

Submit 3 Copies To Appropriate District
Office

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

State of New Mexico

Energy, Minerals and Natural Resources

Form C-103

May 27, 2004

RECEIVED

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

JUL 9 2008

HOBBS OCD

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

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.

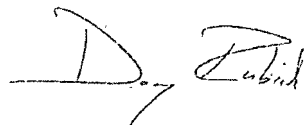
Well	API	Inj Press Limit	Order	Order Date	Comments
WTU 433	3002532032	968	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 443	3002535976	631	WFX-791	7/24/2003	Administrative Order based on 0.2 psi/ft
WTU 641	3002533144	632	WFX-791	7/24/2003	Administrative Order based 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.

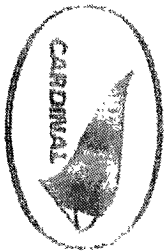
Well	API	Fracture Pressure	Requested Inj Press Limit	Date SRT Ran
WTU 443	3002535976	1,520	1,470	5/29/2008
WTU 641	3002533144	1,854	1,804	6/4/2008
WTU 912	3002529971	1,802	1,752	6/2/2008
WTU 913	3002529972	1,802	1,752	6/3/2008
WTU 921	3002531896	1,572	1,522	5/28/2008
WTU 924	3002536073	1,720	1,670	5/27/2008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

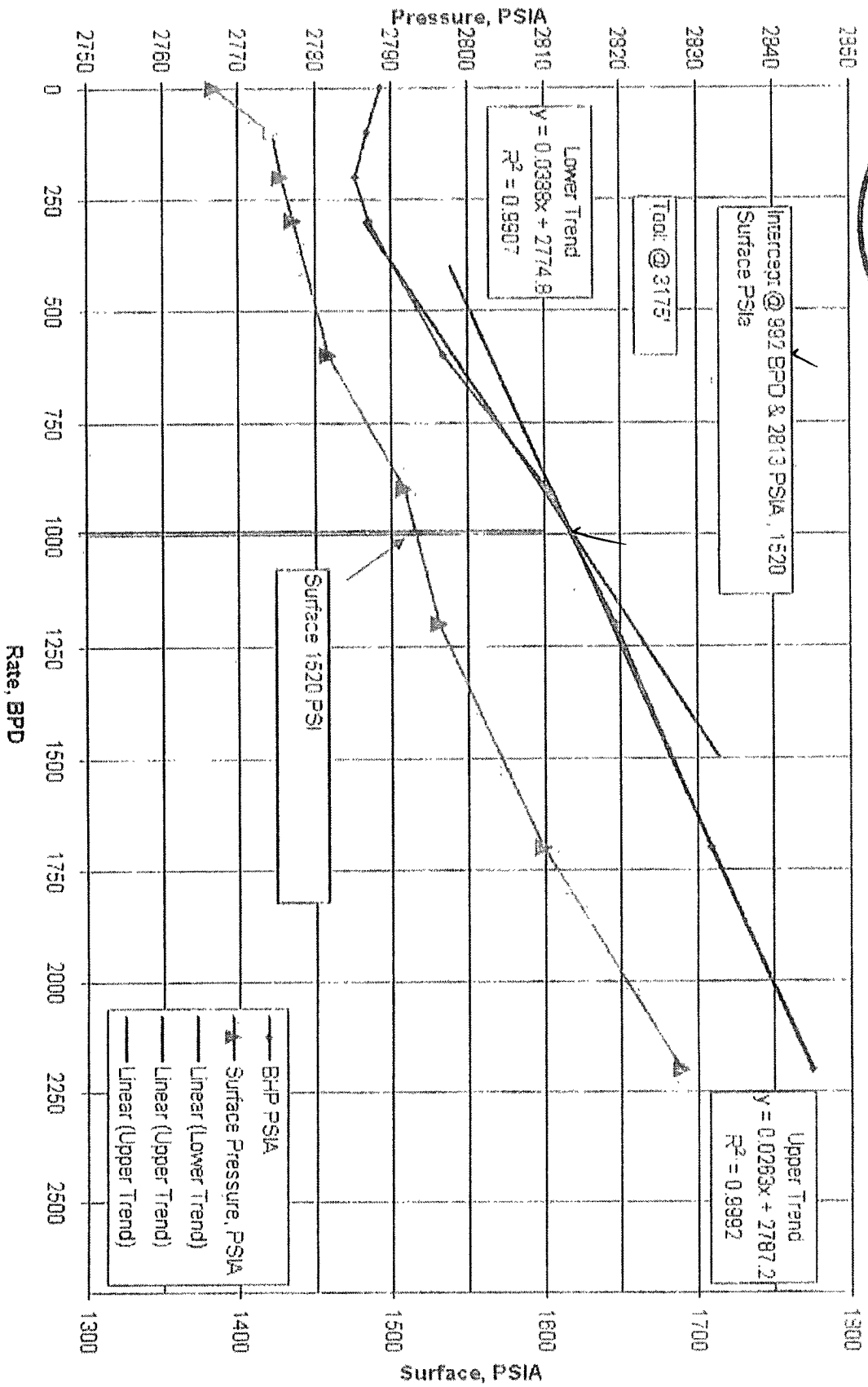
Sincerely,



Doug Rubick
Field Engineer



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



Step Rate Test

Chesapeake Energy
WVU-443
Field:
Lee County, NV

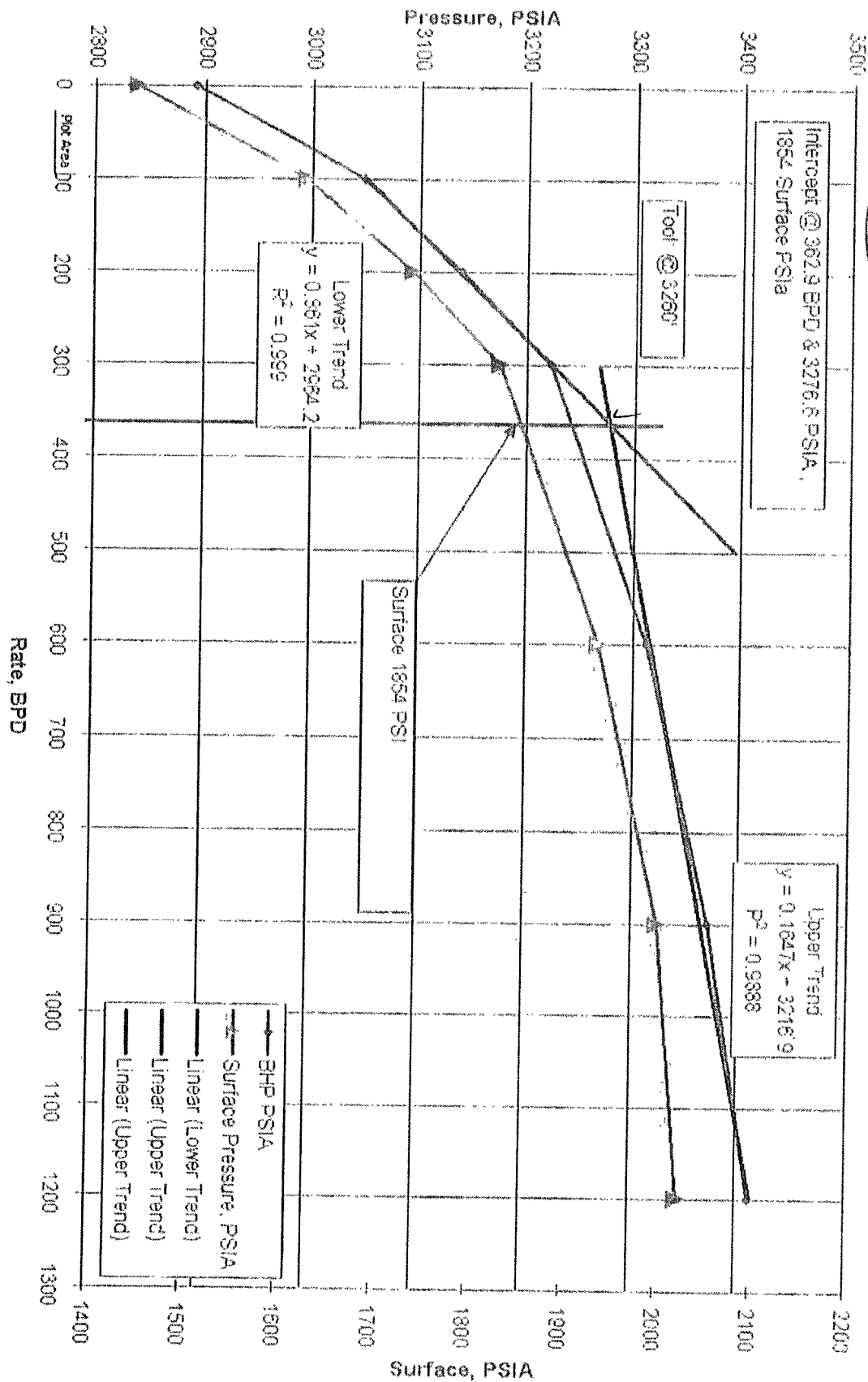


	S Time	E Time	D Time		Last Rate	Step B	Pressure		Cum	Delta	Avg.	Lower	Upper
			Min				PSIA	PSIA					
1	6:31 AM	8:45 AM	14		0	0	2788.5	1384	0	0	175	Trend	Trend
2	8:45 AM	9:45 AM	60		100	100	2788.9	1421.9	7.3	-3	216		
3	9:45 AM	10:45 AM	60		200	100	2789.3	1428.3	15.3	5	319	2787.1	
4	10:45 AM	11:45 AM	60		300	100	2787.1	1435.4	29.6	13.3	595	2796.8	
5	11:45 AM	12:45 PM	60		500	300	2786.8	1436.8	54.4	24.8	-274	2810.4	
6	12:45 PM	1:45 PM	60		900	300	2810.4	1509.2	43	-11.4	2380		
7	1:45 PM	2:45 PM	60		1200	300	2815.3	1531.3	142.3	99.3	1705		
8	2:45 PM	3:45 PM	60		1700	500	2831.9	1599.3	214.6	72.3	2198		
9	3:45 PM	4:45 PM	60		2200	500	2844.9	1669.5	106.2	91.6			
10	4:45 PM	5:45 PM	60		2700								

0.0086 2774.9
0.0233 2787.2
992 BPD
2815.2396 Psia

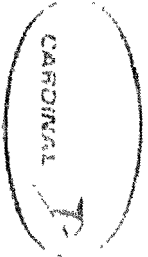


Chesapeake Energy Corp. Well # 641
 Step Rate Test 06-04-2008



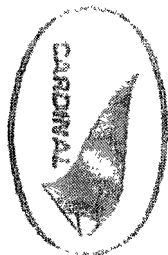
Step Rate Test

Chesapeake Energy
WJ 14641
Field: West Texas
Lea County, NM

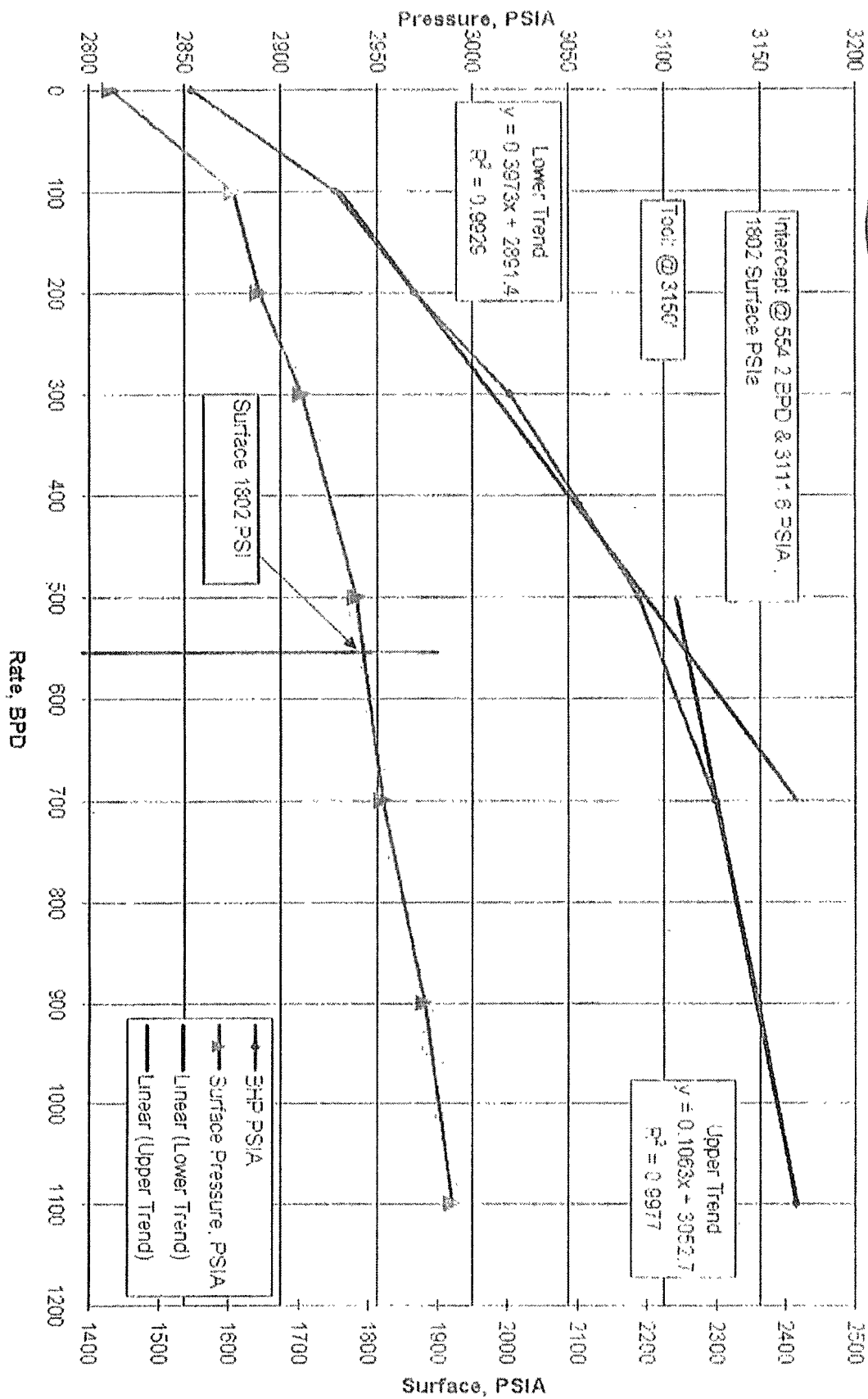


S Time	E Time	O Time	Last Rate	Step B	H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
		Min	BPD	BPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1 8:29 AM	8:45 AM	15	0	0	2851.9	1444.5	0	0	0		
2 8:45 AM	9:45 AM	30	100	100	3048.8	1522.5	6.1	6.1	146	3048.8	
3 9:45 AM	10:45 AM	60	200	100	3139.5	1738.2	15	2.5	214	3139.5	
4 10:45 AM	11:45 AM	60	300	100	3221	1828.5	28.4	13.4	322	3221	
5 11:45 AM	12:45 PM	60	600	300	3312.7	1934.1	51.6	23.2	557		3312.7
6 12:45 PM	1:45 PM	60	900	300	3371.2	1999.4	89	37.4	888		3371.2
7 1:45 PM	2:45 PM	50	1200	300	3411.5	2022.4	138	50	1200		3411.5
8 2:45 PM	3:00 PM	15	0	-1200	3334	1940	138	0	0		

Int point: 362.91523 BPD
3275.5725 PSia
0.361 2994.2
0.1647 3215.9

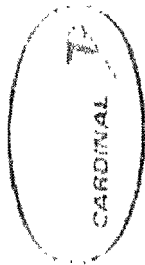


Chesapeake Energy Corp. WTU # 912
Step Rate Test 06-02-2008



Step Rate Test

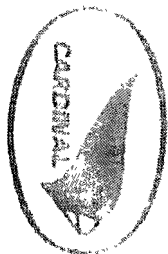
Chesapeake Energy
 Mt J-E-9-C
 Field:
 Lea County NIM



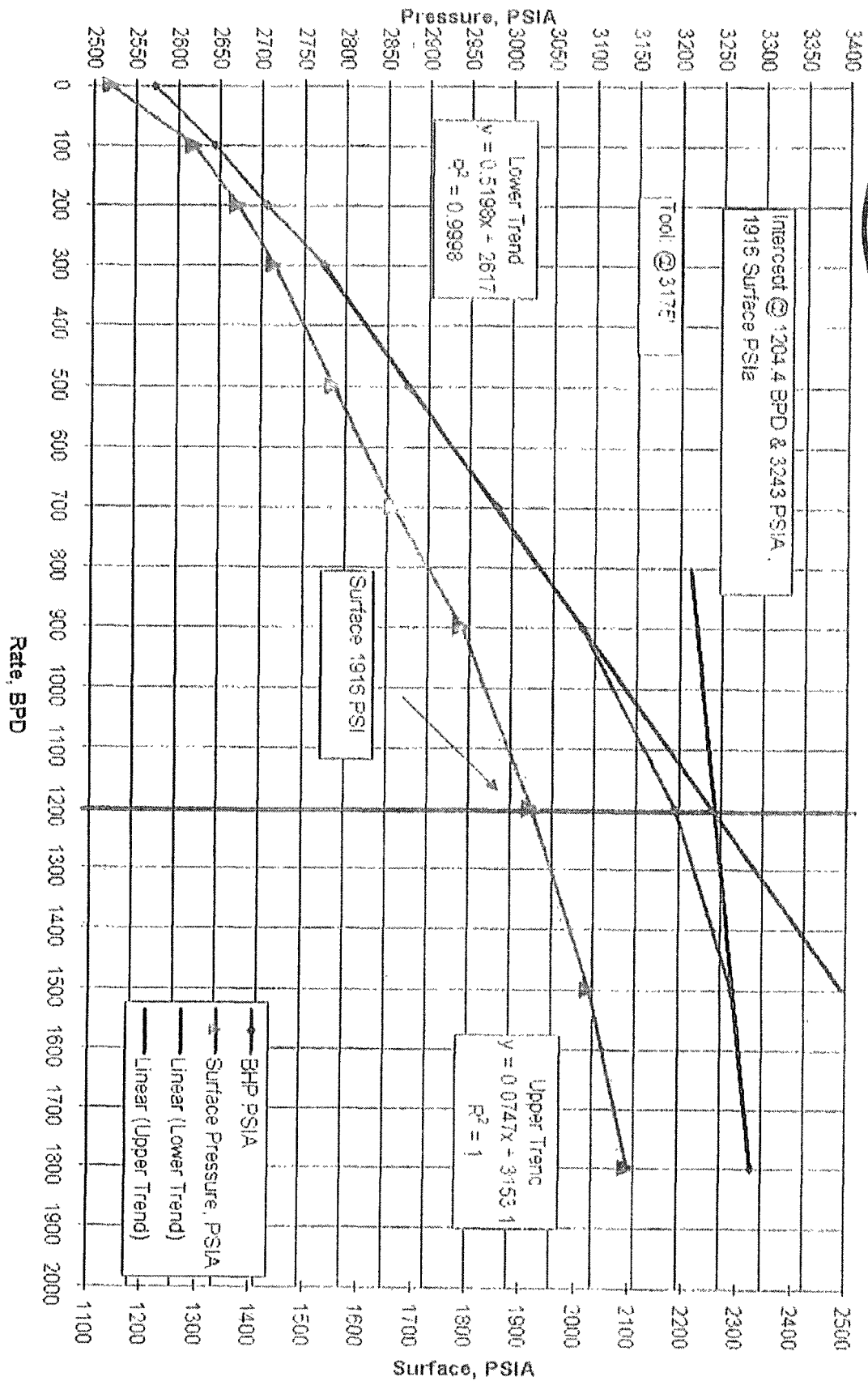
	S Time	E Time	D Time	Last Rate	SPD	Step S. H. Pressure	PSIA	Surf	Cum	Delta	Avg	Lower	Upper
	Min	SPD	SPD	SPD	SPD	SPD	SPD	SPD	SPD	SPD	SPD	Trend	Trend
1	8:48 AM	9:00 AM	12	0	0	2853.6	1607	1432.9	0	0	0		
2	9:00 AM	10:00 AM	60	100	100	2928	1607	1607	3.5	8.5	204	2928	2928
3	10:00 AM	11:00 AM	50	200	100	2999.4	1642.9	1642.9	17.4	8.9	214	2999.4	2999.4
4	11:00 AM	12:00 PM	50	300	100	3078.1	1704.1	1704.1	30.3	12.9	319	3078.1	3078.1
5	12:00 PM	1:00 PM	50	500	200	3058.2	1782.5	1782.5	52.3	22	529	3058.2	3058.2
6	1:00 PM	2:00 PM	50	700	200	3123.5	1821.1	1821.1	81.2	26.9	594		3126.5
7	2:00 PM	3:00 PM	50	900	200	3149.5	1863.9	1863.9	120.1	32.9	934		3149.5
8	3:00 PM	4:00 PM	50	1100	200	3159	1922.1	1922.1	155.5	45.4	1090		3159
9	4:00 PM	5:00 PM	50	0	-100	3125	1797	1797	165.5	0	0		

0.3875 2991.4
 0.1063 3052.7

int point: 554.29553 SPD
 3111.6219 Psia



Chesapeake Energy Corp. WTU # 913
Step Rate Test 06-03-2008



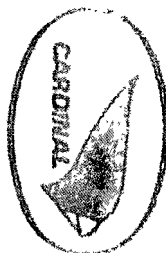
Step Rate Test

Chesapeake Energy
WCU # 913
Field:
Lea County, NM

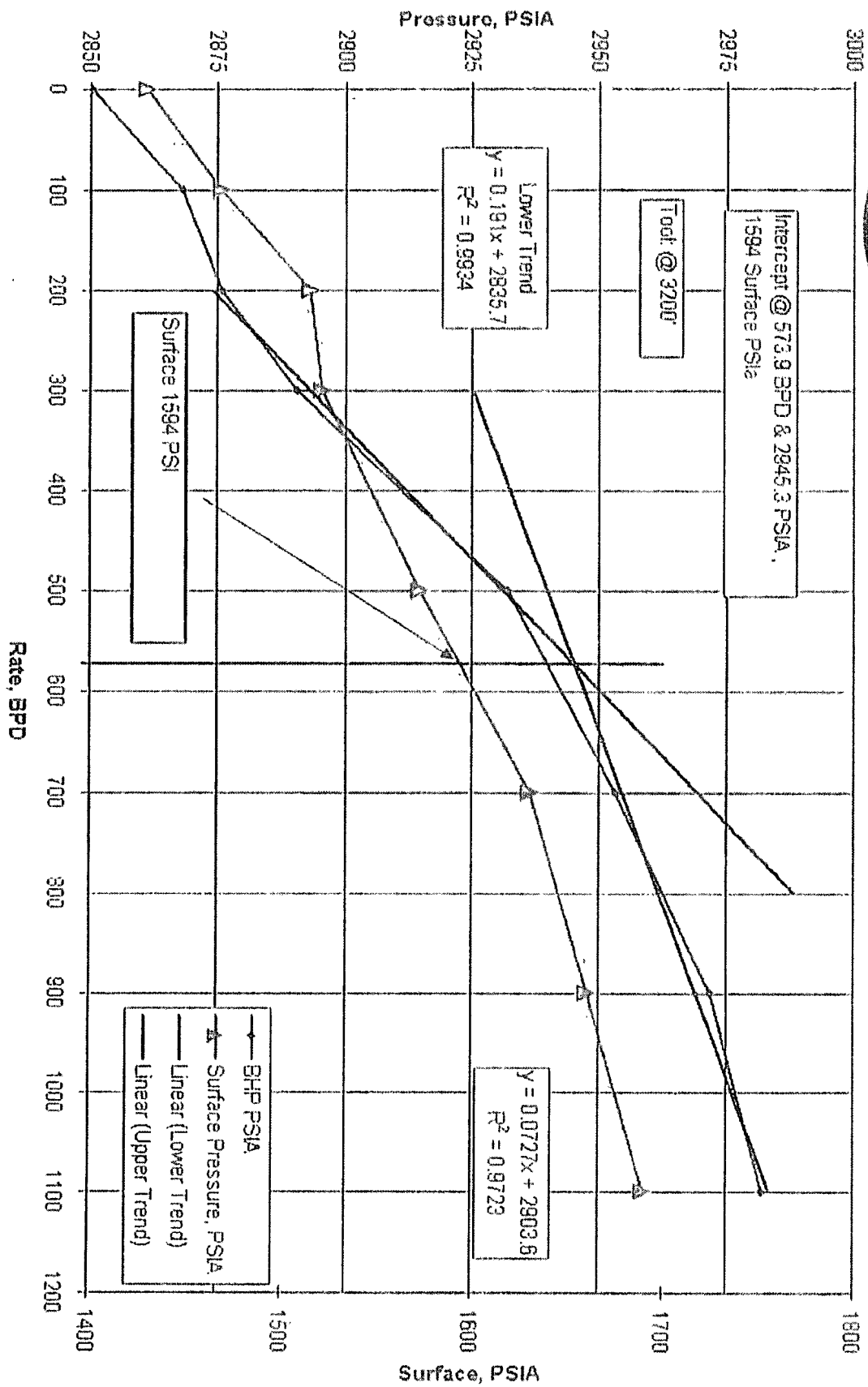


	S Time	E Time	D Time	Last Rate	Step 3	H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min.	BPD	BPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	8:51 AM	9:00 AM	9	0	0	2571.9	1151.4	0	0	0		
2	9:00 AM	10:00 AM	60	100	100	2643.1	1283	5.7	5.7	137		
3	10:00 AM	11:00 AM	60	200	100	2705	1365.8	14.7	9	216		
4	11:00 AM	12:00 PM	60	300	100	2773.5	1403.5	38	15.3	319	2773.2	
5	12:00 PM	1:00 PM	60	500	200	2874.5	1525.5	45.4	21.4	514	2874.5	
6	1:00 PM	2:00 PM	60	700	200	2983	1637.9	78.9	29.2	701	2983	
7	2:00 PM	3:00 PM	60	900	200	3084.2	1739.5	115.5	38	912	3084.2	
8	3:00 PM	4:00 PM	60	1200	300	3195.7	1918.8	198.5	51.9	1246		
9	4:00 PM	5:00 PM	60	1500	300	3285.1	2025.1	231.1	62.9	1502		3285.1
10	5:00 PM	6:00 PM	60	1800	300	3287.5	2096.1	308.5	77.4	1858		3287.5
11	6:00 PM	6:15 PM	15	0	-1200	3182	187.9	308.5	0	0		

0.5196 2617
0.0747 3153.1
net point: 1204.4484 BPD
3243.0723 PSia

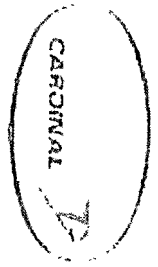


Chesapeake Energy Corp. WTU #921
Step Rate Test 05-28-2008



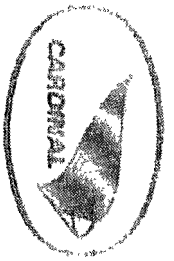
Step Rate Test

Chesapeake Energy
WTL #821
Field:
Lea County, NM

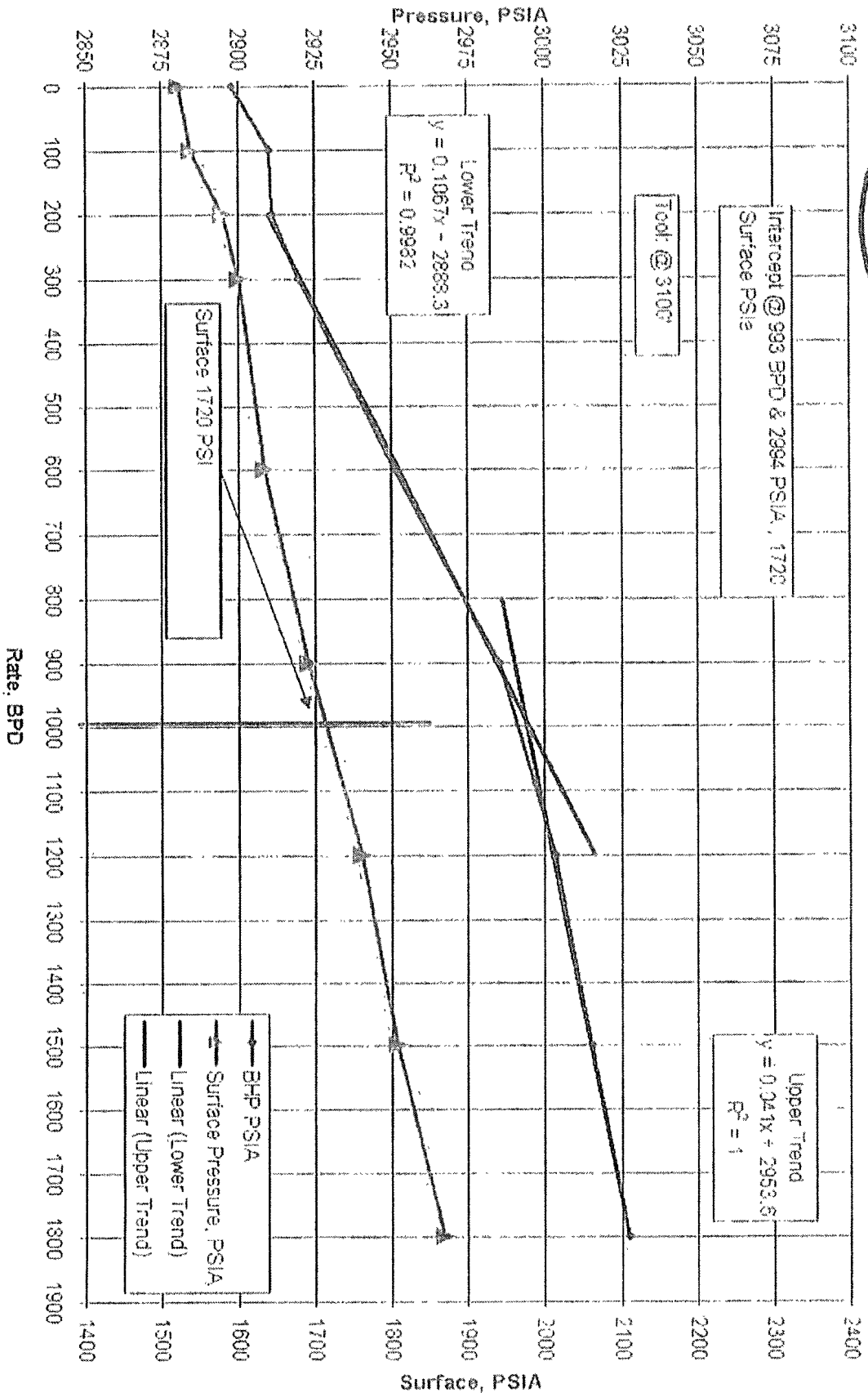


	S Time	E Time	O Time	Last Rate	Step	O. H.	Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD		PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	8:28 AM	8:30 AM	1	0	0		2850.4	1430	0	0	0		
2	8:30 AM	9:30 AM	50	100	100		2856.2	1458.5	5.2	6.5	156		
3	9:30 AM	10:30 AM	50	200	100		2875.7	1515	15.7	9.2	221	2875.7	
4	10:30 AM	11:30 AM	50	300	100		2890.3	1521.3	23.7	13	312	2890.3	
5	11:30 AM	12:30 PM	50	500	200		2932.1	1572.9	49.6	21.1	506	2932.1	
6	12:30 PM	1:30 PM	50	700	200		2953.1	1580.6	60.2	30.4	730		2953.1
7	1:30 PM	2:30 PM	50	900	200		2971.9	1650	117.9	37.7	305		2971.9
8	2:30 PM	3:30 PM	50	1100	200		2982.2	1689.6	185.5	47.6	1142		2982.2
9	3:30 PM	3:45 PM	15	0	-1100		2875	1493	165.5	0	0		

0.191 2835.7
0.0727 2903.6
init point: 573.9645 BPD
2945.3272 Psia



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



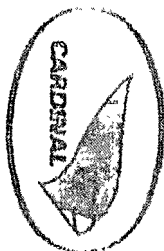
Step Rate Test

Chesapeake Energy
WTU #924
Field:
Lea County, NM

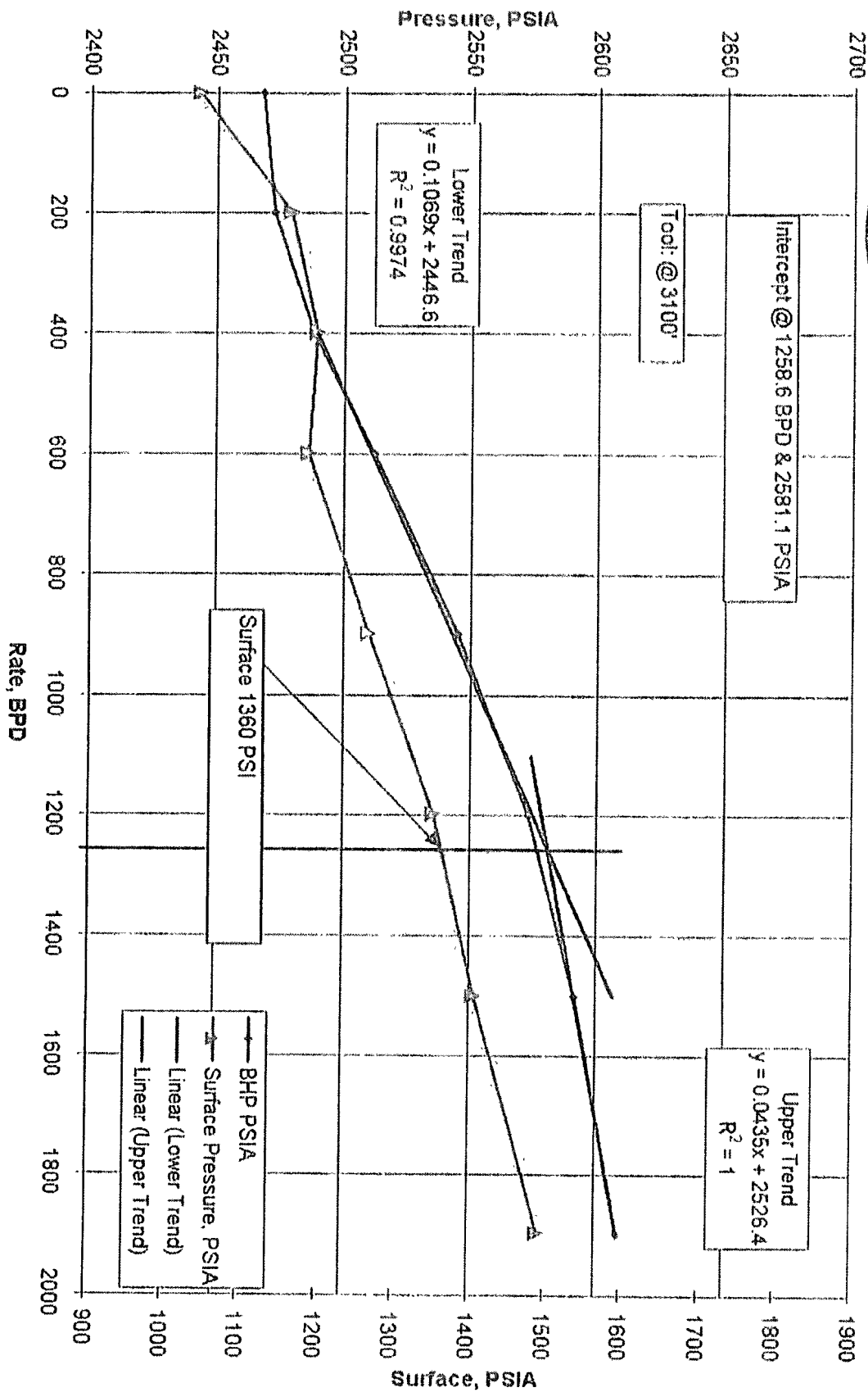


	S Time	E Time	D Time	Last Rate	Step R.	H. Pressure	Surf	CLm	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	SSL	SSL	BPD	Trend	Trend
1	8:00 AM	10:00 AM	50	0	0	2398.1	1522.4	0	0	0		
2	10:00 AM	11:00 AM	50	100	100	2910.3	1557.8	5.7	5.7	161		
3	11:00 AM	12:00 PM	50	200	100	2911	1579.1	15.5	8.8	211	2911	
4	12:00 PM	1:00 PM	50	300	100	2919.5	1601.1	28.6	13.1	314	2919.5	
5	1:00 PM	2:00 PM	50	600	300	2950.7	1634.3	54.3	25.7	617	2950.7	
6	2:00 PM	3:00 PM	50	900	300	2985.4	1681.1	93.2	38.9	934	2985.4	
7	3:00 PM	4:00 PM	50	1200	300	3003.7	1759.4	144.1	50.5	1222		
8	4:00 PM	5:00 PM	50	1500	300	3015.1	1807.2	208.7	64.6	1550		3015.1
9	5:00 PM	6:00 PM	50	1800	300	3027.4	1869.7	285.2	75.5	1835		3027.4
10	6:00 PM	6:15 PM	15	0	-1800	2957.2	1625.9	285.2	0	0		

0.1067 2888.5
0.041 2953.5
in: point: 893.91172 BPD
2994.3504 Psia



Chesapeake Energy Corp. WTU # 941
Step Rate Test 05-23-2008



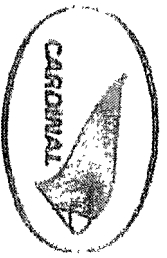
Step Rate Test

Crane Creek Energy
WFTU # 343
Field:
Lea County, NM

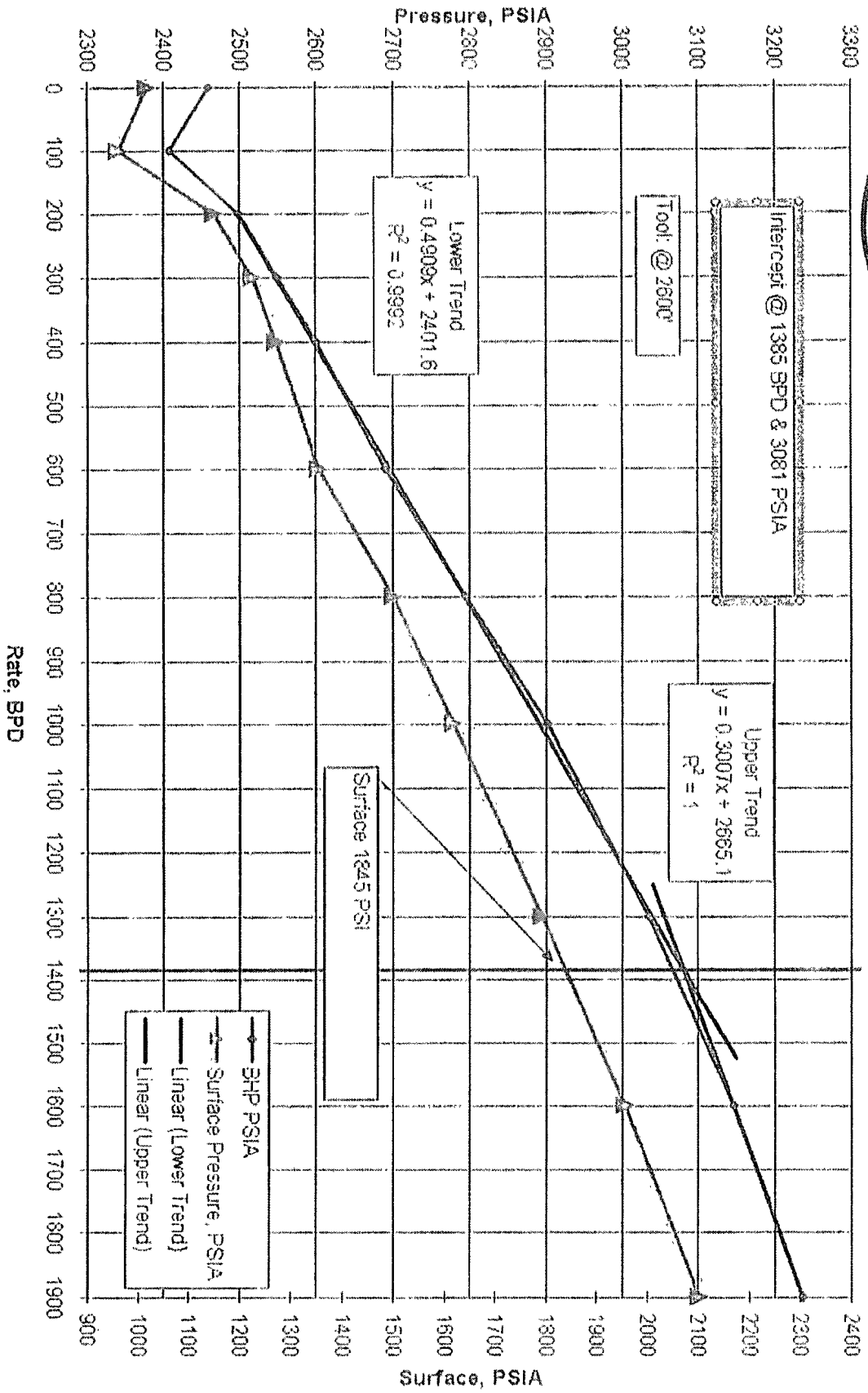


	S Time	E Time	D Time	Last Rate	Step	B. H.	Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	EPD	EPD		PSIA	PSIA	BBL	BBL	EPD	Trend	Trend
1	10:23 AM	10:30 AM	7	0	0		2466	1044.7	0	0	0		
2	10:30 AM	11:30 AM	50	200	200		2472.6	1162.6	5.8	9.3	235	2487.6	
3	11:30 AM	12:30 PM	50	400	200		2487.2	1198.7	25.9	16.1	396	2511.6	
4	12:30 PM	1:30 PM	50	600	200		2511.5	1185.7	51.7	25.3	619	2545	
5	1:30 PM	2:30 PM	50	800	300		2545	1265.9	82.2	37.5	900	2573.2	
6	2:30 PM	3:30 PM	50	1200	200		2573.2	1352	140.6	51.4	1234		
7	3:30 PM	4:30 PM	50	1500	300		2591.7	1406.7	203.1	62.6	1500		2591.7
8	4:30 PM	5:30 PM	50	1800	400		2609.3	1493.5	264.9	91.8	1963		2609.3
9	5:30 PM	5:45 PM	15	0	-1500		2573.2	1251.4	284.5	0	0		

Imp Point: 1258.9751 EPD
2581.524 Psia
0.1069 2446.5
0.0435 2523.4



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



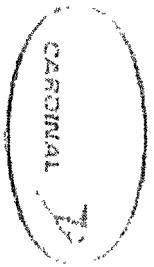
Step Rate Test

Merrose Operating

WTU #343

Field:

Lee County, NV



	S Time	E Time	D Time	Last Rate	Step E. H.	Pressure	SLT	Curt	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	8:04 AM	9:30 AM	25	0	0	2459.5	1016.1	0	0	0		
2	9:30 AM	10:30 AM	60	100	100	2407.1	951.8	5.3	5.3	127	2459.2	
3	10:30 AM	11:30 AM	50	200	100	2499.2	1148.8	13.3	9.5	204	2549.5	
4	11:30 AM	12:30 PM	60	300	100	2549.5	1223.1	28.5	12.7	306	2592.6	
5	12:30 PM	1:30 PM	60	400	100	2599.4	1271.5	42.5	18	354	2639.8	
6	1:30 PM	2:30 PM	60	500	200	2689.8	1355.8	53.4	25.8	522	2794.1	
7	2:30 PM	3:30 PM	60	800	200	2794.1	1499.8	102	33.6	806	2902.6	
8	3:30 PM	4:30 PM	60	1000	200	2902.6	1519	144.5	42.6	1022	3034.5	
9	4:30 PM	5:30 PM	60	1300	300	3034.5	1734	204.5	59.9	1438		
10	5:30 PM	6:30 PM	60	1500	350	3145.2	1957.3	265.4	60.9	1452		
11	6:30 PM	7:30 PM	60	1600	300	3238.4	2102.7	345	30.5	1334		
12	7:30 PM	7:45 PM	15									

0.4909 2401.6
 0.3307 2665.1
 int point 1365.338 BPD
 5081.6849 PSia