



SUPPLEMENTARY MATERIAL TO
**New empirical correlation for oil flowrate prediction through
chokes**

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TABLE S-I. Filtered flowrate measurement data used for developing new correlation

Row	Reservoir	Well No.	C_s , 1/64 in	P_{wh} , Psig	R , Std. ft ³ STB ⁻¹	Q_m , STB d ⁻¹
1	S	A1	24	770	439	1290
2	S	A1	32	700	439	2100
3	S	A1	40	630	439	2900
4	S	A2	24	770	439	1290
5	S	A2	32	700	439	2100
6	S	A2	40	620	439	2850
7	S	A3	24	420	439	850
8	S	A3	32	290	439	1170
9	S	A3	40	200	439	1230
10	S	A4	32	290	439	1000
11	S	A4	24	500	439	950
12	S	A4	32	330	439	1200
13	S	A5	24	1100	439	1800
14	S	A5	32	1000	439	2500
15	S	A5	40	880	439	3700
16	S	A6	20	250	439	470
17	S	A6	24	215	439	540
18	S	A7	28	423	292	1539
19	S	A7	32	393	292	1858
20	S	A8	32	280	292	1350
21	S	A9	28	550	292	1570
22	S	A9	32	470	292	1740
23	S	A9	40	350	292	1890
24	S	A10	32	260	292	1230
25	S	A11	28	830	292	2400
26	S	A11	32	770	292	2700
27	S	A11	40	650	292	3700

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TABLE S-I. Continued

Row	Reservoir	Well No.	C_s , 1/64 in	P_{wh} , Psig	R , Std. ft ³ STB ⁻¹	Q_m , STB d ⁻¹
28	S	A12	24	493	361.69	997
29	S	A12	32	333	361.69	1382
30	S	A13	24	670	361.69	1460
31	S	A13	32	600	361.69	2335
32	S	A13	40	510	361.69	3170
33	S	A14	32	773	439	2703
34	S	A15	40	950	361	4995
35	S	A15	32	1010	361	3640
36	S	A16	32	993	361	3400
37	S	A16	28	1025	361	3020
38	S	A16	40	900	361	4690
39	S	A17	32	380	292	1575
40	S	A18	32	600	292	2150
41	S	A18	28	640	292	1850
42	S	A19	32	377	292	1488
43	S	A20	32	650	292	2900
44	S	A21	24	345	292	840
45	S	A22	32	470	292	2000
46	S	A23	32	455	292	1580
47	S	A24	32	635	439	1990
48	S	A24	24	680	439	1530
49	S	A24	40	590	439	3050
50	S	A25	28	310	361	910
51	S	A26	16	675	361	645
52	S	A26	24	493	361	997
53	S	A26	32	333	361	1382
54	S	A27	24	775	439	1294
55	S	A27	32	702	439	2117
56	S	A27	40	622	439	2856
57	S	A28	24	754	439	1290
58	S	A28	32	705	439	2165
59	S	A28	40	635	439	2913
60	S	A28	24	1135	439	1800
61	S	A28	32	1016	439	2500
62	S	A28	40	883	439	3700
63	S	A29	24	505	439	950
64	S	A29	32	336	439	1220
65	S	A30	24	320	439	645
66	S	A31	32	855	439	2934
67	S	A32	32	609	439	2090
68	S	A32	40	450	439	2354
69	S	A33	24	675	361	1475
70	S	A33	32	602	361	2335
71	S	A33	40	513	361	3170
72	S	A33	48	460	361	3658
73	S	A34	24	428	439	865

TABLE S-I. Continued

Row	Reservoir	Well No.	C_s , 1/64 in	P_{wh} , Psig	R , Std. ft ³ STB ⁻¹	Q_m , STB d ⁻¹
74	S	A35	32	655	439	2350
75	S	A35	40	525	439	2880
76	S	A36	32	350	439	1204
77	S	A37	40	607	292	3045
78	S	A38	40	379	292	2047
79	S	A38	32	473	292	1778
80	S	A39	28	554	292	1606
81	S	A40	24	254	439	527
82	S	A41	24	442	439	888
83	S	A41	32	256	439	1090
84	S	A42	28	269	439	839
85	S	A43	24	610	439	1147
86	S	A43	28	515	439	1378
87	S	A43	32	430	439	1530
88	S	A44	24	365	292	840
89	S	A44	28	342	292	1158
90	S	A45	32	297	292	1295
91	S	A46	24	321	439	673
92	S	A47	16	487	439	417
93	S	A47	24	384	439	746
94	S	A47	32	306	439	1060
95	S	A48	32	265	439	1000
96	S	A48	16	404	439	420
97	S	A48	36	421	439	2092
98	S	A48	40	374	439	1778
99	G	A49	36	1125	818	2753
100	G	A49	40	1040	818	3132
101	G	A49	44	967	818	3427
102	G	A50	36	1340	818	3360
103	G	A50	38	1300	818	3680
104	G	A50	44	1190	818	4540
105	G	A50	48	1090	818	4840
106	G	A51	20	1040	818	980
107	G	A51	24	915	818	1270
108	G	A51	28	840	818	1500
109	G	A52	28	1441	818	2090
110	G	A52	32	1390	818	2630
111	G	A52	36	1343	818	3142
112	G	A52	40	1247	818	3758
113	G	A53	24	1120	818	1359
114	G	A53	32	976	818	1860
115	G	A53	40	847	818	2429
116	G	A54	32	650	818	1390
117	G	A55	32	804	818	1728
118	K	A56	32	700	915	1600
119	K	A57	24	490	915	700

TABLE S-I. Continued

Row	Reservoir	Well No.	C_s , 1/64 in	P_{wh} , Psig	R , Std. ft ³ STB ⁻¹	Q_m , STB d ⁻¹
120	K	A58	24	1160	915	1600
121	K	A58	28	1120	915	2040
122	K	A58	32	1070	915	2500
123	K	A58	36	1030	915	2900
124	K	A59	24	1570	915	1970
125	K	A59	28	1520	915	2590
126	K	A59	32	1450	915	3280
127	K	A59	36	1370	915	3760
128	K	A60	24	495	915	700
129	K	A60	32	722	915	1600
130	K	A60	32	830	915	1560
131	K	A60	48	550	915	2230
132	F	A61	12	1783	1678	509
133	F	A61	16	1304	1678	641
134	F	A61	32	379.5	1678	848
135	F	A61	24	527.88	1678	679
136	F	A61	28	464.46	1678	773
137	F	A62	12	3869	1678	972
138	F	A62	16	3040	1678	1380
139	F	A62	20	2367	1678	1645
140	F	A62	24	1826	1678	1826
141	F	A63	20	1315	1090	1004
142	F	A63	24	1113	1090	1387

TABLE SII. Filtered flowrate measurement data used for testing and comparison of new correlation with older prominent ones

Row	Reservoir	Well No.	C_s , 1/64 inch	P_{wh} , Psig	R , Std. ft ³ STB ⁻¹	Q_m , STB d ⁻¹
1	S	B1	24	320	439	670
2	S	B2	16	485	439	415
3	G	B3	36	1325	818	3330
4	S	B4	32	1002	361	3165
5	K	B5	32	1050	915	2460
6	K	B5	36	960	915	2750
7	F	B6	32	365	1678	810
8	F	B6	24	511	1678	660
9	S	B7	32	295	361	1230
10	S	B8	24	790	439	1310
11	S	B9	32	615	292	2195
12	S	B9	28	665	292	1910