

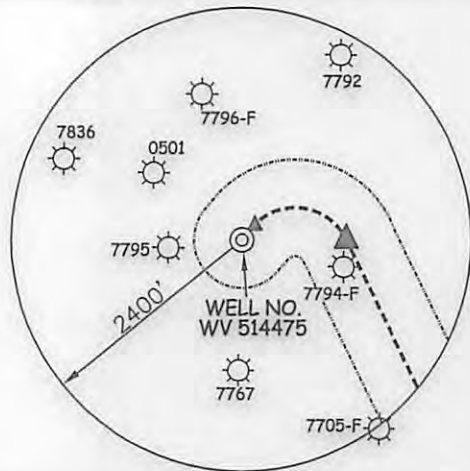
PEN54
WV 514475
EQT PRODUCTION COMPANY

BOTTOM HOLE LATITUDE 39°15'00"

8,855'

ROYALTY OWNERS		
DONALD R. REYNOLDS ET AL	126 AC.±	LEASE NO. 1005916
DEAN E. FLANAGAN ET AL	153 AC.±	LEASE NO. 1005921
EQT PRODUCTION COMPANY ET AL	156 AC.±	LEASE NO. 708517

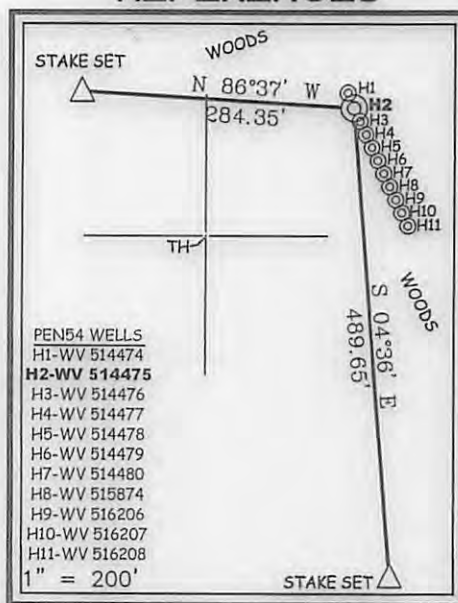
A	JERRY MORTON ET AL	243.50 ACRES±	C-TM-31-05
B	HEARTWOOD FORESTLAND FUND IV LP	185.30 ACRES±	C-TM-31-14
C	HEARTWOOD FORESTLAND FUND IV LP	196.90 ACRES±	C-TM-31-11
D	HEARTWOOD FORESTLAND FUND IV LP	53 ACRES±	C-TM-31-15
E	RANDALL LAMM	126.32 ACRES±	C-TM-31-19
F	COASTAL FOREST RESOURCES COMPANY d/b/a COASTAL 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±	BH 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



(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C. (FT)	N. 279,201.67	E. 1,595,781.38
NAD'27 GEO.	LAT.-(N) 39.257756	LONG.-(W) 80.927542
NAD'83 UTM (M)	N. 4,345,392.18	E. 506,266.12
LANDING POINT		
NAD'27 S.P.C. (FT)	N. 279,207.68	E. 1,596,873.23
NAD'27 GEO.	LAT.-(N) 39.257820	LONG.-(W) 80.923687
NAD'83 UTM (M)	N. 4,345,399.57	E. 506,598.71
BOTTOM HOLE		
NAD'27 S.P.C. (FT)	N. 269,373.03	E. 1,601,655.26
NAD'27 GEO.	LAT.-(N) 39.231028	LONG.-(W) 80.906257
NAD'83 UTM (M)	N. 4,342,427.83	E. 508,105.56

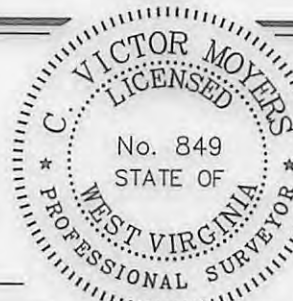
REFERENCES



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 & TOPO MARK SCALE IS 1"=2000'.

SLS
Land & Energy Development
Solutions from the ground up.
 P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634
 www.slsurveys.com



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JUNE 25, 20 15
 REVISED 07/01/15, 06/23/16 & 07/12/16
 OPERATORS WELL NO. WV 514475
 API WELL NO. 47 - 085 - 10227
 STATE COUNTY PERMIT

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.

P.S. C. Victor Moyers
 849

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8083P514475R3.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 <input type="checkbox"/>	GAS <input checked="" type="checkbox"/>	LIQUID INJECTION <input type="checkbox"/>	WASTE DISPOSAL <input type="checkbox"/>	IF "GAS" PRODUCTION <input checked="" type="checkbox"/>	STORAGE <input type="checkbox"/>	DEEP <input type="checkbox"/>	SHALLOW <input checked="" type="checkbox"/>	
LOCATION:	GROUND PROPOSED								
ELEVATION:	<u>1,016'</u>	<u>1,016'</u>	WATERSHED:	<u>NORTH FORK HUGHES RIVER</u>					
DISTRICT:	<u>CLAY</u>		COUNTY:	<u>RITCHIE</u>		QUADRANGLES:	<u>PENNSBORO & PULLMAN 7.5'</u>		
SURFACE OWNER:	<u>JERRY MORTON ET AL</u>		ACREAGE:	<u>243.50±</u>					
ROYALTY OWNER:	<u>ELLEN S. FRANCAVIGLIA ET AL</u>		ACREAGE:	<u>268±</u>					
PROPOSED WORK:			LEASE NO.:	<u>105403</u>					
DRILL <input checked="" type="checkbox"/>	CONVERT <input type="checkbox"/>	DRILL DEEPER <input type="checkbox"/>	REDRILL <input type="checkbox"/>	FRACTURE OR STIMULATE <input checked="" type="checkbox"/>	PLUG OFF OLD FORMATION <input type="checkbox"/>	PERFORATE NEW FORMATION <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	CLEAN OUT AND REPLUG <input type="checkbox"/>	OTHER <input type="checkbox"/>
PHYSICAL CHANGE IN WELL (SPECIFY)			TARGET FORMATION:	<u>MARCELLUS</u>					
			ESTIMATED DEPTH:	<u>6,275'</u>					
WELL OPERATOR:	<u>EQT PRODUCTION COMPANY</u>		DESIGNATED AGENT:	<u>REX C. RAY</u>					
ADDRESS:	<u>115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330</u>		ADDRESS:	<u>115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330</u>					

6,900' BOTTOM HOLE LONGITUDE 80°52'30" TOP HOLE LONGITUDE 80°55'00"

PEN54
WV 514475
EQT PRODUCTION COMPANY

BOTTOM HOLE LATITUDE 39°15'00"

8,855'

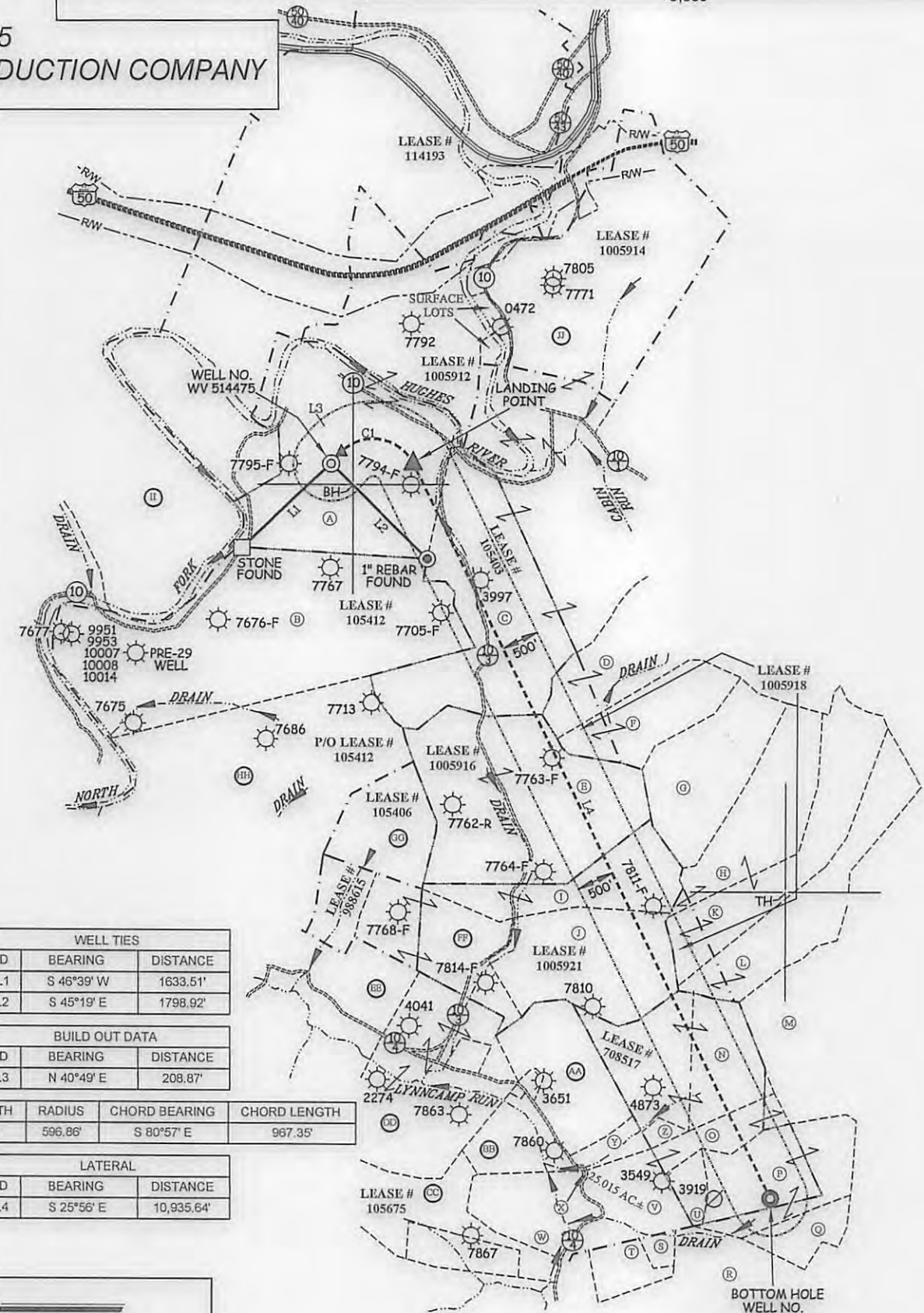
NAD'27 GRID NORTH

9,906.9

12,351'

BOTTOM HOLE LONGITUDE 80°52'30"

TOP HOLE LONGITUDE 80°55'00"



WELL TIES		
ID	BEARING	DISTANCE
L1	S 46°39' W	1633.51'
L2	S 45°19' E	1798.92'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	N 40°49' E	208.87'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	1,127.80'	596.86'	S 80°57' E	987.35'

LATERAL		
ID	BEARING	DISTANCE
L4	S 25°56' E	10,935.64'



Land & Energy Development

Solutions from the ground up.

P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634
 www.slsurveys.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT) N. 279,201.67 E. 1,595,781.38
 NAD'27 GEO. LAT-(N) 39.257756 LONG-(W) 80.927542
 NAD'83 UTM (M) N. 4,345,392.18 E. 506,266.12

LANDING POINT

NAD'27 S.P.C.(FT) N. 279,207.68 E. 1,596,873.23
 NAD'27 GEO. LAT-(N) 39.257820 LONG-(W) 80.923687
 NAD'83 UTM (M) N. 4,345,399.57 E. 506,598.71

BOTTOM HOLE

NAD'27 S.P.C.(FT) N. 269,373.03 E. 1,601,655.26
 NAD'27 GEO. LAT-(N) 39.231028 LONG-(W) 80.906257
 NAD'83 UTM (M) N. 4,342,427.83 E. 508,105.56



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

LEGEND

- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- 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

SCALE 1" = 2000' FILE NO. 8083P514475R3

DATE JUNE 25, 20 15

REVISED 07/01/15, 06/23/16 & 07/12/16

OPERATORS WELL NO. WV 514475

API WELL NO. 47 STATE 085 COUNTY PERMIT 10227

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



DESIGNATED AGENT REX C. RAY

WELL OPERATOR EQT PRODUCTION COMPANY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280
 BRIDGEPORT, WV 26330

ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280
 BRIDGEPORT, WV 26330

COUNTY NOTE

PERMIT

07/15/2016