

Core Analysis, Well Vandevender #35, Experimental Well #2
 Cow Run Sand, Burning Springs Field
 Clay District, Wirt County, W. Va.

Sample no.	Depth, ft.	Air		Permeability, md.		Saturation, percent pore space		Oil content, bbl/acre ft.	Water content, bbl/acre ft.	Salinity, equivalent NaCl, P.P.m./l	Type of clay			
		Horizontal	Vertical	Horizontal	Vertical	Oil	Water					Gas		
81	348.0	-0.2	-0.2	-0.2	-0.2	-0.2	7.6	49.4	43.0	383	249	56,000		
82	349.0	-0.2	-0.2	-0.2	-0.2	-0.2	3.4	---	---	---	---	27,000		
83	350.0	-0.2	-0.2	-0.2	-0.2	-0.2	7.1	6.1	49.7	44.2	336	274	50,000	
84	351.0	-0.2	-0.2	-0.2	-0.2	-0.2	7.1	2.5	29.2	68.3	138	161	56,000	
85	352.0	-0.2	-0.2	-0.2	-0.2	-0.2	6.6	8.4	39.2	52.4	43	201	32,000	
86	353.0	-0.2	-0.2	-0.2	-0.2	-0.2	6.1	8.2	47.0	44.8	39	223	38,000	
87	354.0	-0.2	-0.2	-0.2	-0.2	-0.2	7.0	50.5	37.9	11.6	274	205	24,000	Red/white
37	355.0	-0.2	-0.2	-0.2	-0.2	-0.2	6.0	50.4	42.3	7.3	235	197	46,000	Naevite
38	356.0	-0.2	-0.2	-0.2	-0.2	-0.2	10.5	31.6	18.2	50.2	257	148	46,000	
39	357.2	-0.2	-0.2	-0.2	-0.2	-0.2	5.9	38.1	53.0	8.9	174	243	52,000	
40	358.0	-0.2	-0.2	-0.2	-0.2	-0.2	6.7	31.1	37.9	31.0	161	197	52,000	
41	359.1	-0.2	-0.2	-0.2	-0.2	-0.2	6.9	19.6	47.5	32.9	105	254	38,000	Naevite
42	360.3	-0.2	-0.2	-0.2	-0.2	-0.2	3.1	28.8	42.5	28.7	69	102	67,000	
43	361.2	-0.2	-0.2	-0.2	-0.2	-0.2	3.2	7.4	56.8	35.8	18	141	60,000	
44	362.0	-0.2	-0.2	-0.2	-0.2	-0.2	5.3	4.9	43.9	51.2	20	181	38,000	Naevite
45	363.0	-0.2	-0.2	-0.2	-0.2	-0.2	8.1	26.8	33.5	39.7	168	211	34,000	
46	364.0	-0.2	-0.2	-0.2	-0.2	-0.2	9.6	26.6	25.2	48.2	198	188	59,000	
47	365.0	-0.2	-0.2	-0.2	-0.2	-0.2	4.3	21.4	21.5	71	139	47,000		
48	366.0	-0.2	-0.2	-0.2	-0.2	-0.2	16.7	10.7	21.3	68.0	139	276	22,000	
49	367.0	-0.2	-0.2	-0.2	-0.2	-0.2	1.0	29.1	42.9	28.0	305	235	32,000	
50	368.3	-0.2	-0.2	-0.2	-0.2	-0.2	1.0	29.8	22.2	47.3	305	235	31,000	Naevite
51	369.0	-0.2	-0.2	-0.2	-0.2	-0.2	14.9	23.4	22.2	270	257	21,000		
52	370.0	-0.2	-0.2	-0.2	-0.2	-0.2	13.6	27.3	22.4	50.3	288	236	29,000	
53	371.0	-0.2	-0.2	-0.2	-0.2	-0.2	14.5	26.8	19.8	53.4	301	223	35,000	
54	372.0	-0.2	-0.2	-0.2	-0.2	-0.2	15.0	27.3	15.0	57.7	318	175	42,000	Naevite
55	373.0	-0.2	-0.2	-0.2	-0.2	-0.2	8.2	29.1	42.9	28.0	185	175	31,000	
56	374.0	-0.2	-0.2	-0.2	-0.2	-0.2	10.6	30.6	24.7	44.7	252	203	48,000	
57	375.0	-0.2	-0.2	-0.2	-0.2	-0.2	4.1	28.7	48.2	23.1	91	153	47,000	
58	376.0	-0.2	-0.2	-0.2	-0.2	-0.2	3.3	19.5	62.3	18.2	45	159	35,000	
59	377.0	-0.2	-0.2	-0.2	-0.2	-0.2	---	---	---	---	---	---	---	
60	378.0	-0.2	-0.2	-0.2	-0.2	-0.2	6.6	48.9	48.3	2.8	247	251	29,000	
61	379.0	-0.2	-0.2	-0.2	-0.2	-0.2	8.5	32.2	26.9	40.9	212	177	31,000	Naevite
62	380.0	-0.2	-0.2	-0.2	-0.2	-0.2	7.2	18.8	20.9	60.3	105	117	28,000	
63	381.0	-0.2	-0.2	-0.2	-0.2	-0.2	9.9	33.0	26.5	40.5	253	204	34,000	
64	382.0	-0.2	-0.2	-0.2	-0.2	-0.2	10.3	15.9	28.9	55.2	127	231	40,000	
65	383.0	-0.2	-0.2	-0.2	-0.2	-0.2	8.8	35.7	31.9	32.4	244	218	34,000	
66	384.0	-0.2	-0.2	-0.2	-0.2	-0.2	11.6	40.8	31.1	28.1	279	212	32,000	
67	385.0	-0.2	-0.2	-0.2	-0.2	-0.2	11.6	31.8	25.7	42.5	286	231	38,000	
68	386.0	-0.2	-0.2	-0.2	-0.2	-0.2	11.0	28.0	30.7	41.3	239	262	18,000	
69	387.0	-0.2	-0.2	-0.2	-0.2	-0.2	9.6	21.1	45.3	33.6	157	337	13,000	
70	388.0	-0.2	-0.2	-0.2	-0.2	-0.2	8.5	4.7	25.1	70.2	31	165	33,000	
71	389.0	-0.2	-0.2	-0.2	-0.2	-0.2	13.9	40.5	20.5	39.0	437	221	24,000	Naevite
72	390.0	-0.2	-0.2	-0.2	-0.2	-0.2	13.6	21.8	16.5	61.7	230	174	33,000	
73	391.0	-0.2	-0.2	-0.2	-0.2	-0.2	12.5	41.4	14.5	44.1	437	153	43,000	
74	392.0	-0.2	-0.2	-0.2	-0.2	-0.2	12.5	51.6	14.3	34.1	500	139	42,000	

75	393.0	12.0	3.6	10.0	4.9	9.0	7.5	14.0	41.8	17.5	40.8	527	196	24,000
76	394.0	33.0	6.3	21.4	5.7	21.0	18.2	13.7	49.6	18.4	32.0	527	171	35,000
77	395.0	29.0	22.0	21.0	15.0	21.8	14.8	17.4	41.4	12.7	43.9	539	155	43,000
78	396.0	12.9	6.3	5.1	2.7	4.5	4.3	13.0	57.7	15.4	26.9	582	217	28,000
79	397.0	13.1	5.6	7.0	4.8	6.9	6.3	12.5	60.9	22.4	16.7	590	230	27,000
80	397.8	4.8	7.0	2.6	5.8	2.7	2.5	13.2	30.4	22.5	47.1	311		
Average for total sand		3.4	2.0	2.1	1.5	1.9	1.6	10.0	28.1	31.8	39.6	244	204	43,000

- 1/ Soltrol C; commercial C₁₁ - C₁₂ hydrocarbon mixture.
- 2/ Horizontal cores.
- 3/ Synthetic brine; 45,000 ppm. chlorides. Gravity - 41.1° A.P.I. at 60° F.
- 4/ Crude oil properties: Viscosity - 6.6 cp. at 70° F.
- 5/ Qualitative identification by clay staining test.
- 6/ - indicates "less than."
- 7/ Core water salinity determined by leaching crushed core sample with distilled water, measuring water resistivity and converting to equivalent NaCl concentration.

January 1961
Corrected 11-13-61

Re. 4-15-62

NaCl/eq