

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 NMOCD 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

TITLE

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.

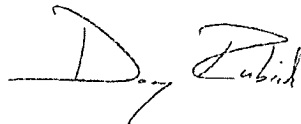
Well	API	Inj Press Limit	Order	Order Date	Comments
WTU 433	3002532032	968	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 443	3002535976	631	WFX-791	7/24/2003	Administrative Order based on 0.2 psi/ft
WTU 641	3002533144	632	WFX-791	7/24/2003	Administrative Order based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

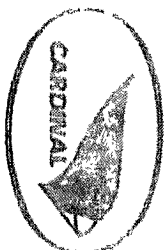
Well	API	Fracture Pressure	Requested Inj Press Limit	Date SRT Ran
WTU 443	3002535976	1,520	1,470	5/29/2008
WTU 641	3002533144	1,854	1,804	6/4/2008
WTU 912	3002529971	1,802	1,752	6/2/2008
WTU 913	3002529972	1,802	1,752	6/3/2008
WTU 921	3002531896	1,572	1,522	5/28/2008
WTU 924	3002536073	1,720	1,670	5/27/2008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

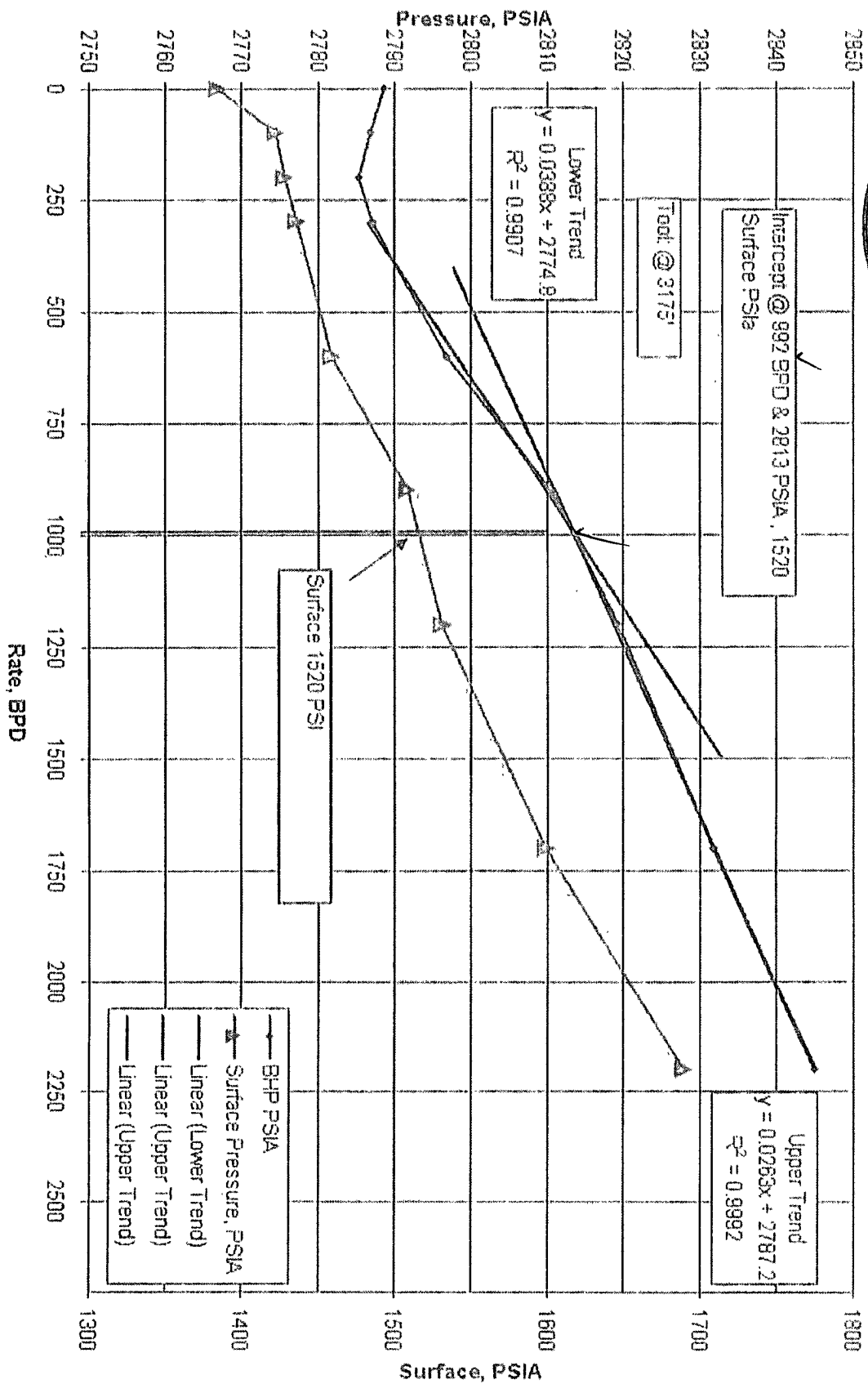
Sincerely,



Doug Rubick
Field Engineer



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



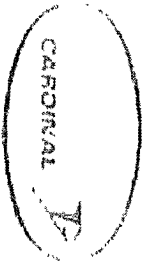
Step Rate Test

Chesapeake Energy

WFTU #443

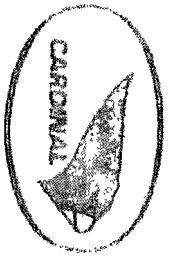
Field:

Lee County, NM

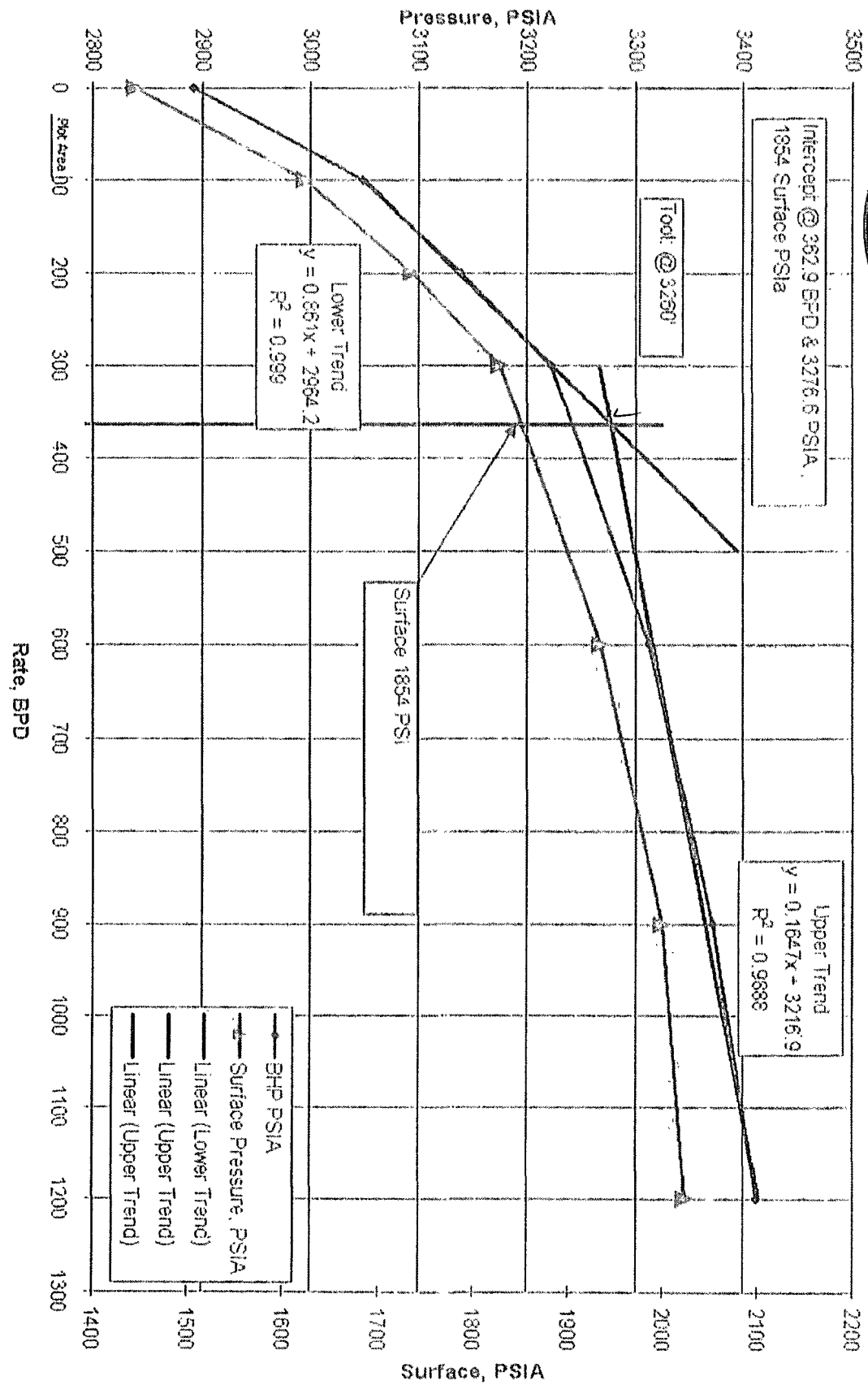


	S Time	E Time	D Time	Last Rate	Step 3. H.	Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	SPD	SPD	PSIA	PSIA	BBL	BBL	SPD	Trend	Trend
1	8:31 AM	8:45 AM	14	0	0	2786.6	1384	0	0	0		
2	8:45 AM	9:45 AM	60	100	100	2786.9	1421.9	7.3	7.3	175		
3	9:45 AM	10:45 AM	60	200	100	2785.3	1426.3	16.3	5	216		
4	10:45 AM	11:45 AM	60	300	100	2797.1	1435.4	29.6	13.3	319	2787.1	
5	11:45 AM	12:45 PM	60	500	300	2795.3	1456.6	54.4	24.8	398	2796.2	2310.4
6	12:45 PM	1:45 PM	60	900	300	2810.4	1509.2	43	-11.4	-274	2810.4	2815.3
7	1:45 PM	2:45 PM	60	1200	300	2819.3	1531.3	142.3	98.3	2383		2831.9
8	2:45 PM	3:45 PM	60	1700	500	2831.9	1595.7	214.6	72.3	1736		2844.9
9	3:45 PM	4:45 PM	60	2200	500	2844.9	1636.5	305.2	91.6	2196		
10	4:45 PM	5:45 PM	60	2700								

0.0036 2774.8
 0.0253 2787.2
 392 SPD
 2613.2896 PSia

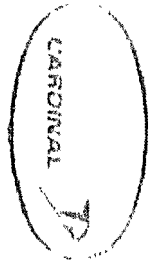


Chesapeake Energy Corp. WTLU # 641
Step Rate Test 06-04-2008



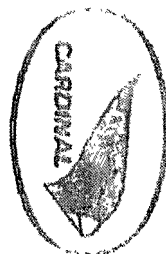
Step Rate Test

Chesapeake Energy
WU #641
Field: West Teas
Lea County, NM

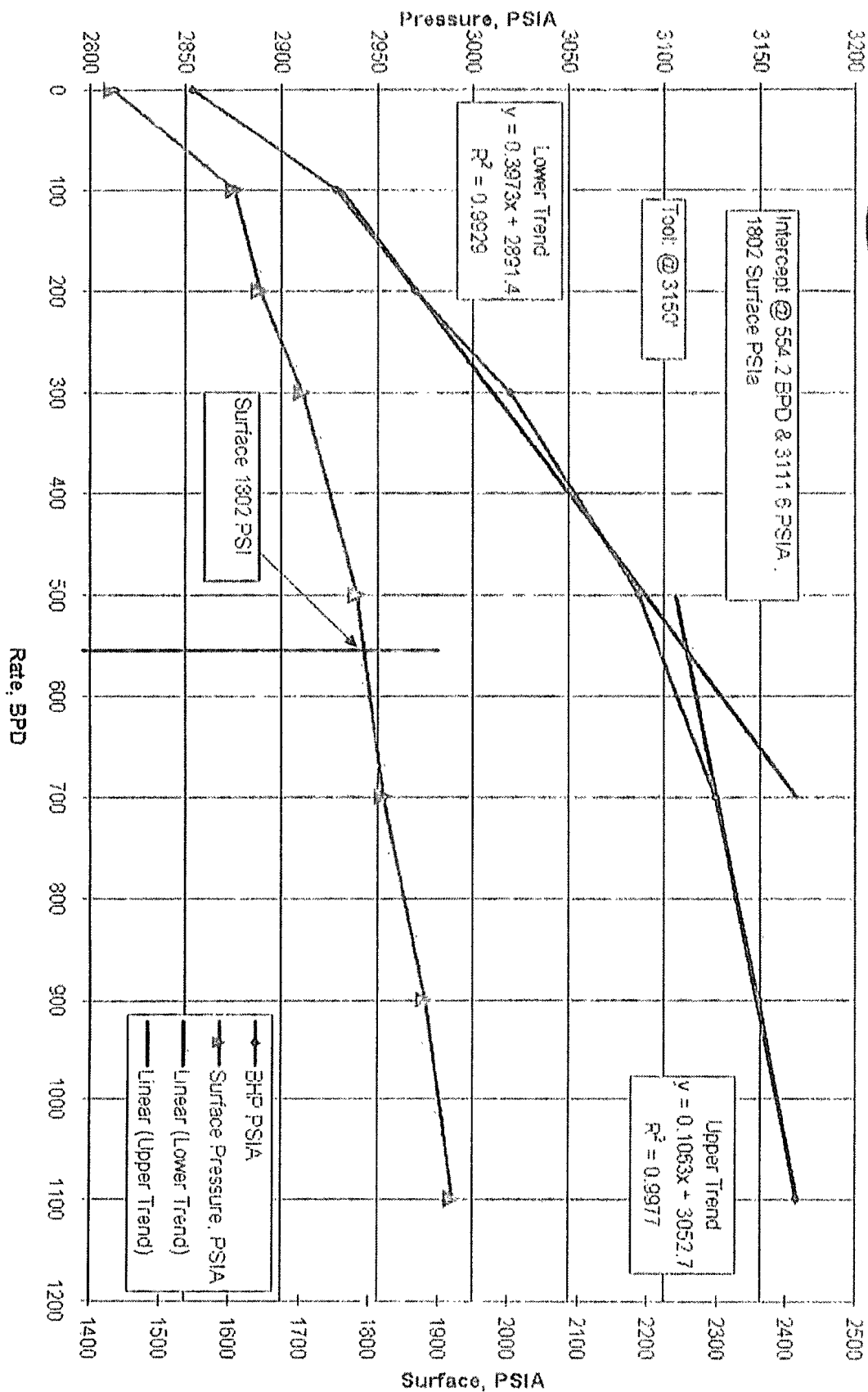


	S Time	E Time	D Time	Last Rate	Step E. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	SPD	SPD	PSIA	BBL	BBL	SPD	Trend	Trend
1	8:29 AM	8:45 AM	15	0	0	2891.8	0	0	0		
2	8:45 AM	8:45 AM	50	100	100	3048.6	5.1	5.1	146	3048.6	
3	9:45 AM	10:45 AM	60	200	100	3139.5	15	8.9	214	3139.5	
4	10:45 AM	11:45 AM	50	300	100	3221	28.4	13.4	322	3221	
5	11:45 AM	12:45 PM	50	500	300	3312.7	51.6	23.2	557	3312.7	
6	12:45 PM	1:45 PM	50	900	300	3371.2	35	37.4	368	3371.2	
7	1:45 PM	2:45 PM	50	1200	300	3411.5	139	30	1200	3411.5	
8	2:45 PM	3:00 PM	15	0	-1200	3334	139	0	0		

0.061 2984.2
0.1647 3216.9
Int point 362.91628 SPD
3276.3726 Psia

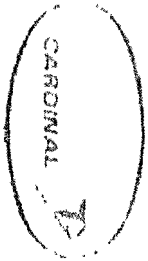


Chesapeake Energy Corp. WTU # 912
Step Rate Test 06-02-2008



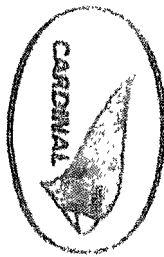
Step Rate Test

Chesapeake Energy
WTO# 912
Field:
Lea County, NM

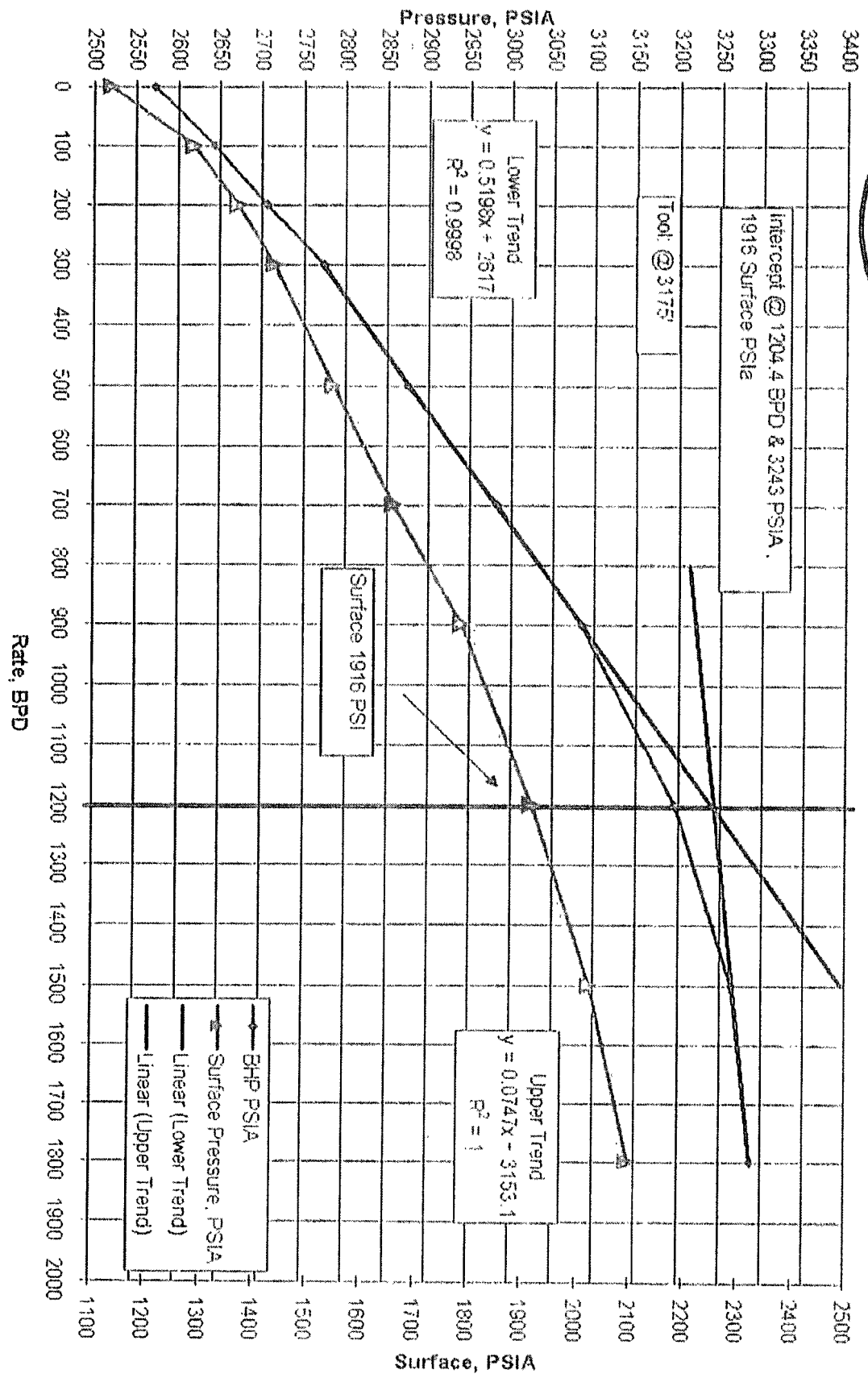


	S Time	E Time	D Time	Last Rate	Step S. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	BBL	BBL	BPD	Trend	Trend
1	8:48 AM	9:00 AM	12	0	0	2853.5	0	0	0	2528	
2	9:00 AM	10:00 AM	60	100	100	2928	8.5	8.5	204	2969.4	
3	10:00 AM	11:00 AM	60	200	100	2969.4	17.4	8.9	214	3019.1	
4	11:00 AM	12:00 PM	60	300	100	3019.1	20.3	12.9	310	3086.2	
5	12:00 PM	1:00 PM	60	500	200	3086.2	52.3	22	528		3126.5
6	1:00 PM	2:00 PM	60	700	200	3126.5	81.2	28.9	364		3149.5
7	2:00 PM	3:00 PM	60	900	200	3149.5	120.1	38.9	394		3169
8	3:00 PM	4:00 PM	60	1100	200	3169	165.5	45.4	1090		
9	4:00 PM	5:00 PM	60	0	-1100	3126	166.5	0	0		

int point 55429553 BPD
31116216 Psia
0.3973 2891.4
0.1063 3052.7



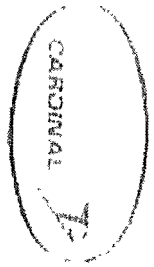
Chesapeake Energy Corp. WTU # 913
Step Rate Test 06-03-2008



Step Rate Test

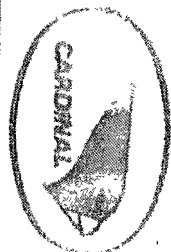
Chesapeake Energy
WTU # 9-3

Field:
Lea County, NM

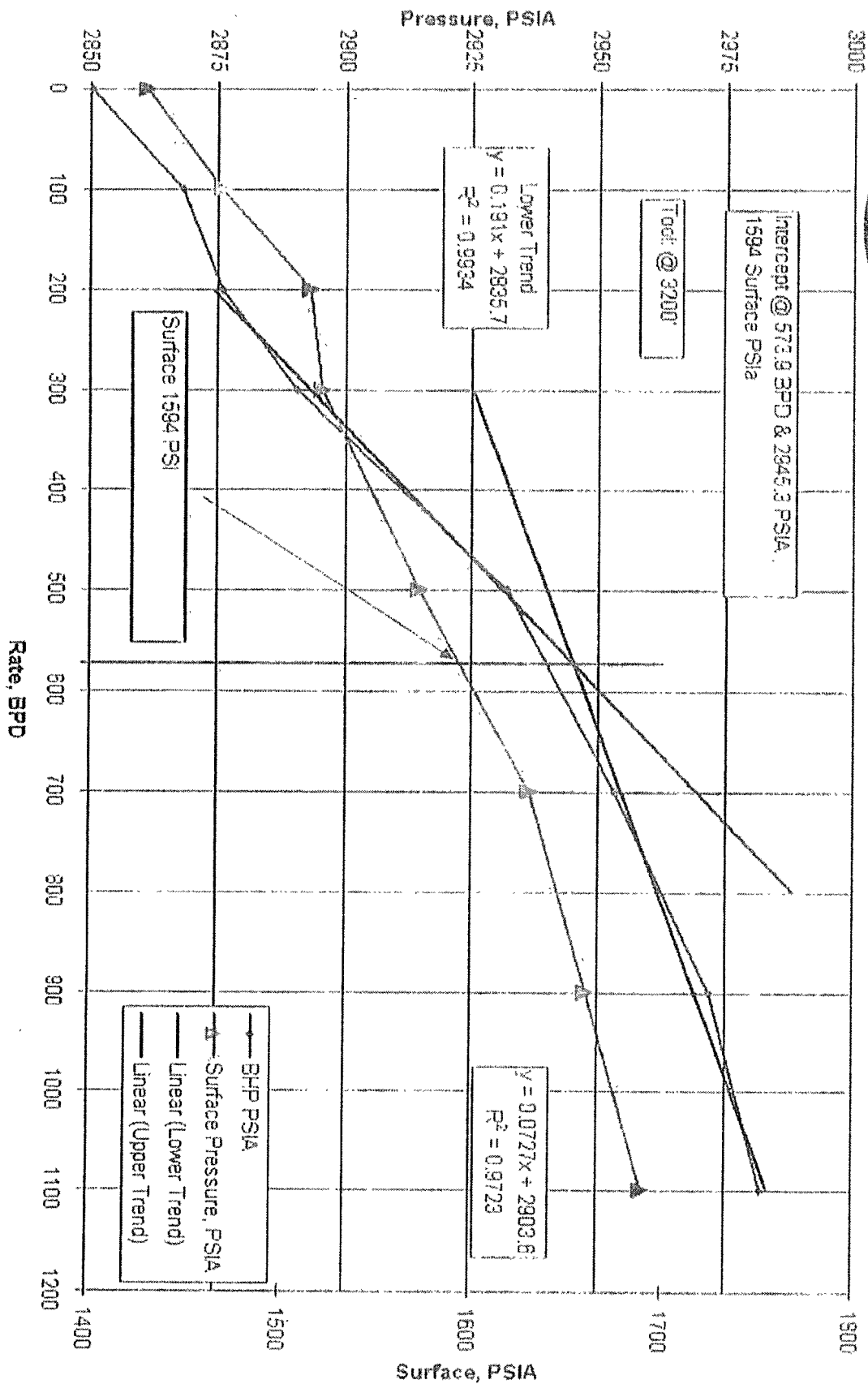


	S Time	E Time	D Time	Last Rate	Step 2	H. Pressure	Surf	Cum	Delta	Avg	Lower	Upper
			Min	BPD	EPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	8:51 AM	9:00 AM	3	0	0	2574.9	1133.4	0	0	0		
2	9:00 AM	10:00 AM	60	100	100	2643.1	1289	5.7	5.7	137		
3	10:00 AM	11:00 AM	90	200	100	2705	1386.3	14.7	9	216		
4	11:00 AM	12:00 PM	90	300	100	2773.8	1483.3	28	13.3	319	2773.8	
5	12:00 PM	1:00 PM	90	500	200	2874.8	1525.5	49.4	21.4	514	2874.8	
6	1:00 PM	2:00 PM	90	700	200	2983	1677.9	73.5	29.2	701	2983	
7	2:00 PM	3:00 PM	90	900	200	3084.2	1786.5	116.5	36	912	3084.2	
8	3:00 PM	4:00 PM	90	1200	300	3195.7	1913.5	168.5	51.9	1246		
9	4:00 PM	5:00 PM	90	1500	300	3265.1	2038.1	231.1	62.9	1502		
10	5:00 PM	6:00 PM	90	1800	300	3287.5	2098.1	308.5	77.2	1858		
11	6:00 PM	6:15 PM	5	0	-1800	3182	1813	308.5	0	0	3265.1	3287.5

0.5198 2617
0.0747 3153.1
1204.4484 BPD
3243.0723 Psia

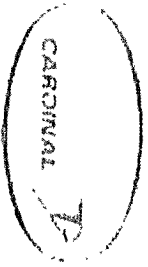


Chesapeake Energy Corp. WTU # 921
Step Rate Test 05-28-2008



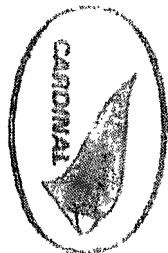
Step Rate Test

Chesapeake Energy
 WTU #921
 Field:
 Lea County, NM

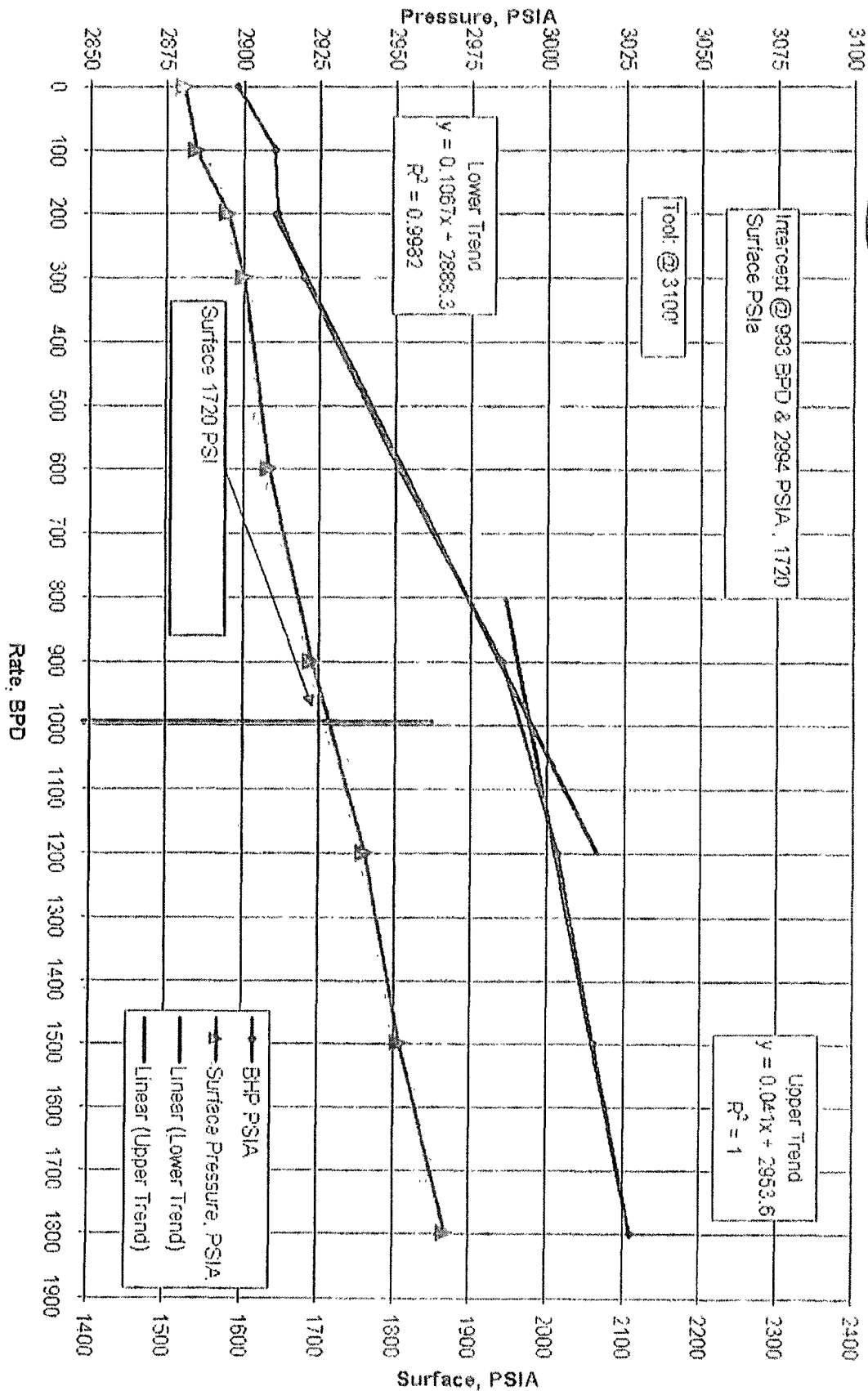


	S Time	E Time	D Time	Last Rate	Step B	H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	BSL	BSL	BPD	Trend	Trend
1	8:28 AM	8:30 AM	2	0	0	2850.4	1430	0	0	0		
2	8:30 AM	8:30 AM	60	100	100	2838.2	1468.5	6.5	6.5	155		
3	8:30 AM	10:30 AM	80	200	100	2875.7	1515	15.7	9.2	221	2875.7	
4	10:30 AM	11:30 AM	60	300	100	2890.3	1521.3	28.7	13	312	2890.3	
5	11:30 AM	12:30 PM	60	500	200	2932.1	1572.9	49.8	21.1	506	2932.1	
6	12:30 PM	1:30 PM	60	700	200	2953.1	1580.6	80.2	30.4	730		2953.1
7	1:30 PM	2:30 PM	60	900	200	2971.9	1650	117.9	37.7	905		2971.9
8	2:30 PM	3:30 PM	90	1100	200	2982.2	1683.6	185.6	47.6	1142		2982.2
9	3:30 PM	3:45 PM	15	0	-1100	2875	1498	165.5	0	0		

0.194 2835.7
 0.0727 2903.6
 Inj point: 573.9845 BPD
 2945.3272 Psia

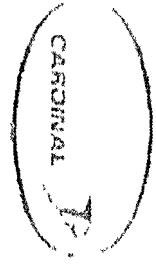


Chesapeake Energy Corp. WTLU # 924
Step Rate Test 05-27-2008



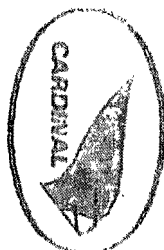
Step Rate Test

Chesapeake Energy
WTU #924
Field:
Lea County, NM

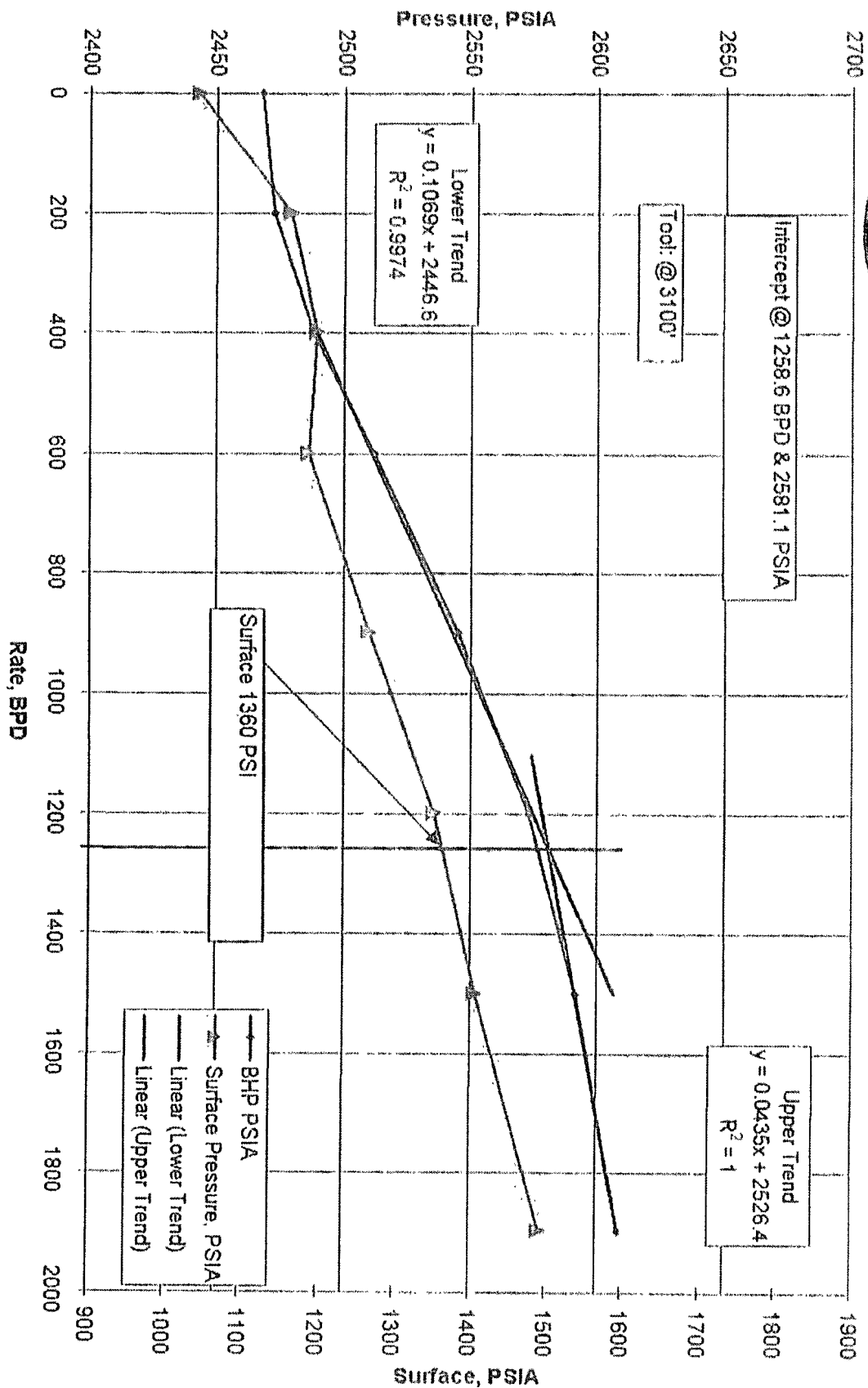


	S Time	E Time	D Time	Last Rate	Step B. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			MIn	BPD	BPC	PSIA	BSL	BSL	BPD	Trend	Trend
1	8:00 AM	10:00 AM	50	0	0	2398.1	0	0	0		
2	10:00 AM	11:00 AM	50	100	100	2910.3	6.7	6.7	161	2911	
3	11:00 AM	12:00 PM	50	200	100	2911	15.5	8.8	211	2919.6	
4	12:00 PM	1:00 PM	50	300	100	2919.6	28.6	13.1	314	2950.7	
5	1:00 PM	2:00 PM	50	500	300	2950.7	54.3	25.7	517	2985.4	
6	2:00 PM	3:00 PM	50	900	366	2985.4	93.2	38.5	934		
7	3:00 PM	4:00 PM	50	1200	360	3003.7	144.1	50.9	1222		
8	4:00 PM	5:00 PM	50	1500	360	3016.1	208.7	64.6	1550		
9	5:00 PM	6:00 PM	50	1600	360	3027.4	265.2	76.5	1635		
10	6:00 PM	6:15 PM	15	0	-1660	2957.2	265.2	0	0		

0.1067 2888.5
0.041 2963.6
Inj. point: 993.91172 BPD
2994.3504 Psia



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



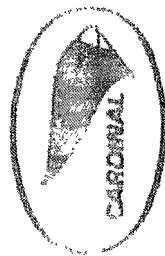
Step Rate Test

Chesapeake Energy
WTLU # 541
Field:
Lea County, NM

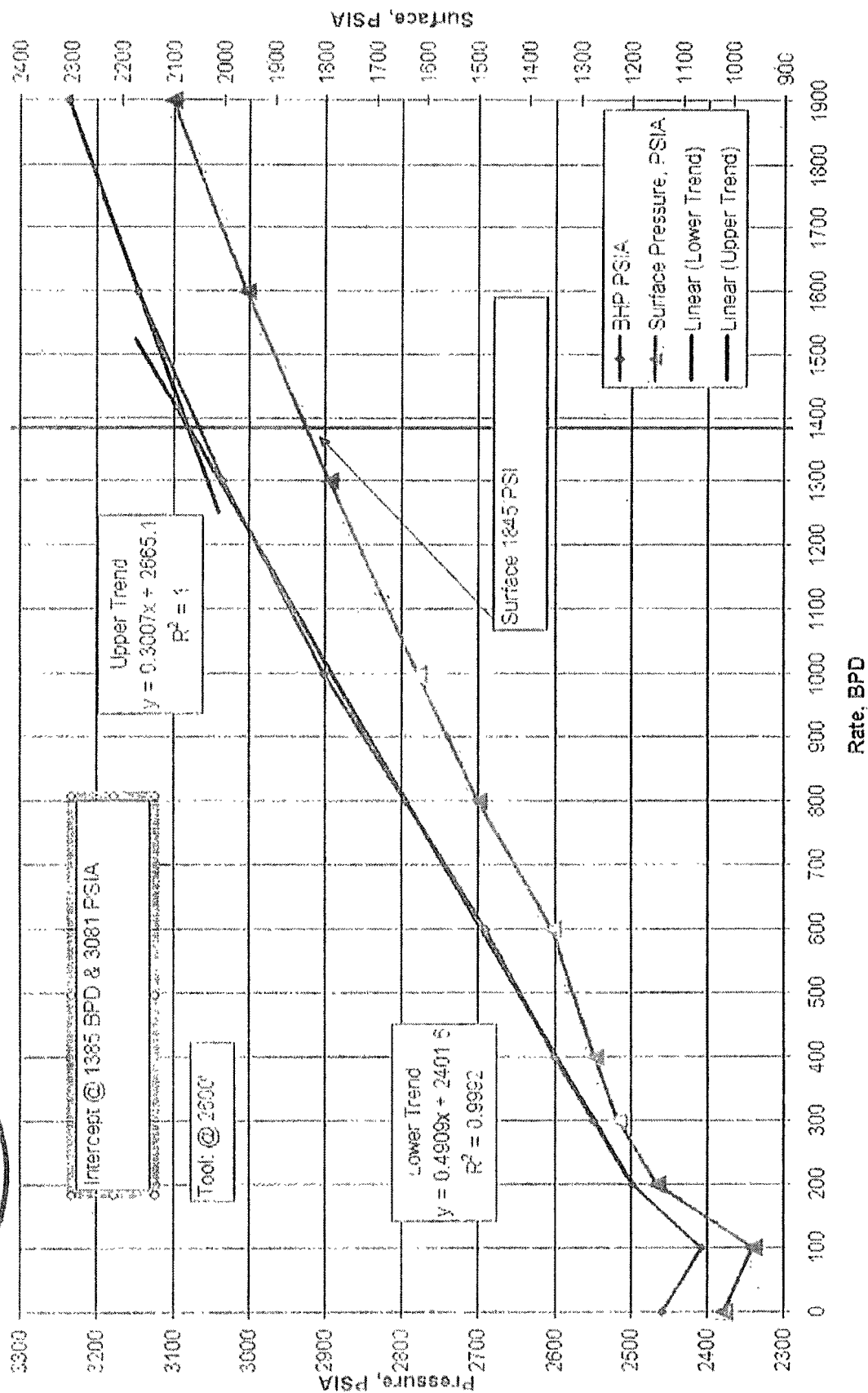


	S Time	E Time	D Time	Last Rate	Step S. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	EPD	EPD	PSIA	PSIA	BSL	SPD	Trend	Trend
1	10:23 AM	10:30 AM	7	0	0	2466	1044.7	0	0		
2	10:30 AM	11:30 AM	60	200	200	2472.6	1152.6	9.8	235		
3	11:30 AM	12:30 PM	60	400	200	2487.3	1198.7	25.9	386	2487.8	
4	12:30 PM	1:30 PM	60	600	200	2511.6	1186.7	51.7	619	2511.6	
5	1:30 PM	2:30 PM	60	800	300	2545	1256.9	39.2	900	2545	
6	2:30 PM	3:30 PM	60	1200	300	2573.2	1352	140.6	1234	2573.2	
7	3:30 PM	4:30 PM	60	1500	300	2591.7	1406.7	203.1	1500		2591.7
8	4:30 PM	5:30 PM	60	1600	400	2609.1	1453.5	264.9	1963		2609.1
9	5:30 PM	5:45 PM	15	0	-1900	2575.2	1251.4	284.9	0		

Int point: 1258.6753 BPD
2581.1524 PSIA
0.1066 2446.5
0.0435 2526.4

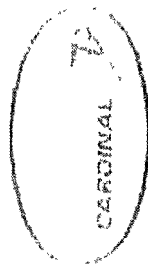


Chesapeake Energy Corp. WTU # 945
Step Rate Test 05-22-2008



Step Rate Test

Manrose Operating
 WTU #945
 Field:
 Lea County, NV



	S Time	E Time	O Time	Last Rate	Step E. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	9:04 AM	9:30 AM	25	0	2459.5	1016.1	0	0	0		
2	9:30 AM	10:30 AM	50	100	2407.1	958.9	53	53	127		
3	10:30 AM	11:30 AM	50	200	2499.2	1149.8	123	85	204	2499.2	
4	11:30 AM	12:30 PM	50	300	2549.8	1223.1	295	127	305	2549.8	
5	12:30 PM	1:30 PM	50	400	2599.4	1271.0	425	16	354	2599.4	
6	1:30 PM	2:30 PM	50	500	2599.8	1353.5	554	25.9	522	2599.8	
7	2:30 PM	3:30 PM	50	600	2784.1	1499.9	102	33.5	805	2784.1	
8	3:30 PM	4:30 PM	50	1000	2902.8	1619	144.6	42.0	1922	2902.8	
9	4:30 PM	5:30 PM	50	1300	3034.5	1794	204.6	59.9	1432	3034.5	
10	5:30 PM	6:30 PM	50	1500	3145.2	1957.3	255.4	80.9	1452		3145.2
11	6:30 PM	7:30 PM	50	1900	3235.4	2102.7	346	50.6	1934		3235.4
12	7:30 PM	7:45 PM	15								

0.4909 2401.9
 0.3007 2555.1

int point: 1385.3838 BPD
 3081.6849 Psia