

LATITUDE 39°20'00"

7,530'

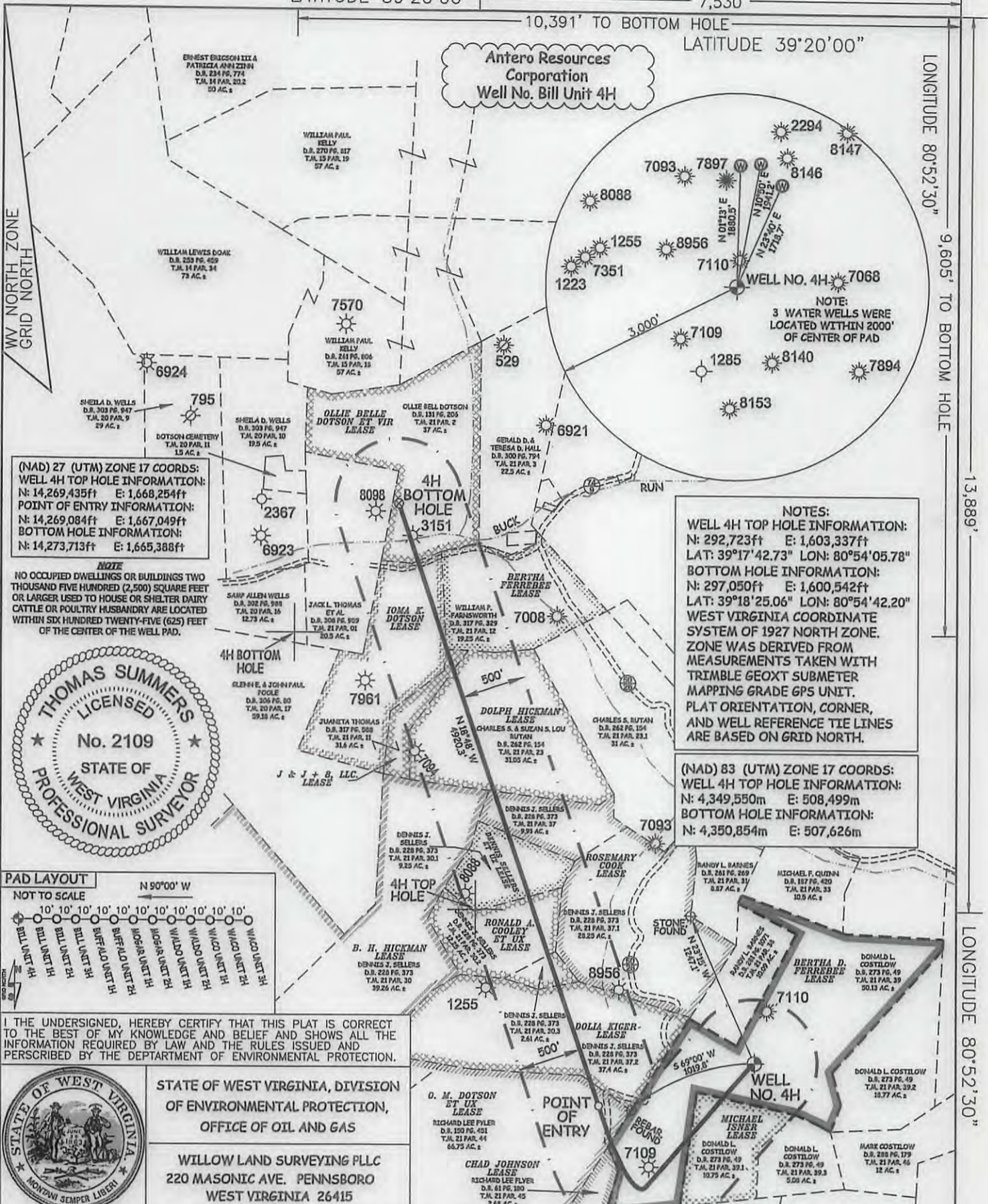
10,391' TO BOTTOM HOLE

LATITUDE 39°20'00"

LONGITUDE 80°52'30"

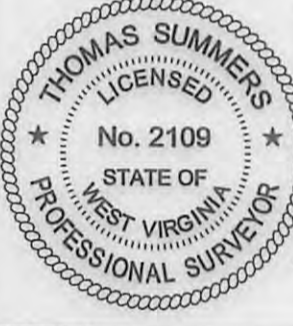
13,889'

LONGITUDE 80°52'30"



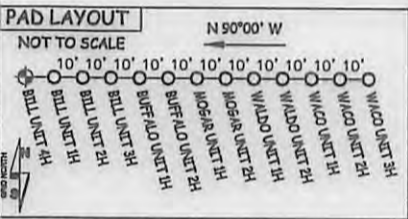
(NAD) 27 (UTM) ZONE 17 COORDS:
 WELL 4H TOP HOLE INFORMATION:
 N: 14,269,435ft E: 1,668,254ft
 POINT OF ENTRY INFORMATION:
 N: 14,269,084ft E: 1,667,049ft
 BOTTOM HOLE INFORMATION:
 N: 14,273,713ft E: 1,665,388ft

NOTE
 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.



NOTES:
 WELL 4H TOP HOLE INFORMATION:
 N: 292,723ft E: 1,603,337ft
 LAT: 39°17'42.73" LON: 80°54'05.78"
 BOTTOM HOLE INFORMATION:
 N: 297,050ft E: 1,600,542ft
 LAT: 39°18'25.06" LON: 80°54'42.20"
 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 4H TOP HOLE INFORMATION:
 N: 4,349,550m E: 508,499m
 BOTTOM HOLE INFORMATION:
 N: 4,350,854m E: 507,626m



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.



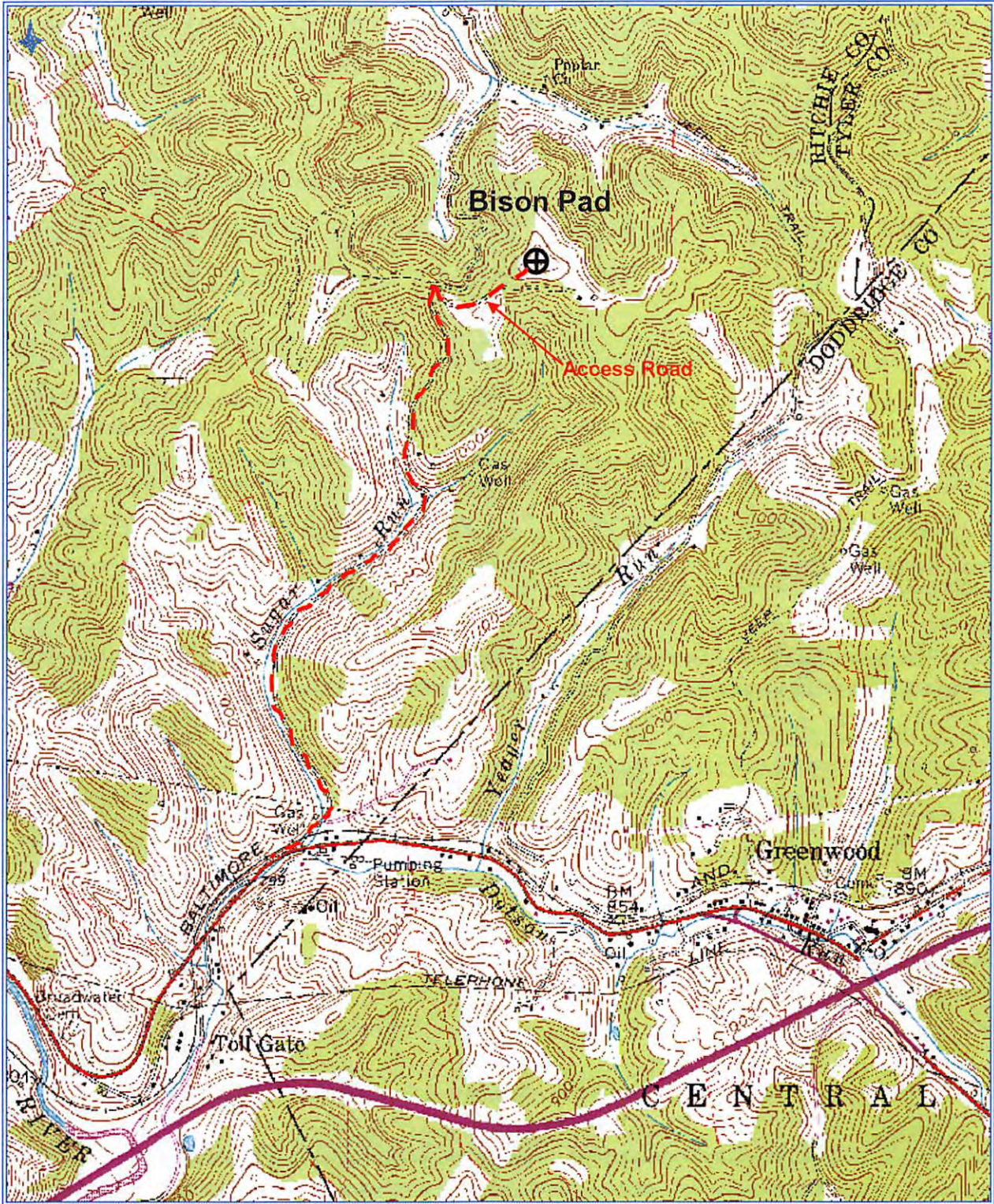
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

JOB # 15-029WA
 DRAWING # BILL4H
 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 +/-
 - x - x - Existing Fence
 ⊕ Found monument, as noted
 THOMAS SUMMERS P.S. 2109
 DATE 08/02/17
 OPERATOR'S WELL# BILLUNIT#4H



WELL TYPE: OIL	<input checked="" type="checkbox"/> GAS	<input checked="" type="checkbox"/> LIQUID INJECTION	<input type="checkbox"/> WASTE DISPOSAL	47	085	10327H6A
(IF "GAS") PRODUCTION	<input checked="" type="checkbox"/> STORAGE	<input type="checkbox"/> DEEP	<input checked="" type="checkbox"/> SHALLOW	STATE	COUNTY	PERMIT
LOCATION: ELEVATION 1,238' - ORIGINAL 1,221' - PROPOSED	WATERSHED NORTH FORK HUGHES RIVER		QUADRANGLE PENNSBORO 7.5	DISTRICT CLAY	COUNTY RITCHIE	09/29/2017
SURFACE OWNER DONALD L. COSTILOW	ACREAGE 50.13 ACRES +/-		LEASE ACREAGE 67 AC.±; 10.75 AC.±; 70 AC.±; 40 AC.±; 13.99 AC.±; 9.25 AC.±; 9.25 AC.±; 26.52 AC.±; 4.58 AC.±; 20 AC.±; 27 AC.±; 37 AC.±;			
OIL & GAS ROYALTY OWNER BERTHA D. FERREBEE; MICHAEL ISNER; O.M. DOTSON ET UX;	LEASE ACREAGE		PLUG & ABANDON CLEAN OUT & REPLUG			
DOLIA KIGER; RONALD A. COOLEY ET UX; DENNIS SELLERS ET UX; ROSEMARY COOK; DOLPH HICKMAN;	ESTIMATED DEPTH 6,900' TVD 13,900' MD		DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM			
J & J + 8 LLC; BERTHA FERREBEE; IOMA K. DOTSON; OLLIE BELLE DOTSON ET VIR;	TARGET FORMATION BURKETT		WELL OPERATOR ANTERO RESOURCES CORP.			
PROPOSED WORK: 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"/>	ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202		ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313			



Antero Resources Corporation
Appalachian Basin
Bill Unit 4H
Ritchie County

Quadrangle: Pennsboro
Watershed: Hughes River
District: Clay
Date: 7-20-2015

RECEIVED
Office of Oil and Gas
AUG 16 2017
WV Department of
Environmental Protection