Latitude: 39°47'30" N

SURFACE HOLE 9,132'

BOTTOM HOLE 985'

Longitude: -80°37'30" W

BOTTOM HOLE 1,080'

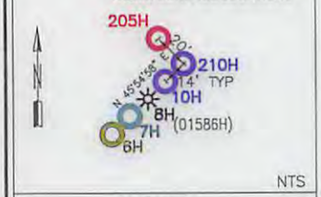
SURFACE HOLE 8,922'

Longitude: -80°35'00" W

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

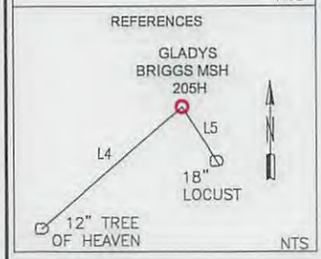
SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,401,986.792 EASTING: 532,903.775
"LANDING POINT" LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,402,526.429 EASTING: 533,369.435
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,404,371.528 EASTING: 531,808.252

REFERENCES TO PROPOSED HORIZONTAL WELLS SURFACE LOCATIONS



NTS

REFERENCES



LINE	BEARING	DISTANCE	DESCRIPTION
L1	S 61°44'17" W	784.35'	SHL TO CNR FP
L2	N 26°00'25" E	1,661.53'	SHL TO ROOFBOLT
L3	N 40°47'29" E	2,338.49'	SHL TO LPL
L4	S 48°56'52" W	535.02'	SHL TO 12" TREE OF HEAVEN
L5	S 32°27'01" E	200.58'	SHL TO 18" LOCUST
L6	N 64°49'05" W	357.80'	SHL TO WATER RESERVOIR (SPRING)

TRACT	SURFACE OWNER (S)	TAX PARCEL	ACRES
1	JAMES RODNEY BRIGGS, ROGER JACOB BRIGGS, JOHN DEAN BRIGGS (S)	7-18-02	121.43
2	PRESTON YEATER & HEATHER L. YEATER (S)	07-16-29.4	17.91
3	PRESTON A. YEATER & HEATHER L. YEATER (S)	07-16-29.2	4.92
4	VINCENT E. LEMASTERS (S)	07-10-24	44.08
5	JAMES M. CLARK (S)	07-10-09	15.00
6	MARILYN V. CLARK (S)	07-10-11	25.00
7	CHARLES R. CLARK & MARILYN V. WHIPKEY (S)	07-10-12	35.30
8	MARILYN V. CLARK (S)	07-10-05	34.02
9	MARILYN V. CLARK (S)	07-10-04.1	1.12
10	CHARLES R. CLARK (S)	07-10-04	46.72
11	CHARLES R. CLARK (S)	07-10-01	48.78
12	WAYNE E. GRAHAM JR. & GWENDOLYN L. GRAHAM (S)	07-07-04	156.00
13	RONALD WM. KASSERMAN (S)	07-08-09	130.15

NOTES ON SURVEY

1. COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. 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.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
5. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
6. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
7. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
8. ALL WELLS WITHIN 500' OF THE HORIZONAL LEG ARE SHOWN ON THIS PLAT BASED UPON INFORMATION TAKEN FROM FROM DEP MAPPING, WELL PLATS AND AERIAL PHOTOS.

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 David L Jackson

DAVID JACKSON LICENSED No. 708 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

COMPANY: SWN Production Company, LLC

SWN Production Company™

(+) 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 SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)

OPERATOR'S WELL #: GLADYS BRIGGS MSH 205H

API WELL #: 47 (STATE) 051-01873 MOD (COUNTY) H6A (PERMIT)

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

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: 129.43

OIL & GAS ROYALTY OWNER: DAVID BONAR; HARRISON J. BRIGGS & GLADYS R. BRIGGS ACREAGE: 129.43

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

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

09/23/2016

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,153' TVD 16,394' 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:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- ABANDONED WELL
- PLUGGED & ABANDONED WELL
- CUT CONDUCTOR
- LEASE BOUNDARY
- 500' DHP BUFFER
- MARCELLUS DHP
- ABANDONED PATH

REVISIONS:	DATE: 10-30-2015
⚠ CORRECTED TICK MARK 12-15-2015	
⚠ SHIFT BOTTOM HOLE & LANDING POINT 01-21-2016	DRAWN BY: N. MANO
⚠ SHIFTED LANDING POINT 08-09-2016	SCALE: 1" = 2000'
⚠ CORRECTED OWNERSHIPS & DHP 08-17-2016	DRAWING NO:
⚠ ADDED H, I, & J	WELL LOCATION PLAT

\\D7W3HRL1\1-04-16 DJ\SWN\GLADYS BRIGGS MSH\WELL PLATS\BRIGGS MSH 205H\GLADYS BRIGGS MSH 205H 08-18-16\GLADYS BRIGGS MSH 205H 08-

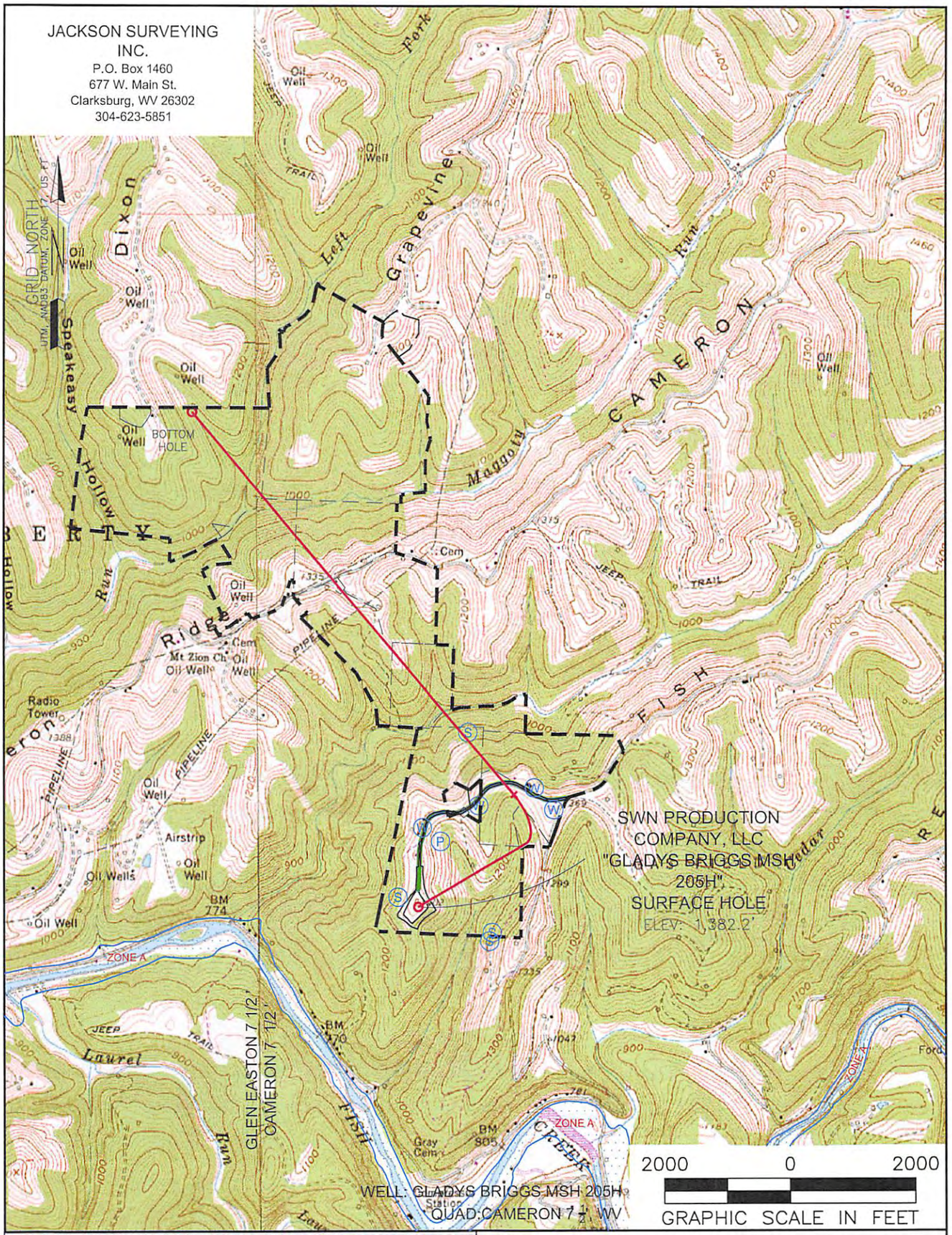
THURSDAY AUGUST 18 2016 02:30PM

PROPERTY NUMBER 2501161955

PAD ID 3001155501

4705101873

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



NAME AND DISTANCE TO THE NEAREST STREAM:	STREAM CROSSING COORDINATES (NAD 83):
FISH CREEK IS LOCATED ±0.49 MILES SW OF THE CENTER OF THE DRILL PAD.	NO NEW CROSSINGS.

WELL RESTRICTIONS:

WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET
WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET
WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET
WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET
CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET
CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET

FEMA FLOOD INFORMATION:

BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF MARSHALL COUNTY, WEST VIRGINIA; MAP NUMBER 54051C0200 E; EFFECTIVE DATE: SEPTEMBER 25, 2009.

LEGEND:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- ABANDONED WELL
- PLUGGED & ABANDONED WELL
- CUT CONDUCTOR
- (S) EXISTING SPRING
- (W) EXISTING WATER WELL
- ACCESS ROAD
- ACCESS ROAD TO PREV. SITE
- HIGHWAY/INTERSTATE
- COUNTY ROAD

COMPANY: SWN Production Company, LLC / SWN Production Company™

OPERATOR'S WELL #: GLADYS BRIGGS MSH 205H

LOCATION: LIBERTY DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

SURFACE HOLE LOCATION:

GEOGRAPHIC (NAD83):
LATITUDE: 39.767173°
LONGITUDE: -80.615830°

BOTTOM HOLE LOCATION:

GEOGRAPHIC (NAD83):
LATITUDE: 39.788701°
LONGITUDE: -80.628505°

REVISIONS:	DATE: 10-30-2015
⚠ CORRECTED TICK MARK 12-15-2015	
⚠ SHIFT BOTTOM HOLE & LANDING POINT 01-21-2016	DRAWN BY: N. MANO
⚠ SHIFTED LANDING POINT 08-09-2016	SCALE: 1" = 2000'
⚠ CORRECTED OWNERSHIPS & DHP 08-17-2016	DRAWING NO:
⚠ ADDED H, I, & J	TOPOGRAPHIC MAP

RECEIVED
Office of Oil and Gas
AUG 22 2016
09/23/2016
WV Department of Environmental Protection

\\D7W3HRL1\1-04-16 DJ\SWN\GLADYS BRIGGS MSH\WELL PLATS\BRIGGS MSH 205H\GLADYS BRIGGS MSH 205H 08-18-16\GLADYS BRIGGS MSH 205H 08-
THURSDAY AUGUST 18 2016 02:30PM

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