

LATITUDE 39°25'00"

9,006'

LATITUDE 39°25'00" 2,530' TO BOTTOM HOLE

Antero Resources  
Appalachian Corporation  
Well No. Thorkildson Unit 1H

Tyler County Surface Tracts

A	Rolph Sweeney DB 301 PG 2 TM 20 PAR 17.1	12.466 Ac.
B	Mary Lemasters WB 34 PG 23 TM 20 PAR 17.2	6.919 Ac.
C	Forest Moore DB 253 PG 83 TM 20 PAR 14	0.81 Ac.
D	Forest Moore DB 296 PG 134 TM 20 PAR 13.1	26.478 Ac.
E	Daniel Moore DB 296 PG 434 TM 20 PAR 8	20.25 Ac.
F	Olive Sheets DB 164 PG 443 TM 20 PAR 9	18.57 Ac.



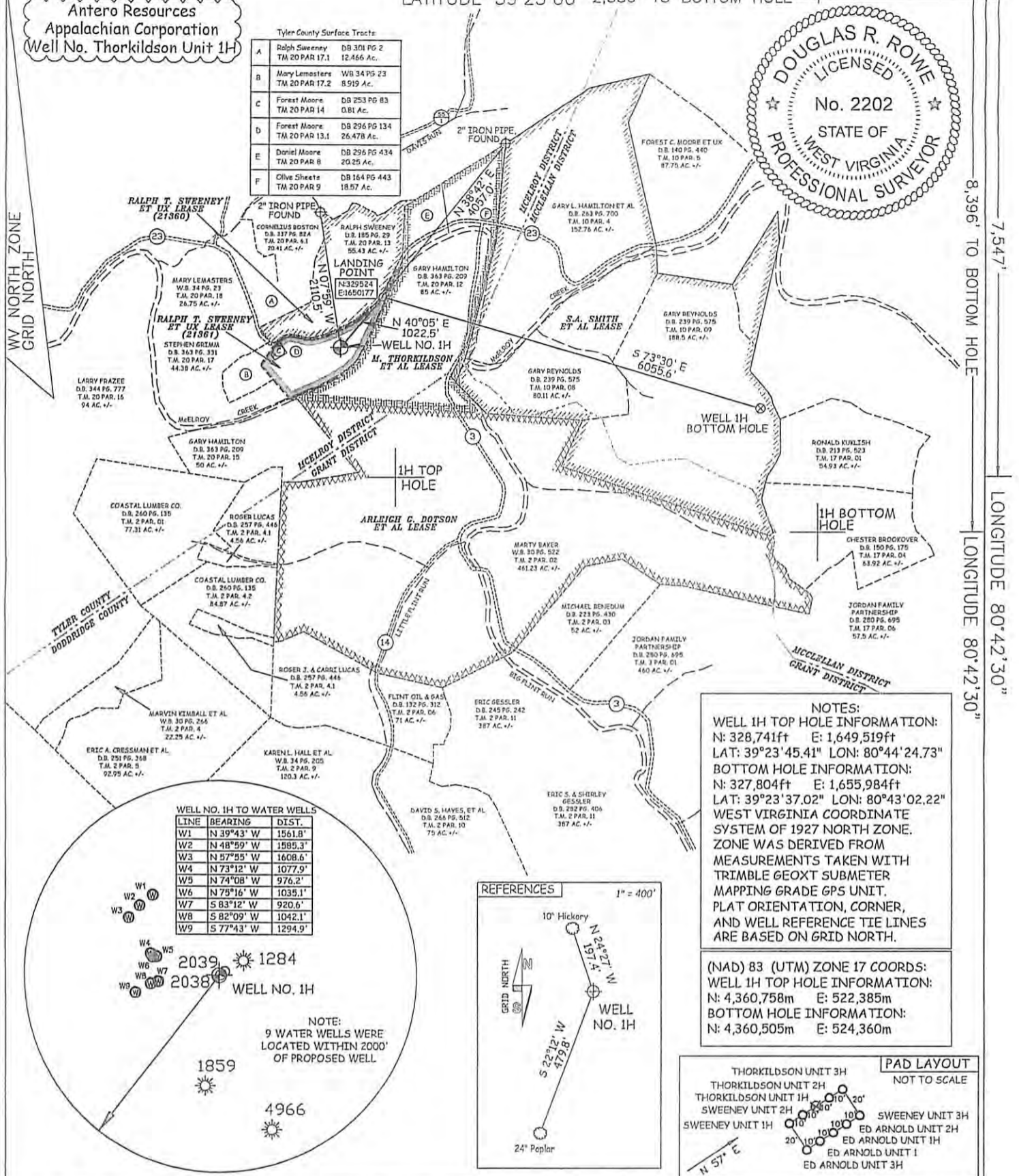
WV NORTH ZONE  
GRID NORTH

8,396' TO BOTTOM HOLE

7,547'

LONGITUDE 80°42'30"

LONGITUDE 80°42'30"

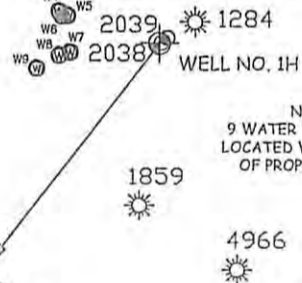
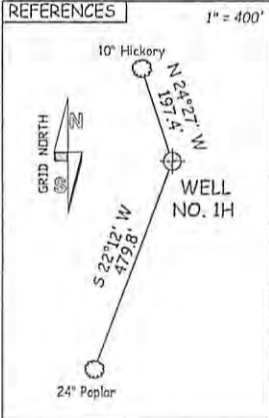


**NOTES:**  
WELL 1H TOP HOLE INFORMATION:  
N: 328,741ft E: 1,649,519ft  
LAT: 39°23'45.41" LON: 80°44'24.73"  
BOTTOM HOLE INFORMATION:  
N: 327,804ft E: 1,655,984ft  
LAT: 39°23'37.02" LON: 80°43'02.22"  
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

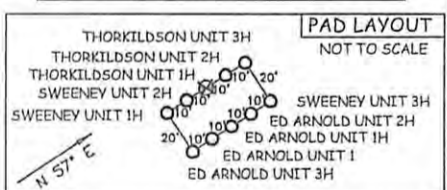
(NAD) 83 (UTM) ZONE 17 COORDS:  
WELL 1H TOP HOLE INFORMATION:  
N: 4,360,758m E: 522,385m  
BOTTOM HOLE INFORMATION:  
N: 4,360,505m E: 524,360m

WELL NO. 1H TO WATER WELLS

LINE	BEARING	DIST.
W1	N 39°43' W	1561.8'
W2	N 48°59' W	1585.3'
W3	N 57°55' W	1608.6'
W4	N 73°12' W	1077.9'
W5	N 74°08' W	976.2'
W6	N 79°16' W	1035.1'
W7	S 83°12' W	920.6'
W8	S 82°09' W	1042.1'
W9	S 77°43' W	1294.9'



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



JOB # 12-053WA  
DRAWING # THORKILDSON1H  
SCALE 1" = 2000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS



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

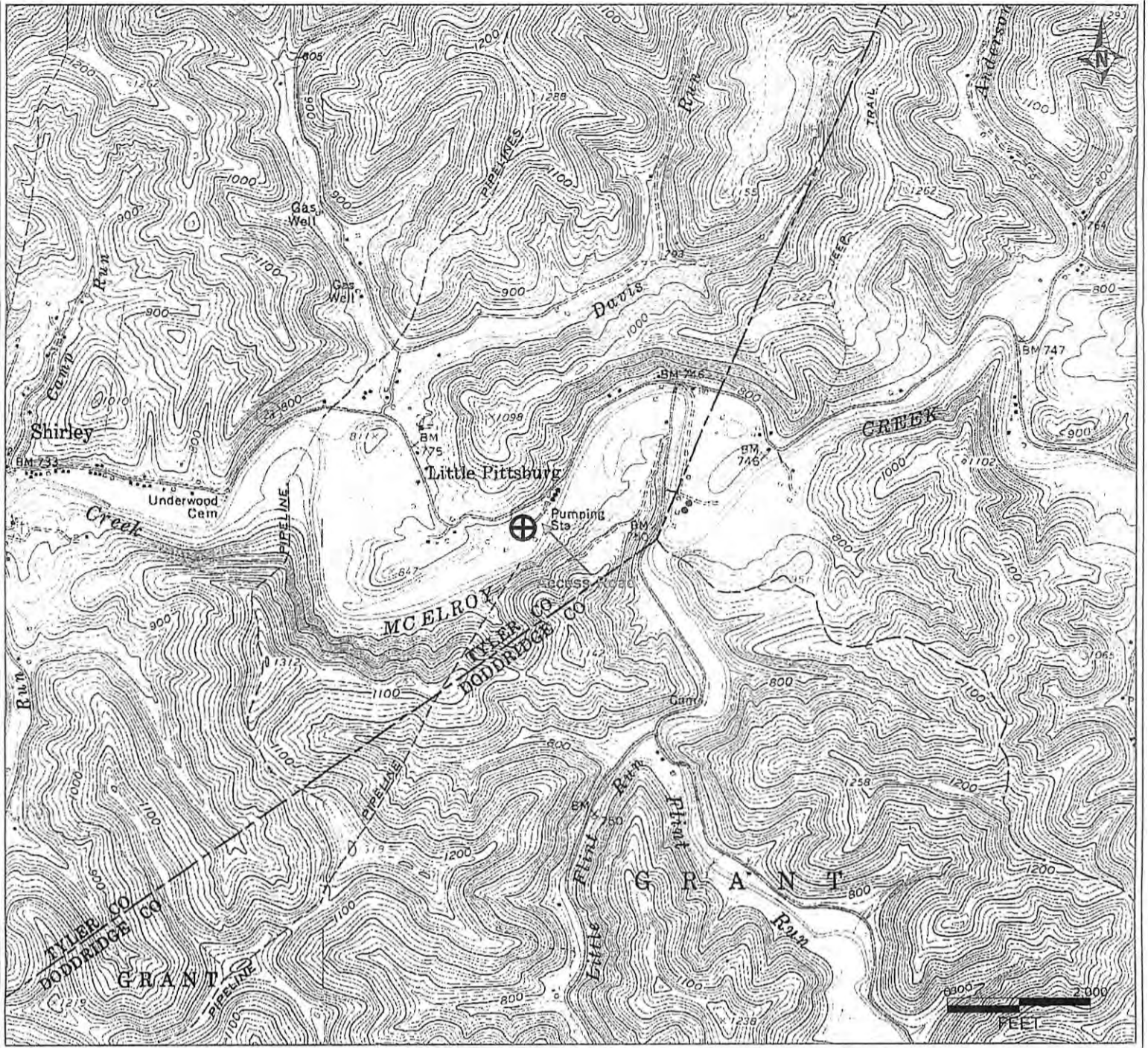
DOUGLAS R. ROWE P.S. 2202  
DATE 10/16/12  
OPERATOR'S WELL# THORKILDSON #1H  
API WELL # 47 - 095 - 02078 HEA  
STATE COUNTY PERMIT

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 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 (21361); RALPH T. SWEENEY ET UX (21360); M. THORKILDSON ET AL; S.A. SMITH ET AL LEASE ACREAGE 25.668 ACRES±; 55.43 ACRES±; 125.91 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 MARCELLUS ESTIMATED DEPTH 7,100' TVD 15,200' MD  
WELL OPERATOR ANTERO RESOURCES APPALACHIAN CORP. DESIGNATED AGENT DIANNA STAMPER  
ADDRESS 1625 17TH STREET ADDRESS CT CORPORATION SYSTEM  
FORM WW-6 DENVER, CO 80202 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

01/18/2013





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95-02078

Antero Resources Corporation
APPALACHIAN BASIN
Thorkildson Unit 1H
Tyler County
REMARKS QUADRANGLE: CENTER POINT WATERSHED: MCELROY DISTRICT: MCELROY
Date: 10/18/12

01/18/2013