

Downhole 1000'
RRGE #1

607314-4

1720	575.872	
1730	.865	✓
1740	.860	
1750	.862	
1800	.855	✓
1810	.854	
1820	.846	
1830	.845	✓
1840	.843	
1850	.833	
1900	.820	✓
1910	.829	
1920	Production Started	RRGE #2 916 gpm
1920	.825	→ assumed zero pressure
1930	.822	✓
1940	.829	
1950	.824	
2000	.815	✓
2010	.800	
2020	.795	
2030	.783	✓
2040	.770	
2050	.761	✓
2100	.752	
2110	.742	
2120	.736	
2130	.729	✓
2140	.731	
2150	.715	✓
2200	.706	✓
2210	.705	
2220	.707	✓
2230	.713	✓
2240	.703	
2250	.690	
2300	.683	
2310	.694	→ Leakage in flange stopped
2320	.801	
2330	.712	✓
2340	.694	
2350	.706	

9/15

0000	.685	✓
0010	.679	
0020	.674	✓
0030	.659	✓
0040	.654	
0050	.650	
0100	.646	✓
0110	.645	

0120 .641
 0130 .639 ✓
 0140 .633
 0150 .627
 0200 .622 ✓
 0210 .615
 0220 .611
 0230 .608 ✓
 0240 .604
 0250 .601
 0300 .593 ✓
 0310 .585
 0320 .582
 0330 .581 ✓
 0340 .575
 0350 .570
 0400 .565 ✓
 0410 .556
 0420 .550
 0430 .545 ✓
 0440 .541
 0450 .530
 0500 .518 ✓
 0510 .508
 0520 .497
 0530 .493 ✓
 0540 .487
 0550 .479
 0600 .471 ✓
 0610 .459
 0620 .448
 0630 .439 ✓
 0640 .428
 0650 .419
 0700 .408 ✓
 0710 .401
 0720 .398
 0730 .387 ✓
 0740 .381
 0750 .361
 0800 .354 ✓
 0810 .350
 0820 .343
 0830 .337 ✓
 0840 .326
 0850 .314
 0900 .308 ✓
 0910 .303
 0920 .296
 0930 .283 ✓

0940 .276
 0950 .269
 1000 .263 ✓
 1010 .260
 1020 .255
 1030 .249 ✓
 1040 .2466
 1050 .2409
 1100 .2359 ✓
 1110 .2321
 1120 .2271
 1130 .2243 ✓
 1140 .2219
 1150 .2172
 1200 .2163 ✓
 1210 .2147
 1220 .2130
 1230 .2119 ✓
 1240 .2117
 1250 .2106
 1300 .2096 ✓
 1310 .2063
 1320 .2046
 1330 .2026 ✓
 1340 .1987
 1350 .1972
 1400 .1958 ✓
 1410 .2000
 1420 .2011
 1430 .2009 ✓
 1440 .2025
 1450 .2055 ✓
 1500 .2096 ✓
 1510 .2080
 1520 .2069
 1530 .2081 ✓
 1540 .2092
 1550 .2077
 1600 .2061 ✓
 1630 .2063 ✓
 1700 .1947 ✓
 1730 .1863 ✓
 1800 .1724 ✓
 1830 .1554 ✓
 1900 .1449 ✓
 1930 .1267 ✓
 2000 .1080 ✓
 2030 .0758 ✓
 2100 .0632 ✓
 2130 .0364 ✓

9/16

9/17

2200	,0238 ✓
2230	,0167 ✓
2300	
2330	,0048 ✓
0000	,0179 ✓
0030	,0055 ✓
0100	,0109 ✓
0130	,0017 ✓
0200	,0008 ✓
0230	,0046 ✓
0300	,0104 ✓
0330	,0136 ✓
0400	,0090 ✓
0430	5174. ,9952 ✓
0500	,9855 ✓
0530	,9716 ✓
0600	,9547 ✓
0630	,9323 ✓
0700	,9064 ✓
0730	,8995 ✓
0800	,8607 ✓
0830	,8302 ✓
0900	,8220 ✓
0930	,7915 ✓
1000	,779 ✓
1030	,757 ✓
1100	,747 ✓
1130	,734 ✓
1200	,737 ✓
1230	,728 ✓
1300	,733 ✓
1330	,733 ✓
1400	,732 ✓
1430	,744 ✓
1500	,751 ✓
1530	,7452 ✓
1600	,7469 ✓
1630	,7521 ✓
1700	,7587 ✓
1730	,7544 ✓
1800	,7318 ✓
1830	,7303 ✓
1900	,7156 ✓
1930	,6976 ✓
2000	,6867 ✓
2030	,6605 ✓
2100	,6421 ✓
2130	,6285 ✓
2200	,6142 ✓
2230	,6022 ✓

2300	,5881 ✓
2330	,5745 ✓
0000	,5621 ✓
0030	,5768 ✓
0100	,5797 ✓
0130	,5872 ✓
0200	,5835 ✓
0230	,5873 ✓
0300	,5899 ✓
0330	,5880 ✓
0400	,5914 ✓
0430	,5940 ✓
0500	,5875 ✓
0530	,5836 ✓
0600	,5620 ✓
0630	,5592 ✓
0700	,542 ✓
0730	,523 ✓
0800	,505 ✓
0830	,472 ✓
0900	,455 ✓
0930	,429 ✓
1000	
1030	
1100	
1130	
1200	,3511 ✓
1230	,3469 ✓
1300	,3443 ✓
1330	,4588 ?
1400	
1430	,3628 ✓
1500	,3741 ✓
1530	,384 ✓
1600	,393 ✓
1630	,408 ✓
1700	,409 ✓
1730	,391 ✓
1800	,392 ✓
1830	,381 ✓
1900	,373 ✓
1930	,361 ✓
2000	,351 ✓
2030	,342 ✓
2100	,329 ✓
2130	,319 ✓
2200	,315 ✓
2230	,295 ✓
2300	,285 ✓
2330	,280 ✓

Downhole 1000'

4

9/18	0000	284	✓
	0030	289	✓
	0100	305	✓
	0130	318	✓
	0200	339	✓
	0230	360	✓
	0300	379	✓
	0330	402	✓
	0400	420	✓
	0430	428	✓
	0500	435	✓
	0530	450	✓
	0600	447	✓
	0630	447	✓
	0700	441	✓
	0730	429	✓
	0800	418	✓
	0830	399	✓
	0900	391	✓
	0930	377	✓
	1000	366	✓
	1030	357	✓
	1100	336	✓
	1130	323	✓
	1200	319	✓
	1230	325	✓
	1300	347	✓
	1330	356	✓
	1400	372	✓
	1430	379	✓
	1500	386	✓
	1530	448	②
	1600	451	✓
	1630	480	✓
	1700	487	✓
	1730	499	✓
	1800	509	✓
	1830	517	✓
	1900	509	✓
	1930	510	✓
	2000	500	✓
	2030	483	✓
	2100	486	✓
	2130	478	✓
	2200	453	✓
	2230	455	✓
	2300	445	✓
	2330	445	✓

9/19	0000	435	✓
	0030	444	✓
	0100	462	✓
	0130	472	✓
	0200	489	✓
	0230	508	✓
	0300	517	✓
	0330	549	✓
	0400	572	✓
	0430	581	✓
	0500	598	✓
	0530	625	✓
	0600	634	✓
	0630	641	✓
	0700	590	✓
	0730	610	✓
	0800	606	✓
	0830	611	✓
	0900	606	✓
	0930	585	✓
	1000	568	✓
	1030	562	✓
	1100	552	✓
	1130	519	✓
	1200	534	✓
	1230	538	✓
	1300	532	✓

9/20	1800	573, 783	J
	1830	773	J
	1900	762	J
	1930	780	J
	2000	810	J
	2030	880	J
	2100	880	J
	2130	864	J
	2200	859	J
	2230	838	J
	2300	779	J
	2330	726	J

Production Started at RGE 2

9/21	1800	574,141 ✓
	1830	,124 ✓
	1900	,114 ✓
	1930	,099 ✓
	2000	,079 ✓
	2030	,062 ✓
	2100	,039 ✓
	2130	,003 ✓
	2200	573,958 ✓
	2230	,918 ✓
	2300	,883 ✓
	2330	,848 ✓

9/22	0000	,820 ✓
	0030	,790 ✓
	0100	,768 ✓
	0130	,749 ✓
	0200	,739 ✓
	0230	,735 ✓
	0300	,736 ✓
	0330	,741 ✓
	0400	,750 ✓
	0430	,760 ✓
	0500	,768 ✓
	0530	,776 ✓
	0600	,787 ✓
	0630	,793 ✓
	0700	,801 ✓
	0730	,804 ✓
	0800	,795 ✓
	0830	,790 ✓
	0900	,781 ✓
	0930	,769 ✓
	1000	,744 ✓
	1030	,721 ✓
	1100	,701 ✓
	1130	,675 ✓
	1200	,651 ✓
	1230	,633 ✓
	1300	,619 ✓
	1330	,599 ✓
	1400	,605 ✓
	1430	,599 ✓
	1500	,602 ✓
	1530	,606 ✓
	1600	
	1630	,624 ✓
	1700	,625 ✓
	⇒ 1740	,645 ✓
	1800	,639 ✓
	⇒ 1840	,648 ✓
	1900	,654 ✓
	1930	,641 ✓
	⇒ 2010	,646 ✓
	⇒ 2040	,636 ✓
	⇒ 2110	,672 ✓
	⇒ 2140	,599 ✓
	⇒ 2210	,582 ✓
	⇒ 2240	,553 ✓
	2310	,530 ✓
	2340	,503 ✓

Downhole 1000'

(corrected)

6
8 psi less than instr
Corrected

9/23	0010	.489 ✓
	0040	.464 ✓
	0110	.453 ✓
	0140	.449 ✓
	0210	.447 ✓
	0240	.439 ✓
	0310	.447 ✓
	0340	.437 ✓
	0410	.445 ✓
	0440	.456 ✓
	0510	.476 ✓
	0540	.487 ✓
	0610	.498 ✓
	0640	.505 ✓
	0710	.499 ✓
	0740	.513 ✓
	0810	.522 ✓
	0840	.517 ✓
	0910	.486 ✓
	0940	.474 ✓
	1010	.430 ✓
	1040	.435 ✓
	1110	.426 ✓
	1140	
	1210	.388 ✓
	1240	.382 ✓
	1310	.375 ✓
	1340	.345 ✓
	1410	.335 ✓
	1440	.337 ✓
	1510	.336 ✓
	1540	.334 ✓
	1610	.334 ✓
	1730	.355 ✓
	1900	.372 ✓
	1930	.385 ✓
	2030	.385 ✓
→	2220	.351 ✓
→	2243	.308 ✓

9/24	1430	573.243 ✓
	1500	.213 ✓
	1530	.203 ✓
	1600	.217 ✓
	1630	.190 ✓
	1700	.193 ✓
	→1750	.211 ✓
	→1820	.195 ✓
	1900	.199 ✓
	1930	.195 ✓
	2000	.202 ✓
	2030	.217 ✓
	2100	.248 ✓
	2130	.236 ✓
	2200	.273 ✓
	2230	.375 ✓
	2320	.312 ✓



9/25	0020	573,175	/
	0120	,133	✓
	0220	,077	✓
	0320	,045	✓
	0350	,033	✓
	0420	,057	✓
	0520	,041	✓
	0620	,031	✓
	0720	,055	✓
	0750	,057	✓
	0820	,054	✓
	0850	,049	✓
	0920	,046	✓
	0950	,040	✓
	1020	,031	✓
	1050	,022	✓
	1120	,006	✓
	1150	572. 996	✓
	1220	,974	✓
	1250	,971	✓
	1320	,951	✓
	1350	,942	✓
	1420	,932	✓
	1450	,923	✓
	1520	,915	✓
	1550	,911	✓
	1620	,905	✓
	1650	,911	✓
	1720	,905	✓
	1750	,913	✓
	1820	,916	✓
	1850	,925	✓
	1920	,921	✓
	1950	,923	✓
	2020	,924	✓
	2050	,915	✓
	2120	,912	✓
	2150	,910	✓
	2220	,898	✓
	2250	,885	✓
	2320	,872	✓
	2350	,850	✓

9/26	0020	,829	✓
	0050	,815	✓
	0120	,789	✓
	0150	,779	✓
	0220	,767	✓
	0250	,758	✓
	0320	,744	✓
	0350	,739	✓
	0420	,743	✓
	0450	,731	✓
	0520	,733	✓
	0550	,737	✓
	0620	,744	✓
	0650	,748	✓
	0720	,770	✓
	0750	,777	✓
	0820	,787	✓
	0850	,789	✓
	0920	,788	✓
	0950	,787	✓
	1020	,785	✓
	1050	,781	✓
	1120	,776	✓
	1150	,764	✓
	1220	,759	✓
	1250	,753	✓
	1320	,750	✓
	1350	,732	✓
	1420	,713	✓
	1450	,709	✓
	1520	,698	✓
	→ 1607	,697	✓
	→ 1620	,692	✓
	1650	,692	✓
	1720	,689	✓
	1750	,693	✓
	1820	,689	✓
	1850	,692	✓
	1920	,695	✓
	1950	,697	✓
	2020	,696	✓
	2050	,700	✓
	2120	,700	✓
	2150	,695	✓
	2220	,680	✓
	2250	,670	✓
	? 2300	2320	✓
	2350	,671	✓

9/27	0020	.656	✓
	0050	.642	✓
	0120	.621	✓
	0150		
	0220	.603	✓
	0250	.587	✓
	0320		
	0350	.568	✓
	0420	.568	✓
	0450	.571	✓
	0520	.570	✓
	0550	.600	✓
	0620		
	0650		
	0720		
	0750	.609	✓

correction
encl

1400	576.482	(?)	
1430	572.792		✓
1500	.746		✓
1530	.735		✓
1600	.722		✓
1630	.716		✓
1700	.708		✓
1730	.704		✓
1800	.693		✓
1830	.696		✓
1900	.691		✓
1930	.687		✓
2000	.683		✓
2030	.696		✓
2100	.700		✓
2130	.695		✓
2200	.699		✓
2230	.686		✓
2300	.667		✓
2330	.667		✓

↓ corrected for new
N & R, but not
corrected for shift.

Downhole 1000'

9

9/28	0000	.692 ✓
	0030	.705 ✓
	0100	.712 ✓
	0130	.728 ✓
	0200	.707 ✓
	0230	.689 ✓
	0300	.735 ✓
	0330	.753 ✓
	0400	.706 ✓
	0430	.679 ✓
	0500	.667 ✓
	0530	.649 ✓
	0600	.639 ✓
	0630	.612 ✓
	0700	.622 ✓
	0730	.592 ✓
	0800	.591 ✓
	0830	.595 ✓
	0900	.583 ✓
	0930	.588 ✓
	1000	.587 ✓
	1030	.586 ✓
	1100	.584 ✓
	1130	.584 ✓
	1200	.579 ✓
	1230	.598 ✓
	1300	.596 ✓
	1330	.591 ✓
	1400	.582 ✓
	1430	.582 ✓
	1500	.577 ✓
	1530	.567 ✓
	1600	.564 ✓
	1630	.553 ✓
	1700	.539 ✓
	1730	.531 ✓
	1800	.529 ✓
	1830	.519 ✓
	1900	.511 ✓
	1930	.509 ✓
	2000	.510 ✓
	2030	.516 ✓
	2100	.510 ✓
	2130	.510 ✓
	2200	.514 ✓
	2230	.508 ✓
	2300	.509 ✓
	2330	.506 ✓

9/29	0000	.505 ✓
	0030	.502 ✓
	0100	.501 ✓
	0130	.498 ✓
	0200	.484 ✓
	0230	.482 ✓
	0300	.470 ✓
	0330	.457 ✓
	0400	.442 ✓
	0430	.427 ✓
	0500	.419 ✓
	0530	.402 ✓
	0600	.390 ✓
	0630	.379 ✓
	0700	.370 ✓
	0730	.357 ✓
	0800	.347 ✓
	0830	.343 ✓
	0900	.346 ✓
	0930	.337 ✓
	→0950	.342 ✓
	1020	.342 ✓
	1050	.350 ✓
	1120	.354 ✓
	1150	.358 ✓
	1220	.367 ✓
	1250	.378 ✓
	1320	.386 ✓
	1350	.394 ✓
	1420	.396 ✓
	1450	.398 ✓
	1520	.392 ✓
	1550	.389 ✓
	1620	.381 ✓
	1650	.378 ✓
	1720	.369 ✓
	1750	.361 ✓
	1820	.362 ✓
	1850	.347 ✓
	1920	.337 ✓
	1950	.337 ✓
	2020	.332 ✓
	2050	.328 ✓
	2120	.326 ✓
	2150	.328 ✓
	2220	.324 ✓
	2250	.320 ✓
	2320	.331 ✓
	2350	.331 ✓

9/30	0020	.335	/
	0050	.337	/
	0120	.345	/
	0150	.345	/
	0220	.342	/
	0250	.337	/
	0320	.340	/
	0350	.325	/
	0420	.316	/
	0450	.306	/
	0520	.293	/
	0550	.283	/
	0620	.270	/
	0650	.247	/
	0720	.237	/
	0750	.214	/
	0820	.200	/
	0850	.189	/
	0920	.190	/
	0950	.185	/
	1020	.184	/
	1050	.184	/
	1120	.189	/
	1150	.191	/
	1220	.211	/
	1250	.211	/
	1320	.226	/
	1350	.231	/
	1420	.226	/
	1450	.240	/
	1520	.244	/
	1550	.248	/
	1620	.253	/
	1650	.243	/
	1720	.235	/
	1750	.228	/
	1820	.216	/
	1850	.215	/
	1920	.194	/
	1950	.185	/
	2020	.178	/
	2050	.163	/
	2120	.154	/
	2150	.137	/
	2220	.149	/
	2250	.150	/
	2320	.157	/
	2350	.157	/

10/1	0020	.173	/
	0050	.176	/
	0120	.186	/
	0150	.191	/
	0220	.202	/
	0250	.195	/
	0320	.216	/
	0350	.203	/
	0420	.202	/
	0450	.205	/
	0520	.184	/
	0550	.166	/
	0620	.154	/
	0650	.130	/
	0720	.108	/
	0750	.098	/
	0820	.061	/
	0850	.050	/
	0920	.041	/
	0950	.031	/
	1020	.016	/
	1050	.020	/
	1120	.028	/
	1150	.022	/
	1220	.034	/
	1250	.039	/
	1320	.053	/
	1350	.075	/
	1420	.084	/
	1450	.091	/
	1520	.099	/
	1550	.106	/
	1620	.103	/
	1650	.106	/
	1720	.104	/
	1750	.109	/
	1820	.1093	/
	1850	.1070	/
	1920	.1041	/
	1950	.1046	/
	2020	.1040	/
	2050	.1023	/
	2120	571.997	/
	2150	.991	/
	2220	.992	/
	2250	.995	/
	2320	.999	/
	2350	.984	/

Downhole 1000'

10/2	0620	572.001	✓
	0050	,018	✓
	0120	,026	✓
	0150	,048	✓
	0220	,034	✓
	0250	,065	✓
	0320	,067	✓
	0350	,075	✓
	0420	,076	✓
	0450	,086	✓
	0520	,081	✓
	0550	,068	✓
	0620	,049	✓
	0650	,044	✓
	0720	,019	✓
	0750	,000	✓
	0820	571.977	✓
	0850	,932	✓
	0920	,931	✓
	0950	,923	✓
	1020	,896	✓
	1050	,903	✓
	1120	,884	✓
	1150	,869	✓
	1220	,890	✓
	1250	,899	✓
	1320	,913	✓
	1350	,915	✓
	1420	,937	✓
	1450	,946	✓
	1520	,956	✓
	1550	,982	✓
	1620	,982	✓
	1650	572.005	✓
	1720	571.989	✓
	1750	,984	✓
	1820	,991	✓
	1850	,989	✓
	1920	,952	✓
	1950	,940	✓
	2020	,920	✓
	2050	,903	✓
	2120	,872	✓
	2150	,864	✓
	2270	,829	✓
	2250	,935	✓
	2320	,840	✓
	2350	,820	✓

10/3	0020	,839	✓
	0050	,840	✓
	0120	,855	✓
	0150	,862	✓
	0220	,886	✓
	0250	,904	✓
	0320	,910	✓
	0350	,928	✓
	0420	,954	✓
	0450	,947	✓
	0520	,951	✓
	0550	,954	✓
	0620	,963	✓
	0650	,923	✓
	0720	,919	✓
	0750	,918	✓
	0820	,877	✓
	0850	,863	✓
	0920	,838	✓
	0950	,811	✓
	1020	,790	✓
	1050	,757	✓
	1120	,757	✓
	1150	,762	✓
	1220	,747	✓
	1250	,763	✓
	1320	,763	✓
	1350	,801	✓
	1420	,784	✓
	1450	,812	✓
	1520	,824	✓
	1550	,834	✓
	1620	,881	✓
	1650	,874	✓
	1720	,846	✓
	1750	,874	✓
	1820	,864	✓
	1850	,856	✓
	1970	,845	✓
	1950	,814	✓
	2020	,802	✓
	2050	,787	✓
	2120	,768	✓
	2150	,754	✓
	2220	,724	✓
	2250	,700	✓
	2320	,684	✓
	2350	,686	✓

Good N & R, not shift corrected



10/4	0020	.667	✓
	0050	.672	✓
	0120	.682	✓
	0150	.707	✓
	0220	.698	✓
	0250	.723	✓
	0320	.744	✓
	0350	.777	✓
	0420	.808	✓
	0450	.849	✓
	0520	.818	✓
	0550	.849	✓
	0620	.846	✓
	0650	.847	✓
	0720	.812	✓
	0750	.831	✓
	0820	.808	✓
	0850	.776	✓
	0920	.762	✓
	0950	.732	✓
	1020	.720	✓
	1050	.687	✓
	1120	.657	✓
	1150	.646	✓
→	1220	.665	✓
	1250	.653	✓
	1320	.633	✓
	1350	.646	✓
	1420	.650	✓
	1450	.673	✓
	1520	.687	✓
	1550	.714	✓
	1620	.716	✓
	1650	.740	✓
	1720	.760	✓
	1750	.739	✓
	1820	.758	✓
	1850	.770	✓
	1920	.757	✓
	1950	.738	✓
	2070	.718	✓
	2050	.706	✓
	2120	.683	✓
	2150	.643	✓
	2220	.643	✓
	2250	.596	✓
	2320	.594	✓
	2350	.572	✓

10/5	0020	.561	✓
	0050	.547	✓
	0120	.558	✓
	0150	.573	✓
	0220	.564	✓
	0250	.599	✓
	0320	.615	✓
	0350	.619	✓
	0420	.657	✓
	0450	.682	✓
	0520	.676	✓
	0550	.683	✓
	0620	.738	✓
	0650	.706	✓
	0720	.735	✓
	0750	.715	✓
	0820	.687	✓
	0850	.708	✓
	0920	.682	✓
	0950	.654	✓
	1020	.658	✓
	1050	.604	✓
	1120	.599	✓
	1150	.586	✓
	1220	.559	✓
	1250	.550	✓
	1320	.544	✓
	1350	.539	✓
	1420	.542	✓
	1450	.553	✓
	1520	.570	✓
	1550	.596	✓
	1620	.606	✓
	1650	.609	✓
	1720	.594	✓
	1750	.624	✓
	1820	.643	✓
	1850	.667	✓
	1920	.631	✓
	1950	.640	✓
	2020	.617	✓
	2050	.610	✓
	2120	.566	✓
	2150	.531	✓
	2220	.527	✓
	2250	.502	✓
	2320	.470	✓
	2350	.466	✓

10/6

0020	.436 ✓
0050	.427 ✓
0120	.405 ✓
0150	.406 ✓
0220	.424 ✓
0250	.417 ✓
0370	.439 ✓
0350	.454 ✓
0420	.475 ✓
0450	.522 ✓
0520	.524 ✓
0550	.534 ✓
0620	.553 ✓
0650	.560 ✓
0720	.570 ✓
0750	.598 ✓
0870	.567 ✓
0850	.598 ✓
0920	.565 ✓
0950	.562 ✓
1020	.526 ✓
1050	.516 ✓
1120	.483 ✓
1150	.464 ✓