

(NEWBURG) Latitude: 39°25'00"

8,063' BHL

7,697' SHL

THRASHER

(FELLOWSVILLE) Latitude: 39°22'30"

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

NOTES ON SURVEY

- COORDINATES SYSTEM IS STATE PLANE, NAD 83 DATUM, WV NORTH, 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.

| TRACT | SURFACE OWNER | TAX PARCEL | ACRES |
|-------|--|-------------------------|--------|
| 1 | CHRISTOPHER R. JENNINGS | 03-18-35 | 265.86 |
| 2 | CHRISTOPHER R. JENNINGS | 03-18-36 | 297 |
| 3 | CHRISTOPHER R. JENNINGS | 03-18-2-1 | 1.672 |
| 4 | RICHARD C. BOLYARD | 03-15-22-1 | 0.706 |
| 5 | WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS | SCOTCH HILL RD CR 92/11 | N/A |
| 6 | ANTHONY J. & BETHANN RIDOLE | 03-15-20-4 | 1.99 |
| 7 | FRANKLIN M. JENNINGS | 03-15-20-1 | 168.03 |
| 8 | LLOYD R. & KAREN TICHNELL | 03-15-20 | 36.84 |

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,357,868.827
EASTING: 598,178.158

LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,358,158.486
EASTING: 598,695.172

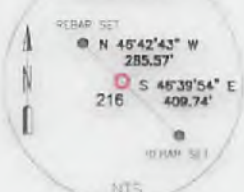
BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,359,552.636
EASTING: 598,044.672

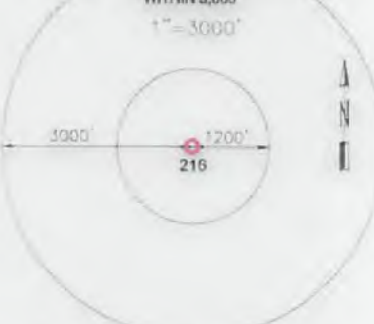
| TRACT | ADJACENT | TAX PARCEL |
|-------|---|------------|
| A | LLOYD RANBELL TICHNELL | 03-15-20-5 |
| B | TIMOTHY G. WEAVER | 03-15-11 |
| C | WILLIAM W. BROWN & CORINNA R. SHAHAN | 03-15-10 |
| D | JAMES E. LARER JR., MELISSA C. BOWAR, CRYSTAL A. MESTOR | 03-18-5-3 |
| E | RUTH TAYLOR | 03-18-09 |
| F | CRISTY J. & CHRISTOPHER L. BAKER | 03-18-2-3 |
| G | OLIVY J. BOKROUB | 03-18-2-2 |
| H | RICHARD LEE BOLYARD | 03-15-27 |
| I | SCOTCH HILL CEMETERY ASSOCIATION | 03-15-28 |
| J | LEE L. E. & TRACEY FRIEND | 03-15-25-1 |
| K | LEE L. E. & TRACEY FRIEND | 03-15-25-2 |
| L | DEWEY F. PIERCE | 03-15-26-3 |
| M | FRANKLIN M. & PEGGY A. JENNINGS | 03-15-26-4 |
| N | ROGER LEROY LYONS, ALICE LYNN LYONS | 03-15-25-2 |



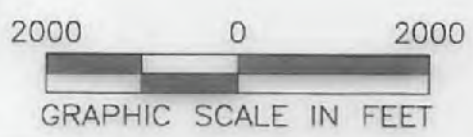
REFERENCES



EXISTING WELLS WITHIN 3,000'



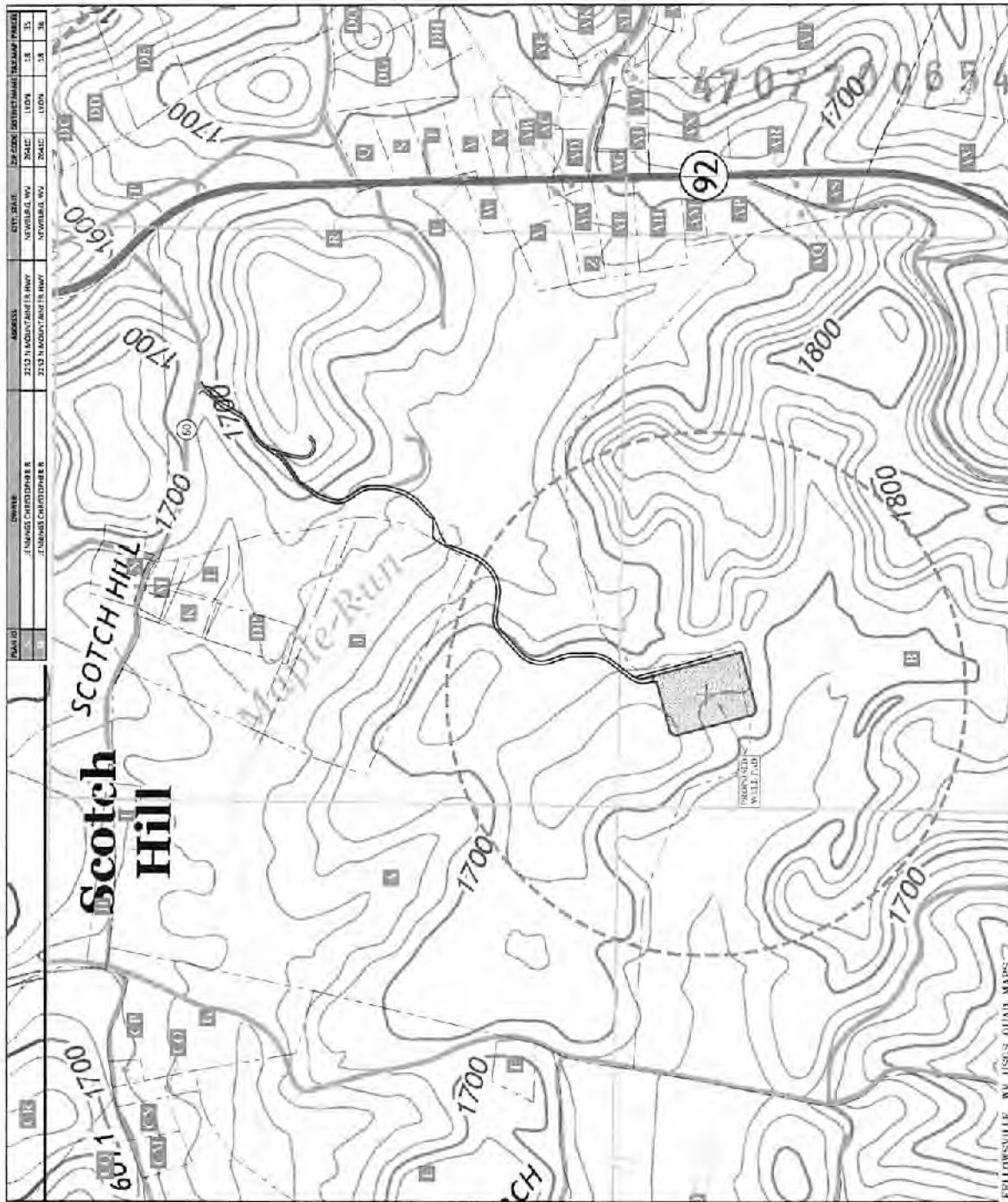
I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



P.S. 2270 *MSW* 4/12/18

| | | |
|---|---|--|
| <p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p> | <p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)</p> | <p>OPERATOR'S WELL #: CHRIS JENNINGS PL2017E 216</p> <p>API WELL #: 47 STATE 77 COUNTY 00654 PERMIT</p> |
| | <p>WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS <input checked="" type="checkbox"/> LIQUID INJECTION STORAGE SHALLOW <input checked="" type="checkbox"/></p> <p>WATERSHED: SANDY CREEK</p> <p>DISTRICT: LYON COUNTY: PRESTON</p> <p>SURFACE OWNER: CHRISTOPHER R. JENNINGS</p> <p>OIL & GAS ROYALTY OWNER: CHRISTOPHER R. JENNINGS</p> <p>DRILL <input checked="" type="checkbox"/> DRILL DEEPER REDRILL FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION PERFORATE NEW FORMATION</p> <p>CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)</p> <p>TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 8,262 TVD 14,136 TMD</p> | <p>ELEVATION: 1735.5' (DESIGN)</p> <p>QUADRANGLE: FELLOWSVILLE/NEWBURG</p> <p>ACREAGE: ± 265.96</p> <p>ACREAGE: ± 265.96</p> |
| <p>WELL OPERATOR: ARSENAL RESOURCES</p> <p>ADDRESS: 6031 WALLACE ROAD EXTENSION #300</p> <p>CITY: WEXFORD STATE: PA ZIP CODE: 15090</p> | <p>DESIGNATED AGENT: WILLIAM VEIGEL</p> <p>ADDRESS: 65 PROFESSIONAL PLACE, SUITE 200</p> <p>CITY: BRIDGEPORT STATE: WV ZIP CODE: 26330</p> | <p>DATE: 04-05-2018</p> <p>DRAWN BY: R. DOERR</p> <p>SCALE: 1" = 2000'</p> <p>DRAWING NO: 030-3213</p> <p>WELL LOCATION PLAT</p> |

05/18/2018



EMERGENCY CONTACT INFORMATION

OPERATOR:
 Arsenal Construction
 401 W. 4th St., Suite 100
 Felloesville, WV 26032
 1-724-644-1100

WV DEP:
 1000 10th and Gas
 Charleston, WV 25309
 1-800-425-6399 (24-hour pollution & emergency spill contact number)

OIL AND GAS INSPECTOR:
 Gregory J. Kinnaman | 1-800-544-6071 (Preston County)

LOCAL EMERGENCY RESPONSE UNIT:
 Chemical or Oil Spills: 1-800-421-2002
 24-hour Emergency Spill Notification
 1-800-421-2074

Northshore Fire, Law Enforcement
 301

LEGEND

- 500 FT RADIUS FROM WELL PAD
- PROPOSED WELL PAD
- PROPERTY LINE
- PROPERTY ID

Chris Jennings P12017E Well Pad Site Coordinates

| Coordinate | UTM Zone | UTM Easting | UTM Northing | UTM Zone | UTM Easting | UTM Northing |
|--------------------|----------|-------------|--------------|----------|-------------|--------------|
| Well Pad Center | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad NE Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad SE Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad SW Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad NW Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad W Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad E Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad S Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |
| Well Pad N Corner | 18Q | 411224.00 | 4701210.00 | 18Q | 411224.00 | 4701210.00 |



| | |
|----------|-------------|
| DATE | 2/21/18 |
| BY | J. JENNINGS |
| APPROVED | |
| DATE | |
| BY | |
| APPROVED | |
| DATE | |
| BY | |
| APPROVED | |
| DATE | |
| BY | |

| | |
|--------------|--|
| OWNER | J. JENNINGS CHRISTOPHER R J. JENNINGS CHRISTOPHER R |
| ADDRESS | 2123 N. MADYANTOWN HWY 2123 N. MADYANTOWN HWY |
| CITY, STATE | NEVILLS, WV NEVILLS, WV |
| DEVELOPER | ARSENAL |
| PROJECT NAME | SCOTCH HILL WELL PAD |
| PROJECT NO. | 101-030-3213 |
| DATE | 2/21/18 |
| BY | J. JENNINGS |
| APPROVED | |
| DATE | |
| BY | |
| APPROVED | |
| DATE | |
| BY | |
| APPROVED | |
| DATE | |
| BY | |

ARSENAL
P E C O U N T Y

THRASHER
THE ENGINEERING FIRM
604 S. MARKET STREET, SUITE 200
FELLOESVILLE, WV 26032
TEL: 724-644-1100

ARSENAL RESOURCES
SITE SAFETY PLANS FOR THE
CHRIS JENNINGS P12017E WELL PAD
PRESTON COUNTY, WEST VIRGINIA
POTENTIAL WATER SOURCES

PROJECT NO. 101-030-3213

DATE: 2/21/18
BY: J. JENNINGS
APPROVED: [Signature]
DATE: [Blank]
BY: [Blank]
APPROVED: [Blank]
DATE: [Blank]
BY: [Blank]

FELLOESVILLE, WV USGS QUAD MAPS