

DATE IN 7/11/08	SUSPENSE	ENGINEER W Jones	LOGGED IN 7/11/08	TYPE IPI	APP NO. PKUR0819329405
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

Chesapeake
Swellers

Lea County

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached
- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**
- [4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Curtis Blake
Print or Type NameCurtis Blake
SignatureProduction Superintendent 7-11-08
Title DateCBLAKE@CHKEnergy.com
e-mail Address

2008 JUL 11 AM 8 09

RECEIVED

Chesapeake

FACSIMILE COVERSHEET

Date: 7-11-2008

To: Kim Romero

Phone #: _____

Fax #: 505-476-3462

From: Doug Rubick

Phone #: 575-441-7326

Fax #: (505) 391-6679

No. of Pages (Including coversheet) 2

Notes: WTU waterflood increase injection
pressure. If you need anything else let me
know.

Have a Great Day !

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

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

RECEIVED
2008 JUL 10 PM 1 49

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
For State Use Only

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

Telephone No. (575)391-1462

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

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.

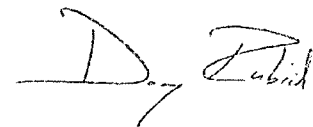
Well	API	Inj Press Limit	Order	Order Date	Comments
WTU 433	3002532032	988	IPI-244	10/19/2004	Division Order for increased injection pressure after SRT.
WTU 443	3002535978	631	WFX-791	7/24/2003	Administrative Order based on 0.2 psi/ft
WTU 641	3002533144	632	WFX-791	7/24/2003	Administrative Order based 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	3002535978	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	1,672	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

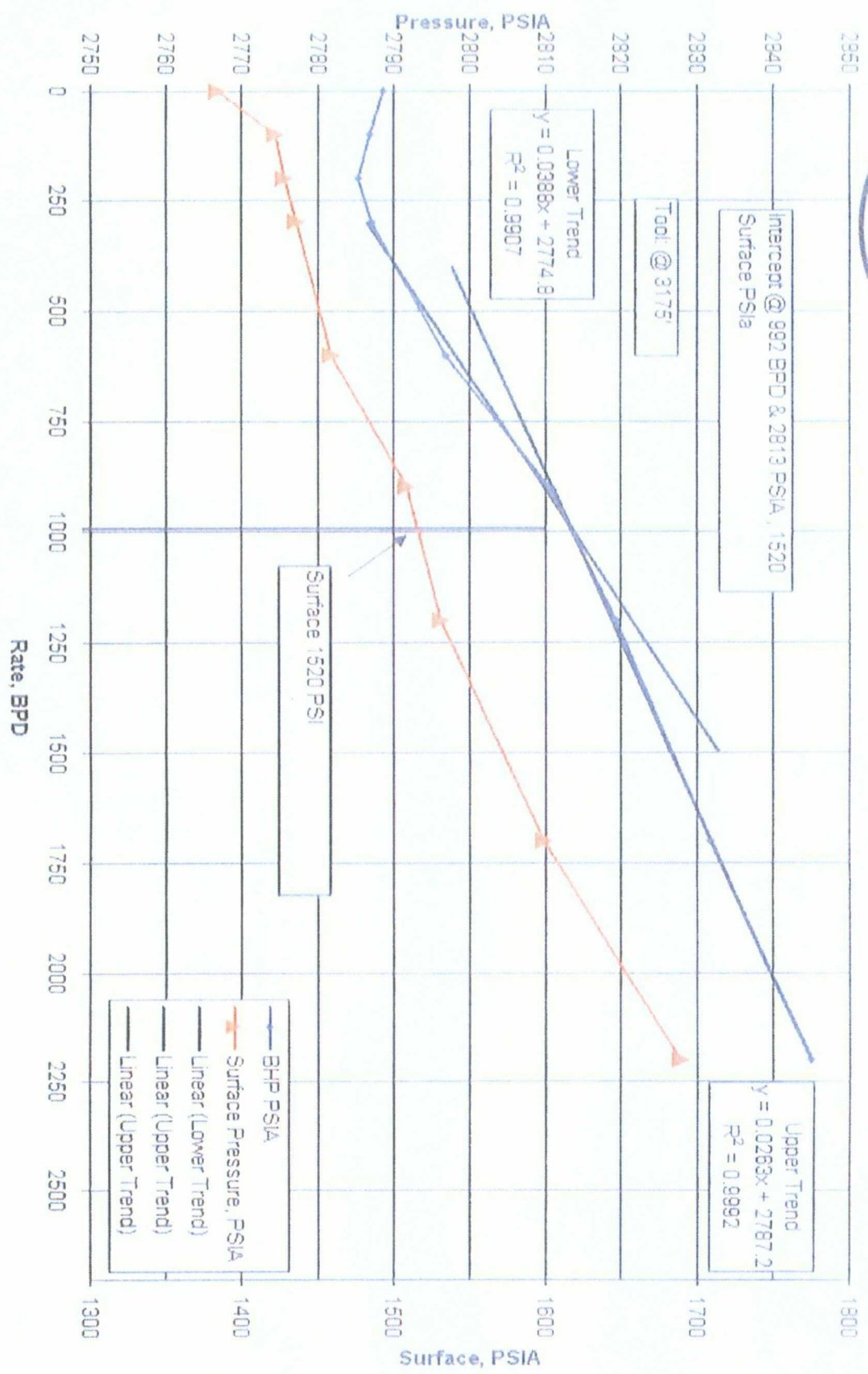
xxx psi
Murphy Kill Switch

0% of error
on measurement

TRRC 1/2 psi/ft
0.5 x 1/4 ft



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



Step Rate Test

Chesapeake Energy
WTU #443
Field:
Lea County, NM

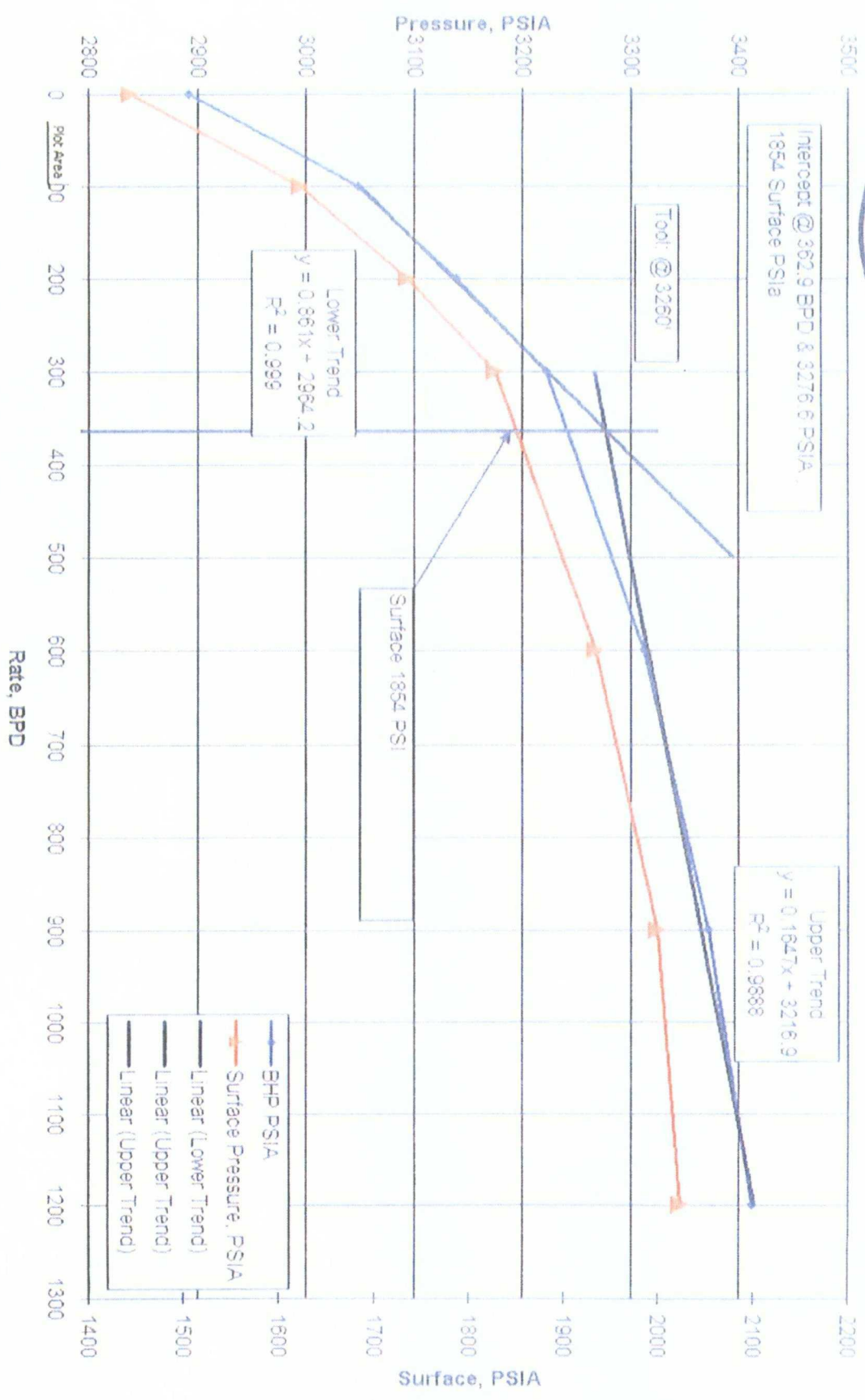


	S Time	E Time	D Time	Last Rate	Step	A. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	BBL	BBL	EPD	Trend	Trend
1	8:31 AM	8:45 AM	12	3	0	2768.5	1364	0	0	0		
2	8:45 AM	9:45 AM	60	100	100	2768.9	1421.3	7.3	7.3	175		
3	9:45 AM	10:45 AM	60	200	100	2785.2	1428.3	16.3	9	216		
4	10:45 AM	11:45 AM	60	300	100	2787.1	1435.4	29.6	13.3	316	2787.1	
5	11:45 AM	12:45 PM	60	300	300	2795.9	1458.3	54.4	24.8	595	2795.8	
6	12:45 PM	1:45 PM	60	900	300	2810.4	1509.2	43	-11.4	-274	2810.4	2810.4
7	1:45 PM	2:45 PM	60	1200	300	2819.3	1531.5	142.3	93.3	2383		2819.3
8	2:45 PM	3:45 PM	60	1700	500	2831.9	1599.3	214.6	72.3	1735		2831.9
9	3:45 PM	4:45 PM	60	2200	500	2844.9	1666.5	305.2	91.6	2198		2844.9
10	4:45 PM		60	2700								

in point 992 BPD
2810.2896 Psia
0.0036 2774.8
0.00263 2787.2



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



Step Rate Test

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

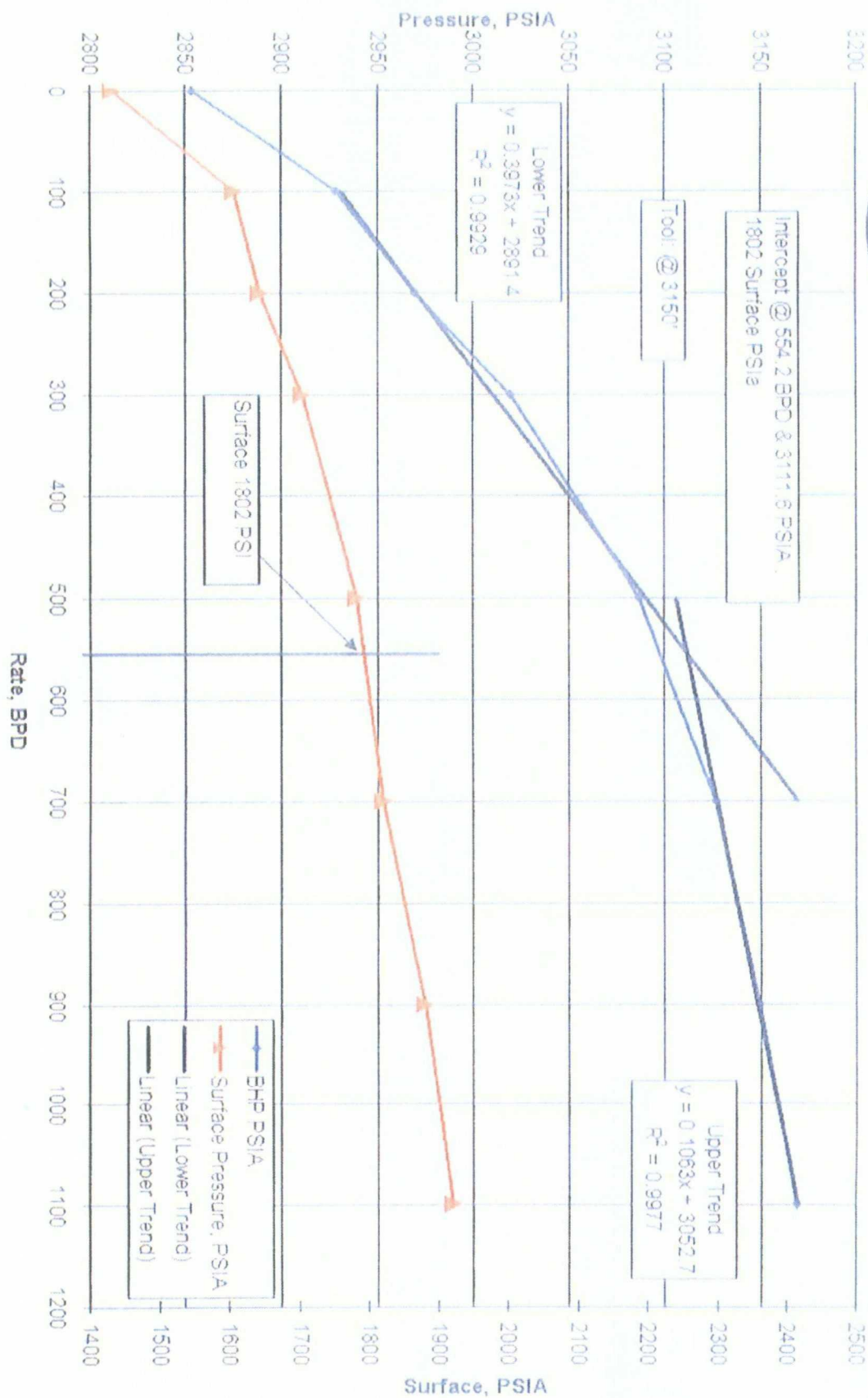


	S Time	E Time	D Time Last Rate		Step S. H. Pressure		Surf		Cum		Delta		Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	3BL	3BL	3BL	BPD	BPD			
1	8:29 AM	8:45 AM	18	0	0	2891.8	1444.6	0	0	0	0	0			
2	8:45 AM	9:45 AM	60	100	100	3048.8	1622.5	6.1	6.1	6.1	146	146	3048.8		
3	9:45 AM	10:45 AM	60	200	100	3139.5	1736.2	15	8.9	8.9	214	214	3139.5		
4	10:45 AM	11:45 AM	60	300	100	3221	1828.5	28.4	13.4	13.4	322	322	3221		
5	11:45 AM	12:45 PM	60	600	300	3312.7	1934.1	51.8	23.2	23.2	567	567	3312.7		
6	12:45 PM	1:45 PM	60	900	300	3371.2	1999.4	89	37.4	37.4	668	668	3371.2		
7	1:45 PM	2:45 PM	60	1200	300	3411.5	2022.4	139	50	50	1200	1200	3411.5		
8	2:45 PM	3:00 PM	15	0	-1200	3354	1940	139	0	0	0	0			

0.861 2864.2
0.1647 3246.9
Int point: 362.91828 BPD
3276.6726 Psia



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



Step Rate Test

Chesapeake Energy
WTLU # 912
Field:
Lee County, NM

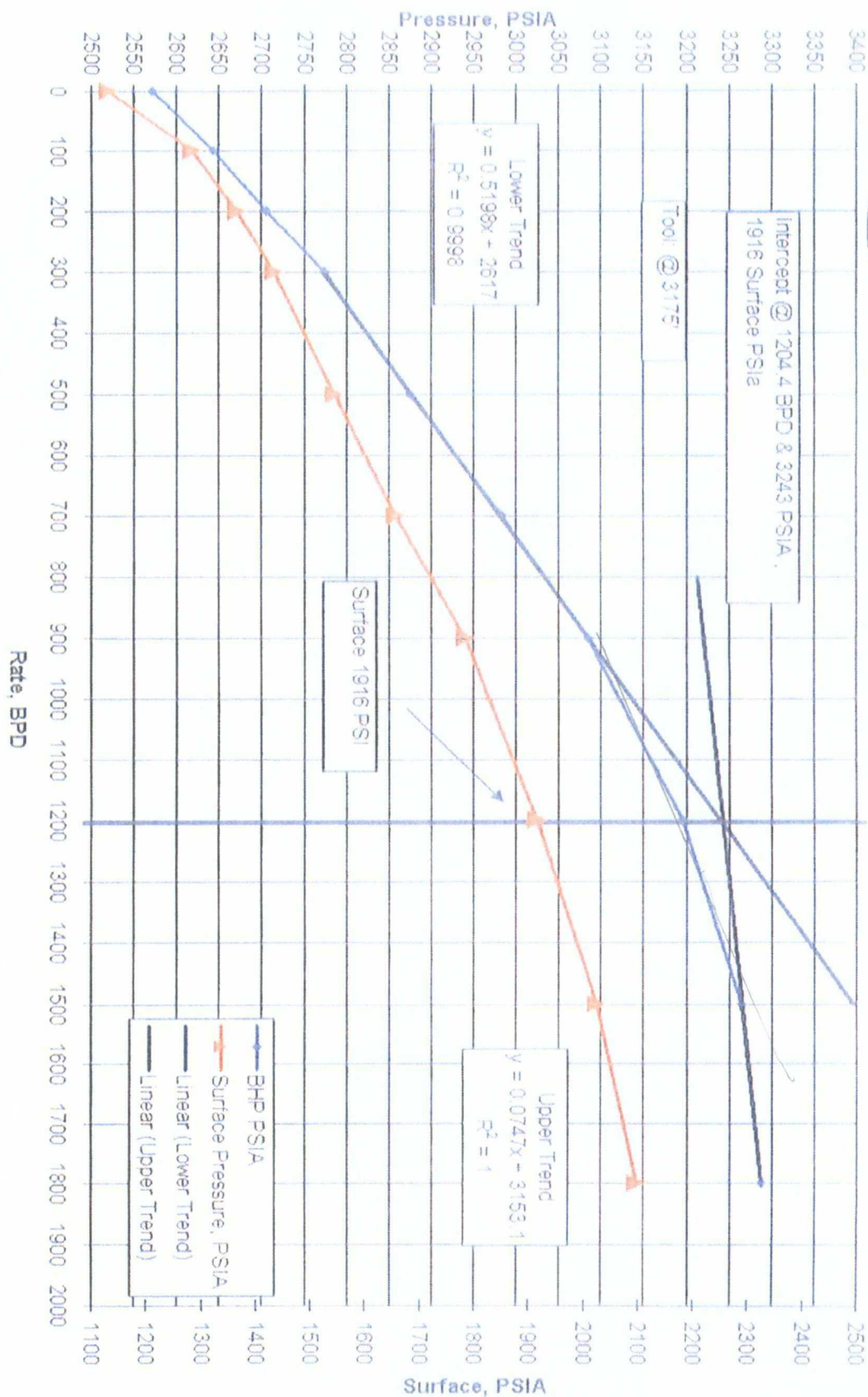


S Time	E Time	D Time	Last Rate	Step S. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
		Min	BPD	BPD	PSIA	BBL	BBL	BPD	Trend	Trend
1 8:45 AM	9:00 AM	12	0	0	2853.5	0	0	0	2928	
2 9:00 AM	10:00 AM	80	100	100	2928	8.5	8.5	204	2969.4	
3 10:00 AM	11:00 AM	80	200	100	2969.4	17.4	8.9	214	3019.1	
4 11:00 AM	12:00 PM	80	300	100	3019.1	30.3	12.9	310	3069.2	
5 12:00 PM	1:00 PM	80	500	200	3069.2	52.3	22	528		3126.5
6 1:00 PM	2:00 PM	80	700	200	3126.5	81.2	28.9	894		3149.5
7 2:00 PM	3:00 PM	80	900	200	3149.5	120.1	38.8	934		3169
8 3:00 PM	4:00 PM	30	1100	200	3169	155.5	45.4	1080		
9 4:00 PM	5:00 PM	80	0	-1100	3126	185.5	0	0		

int point: 554,29553 BPD
3111.6216 Psia
0.3673 2891.4
0.1063 3052.7



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



Step Rate Test

Chesapeake Energy
WTLU # 515
Field:
Lea County, NM

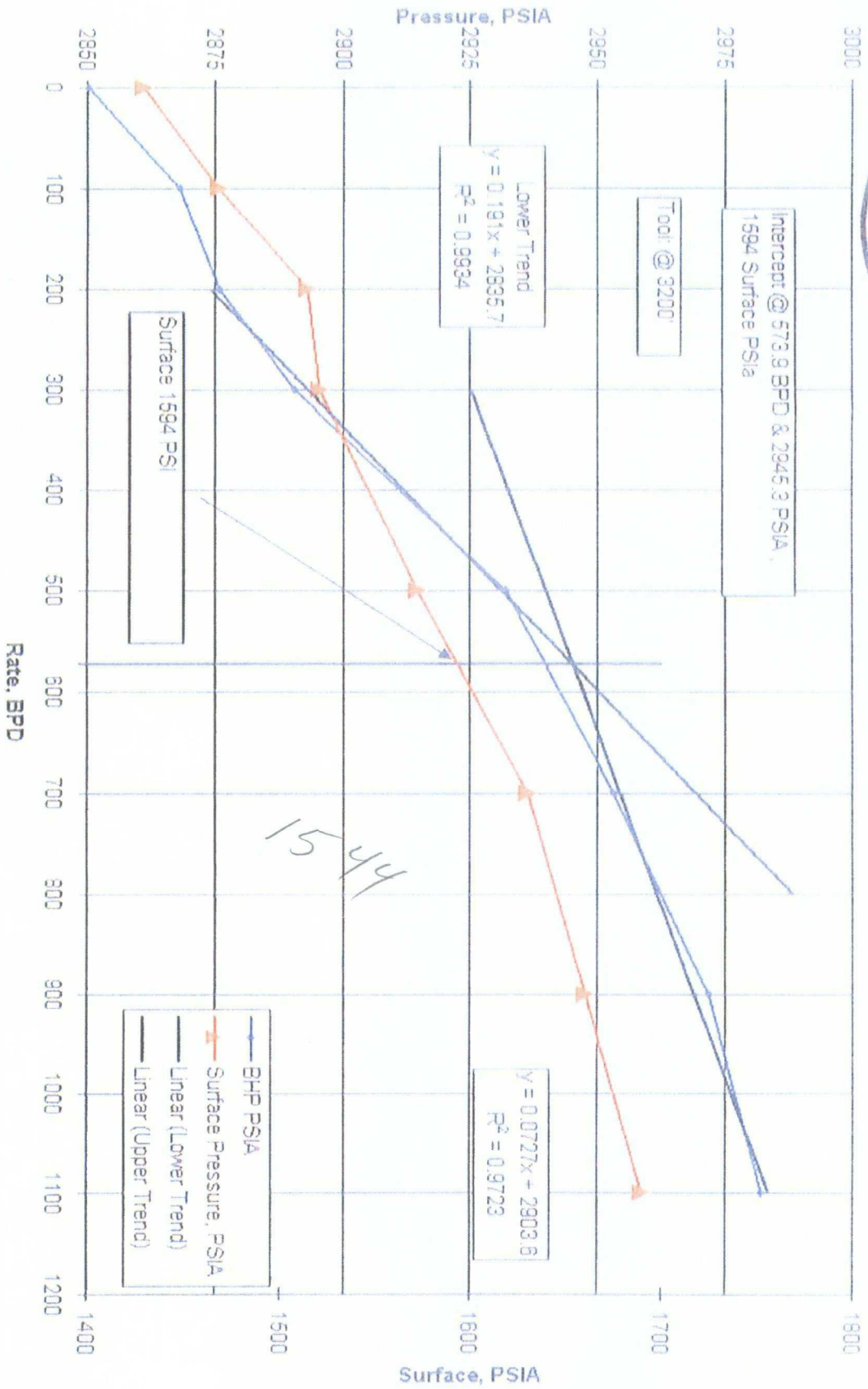


	S Time	E Time	D Time	Last Rate	Step S. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	3BL	3BL	Trend	Trend
1	8:51 AM	9:00 AM	3	0	0	2571.9	1131.4	0	0		
2	9:00 AM	10:00 AM	60	100	100	2643.1	1223	5.7	137		
3	10:00 AM	11:00 AM	90	200	100	2706	1366.8	14.7	216		
4	11:00 AM	12:00 PM	60	300	100	2773.8	1433.3	28	319	2773.8	
5	12:00 PM	1:00 PM	60	500	200	2874.5	1545.5	49.4	514	2874.5	
6	1:00 PM	2:00 PM	60	700	200	2983	1657.9	73.6	701	2983	
7	2:00 PM	3:00 PM	60	900	200	3084.2	1766.6	116.6	912	3084.2	
8	3:00 PM	4:00 PM	90	1200	300	3163.7	1916.6	188.5	1246		
9	4:00 PM	5:00 PM	60	1500	300	3265.1	2025.1	231.1	1502		
10	5:00 PM	6:00 PM	60	1800	300	3287.5	2096.1	308.5	1856		
11	6:00 PM	6:15 PM	15	0	-1300	3182	1319	308.5	0		

inf point: 1204.484 BPD
3243.0725 Psia
0.5198 2617
0.0747 3153.1



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



Step Rate Test

Chesapeake Energy
WTTU #924
Field:
Lea County, NM

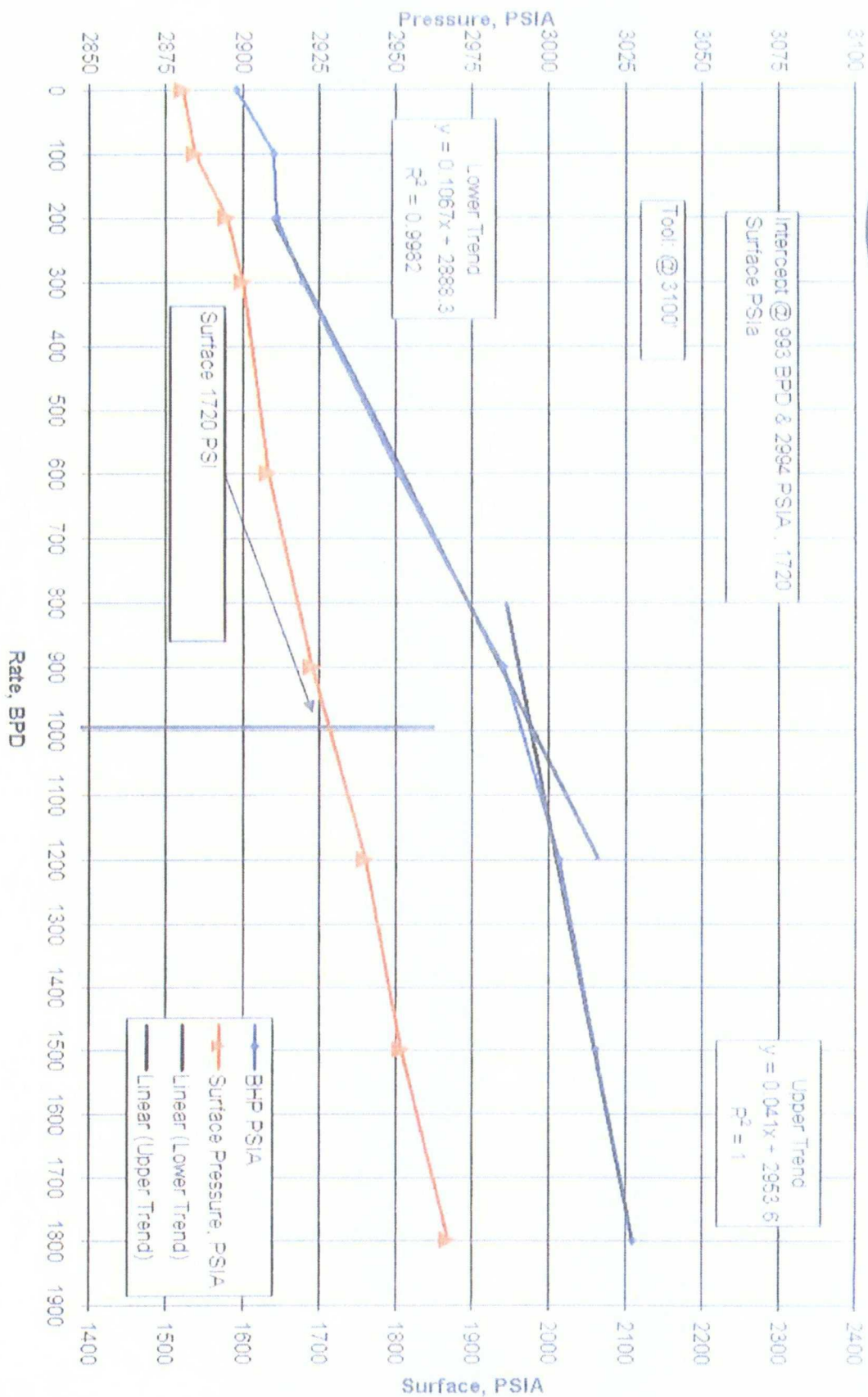


	S Time	E Time	O Time		Last Rate BPD	Step B. H. Pressure		Surf PSIA	Cum BSL	Delta		Avg BPD	Lower Trend	Upper Trend
			Min			PSIA	PSIA			BSL				
1	8:28 AM	8:30 AM	2		0	2860.4	1430	0	0	0		0		
2	8:30 AM	9:20 AM	60		100	2868.2	1468.5	5.5	5.5	8.5		156		
3	9:30 AM	10:30 AM	60		200	2875.7	1515	15.7	15.7	9.2		221	2875.7	
4	10:30 AM	11:30 AM	60		300	2890.3	1521.3	28.7	28.7	13		312	2890.3	
5	11:30 AM	12:30 PM	60		500	2932.1	1572.9	49.8	49.8	21.1		506	2932.1	
6	12:30 PM	1:30 PM	60		700	2958.1	1630.6	80.2	80.2	30.4		730	2958.1	
7	1:30 PM	2:30 PM	60		900	2971.9	1660	117.8	117.8	37.7		905	2971.9	
8	2:30 PM	3:30 PM	60		1100	2982.2	1689.9	165.5	165.5	47.6		1142	2982.2	
9	3:30 PM	3:45 PM	15		0	2875	1498	165.5	0	0		0		

int point: 573.9945 BPD
2845.8272 Psia
0.191 2835.7
0.0727 2903.6



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



Step Rate Test

Chesapeake Energy
WTTU #924
Field:
Lea County, NM

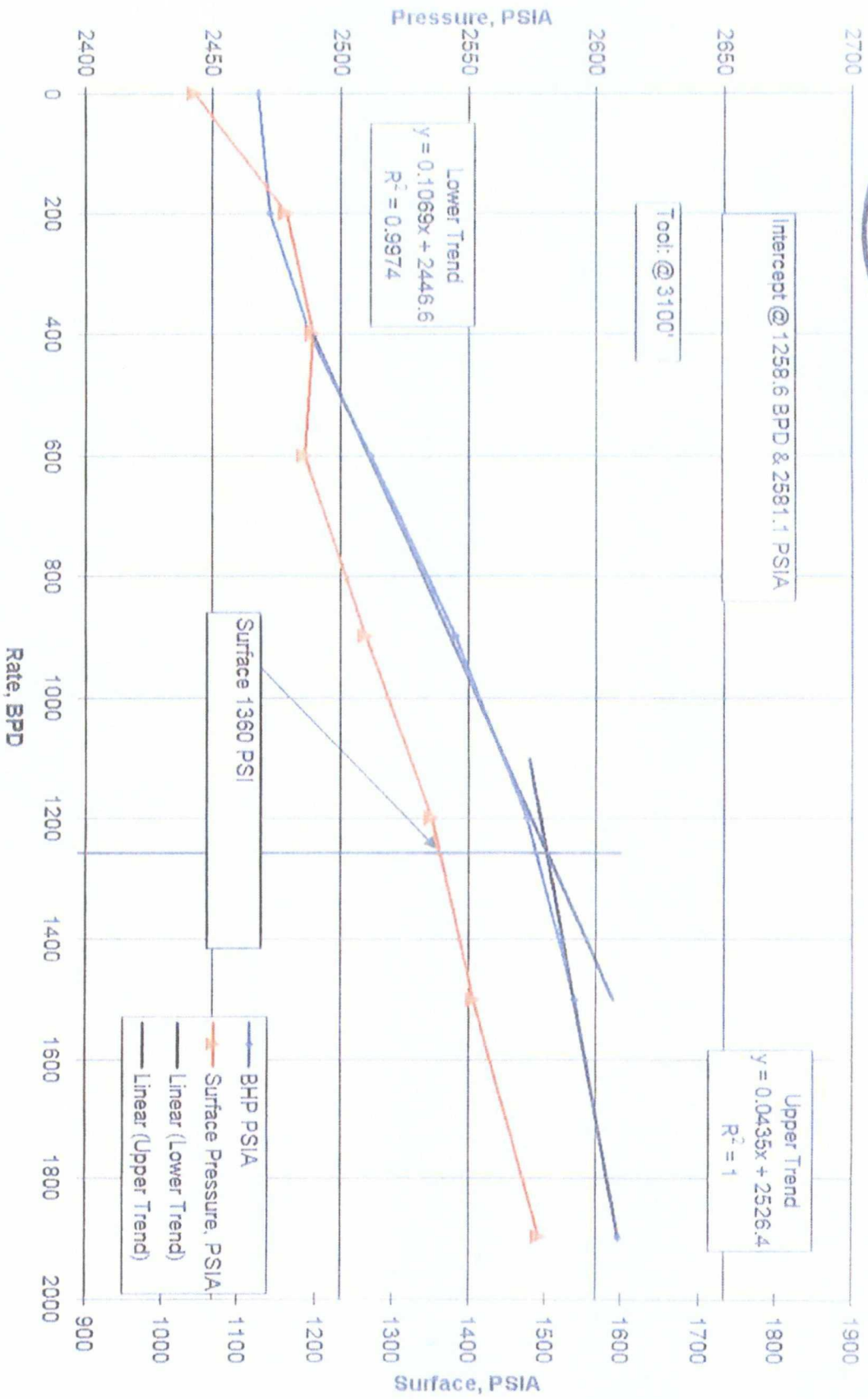


	S Time	E Time	D Time		Step B. H. Pressure		Surf		Cum	Delta		Avg.	Lower	Upper
			Min	Last Rate	BPD	PSIA	PSIA	BBL		BBL	BPD			
1	9:00 AM	10:00 AM	50	0	0	2898.1	1522.4	0	0	0	0			
2	10:00 AM	11:00 AM	50	100	100	2810.3	1537.8	5.7	6.7	161		2911		
3	11:00 AM	12:00 PM	50	200	100	2911	1579.1	15.5	8.3	211		2919.6		
4	12:00 PM	1:00 PM	50	300	100	2919.6	1601.1	28.6	13.1	314		2950.7		
5	1:00 PM	2:00 PM	50	500	300	2950.7	1634.3	54.3	25.7	617		2985.4		
6	2:00 PM	3:00 PM	50	300	300	2985.4	1691.1	93.2	38.9	934				
7	3:00 PM	4:00 PM	50	1200	300	3003.7	1759.4	144.1	50.9	1222				
8	4:00 PM	5:00 PM	50	1500	300	3015.1	1807.2	206.7	64.8	1550				3015.1
9	5:00 PM	6:00 PM	50	1600	300	3027.4	1868.7	285.2	76.5	1836				3027.4
10	6:00 PM	6:45 PM	15	0	-1800	2957.2	1626.9	285.2	0	0				

int point: 393.91172 BPD
2994.3504 Psia
0.1067 2885.3
0.041 2853.6



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



Step Rate Test

Cresapeake Energy

WTLU # 941

Field:

Lee County, NM



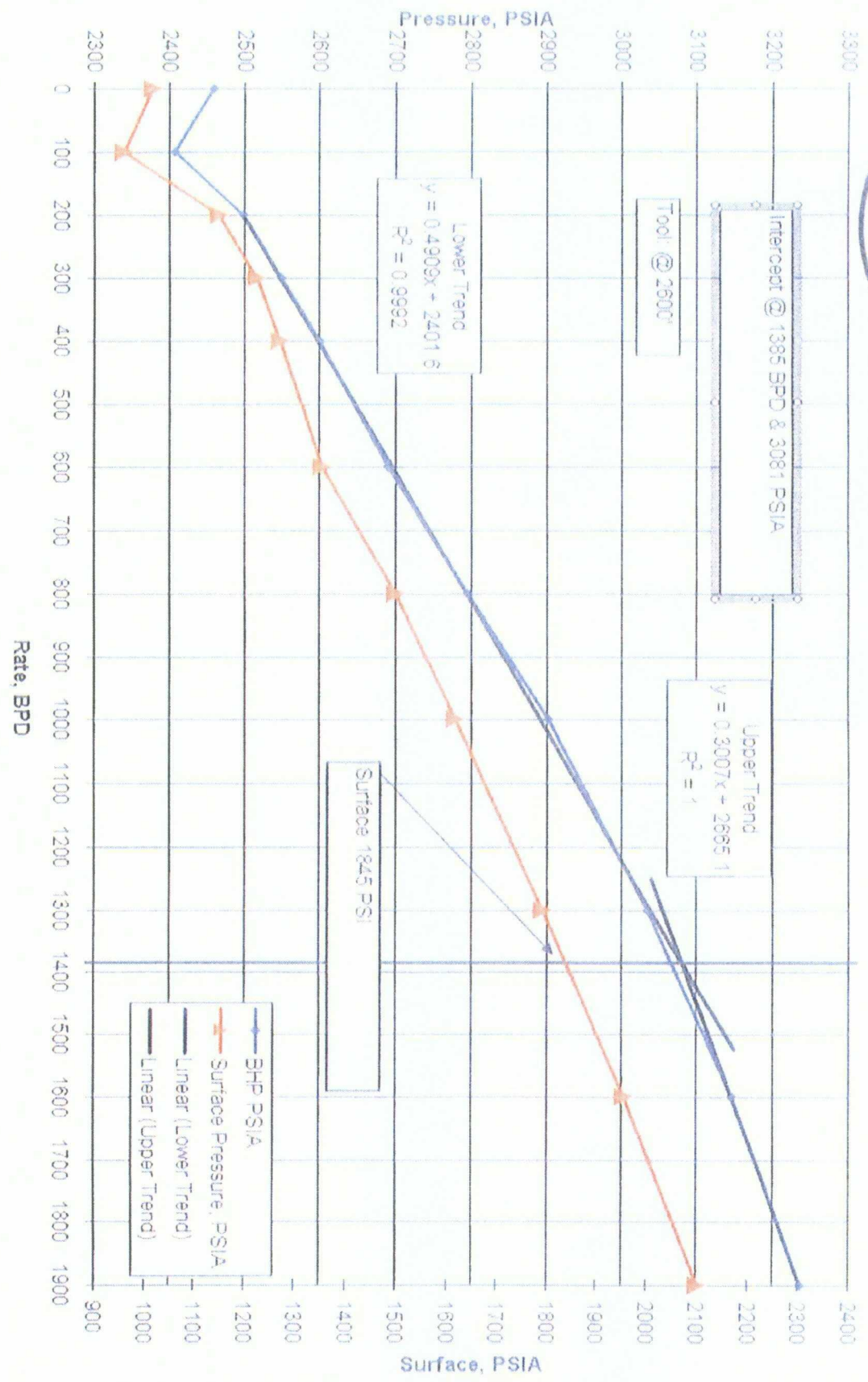
	S Time	E Time	D Time	Last Rate	Step S. R.	Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	EPD	EPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	10:23 AM	10:30 AM	7	0	0	2468	1044.7	0	0	0		
2	10:30 AM	11:30 AM	60	200	200	2472.6	1162.6	6.8	6.8	235	2467.5	
3	11:30 AM	12:30 PM	60	400	200	2487.8	1166.7	25.9	16.1	396	2511.6	
4	12:30 PM	1:30 PM	60	600	200	2511.6	1166.7	51.7	25.8	619	2545	
5	1:30 PM	2:30 PM	60	900	300	2545	1265.9	89.2	37.5	900	2573.2	
6	2:30 PM	3:30 PM	60	1200	300	2573.2	1352	140.6	51.4	1234		2591.7
7	3:30 PM	4:30 PM	60	1500	300	2591.7	1406.7	203.1	62.6	1500		2591.7
8	4:30 PM	5:30 PM	60	1900	400	2609.1	1493.5	284.9	81.9	1963		2609.1
9	5:30 PM	5:45 PM	15	0	-1900	2575.2	1251.4	264.6	0	0		

0.1068 2446.6
0.0465 2526.4

Int. point: 1258.6751 BPD
2531.1524 Psia



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



Step Rate Test

Metrose Operating
W/TU #945
Field:
Lee County, NM



	S Time	E Time	D Time	Last Rate	Step	E. H. Pressure	Surf	Cum	Delta	Avg.	Lower	Upper
			Min	BPD	BPD	PSIA	PSIA	BBL	BBL	BPD	Trend	Trend
1	9:04 AM	9:30 AM	26	0	0	2459.5	1016.1	0	0	0		
2	9:30 AM	10:30 AM	50	100	100	2407.1	955.6	5.3	5.3	127	2499.2	
3	10:30 AM	11:30 AM	60	200	100	2489.2	1149.8	13.8	8.5	204	2549.8	
4	11:30 AM	12:30 PM	60	300	100	2549.8	1223.1	26.5	12.7	306	2699.4	
5	12:30 PM	1:30 PM	60	400	100	2599.4	1271.5	42.5	16	384	2689.6	
6	1:30 PM	2:30 PM	60	600	200	2689.8	1353.3	58.4	25.9	622	2794.1	
7	2:30 PM	3:30 PM	60	800	200	2794.1	1489.9	102	33.6	806	2902.8	
8	3:30 PM	4:30 PM	60	1000	200	2902.8	1619	144.5	42.6	1022	3034.5	
9	4:30 PM	5:30 PM	50	1300	300	3034.5	1794	204.5	59.9	1438		
10	5:30 PM	6:30 PM	50	1500	300	3146.2	1957.3	265.4	60.9	1462		
11	6:30 PM	7:30 PM	50	1900	300	3236.4	2102.7	346	80.6	1934		
12	7:30 PM	7:45 PM	15									

int point 1365.3838 BPD
0.4909 2401.5
0.3007 2665.1
3081.6849 Psia

Jones, William V., EMNRD

FPI from Will

From: Jones, William V., EMNRD
Sent: Monday, July 21, 2008 10:00 AM
To: 'doug.rubick@chk.com'
Cc: Warnell, Terry G, EMNRD; Ezeanyim, Richard, EMNRD; Romero, Kimberly V, EMNRD
Subject: FW: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

Doug:
 Kim forwarded your inquiry to me.
 The application is still pending here in Santa Fe. After a quick review, everything seems fine.

Would you please send by email:

- 1) An EXCEL file with the subject injection wells showing APIs, Well names, Locations, Upper Injection Perf, Lower Injection Perf
- 2) A copy of the Division or Commission order establishing this waterflood - it should specify the upper and lower limits of this waterflood.
- 3) Send a "Rate vs Time" plot of injection into this waterflood from the date this Order established this waterflood and put the number of active injection wells as another curve on the plot.
- 4) A map of this project showing all producing and injection wells - and the subject injection wells circled or marked on this map.
- 5) A list of any closely offsetting operators with producing wells in these same formations.

In some cases, we have required notice to be sent to offsetting operators in the same formation where the applicant wants to raise the injection pressure.

As you know, injection must be limited to the depth ranges and formation names permitted in the hearing order establishing the project.

Also, any production wells with perfs in this waterflood AND above or below the permitted waterflood interval must have Down Hole Commingle orders approved by the Division.

This permit will likely be approved in the next two weeks.

Regards,

William V. Jones PE
 New Mexico Oil Conservation Division
 1220 South St. Francis
 Santa Fe, NM 87505
 505-476-3448

From: Romero, Kimberly V, EMNRD
Sent: Monday, July 21, 2008 8:31 AM
To: Jones, William V., EMNRD
Subject: FW: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

From: Doug Rubick [mailto:doug.rubick@chk.com]
Sent: Monday, July 21, 2008 6:38 AM
To: Romero, Kimberly V, EMNRD
Subject: RE: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

7/21/2008

Kim,
Good morning. I was just curious to see where we are at in this process, and wondering if you needed anything else from us.
Thanks,
Doug

From: Romero, Kimberly V, EMNRD [mailto:KimberlyV.Romero@state.nm.us]
Sent: Thursday, July 10, 2008 2:24 PM
To: Doug Rubick
Subject: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

Good Afternoon Doug,

We have received your application however, we are lacking the Administration Application Checklist for you application. I cannot log in your application until I receive this form. The checklist is located at our OCD website under forms, scroll down until you see unnumbered forms and it is the first form under this title. Please fill out fax to OCD Attn Kim Romero at 505-476-3462.

Thank you,
Kim Romero

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This inbound email has been scanned by the MessageLabs Email Security System.

7/21/2008

Jones, William V., EMNRD

From: Doug Rubick [doug.rubick@chk.com]
Sent: Tuesday, July 22, 2008 3:20 PM
To: Jones, William V., EMNRD
Cc: Charlie Robinson; Bryan Arrant
Subject: RE: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945
Attachments: WTU Data.xls; OrderoftheDivision.pdf; RateVsTime.pdf; WTU Waterflood Map.pdf

Will,
 Here is what you asked for;

- 1) See attached Excel file WTU Data,
- 2) See attached PDF file Order of the Division. (I think this is what you are looking for),
- 3) See attached PDF file Rate Vs. Time,
- 4) See attached PDF file WTU Waterflood Map,
- 5) The only offsetting operators I am aware of is Shackelford. I think they share interest in some of the WTU Wells.

I believe that all our wells are producing out of the same interval but I will check on that. If there is anything else you need let me know.

Thanks,
 Doug

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Monday, July 21, 2008 10:00 AM
To: Doug Rubick
Cc: Warnell, Terry G, EMNRD; Ezeanyim, Richard, EMNRD; Romero, Kimberly V, EMNRD
Subject: FW: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

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7/22/2008

Regards,

William V. Jones PE
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505
505-476-3448

From: Romero, Kimberly V, EMNRD
Sent: Monday, July 21, 2008 8:31 AM
To: Jones, William V., EMNRD
Subject: FW: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

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Sent: Monday, July 21, 2008 6:38 AM
To: Romero, Kimberly V, EMNRD
Subject: RE: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

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Doug

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To: Doug Rubick
Subject: IPI App West Yates Seven Rivers Unit # 443, 641, 912, 913, 921, 924, 941, 945

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7/22/2008

WTU Field

API	Well	State	County	Section	Range	Legal Description	Upper Injection Perf	Lower Injection Perf
3002532032	WTU 433	NEW MEXICO	LEA	4	033E	SL: S2 NW SE - 1650 FSL 1980 FEL	3,230	3,250
3002535976	WTU 443	NEW MEXICO	LEA	4	033E	SL: S2 NE SE - 1855 FSL 660 FEL	3,157	3,217
3002533144	WTU 641	NEW MEXICO	LEA	16	033E	SL: NE NE NE - 330 FNL 330 FEL	3,160	3,294
3002529971	WTU 912	NEW MEXICO	LEA	9	033E	SL: C SW NW - 1980 FNL 660 FWL	3,138	3,278
3002529972	WTU 913	NEW MEXICO	LEA	9	033E	SL: C NW SW - 1980 FSL 660 FWL	3,114	3,239
3002531896	WTU 921	NEW MEXICO	LEA	9	033E	SL: NE NE NW - 330 FNL 2310 FWL	3,161	3,252
3002536073	WTU 924	NEW MEXICO	LEA	9	033E	SL: SE SE NW - 2560 FNL 2210 FWL	3,038	3,233
3002532217	WTU 941	NEW MEXICO	LEA	9	033E	SL: NW NE NE - 330 FNL 990 FEL	3,076	3,114
3002536079	WTU 945	NEW MEXICO	LEA	9	033E	SL: SE SE NE - 2612 FNL 330 FEL	3,096	3,218