



- New Location
- Drill Deeper
- Abandonment
- Fracture
- Redrill

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Chet Waterman

Company PENN RESOURCES, INC.
 Address PHILADELPHIA, PA.
 Farm W.A. FORD
 Tract 202.28 Acres Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 862'
 Quadrangle WEST UNION *SE*
 County DODD RIDGE District Central
 Engineer CHET WATERMAN
 Engineer's Registration No. 3788
 File No. 71003-282 Drawing No. _____
 Date 7/28/71 Scale 1" = 40P

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. DOD-1634

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 — Denotes one inch spaces on border line of original tracing.

AUG 23 1971

6-6 Central Station (91)



PENN WELL 166

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

Rotary
Spudder
Cable Tools
Storage

WELL RECORD

Oil or Gas Well Both
(KIND)

Quadrangle West Union
Permit No. DOD 1634

Company PENN RESOURCES, INC. Willard E. Ferrell, Agent
Address 1 Decker Square, Bala Cynwyd, Pa. 19004
Farm O.T. Smith -- W.A. Ford Acres 202.28
Location (waters) _____
Well No. Series 1 Elev. 862
District West Union County Doddridge
The surface of tract is owned in fee by W.A. Ford
Address West Union, W. Va.
Mineral rights are owned by N.M. Welch et al
7th Street Address Parkersburg, W. Va. 19101
Drilling commenced Aug. 17, 1971
Drilling completed Sept. 13, 1971
Date Shot Fractured 9/30/1971 To _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16	18	18	
13			Size of
10	308	308	
8 1/4	937		Depth set
6 1/4			
5 3/16	1948	1948	Perf. top
3			Perf. bottom
2			Perf. top
Liners Used			Perf. bottom

With _____
Open Flow 5/10ths Water in 2 Inch
/10ths Merc. in Inch
Volume 105M Cu. Ft.
Rock Pressure Not taken lbs. hrs.
Oil Show bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS) _____
WELL FRACTURED (DETAILS) 500 gal acid - 800 bbls. fluid - 40M Sand

Attach copy of cementing record.
CASING CEMENTED 4 1/2 SIZE 200 No. Ft. 9/21/71 Date
Amount of cement used (bags) 55
Name of Service Co. LAWSON
COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
FEET _____ INCHES FEET _____ INCHES
FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 400M cuft
ROCK PRESSURE AFTER TREATMENT 650 HOURS 24
Fresh Water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Big Injun Depth 1890 (Squaw?)

4. bbls oil 400,000 gals

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Clay			0	70			
Slate & Shells			10	50			
Red Rock			50	70			
Slate & Shells			70	90			
Red Rock			90	145			
Slate & Shells			145	270			
Red Rock			270	278			
Slate & Shells			278	315			
Red Rock			315	342			
Sand			342	430			
Slate & Shells			430	490			
Lime (Hard)			490	510			
Slate & Shells			510	600			
Red Rock			600	675			
Slate & Shells			675	711			
Lime			711	760			
Sand			760	803			
Slate & shells			803	815			
Red Rock			815	848			
Lime			848	895			
Red Rock			895	916			
Slate & Shells			916	950			
Sand			950	982			
Slate & Shells (Black)			982	1000			
Slate			1000	1014			
Slate & Red Rock			1014	1028			
Lime			1028	1081			
Sand			1081	1115			

RECEIVED
JAN 10 1972
OIL & GAS DIVISION
DEPT. OF MINES

Formation	Color	Hard or Soft	Top /	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1115	1135			
Sand			1135	1210			
Slate & Lime			1210	1283			
Sand			1283	1350			
Slate (Black)			1350	1365			
Sand			1365	1410			
Slate & Lime			1410	1450			
Sand			1450	1500			
Lime (Gritty)			1500	1560			
Slate & Shells			1560	1575			
Lime			1575	1590			
Sand			1590	1650			
Lime (Gritty)			1650	1672			
Sand			1672	1675			
Slate & Shells			1675	1690			
Red Rock			1690	1705			
Lime (little)			1705	1730			
Slate			1730	1733			
Lime (Big-Broken)			1733	1755			
Lime (Big-Good)			1755	1813			
Sand (Keener)			1813	1843			
Injunct Sand			1843	1875			
Squaw Sand			1875	1909			
Slate			1909	1948			
			Total Depth	1948			

Date June 6, 1972
APPROVED P. R. [Signature], Owner
By Howard E. [Signature]
(Title)