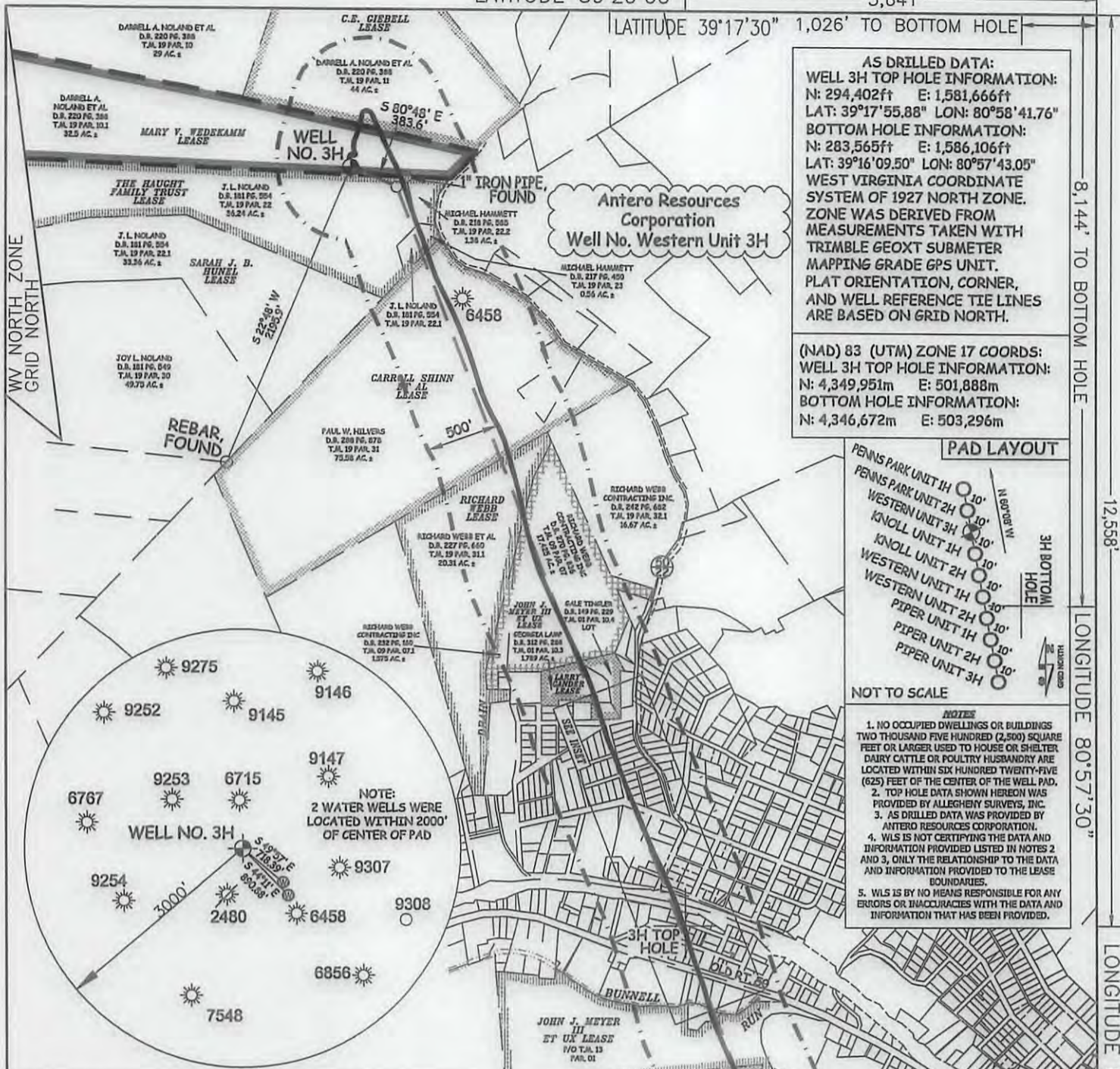


LATITUDE 39°20'00"

5,641'

LATITUDE 39°17'30"

1,026' TO BOTTOM HOLE



AS DRILLED DATA:
WELL 3H TOP HOLE INFORMATION:
 N: 294,402ft E: 1,581,666ft
 LAT: 39°17'55.88" LON: 80°58'41.76"
BOTTOM HOLE INFORMATION:
 N: 283,565ft E: 1,586,106ft
 LAT: 39°16'09.50" LON: 80°57'43.05"
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 3H TOP HOLE INFORMATION:
 N: 4,349,951m E: 501,888m
BOTTOM HOLE INFORMATION:
 N: 4,346,672m E: 503,296m

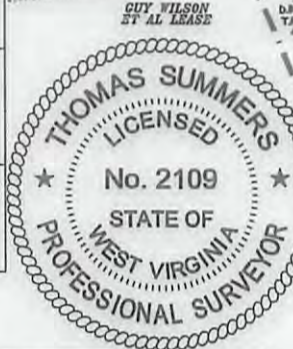


- NOTES**
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
 3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

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 RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415



47 - 085 - 10295
 STATE COUNTY PERMIT

JOB # 16-022WA
 DRAWING # WESTERN3HAD
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
 STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND
 — Surface Owner Boundary Lines +/-
 - - - Interior Surface Tracts +/-
 ○ Proposed Well Path
 ⊗ As Drilled Well Path

THOMAS SUMMERS P.S. 2109
 DATE 02/01/18
 OPERATOR'S WELL# WESTERN UNIT #3H

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1,143' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER
 QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE
 SURFACE OWNER DARRELL A. NOLAND ET AL ACREAGE 32.5 ACRES +/-
 OIL & GAS ROYALTY OWNER SEE ATTACHED PAGES LEASE ACREAGE SEE ATTACHED PAGES

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
 PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL ___
 (SPECIFY) AS DRILLED PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,444' TVD 18,265' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD
 DENVER, CO 80202 CHARLESTON, WV 25313

06/01/2018

8,144' TO BOTTOM HOLE

12,558'

LONGITUDE 80°57'30"

LONGITUDE 80°57'30"

COUNTY NAME PERMIT

Antero Resources Corporation
Well No. Western Unit 3H

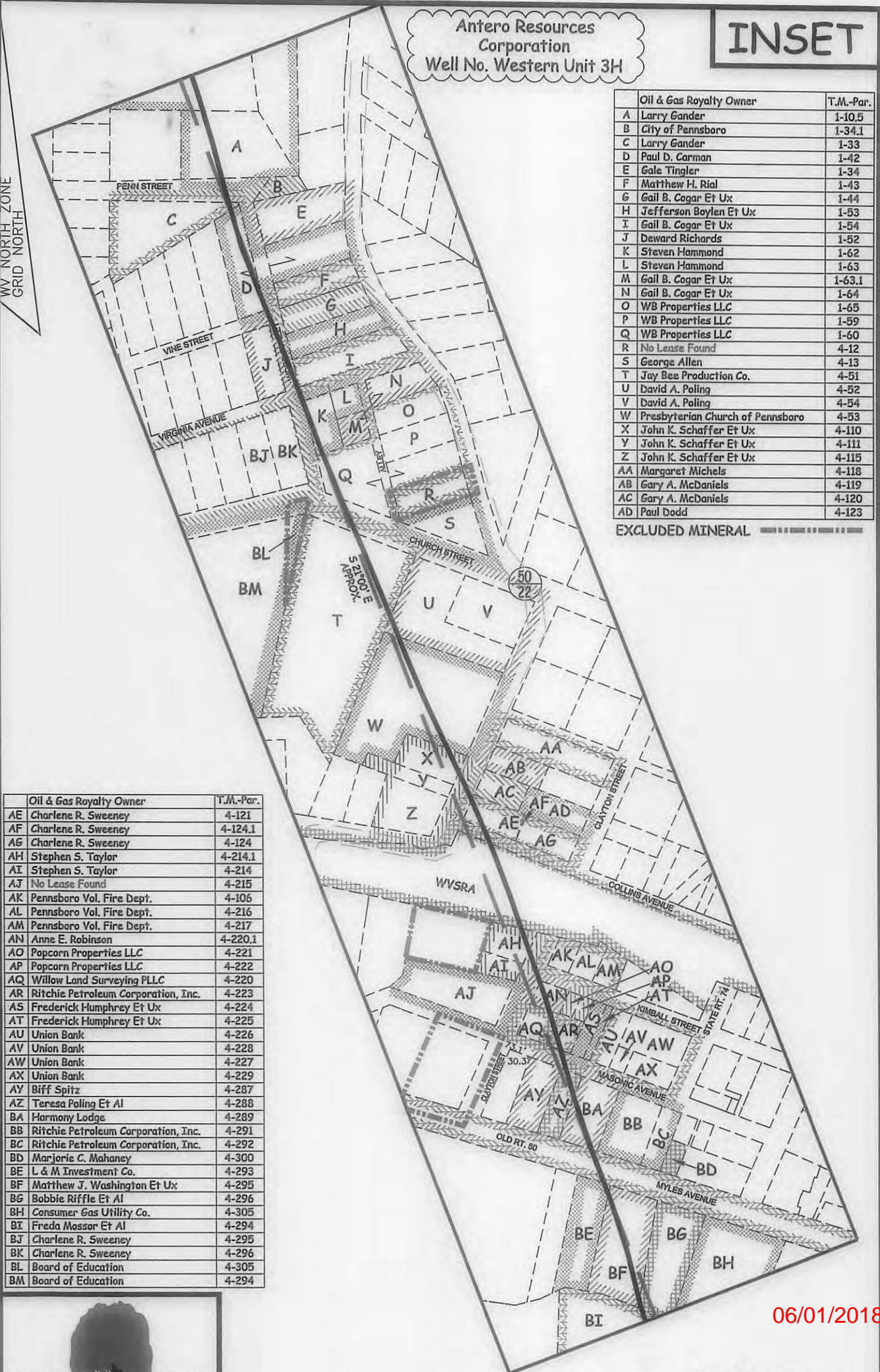
INSET

WV NORTH ZONE
GRID NORTH

Oil & Gas Royalty Owner	T.M.-Par.
A Larry Gander	1-10.5
B City of Pennsboro	1-34.1
C Larry Gander	1-33
D Paul D. Carman	1-42
E Gale Tinger	1-34
F Matthew H. Rial	1-43
G Gail B. Cogar Et Ux	1-44
H Jefferson Boylen Et Ux	1-53
I Gail B. Cogar Et Ux	1-54
J Deward Richards	1-52
K Steven Hammond	1-62
L Steven Hammond	1-63
M Gail B. Cogar Et Ux	1-63.1
N Gail B. Cogar Et Ux	1-64
O WB Properties LLC	1-65
P WB Properties LLC	1-59
Q WB Properties LLC	1-60
R No Lease Found	4-12
S George Allen	4-13
T Jay Bee Production Co.	4-51
U David A. Poling	4-52
V David A. Poling	4-54
W Presbyterian Church of Pennsboro	4-53
X John K. Schaffer Et Ux	4-110
Y John K. Schaffer Et Ux	4-111
Z John K. Schaffer Et Ux	4-115
AA Margaret Michels	4-118
AB Gary A. McDaniels	4-119
AC Gary A. McDaniels	4-120
AD Paul Dodd	4-123

EXCLUDED MINERAL

Oil & Gas Royalty Owner	T.M.-Par.
AE Charlene R. Sweeney	4-121
AF Charlene R. Sweeney	4-124.1
AG Charlene R. Sweeney	4-124
AH Stephen S. Taylor	4-214.1
AI Stephen S. Taylor	4-214
AJ No Lease Found	4-215
AK Pennsboro Vol. Fire Dept.	4-106
AL Pennsboro Vol. Fire Dept.	4-216
AM Pennsboro Vol. Fire Dept.	4-217
AN Anne E. Robinson	4-220.1
AO Popcorn Properties LLC	4-221
AP Popcorn Properties LLC	4-222
AQ Willow Land Surveying PLLC	4-220
AR Ritchie Petroleum Corporation, Inc.	4-223
AS Frederick Humphrey Et Ux	4-224
AT Frederick Humphrey Et Ux	4-225
AU Union Bank	4-226
AV Union Bank	4-228
AW Union Bank	4-227
AX Union Bank	4-229
AY Biff Spitz	4-287
AZ Teresa Poling Et Al	4-288
BA Harmony Lodge	4-289
BB Ritchie Petroleum Corporation, Inc.	4-291
BC Ritchie Petroleum Corporation, Inc.	4-292
BD Marjorie C. Mahaney	4-300
BE L & M Investment Co.	4-293
BF Matthew J. Washington Et Ux	4-295
BG Bobbie Riffle Et Al	4-296
BH Consumer Gas Utility Co.	4-305
BI Freda Mossor Et Al	4-294
BJ Charlene R. Sweeney	4-295
BK Charlene R. Sweeney	4-296
BL Board of Education	4-305
BM Board of Education	4-294



06/01/2018

WILLOW
LAND SURVEYING PLLC

P.O. BOX 17
PENNSBORO, WV 26415
304-659-1717



FILE: 16-022WA
JOB: WESTERN3H INSET AD
DRAFTED BY: T.B.S. 01/24/18

LEGEND	
	As Drilled Well Path
	Interior Surface Tracts +/-
	Proposed Well Path