

LATITUDE

39° 15'

15'
0.40S
1.80W

78° 50'

LONGITUDE

loc from description
on well record

7'5 OGIS topo location

7.5' loc 0.43S
Elev 219/2210 } 1.78W

15' loc 0.40S
(calc.) 1.80W

Company W.B. Robb

Farm Mrs. Ella Pancake 1

Quad Sector 75 quad
Moosefield 15' NC

County Hampshire

District Mill Creek (4)

WELL LOCATION MAP

File No. 027-40

(WNGES = was 80002 'B')

Hampshire

now
Hampshire 40

Mill Creek District, Hampshire County, W. Va.

By W. B. Robb.

Hamp-B on map.

Elevation, 1415' B.

Located 0.40 mi. S. of 39° 15' and 1.8 mi. W. of 78° 50' - NC - Moorefield Quadrangle.

On top of Mill Creek Mountain, W.+ side of South Branch of Potomac River.

1.22 mi. N. 30° W. of Sector P. O. (Glebe Station); 160' N. 29° W. of road fork.

Remarks:

Starts in Niagara Series.

Drilling at 374', May 28, 1938, (last report).

Above information published on p. 61 of Volume XVI, 1944, of W. Va. Geological Survey.

HAMP-B north Hampshire 40

WEST VIRGINIA GEOLOGICAL SURVEY

61

✓ Mrs. Ella Pancake No. 1 Well.

Mill Creek District, Hampshire County, W. Va.

By W. B. Robb.

Hamp-B on map.

Elevation, 1415' B.

Located 0.40 mi. S. of 39° 15' and 1.8 mi. W. of 78° 50'—NC—Moorefield Quadrangle.

On top of Mill Creek Mountain, W.+ side of South Branch of Potomac River.

1.22 mi. N. 30° W. of Sector P. O. (Glebe Station); 160' N. 29° W. of road fork.

Remarks:

Starts in Niagara Series.

Drilling at 374', May 28, 1938, (last report).

WVGES - Vol XVI, 1944 p. 61

THARP-HAMPTON LEASE

34.813 UNIT ACRES±

WELL NO. 1666

J. SAVILLE ET AL
134.5 AC.±

ROGER K. THARP AND
TRUDY J. HAMPTON
20.000 AC.±

R. J. HOTT
128.37 AC.±

DEED
N 23°29'13" E
485.19'
5/8" REBAR
(FOUND)

WELL NO. 1666
STATE PLANE
COORDINATES

(N) 254,430
(E) 2,214,273

E. E. HIMES
5.000 AC.±

E. E. HIMES
5.32 AC.±

E. E. HIMES
5.53 AC.±

M. J. DEHAVEN
5 AC.±

GARY GRAY
12.22 AC.±

R. SHANKLIN
5 AC.±

J. A. POLLARD, SR
10 AC.±

DRAIN

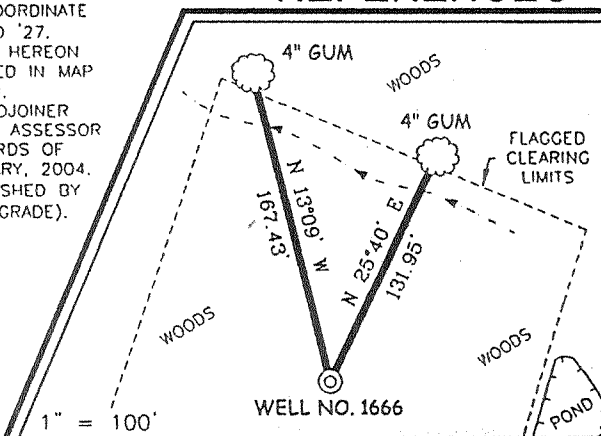
TO CO. RT.
NO. 105

PRIVATE
ROADS

NOTES ON SURVEY

1. TIES TO WELLS, CORNERS AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT RECORDED IN MAP BOOK 3 AT PAGE 19.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF HAMPSHIRE COUNTY IN JANUARY, 2004.
4. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

REFERENCES



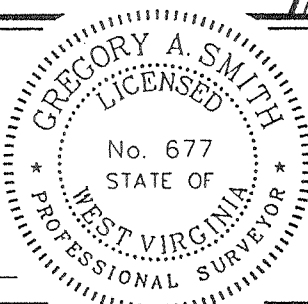
THERE APPEARS TO BE NO
KNOWN PERMITTED WELLS
WITHIN 3000'

WELL NO. 1666



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. 677
Gregory A. Smith



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

DATE JANUARY 30, 20 04
OPERATORS WELL NO. THARP-HAMPTON NO. 1666
API WELL NO. 47-027-00041
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 5428P1666 (131-63 TO 66)
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

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: ELEVATION 1,910' WATERSHED BRANCH OF GRASSY LICK RUN
DISTRICT SHERMAN COUNTY HAMPSHIRE QUADRANGLE RIO 7.5'

SURFACE OWNER ROGER K. THARP AND TRUDY J. HAMPTON ACREAGE 29.813
ROYALTY OWNER ROGER K. THARP AND TRUDY J. HAMPTON LEASE ACREAGE 29.813 OF 34.813

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 ORISKANY
ESTIMATED DEPTH 6,275'

WELL OPERATOR PENNSYLVANIA GENERAL ENERGY COMPANY, LLC DESIGNATED AGENT Ms. CATHE L. MORLAND, ESQ.
ADDRESS 208 LIBERTY STREET ADDRESS 52 WEST ROSEMARY LANE
WARREN, PA 16365 ROMNEY, WV 26757

2-2 (304)

deep

DEEP

Mr B

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Tharp-Hampton Operator Well No.: 1666

LOCATION: Elevation: 1910 Quadrangle: RIO

District: Sherman County: Hampshire
Latitude: 4,430 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude: 10,110 Feet West of 78 Deg. 42 Min. 30 Sec.

Company: Pennsylvania General Energy Company L. L. C.

	Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. Ft.
Address: <u>208 Liberty St., Warren, Pa. 16365</u>	<u>20'</u>	<u>80'</u>	<u>80'</u>	<u>N/A</u>
Agent: <u>Ms. Cathe L. Morland, ESQ, Romney, WV</u>	<u>13 3/8"</u>	<u>449'</u>	<u>449'</u>	<u>507</u>
Inspector: <u>Terry Urban</u>	<u>9 5/8"</u>	<u>1520'</u>	<u>1520'</u>	<u>715</u>
Date Permit Issued: <u>February 23, 2004</u>	<u>7'</u>	<u>5784'</u>	<u>5784'</u>	<u>313</u>
Date Well Work Commenced: <u>April 2, 2004</u>	<u>2 7/8"</u>	<u>5766'</u>	<u>5766'</u>	<u>N/A</u>
Date Well Work Completed: <u>September 24, 2004</u>				
Verbal Plugging:				
Date Permission Granted on:				
Rotary Cable Rig <u>Rotary</u>				
Total Depth (feet): <u>5979'</u>				
Fresh Water Depth (ft): <u>80 feet</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is Coal being mined in area (N/Y)? <u>NO</u>				
Coal Depths (ft.): _____				

OPEN FLOW DATA

Producing formation Oriskany Pay zone depth (ft) 5800'
Gas: Initial open flow 500 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1500 MCF/d final open flow _____ Bbl/d
Time of open flow between initial and final tests see note Hours
Static rock Pressure 1421 psig (surface pressure) after 123 Hours

*Note; Final open flow was performed 24 hours after the well was stimulated

Second Producing Formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED
Office of Oil & Gas
Office of Chief
OCT 25 2004
WV Department of
Environmental Protection

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OF STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: [Signature] PNEC LLC.
By: Robert Kuntz, Executive V. P.
Date: 10/12/04

DEC 30 2004
11/30/2004

HAM 0041

LOG OF FORMATIONS

Well API#

47-027-00041

Formation Name	Top	Bottom	Gas at	Oil at	Water at (Fresh or Brine)	Source of Date
Fill	0	3'				Drillers Log
Clay & Shale	3'	110'			Fresh @ 80'	"
Shale and Sandstone	110'	295'				"
Shale and Red Rock	295'	540'				"
Shale and Sandstone	540'	946'				"
Shale	946'	1155'				"
Shale and Sandstone	1155'	3964'				"
Chaneyville Siltstone	3964'	4150'				Electric Log
Oolitic Limestone	4150'	4154'				"
Shale & Siltstone	4154'	5428'				"
Upper Marcellus	5428'	5452'				"
Purcell Limestone	5452'	5546'			"	
Lower Marcellus	5546'	5682'			"	
Onodaga Limestone	5682'	5697'			"	
Needmore Shale	5697'	5797'			"	
Oriskany Sandstone	5797'	5948'	5800'		"	
Shriver Chert	5948'	5979'			"	
TD		5979'			"	

COMPLETION REPORT

Stimulation Record						
Date	Interval Treated		Amount of fluid in gals	Sand 20/40	Fluid Type	Average Injection Rate
	From	To				
09/24/04	5784'	5980'	5,000		HCl	10 BPM
			15,000	300 sks	water	30 BPM

Note: Well was stimulated via open hole hydrofracture utilizing Halliburton Energy Services.