

LATITUDE 39° 40' 00"

11.00.00 008

LONGITUDE

7.5
+
70376

7.5 OGIS topo location

7.5' loc	<u>1.045</u>	15' loc	<u>1.045</u>
	<u>1.94W</u>	(calc.)	<u>1.94W</u>

290 ~ 1912 G Pt

Company _____

Farm _____

A1493 on Equitable map

Quad Osage (Belle, etc)

County Monongalia

District Grant

WELL LOCATION MAP

File No. 061-70378

L. S. Bircher No. 1 Well Record (291).

Grant district, 1.4 mile southeast of Cassville. Authority, West Virginia Traction & Electric Company. Completed in 1909.

	(Elevation, 1335' B.A. T.)	Thickness.	Total.
		Feet.	Feet.
Slate, etc.	112	112
Sand	58	170
Mt. Morris (Waynesburg) coal	6	176
Slate, lime, shale and sand in layers, no coal	353	465
Mapletown, (Sewickley) coal	7	472
Slate	20	492
Lime	17	509
Slate and shale	28	537
Lime	18	555
Slate	8	563
Pittsburgh coal	9	572
Slate, lime, red rock and sand in layers, no coal	1226	1798
Lime	19	1817
Black slate	8	1825
Big Lime	75	1900
Big Injun sand (pay, 1972')	100	2000
Slate and shale	36	2036
Sand	30	2066
Slate	19	2085
Sand	40	2125
Slate and shale	35	2160
Sand, (Squaw)	30	2190
Slate and shale	70	2260
Lime and sand	27	2287
Slate	42	2329
Slate and shale	38	2367
Lime and sand	25	2392
Slate and shale	22	2414
Sand, (Gantz) (gas pay, 2417')	59	2473
Slate	17	2490
Sand, (Fifty-foot)	38	2528
Red rock	35	2563
Slate and shale	40	2609
Red rock	83	2692
Sand shales, (Gordon)	47	2739
Slate	33	2772
Lime and sand, (Fourth)	30	2802
Slate and shales	60	2862
Sand shales, (Fifth)	48	2910
Slate	22	2932
Sand (Bayard),	76	3008
Slate and shales to bottom	58	3066

10" casing, 600'6"; 8" casing, 1161'; 6 1/2" casing, 1603'; 5" casing, 1900".

70378

Sanford Barrickman No. 1 Well Record (290).

Grant district, 1.3 miles southeast of Cassville. Authority, West Virginia Traction & Electric Company.

	(Elevation, 1085 B.A. T.)	Thickness.	Total.
		Feet.	Feet.
Slate and shales, and lime in layers	178	178
Coal, Sewickley	6	184
Slate shale	23	207
Lime	12	219
Sand	7	226
Slate	17	243
Lime	11	254
Slate	14	268
Sand	5	273
Pittsburgh coal	8	281
Slate, lime, red rock, sand in layers, no coal	705	986
Coal, (Upper Kittanning)	5	991
Slate and shale	45	1036
Lime	7	1043
Black slate	13	1056
Gas sand	40	1096
Black slate	17	1113
Sand, Salt? (H Cow Run)	92	1205
Slate	18	1223
Sand (Salt)	60	1283
Slate and shale	75	1358
Red rock, slate, shale and red rock	165	1523
Big Lime	60	1583
Broken sandy lime	42	1625
Big Injun sand (gas show, 1697')	113	1738
Slate and shale	30	1768
Squaw sand	28	1796
Slate and shale	125	1921
Lime sand	40	1961
Slate and shale	75	2036
Sandy lime	27	2063
Slate and shale	130	2193
Sandy lime	28	2216
Slate	14	2230
Fifty-foot sand	57	2287
Break	13	2300
Sand, (Thirty-foot)	40	2340
Red rock	35	2375
Lime sand, (Gordon Stray)	18	2393
Slate and shale	25	2418
Red lime	30	2448
Slate	12	2460
Lime	10	2470
Slate	12	2482
Sand (Fourth)	30	2512
Slate	16	2528
Red rock	4	2532
Sand, (Fourth)	28	2560
Slate	30	2590
Sand, (Fifth)	26	2616

70378

	Thickness. Total.	
	Feet.	Feet.
Slate	33	2649
Sand, (Bayard)	52	2701
Slate and shale	84	2785
10" casing, 475'; 8" casing, 873'; 6 5/8" casing, 1400'; 5 3/16" casing, 1641'.		

Two miles southeastward a dry hole (317) was drilled on the J. W. Holland farm by Messrs. Courtney & McDermott on a branch of Dents run, the detailed log of which is published on pages 134-135 of Vol. I(A) of the State Survey reports. This well penetrated 175 feet below the Bayard sand, and starts 55 feet by hand-level below the Pittsburgh coal.

One mile west of Morgantown the Peninsula Company No. 1 well (318) was drilled to a depth of about 1200 feet a short distance west of the crest of the Indiana anticline; in which a light show of gas was encountered. The well starts 65 feet by hand-level below the Harlem coal, according to Reger; hence it must have stopped near the base of the Big Injun, since the latter coal in this region belongs about 320 feet below the Pittsburgh coal. The gas pay was too light to be utilized by the owners—the Mississippi Glass Company.

Three miles southwestward the Round Bottom Oil & Gas Company drilled practically a dry hole (316) during 1910 on the Jesse Camp farm, 0.6 miles northwest of Round Bottom station. The well starts about 50 feet below the Pittsburgh coal and reached a depth of slightly over 2000 feet, according to S. G. Yoke of Morgantown, an interested party.

The Ben J. Miller No. 1 well (312), located in the extreme western point of Grant district, near the head of Craig run, is a light gasser. It was not learned in what sand the gas pay was encountered.

Prospective Oil and Gas Areas, Grant District.—The developed gas fields of both Cass and Grant districts, Monongalia county, lying southeast up the structural slope from the Mt. Morris-Fairview oil belt, appear to occur in more or less congested pools along this slope without relation to any special interruption of this slope with the possible exception of the pool west of Bowlby, while other territory apparently as well located from the standpoint of development and structure

This leads to the conclusion that the producing sands therein are quite irregular and not always porous, thus making it quite difficult for the geologist to point out good or bad territory. Hence, with the exception of the region on the head of Little Indian creek, drilling operations in Grant have not led to very encouraging results. However, there are several large areas therein that are so favored by structure as to warrant the drilling of more test wells. Taking up the discussion of these areas roughly from west to east, (1), that portion of the district lying northwest of Georgetown and Arnettsville on the waters of Snider and Stewart runs from a structural standpoint would justify the drilling of two or three test wells for Big Injun gas and Fifth sand oil; (2) that, southward from Flaggy Meadow run to the Monongalia-Marion county line between the 700 and 800-foot contours of the Pittsburgh coal as outlined on Map II, appears favorable for gas in the Big Injun and Fifth; (3) that along the crest of the Indiana anticline from the Monongahela river at Westover to the same stream at Uffington for gas in the Big Injun and Berea sands in view of the showings encountered at these horizons in wells Nos. 318 and 332 in Morgantown and one mile west thereof; and (4) that, at Little Falls from the river west to the 1375-foot contour of the Pittsburgh coal, for gas in the same sands.

Union District.

Union district, Monongalia county, lies immediately east of the Monongahela river, south of Pennsylvania, west of Preston county and northeast of Morgan district; hence, its area is traversed in a northeast-southwest direction by three structural folds; viz., the Indiana and Chestnut Ridge anticlines, and the Connellsville (Uniontown) syncline, so that its strata are very much warped and twisted. The elevation of the Pittsburgh coal horizon therein varies from about 1070'A. T. at the State line, 0.7 mile southwest of Cheat Haven, Pa., to over 2500'A. T. in the extreme northeast corner of the district. Eight wells have been drilled within the boundaries of Union—2 on the west side of Cheat river and 6