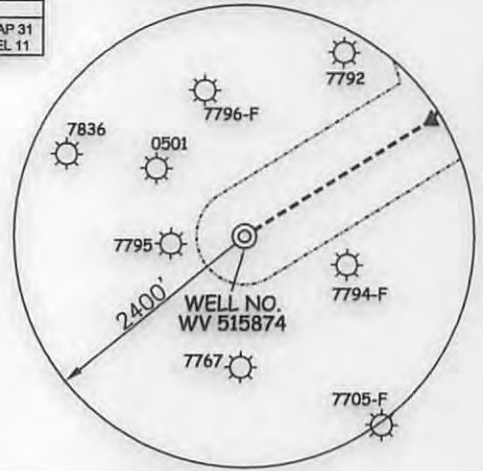


PEN54
WV 515874
EQT PRODUCTION COMPANY

SUBSURFACE EASEMENT		
HEARTWOOD FORESTLAND FUND IV LP	196.90 AC±	TAX MAP 31 PARCEL 11

LATITUDE 39°17'30"



LONGITUDE 80°55'00"

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'

A	JERRY MORTON ET AL	243.50 ACRES±	TM C-31-05
B	HEARTWOOD FORESTLAND FUND IV LP	185.3 ACRES±	TM C-31-14
C	DONALD & BARBARA DEEM	133.07 ACRES±	TM C-31-10
D	HEARTWOOD FORESTLAND FUND IV LP	196.90 ACRES±	TM C-31-11
E	ROGER SATTERFIELD	3 ACRES±	TM C-31-5.2
F	JOSEPH FLANAGAN ET AL	2.5 ACRES±	TM C-31-5.3
G	ANTERO TREATMENT LLC	175.85 ACRES±	TM C-31-6
H	JUDITH & JO ANN ROBINSON	106.265 ACRES±	TM C-31-22
I	VIRGINIA COTTRILL	25.5 ACRES±	TM C-31-04
J	VIRGINIA COTTRILL	55.73 ACRES±	TM C-26-56.2
K	VIRGINIA COTTRILL	57.63 ACRES±	TM C-26-56.1
L	VIRGINIA COTTRILL	84.35 ACRES±	TM C-26-56
M	WV RAILROAD MAINTENANCE AUTHORITY	48.14 ACRES±	TM C-26-19
N	WV RAILROAD MAINTENANCE AUTHORITY	P/O 1141.03 ACRES±	TM C-26-X
O	ROY & LINDA HAMMOND	77.088 ACRES±	TM C-26-57
P	JANICE WILLIAMS	111.876 ACRES±	TM C-26-58.9
Q	EQT PRODUCTION COMPANY	46.63 ACRES±	TM C-26-58
R	JANICE WILLIAMS	1.715 ACRES±	TM C-26-58.2
S	EUSTACE LAMM ET AL	2.28 ACRES±	TM C-26-20.1
T	EARL DAUGHERTY	1.80 ACRES±	TM C-26-52.1
U	JEAN & KRISTINE KNUITSEN	5.34 ACRES±	TM C-26-58.3
V	KATRINA DOTSON	1.01 ACRES±	TM C-26-58.4
W	KEVIN & MICHELE ESTEP	2.912 ACRES±	TM C-26-57.1
X	BRIAN & JULIE RICHEY	7.69 ACRES±	TM C-26-58.8
Y	FERYL & MAHLON HARRIS	8.38 ACRES±	TM C-26-58.1
Z	FERYL & MAHLON HARRIS	16.62 ACRES±	TM C-26-58.6
AA	WILLIAM & JANET BROADWATER	37.565 ACRES±	TM C-26-12
BB	CITY OF PENNSBORO	25.246 ACRES±	TM C-26-12.1
CC	CITY OF PENNSBORO	4.778 ACRES±	TM C-26-5.1
DD	MOUNTVIEW CONFERENCE CHURCH	10.41 ACRES±	TM C-26-58.5
EE	TODD G. GILLENWATER	65 ACRES±	TM C-26-11
FF	TERRY & JANET HALL	5.71 ACRES±	TM C-26-4.4
GG	CITY OF PENNSBORO	2.625 ACRES±	TM C-26-4.3
HH	P.M. MANAGEMENT COMPANY	83.022 ACRES±	TM C-26-05
II	WILLIAM & JANET BROADWATER	8.203 ACRES±	TM C-26-4.1
JJ	WILLIAM & JANET BROADWATER	50 ACRES±	TM C-26-4.2
KK	CAROL COGAR ET AL	172.44 ACRES±	TM C-32-01
LL	TODD G. GILLENWATER	10.18 ACRES±	TM C-26-11.1
MM	CARLA POLING ET AL	5.4 ACRES±	TM C-26-23
NN	CARLA POLING ET AL	11.43 ACRES±	TM C-26-22

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

NAD'27 S.P.C.(FT)	N. 279,120.12	E. 1,595,819.44
NAD'27 GEO.	LAT-(N) 39.257534	LONG-(W) 80.927403
NAD'83 UTM (M)	N. 4,345,367.53	E. 506,278.12

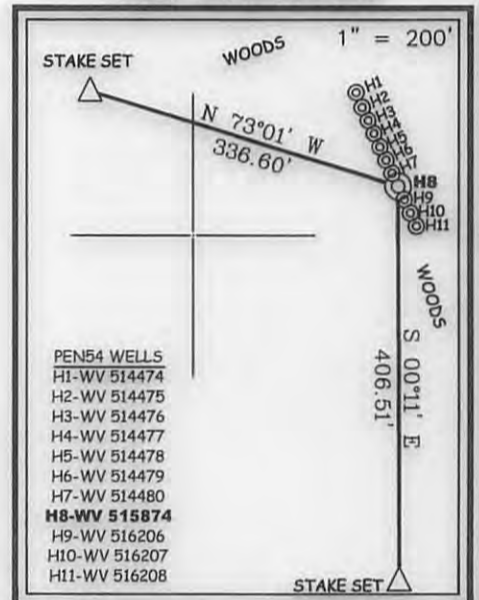
LANDING POINT

NAD'27 S.P.C.(FT)	N. 280,915.75	E. 1,597,908.20
NAD'27 GEO.	LAT-(N) 39.262554	LONG-(W) 80.920127
NAD'83 UTM (M)	N. 4,345,925.21	E. 506,905.33

BOTTOM HOLE

NAD'27 S.P.C.(FT)	N. 286,609.67	E. 1,596,232.79
NAD'27 GEO.	LAT-(N) 39.278112	LONG-(W) 80.926363
NAD'83 UTM (M)	N. 4,347,651.32	E. 506,365.96

REFERENCES



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

ROYALTY OWNERS		
GUY FLANAGAN ET AL	128 AC±	LEASE NO. 1005912
MARY LEE AZELVANDRE ET AL	500 AC±	LEASE NO. 114193
WEST VIRGINIA RAIL AUTHORITY	24.30 AC±	LEASE NO. 1012475
CAROL A. MARSH	72 AC±	LEASE NO. 708265
KIEDAISCH & SUMMERS ENTERPRISES LLC	2.75 AC±	LEASE NO. 1006531

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.
 2288 *Earl N. Thompson*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JUNE 24, 20 15
 REVISED 02/08/16, 05/12/16 & 06/23/16
 OPERATORS WELL NO. WV 515874
 API WELL NO. 47-085-10282
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8083P515874R3.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 INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

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

SURFACE OWNER JERRY MORTON ET AL ACREAGE 243.50±
 ROYALTY OWNER ELLEN S. FRANCAVIGLIA ET AL ACREAGE 268± **07/08/2016**

PROPOSED WORK:
 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

PEN54
WV 515874
EQT PRODUCTION COMPANY

LATITUDE 39°17'30"

WELL TIES		
ID	BEARING	DISTANCE
L1	N 22°11' W	1989.19'
L2	N 05°10' E	3814.31'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	N 58°20' E	2295.72'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	637.85'	573.35'	N 12°53' E	605.46'

LATERAL		
ID	BEARING	DISTANCE
L4	N 18°00' W	3902.77'

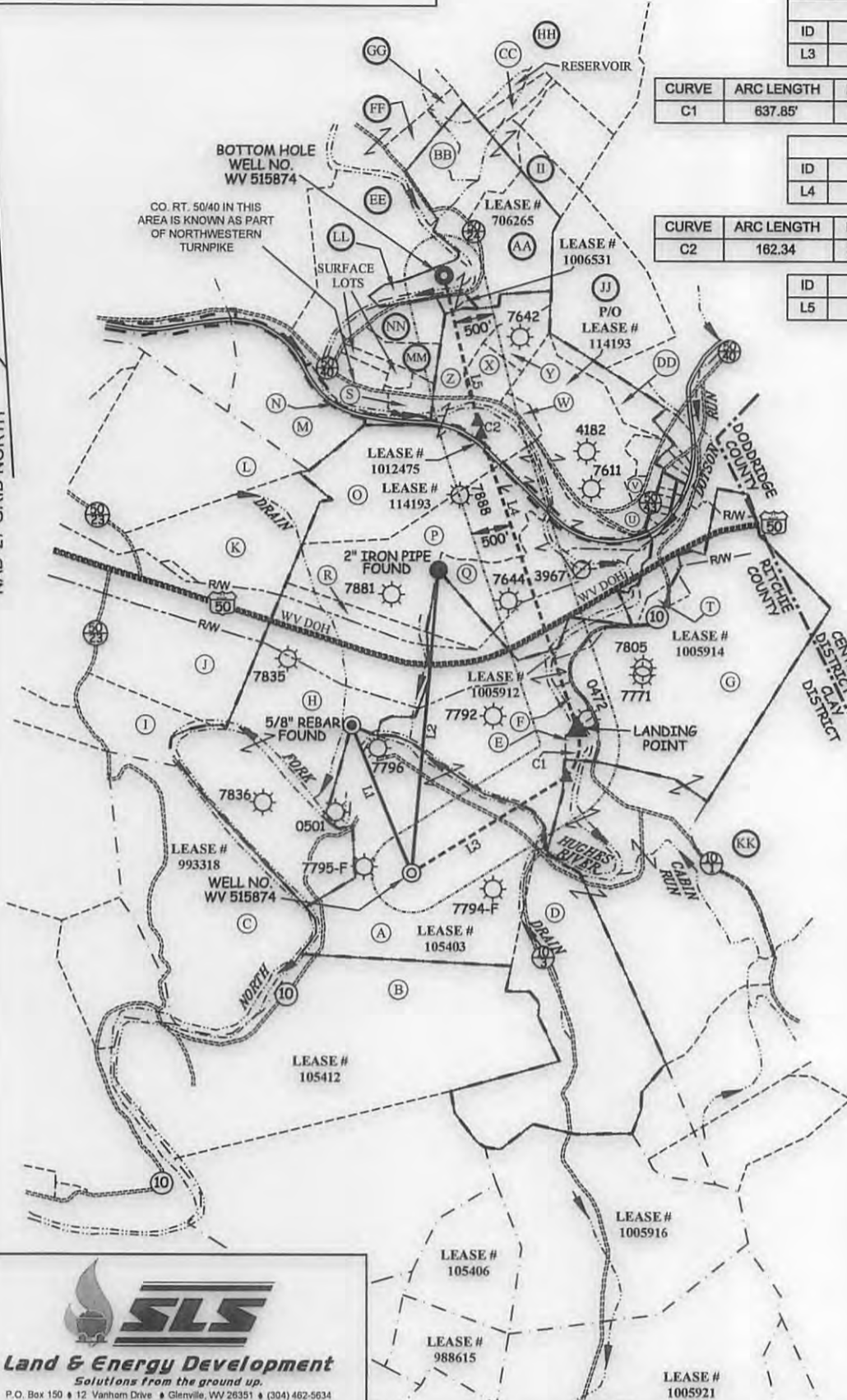
CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C2	162.34	3086.78'	N 15°34' W	162.32'

ID	BEARING	DISTANCE
L5	N 13°08' W	1874.80'

LONGITUDE 80°55'00"

12,432'

NAD'27 GRID NORTH



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

LEGEND

LEASE LINE	---
SURFACE LINE	- - - - -
WELL LATERAL	- - - - -
OFFSET LINE	- - - - -
TIE LINE	—+—+—+—
CREEK	~ ~ ~ ~ ~
ROAD	—+—+—+—
RAIL ROAD	—+—+—+—
COUNTY ROUTE	—+—+—+—
STATE ROUTE	—+—+—+—
PROPOSED WELL	⊙
EXISTING WELL	⊙
PERMITTED WELL	⊙
CLAY DISTRICT	⊙
TAX MAP-PARCEL	⊙

C-00-00

SCALE 1" = 2000'

DATE JUNE 24, 20 15

REVISED 02/08/16, 05/12/16 & 06/23/16

OPERATORS WELL NO. WV 515874

API WELL NO. 47 — 085 — 10282

NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
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07/08/2016