9,012' TO TOP HOLE — LATITUDE 39°25'00"

2,188' TO BOTTOM HOLE — LATITUDE 39°25'00"

Antero Resources
Well No. Ed Arnold Unit 3H
Appalachian Corporation

LEGEND

- Surface Owner Boundary Lines +/-
- Interior Surface Tracts +/-
- Found monument, as noted

(+) DENOTES LOCATION OF WELL ON U. S. TOPOGRAPHIC MAPS

WV NORTH ZONE GRID NORTH

Tyler County Surface Tracts

A	Ralph Sweeney TM 20 PAR 17.1	DB 301 PG 2 12.466 Ac.
B	Mary Lemasters TM 20 PAR 17.2	WB 34 PG 23 6.919 Ac.
C	Forest Moore TM 20 PAR 14	DB 253 PG 83 0.81 Ac.
D	Forest Moore TM 20 PAR 13.1	DB 296 PG 134 26.478 Ac.
E	Daniel Moore TM 20 PAR 8	DB 296 PG 434 30.25 Ac.
F	Olive Sheets TM 20 PAR 9	DB 364 PG 443 18.57 Ac.

NOTES:
WELL 3-H TOP HOLE INFORMATION:
N: 328,713ft E: 1,649,513ft
LAT: 39°23'45.13" LON: 80°44'24.80"
BOTTOM HOLE INFORMATION:
N: 325,273ft E: 1,656,291ft
LAT: 39°23'12.05" LON: 80°42'57.87"
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 3-H TOP HOLE INFORMATION:
N: 4,360,750m E: 522,384m
BOTTOM HOLE INFORMATION:
N: 4,359,736m E: 524,466m

NOTE A:
RALPH & SHELLY SWEENEY LEASE NO. 21361

LONGITUDE 80°42'30"

7,575' TO TOP HOLE

10,922' TO BOTTOM HOLE

2" IRON PIPE FOUND

CORNELIUS BOSTON D.B. 357 PG. 824 T.M. 20 PAR. 4.3 86.41 AC. +/-

RALPH SWEENEY D.B. 150 PG. 29 T.M. 20 PAR. 13 88.43 AC. +/-

MARY LEMASTERS W.B. 34 PG. 23 T.M. 20 PAR. 18 26.78 AC. +/-

STEPHEN GRIZMA D.B. 363 PG. 331 T.M. 20 PAR. 17 44.38 AC. +/-

LARRY FRAZEE D.B. 344 PG. 777 T.M. 20 PAR. 16 94 AC. +/-

HARRISON-RITCHIE OIL & GAS COMPANY LEASE NO. 7325

GARY HAMILTON D.B. 363 PG. 209 T.M. 20 PAR. 12 88 AC. +/-

GARY HAMILTON D.B. 363 PG. 209 T.M. 20 PAR. 18 50 AC. +/-

LANDING POINT

THE NOTT & FOX TRACT

WELL # 3-H

N 07°24' W 2,157.1'

S 66°39' E 7,294.4'

S 73°37' E 8,200.0'

3-H TOP HOLE CENTER POINT 7.5' SPOT

GARY REYNOLDS D.B. 239 PG. 575 T.M. 20 PAR. 68 80.11 AC. +/-

GARY REYNOLDS D.B. 239 PG. 575 T.M. 20 PAR. 69 103.5 AC. +/-

RONALD KUKLISH D.B. 213 PG. 523 T.M. 17 PAR. 01 54.93 AC. +/-

5/8" REBAR FOUND

CHESTER BROOKOVER D.B. 150 PG. 175 T.M. 17 PAR. 04 63.92 AC. +/-

COASTAL LUMBER CO. D.B. 260 PG. 135 T.M. 2 PAR. 01 77.31 AC. +/-

ROGER LUCAS D.B. 257 PG. 446 T.M. 2 PAR. 4.1 4.59 AC. +/-

COASTAL LUMBER CO. D.B. 260 PG. 135 T.M. 2 PAR. 4.2 84.57 AC. +/-

ARLEIGH G. DOTSON LEASE NO. 7258

MARTY BAKER W.B. 30 PG. 522 T.M. 2 PAR. 02 461.23 AC. +/-

MICHAEL BENEDUM D.B. 223 PG. 430 T.M. 2 PAR. 03 52 AC. +/-

JORDAN FAMILY PARTNERSHIP D.B. 280 PG. 695 T.M. 3 PAR. 01 460 AC. +/-

JORDAN FAMILY PARTNERSHIP D.B. 280 PG. 695 T.M. 17 PAR. 06 57.5 AC. +/-

WELL 3-H BOTTOM HOLE

3-H BOTTOM HOLE CENTER POINT 7.5' SPOT

FLINT OIL & GAS D.B. 136 PG. 312 T.M. 2 PAR. 06 71 AC. +/-

ERIC GESSLER D.B. 248 PG. 242 T.M. 2 PAR. 11 287 AC. +/-

TYLER COUNTY
DODDRIDGE COUNTY

WELL # 2-H TO WATER WELLS

LINE	BEARING	DIST.
W1	N 38°55' W	1579.6'
W2	N 48°06' W	1599.3'
W3	N 56°59' W	1618.6'
W4	N 71°42' W	1080.7'
W5	N 72°29' W	978.6'
W6	N 73°42' W	1036.9'
W7	S 84°53' W	911.9'
W8	S 83°38' W	1032.9'
W9	S 78°52' W	1283.6'

1284 — WELL # 3-H — 570 — 1859 — 4966 — 3000'

NOTE:
9 WATER WELLS WERE LOCATED WITHIN 2000' OF PROPOSED WELL

REFERENCES 1" = 400'

10" Hickory — N 19°43' W 291' — WELL # 3-H — S 22°33' W 402.3' — 24" Poplar

GRID NORTH

PAD LAYOUT

NOT TO SCALE

Ed Arnold Unit 2H
Ed Arnold Unit 1H
Ed Arnold Unit 1
Ed Arnold Unit 3H

THOMAS SUMMERS LICENSED No. 2109 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

JOB # 11-059
DRAWING # EDARNOLDUNIT3H
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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 PERSCRIBED BY THE DEPTARTMENT OF ENVIRONMENTAL PROTECTION.

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

WILLOW LAND SURVEYING PLLC
266 HUSHERS RUN RD PENNSBORO
WEST VIRGINIA 26415

THOMAS SUMMERS P.S. 2109

DATE 5/7/12

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

OPERATOR'S WELL# ED ARNOLD UNIT 3H

API WELL # 47 095 02054 H6A

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___

(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

CANCELLED

STATE COUNTY PERMIT

LOCATION: ELEVATION 749' WATERSHED McELROY CREEK DISTRICT McELROY COUNTY TYLER

QUADRANGLE CENTER POINT 7.5'

SURFACE OWNER FOREST & BRENDA MOORE ACREAGE 26.478 ACRES +/-

OIL & GAS ROYALTY OWNER RALPH T. & SHELLY A. SWEENEY; ARLEIGH G. DOTSON; HARRISON-RITCHIE OIL & GAS COMPANY LEASE ACREAGE 26.478 AC; 461.23 AC; 54 AC

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION -X-

OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___

PLUG & ABANDON ___ CLEAN OUT & REPLUG ___ ESTIMATED DEPTH 6900' TVD 17,250' MD

TARGET FORMATION BURKETT

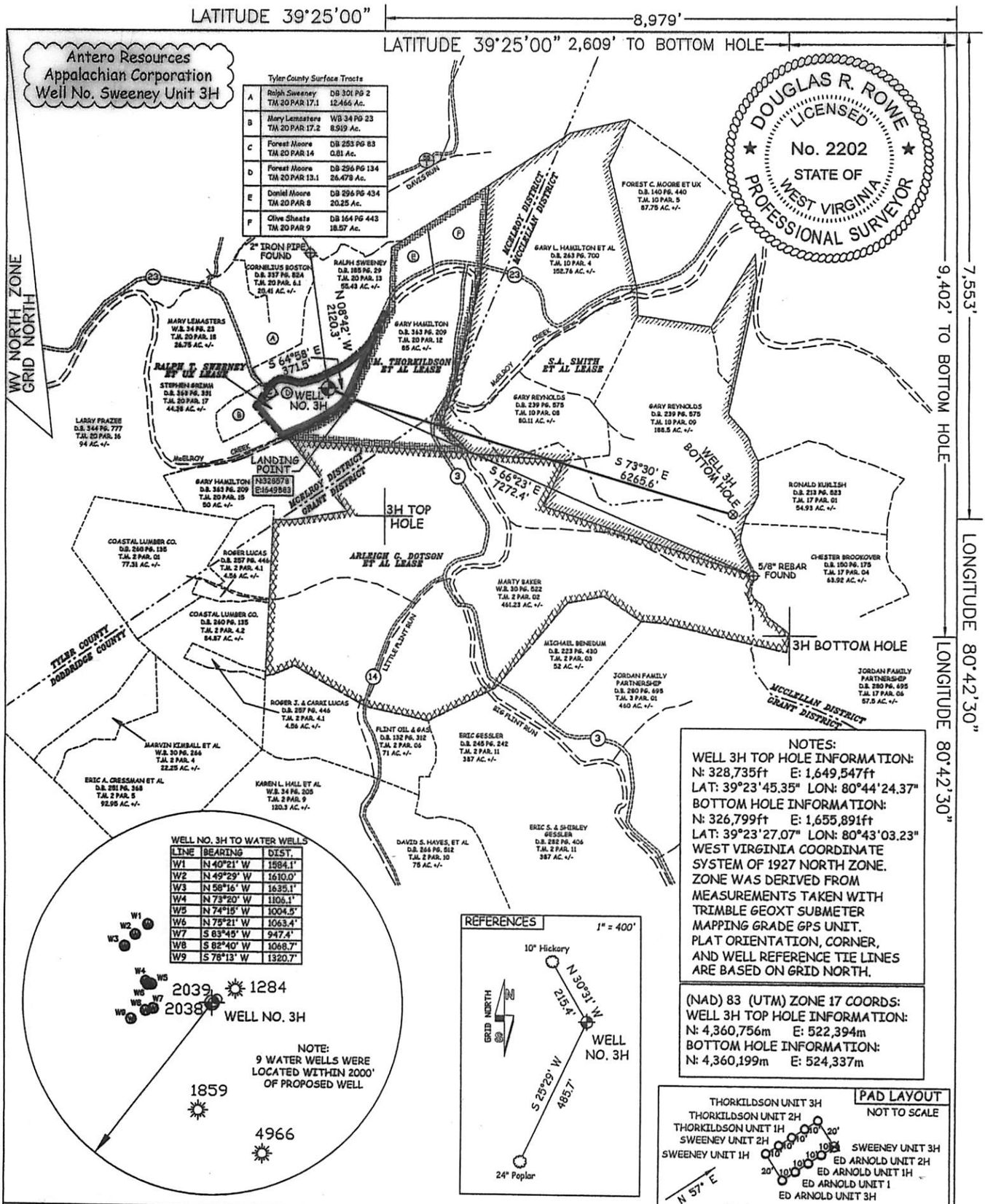
WELL OPERATOR ANTERO RESOURCES APPALACHIAN CORP. DESIGNATED AGENT DIANNA STAMPER

ADDRESS 1625 17TH STREET DENVER, CO 80202 ADDRESS CT CORPORATION SYSTEM 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

LEASE # 21361; 7258; 7325

COUNTY NAME PERMIT

FORM WW-6



JOB # 12-052WA
DRAWING # SWEENEY3H
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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 PERSCRIBED BY THE DEPTARTMENT 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

LEGEND
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Existing Fence
Found monument, as noted

DLRR
DOUGLAS R. ROWE P.S. 2202

DATE 08/17/12
OPERATOR'S WELL# SWEENEY UNIT #3H

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

API WELL #
47 — 095 — 02066 H6A
STATE COUNTY PERMIT

CANCELLED

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 749' WATERSHED McELROY CREEK
QUADRANGLE CENTER POINT 7.5' DISTRICT McELROY COUNTY TYLER
SURFACE OWNER FOREST & BRENDA MOORE ACREAGE 26.478 ACRES +/-
OIL & GAS ROYALTY OWNER RALPH T. SWEENEY ET UX; M. THORKILDSON ET AL; S.A. SMITH ET AL; ARLEIGH G. DOTSON ET AL LEASE ACREAGE 25.668 ACRES±; 125.91 ACRES±; 443.68 ACRES±; 446.5 ACRES±
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___ PLUG & ABANDON ___ CLEAN OUT & REPLUG
TARGET FORMATION BURKETT ESTIMATED DEPTH 7,000' TVD 14,700' MD

COUNTY NAME
PERMIT

WELL OPERATOR ANTERO RESOURCES APPALACHIAN CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1625 17TH STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

FORM WW-6

LATITUDE 39°25'00" 8,990'

LATITUDE 39°25'00" 2,849' TO BOTTOM HOLE

7,963' TO BOTTOM HOLE

7,536'

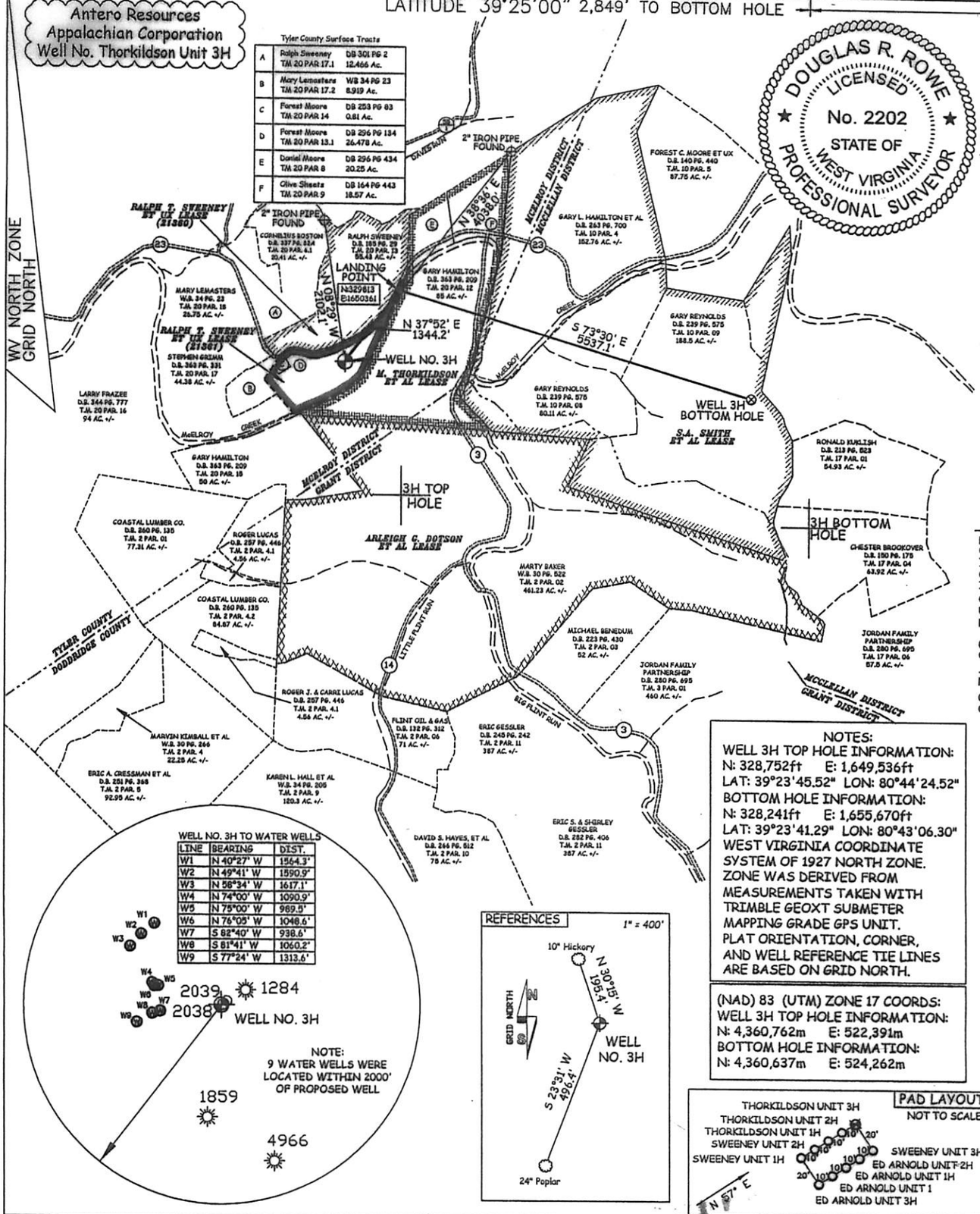
LONGITUDE 80°42'30"

LONGITUDE 80°42'30"

Antero Resources
Appalachian Corporation
Well No. Thorkildson Unit 3H

Tyler County Surface Tracts

A	Ralph Sweeney TM 20 PAR 17.1	DB 301 PG 2 12.466 Ac.
B	Mary Lemasters TM 20 PAR 17.2	WB 34 PG 23 8.919 Ac.
C	Forest Moore TM 20 PAR 14	DB 253 PG 83 0.81 Ac.
D	Forest Moore TM 20 PAR 13.1	DB 296 PG 134 26.478 Ac.
E	Daniel Moore TM 20 PAR 8	DB 296 PG 434 20.25 Ac.
F	Olive Sheets TM 20 PAR 9	DB 164 PG 443 18.57 Ac.



DOUGLAS R. ROWE LICENSED No. 2202 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

NOTES:
WELL 3H TOP HOLE INFORMATION:
N: 328,752ft E: 1,649,536ft
LAT: 39°23'45.52" LON: 80°44'24.52"
BOTTOM HOLE INFORMATION:
N: 328,241ft E: 1,655,670ft
LAT: 39°23'41.29" LON: 80°43'06.30"
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: 4,360,762m E: 522,391m
BOTTOM HOLE INFORMATION:
N: 4,360,637m E: 524,262m

JOB # 12-053WA
DRAWING # THORKILDSON3H
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGB AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PERSCRIBED BY THE DEPTARTMENT 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

LEGEND
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Existing Fence
Found monument, as noted

DOUGLAS R. ROWE P.S. 2202

DATE 01/29/13
OPERATOR'S WELL # THORKILDSON UNIT #3H
API WELL # 095 - 02077 CANCELLED
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 749' WATERSHED McELROY CREEK
QUADRANGLE CENTER POINT 7.5' DISTRICT McELROY COUNTY TYLER
SURFACE OWNER FOREST & BRENDA MOORE ACREAGE 26.478 ACRES +/-
OIL & GAS ROYALTY OWNER RALPH T. SWEENEY ET UX (21361); M. THORKILDSON ET AL; RALPH T. SWEENEY ET UX (21360); S.A. SMITH ET AL LEASE ACREAGE 25.668 ACRES±; 125.91 ACRES±; 55.43 ACRES±; 443.68 ACRES±;
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___ PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION BURKETT ESTIMATED DEPTH 6,900' TVD 15,500' MD

COUNTY NAME
PERMIT

WELL OPERATOR ANTERO RESOURCES APPALACHIAN CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1625 17TH STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

FORM WW-6