

**Step Rate Test**



**Cardinal Surveys Company**

2-Apr-04

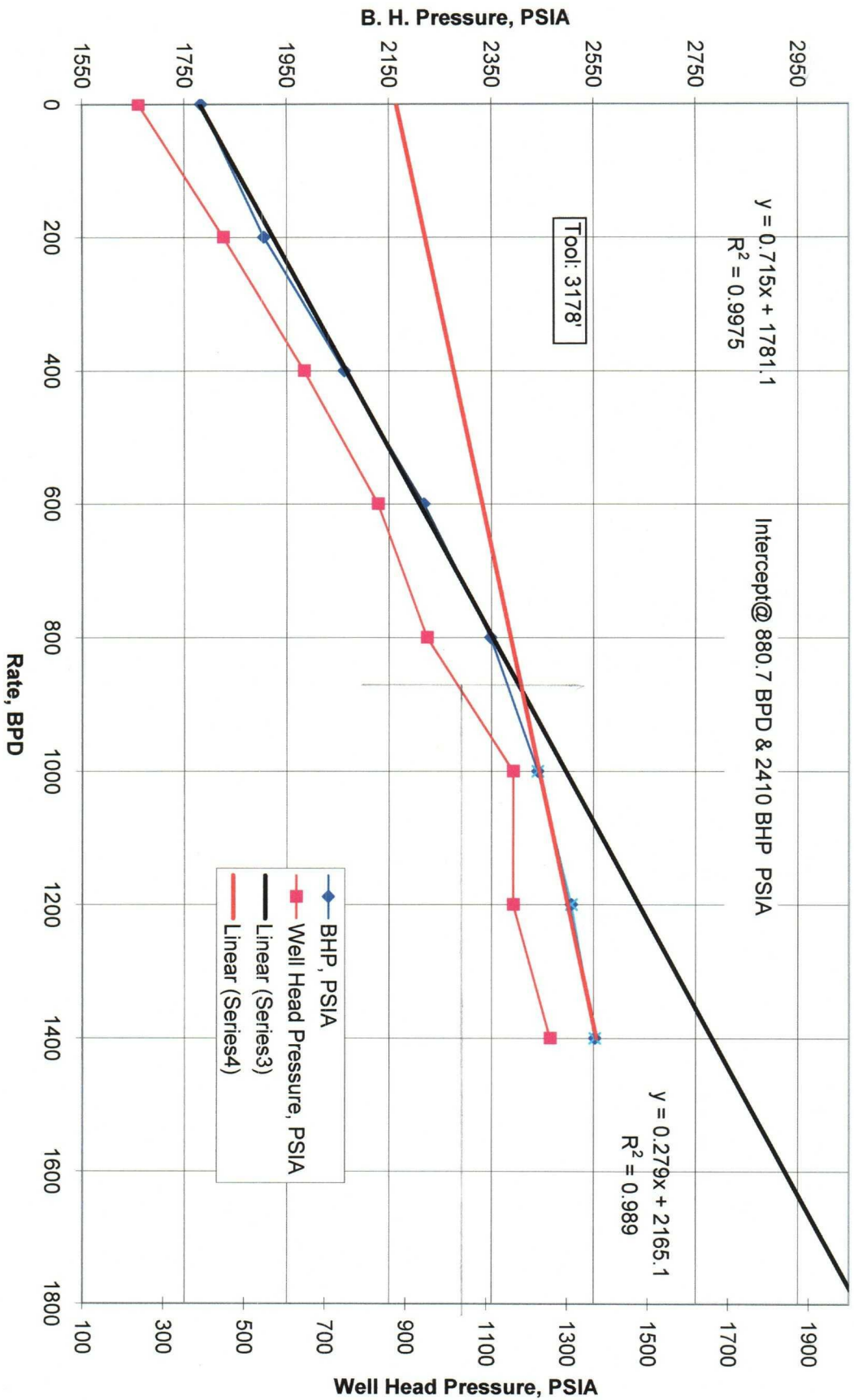
Chesapeake Energy Corporation  
W T U # 921  
West Texas Field  
"C" Section 9, T20S, R33E  
Lea County, New Mexico  
GL. 3557' KB 3559'

Downhole PSI Tool Ser. No.  
Surface PSI Guage Ser. No.

11:00 AM	Arr. Loc.	
12:07 PM	On Bottom	
12:07-12:20		0
12:20-1:20		400
1:20-2:20		600
2:20-3:20		800
3:20-4:20		1000
4:20-5:20		1200
5:20-6:20		1400
6:20-7:20		1600
7:20-7:30		0
7:20-7:30	Start Out	
8:15 PM	Drive off Location	



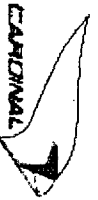
Chesapeake Energy Corporation, W T U #921  
Step Rate Test 4-2-2004



10/28

**Step Rate Test**

Chesapeake Energy Corporation  
 W T U # 433  
 West Texas Field  
 Lea County, New Mexico



	S Time	E Time	D Time Min	Last Rate BPD	Step BPD	Last BHP PSIA	Last Surf PSIA	Cum BBL	Delta BBL	Avg BPD	Lower	upper
1	12:07 PM	12:20 PM	1:00:00	0	0	1783	240	0		412.8		
2	12:20 PM	1:20 PM	1:00:00	200	200	1905.6	450	8.6	15.5	372	2062.9	2440.7
3	1:20 PM	2:20 PM	1:00:00	400	200	2062.9	650	24.1	24.59	590.16	2218.4	2506.7
4	2:20 PM	3:20 PM	1:00:00	600	200	2218.4	833	48.69	33.67	808.08	2348.9	2552.3
5	3:20 PM	4:20 PM	1:00:00	800	200	2348.9	954	82.36	40.84	980.16		
6	4:20 PM	5:20 PM	1:00:00	1000	200	2440.7	1167	123.2	49.8	1195.2		
7	5:20 PM	6:20 PM	1:00:00	1200	200	2506.7	1167	173	58.7	1408.8		
	6:20 PM	7:20 PM	1:00:00	1400	200	2552.3	1259	231.7				
	7:20 PM	7:30 PM	0:10:00	0	0		1046.7					

Int Point: 880.7339 BPD  
 2410.825 Pressure  
 0.715 1781.1  
 0.279 2165.1



Chesapeake Energy Corporation, WTU # 921  
Step Rate Test Raw Data 4-2-2004

