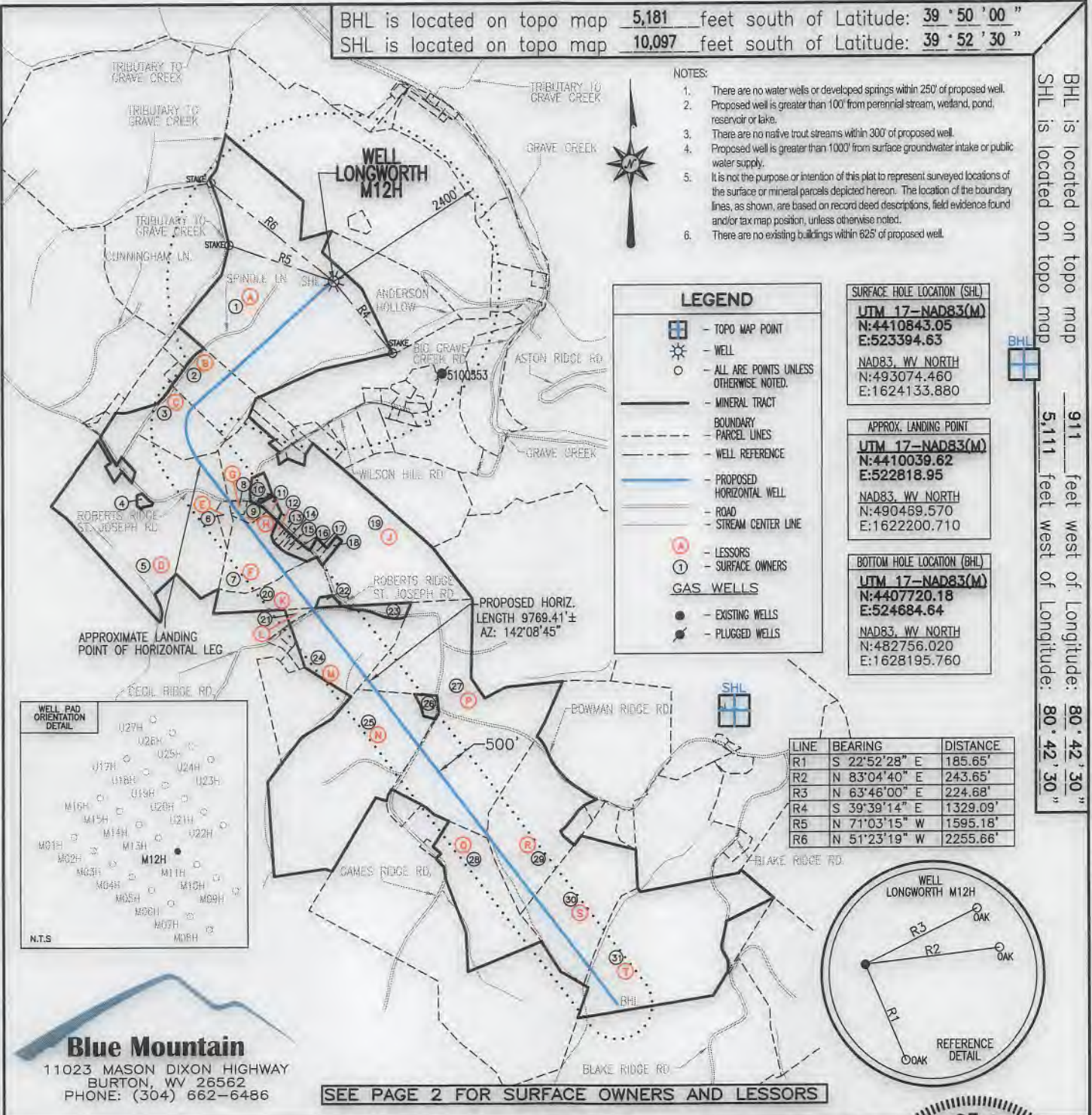


BHL is located on topo map 5,181 feet south of Latitude: 39° 50' 00"  
 SHL is located on topo map 10,097 feet south of Latitude: 39° 52' 30"



BHL is located on topo map 5,111 feet west of Longitude: 80° 42' 30"  
 SHL is located on topo map 911 feet west of Longitude: 80° 42' 30"

FILE #: LONGWORTH M12H  
 DRAWING #: LONGWORTH M12H  
 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

**GEORGE D. SIX**  
 LICENSED  
 No. 2000  
 STATE OF  
 WEST VIRGINIA  
 PROFESSIONAL SURVEYOR

PLACE SEAL HERE

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

DATE: SEPTEMBER 5, 2018  
 OPERATOR'S WELL #: LONGWORTH M12H  
 API WELL #: 47 51 02132  
 STATE COUNTY PERMIT

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

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1270'  
 COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: GLEN EASTON, WV 7.5'  
 SURFACE OWNER: GRAHAM H. LONGWORTH JR. ACREAGE: 123.589±  
 OIL & GAS ROYALTY OWNER: GRAHAM H. LONGWORTH JR. ACREAGE: 813.518±  
 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: TVD: 6,511'± TMD: 17,724.82'±  
 WELL OPERATOR CHEVRON APPALACHIA, LLC DESIGNATED AGENT KENNETH E. TAWNEY  
 Address 700 CHERRINGTON PARKWAY Address 500 LEE STREET, EAST SUITE 1600  
 City CORAOPOLIS State PA Zip Code 15108 City CHARLESTON State WV Zip Code 25301-3202



# LONGWORTH

## M12H

### PAGE 2 OF 2

|   | LESSOR                                   | DIST-TM/PAR |
|---|--|-------------|
| A | GRAHAM H. LONGWORTH JR., ET AL           | 4-11/1      |
| B | HOLMES CWC LEGACY LLC                    | 4-11/55     |
| C | MARY W. HOLMES ET AL                     | 4-13/39     |
| D | MICHAEL W. DERROW ET AL                  | 5-3/13      |
| E | *KAREN M. CARNEY<br>*ABRAHAM S. NEMURAS  | 5-3/13.3    |
| F | GEORGE R. LIGHTNER, SR.                  | 5-3/41      |
| G | RICHARD M. & CRYSTAL M. HUGGINS          | 5-3/36      |
| H | GEORGE R. LIGHTNER SR.                   | 5-3/41.1    |
| J | CLINT E. FLOWERS AND BRENT L. FLOWERS    | 4-11/56     |
| K | LLOYD BAKER                              | 5-3/17      |
| L | LLOYD BAKER                              | 5-3/18      |
| M | PIKEWOOD ENERGY CORP.                    | 9-1/19      |
| N | CNX GAS COMPANY LLC                      | 9-1/20.1    |
| P | SHANNON R. & Lyla L. HUBBS               | 9-1/21      |
| Q | *JOHN D. ROBERTS                         | 9-4/8       |
| R | DEAN B. COLVIN                           | 9-1/22.2    |
|   | MARGARET KINNEY                          |             |
|   | PATRICIA COLVIN GRANDSTAFF               |             |
|   | MARILYN PYLES SNYDER                     |             |
|   | JAMES E. PYLES                           |             |
|   | SUSAN ASTON                              |             |
|   | CAROL HULL                               |             |
|   | DAVID GEORGE MOORE                       |             |
|   | BETTY LOU DELLGET KERNS                  |             |
|   | MARILYN SOUTH                            |             |
|   | HOWARD GUMP ET UX                        |             |
|   | JUDY REILLEY FEIERSTEIN                  |             |
|   | RICHARD O'HARA                           |             |
|   | CATHY J. COLVIN                          |             |
|   | ALICE FAYE VAN DINE                      |             |
|   | LORA FORNSHELL                           |             |
|   | KEITH PYLES                              |             |
|   | WANDA L. PYLES                           |             |
|   | SHERLEY M. WHITE FKA SHERLEY M. VAN DINE |             |
|   | VERENDA STOKES                           |             |
|   | DOMINAE VESICO-RAMIREZ                   |             |
|   | KRISTA L. VAN DINE                       |             |

|   | LESSOR                                 | DIST-TM/PAR |
|---|--|-------------|
| R | ROBERT P. COLVIN                       | 9-1/22.2    |
|   | RONALD PYLES                           |             |
|   | DONALD COOK POA CAROL HULL             |             |
|   | KEVIN O'HARA                           |             |
|   | CATHY LUDWIG GARRETT                   |             |
|   | ROBERT R. D'ERAMO JR., ET AL           |             |
|   | DEBRA FORDYCE                          |             |
|   | KEITH JOEL VAN DINE                    |             |
|   | GLADYS PETRELLE BY AIF SHIRLEY BUFFONE |             |
|   | RODNEY COLVIN                          |             |
|   | PAULA REILLEY                          |             |
|   | VICKIE EISENHAUER                      |             |
|   | KIM YOHO                               |             |
|   | JASON COLVIN                           |             |
|   | BRENDA WILLINGHAM                      |             |
|   | DONALD COLVIN                          |             |
|   | MICHAEL COLVIN                         |             |
|   | STACY PANYKO                           |             |
|   | HAROLD E. VAN DINE                     |             |
|   | JOHN E. VAN DINE                       |             |
| S | THOMAS B. CLARK ET UX                  | 9-4/9.1     |
| T | THOMAS B. CLARK ET UX                  | 9-5/2       |

|    | SURFACE OWNER                             | DIST-TM/PAR |
|----|---|-------------|
| 1  | GRAHAM H. LONGWORTH JR.                   | 4-11/1      |
| 2  | HOLMES-CWC-LEGACY LLC                     | 4-11/55     |
| 3  | MARY HOLMES - LIFE                        | 4-13/39     |
| 4  | TRACY MERCER                              | 5-3/13.2    |
| 5  | DOUGLAS G., MICHAEL W. & STEVEN S. DERROW | 5-3/13      |
| 6  | *KAREN M. CARNEY & ABRAHAM S. NEMURAS     | 5-3/13.3    |
| 7  | GEORGE R. LIGHTNER SR.                    | 5-3/41      |
| 8  | JORDAN M. & ASHLEY J. WALLACE             | 5-3/36      |
| 9  | ASHLEY J. & JORDAN M. WALLACE             | 5-3/41.1    |
| 10 | CLINT E. & BRENT L. FLOWERS               | 4-11/56.13  |
| 11 | CLINT E. & BRENT L. FLOWERS               | 4-11/56.6   |
| 12 | MARK DAVID MILLER                         | 5-3/41.2    |
| 13 | MARK DAVID MILLER                         | 5-3/37      |
| 14 | MARK DAVID MILLER                         | 5-3/38      |
| 15 | JOHN D. JR. & CATHY L. LIGHTNER           | 5-3/39      |
| 16 | CAMDEN M. CHAMBERS II                     | 5-3/40      |
| 17 | DAVID A. & BONNIE LYNN FOX                | 4-11/56.8   |
| 18 | THOMAS O. RICHMOND ET UX                  | 4-11/56.1   |
| 19 | CLINT E. & BRENT B. FLOWERS               | 4-11/56     |
| 20 | LLOYD BAKER                               | 5-3/17      |
| 21 | LLOYD BAKER                               | 5-3/18      |
| 22 | LLOYD BAKER                               | 5-3/19      |
| 23 | KENNETH A. MAYHUGH II & SHELBY E. HARRIS  | 4-11/58     |
| 24 | CHAS R. & EDITH V. KERNAN                 | 9-1/19      |
| 25 | CNX LAND RESOURCES INC                    | 9-1/20.1    |
| 26 | CNX LAND RESOURCES INC                    | 9-1/20      |
| 27 | CNX LAND RESOURCES INC                    | 9-1/21      |
| 28 | *JOHN D. & MARSHA ROBERTS                 | 9-4/8       |
| 29 | GEORGE CHRIS LAGOS ET UX                  | 9-1/22.2    |
| 30 | THOMAS B. & ANNETTE K. CLARK              | 9-4/9.1     |
| 31 | THOMAS B. & ANNETTE K. CLARK              | 9-5/2       |

**SURFACE HOLE LOCATION (SHL)**

**UTM 17-NAD83(M)**  
**N:4410843.05**  
**E:523394.63**

NAD83, WV NORTH  
 N:493074.460  
 E:1624133.880

**APPROX. LANDING POINT**

**UTM 17-NAD83(M)**  
**N:4410039.62**  
**E:522818.95**

NAD83, WV NORTH  
 N:490469.570  
 E:1622200.710

**BOTTOM HOLE LOCATION (BHL)**

**UTM 17-NAD83(M)**  
**N:4407720.18**  
**E:524684.64**

NAD83, WV NORTH  
 N:482756.020  
 E:1628195.760

**SEPTEMBER 5, 2018**