

NEAL #3
STEP RATE TEST - 9/29/99

STEP #	TIME	TBG PRESS	CUM VOLUME	INJ RATE (BPD)	FRICTION LOSS	CORRECTED TBG PRESS
1	10:00	1100	0.00	0		
	10:00	1220	0.00	288		
	10:05	1305	0.95	288		
	10:10	1348	1.90	288		
	10:15	1365	3.00	317		
AVG		1310		295	2.8	1307.2
2	10:16	1395	3.05	619		
	10:21	1403	5.08	634		
	10:26	1406	7.20	634		
	10:31	1412	9.35	634		
AVG		1404		630	10.5	1393.5
3	10:31	1495	9.50	1080		
	10:36	1512	13.29	1094		
	10:41	1512	17.10	1094		
	10:46	1512	20.85	1094		
AVG		1508		1090	21.7	1486.3
4	10:46	1600	21.04	1512		
	10:51	1595	26.09	1469		
	10:56	1590	31.18	1454		
	11:01	1590	36.09	1440		
AVG		1594		1469	45.0	1549.0
5	11:01	1725	38.40	2290		
	11:06	1728	43.95	2347		
AVG		1726		2218	109.0	1617.0
6	11:07	1925	44.12	3053		
	11:13	1925	56.18	3053		
AVG		1925		3053	162.0	1763.0
7	11:14	2165	57.43	3715		
	11:19	2086	70.80	3830		
AVG		2125		3772	249.0	1876.0
8	11:19	2294	73.12	4435		
	11:22	2260	83.34	4536		
	11:24	2202	88.45	4536		
AVG		2252		4502	350.0	1902.0
9	11:24	2397	90.04	5256		
	11:26	2394	95.08	5155		
	11:29	2394	107.75	5227		
AVG		2395		5213	482.0	1913.0
10	11:29	2555	112.40	5947		
	11:31	2542	120.70	5760		
	11:32	2542	122.70	5760		
AVG		2546		5822	613.0	1933.0
ISIP	1450#					
5 MIN	1418#					
10 MIN	1388#					
15 MIN	1362#					

6

N8AL #3
 STB RATE TEST
 9/29/99

