

**PEN54**  
**WV 514476**  
**EQT PRODUCTION COMPANY**

BOTTOM HOLE LATITUDE 39°15'00"

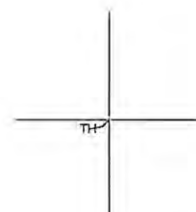
9,693'

**ROYALTY OWNERS**

MARLE BROADWATER ET AL	360 AC ±	LEASE NO. 105417
DONALD R. REYNOLDS ET AL	128 AC ±	LEASE NO. 102919
DEAN L. FLANAGAN ET AL	153 AC ±	LEASE NO. 102521
EQT PRODUCTION COMPANY ET AL	126 AC ±	LEASE NO. 726217

A	JERRY MORTON ET AL	243.50 ACRES±	C-TM-31-05
B	HEARTWOOD FORESTLAND FUND IV LP	185.30 ACRES±	C-TM-31-14
C	HEARTWOOD FORESTLAND FUND IV LP	196.90 ACRES±	C-TM-31-11
D	HEARTWOOD FORESTLAND FUND IV LP	53 ACRES±	C-TM-31-15
E	RANDALL LAMM	126.32 ACRES±	C-TM-31-19
F	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	42.51 ACRES±	C-TM-32-02
G	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	56.14 ACRES±	C-TM-32-02
H	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	57 ACRES±	C-TM-32-04
I	RANDALL LAMM	44 ACRES±	C-TM-36-5.1
J	RONNIE WAGES	66.95 ACRES±	C-TM-36-05
K	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	66.45 ACRES±	C-TM-32-05
L	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL TIMBERLANDS COMPANY	57.60 ACRES±	C-TM-32-07
M	JACK MACKAY ET AL	235.03 ACRES±	C-TM-37-03
N	RONALD DODD ET AL	70.40 ACRES±	C-TM-37-02
O	JEFFERY JETT	18.31 ACRES±	C-TM-37-04
P	EDWIN G. WILLIAMS	40.77 ACRES±	C-TM-37-05
Q	EDWIN G. WILLIAMS	23 ACRES±	C-TM-37-5.1
R	MARY SIMMONS (LIFE) ET AL	30 ACRES±	C-TM-37-07
S	REBECCA COTTRILL ET AL	4.3 ACRES±	C-TM-37-08
T	CHARLES E. COTTRILL ET AL	16.15 ACRES±	C-TM-36-25
U	ROGER & MARY WILLIAMS	8.068 ACRES±	C-TM-37-5.2
V	JEFFERY JETT	25.015 ACRES±	C-TM-36-21.1
W	JUNIOR COTTRILL ET AL	33.065 ACRES±	C-TM-36-21
X	JEFFERY JETT	0.472 ACRES±	C-TM-36-21.2
Y	GARY COTTRILL	5.051 ACRES±	C-TM-36-11.4
Z	ROY DODD	2.51 ACRES±	C-TM-36-13
AA	GARY COTTRILL	40.847 ACRES±	C-TM-36-11.5
BB	GARY COTTRILL ET AL	23.322 ACRES±	C-TM-36-11
CC	ERNEST McATEE ET AL	48.88 ACRES±	C-TM-36-20
DD	PAUL HILVERS	90.70 ACRES±	C-TM-36-09
EE	FOUSS FARMS LLC	19 ACRES±	C-TM-36-08
FF	JACK HARGIS ET AL	45.47 ACRES±	C-TM-36-04
GG	RANDALL LAMM	45.502 ACRES±	C-TM-36-03
HH	HEARTWOOD FORESTLAND FUND IV LP	168.20 ACRES±	C-TM-31-14.1
II	DONALD DEEM ET AL	133.07 ACRES±	C-TM-31-10
JJ	ANTERO TREATMENT LLC	175.85 ACRES±	C-TM-31-06

**AS DRILLED COORDINATES (PEN54 H3)**  
 (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD27 S.P.C. (FT) N. 279,188.08 E. 1,595,787.72  
 NAD27 GEO. LAT. (N) 39 257719 LONG. (W) 80 927518  
 NAD83 UTM (M) N. 4,345,388.07 E. 506,268.12  
**LANDING POINT**  
 NAD27 S.P.C. (FT) N. 278,913.13 E. 1,596,265.30  
 NAD27 GEO. LAT. (N) 39 256985 LONG. (W) 80 925817  
 NAD83 UTM (M) N. 4,345,306.74 E. 506,415.01  
**BOTTOM HOLE**  
 NAD27 S.P.C. (FT) N. 269,162.93 E. 1,600,813.36  
 NAD27 GEO. LAT. (N) 39 230415 LONG. (W) 80 909217  
 NAD83 UTM (M) N. 4,342,359.54 E. 507,850.16



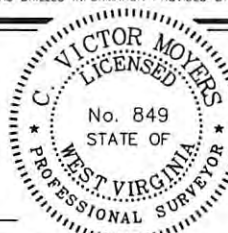
7,130'  
 12,385'  
 BOTTOM HOLE LONGITUDE 80°52'30"  
 TOP HOLE LONGITUDE 80°55'00"

**SLS**  
**Land & Energy Development**  
*Solutions from the ground up.*  
 P.O. Box 150 & 12 Washburn Drive & Dennis, WV 26031 & (204) 482 8834  
 www.slsurveyors.com

**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- WELL SPOT CIRCLE & TOP MARK SCALE IS 1"=2000'.
- AS DRILLED INFORMATION PROVIDED BY EQT.

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 DIVISION OF ENVIRONMENTAL PROTECTION.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE JUNE 25, 20 15  
 REVISED 07/01/15, 06/23/16 07/12/16 & 08/15/16  
 OPERATORS WELL NO. WV 514476  
 API WELL NO. 47 - 085 - 10226H  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8083AD514476.dwg  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)  
 SCALE SEE NOTE 2

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID WASTE IF INJECTION  DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION:  
 PAD ELEVATION 1,016' WATERSHED NORTH FORK HUGHES RIVER  
 DISTRICT CLAY COUNTY RITCHIE QUADRANGLES PENNSBORO & PULLMAN 7.5'

SURFACE OWNER JERRY MORTON ET AL ACREAGE 243.50±  
 ROYALTY OWNER ELLEN S. FRANCAVIGLIA ET AL ACREAGE 268±  
 PROPOSED WORK: LEASE NO. 105403  
 DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD   
 FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER   
 PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION MARCELLUS  
 ESTIMATED DEPTH 6,275'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY  
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME  
 PERMIT

05/19/2017



**PEN54**  
**WV 514476**  
**EQT PRODUCTION COMPANY**

NAD 27 GRID NORTH

BOTTOM HOLE LONGITUDE 80°52'30"

12,365'

TOP HOLE LONGITUDE 80°55'00"

WELL TIES		
ID	BEARING	DISTANCE
L1	S 47°09' W	1628.85'
L2	S 45°29' E	1784.86'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	N 06°00' W	209.95'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	167.49'	70.84'	N 63°14' E	131.11'
C2	328.66'	772.30'	S 42°48' E	328.18'

LATERAL		
ID	BEARING	DISTANCE
L4	S 28°46' E	257.47'
L5	S 24°59' E	10,843.46'



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 P.O. Box 150 • 12 Vanborn Drive • Glenville, WV 26351 • (304) 402-5534  
 www.slsurvey.com

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 NAD 27 GEO. LAT (N) 39 23 04.15 LONG (W) 80 9 09.217  
 NAD 83 UTM (M) N. 4,342,359.54 E. 507,650.16

SCALE **1" = 2000'** FILE NO. **8083AD514476**  
 DATE **JUNE 25**, 20 **15**  
 REVISED **07/01/15, 06/23/16 07/12/16 & 08/15/16**  
 OPERATORS WELL NO. **WV 514476**  
 API WELL **47 — 085 — 10226H**  
 NO. STATE COUNTY PERMIT



STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

**LEGEND**

- LEASE LINE
  - SURFACE LINE
  - PROPOSED PATH
  - AS DRILLED PATH
  - OFFSET LINE
  - TIE LINE
  - CREEK
  - ROAD
  - COUNTY ROUTE
  - STATE ROUTE
  - PROPOSED WELL
  - EXISTING WELL
  - PERMITTED WELL
  - CLAY DISTRICT
  - TAX MAP-PARCEL
- C-TM-00-00

COUNTY NAME

PERMIT

WELL OPERATOR **EQT PRODUCTION COMPANY** DESIGNATED AGENT **REX C. RAY**  
 ADDRESS **115 PROFESSIONAL PLACE P.O. BOX 280** ADDRESS **115 PROFESSIONAL PLACE P.O. BOX 280**  
**BRIDGEPORT, WV 26330** **BRIDGEPORT, WV 26330**

**05/19/2017**