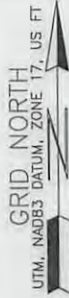


**JACKSON SURVEYING INC.**

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

<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,401,979.471
EASTING: 532,904.931
<b>LANDING POINT LOCATION (LPL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,402,117.234
EASTING: 533,185.902
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,872.746
EASTING: 534,709.219



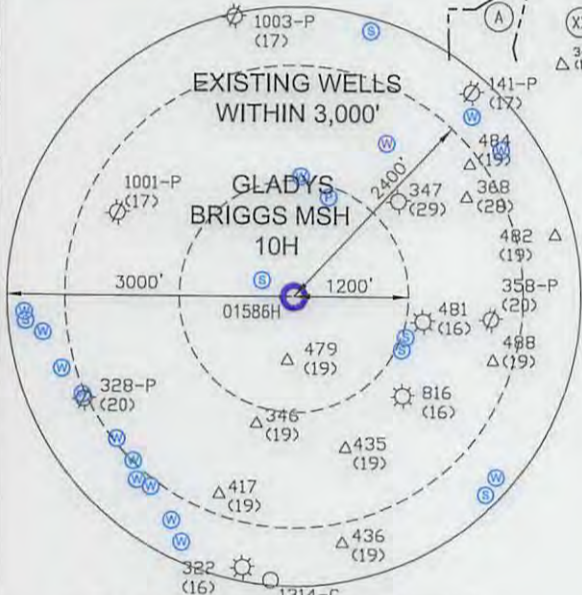
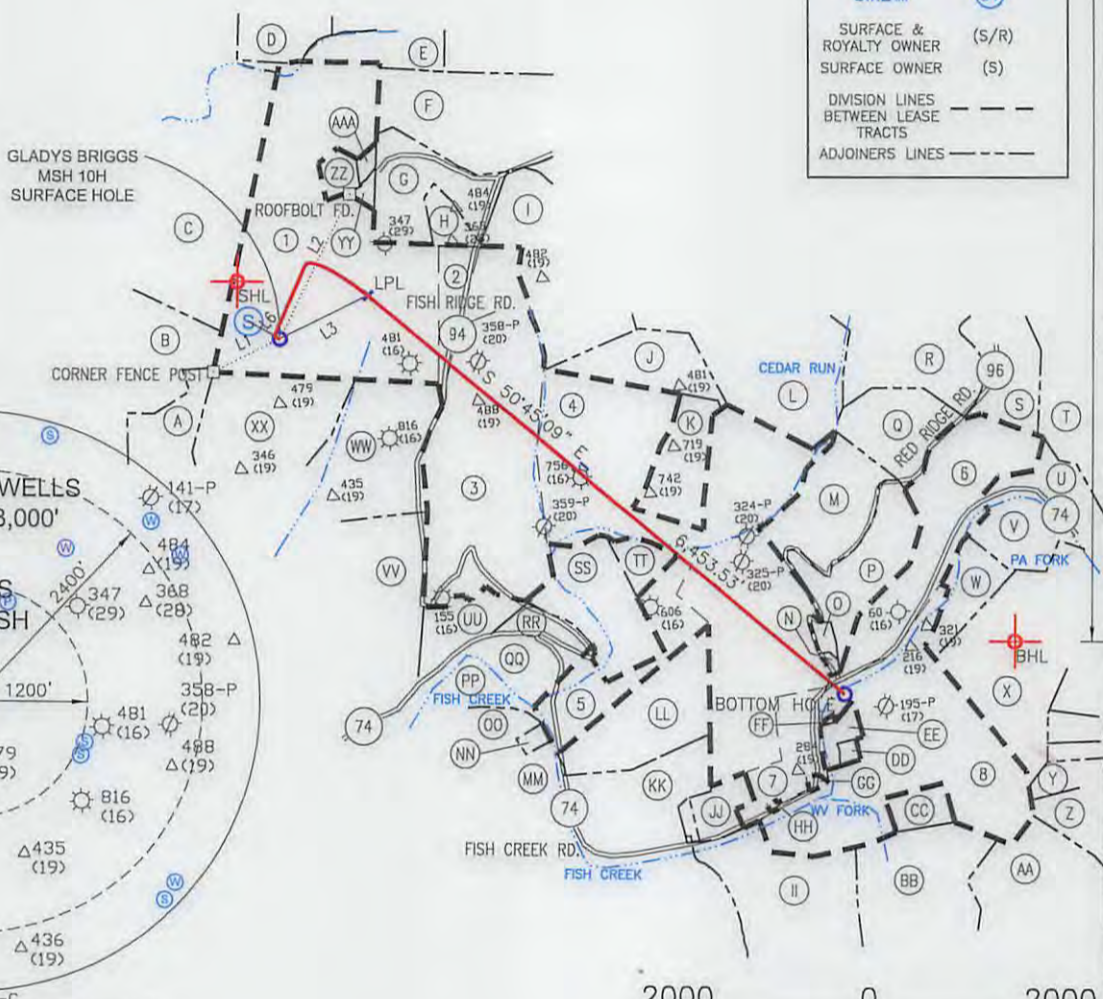
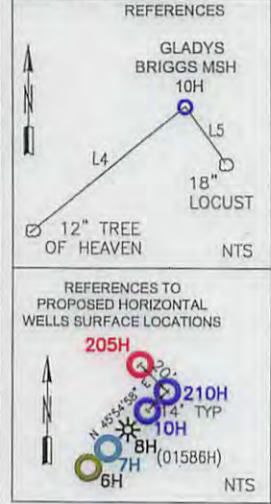
**NOTES ON SURVEY**

- 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 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- ALL WELLS WITHIN 500' OF THE HORIZONTAL LEG ARE SHOWN ON THIS MAP BASED UPON INFORMATION TAKEN FROM DEP MAPPING, WELL PLATS AND AERIAL PHOTOS.

Latitude: 39°47'30" N 983'

LINE	BEARING	DISTANCE	DESCRIPTION
L1	S 63°25'52" W	776.65'	SHL TO CNR FP
L2	N 25°31'55" E	1,681.52'	SHL TO ROOFBOLT
L3	N 63°52'51" E	1,026.66'	SHL TO LPL
L4	S 51°12'27" W	522.51'	SHL TO 12" TREE OF HEAVEN
L5	S 35°33'41" E	178.54'	SHL TO 18" LOCUST
L6	N 61°43'01" W	372.00'	SHL TO WATER RESERVOIR (SPRING)

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	JAMES RODNEY BRIGGS, ROGER JACOB BRIGGS & JOHN DEAN BRIGGS (S)	7-16-02	121.43
2	JAMES RODNEY BRIGGS, ROGER JACOB BRIGGS & JOHN DEAN BRIGGS (S)	7-16-03	10.00
3	JOHN DEAN BRIGGS & PAITY KAY BRIGGS (S)	7-16-04	81.25
4	GEORGE R. CUMPSTON & NANCY K. CUMPSTON (S)	7-16-24	115.72
5	DELORSE A. HORNER (LIFE), DOROTHY S. PRICE MITCHELL J. PRICE (S)	7-16-22	26.67
6	JOHN MATTHEW BUTLER (S)	7-16-39	43.56
7	VINCENT E. LEMASTER (S)	7-19-20	14.73
8	ALAN UNDERDONK (S)	7-16-25.1	75.79



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. 708

	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	GLADYS BRIGGS MSH		
	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 #: 10H	API WELL #: 47	051 01883 H46

WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input checked="" type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>	WATERSHED: FISH CREEK OF UPPER OHIO RIVER 2	ELEVATION: 1382.2'
DISTRICT: LIBERTY	COUNTY: MARSHALL	QUADRANGLE: CAMERON 7 1/2'
SURFACE OWNER: JAMES RODNEY BRIGGS, ROGER JACOB BRIGGS & JOHN DEAN BRIGGS	ACREAGE: 121.43	
OIL & GAS ROYALTY OWNER: DAVID BONAR; HARRISON J. BRIGGS & GLADYS R. BRIGGS	ACREAGE: 121.43	
DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input checked="" type="checkbox"/>	CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY)	ESTIMATED DEPTH: 7,191' TVD 14,132.2'TMD
TARGET FORMATION: MARCELLUS		

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: 10-30-2015
○ PROPOSED SURFACE HOLE / BOTTOM HOLE ☼ EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊗ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR	--- LEASE BOUNDARY --- 500' DHP BUFFER --- MAR 1C --- MARCELLUS DHP --- ABANDONED PATH	△ REVISED OWNERSHIPS & DHP 08-24-2016 DRAWN BY: M. PERKINS SCALE: 1" = 2000' DRAWING NO: WELL LOCATION PLAT

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

ADJOINING OWNERS

TRACT	ADJOINING SURFACE OWNER (S)	TAX PARCEL	ACRES
A	MASON DIXON FARMS LLC (S)	07-17-19.1	20.00
B	MASON DIXON FARMS LLC (S)	07-17-19	22.80
C	MCELROY COAL COMPANY (S)	07-10-08	50.77
D	MARILYN V. CLARK (S)	07-10-11	25.00
E	JAMES M. CLARK (S)	07-10-09	15.00
F	VINCENT E. LEMASTERS (S)	07-10-24	44.08
G	PRESTON & HEATHER L. YEATER (S)	07-16-29.4	17.91
H	PRESTON A. YEATER ET UX (S)	07-16-29.2	4.92
I	THELMA YEATER (LIFE) (S)	07-16-29	40.41
J	RICHARD M. YEATER ET UX (S)	07-16-29.1	18.39
K	RUSSELL ALLEN JR. & JODI D. DOTSON (S)	07-16-28	69.12
L	JOHN M. BUTLER (S)	07-16-26.1	19.56
M	JEREMIAH N. & ANDREA J. MAGERS (S)	07-16-33.1	12.00
N	DONALD REX QUIGLEY ET UX (S)	07-16-33	71.50
O	DAVID L. ELSON ET UX (S)	07-16-34	25.00
P	LAWRENCE WESLEY QUIGLEY ET UX (S)	07-16-36	146.78
Q	LOUIS S. MCCLELLAND EST. (S)	07-16-37	13.74
R	JOHN E. RIGGS JR. (S)	07-16-41	10.00
S	JUDITH A. BURGE & VIRGINIA L. BAILEY ET AL (S)	07-16-40	10.52
T	JUDITH A. BURGE & VIRGINIA L. BAILEY ET AL (S)	07-20-06	52.00
U	ANNIE L. GEHO EST. (S)	07-20-11	6.60
V	AMMON BURLEY ET UX (S)	07-20-12	34.80
W	WV WILDLIFE RES. SEC. (S)	07-24-01	1,842.26
X	BRAD FROMHART ET UX (LIFE) (S)	07-20-41	57.00
Y	PEGGY M. GRIBBEN (S)	07-19-28	112.16
Z	GAIL CUMPTSON (S)	07-19-20	14.73
AA	SHERRY L. JOHNSON ET VIR (S)	07-19-21	0.57
BB	CHARLES VUCELICK EST. (S)	07-19-22	0.20
CC	JAMES F. & JAMIE ANN DRUSCHEL ET AL (S)	07-19-23	4.43
DD	CHARLES E. HORNER ET UX (LIFE) (S)	07-19-26	28.34
EE	CHARLES E. HORNER ET UX (LIFE) (S)	07-19-18	26.77
FF	CHARLES E. HORNER ET UX (LIFE) (S)	07-16-22	26.67
GG	CHARLES E. HORNER ET UX (LIFE) (S)	07-16-23	7.06
HH	WILLIAM ZERVOS JR. (S)	07-16-21	3.00
II	CHARLES C. COOK ET UX (S)	07-16-09	11.21
JJ	COLUMBIA GAS TRANSMISSION CORP. (S)	07-19-10	55.15
KK	JACK J. BRIGGS (S)	07-16-05	37.88
LL	MASON DIXON FARMS LLC (S)	07-16-06	69.72
MM	CHARLES E. HORNER ETUX LIFE (S)	07-17-23	16.71

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
5	GEORGE R. CUMPTSON (S)/ TIERRA OIL COMPANY A/K/A TIERRA OIL COMPANY, L.L.C.	7-16-27	20.00
6	BEN F. ALLMAN & ELLEN ALLMAN (S)/ JOHN A. GROW, JUDITH COLLINS, BETTE N. HOUCK, DEBORAH KAY KINCAID A/K/A DEBORAH KINCAID, DANIEL W. DEVER, JOHN A. DEVER, GREGORY T. DEVER, LAWRENCE A. DEVER, DAVID S. DEVER, JOSEPH R. JONES, JERRY CRANE JONES, CHESTNUT HOLDINGS INC., PAM DENNIS, LIESELOTTE D. JONES, CATHY YONTZ & WILLIAM A. YONTZ (R)	7-16-25	0.72
7	DAVID T. BUTLER (LIFE) REMAINDERMEN: JOHN BUTLER & BENJAMIN BUTLER (S)/ JOHN A. GROW, JUDITH COLLINS, JOSEPH R. JONES, JERRY CRANE JONES, BETTE N. HOUCK, DEBORAH KAY KINCAID A/K/A DEBORAH KINCAID, DANIEL W. DEVER, JOHN A. DEVER, LAWRENCE A. DEVER, GREGORY T. DEVER, DAVID S. DEVER, CHESTNUT HOLDINGS INC., PAM DENNIS, CATHY YONTZ & WILLIAM A. YONTZ (R)	7-16-26	26.34
8	JOHN MATTHEW BUTLER (S)/ MARTHA JANE CHAMBERS, JUNE MARIE RUSH, LISA WARREN F/K/A LISA CHAMBERS, KATHRYN A. KINSEY, ROBERT C. RICHARDSON, DELORA H. GEHRDES & JAMES GEHRDES, STEPHEN W. BURGE, KENNETH LLOYD HOSTETLER, NATIONAL CITY BANK OF PENNSYLVANIA SUCCESSOR TO FIRST NATIONAL BANK AND TRUST COMPANY OF WAYNESBURG, PENNSYLVANIA, TESTAMENTARY TRUSTEE (R)	7-16-39	43.56
9	ALAN UNDERDONK (S)/ CLARE CONNELLY (R)	7-16-25.1	75.79
10	DANNY ZIEGLER & MARK ROBERTS (S)/ JOHN A. GROW, JUDITH COLLINS, BETTE N. HOUCK, DEBORAH KAY KINCAID A/K/A DEBORAH KINCAID, DANIEL W. DEVER, JOHN A. DEVER, GREGORY T. DEVER, LAWRENCE A. DEVER, DAVID S. DEVER, JOSEPH R. JONES, JERRY CRANE JONES, CHESTNUT HOLDINGS INC., PAM DENNIS, LIESELOTTE D. JONES, CATHY YONTZ & WILLIAM A. YONTZ (R)	7-16-25.2	1.72
11	VINCENT E. LEMASTERS (S)/ JAMES M. RINE & MARY B. RINE & FRANK HOPKINS & AUSTIA M. HOPKINS (R)	7-16-01	4.00
12	JACK BRIGGS (S)/ DAVID BONAR, HARRISON J. BRIGGS & GLADYS R. BRIGGS (R)	7-16-02.1	1.02
13	JOHN D. BRIGGS & PATTY K. BRIGGS (S)/ DAVID BONAR, HARRISON J. BRIGGS & GLADYS R. BRIGGS (R)	7-16-02.2	1.03

REVISIONS:

COMPANY:

**SWN**  
 Production Company, LLC

**SWN**  
 Production Company™

10/21/2016

OPERATOR'S: GLADYS BRIGGS MSH

DATE: 10-30-2015

WELL #: 10H

DRAWN BY: M. PERKINS

LOCATION: LIBERTY DISTRICT,  
 MARSHALL COUNTY, WEST VIRGINIA

SCALE: N/A

DRAWING NO:

ADJOINING OWNERS