

Submit 3 Copies To Appropriate District Office

State of New Mexico

Form C-103

May 27, 2004

District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

WTYSR Unit Wells:
443,641,912,913,921, 924,941,945

8. Well Number

9. OGRID Number 147179

10. Pool name or Wildcat

Teas (Yates-Seven Rivers), West

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other Injection Wells

2. Name of Operator

Chesapeake Operating, Inc.

3. Address of Operator

P.O. Box 18496
Oklahoma City, OK 73154-0496

4. Well Location

Unit Letter : feet from the line and feet from the line

Section 4 & 9 Township 20S Range 33E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type Depth to Groundwater Distance from nearest fresh water well Distance from nearest surface water

Pit Liner Thickness: mil Below-Grade Tank: Volume bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: Injection Pressure Increase ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Chesapeake Operating, Inc. respectfully requests to increase the injection pressure on eight wells in the West Teas (Yates-Seven Rivers) Waterflood Unit Area.

For your review, please find the attached application letter along with step rates tests performed for each well. Copies of this application have been submitted to the Hobbs New Mexico Oil Conservation Division office.

WEST TEAS YATES SEVEN RIVERS UNIT No. 443 3002535976 I-4-20S-33E 1855 FSL & 660 FEL
WEST TEAS YATES SEVEN RIVERS UNIT No. 641 3002533144 A-4-20S-33E 330 FNL & 330 FEL
WEST TEAS YATES SEVEN RIVERS UNIT No. 912 3002529971 E-9-20S-33E 1980 FNL & 660 FWL
WEST TEAS YATES SEVEN RIVERS UNIT No. 913 3002529972 L-9-20S-33E 1980 FSL & 660 FWL
WEST TEAS YATES SEVEN RIVERS UNIT No. 921 3002531896 C-9-20S-33E 330 FNL & 2310 FWL
WEST TEAS YATES SEVEN RIVERS UNIT No. 924 3002536073 F-9-20S-33E 2560 FNL & 2210 FWL
WEST TEAS YATES SEVEN RIVERS UNIT No. 941 3002532217 A-9-20S-33E 330 FNL & 990 FEL
WEST TEAS YATES SEVEN RIVERS UNIT No. 945 3002536079 H-9-20S-33E 2612 FNL & 330 FEL

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Doug Rubick TITLE Field Engineer DATE 07/08/2008

Type or print name Doug Rubick

E-mail address: doug.rubick@chk.com

Telephone No. (575)391-1462

For State Use Only

APPROVED BY: Chris Williams TITLE OC DISTRICT SUPERVISOR/GENERAL MANAGER DATE JUL 17 2008

Conditions of Approval (if any): Need approval of Santa Fe Office! CW

June 27, 2008

Will Jones
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87505

Dear Mr. Jones,

Chesapeake Energy respectfully requests to increase the injection pressure on eight wells in the West Teas Unit (WTU) waterflood. This waterflood has been active since 2003 and step rate tests have not been performed since 2004. Please see the table below for a summary of the current pressure limitations for the injection wells at the WTU waterflood.

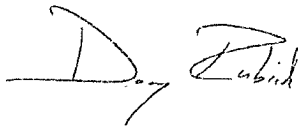
Well	API	Inj Press Limit	Order	Order Date	Comments
WTU 433	3002532032	988	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 443	3002535976	631	WFX-791	7/24/2003	Administrative Order based on 0.2 psi/ft
WTU 641	3002533144	632	WFX-791	7/24/2003	Administrative Order based on 0.2 psi/ft
WTU 912	3002529971	1,200	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 913	3002529972	903	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 921	3002531896	998	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 924	3002536073	1,197	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 941	3002532217	615	WFX-791	7/24/2003	Administrative Order based on 0.2 psi/ft. The SRT for this well was inconclusive from IPI-244 and increase request denied.
WTU 945	3002536079	1,200	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.

Step rate tests were performed on all nine of the injectors between May 22nd and June 4th, 2008. Eight of the nine test results indicate there is room for an increase in maximum injection pressure. Results from each step rate test are attached and summarized in the table below.

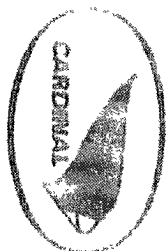
Well	API	Fracture Pressure	Requested Inj Press Limit	Date SRT Ran
WTU 443	3002535976	1,520	1,470	5/29/2008
WTU 641	3002533144	1,854	1,804	6/4/2008
WTU 912	3002529971	1,802	1,752	6/2/2008
WTU 913	3002529972	1,802	1,752	6/3/2008
WTU 921	3002531896	1,572	1,522	5/28/2008
WTU 924	3002536073	1,720	1,670	5/27/2008
WTU 941	3002532217	1,360	1,310	5/23/2008
WTU 945	3002536079	1,845	1,795	5/22/2008

Should you require further information or have any questions, please call Doug Rubick at 505-391-1462.

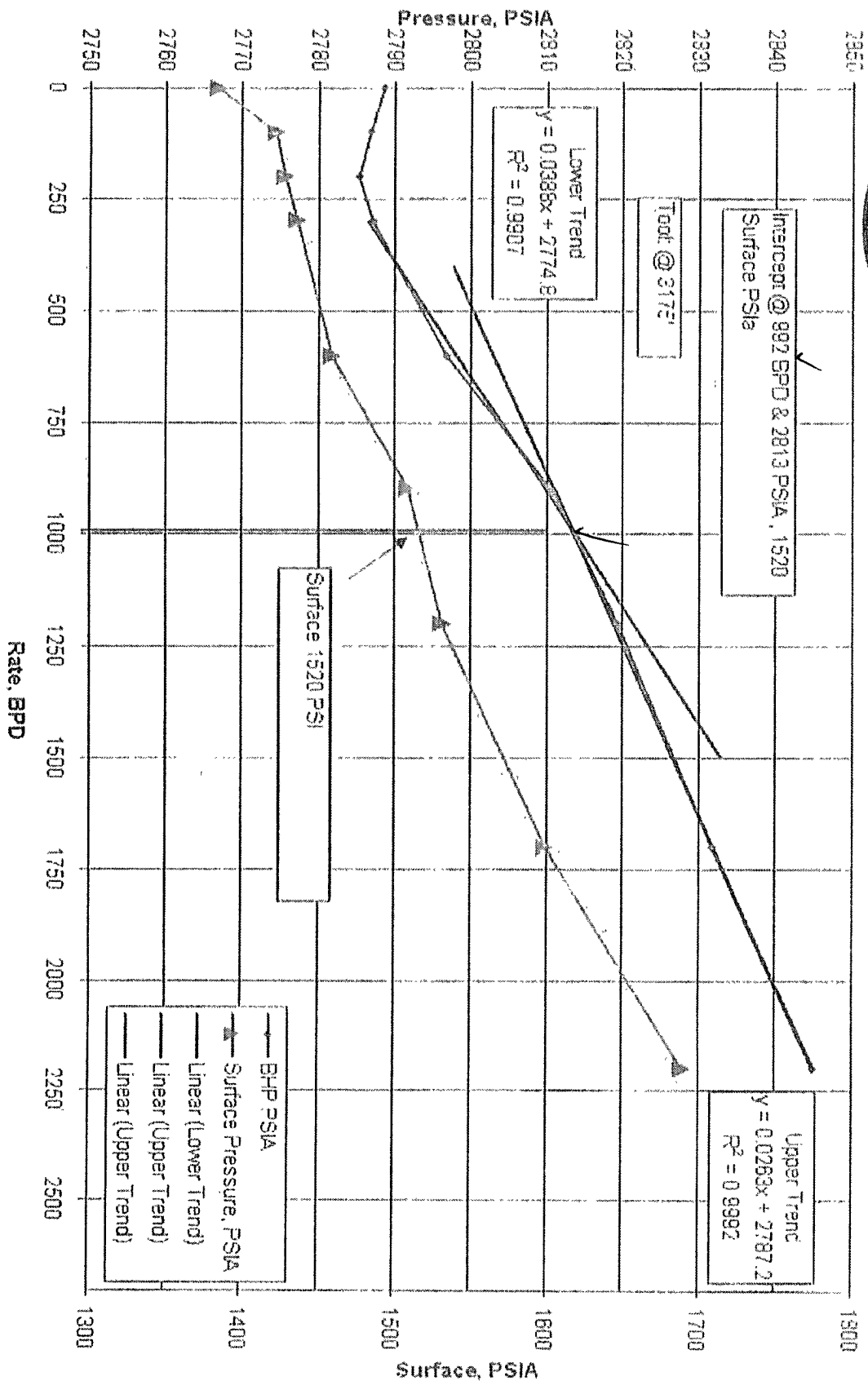
Sincerely,



Doug Rubick
Field Engineer



Chesapeake Energy Corp. WTU # 443
Step Rate Test 05-29-2008



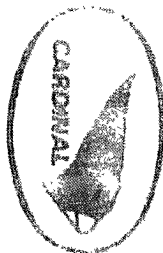
Step Rate Test

Chesapeake Energy
WTL # 443
Field
Leas County, NV

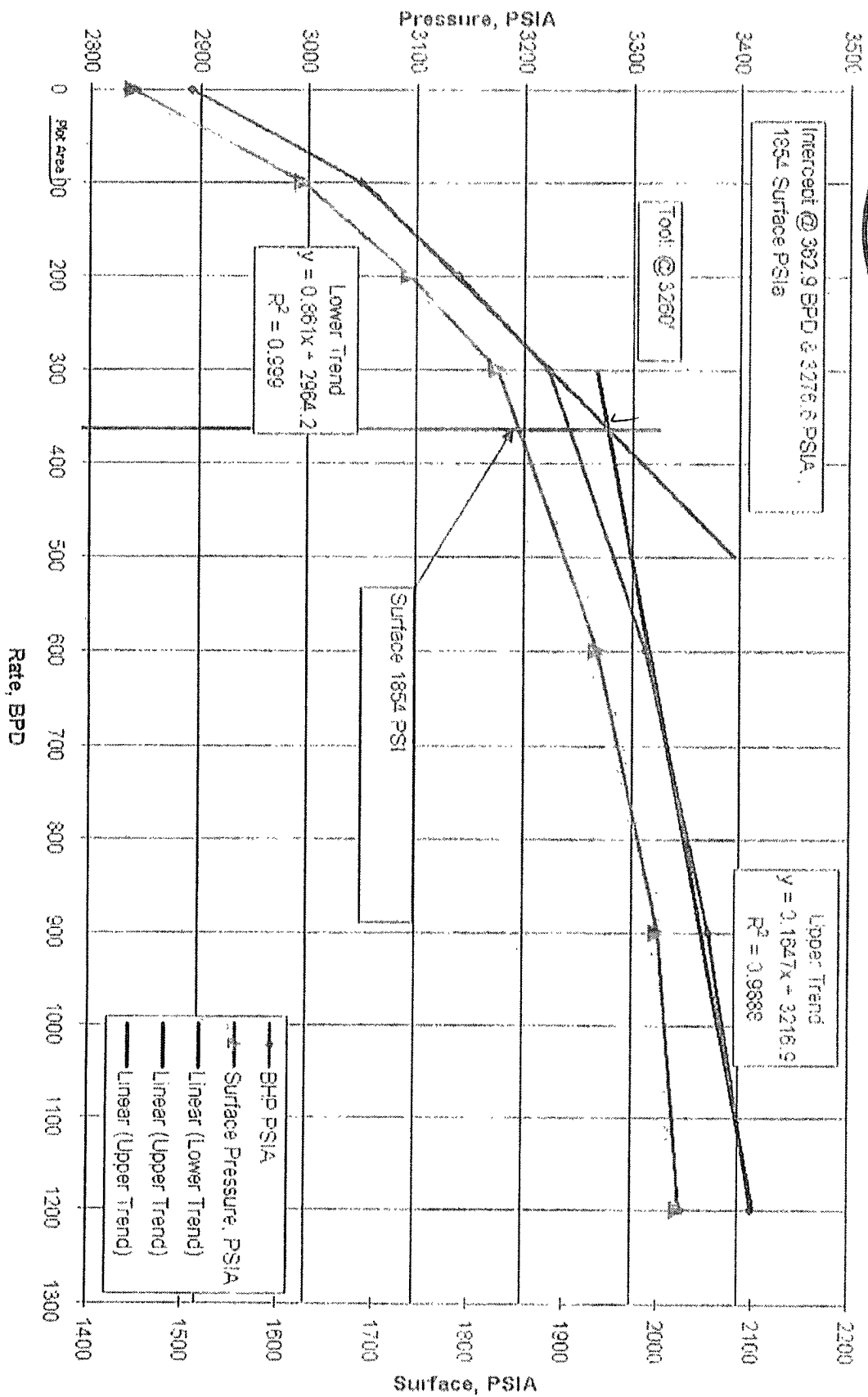


S Time	E Time	C Time	Last Rate	Step 2 - Pressure		Surf		Cum	Delta	Avg.	Lower	Upper
				BPD	PSIA	PSIA	EBL					
1	8:31 AM	8:45 AM	14	3	2782.5	1324	0	0	0	0	2787.1	
2	8:45 AM	9:45 AM	60	100	2786.9	1421.9	7.3	7.3	175	215	2787.1	2810.4
3	9:45 AM	10:45 AM	60	200	2786.3	1426.3	15.2	15.2	319	319	2787.1	2810.4
4	10:45 AM	11:45 AM	60	300	2787.1	1435.4	29.6	29.6	565	565	2787.1	2810.4
5	11:45 AM	12:45 PM	60	500	2795.6	1505.2	43	43	-274	-274	2795.6	2810.4
6	12:45 PM	1:45 PM	60	900	2810.4	1591.6	98.3	98.3	2382	2382	2795.6	2810.4
7	1:45 PM	2:45 PM	60	1200	2819.3	1592.2	142.3	142.3	1735	1735	2795.6	2810.4
8	2:45 PM	3:45 PM	60	1700	2831.9	1592.2	214.6	214.6	2196	2196	2795.6	2810.4
9	3:45 PM	4:45 PM	60	2200	2844.3	1592.2	306.2	306.2			2795.6	2810.4
10	4:45 PM	5:45 PM	60	2700			31.6					

0.0086 2774.9
0.0263 2787.2
992 BPD
2810.2855 PSia

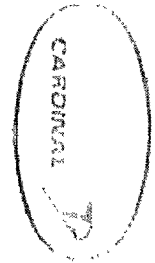


Chesapeake Energy Corp. WTU # 641
 Step Rate Test 06-04-2008



Step Rate Test

Openlake Energy
WTL # 641
Field: West Texas
Lea County, NV

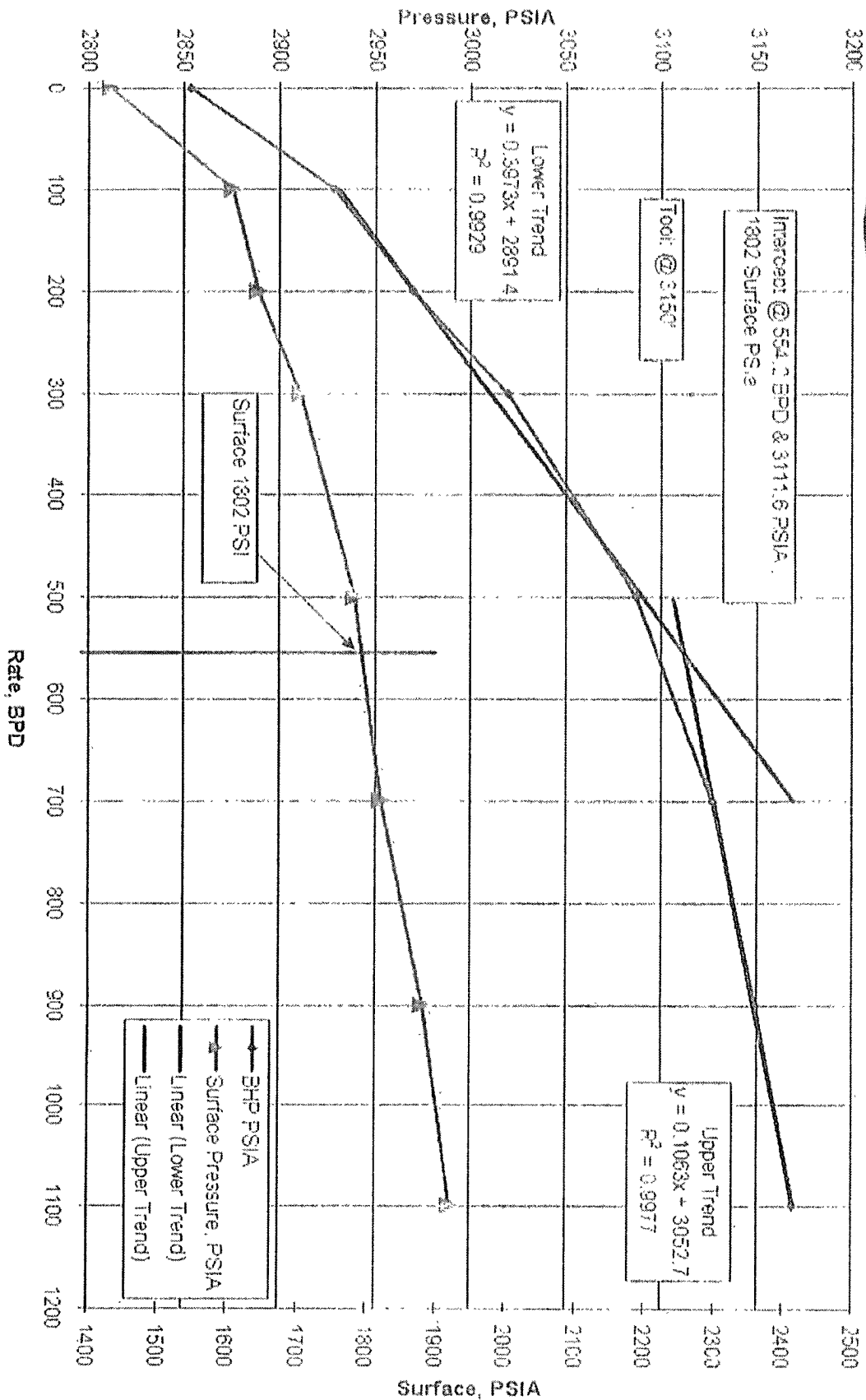


	Start Time	End Time	Duration	Last Rate	Step E. H. Rate	Pressure	Surf	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	BBL	BPD	Trend	Trend
1	8:29 AM	8:45 AM	16	0	0	2891.2	1444.6	0	0		
2	8:45 AM	9:45 AM	60	100	100	3048.8	1622.5	6.1	146	3048.8	
3	9:45 AM	10:45 AM	60	200	100	3139.5	1736.2	15	214	3139.5	
4	10:45 AM	11:45 AM	60	300	100	3221	1826.8	26.4	322	3221	
5	11:45 AM	12:45 PM	60	600	300	3312.7	1934.1	51.8	567	3312.7	
6	12:45 PM	1:45 PM	60	900	300	3374.2	1995.4	35	868	3374.2	
7	1:45 PM	2:45 PM	60	1200	300	3411.5	2022.4	103	1200	3411.5	
8	2:45 PM	3:00 PM	15	0	-1200	3394	1940	0	0		

0.261 2984.2
0.1647 3276.9
362.91528 BPD
3276.9726 Psia

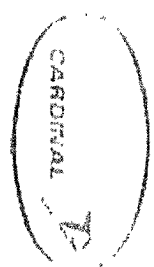


Chesapeake Energy Corp. WTLU # 912
Step Rate Test 06-02-2008



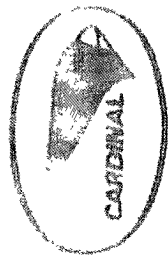
Step Rate Test

Chesapeake Energy
WU # 912
Field:
Lee County, NM

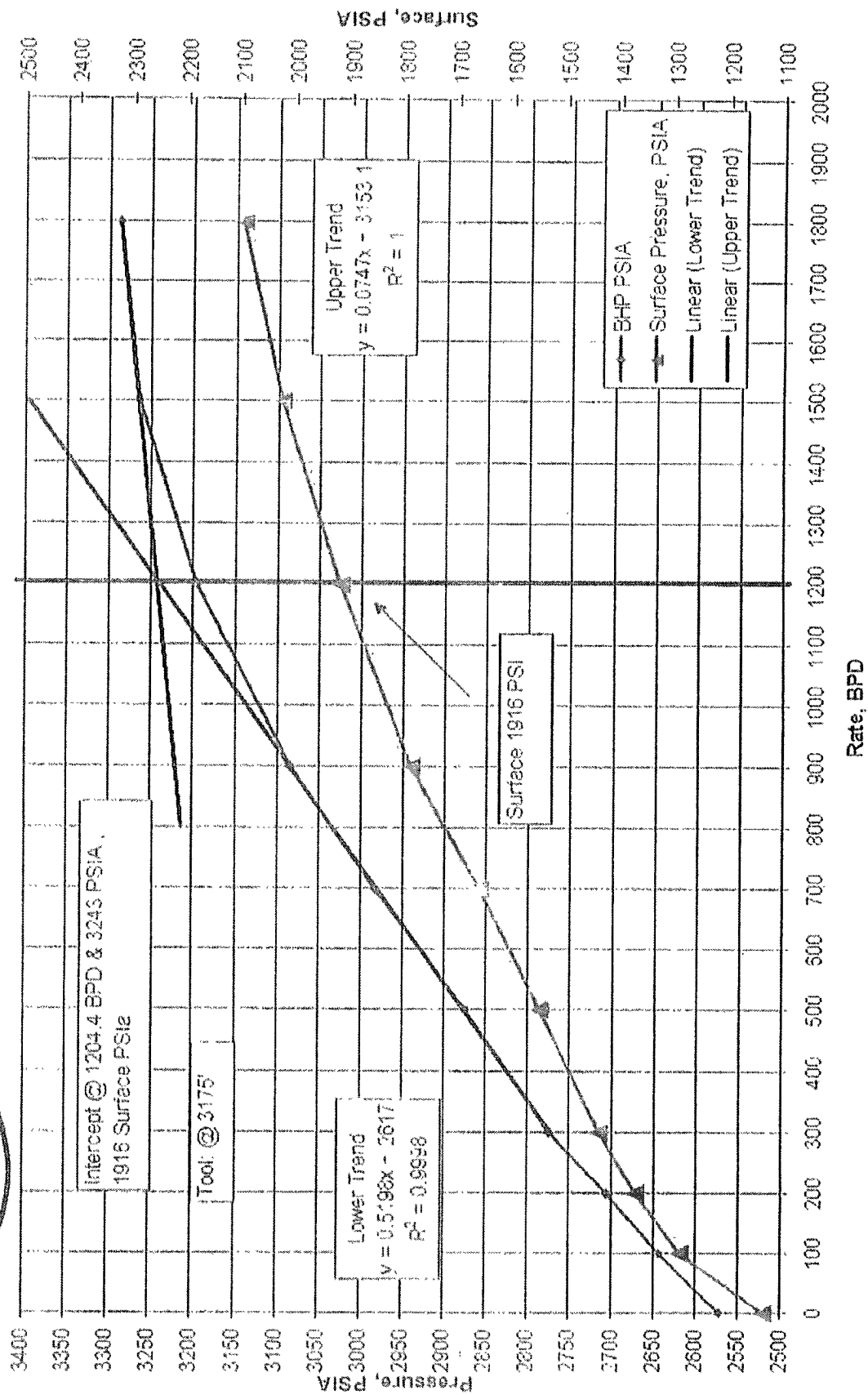


	S Time	E Time	D Time	Last Rate	Step S. H. Pressure	SuH	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	BBL	BBL	BPD	Trend	Trend
1	8:45 AM	9:00 AM	12	0	2853.5	1432.0	0	0	0	2925	
2	9:00 AM	10:00 AM	50	100	2925	1607	8.5	8.5	204	2869.4	
3	10:00 AM	11:00 AM	50	200	2989.4	1642.5	17.4	8.9	214	3015.1	
4	11:00 AM	12:00 PM	50	300	3078.1	1704.1	30.3	12.3	313	3096.2	
5	12:00 PM	1:00 PM	50	500	3088.2	1782.5	52.3	22	525		3126.5
6	1:00 PM	2:00 PM	50	700	3125.5	1821.1	51.2	25.9	594		3148.5
7	2:00 PM	3:00 PM	50	800	3149.5	1880.9	120.1	35.9	334		3169
8	3:00 PM	4:00 PM	50	1000	3189	1922.1	185.5	45.4	1090		
9	4:00 PM	5:00 PM	50	0	-1100	1797	185.5	0	0		

0.3970 2891.4
 0.1068 3052.7
 In point: 554.2853 BPD
 311.5218 psia

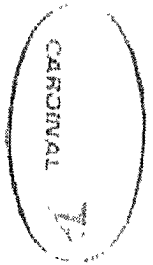


Chesapeake Energy Corp. WTU # 343
Step Rate Test 06-03-2008



Step Rate Test

Chesapeake Energy
WTTU # 915
Field:
Lea County NM

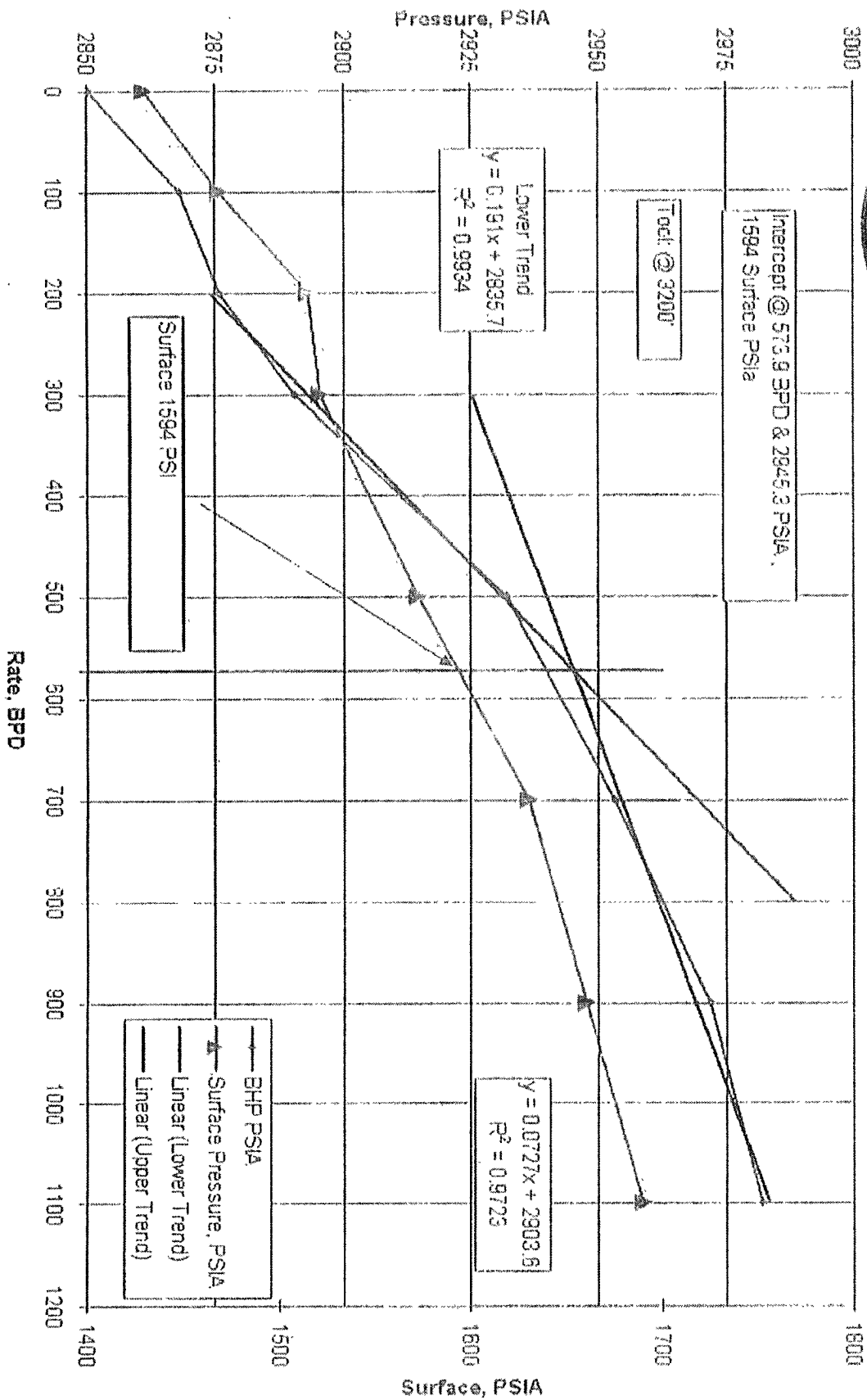


	S Time	E Time	O Time	Last Rate	Min	SPC	Step S	H Pressure	PSIA	PSIA	Cum	Delta	Avg	Lower	Upper
												EBL	SPD	Trend	Trend
1	8:51 AM	9:00 AM			9	0	0	2571.9	1131.4	0	0	0	0		
2	9:09 AM	10:00 AM		100	60	100	100	2643.1	1283	5.7	137	0	137		
3	10:39 AM	11:00 AM		200	60	200	100	2705	1366.8	14.7	216	9	216		
4	11:00 AM	12:00 PM		300	60	300	100	2773.6	1409.3	28	319	13.3	319	2773.6	
5	12:00 PM	1:00 PM		500	60	500	200	2874.6	1546.5	49.4	514	21.4	514	2874.6	
6	1:00 PM	2:00 PM		700	60	700	200	2983	1657.9	78.5	701	29.2	701	2983	
7	2:00 PM	3:00 PM		900	60	900	200	3084.2	1766.6	116.5	912	36	912	3084.2	
8	3:00 PM	4:00 PM		1200	60	1200	300	3195.7	1915.8	168.5	1246	51.9	1246		
9	4:00 PM	5:00 PM		1500	60	1500	300	3265.1	2025.1	231.1	1502	62.5	1502		
10	5:00 PM	6:00 PM		1800	60	1800	300	3287.5	2088.1	308.5	1856	77.4	1856		
11	6:00 PM	6:15 PM		0	15	0	-1800	3182	1818	308.5	0	0	0		3265.1 3287.5

Int Point: 1204.4484 SPD
3243.0723 PSia
0.5196 2617
0.0747 3153.1

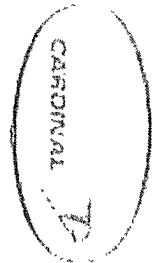


Chesapeake Energy Corp. WTL # 921
Step Rate Test 05-28-2008



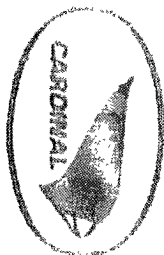
Step Rate Test

Chesapeake Energy
WTL #92
Field
Lea County NM

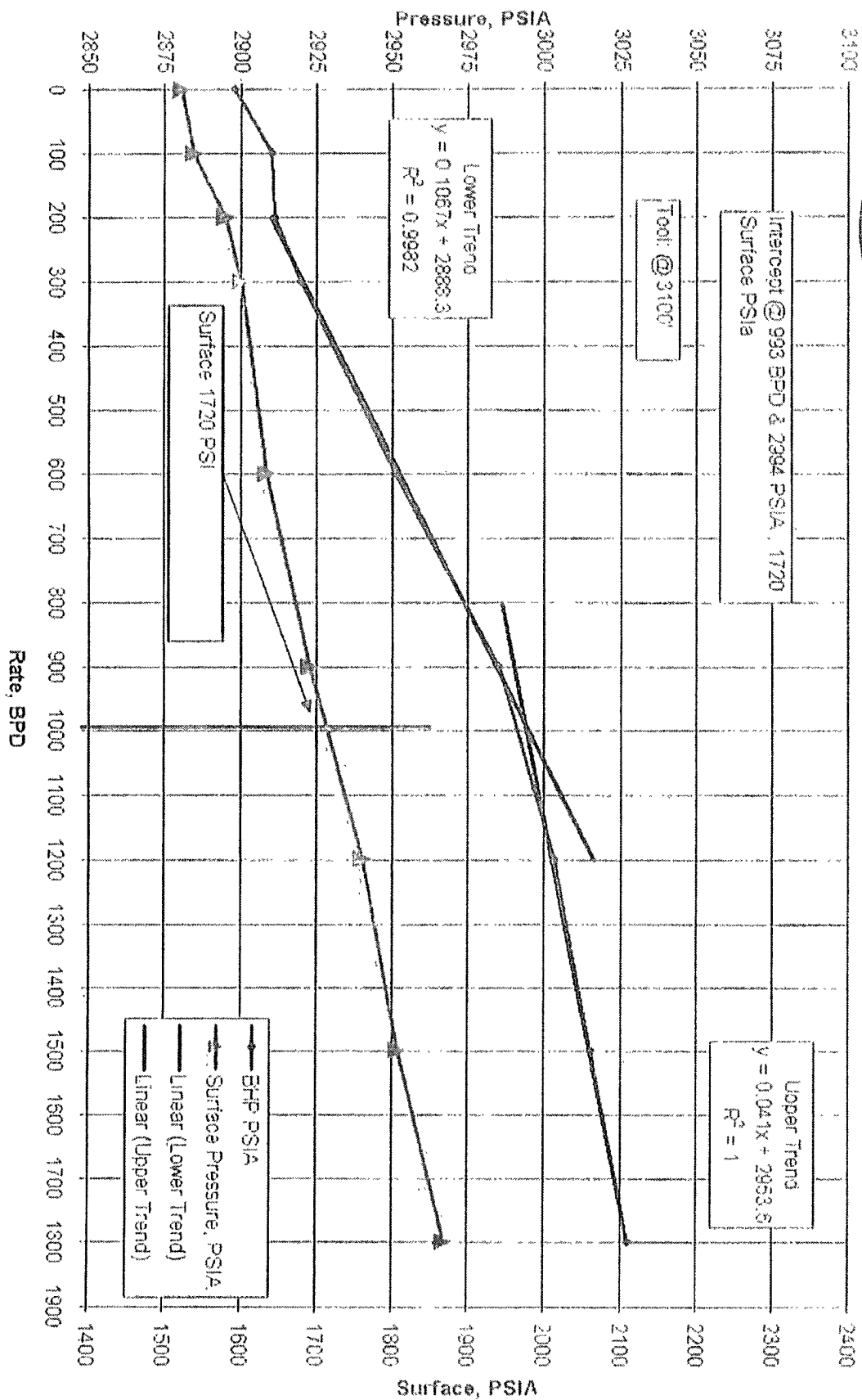


	S Time	E Time	D Time	Last Rate	Step	S H	Pressure	Surf	Cum	Delta	Avg	Lower	Upper
			Min	BPD	BPD		PSIA	PSIA	BBL	BBL	BPD	Trans	Trans
1	8:28 AM	8:30 AM	2	0	0		2850.4	1430	0	0	0		
2	8:30 AM	8:30 AM	60	100	100		2850.2	1438.5	5.5	5.5	155	2875.7	
3	8:30 AM	10:30 AM	60	200	100		2875.7	1515	15.7	9.2	221	2890.3	
4	10:30 AM	11:30 AM	60	300	100		2890.3	1521.3	28.7	13	312	2932.1	
5	11:30 AM	12:30 PM	60	500	200		2932.1	1572.9	45.8	21.1	506		2953.1
6	12:30 PM	1:30 PM	60	700	200		2953.1	1630.6	80.2	30.4	730		
7	1:30 PM	2:30 PM	60	900	200		2971.9	1650	117.9	37	906		2971.9
8	2:30 PM	3:30 PM	60	1100	200		2982.2	1669.6	165.5	47.6	1142		2982.2
9	3:30 PM	3:45 PM	15	0	-1100		2875	1496	165.5	0	0		

0191 2835.7
00727 2903.6
Net point: 573.9845 BPD
2945.3272 Psia

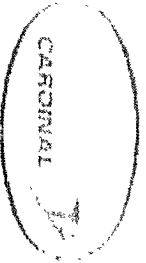


Chesapeake Energy Corp. WTLU # 924
Step Rate Test 05-27-2008



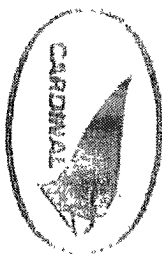
Step Rate Test

Chesapeake Energy
WTU #924
Field:
Lea County, NM

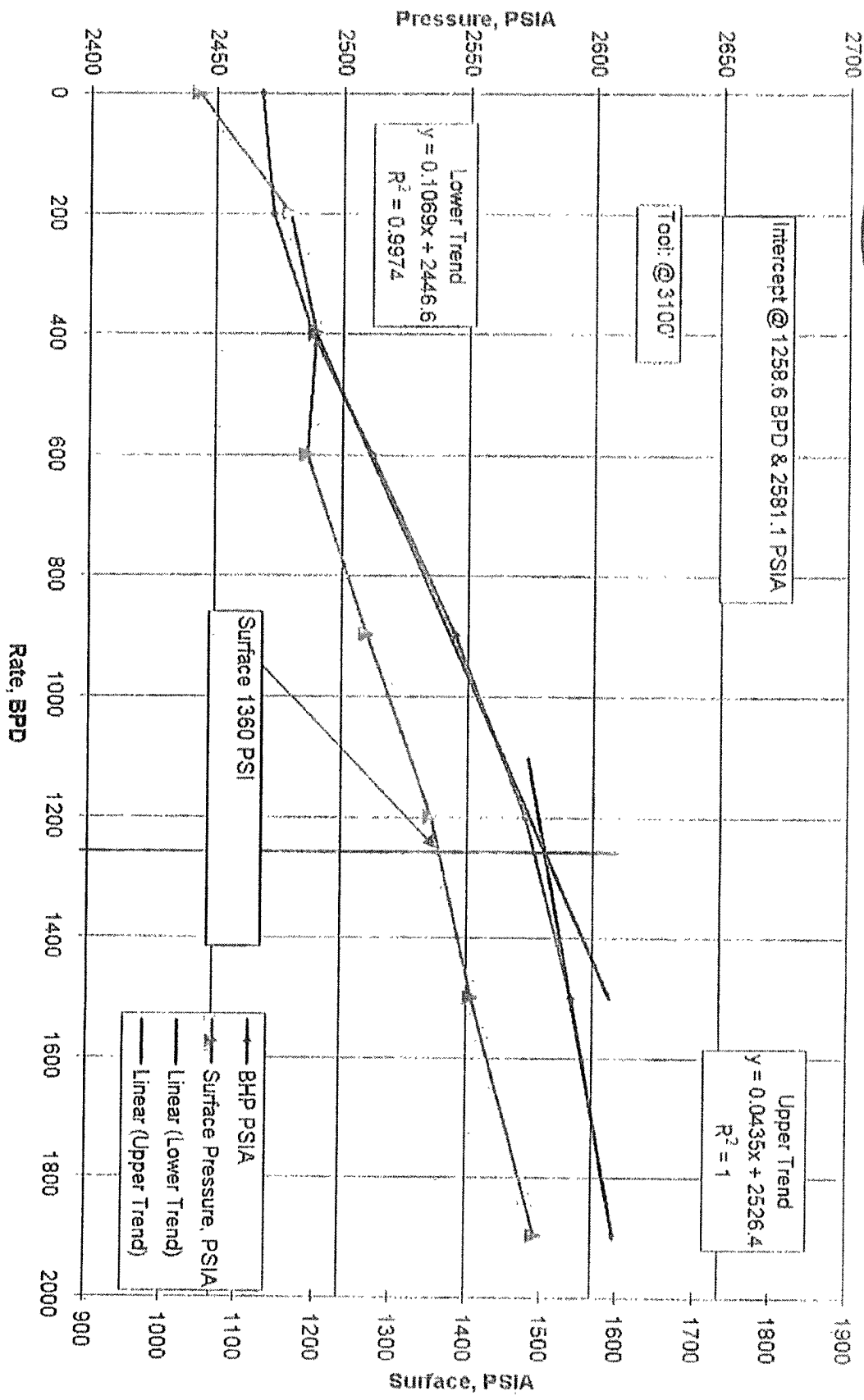


	S Time	E Time	D Time		Last Rate	Step 2. H. Pressure		Surf		Cum		Delta		Avg.	Lower	Upper
			Min	SPD		SPD	PSIA	PSIA	PSIA	BBL	BBL	BBL	BBL			
1	8:00 AM	10:00 AM	60	0	0	0	2898.7	1522.4	1522.4	0	0	0	0	0		
2	10:00 AM	11:00 AM	60	100	100	100	2910.0	1537.8	1537.8	6.7	6.7	6.7	6.7	161	2911	2919.6
3	11:00 AM	12:00 PM	60	200	200	100	2911	1579.4	1579.4	16.5	16.5	8.6	8.6	211	2911	2920.7
4	12:00 PM	1:00 PM	60	300	300	100	2919.6	1601.1	1601.1	28.6	64.3	13.1	13.1	314	2919.6	2920.7
5	1:00 PM	2:00 PM	60	600	600	300	2950.7	1534.3	1534.3	64.3	128.6	26.7	26.7	617	2920.7	2922.4
6	2:00 PM	3:00 PM	60	900	900	300	2950.7	1691.1	1691.1	96.2	224.8	39.9	39.9	864	2922.4	2922.4
7	3:00 PM	4:00 PM	60	1200	1200	300	3003.7	1759.4	1759.4	144.1	368.9	50.6	50.6	1222	2922.4	3015.7
8	4:00 PM	5:00 PM	60	1500	1500	300	3016.1	1807.2	1807.2	209.7	578.6	64.6	64.6	1550	3015.7	3027.4
9	5:00 PM	6:00 PM	60	1800	1800	300	3027.4	1869.7	1869.7	286.2	864.8	76.5	76.5	1835	3027.4	3027.4
10	6:00 PM	6:15 PM	15	0	-1300	-1300	2957.2	1626.9	1626.9	286.2	1151.0	0	0	0		

Wk point: 993.9172 BPD
2994.6504 PSia
0.1057 2986.3
0.041 2963.6



Chesapeake Energy Corp. WTU # 944
Step Rate Test 05-23-2008



Step Rate Test

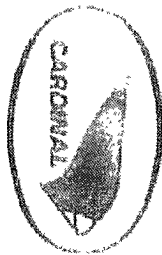
Thesapeake Energy
WTLU # 343
Field:
Lea County, NM



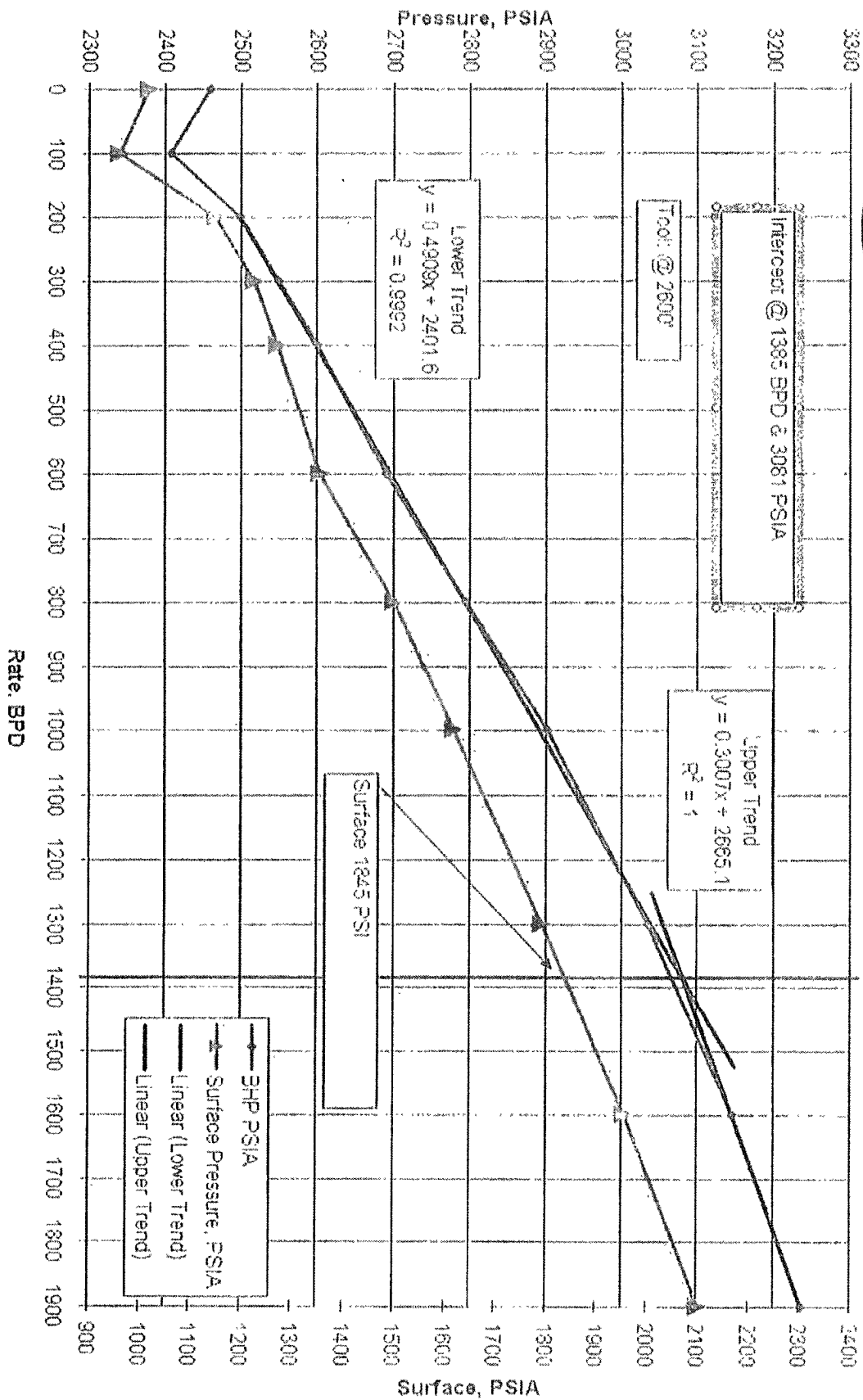
	S Time	E Time	D Time	Last Rate	Step E. W. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	EPD	EPD	PSIA	BBL	BBL	BPD	Trend	Trend
1	10:28 AM	10:30 AM		0	0	2468	0	0	0		
2	10:30 AM	11:30 AM	60	200	200	2472.5	9.6	9.6	235	2487.6	
3	11:30 AM	12:30 PM	60	400	200	2467.5	25.9	16.1	336	2511.6	
4	12:30 PM	1:30 PM	60	600	200	2511.6	51.7	25.3	619	2546	
5	1:30 PM	2:30 PM	60	900	300	2545	82.2	37.5	990	2573.2	
6	2:30 PM	3:30 PM	60	1200	300	2573.2	140.6	51.4	1234		
7	3:30 PM	4:30 PM	60	1500	300	2591.7	203.1	62.5	1500		
8	4:30 PM	5:30 PM	60	1800	400	2609.1	284.9	81.8	1993		
9	5:30 PM	6:45 PM	15	0	-1820	2575.2	284.9	0	0		

Inc Point: 1258 375: BPD
2587 1524 Psia

0.1069 2445.8
0.0455 2526.4

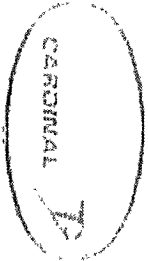


Chesapeake Energy Corp. WTLU # 945
Step Rate Test 05-22-2008



Step Rate Test

Meinose Operating
WTL#245
Field
Lee County, NM



	S Time	E Time	D Time	Last Rate	Step	E. h.	Pressure	Surf	Cum	Delta	Avg	Lower	Upper
			Min	3rd	BPD		PSIA	PSIA	GBL	GBL	BPD	Trenc	Trenc
1	9:04 AM	9:30 AM	25	0	0		2459.5	1076.1	0	0	0		
2	9:30 AM	10:30 AM	60	100	100		2407.1	955.8	5.3	5.3	127	2499.2	
3	10:30 AM	11:30 AM	90	200	100		2499.2	1145.8	13.8	3.5	204	2549.5	
4	11:30 AM	12:30 PM	60	300	100		2549.5	1223.1	26.5	12.7	306	2593.4	
5	12:30 PM	1:30 PM	60	400	100		2599.4	1271.5	42.9	16	364	2637.4	
6	1:30 PM	2:30 PM	60	500	200		2689.8	1353.3	89.4	25.9	622	2689.8	
7	2:30 PM	3:30 PM	60	800	200		2794.1	1459.9	102	33.6	805	2794.1	
8	3:30 PM	4:30 PM	90	1000	200		2802.8	1619	144.6	42.8	1022	2802.8	
9	4:30 PM	5:30 PM	90	1300	300		3034.5	1794	204.5	59.9	1432	3034.5	
10	5:30 PM	6:30 PM	60	1800	300		3146.2	1957.5	263.4	60.9	1462		
11	6:30 PM	7:30 PM	60	1900	300		3236.4	2102.7	326	60.6	1934		
12	7:30 PM	7:45 PM	15										

int point 1365.3828 BPD
0.4909 2401.6
0.3007 2555.1
3081.6849 Psia