

BHL is located on topo map 12,559 feet south of Latitude: 39° 15' 00"
 SHL is located on topo map 9,364 feet south of Latitude: 39° 17' 30"

BHL is located on topo map 10,613 feet west of Longitude: 80° 10' 00"
 SHL is located on topo map 2,736 feet west of Longitude: 80° 12' 30"

04/12/2019

	SURFACE OWNER	DIST-TM/PAR
1	JUDY M. OSBORN (LE) (JUDY M. OSBORN IRREVOCABLE TRUST)	15-330/5
2	CHARLES THOMAS DAVIS II, ET AL	15-330/4
3	CAROLYN S. HARRON	15-330/3
4	CHARLES E. REED 1/2 INTEREST GERALD W. BURNER ET AL 1/2 INTEREST	15-330/25
5	MICHAEL A. & ROBERTA OSBORN	15-350/4
6	GORDON F. OSBORN (LE) (BRIAN MATTHEW OSBORN)	15-350/3
7	GORDON F. OSBORN (LE) (BRIAN MATTHEW OSBORN)	15-350/3.3
8	GORDON F. & DONNA R. OSBORN (BRIAN MATTHEW OSBORN)	15-350/3.1
9	GORDON F. OSBORN (LE) (BRIAN MATTHEW OSBORN)	15-350/16.1
10	ANNESE FRANK	15-350/16.3
11	MICHAEL DAVID & REBECCA JANE CONLEY	15-350/16
12	JASON J. POTH	15-350/16.9
13	KILI K. PALACAT	15-350/23.2
14	KILI K. PALACAT	15-350/23.1
15	BILLY JOE & DEBRA K. WORMAN C/O TABITHA BENNETT	15-350/23.4
16	*PATRICIA L. MOORE	15-350/23.6
17	PATRICIA L. MOORE	15-350/23
18	CHARLES W. CLEVINGER IRR TRUST C/O MARY M. TUCKER	15-350/24
19	CHARLES W. CLEVINGER IRR TRUST	15-370/10
20	CHARLES W. CLEVINGER IRR TRUST C/O MARY M. TUCKER	15-370/12
21	CHARLES W. CLEVINGER IRR TRUST	15-370/13
22	SHAWN R. NEWBROUGH	15-370/21
23	JOHN JAMES JONES C/O ANTHONY JONES	15-370/27
24	CHARLES A. & JOYCE G. MATHENY	15-370/28.1
25	CHARLES A. & JOYCE G. MATHENY	15-370/28
26	JOHN A. & JULIE A. TURNBULL	15-370/28.2

	LESSOR	DIST-TM/PAR
A	GOBEL OSBORN, ET AL	15-330/5
B	CHARLES THOMAS DAVIS, ET UX	15-330/4
C	GEORGE T. FARIS, ET AL	15-330/3
D	JOHN B. WEBB, ET AL	15-330/25
E	MICHAEL A. OSBORN ET UX	15-350/3
F	XTO ENERGY INC.	15-350/3.3 15-350/3.1 15-350/16.1 15-350/16.3 15-350/16 15-350/16.9 15-350/23.2 *15-350/23.6 15-350/23
G	REBECCA A. COMPTON; JAMES MICHAEL COMPTON & JENNIFER NORA COMPTON	P/O 15-350/23.1 15-350/23.4
H	PATRICIA MOORE	15-350/24 15-370/10 15-370/12 15-370/13
J	TRACY H. MCDONALD	15-370/21
K	BILLY JOE WORKMAN ET UX CHARLES W. CLEVINGER IRR TRUST	15-370/27 15-370/28.1 15-370/28
L	W. R. JOHNSON ET AL	
M	N. D. PARKS ET AL	
N	JOHN JAMES JONES	
P	JOHN JAMES JONES AUDREY U. DAVIS ET UX.	



SURFACE HOLE LOCATION (SHL)
 UTM 17-NAD83
 N:4346582.31
 E:567461.23
 NAD83, WV NORTH
 N:279795.329
 E:1765216.814
 LAT/LON DATUM-NAD83
 LAT:39.265958
 LON:-80.217997

APPROX. LANDING POINT
 UTM 17-NAD83
 N:4345994.90
 E:566887.55
 NAD83, WV NORTH
 N:277899.123
 E:1763302.307
 LAT/LON DATUM-NAD83
 LAT:39.260711
 LON:-80.224706

BOTTOM HOLE LOCATION (BHL)
 UTM 17-NAD83
 N:4340995.19
 E:568707.28
 NAD83, WV NORTH
 N:261393.846
 E:1769000.753
 LAT/LON DATUM-NAD83
 LAT:39.215519
 LON:-80.204122



SEE PAGE 2 FOR PLAT DUE TO LENGTH OF LATERAL

FILE #: J OSBORN HSOP 16 201
 DRAWING #: J OSBORN HSOP 16 201
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 Signed: George D. Six
 R.P.E.: _____ L.L.S.: P.S. No. 2000



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25304



DATE: JANUARY 3, 2019
 OPERATOR'S WELL #: J OSBORN HSOP 16 201
 API WELL #: 47 33 05949
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: SIMPSON CREEK ELEVATION: 1163.30'±

COUNTY/DISTRICT: HARRISON / SIMPSON QUADRANGLE: ROSEMONT, WV 7.5'

SURFACE OWNER: JUDY M OSBORN (LE) (JUDY M OSBORN IRREVOCABLE TRUST) ACREAGE: 70.00±

OIL & GAS ROYALTY OWNER: GOBEL OSBORN, ET AL ACREAGE: 1387.201±

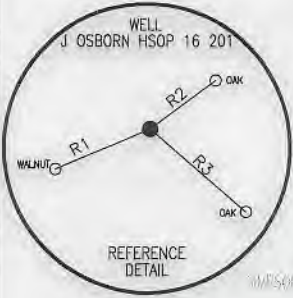
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: (LATERAL)TVD: 7,108.3'± TMD: 25,563.09'±

WELL OPERATOR ARSENAL RESOURCES DESIGNATED AGENT WILLIAM VEIGEL
 Address 6031 WALLACE ROAD EXTENSION, SUITE 300 Address 65 PROFESSIONAL PLACE, SUITE 200
 City WEXFORD State PA Zip Code 15090 City BRIDGEPORT State WV Zip Code 26330

J OSBORN HSOP 16 201

PAGE 2 OF 2



SURFACE HOLE LOCATION (SHL)

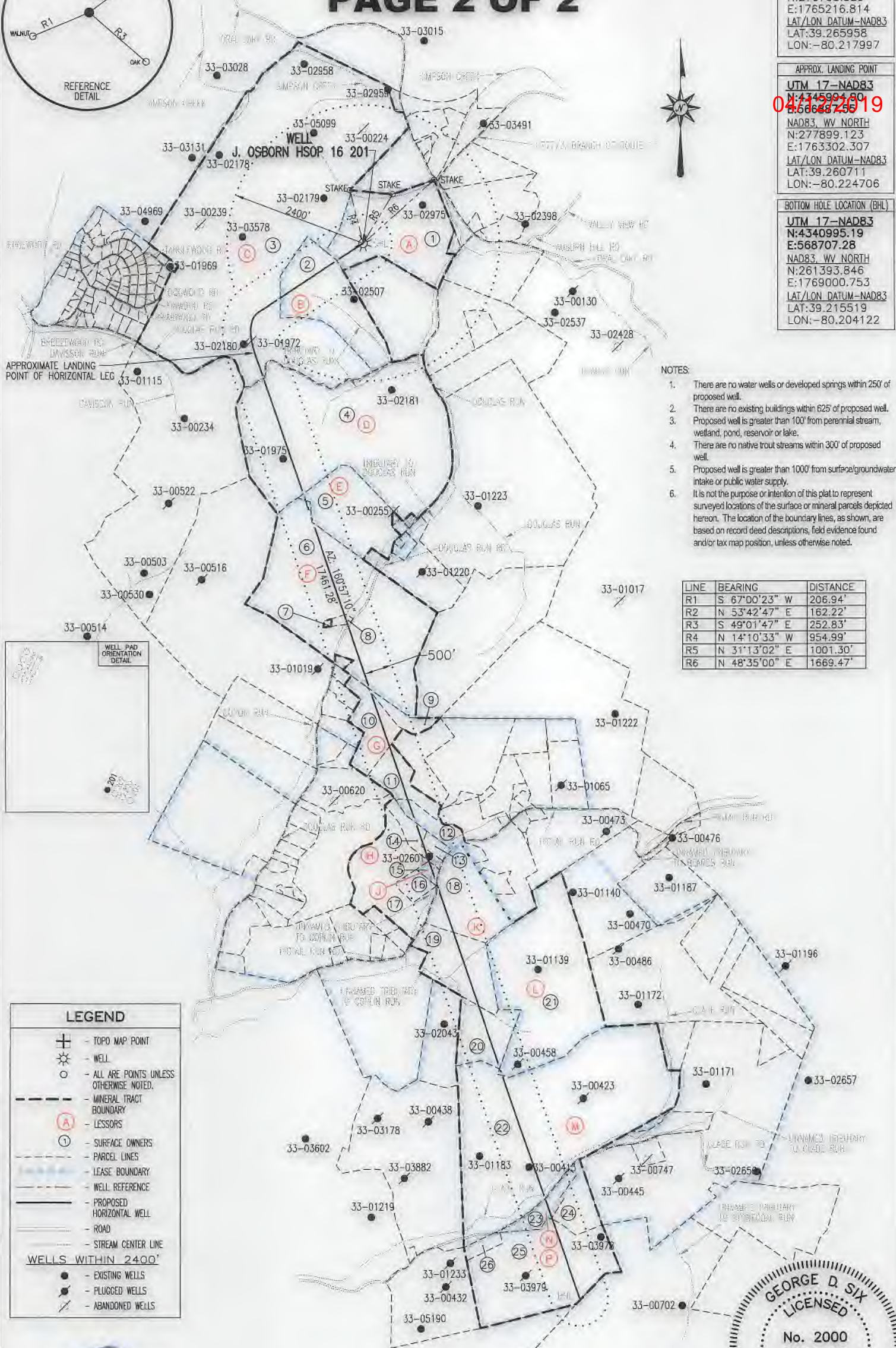
UTM 17-NAD83
N:4346582.31
E:567461.23
NAD83, WV NORTH
N:279795.329
E:1765216.814
LAT/LON DATUM-NAD83
LAT:39.265958
LON:-80.217997

APPROX. LANDING POINT

UTM 17-NAD83
N:43459490
E:566875619
NAD83, WV NORTH
N:277899.123
E:1763302.307
LAT/LON DATUM-NAD83
LAT:39.260711
LON:-80.224706

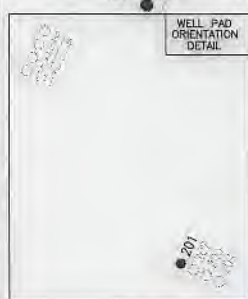
BOTTOM HOLE LOCATION (BHL)

UTM 17-NAD83
N:4340995.19
E:568707.28
NAD83, WV NORTH
N:261393.846
E:1769000.753
LAT/LON DATUM-NAD83
LAT:39.215519
LON:-80.204122



- NOTES:**
1. There are no water wells or developed springs within 250' of proposed well.
 2. There are no existing buildings within 625' of proposed well.
 3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 4. There are no native trout streams within 300' of proposed well.
 5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
 6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

LINE	BEARING	DISTANCE
R1	S 67°00'23" W	206.94'
R2	N 53°42'47" E	162.22'
R3	S 49°01'47" E	252.83'
R4	N 14°10'33" W	954.99'
R5	N 31°13'02" E	1001.30'
R6	N 48°35'00" E	1669.47'

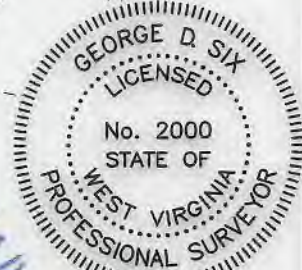


LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- LESSORS
- SURFACE OWNERS
- PARCEL LINES
- LEASE BOUNDARY
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE

WELLS WITHIN 2400'

- EXISTING WELLS
- PLUGGED WELLS
- ABANDONED WELLS



JANUARY 3, 2019

George D. Six

Blue Mountain
11023 MASON DIXON HIGHWAY
BURTON, WV 26582
PHONE: (304) 662-6486