

Surficial Geology of the Plainfield Quadrangle
Middlesex, Union, and Somerset Counties, New Jersey

New Jersey Geological Survey
Open-File Map OFM 77
2009

pamphlet to accompany map

Table 1.--Selected well and boring records.

Well no.	Identifier ¹	Driller's log with depth and description ²
1	25-118	0-33 red clay (Qcb over Qws) 33-134 red shale and sandstone
2	25-1683	0-35 clay (Qal over Qws) 35-62 shale 62-75 rock (basalt)
3	25-29675	0-4 sand and gravel fill 4-9 red medium-to-fine sand, some silt, little coarse-to-medium shale fragments (Qws) 9-16 highly fractured shale
4	25-28207	0-14 red clayey silt (Qws) 14-28 red soft micaceous shale
5	25-1487	0-35 soft brown clay (Qws) 35-110 red shale 110-128 sandstone
6	25-7731	0-15 dirt (Qws) 15-123 red rock
7	25-24207	0-25 overburden (Qwb) 25-470 trap rock
8	25-43429	abbreviated log 0-16 fill 16-32 brown clayey silt, fine-to-coarse sand, some gravel, trace boulders (Qwb) at 32 refusal (basalt)
9	25-19215	0-20 overburden (Qwb) 20-250 trap
10	25-8733	0-10 soil, rock fragments, boulders (Qwb) 10-152 diabase
11	25-31049	0-10 loose rock (Qwb) 10-400 trap rock
12	25-15341	0-40 overburden (Qwb) 40-270 blue rock (basalt) 270-560 red shale
13	25-9662	0-33 overburden (Qwb) 33-115 trap
14	25-14773	0-40 overburden and rock (Qcb) 40-125 shale
15	25-39884	0-5 brown silty clay (Qcb) 5-9 reddish brown clay (Qcb or Qws)

		9-25	very soft red shale
16	25-42166	0-7 7-9 9-10	fill dirt (fill or Qcb) wet sandy soil, orange (Qcb) weathered sandstone
17	25-1370	0-30 30-162	clay (Qcb) red shale
18	25-7372	0-8 8-100	sand (Qcb) red shale
19	25-26968	0-83 83-295	sand, gravel (Qcb) shale
20	25-32990	0-24 at 24	brown and red clays (Qcb) shale
21	25-1024	0-20 20-45 45-150	yellow with streaks of white clay mixed with loose rocks (Qcb) red clay, very hard, with some gravel and sand (Qcb over Qws) red shale and sandstone
22	25-30608	0-40 40-225	overburden (Qcb) red rock
23	25-35138	0-12 at 12	sand, gravel, clay (Qpf over Qws) red rock
24	25-3992	0-71 71-137	yellow clay, very stony (Qcb) clay and shale mixed (Qws over shale)
25	25-19749	0-24 24-175	sand and clay (Qcb) red shale
26	25-31549	0-6 6-48	red fine sand, trace silt (Qcb) weathered shale
27	25-524	0-60 60-179	clay and mountain stone (Qcb) red shale
28	25-11466	0-25 25-200	clay and small boulders (Qcb) shale
29	25-3879	0-50 50-140	red clay (Qcb) red shale
30	25-3291	0-30 30-115	yellow clay (Qcb) red shale
31	25-2072	0-35 35-90	brown sand and gravel (Qpf) clay and shale mixture (Qws over shale)
32	25-1394	0-60 60-84	sand and gravel (Qpf) red shale
33	25-22840	0-20 20-150	fine red sand (Qpf) red shale
34	25-21764	0-40 40-105	sand (Qpf) red shale
35	25-1100	0-15 15-20 20-32 32-100	yellow sandy clay (Qpf) dirty muddy brown quick sand (Qpf) hard red clay (Qpf over Qws) red shale and sandstone
36	25-1023	0-10 10-25 25-100	yellow and blue clay (Qpf) hard red clay (Qpf over Qws) red shale and sandstone
37	25-1101	0-15 15-20 20-32	yellow sandy clay (Qpf) dirty muddy brown quick sand (Qpf) hard red clay (Qpf over Qws)

		32-100	red shale and sandstone
38	25-2716	0-40 40-64 64-507	sand and gravel (Qal over Qpf) clay and sand (Qpf) red rock
39	25-2715	0-10 10-52 52-60 60-445	yellow clay (Qal) red clay with little gravel (Qpf) soft red rock (Qws) red shale
40	25-2718	0-23 23-40 40-45 45-510	sand and clay (Qal over Qpf) sand and gravel (Qpf) clay (Qpf over Qws) red rock
41	25-572	0-9 9-23 23-30 30-68 68-454	clay (Qal) sand and gravel (Qpf) red clay (Qpf over Qws) soft red shale rock (Qws) red shale rock
42	25-632	0-8 8-20 20-26 26-390 390-473	yellow clay (Qal) sand and gravel (Qpf) red clay (Qpf over Qws) red shale rock brown shale rock
43	25-633	0-12 12-30 30-545	gray sand and clay (Qal) sand and gravel, some clay (Qpf) red shale
44	25-10576	0-10 10-30 30-125	sand (Qpf) soft shale hard shale
45	25-45	0-39 39-48 48-140	fine brown sand (Qpf) red clay (Qpf over Qws) red shale
46	25-11215	0-35 35-110	sand and gravel (Qpf) shale
47	25-27396	0-60 60-200	sand and gravel (Qpf) shale
48	25-44317	0-60 60-280	sand and gravel (Qpf) red shale
49	25-14905	0-18 18-35 35-45 45-54 54-57 57-600	fine sand and clay (Qpf) red silt and sand (Qpf) silt, sand, and gravel (Qpf) sand, gravel, silt, and clay mix (Qpf) dirty sand and gravel (Qpf) red shale
50	25-611A	0-15 15-64 64-304	sand (Qpf) sand, gravel, and clay (Qpf) red shale
51	25-762	0-50 50-326	sand, gravel, and clay (Qpf) red rock
52	25-44353	abbreviated log 0-18	red and gray medium-to-coarse sand (Qpf)
53	25-37014	0-10 10-20	red-brown clayey silt, some fine sand (Qpf) gray fine sand, trace silt
54	25-11751	0-61 61-436	sand, gravel, and a little clay (Qpf) red shale
55	25-34649	abbreviated log	

		0-17	gray fine-to-coarse sand, silty sand, some pebbles (Qpf)
56	25-12665	no log of surficial material, cased to 42, then red sandstone to 350 (Qpf to 42)	
57	25-10086	0-45 45-98	sand and gravel (Qpf) shale
58	25-91	0-30 30-60 60-67 67-600	fine sand (Qpf) sand and gravel (Qpf) soft red rock (Qws) red sandstone
59	25-39068	0-18	red-brown medium-to-fine sand, trace silt (Qpf)
60	25-33345	0-40 40-180	sandy soil (Qpf) NBS ("New Brunswick shale")
61	25-8861	0-78 78-128	sand and gravel (Qpf) red shale
62	25-8170	0-80 80-125	sand (Qpf) shale
63	25-6471	0-80 80-118	sand (Qpf) red shale
64	25-21914	0-60 60-175	medium-to-fine brown sand and gravel (Qpf) red shale
65	25-7609	0-26 26-102	sand (Qpf) shale
66	25-8431	0-50 50-115	sand (Qpf) shale
67	25-12498	0-29 29-92	red sand (Qpf) red shale
68	25-8202	0-42 42-90	sand (Qpf) red shale
69	25-6996	0-60 60-120	sand and gravel (Qpf) red shale
70	25-385	0-53 53-200	dirt (Qpf) red shale
71	25-32529	0-30 30-150	sand (Qpf) shale
72	25-13167	0-15 15-110	sand and gravel (Qpf) red shale
73	25-1121	0-8 8-18 18-31 31-47 47-49 49-100	fill yellow sandy clay (Qpf) dirty muddy sand (Qpf) hard red clay (Qpf over Qws) soft red rock (Qws) red sandstone
74	25-42464	abbreviated log	
		0-3 3-9	brownish-red clayey silt, trace fine fragments of red shale (Qws) red shale
75	25-40109	0-7 7-15 15-18	fill (af) red-brown medium-to-fine sand; red rock fragments (Qpf over Qws) soft red shale
76	25-16311	0-24 24-387	sand and gravel (Qpf) shale
77	25-9060	0-43 43-110	sand and gravel (Qpf) red shale

78	25-8621	0-65 65-143	sand (Qpf) red shale
79	25-11102	0-20 20-40 40-50 50-128	sand and gravel (Qpf) sand and medium clay [sic] (Qpf) soft shale (Qws) medium hard shale
80	25-39268	0-3 3-20	miscellaneous fill, coarse-to-fine gravel with sand red-brown silty medium-to-fine sand (Qpf)
81	25-39178	0-23	pea gravel and orange-brown sands, silts, and gravels (Qpf)
82	25-13899	0-70 70-155 155-350	red sand and gravel (Qpf) red sand and gravel and shale (Qpf over shale) red shale
83	25-2545	0-63 63-200	brown sand (Qpf) red shale
84	25-39368	0-9 9-20 20-28	fill sand, red gravel (Qpf) sand, red gravel, cobbles (Qpf)
85	25-651	0-40 40-427	sandy soil and clay (Qpf) red shale rock
86	25-15820	0-50 50-205	red hardpan (Qpf) red sandstone
87	25-39952	0-50 50-200	overburden (Qpf) red shale
88	25-13898	0-30 30-220	sand and gravel (Qpf) hard shale and sandstone
89	25-13106	0-5 5-400	sand and hardpan (Qpf) sandstone and shale
90	25-19211	0-7 7-25 25-280	fill gravel and sand (Qpf) red shale
91	25-39570	0-4 4-10 10-15 15-20	tan clayey silt (Qpf) red-brown coarse-to-fine sand, gravel, cobbles, some silt, trace clay (Qpf) gravel and rock fragments (Qpf) soft red shale
92	25-7817	0-46 46-99	gravel (Qpf) shale
93	25-42005	0-27 27-275	overburden (Qpf) red shale
94	25-25872	0-20	silt, sand, gravel (Qpf)
95	25-40781	abbreviated log 0-34	reddish-brown fine-to-coarse sand and gravel, trace clay (Qpf)
96	25-16706	0-50 50-200	sand and gravel (Qpf) shale
97	25-2902	0-10 10-15 15-20 20-29 29-35 35-37	fill red sandy clay (Qpf) sandy clay (Qpf) coarse sandy clay, red (Qpf) coarse sand, layers of small gravel at 31-33 (Qpf) red shale
98	25-2955	0-8 8-18	red hardpan (Qpf) red sandy clay (Qpf)

		18-23	cemented sand and gravel (Qpf)
		23-32	sandy clay (Qpf)
		32-34	sand and gravel (Qpf)
		34-39	coarse water-bearing sand
		39-43	red shale
99	25-2957	0-10	red hardpan with large gravel (Qpf)
		10-31	red sandy clay (Qpf)
		31-33	coarse sand and small gravel (Qpf)
		33-34	coarse sand, large gravel, big pieces of shale (Qpf)
		34-36	coarse sand, large and small gravel (Qpf)
		36-39	medium sand with small gravel (Qpf)
		39-40	fine soupy sand (Qpf)
		40-44	red shale
100	25-1922	0-10	fill
		10-48	sand and gravel (Qpf)
		48-501	red rock
101	25-606	0-40	red earth (Qpf)
		40-301	red shale
102	25-39576	0-10	gravel, cobbles (Qpf)
		10-34	sand, gravel (Qpf)
103	25-41523	0-13	fill: sand, gravels
		13-32	red-brown fine-to-coarse sand (Qpf)
104	25-34453		abbreviated log
		0-35	red-brown coarse-to-fine sand, some coarse-to-fine gravel (Qpf)
		35-37	red shale
105	25-39832	0-25	red clay, silt, cobbles, small stone (Qpf)
		25-30	coarse sand, silt, traces clay (Qpf)
106	25-22005	0-63	sand and gravel (Qpf)
		63-200	shale
107	25-37920	0-15	brown medium-to-fine sand, trace clay (Qpf)
		15-23	brown medium-to-fine sand with shale fragments (Qpf)
		23-42	glacial till (Qpf)
108	25-41252	0-5	red clay and gravel (Qpf)
		5-16	fine red dry sand (Qpf)
		16-28	coarse red wet sand (Qpf)
109	25-42261		abbreviated log
		0-6	fill: cinders, rock, black silt
		2-30	red-brown coarse-to-fine sand, trace gravel (Qpf)
110	25-38698		abbreviated log
		0-34	red-brown coarse-to-fine sand, little silt, little coarse-to-fine gravel (Qpf)
111	25-32181	0-3	fill
		3-18	sand, gravel, clay (Qpf)
		18-100	clay (depth anomalous, "clay" may be shale bedrock, not contoured)
112	25-40	0-37	sand and gravel (Qpf)
		37-310	red shale
113	25-876	0-25	earth and clay and sand (Qpf)
		25-303	red sandstone rock
114	25-37055		abbreviated log
		0-30	red-brown fine-to-coarse sand with fine-to-coarse gravel (Qpf)
115	25-8185	0-6	dirt and stones (Qtmr)
		6-114	clay and gravel mixed (Qtmr)
		114-605	red shale
116	25-9037	0-40	overburden (Qtmr)
		40-105	red sandy clay (Qtmr)
		105-350	red rock

117	25-25524	0-55 55-125	overburden (Qtmr) shale
118	25-17070	0-62 62-105	mud gravel (Qtmr) shale
119	25-11464	0-6 6-38 38-60 60-99 99-105 105-110	sandy clay (Qpf) red, brown sand (Qpf) red sandy clay (Qpf) sand, gravel (Qpf) fine reddish sand (Qpf) hard clay to shale (Qws)
			screened 95-104, yield 300 gpm (production well at same site yields 1420 gpm)
120	25-9603	0-18 18-25 25-38 38-40 40-42 42-49 49-59 59-70 70-80 80-90 90-99 at 99	sandy hardpan with rocks (Qpf) fine sand, dirty (Qpf) fine sand (Qpf) silty clay (Qpf) fine sand (Qpf) silty clay (Qpf) fine-to-medium sand with layers of sand and clay with stones (Qpf) sandy clay with stones, some sand seams (Qpf) fine-to-medium sand, some gravel (Qpf) fine-to-coarse sand and some gravel with clay seams (Qpf) coarse sand and gravel (Qpf) shale
			screened 80-100, yield 1600 gpm
121	25-66173	0-4 4-11 11-29 29-44 44-61 61-65 65-73 at 73	fill sand with some clay (Qal) sandy clay (Qpf) sandy clay, some stones, hard clay seams (Qpf) sand and gravel, some fine clay seams (Qpf) sandy clay (Qpf) sand and gravel (Qpf) shale
			screened 58-73, yield 1055 gpm
122	25-40339	0-7 7-82 at 82	brown fine-to-coarse sand, trace silt (Qpf) red-brown fine-to-medium sand, trace silt (Qpf) refusal (probable shale)
123	25-40341	abbreviated log 0-34	red-brown fine-to-medium sand, some silt (Qpf)
124	25-40345	0-62 62-80 80-85	red-brown fine-to-coarse sand, trace silt (Qpf) red-brown weathered shale (Qpf over Qws) red-brown shale
125	25-12130	0-3 3-13 13-35 35-42 42-60 60-68 68-70 70-500	cinders sandy clay (Qal) soupy red sand, fine (Qpf) sand and gravel, clay binder (Qpf) sand and gravel, clean (Qpf) brown sand, medium (Qpf) red hardpan (Qws) red shale
126	25-12131	0-3 3-6 6-9 9-18 18-20 20-24 24-34 34-38 38-42 42-48 48-51 51-54 54-65 65-75	trap rock fill black topsoil (Qal) yellow clay (Qal) brown sandy clay (Qal) soft clay (Qpf) soupy fine sand and clay (Qpf) sand and gravel (Qpf) sand (Qpf) sand and clay (Qpf) gray sand (Qpf) sand and gravel (Qpf) gravel and sand (Qpf) red clay, sand, and gravel (Qpf) red shale and clay (Qws)

		75-501	red shale
127	25-12461	0-3 3-4 4-5 5-14 14-25 25-27 27-36 36-44 44-56 56-63 63-65 65-69 69-500	trap rock fill yellow sand and clay fill black loam (Qal) red clay, sand and gravel (Qal) red clay, fine sand (Qpf) fine red sandy clay, broken rock (Qpf) coarse sand and gravel (Qpf) fine sand, some clay (Qpf) coarse sand, some gravel (Qpf) red clay, soupy sand (Qpf) red hardpan (Qpf) fine sand and red clay (Qpf) red and brown rock
128	25-12119	0-3 3-5 5-12 12-29 29-33 33-40 40-50 50-68 68-500	fill black loam (Qal) brown soupy clay (Qal) red clay, fine sand (Qpf) streak of gray sand and gravel (Qpf) broken rock, hardpan (Qpf) red clay and sand (Qpf) red broken shale red and brown rock
129	25-11822	0-30 30-35 35-40 40-49 49-51 51-63 63-501	fine sand (Qal over Qpf) medium-to-coarse sand (Qpf) fine-to-coarse sand (Qpf) fine-to-coarse sand with clay binder (Qpf) coarse sand and gravel (Qpf) red hardpan (Qpf over Qws) red shale and sandstone
130	25-11816	0-5 5-12 12-38 38-43 43-495	fill dirty sandy gravel (Qal) reddish bulls liver (silt and fine sand, Qpf) red hardpan (Qpf over Qws) red shale
131	25-12120	0-5 5-34 34-58 58-76 76-500	yellow sandy clay (Qpf) red sandy clay, soupy (Qpf) brown medium sand and gravel (Qpf) red hardpan (Qpf over Qws) red shale
132	25-38087	0-13 13-37	miscellaneous fill red-brown fine-to-medium sand, some silt (Qpf)
133	25-6606	0-60 60-125	red clay (Qpf) red rock
134	25-32765	0-50 50-200	sand, gravel (Qpf) red shale
135	25-6981	0-90 90-125	sand and gravel (Qpf) red rock
136	25-38450	0-30 30-160	red sand with some gravel (Qpf) red shale (depth to rock anomalously shallow, not contoured)
137	25-10001	0-4 4-29 29-52 52-59 59-65 65-67 67-351	red soil (Qpf) red clay and sand (Qpf) red sandy hardpan (Qpf) medium-to-coarse sand (Qpf) coarse sand and gravel (Qpf) grayish-blue clay (Qpf or Qws) red, blue, brown shale
138	25-41954	abbreviated log 0-40 40-45	abbreviated log red-brown fine sand, some silt (Qpf) red-brown medium-to-coarse sand (Qpf)

139	25-6839	0-109 109-600	red clay and stones (Qtmr) red shale rock
140	25-30054	0-15 15-40 40-185	mixed red sand with some gravel (Qtmr) soft red shale hard red shale
141	25-66178	0-5 5-65 65-72 72-508	clay (Qtmr) fine sand and gravel (Qtmr, possibly over Qpf) sand, gravel, and clay (Qtmr or Qpf) red rock
142	25-23756	0-70 70-75 75-250	sand and gravel (Qpf) clay (Qpf or Qws) red rock
143	25-10314	0-46 46-49 49-59 59-60 60-61 61-75 75-421	red sandy clay (Qpf) red hardpan (Qpf) red sandy clay (Qpf) medium sand and gravel (Qpf) red fine sand and clay (Qpf) coarse sand and clay (Qpf) red shale
144	25-66175	0-7 7-10 10-15 15-25 25-32 32-34 34-500	sand fill black muck (Qal) soft sandy clay (Qal) red clay with sand (Qpf) fine soupy sand (Qpf) soft red shale with clay (Qws) red shale
145	25-66176	0-3 3-6 6-19 19-30 30-500	fill black loam and clay (Qal) brown mucky clay and some sand (Qal over Qpf) red clay and hardpan (Qpf over Qws) red and brown shale
146	25-11823	0-4 4-15 15-24 24-29 29-500	fill brown soupy sandy clay (Qal) red soupy sandy clay (Qpf) red hardpan (Qws) red and gray shale
147	25-11828	0-13 13-14 14-17 17-27 27-35 35-504	brown sand and fill black topsoil (Qal) gray clay, sand (Qal) red hardpan (Qpf) clay, red shale (Qws) red and gray shale
148	25-35804	0-10 10-12 12-15 15-20	dark reddish-brown very fine sand, 10% silt and clay (Qpf) red-brown silt, 20% clay, trace fine sand (Qpf) dark reddish-brown fine sand, 20% silt, 5% clay (Qpf) Brunswick shale
149	25-43760	abbreviated log 0-20	red fine-to-medium clayey sand (Qpf)
150	25-6538	0-60 60-126	sand (Qpf) red shale
151	25-21406	0-65 65-150	sand and gravel (Qtmr) red shale
152	25-33202	0-5 5-18 18-38 38-150	fill mixed sand and gravel (Qtmr) soft red shale medium hard red shale
153	25-35211	0-40	red-brown silty sand with varying amounts of gravel (Qpf over Qtmr)
154	25-32403	0-5	red silty fine sand with roots and organic mater (fill)

		5-41 41-100	red sand with silt and gravel (Qtmr) red siltstone and shale
155	25-35258	0-24 24-100	gravel, cobbles, sand (Qtmr) red shale
156	25-11139	0-62 62-200	dirty sand and soft red clay (Qpf) red shale
157	25-22131	0-10 10-20	brown sand (Qpf) silt and sand (Qpf)
158	25-10088	0-42 42-98	sand and gravel (Qtmr) shale
159	25-10089	0-46 46-98	sand and gravel (Qtmr) red shale
160	25-30410	abbreviated log 0-14 14-15	brown clay, fine sand, silt (Qpf) weathered shale
161	25-21825	0-20 20-225	sand and gravel (Qpf) shale
162	25-22218	0-26 26-550	sand (Qpf) shale
163	25-7915	0-31 31-250	glacial clay (Qpf) Newark Triassic (shale)
164	25-37152	0-19 19-39	red-brown medium-to-fine sand, trace silt (Qpf) shale
165	25-13107	0-38 38-125	sand and gravel and clay (Qpf) red shale
166	25-42821	abbreviated log 0-18 18-48 48-74	red-brown fine sand, silt, gravel (Qpf) red-brown silty clay (Qpfl) red shale
167	25-15811	0-20 20-38 38-252	sand (Qpf) clay (Qpfl) sandstone
168	25-42230	abbreviated log 0-10 10-33	silty fine-to-medium sand (Qpf) fine-to-medium sand and fine-to-coarse gravel (Qpf)
169	25-42823	abbreviated log 0-16 16-20	fine-to-medium sand (Qpf) silty clay (Qpfl)
170	25-31765	0-7 7-10 10-16	red-brown coarse-to-fine sand, trace silt, trace clay, trace medium-to-fine gravel (Qpf) soft weathered red shale (Qws) red shale
171	25-22761	abbreviated log 0-10 10-15 15-22 22-25 25-27	fine-to-coarse red sand (Qpf) silty red clay (Qpfl) silty red clay with layers of coarse sand (Qpf) medium-to-coarse red sand and gravel (Qpf) red clay (Qpfl)
172	25-14113	0-23 23-35 35-42 42-250	sand (Qpf) clay (Qpfl) soft shale (Qws) shale
173	25-36010	abbreviated log 0-22	red-brown silty fine-to-coarse sand (Qpf)

174	25-845	0-23 23-240	sand and clay (Qpf) red rock
175	25-34998	abbreviated log 0-8 8-12 12-13	red-brown coarse-to-fine sand, trace fine gravel, trace silt (Qpf) red-brown fine sandy silt (Qpfl) shale
176	25-34967	abbreviated log 0-10 10-13 13-30	red-brown and gray silt, sand, and clay (Qpf) red-brown silty clay, trace rock fragments (Qws) red shale
177	25-30767	0-2 65	sandy red soil (Qws) red shale
178	25-21332	0-30 30-125	sand (Qpf) shale
179	25-13108	0-34 34-100	sand, gravel (Qpf) red shale
180	25-13094	0-24 24-100	sand, gravel, clay (Qe over Qpf) red shale
181	25-34911	abbreviated log 0-7 7-8 8-70	medium-to-fine sandy silt (Qe) soft shale shale
182	25-41528	0-9 9-11 11-71	brown to reddish-brown silt, little medium-to-fine sand (Qe) weathered red shale red shale
183	25-40944	0-13 13-18	red-brown clays, silts, and sands (Qe) red-brown shale
184	25-32832	0-2 2-130	brown topsoil (Qws) red shale
185	25-39174	0-8 8-15	reddish-brown fine sand with some silts, trace clay (Qe) reddish-brown fine sand with some silts and trace gravel, trace clay (Qe over Qtl)
186	25-38266	abbreviated log 0-12 12-13	red clay (Qe) hard silt with red shale fragments (Qws)
187	25-15307	0-20 20-30 30-270	sand (Qe) gravel (Qtl) shale
188	25-36487	0-6 6-10 10-14 at 15	sand (Qe) sandy clay (Qe over Qws) clay (Qws) rock
189	25-42184	0-8 8-14 14-41	red-brown medium-to-fine sand (Qe) red-brown silty clay (Qws) red shale
190	25-36752	0-5 5-16 16-60	fine-to-medium gray sand (Qe) reddish-brown decomposed shale (Qws) shale
191	25-37300	0-4 4-25	red-brown silty clay (Qe) weathered red shale
192	25-8633	0-48 48-115	sand (Qe, anomalously thick, not contoured) red shale
193	25-29697	0-4	sand and gravel (Qe over Qws)

		4-155	red shale
194	25-32438	0-5 5-200	overburden (Qe) shale
195	25-39055	0-5 5-20	fill red-brown silt, decomposed Brunswick shale (Qe over Qws)
196	25-20865	0-25 25-130	sand (Qpf) shale
197	25-21907	0-35 35-300	sand and gravel (Qpf) red shale
198	25-30449	0-5 5-14 14-21	brown silt, sandy clay (Qtl) silt, clay, trace of decomposed siltstone in layers of fine sand (Qtl) decomposed siltstone
199	25-33208	0-5 5-15	red-brown silt and clay, trace sand (Qws) weathered to competent Brunswick shale
200	25-37962	0-8 8-10 10-40	red-brown sand, trace silt (Qe) decomposed rock red-brown shale
201	25-41294	0-8 8-43	red-brown sandy silt, little clay (Qe) reddish-brown shale and siltstone
202	25-453	0-25 25-48 48-153	sandy soil, clay, and soft rock (Qe over Qws) soft red shale rock red shale rock
203	25-31729	0-3 3-6 6-17	dark brown silt, sand, clay fill (Qe) red-brown clayey silt and shale fragments (Qws) red shale
204	25-41157	0-6 6-13 13-16	brown medium-to-coarse sand, some silt, trace clay (Qe) red-brown clay (Qws) bedrock
205	25-33082	0-14 14-40	red-brown clay (Qe) red-brown shale
206	25-30822	0-5 5-250	red-brown clayey silt, trace coarse-to-fine sand, trace medium-to-fine gravel (Qws) red shale
207	25-42722	0-2 2-20	red-brown clay and silt, gravel (Qws) red shale
208	25-32484	0-3 3-60	silt, clay, fine sand (Qws) bedrock
209	25-44430	0-3 3-35	clay (Qws) shale
210	25-33273	0-6 6-13 13-50	sands, clay (Qws) weathered rock rock
211	25-35335	0-5 5-6 6-55	red-brown sandy clay (Qe) red-brown clayey silt (Qws) red shale
212	25-38001	0-3 3-18	clay (Qws) red shale
213	25-39731	0-3 3-25	red weathered shale (Qws) sandstone
214	25-38103	abbreviated log 0-6 6-14	red-brown clay, trace silt (Qws) mudstone

215	25-34157	0-3 3-160	silt, clay (Qws) red shale
216	25-40277	0-9 9-17	red-brown sands and silts with fractured rock (Qws) shale
217	25-35819	0-3 3-75	soft weathered shale (Qws) red shale
218	25-31655	0-3 3-6 6-60	red-brown silty clay, trace shale fragments (Qws) soft fractured and seamy shale red shale
219	25-38134	0-5 5-8 8-16	red silt, trace fine gravel, trace fine sand (Qws) red decomposed shale dark-brown siltstone
220	25-36208	abbreviated log 0-6 6-12 12-15	red clayey silt, trace fine gravel (Qws) red decomposed shale red shale and siltstone
221	25-39590	0-60	red shale
222	25-37951	0-2 2-13	gravel with brown fine-to-medium sand (Qws) red shale in various stages of decomposition
223	25-43763	0-3 3-22	silt and sandy clay (Qws) red shale
224	25-40054	0-4 4-18	red-brown silty clay, some medium-to-fine sand (Qws) red shale
225	25-44073	0-3 3-12	red-brown silt and clay with rock fragments (Qws) red-brown shale
226	25-39037	0-7 7-18	red-brown clay, trace sand (Qws) red-brown shale
227	25-33861	0-8 8-165	fill (af) hard red shale and some sandstone
228	25-27597	0-3 3-15	overburden (Qws) shale
229	25-38908	0-6 6-8 at 8	red-brown silty medium-to-fine sand (Qtl) red clay (Qws) rock
230	25-10303	0-5 5-166	earth and clay (Qtl) red shale
231	25-42195	0-2 2-5 5-160	fill soft shale (Qws) New Brunswick shale
232	25-23291	0-15 15-200	sand and gravel (Qrtl) shale
233	25-36589	0-5 5-150	overburden (Qws) red shale
234	25-32437	0-4 4-200	overburden (Qws) red shale
235	25-34699	0-5 5-150	overburden (Qws) red shale
236	25-32274	0-14 14-28	red-brown clay, trace of sand (Qws) red-brown shale
237	25-37647	0-4	overburden (Qws)

		4-3096	red and gray shale
238	25-34578	0-9 9-11 11-22	red clay (Qws) blackish clay (Qws) red shale
239	25-40516	0-4 4-38	clay, red silty shale (Qws) clay, red weathered shale
240	25-43964	0-2 2-170	topsoil (Qws) shale
241	25-39442	0-11 11-600	fill red shale
242	25-32301	0-2 2-200	overburden (Qws) shale
243	25-29472	0-20 20-200	gravel, soil (Qws) shale
244	25-36420	abbreviated log 0-8 8-14 14-30	red clay and soft red shale (Qws) very soft shale, purple-brown with white layers red and purple shale
245	25-41216	0-5 5-38	red silt and fine sand (Qws) red weathered shale
246	25-34835	0-3 3-12	reddish-brown clayey silt, trace medium-to-fine gravel, trace shale fragments (Qws) red shale
247	25-42104	0-7 7-25	clay (Qws) red shale
248	25-40587	0-3 3-15 15-720	topsoil (Qws) soft red shale red shale
249	25-34941	0-7 7-80	clay (Qws) red shale
250	25-42656	0-7 7-19	red-brown silty clay, trace medium-to-fine sand (Qws) red shale
251	25-31440	0-10 10-22	brown medium-to-fine sand, trace clay and silt (Qpf) red-brown decomposed shale
252	25-30188	0-3 3-6 6-15 15-20	reddish sand, clayey silt (fill) black organic-rich clay (Qs) dark gray to black clayey silty sand, some granules (Qs over Qpf) reddish silty clayey sand, becoming more silty and less sandy with depth (Qpf over Qpfl)
253	25-15138	0-50 50-69 69-253	red sand (Qpf) sand and clay seams (Qpfl) red shale
254	25-38794	abbreviated log 0-16	red medium-to-fine sand, some clayey silt (Qpf)
255	25-40906	0-15 15-18	clay (Qpf) bedrock
256	25-32236	abbreviated log 0-16 16-18 18-22	red clayey fine-to-medium sand (Qpf) red clay with shale fragments (Qws) weathered red shale
257	25-32237	0-6 6-65	overburden (Qws) weathered and competent Brunswick shale

258	25-36034	0-5	red clay (Qws)
		5-8	red clay, little fine sand (Qws)
		8-13	red clay, little coarse-to-fine sand (Qws)
		13-36	red shale
259	25-34678	0-3	fill, sands (Qpf)
		3-5	gray clay, little silt (Qpf)
		5-8	red-brown sands, silt (Qpf)
		8-10	shale and sandstone
260	25-35134	0-6	multicolored silty clay (Qpf)
		6-18	soft red shale
261	25-41534	abbreviated log	
		0-11	red-brown sandy silt, some clay (Qws)
		11-39	shale and siltstone
262	25-37974	abbreviated log	
		0-18	red-brown clayey silt with some fine sand (Qws)
		18-20	weathered red-brown shale
263	25-23710	0-12	brown medium-to-fine sand with trace of gravel and silt (Qws)
		12-15	red clayey silt with trace of fine gravel (Qws)
		15-60	decomposed red shale rock
264	25-31208	abbreviated log	
		0-9	red-brown clayey silt, some rock fragments, trace sand (Qws)
		9-65	weathered shale
265	26-20026	0-11	fine and coarse sand (Tp)
		11-14	weathered shale
		14-35	competent rock
266	25-44485	0-6	orange-brown to red-brown silts with fine sands and pea-size gravel (Tp)
		6-20	red-brown clayey silts grading into a highly weathered shale
267	25-40130	0-30	reddish-brown moist to wet till (Tp)
		30-35	weathered rock (Qws)
		35-55	red shale
268	25-41865	0-5	fill materials
		5-10	overburden (Tp)
		10-35	weathered shale and siltstone
		35-55	shale
269	25-40782	0-7	sand, clay, gravel (Qws)
		7-8	broken shale
		8-34	red shale
270	25-35250	0-2	red-brown clay (Qws)
		2-5	red-brown soft weathered shale
		5-14	red shale
271	25-43511	0-5	overburden (Qws)
		5-177	red shale
272	25-39347	0-8	reddish-brown silt and clay (Qws)
		8-75	red shale
273	25-38625	0-2	red-brown clay (Qws)
		2-25	red shale
274	25-40980	0-19	red fractured shale
275	25-34581	0-5	red silt clay (Qws)
		5-7	modeled red clay with gray streaks (Qws)
		7-10	weathered shale
		10-22	red shale
276	25-1777	0-5	red sandy clay (Qws)
		5-15	red hardpan (Qws)
		15-27	red hard clay (Qws)

		27-86	red hard sand rock
277	25-38352	0-8 8-9 9-45	red-brown silty clay (Qws) red-brown weathered shale Brunswick shale
278	25-38327	0-5 5-117	fine sand, some silt, clay (Qws) red shale
279	25-35218	0-3 3-16	firm, red homogeneous sandy gravel with clay mixture (Qws) red weathered shale
280	25-33776	abbreviated log 0-10 10-18	red clay and gravel (Qws) gray and red shale
281	25-31264	abbreviated log 0-9 9-18	red silty clay, trace medium-to-fine sand (Qws) red and gray shale
282	25-41087	0-5 5-20	red-brown silty clay (Qws) red shale
283	25-38723	abbreviated log 0-18	red-brown silty clay, with some sand below 6 feet and small pieces of bedrock below 12 feet (Qws)
284	25-37260	abbreviated log 0-24	red silty sand with fine-to-medium quartz gravel (Tp)
285	25-24514	abbreviated log 0-25	orange-brown, red-brown medium-to-fine sand and clayey silt, little medium-to-fine gravel (Tp)
286	25-40796	abbreviated log 0-18 18-24 24-30	red-brown, yellow sand, little silt and clay, some gravel (Tp) red-brown silt and clay, some gravel (Tp over Qws) weathered gravel-sized shale chips (shale)
287	25-42983	abbreviated log 0-25	red-brown, orange-brown clayey sand to silty sand, some quartz gravel (Tp)
288	25-26687	0-8 8-30 30-38	brown clayey silt (Tp) red silty clay (Tp) red clayey silt, some gravel (Tp)
289	25-34370	0-18 at 18	red-brown clay, silt, trace medium-to-fine sand, trace fine gravel (Tp) weathered shale
290	25-40312	0-11 11-20	small gravels and fine tan sand (Tp) red shale
291	25-40276	0-20	red-brown silty clay and sandstone gravels throughout (Tp)
292	25-29695	0-40 40-50 50-56 56-170	red-brown medium-to-fine sand, trace fine gravel, trace silt (Qpf) gray medium-to-fine sand, trace silt (Qpf) gray coarse-to-fine sand, trace fine gravel (Qpf) red shale
293	25-29889	0-5 5-45 45-145	fill red sand (Qpf) red shale
294	N25-34-684	0-3 3-10 10-13 13-23 23-24	topsoil, brown sand and gravel (Qpf) red clay, fine sand and gravel (Qpf or Qtmr) red clay with some sand and gravel (Qpf or Qtmr) red clay and fine sand (Qpf) red shale
295	N25-34-595	0-26 at 26	sandy clay (Qpf) red shale
296	N25-34-352	82 feet to rock	

297	25-40659	0-3 3-12	tight red sand (Qe) coarse brown sand (Qe)
298	25-41208	0-46	red sandstone
299	25-10488	0-47 47-502	sand and clay (Qpf) red shale
300	25-7004	0-35 35-220	clay (Qpf) red shale

¹Identifiers of the form 25-xxxx and 26-xxxx are well permit numbers issued by the N. J. Department of Environmental Protection, Bureau of Water Allocation. Identifiers of the form Nxx-xx-xxx are N. J. Atlas Sheet grid coordinates of entries in the N. J. Geological Survey permanent note collection.

²The depth interval (in feet below land surface) and driller's or logger's description of materials penetrated in that interval are provided. Inferred map units and comments by author are in parentheses. Some inferred map units may not match the map and sections precisely due to scaling and lack of detail in drillers' descriptions. All descriptions are reproduced as they appear in the original source, except for minor format, punctuation, and spelling changes. Logs identified as "abbreviated" have been condensed for brevity. Many bedrock descriptions have been condensed; these are not identified as abbreviated. For wells completed in surficial materials, the screened interval and yield (in gallons per minute, gpm) are reported beneath the log. Notation "not contoured" indicates that the bedrock-surface elevation reported in the well log was not considered when constructing bedrock-surface elevation contours because it was anomalously deep or shallow compared to other nearby logs. Map units are inferred from the known extent of materials at the surface and from known depositional settings, in addition to the drillers' descriptions.