ±60.80

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: UPPER DEVONIAN ESTIMATED DEPTH: 7,184 TVD 12,287 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
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:	— SURVEYED BOUNDARY	REVISIONS:	DATE: 01-15-2019
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— DRILLING UNIT		DRAWN BY: N. MANO
⊙ EXISTING / PRODUCING WELLHEAD	== LEASE BOUNDARY		SCALE: 1" = 2000'
LPL* LANDING POINT LOCATION	— PROPOSED PATH		DRAWING NO:
⊙ EXISTING WATER WELL			WELL LOCATION PLAT
⊙ EXISTING SPRING			

03/29/2019



1 in = 833 ft

0 0.05 0.1 0.2 0.3 0.4 Miles

Coordinate System: NAD 1983 UTM Zone 17N
Units: Meter

- Spring
- Water Well
- Pond
- 1500' Buffer

Water Purveyor Map
Well Pad: Rine
County: WTZ



Southwestern Energy®

Date: 11/7/2017

Author: willisb

Document Path: K:\EandP\WVD\Team_Data\Regulatory\Bobby_Wille\Maps\Water_Purveyor_Rine_Pad.mxd

RECEIVED
Office of Oil and Gas

JAN 30 2019

WV Department of
Environmental Protection