DATE IN 9-14-05	SUSPENSE 9/14/05	ENGINEER Catanach	LOGGED IN 9-14-05	TYPE IPI	APP NO. pSEM0525735495

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

258

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.

Print or Type Name	Signature	Title	Date

e-mail Address

BP America Production Company
501 Westlake Park Boulevard
Houston, Texas 77079

David D. Reese
Reservoir Engineer
Phone: 281.366.5834
Fax: 281.366.7836

30-045-28351
SWD-405
615 FNL 1840 FWL
C-34-31N 9W

September 12, 2005
New Mexico Oil Conservation Division
1220 South Francis Drive
Sante Fe, NM 87505

Attention: David Catanach

Dear Mr. Catanach:

Re: Request for Revised Maximum Injection Pressure
Pritchard SWD Well No. 1

This letter is to request that the injection pressure limit for the Pritchard SWD Well No. 1 be raised from the current level of 1,676 psig wellhead pressure to 1,843 psig, wellhead pressure. The current pressure limit was established March 19, 1991 based on a perforated interval in the Entrada formation from 8,382 ft to 8,600 ft and a pressure gradient of 0.2 psi per foot, see Attachment 1. This requested revision is based on a Step Rate Test performed on this well December 12, 2003 and augmented with data from the previous Step Rate Test, performed December 13, 2000.

The most recent Step Rate Test (SRT) was performed on this well December 12, 2003 and approved test design is included as Attachment 2. The surface treating record is included as Attachment 3. A digital record of the down hole pressure recording is provided on accompanying CD with a file name of PRITCHARD SWD-40006.ASC. Attachment 4 shows the injection rate and bottom hole pressure as a function of time. Attachment 5 shows the bottom hole injection pressure as a function of the injection rate. As shown on Attachment 5, the bottom hole parting pressure is identified as 5,323 psia with a corresponding injection rate of 3.1 bpm. The relationship between the bottom hole injection pressure (psia) and surface injection pressure (psig) as a function of injection rate for this well is shown on Attachment 6. At a rate of 3.1 bpm a pressure difference of 3,480 psi is determined. Combining this pressure difference with the bottom hole parting pressure of 5,323 psi yields a surface pressure of 1,843 psig.

The differential pressure versus injection rate relationship for this well shown on Attachment 6 was obtained during the 2000 SRT. The surface treating report and bottom hole memory gauge recording report from the 2000 SRT are included as Attachment 7. A digital record of the down hole pressure recording is provided on accompanying CD with a file name of Pritchard SWD-9656.ASC. Attachment 8 shows the surface pressure data, surface injection rate and bottom hole pressure data as a function of time, which was used to construct Attachment 6. This relationship was used because the surface pressure transducer had failed during the 2003 SRT. This relationship, which combines the hydrostatic pressure gradient with the friction losses, remains valid because the well bore configuration has not changed since the 2000 SRT.

The Pritchard SWD Well No.1 is operated very conservatively, with an average surface injection pressure of 1,620 psig. The pressure recording chart for May 2005, when an average of 460 bwpd was injected into the Pritchard SWD Well No.1, is included as Attachment 9. Although we currently have a pressure limit

of 1,676 psig, we have maintained a conservative margin of 50 psi from the established limit, so that momentary pressure spikes (meter jiggle?) do not approach the pressure limit. As can be seen on the chart, the injection pressure is only about 40 psi higher than the pressure recorded during static, shut-in periods. This slight incremental pressure, less than 1% of reservoir pressure, is operationally very difficult to maintain and limits injection rates to an average of about 0.3 bmp, far below the rate of 3.1 bpm observed during the recent SRT. At a revised Maximum Injection Pressure of 1,840 psig, BP would continue to maintain a 50 psi conservative margin and maintain average injection pressure below 1,790 psig.

If you have any questions, please contact me at 281-366-5834.

Sincerely,

David W Reese

David Reese

Attachments

CC: New Mexico Oil Conservation Division
Attention: Charles Perrin
1000 Rio Brazos Road
Aztec, NM 87410

Don Brooks – Farmington OC
Kelly Hart – Farmington OC

List of Attachments

Attachment 1	Authorization of Maximum Surface Injection Pressure, March 19, 1992
Attachment 2	Approved Step Rate Test Design, 2003
Attachment 3	Surface Treating Report, December 12, 2003
Attachment 4	Surface Injection Rate versus Time, 2003
Attachment 5	Bottom Hole Injection Pressure versus Injection Rate, 2003
Attachment 6	Bottom Hole Pressure minus Surface Pressure, Versus Rate, 2000
Attachment 7	Surface Treating Report, December 13, 2000
Attachment 8	Surface Pressure, Bottom Hole Pressure and Rate, Versus Time, 2000
Attachment 9	Surface Pressure Recording Chart, May 2005

Attachment #1

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

March 19, 1991

RECEIVED
DEC21 1992
OIL CON. DIV.
DIST. 3

Amoco Production Company
P.O. Box 800
Denver, Colorado 80201

Attention: T.D. Autry

Re: Amendment of Order No. SWD-405

Dear Mr. Autry:

Reference is made to your letter dated February 7, 1991, whereby you requested an amendment to the surface injection pressure authorized by Division Order No. SWD-405. It is our understanding that the Pritchard Well No. 1 was actually perforated in the Entrada interval from 8382 feet to 8600 feet, and that the Morrison and Bluff formations were not perforated at 7500 feet as proposed in the application.

You are therefore authorized to inject into said Entrada formation at a surface injection pressure not to exceed 1676 psi.

Sincerely,

William J. LeMay
Director

xc: OCD-Aztec
File-SWD-405

The Western Company—Treatment Report

Date 1-26-91 District FARMINGTON Receipt L173410 Operator AMOCO PRODUCTION
Lease PRITCHARD Well No. S.W.D. #1 Field ENTRADA Location SEC 34 T31N R9W
County SAN JUAN State N.M. Stage Number 1 This Zone ☒ This Well ☐

WELL DATA

WATER DISPOSAL Depth TD/PB 8600 Formation ENTRADA
Tubing Size _____ WT. _____ Set at: _____ Type Packer _____ Set At _____
Casing Size 7 WT. 26 Set From SURFACE To 8600 Liner Size _____ Wt. _____
Liner Set From _____ To _____ Open Hole: Size _____ From _____ To _____ Casing Perforations: Size .79
Holes Per Foot 4 Intervals 8382-8440, 8456-8466, 8476-8528, 8534-8528, 8534-8600
Previous Treatment _____ Prior Production _____

TREATMENT DATA

Pad Type 30# APOLLO X-LINK
Treating Fluid Type: WATER Treat. Fluid Vol. 160,776 Gal.
Base Fluid Type 30# APOLLO W/ADDITIVES Base Fluid Vol. 160,776 Gal.
Foam Qual.: _____ % Total Prop Qty 222,000 Lbs.
Prop Type: SAND
Prop Mesh Sizes, Types and Quantities 20/40 BRADY 222,000#
Hole Loaded With H_2O Treat Via: CASING
Ball Sealers: _____ In _____ Stages of _____
Types and Number of Pumps Used (5) PACESETTER 1000'S
Auxiliary Materials PER 1000 GAL-6.82 GAL. J-20L, 1.0 GAL CROSS LINKED (TIC), 2# B-5, 1095 GAL J-20L, 2180 GAL TIC, 42# B-5, 54# FRACIDE

PROCEDURE SUMMARY

FRAC VIA CASING W/ A 55000 GAL PAD, 9500 GAL 1#, 1 1/2#, 9300 GAL 2#, 2 1/2#, 9000 GAL 3#, 3 1/2#, 8900 GAL 3 1/2#, & 4#, 13338 GAL FLUSH

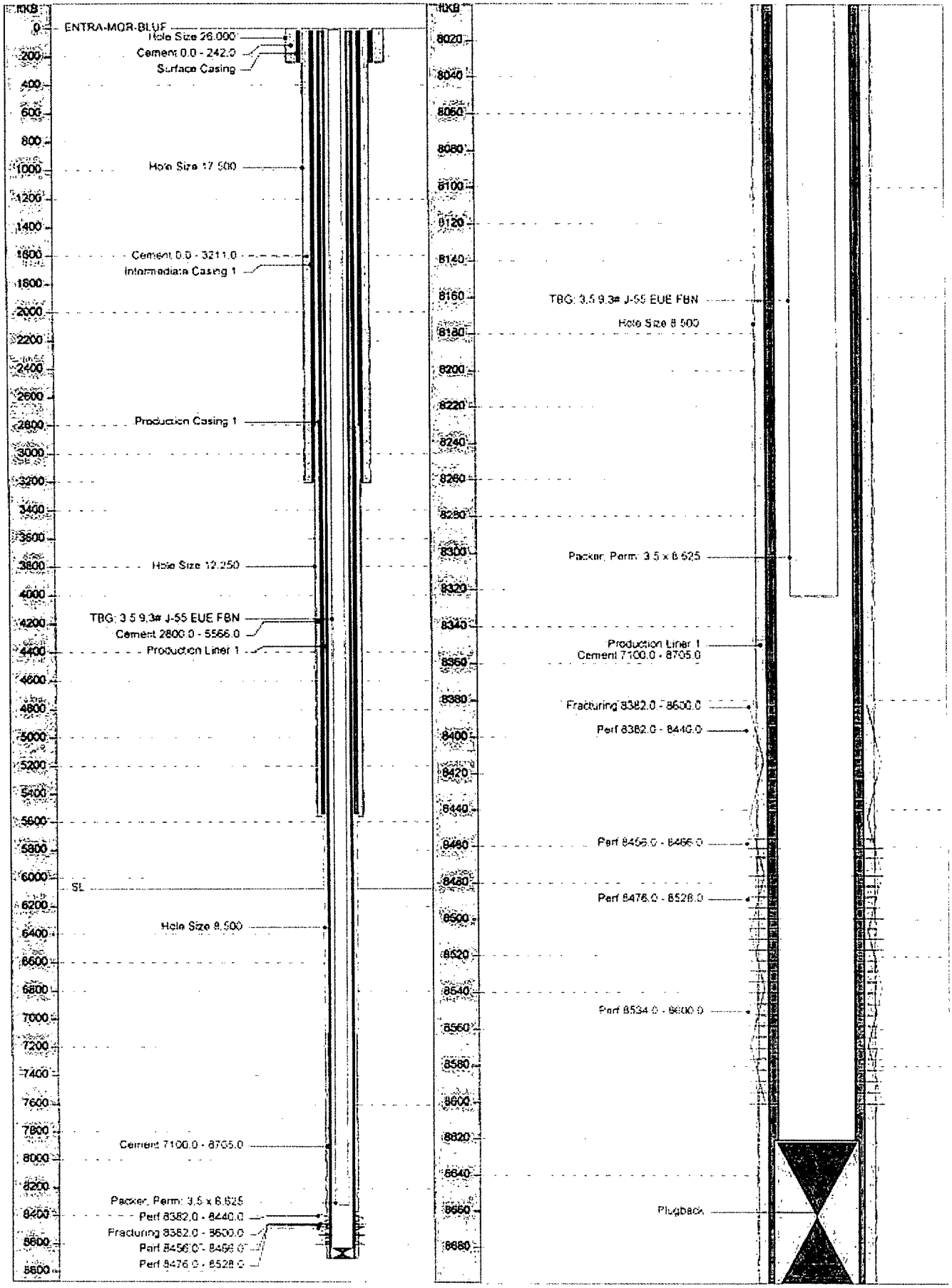
LIQUID/GAS PUMPED AND CAPACITIES IN BBLS.

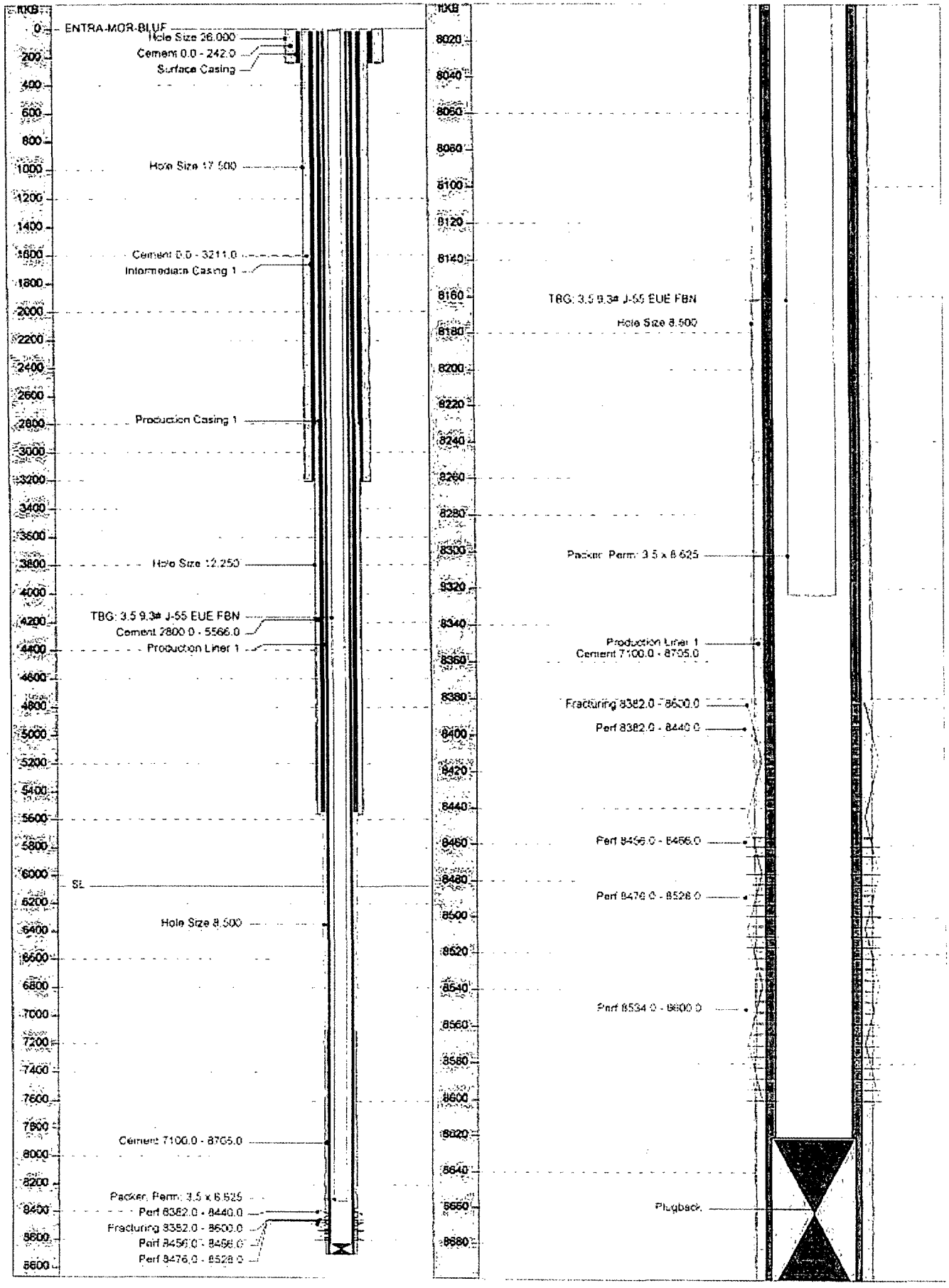
Tubing Cap. _____
Casing Cap. 321
Annular Cap. _____
Open Hole Cap. _____
Fluid to Load _____
Pad Volume 1310
Treating Fluid 2200
Flush 318
Overflush _____
Fluid to Recover 3828
Total N^2 _____
Total CO_2 _____

Time AM/PM	Treating Pressure-Psi		Surface Slurry BBLS. Pumped		Slurry Rate BPM	Surface CO_2 BBLS. Pumped		CO_2 Rate BPM	Surface N^2 MSCF Pumped		N^2 Rate SCFM	Comments
	STP	Annulus	Stage	Total		Stage	Total		Stage	Total		
9:37	0		0	0	40							START PAD
10:09	1100		1310	1310	44							START 1#
10:14	950		236	1546	44							START 1 1/2#
10:20	780		226	1788	44							START 2#
10:26	660		221	2030	44							START 2 1/2#
10:31	780		221	2277	44							START 3#
10:37	670		214	2529	44							START 3 1/4#
10:42	640		214	2766	44							START 3 1/2#
10:49	730		212	3012	44							START 3 3/4#
10:54	720		212	3260	43							START 4#
10:59	670		212	3510	44							ALL SAND
11:07	1450		318	3828	40							SHUTDOWN
												5 MIN-930 PSI
												10 MIN-730 PSI

Treating Pressure: Min. 640 Max. 1470 Avg. 800 Customer Representative RANDY DUROSSETTE
Rate on Treating Fluid 44 Rate on Flush 44 Western Representative BILL WALKER
Avg. Inj. Rate 44 I.S.D.P. 1100 Flush Dens. lb./gal. 8.34 Distribution AMOCO PRODUCTION
Final Shut-in Pressure 590 in 15 Minutes _____
Operator's Maximum Pressure 5000

Job Number 131221 Recommendation ID # _____


ftKB
0
ENTRA-MOR-BLUF
Hole Size 26.000
Cement 0.0 - 242.0
Surface Casing
Hole Size 17.500
Cement 0.0 - 3211.0
Intermediate Casing 1
Production Casing 1
Hole Size 12.250
TBG: 3.5 9.3# J-55 EUE FBN
Cement 2800.0 - 5566.0
Production Liner 1
SL
Hole Size 8.500
Cement 7100.0 - 8705.0
Packer, Perm: 3.5 x 6.625
Perf 8382.0 - 8440.0
Fracturing 8382.0 - 8600.0
Perf 8456.0 - 8466.0
Perf 8476.0 - 8528.0
TBG: 3.5 9.3# J-55 EUE FBN
Hole Size 8.500
Packer, Perm: 3.5 x 6.625
Production Liner 1
Cement 7100.0 - 8705.0
Fracturing 8382.0 - 8600.0
Perf 8382.0 - 8440.0
Perf 8456.0 - 8466.0
Perf 8476.0 - 8528.0
Perf 8534.0 - 8600.0
Plugback


RKB
0
ENTRA-MOR-BLUF
Hole Size 26.000
Cement 0.0 - 242.0
Surface Casing
200
400
600
800
1000
Hole Size 17.500
1200
1400
1600
Cement 0.0 - 3211.0
Intermediate Casing 1
1800
2000
2200
2400
2600
2800
Production Casing 1
3000
3200
3400
3600
3800
Hole Size 12.250
4000
4200
TBG: 3.5 9.3# J-55 EUE FBN
Cement 2800.0 - 5566.0
4400
Production Liner 1
4600
4800
5000
5200
5400
5600
5800
6000
SL
6200
6400
Hole Size 8.500
6600
6800
7000
7200
7400
7600
7800
8000
Cement 7100.0 - 8705.0
8200
8400
Packer, Perm; 3.5 x 6.625
Perf 8382.0 - 8440.0
Fracturing 8382.0 - 8600.0
8600
Perf 8456.0 - 8466.0
Perf 8476.0 - 8528.0
8800
RKB
8020
8040
8060
8080
8100
8120
8140
8160
TBG: 3.5 9.3# J-55 EUE FBN
Hole Size 8.500
8180
8200
8220
8240
8260
8280
8300
Packer, Perm; 3.5 x 6.625
8320
8340
Production Liner 1
Cement 7100.0 - 8705.0
8360
8380
Fracturing 8382.0 - 8600.0
Perf 8382.0 - 8440.0
8400
8420
8440
8460
Perf 8456.0 - 8466.0
8480
Perf 8476.0 - 8528.0
8500
8520
8540
Perf 8534.0 - 8600.0
8560
8580
8600
8620
8640
8660
Plugback
8680

Amoco Production Company

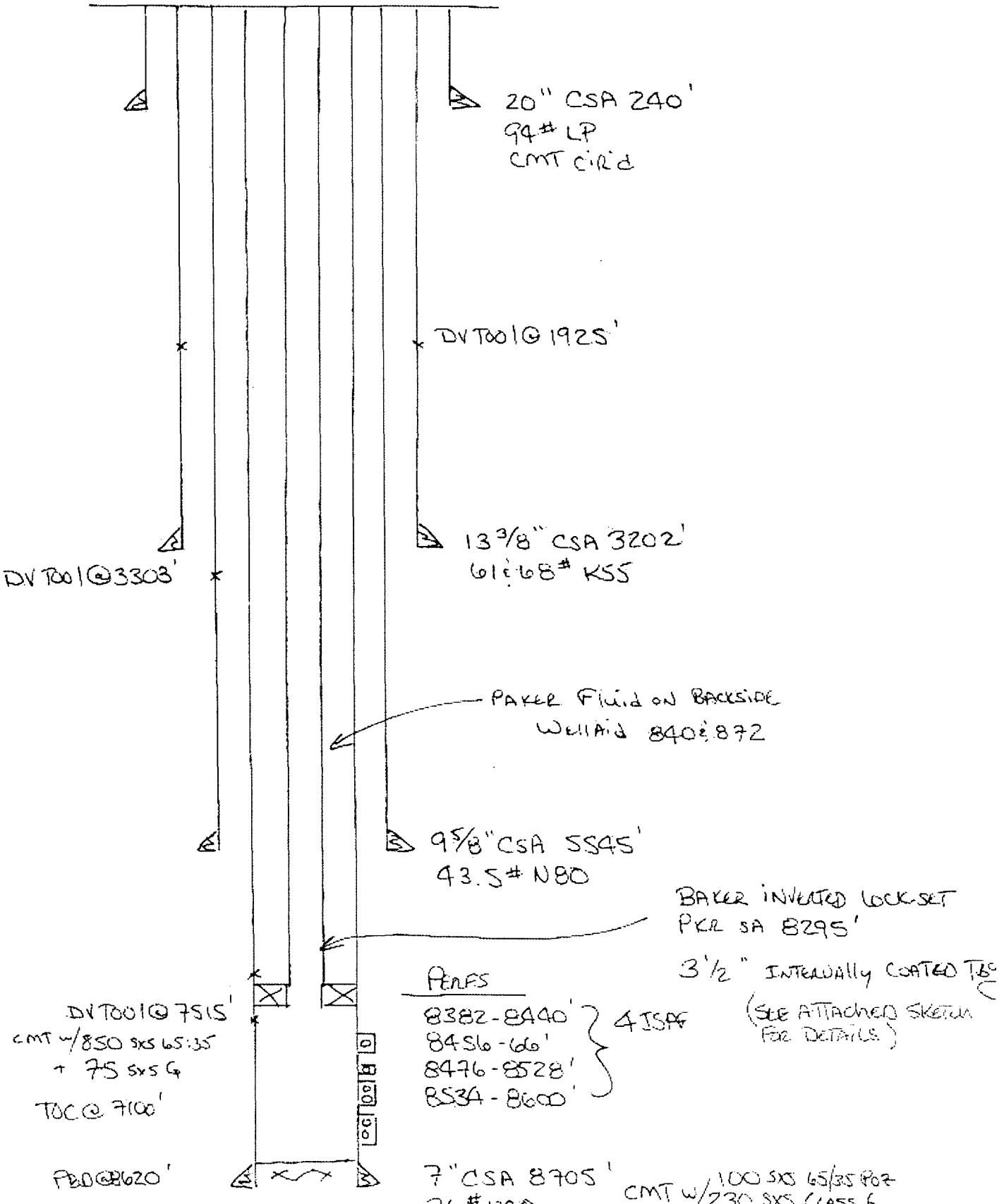
ENGINEERING CHART

SUBJECT PRITCHARD SWD - SEC 34 - T31N - R9W

ENTRADA FM

DATE 4-4-96

BY GMK

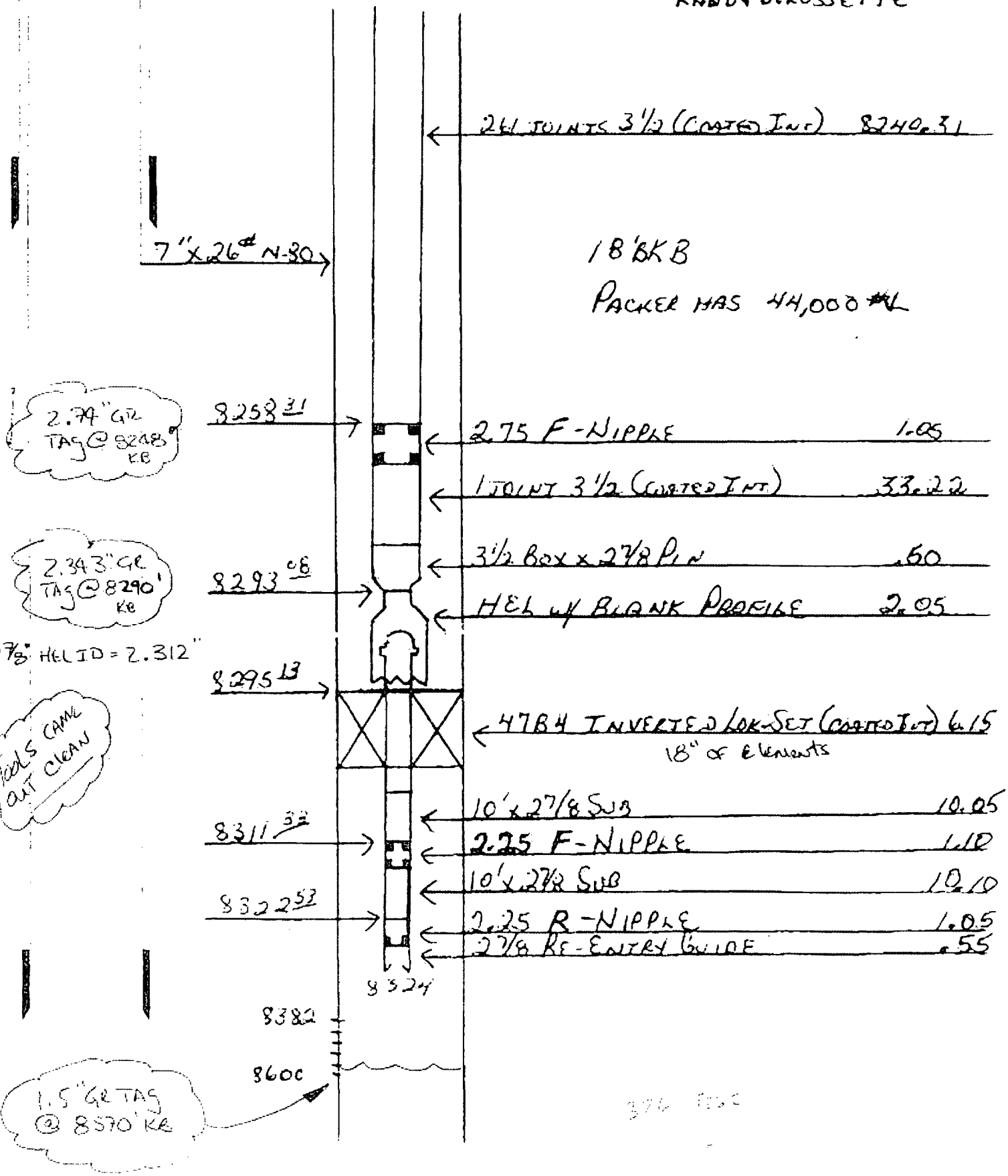


AMOCO PRODUCTION COMPANY

BAKER OIL TOOLS

DATE 02-02-91 WELL NO. 1 LEASE PRITCHARD SWD 373-22336

RANDY DEROSSETTE



Attachment #2

bp

Amoco Production Company
A Part of the BP Amoco Group
501 WestLake Park Blvd.
Houston, TX 77079-3092

Phone: 281-366-2000

November 11, 2003

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Attention: Mr. Charlie Perrin

Step Rate Test Procedure
Pritchard SWD Well No. 1
Section 34C-T31N-R9W
API#: 30004528351
San Juan County, New Mexico

Amoco respectively submits the attached step rate test procedure for the Pritchard SWD #1 for your review and approval. The results of this step rate test will be used to support a request to increase the maximum allowable surface injection pressure on this well. We would like to perform this step rate test as early in December as possible and will notify you of the date and time of the test. Thank you for your prompt attention to this matter.

If you have any questions please contact Daniel Crosby at (281) 366-0769.

Respectfully yours,

Daniel Crosby
Production Engineer

Attachments

cc: UIC Environmental File
Brittany Benko -Farmington
Baynard Duke - Farmington

EMAIL: Guidelines 11-13-03

crosbydc@BP.com

ubmit 3 Copies to
ppropriate
istrict Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

ISTRICT I
.O. Box 1980, Hobbs, NM
ISTRICT II
.O. Drawer DD, Artesia, NM 88210
ISTRICT III
000 Rio Brazos Rd., Aztec, NM

OIL CONSERVATION DIVISION

P.O.Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.
30-045-28351

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name
Pritchard SWD

Type of Well:
OIL WELL ☐ GAS WELL ☐ OTHER Disposal

Name of Operator
MOCO PRODUCTION COMPANY

Attention: Mary Corley

8. Well No.
1

P.O. Box 3092 Houston TX 77253

9. Pool name or Wildcat
Morrison Bluff Entrada

Well Location
Unit Letter C : 615' Feet From The NORTH Line and 1840' Feet From The WEST Line

Sectio 34 Township 31N Rang 9W NMPM San Juan County

10. Elevation *(Show whether DF, RKB, RT, GR, etc.)*

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
RFORM REMEDIAL WORK	☒	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
MPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
LL OR ALTER CASING	☐			CASING TEST AND CEMENT JOB	☐		
HER:	☐			OTHER:			☐

2. Describe Proposed or Completed Operations *(Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed*

noco Production Company respectivaly submits the attached step rate test procedure and supporting documents for the subject well for your review and pproval. Results of this step rate test will be used to support a request to increase the maximum allowable surface injection pressure on this well. We ould like to perform this step rate test as early in December as possible.

RECEIVED
DEC 2000
OIL CONS. DIV.
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Mary Corley TITLE Sr. Regulatory Analyst DATE 12-01-2000

TYPE OR PRINT NAME Mary Corley TELEPHONE NO. 281-366-4491

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY CHARLIE T. PERRIN TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE DEC -6 2000

CONDITIONS OF APPROVAL, IF ANY:

Pritchard SWD #1 - Step Rate Test
Entrada Formation

Step Rate Test Procedure:

Prior to performing the step rate test the building setting over the wellhead must be removed by a roustabout crew. Ensure that water storage tanks are completely full before initiating the step rate test. Water storage capacity on location is 2000 bbls, available capacity for test is 1000^{+} bbls. Must contact NMOCD prior to the step rate test so that they can have a representative witness the test.

1. Shut-in well for 24 hours prior to running step rate test.

2. Rig up wireline unit and lubricator. Trip in the hole with tandem pressure bombs capable of measuring pressure from 0 psig to 10,000 psig. Land bombs in 2.25" ID F seating nipple at approximately 8311' (KB=18'). Note the exact time the gauge was set in the seating nipple.

   - the gauge should allow water to pass by.
   - Program bombs to take readings every 5 seconds throughout the test.

3. Rig up pump trucks (if required provide second pump truck to span range of injection rates for step rate test). Tie suction to disposal tanks and discharge to tubing. Pressure test lines and connections. Monitor casing and bradenhead pressures during the test.

4. Perform step rate test as follows:

Step	Time	Injection Rate (BPM)	(BWPD)	Cum. Inj. Vol. BW
1	20 minutes	0.40	576	8
2	20 minutes	0.80	1152	16
3	20 minutes	1.20	1728	24
4	20 minutes	1.60	2304	32
5	20 minutes	2.00	2880	40
6	20 minutes	2.40	3456	48
7	20 minutes	2.80	4032	56
8	20 minutes	3.20	4608	64
9	20 minutes	3.60	5184	72
10	20 minutes	4.00	5760	80
11	20 minutes	4.40	6336	88
12	20 minutes	4.80	6912	96
13	20 minutes	5.20	7448	104
14	20 minutes	5.60	8064	112
Total= 280 minutes or 4.7 hrs				Total = 842 bbls

Note: 1. Well disposal rates = 700 to 1200 BWPD
2. E.E. Elliott SWD#1 5/5/00 results: frac@ 6000 bwpd and 1740 psi

- Continuously monitor surface injection pressure and rate in a digital format. Use a computer van or equivalent if necessary.
- The time step intervals are critical. Inconsistencies such as shorter or longer time steps are unacceptable.
- Once an injection rate has been established at or near the requested rate every effort must be made to keep the rate constant.

5. Shut down and record ISIP.

6. After performing the step rate test, trip out of the hole with pressure gauges.

7. Perform Mechanical Integrity Test following New Mexico Oil Conservation Division guidelines (if required).

8. Return well to injection. Send all test results to Mike Kutas in Houston immediately.

Attachment #3

Time	Line Press	Treating Press	Annulus Press	Braden Head Press	Rate	Stg Vol	Tot Vol.
mm:dd:yyyy:hh:mm:ss	psi	psi	psi	psi	bbl/min	bbl	bbl
12:12:2003:11:15:58	27	37	114	9	0	0	0
12:12:2003:11:16:09	**Start Job**						
12:12:2003:11:16:09	27	32	114	9	0	0	0
12:12:2003:11:16:58	3094	4578	110	14	0	0.1	0.1
12:12:2003:11:17:58	2971	4330	110	14	0	0.1	0.1
12:12:2003:11:18:58	3085	4587	110	14	0	0.2	0.2
12:12:2003:11:19:58	1337	1392	105	18	0	0.2	0.2
12:12:2003:11:20:59	1382	1392	105	18	0	0.2	0.2
12:12:2003:11:21:59	1378	1387	101	18	0	0.2	0.2
12:12:2003:11:22:59	**Start 1st Step**						
12:12:2003:11:22:59	1392	1584	105	18	0.6	0.3	0.3
12:12:2003:11:23:59	1392	1602	101	18	0.5	0.8	0.8
12:12:2003:11:24:59	1396	1611	96	23	0.5	1.3	1.3
12:12:2003:11:25:59	1401	1579	92	23	0.5	1.8	1.8
12:12:2003:11:26:59	1396	1566	82	23	0.5	2.3	2.3
12:12:2003:11:27:59	1392	1566	73	23	0.5	2.7	2.7
12:12:2003:11:28:59	1396	1575	64	23	0.5	3.2	3.2
12:12:2003:11:29:59	1401	1566	55	23	0.5	3.7	3.7
12:12:2003:11:30:59	1392	1556	46	27	0.5	4.2	4.2
12:12:2003:11:32:00	1405	1552	41	27	0.5	4.7	4.7
12:12:2003:11:33:00	1405	1561	37	27	0.5	5.1	5.1
12:12:2003:11:34:00	1414	1566	32	27	0.5	5.6	5.6
12:12:2003:11:35:00	1401	1570	27	27	0.5	6.1	6.1
12:12:2003:11:36:00	1405	1556	23	27	0.5	6.6	6.6
12:12:2003:11:37:00	1410	1547	18	27	0.5	7	7
12:12:2003:11:38:00	1414	1552	14	27	0.5	7.5	7.5
12:12:2003:11:39:00	1419	1538	14	27	0.5	8	8
12:12:2003:11:40:00	1401	1561	14	32	0.5	8.5	8.5
12:12:2003:11:41:00	1410	1547	9	32	0.5	8.9	8.9
12:12:2003:11:42:00	1405	1543	9	32	0.5	9.4	9.4
12:12:2003:11:43:00	1419	1566	5	32	0.5	9.9	9.9
12:12:2003:11:43:11	**Start 2nd Step**						
12:12:2003:11:43:11	1428	1570	5	32	0.8	10	10
12:12:2003:11:44:01	1447	1561	5	32	0.8	0.6	10.7
12:12:2003:11:45:01	1405	1611	5	32	0.8	1.4	11.4
12:12:2003:11:46:01	1437	1588	5	32	0.8	2.2	12.2
12:12:2003:11:47:01	1437	1515	0	32	0.8	3	13
12:12:2003:11:48:01	1419	1575	0	32	0.8	3.7	13.8
12:12:2003:11:49:01	1447	1570	0	32	0.8	4.5	14.5
12:12:2003:11:50:01	1437	1593	0	32	0.8	5.3	15.3
12:12:2003:11:51:01	1437	1561	0	32	0.8	6.1	16.1
12:12:2003:11:52:01	1451	1584	-5	32	0.8	6.9	16.9
12:12:2003:11:53:01	1451	1579	-5	32	0.8	7.6	17.7
12:12:2003:11:54:01	1410	1598	-5	32	0.8	8.4	18.4
12:12:2003:11:55:02	1442	1524	-5	32	0.8	9.2	19.2
12:12:2003:11:56:02	1433	1529	-5	32	0.8	10	20
12:12:2003:11:57:02	1419	1561	-5	37	0.8	10.8	20.8
12:12:2003:11:58:02	1442	1547	-5	37	0.8	11.6	21.6
12:12:2003:11:59:02	1414	1538	-5	37	0.8	12.3	22.4
12:12:2003:12:00:02	1414	1543	-5	37	0.8	13.1	23.1
12:12:2003:12:01:02	1424	1552	-5	37	0.8	13.9	23.9
12:12:2003:12:02:02	1424	1538	-5	37	0.8	14.7	24.7

12:12:2003:12:03:02	1437	1575	-5	37	1.1	15.5	25.5
12:12:2003:12:03:12	**Start 3rd Step**						
12:12:2003:12:03:12	1456	1598	-5	37	1.1	15.7	25.7
12:12:2003:12:04:02	1451	1561	-5	37	1.2	1	26.6
12:12:2003:12:05:02	1456	1552	-5	37	1.2	2.1	27.8
12:12:2003:12:06:02	1433	1575	-5	37	1.2	3.3	29
12:12:2003:12:07:03	1447	1575	-5	37	1.2	4.5	30.2
12:12:2003:12:08:03	1451	1566	-5	37	1.2	5.6	31.3
12:12:2003:12:09:03	1460	1547	-5	37	1.2	6.8	32.5
12:12:2003:12:10:03	1447	1584	-9	37	1.2	8	33.7
12:12:2003:12:11:03	1442	1575	-9	37	1.2	9.1	34.8
12:12:2003:12:12:03	1451	1579	-9	37	1.2	10.3	36
12:12:2003:12:13:03	1465	1584	-5	37	1.2	11.4	37.1
12:12:2003:12:14:03	1451	1598	-5	37	1.2	12.6	38.3
12:12:2003:12:15:03	1460	1588	-9	37	1.2	13.7	39.4
12:12:2003:12:16:03	1460	1588	-5	37	1.2	14.9	40.6
12:12:2003:12:17:03	1451	1584	-5	37	1.2	16.1	41.7
12:12:2003:12:18:04	1447	1584	-9	37	1.2	17.2	42.9
12:12:2003:12:19:04	1447	1575	-9	37	1.2	18.4	44.1
12:12:2003:12:20:04	1460	1570	-9	37	1.2	19.5	45.2
12:12:2003:12:21:04	1447	1552	-9	37	1.1	20.7	46.4
12:12:2003:12:22:04	1451	1575	-9	37	1.2	21.9	47.6
12:12:2003:12:23:04	1437	1543	-9	37	1.1	23	48.7
12:12:2003:12:23:18	**Start 4th Step**						
12:12:2003:12:23:18	1483	1643	-9	37	1.7	23.4	49.1
12:12:2003:12:24:04	1501	1602	-9	37	1.7	1.3	50.4
12:12:2003:12:25:04	1488	1625	-9	37	1.6	2.9	52
12:12:2003:12:26:04	1492	1616	-9	41	1.7	4.5	53.6
12:12:2003:12:27:04	1488	1630	-9	41	1.6	6.1	55.2
12:12:2003:12:28:04	1497	1630	-9	41	1.6	7.7	56.8
12:12:2003:12:29:05	1492	1620	-9	41	1.6	9.3	58.5
12:12:2003:12:30:05	1492	1625	-9	37	1.6	11	60.1
12:12:2003:12:31:05	1483	1602	-9	41	1.6	12.5	61.6
12:12:2003:12:32:05	1497	1625	-9	41	1.6	14.1	63.2
12:12:2003:12:33:05	1511	1611	-9	41	1.6	15.7	64.9
12:12:2003:12:34:05	1483	1630	-9	41	1.6	17.3	66.4
12:12:2003:12:35:05	1483	1607	-9	41	1.6	18.9	68
12:12:2003:12:36:05	1483	1616	-9	41	1.6	20.6	69.7
12:12:2003:12:37:05	1511	1625	-9	41	1.6	22.2	71.3
12:12:2003:12:38:05	1511	1602	-9	41	1.7	23.8	72.9
12:12:2003:12:39:05	1506	1607	-9	41	1.6	25.4	74.6
12:12:2003:12:40:05	1488	1625	-9	41	1.6	27.1	76.2
12:12:2003:12:41:05	1511	1616	-9	41	1.7	28.7	77.8
12:12:2003:12:42:06	1501	1598	-9	41	1.7	30.4	79.5
12:12:2003:12:43:06	1538	1625	-9	41	1.9	32	81.1
12:12:2003:12:43:10	**Start 5th Step**						
12:12:2003:12:43:10	1511	1666	-9	41	2	32.2	81.3
12:12:2003:12:44:06	1515	1675	-9	41	2	1.9	83.2
12:12:2003:12:45:06	1515	1671	-9	41	2.1	3.9	85.2
12:12:2003:12:46:06	1520	1662	-9	41	2	5.9	87.2
12:12:2003:12:47:06	1520	1666	-9	41	2	7.9	89.2
12:12:2003:12:48:06	1534	1680	-9	41	2	9.9	91.2
12:12:2003:12:49:06	1534	1666	-9	41	2	11.9	93.2
12:12:2003:12:50:06	1524	1680	-9	41	2	14	95.2
12:12:2003:12:51:06	1524	1653	-9	41	2.1	16	97.3
12:12:2003:12:52:06	1515	1657	-9	41	2	18	99.3
12:12:2003:12:53:07	1538	1653	-9	41	2.1	20.1	101.3
12:12:2003:12:54:07	1538	1643	-9	41	2.1	22.1	103.4

12:12:2003:12:55:07	1538	1680	-9	41	2	24.1	105.4
12:12:2003:12:56:07	1534	1671	-9	41	2	26.1	107.4
12:12:2003:12:57:07	1524	1680	-9	41	2.1	28.1	109.4
12:12:2003:12:58:07	1524	1685	-9	41	2	30.1	111.4
12:12:2003:12:59:07	1538	1671	-9	41	2	32.2	113.4
12:12:2003:13:00:07	1538	1685	-9	41	2.1	34.2	115.5
12:12:2003:13:01:07	-3749	-3790	-3850	-3387	0	36.2	117.5
12:12:2003:13:02:07	1538	1685	-9	41	2.1	38.2	119.5
12:12:2003:13:03:07	1561	1739	-9	41	2.3	40.3	121.5
12:12:2003:13:03:10	**Start 6th Step**						
12:12:2003:13:03:10	1534	1698	-9	41	2.3	40.4	121.7
12:12:2003:13:04:07	1552	1685	-9	41	2.3	2.2	123.8
12:12:2003:13:05:08	1556	1689	-9	41	2.4	4.6	126.3
12:12:2003:13:06:08	1552	1685	-9	41	2.4	6.9	128.6
12:12:2003:13:07:08	1561	1717	-9	41	2.4	9.3	131
12:12:2003:13:08:08	1538	1685	-9	41	2.4	11.7	133.4
12:12:2003:13:09:08	1552	1685	-9	41	2.4	14.1	135.8
12:12:2003:13:10:08	1566	1744	-9	41	2.4	16.5	138.2
12:12:2003:13:11:09	1552	1744	-9	41	2.4	18.9	140.6
12:12:2003:13:12:09	1570	1703	-9	41	2.4	21.3	143
12:12:2003:13:13:09	1561	1730	-9	41	2.4	23.7	145.4
12:12:2003:13:14:09	1552	1726	-9	41	2.4	26.1	147.8
12:12:2003:13:15:09	1570	1762	-9	41	2.4	28.5	150.2
12:12:2003:13:16:09	1575	1703	-9	41	2.4	30.9	152.6
12:12:2003:13:17:09	1570	1735	-9	41	2.4	33.3	155
12:12:2003:13:18:09	1584	1717	-9	41	2.4	35.7	157.4
12:12:2003:13:19:09	1575	1680	-9	41	2.4	38.1	159.8
12:12:2003:13:20:09	1556	1689	-9	41	2.4	40.5	162.2
12:12:2003:13:21:09	1556	1744	-9	41	2.4	42.9	164.6
12:12:2003:13:22:10	1556	1721	-9	41	2.4	45.3	167
12:12:2003:13:23:08	**Start 7th Step**						
12:12:2003:13:23:08	1566	1863	-9	41	2.8	47.7	169.4
12:12:2003:13:23:10	1524	1804	-9	41	2.8	0.1	169.5
12:12:2003:13:24:10	1552	1685	-9	46	2.8	2.9	172.3
12:12:2003:13:25:10	1534	1753	-9	41	2.8	5.7	175.1
12:12:2003:13:26:10	1529	1713	-9	46	2.8	8.5	177.9
12:12:2003:13:27:10	1614	1728	-9	41	2.8	11.3	180.7
12:12:2003:13:28:10	1607	1734	-9	46	2.8	14.1	183.5
12:12:2003:13:29:10	1625	1788	-9	46	2.8	16.9	186.3
12:12:2003:13:30:10	1620	1811	-9	41	2.8	19.7	189
12:12:2003:13:31:10	1627	1813	-9	41	2.8	22.5	191.8
12:12:2003:13:32:10	1596	1774	-9	41	2.8	25.2	194.5
12:12:2003:13:33:10	1617	1729	-9	46	2.8	28	197.3
12:12:2003:13:34:10	1607	1724	-9	46	2.8	30.8	200.1
12:12:2003:13:35:11	1620	1750	-9	46	2.8	33.6	202.9
12:12:2003:13:36:11	1612	1742	-9	46	2.8	36.4	205.7
12:12:2003:13:37:11	1582	1761	-9	46	2.8	39.2	208.5
12:12:2003:13:38:11	1601	1823	-9	46	2.8	42	211.3
12:12:2003:13:39:11	1624	1805	-9	46	2.8	44.8	214.1
12:12:2003:13:40:11	1607	1774	-9	46	2.8	47.6	216.9
12:12:2003:13:41:11	1581	1740	-9	46	2.8	50.4	219.7
12:12:2003:13:42:11	1602	1715	-9	46	2.8	53.2	222.5
12:12:2003:13:43:11	1629	1821	-9	46	3.1	56	225.4
12:12:2003:13:43:12	**Start 8th Step**						
12:12:2003:13:43:12	1627	1821	-9	46	3.2	56.1	225.5
12:12:2003:13:44:11	1628	1819	-9	46	3.2	3.1	228.6
12:12:2003:13:45:11	1639	1839	-9	46	3.2	6.3	231.8
12:12:2003:13:46:12	1637	1823	-9	46	3.2	9.6	235.1

12:12:2003:13:47:12	1638	1835	-9	46	3.2	12.8	238.3
12:12:2003:13:48:12	1631	1821	-9	46	3.2	16	241.5
12:12:2003:13:49:12	1638	1840	-9	46	3.2	19.2	244.7
12:12:2003:13:50:12	1643	1836	-9	46	3.2	22.4	247.9
12:12:2003:13:51:12	1636	1820	-9	46	3.2	25.6	251.1
12:12:2003:13:52:12	1650	1854	-9	46	3.2	28.8	254.2
12:12:2003:13:53:12	1642	1843	-9	46	3.2	32	257.4
12:12:2003:13:54:12	1671	1881	-9	46	3.2	35.2	260.7
12:12:2003:13:55:12	1662	1817	-9	46	3.2	38.3	263.8
12:12:2003:13:56:12	1671	1794	-9	46	3.2	41.5	267
12:12:2003:13:57:12	1634	1868	-9	46	3.2	44.8	270.2
12:12:2003:13:58:13	1643	1891	-9	46	3.2	48	273.5
12:12:2003:13:59:13	1648	1868	-9	46	3.2	51.2	276.7
12:12:2003:14:00:13	1671	1849	-9	46	3.2	54.4	279.9
12:12:2003:14:01:13	1630	1790	-9	46	3.2	57.6	283.1
12:12:2003:14:02:13	1666	1891	-14	46	3.2	60.9	286.3
12:12:2003:14:03:07	**Start 9th Step**						
12:12:2003:14:03:07	1680	1877	-9	46	3.6	63.8	289.3
12:12:2003:14:03:13	1703	1927	-9	46	3.7	0.4	289.6
12:12:2003:14:04:13	1657	1872	-9	46	3.6	4	293.2
12:12:2003:14:05:13	1680	1881	-9	46	3.6	7.5	296.8
12:12:2003:14:06:13	1689	1859	-14	46	3.6	11.1	300.3
12:12:2003:14:07:13	1694	1904	-14	46	3.6	14.7	304
12:12:2003:14:08:13	1666	1891	-14	46	3.6	18.3	307.6
12:12:2003:14:09:13	1662	1900	-14	46	3.5	21.9	311.2
12:12:2003:14:10:14	1685	1923	-14	46	3.6	25.6	314.8
12:12:2003:14:11:14	1689	1923	-14	46	3.6	29.2	318.4
12:12:2003:14:12:14	1694	1881	-14	46	3.6	32.8	322
12:12:2003:14:13:14	1685	1849	-14	46	3.6	36.4	325.6
12:12:2003:14:14:14	1666	1868	-14	46	3.6	40	329.2
12:12:2003:14:15:14	1685	1872	-14	46	3.6	43.6	332.8
12:12:2003:14:16:14	1666	1909	-14	46	3.6	47.2	336.4
12:12:2003:14:17:14	1698	1895	-14	46	3.6	50.8	340
12:12:2003:14:18:14	1689	1913	-14	46	3.6	54.4	343.6
12:12:2003:14:19:14	1666	1909	-14	46	3.6	58	347.2
12:12:2003:14:20:14	1694	1909	-14	46	3.6	61.6	350.8
12:12:2003:14:21:15	1685	1881	-14	46	3.6	65.2	354.5
12:12:2003:14:22:15	1675	1868	-14	46	3.6	68.9	358.1
12:12:2003:14:23:05	**Start 10th Step**						
12:12:2003:14:23:05	1726	1932	-14	46	4	71.9	361.1
12:12:2003:14:23:15	1721	1959	-14	46	4	0.7	361.8
12:12:2003:14:24:15	1717	1955	-14	46	4	4.7	365.8
12:12:2003:14:25:15	1717	1950	-14	46	4	8.7	369.9
12:12:2003:14:26:15	1726	1987	-14	46	4	12.8	373.9
12:12:2003:14:27:15	1726	1964	-14	46	4	16.8	377.9
12:12:2003:14:28:15	1721	1945	-14	46	4	20.8	382
12:12:2003:14:29:15	1712	1945	-14	46	4	24.8	385.9
12:12:2003:14:30:15	1730	1982	-14	46	4	28.8	390
12:12:2003:14:31:15	1717	1955	-14	46	4	32.8	394
12:12:2003:14:32:16	1717	1968	-14	46	4	36.9	398.1
12:12:2003:14:33:16	1717	1973	-14	46	4.1	41	402.1
12:12:2003:14:34:16	1712	1941	-14	46	4	45	406.1
12:12:2003:14:35:16	1717	1941	-14	46	4	49	410.1
12:12:2003:14:36:16	1721	1955	-14	46	4	52.9	414
12:12:2003:14:37:16	1712	1973	-14	46	4	56.9	418
12:12:2003:14:38:16	1717	1978	-14	46	4	60.9	422
12:12:2003:14:39:16	1721	1950	-14	46	4	64.9	426.1
12:12:2003:14:40:16	1735	1950	-14	46	4	68.9	430.1

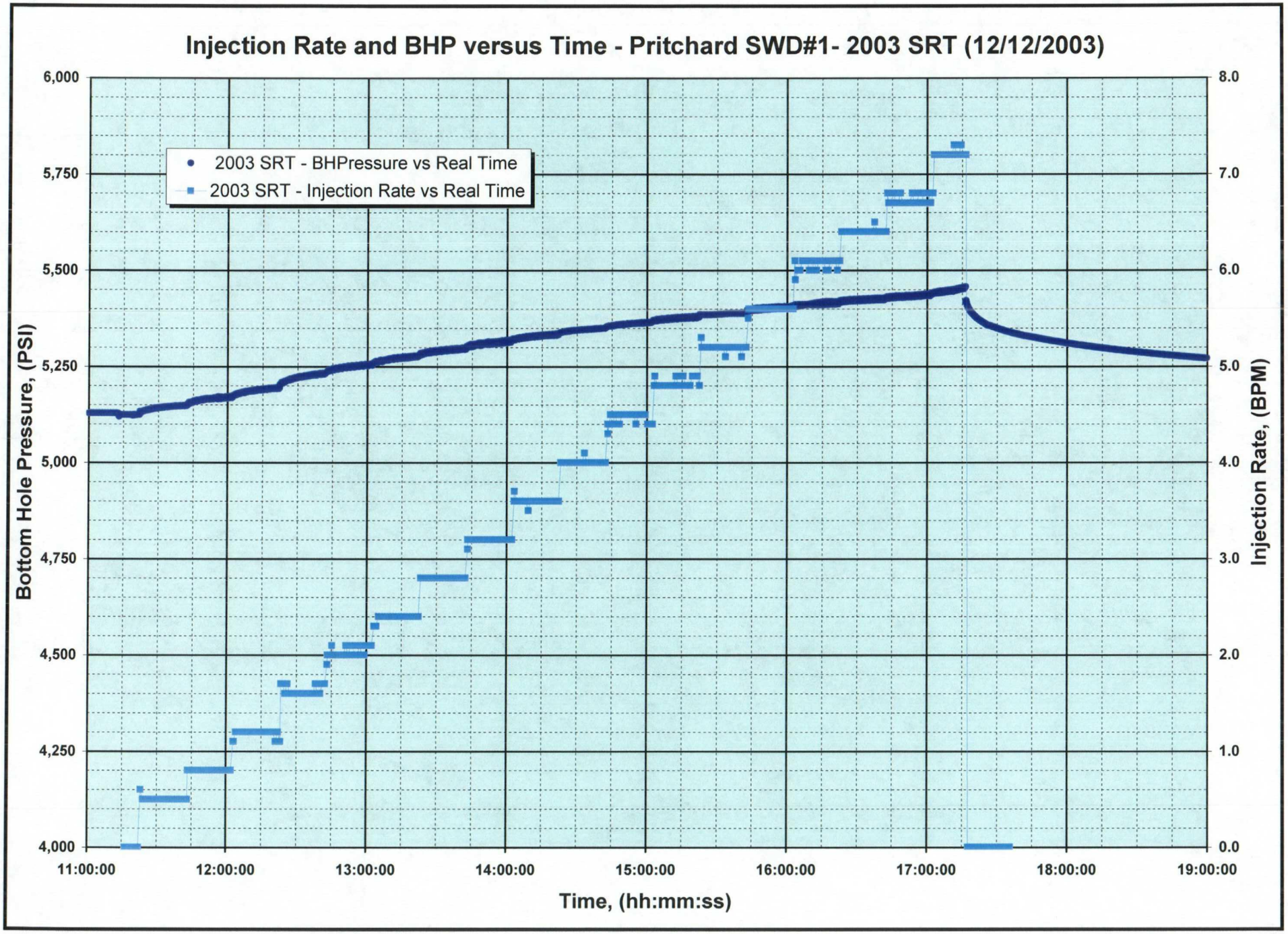
12:12:2003:14:41:16	1721	1964	-14	46	4	72.9	434
12:12:2003:14:42:16	1712	1945	-14	46	4	76.9	438
12:12:2003:14:43:12	**Start 11th Step**						
12:12:2003:14:43:12	1749	2051	-14	46	4.4	80.6	441.7
12:12:2003:14:43:16	1739	2005	-14	46	4.3	0.3	442
12:12:2003:14:44:17	1762	2005	-14	46	4.5	4.8	446.5
12:12:2003:14:45:17	1772	1991	-14	46	4.4	9.2	450.9
12:12:2003:14:46:17	1776	2023	-14	46	4.5	13.6	455.3
12:12:2003:14:47:17	1767	1996	-14	46	4.4	18	459.8
12:12:2003:14:48:17	1781	2023	-14	46	4.4	22.5	464.2
12:12:2003:14:49:17	1758	2055	-14	46	4.5	26.9	468.6
12:12:2003:14:50:17	1772	2065	-14	46	4.5	31.2	472.9
12:12:2003:14:51:17	1762	2065	-14	46	4.5	35.6	477.3
12:12:2003:14:52:17	1767	2055	-14	46	4.5	40	481.8
12:12:2003:14:53:17	1753	1991	-14	46	4.5	44.5	486.2
12:12:2003:14:54:17	1772	2032	-14	46	4.5	48.9	490.6
12:12:2003:14:55:18	1753	2065	-14	46	4.4	53.4	495.2
12:12:2003:14:56:18	1767	1982	-14	46	4.5	57.8	499.6
12:12:2003:14:57:18	1781	2028	-14	46	4.5	62.3	504
12:12:2003:14:58:18	1753	2019	-14	46	4.5	66.7	508.5
12:12:2003:14:59:18	1767	2028	-14	46	4.5	71.2	512.9
12:12:2003:15:00:18	1772	2046	-14	46	4.4	75.6	517.3
12:12:2003:15:01:18	1762	1978	-14	46	4.4	80	521.8
12:12:2003:15:02:18	1762	2060	-14	46	4.4	84.5	526.2
12:12:2003:15:03:03	**Start 12th Step**						
12:12:2003:15:03:03	1822	1680	-14	46	4.8	87.8	529.6
12:12:2003:15:03:18	1772	2046	-14	46	4.9	1.2	530.8
12:12:2003:15:04:18	1781	1987	-14	50	4.8	6	535.6
12:12:2003:15:05:18	1849	2138	-14	46	4.8	10.8	540.4
12:12:2003:15:06:18	1790	2010	-14	46	4.8	15.7	545.2
12:12:2003:15:07:19	1799	2078	-14	46	4.8	20.6	550.1
12:12:2003:15:08:19	1762	2151	-14	46	4.8	25.4	555
12:12:2003:15:09:19	1772	2151	-14	46	4.8	30.2	559.8
12:12:2003:15:10:19	1781	2010	-14	46	4.8	35.1	564.6
12:12:2003:15:11:19	1794	2110	-14	46	4.8	39.9	569.4
12:12:2003:15:12:19	1772	2078	-14	46	4.9	44.7	574.3
12:12:2003:15:13:19	1804	2005	-14	46	4.8	49.5	579.1
12:12:2003:15:14:19	1840	2156	-18	46	4.8	54.3	583.9
12:12:2003:15:15:19	1808	2069	-18	50	4.9	59.2	588.7
12:12:2003:15:16:19	1849	2129	-18	50	4.8	63.8	593.4
12:12:2003:15:17:19	1762	2133	-18	50	4.8	68.7	598.2
12:12:2003:15:18:20	1785	2165	-18	50	4.8	73.6	603.1
12:12:2003:15:19:20	1776	2037	-18	46	4.9	78.4	607.9
12:12:2003:15:20:20	1808	2010	-18	46	4.9	83.2	612.8
12:12:2003:15:21:20	1785	2032	-18	46	4.9	88	617.5
12:12:2003:15:22:20	1772	2055	-18	50	4.8	92.8	622.3
12:12:2003:15:23:03	**Start 13th Step**						
12:12:2003:15:23:03	1808	2307	-18	50	5.3	96.3	625.8
12:12:2003:15:23:20	1836	2252	-18	50	5.2	1.5	627.3
12:12:2003:15:24:20	1904	2325	-18	50	5.2	6.7	632.5
12:12:2003:15:25:22	1822	2248	-18	50	5.2	12.1	637.9
12:12:2003:15:26:22	1836	2046	-18	50	5.2	17.3	643.1
12:12:2003:15:27:22	1831	2257	-18	50	5.2	22.5	648.3
12:12:2003:15:28:22	1856	2158	-18	50	5.2	27.7	653.5
12:12:2003:15:29:22	1866	2157	-18	50	5.2	32.9	658.7
12:12:2003:15:30:23	1864	2146	-18	50	5.2	38.1	664
12:12:2003:15:31:22	1870	2179	-18	50	5.2	43.2	669.1
12:12:2003:15:32:22	1863	2163	-18	50	5.2	48.4	674.3

12:12:2003:15:33:22	1862	2175	-18	50	5.1	53.6	679.5
12:12:2003:15:34:22	1861	2132	-18	50	5.2	58.8	684.6
12:12:2003:15:35:23	1844	2142	-18	50	5.2	64.1	689.9
12:12:2003:15:36:23	1870	2178	-18	50	5.2	69.2	695
12:12:2003:15:37:23	1850	2184	-18	50	5.2	74.4	700.2
12:12:2003:15:38:23	1840	2174	-18	50	5.2	79.6	705.4
12:12:2003:15:39:23	1850	2169	-18	50	5.2	84.8	710.6
12:12:2003:15:40:23	1866	2139	-18	50	5.1	90	715.8
12:12:2003:15:41:23	1875	2169	-18	50	5.2	95.2	721
12:12:2003:15:42:23	1871	2189	-23	50	5.2	100.4	726.2
12:12:2003:15:43:10	**Start 14th Step**						
12:12:2003:15:43:10	1862	2152	-23	50	5.5	104.5	730.3
12:12:2003:15:43:23	1882	2251	-23	50	5.6	1.2	731.5
12:12:2003:15:44:23	1925	2249	-23	50	5.6	6.8	737.1
12:12:2003:15:45:23	1879	2260	-23	50	5.6	12.4	742.7
12:12:2003:15:46:24	1894	2211	-23	50	5.6	18.1	748.4
12:12:2003:15:47:24	1877	2133	-23	50	5.6	23.6	753.9
12:12:2003:15:48:24	1889	2201	-23	50	5.6	29.2	759.5
12:12:2003:15:49:24	1893	2207	-23	50	5.6	34.8	765.1
12:12:2003:15:50:24	1921	2158	-23	50	5.6	40.4	770.7
12:12:2003:15:51:24	1935	2273	-23	50	5.6	46	776.3
12:12:2003:15:52:24	1891	2225	-23	50	5.6	51.6	781.9
12:12:2003:15:53:24	1886	2208	-23	50	5.6	57.2	787.5
12:12:2003:15:54:24	1878	2281	-23	50	5.6	62.8	793.1
12:12:2003:15:55:24	1915	2272	-23	50	5.6	68.4	798.7
12:12:2003:15:56:24	1929	2239	-23	50	5.6	74	804.3
12:12:2003:15:57:24	1915	2213	-23	50	5.6	79.6	809.9
12:12:2003:15:58:25	1923	2206	-23	50	5.6	85.3	815.6
12:12:2003:15:59:25	1936	2313	-23	50	5.6	90.9	821.2
12:12:2003:16:00:25	1250	1521	-23	50	5.6	96.4	826.7
12:12:2003:16:01:25	1877	2270	-23	50	5.6	102	832.3
12:12:2003:16:02:25	1918	2266	-23	50	5.6	107.6	837.9
12:12:2003:16:03:11	**Start 15th Step**						
12:12:2003:16:03:11	1911	2304	-23	50	6.1	111.9	842.2
12:12:2003:16:03:25	1944	2320	-23	50	5.9	1.4	843.6
12:12:2003:16:04:25	1950	2333	-23	50	6	7.5	849.7
12:12:2003:16:05:25	1951	2337	-23	50	6	13.5	855.8
12:12:2003:16:06:25	1953	2317	-23	50	6.1	19.6	861.8
12:12:2003:16:07:25	1966	2332	-23	50	6.1	25.6	867.9
12:12:2003:16:08:25	1959	2323	-23	50	6.1	31.7	873.9
12:12:2003:16:09:26	1964	2319	-23	50	6	37.8	880.1
12:12:2003:16:10:26	1960	2343	-23	50	6	43.9	886.1
12:12:2003:16:11:26	1949	2313	-23	50	6.1	49.9	892.1
12:12:2003:16:12:26	1952	2305	-23	50	6	56	898.2
12:12:2003:16:13:26	1971	2322	-23	50	6.1	62	904.2
12:12:2003:16:14:26	1956	2312	-23	50	6.1	68.1	910.3
12:12:2003:16:15:26	1960	2349	-23	50	6.1	74.1	916.3
12:12:2003:16:16:26	1973	2303	-23	50	6	80.1	922.4
12:12:2003:16:17:26	1967	2348	-23	50	6	86.2	928.4
12:12:2003:16:18:26	1957	2339	-23	50	6.1	92.2	934.5
12:12:2003:16:19:26	1968	2338	-23	50	6.1	98.3	940.5
12:12:2003:16:20:26	1959	2343	-23	50	6.1	104.3	946.6
12:12:2003:16:21:27	1971	2328	-23	50	6	110.5	952.7
12:12:2003:16:22:27	1971	2337	-23	50	6.1	116.4	958.7
12:12:2003:16:23:08	**Start 16th Step**						
12:12:2003:16:23:08	1988	2352	-23	50	6.4	120.6	962.8
12:12:2003:16:23:27	2002	2391	-23	50	6.4	2	964.9
12:12:2003:16:24:27	1997	2386	-23	50	6.4	8.4	971.3

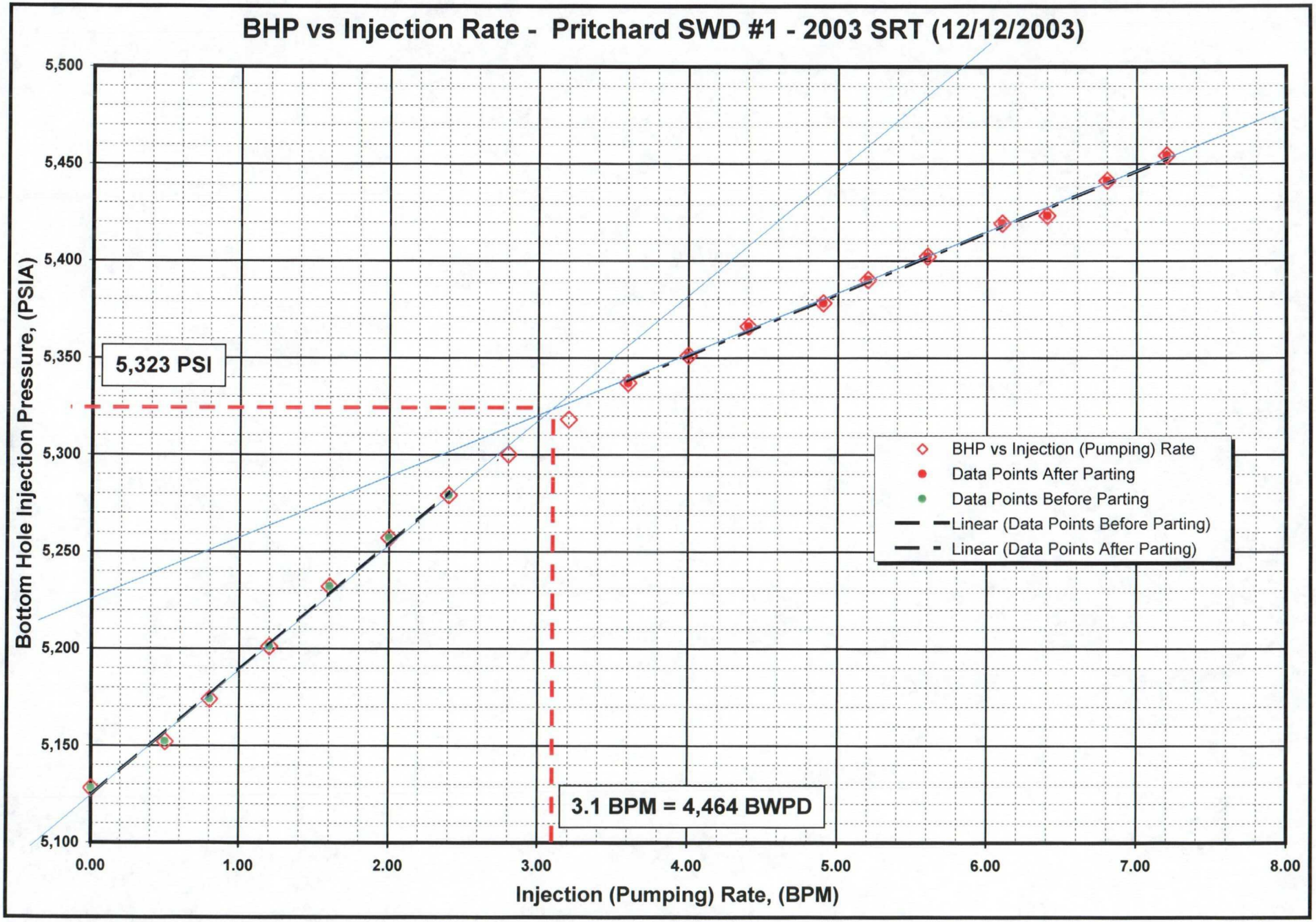
12:12:2003:16:25:27	2005	2401	-23	50	6.4	14.9	977.7
12:12:2003:16:26:27	2009	2381	-23	50	6.4	21.3	984.1
12:12:2003:16:27:27	2003	2401	-23	50	6.4	27.7	990.5
12:12:2003:16:28:27	1997	2417	-23	50	6.4	34.1	996.9
12:12:2003:16:29:27	1997	2405	-23	50	6.4	40.4	1003.2
12:12:2003:16:30:27	1998	2390	-23	50	6.4	46.8	1009.6
12:12:2003:16:31:27	2009	2391	-23	50	6.4	53.1	1015.9
12:12:2003:16:32:28	2009	2408	-23	50	6.4	59.6	1022.4
12:12:2003:16:33:28	2001	2394	-23	50	6.4	66	1028.9
12:12:2003:16:34:28	1997	2391	-23	50	6.4	72.5	1035.3
12:12:2003:16:35:28	2006	2397	-23	50	6.4	78.9	1041.7
12:12:2003:16:36:28	2006	2393	-23	50	6.4	85.2	1048
12:12:2003:16:37:28	2004	2391	-23	50	6.5	91.6	1054.4
12:12:2003:16:38:28	2004	2403	-23	50	6.4	98	1060.8
12:12:2003:16:39:28	2010	2414	-23	50	6.4	104.4	1067.2
12:12:2003:16:40:28	2001	2391	-23	50	6.4	110.8	1073.6
12:12:2003:16:41:28	2005	2396	-23	50	6.4	117	1079.8
12:12:2003:16:42:28	2013	2400	-23	50	6.4	123.4	1086.2
12:12:2003:16:43:00	**Start 17th Step**						
12:12:2003:16:43:00	2021	2419	-23	50	6.8	126.9	1089.7
12:12:2003:16:43:28	2051	2479	-23	50	6.7	3.2	1092.8
12:12:2003:16:44:29	2050	2476	-23	50	6.7	10	1099.7
12:12:2003:16:45:29	2053	2479	-23	50	6.8	16.8	1106.5
12:12:2003:16:46:29	2054	2480	-23	50	6.7	23.5	1113.1
12:12:2003:16:47:29	2056	2478	-23	50	6.7	30.2	1119.9
12:12:2003:16:48:29	2058	2478	-23	50	6.8	37	1126.6
12:12:2003:16:49:29	2056	2480	-23	50	6.7	43.8	1133.4
12:12:2003:16:50:29	2060	2482	-23	50	6.7	50.5	1140.2
12:12:2003:16:51:29	2058	2484	-23	50	6.7	57.3	1146.9
12:12:2003:16:52:29	2060	2485	-23	50	6.7	64	1153.7
12:12:2003:16:53:29	2059	2484	-23	50	6.8	70.8	1160.5
12:12:2003:16:54:29	2062	2489	-23	50	6.7	77.6	1167.2
12:12:2003:16:55:30	2062	2480	-23	50	6.7	84.5	1174.1
12:12:2003:16:56:30	2060	2489	-23	50	6.8	91.2	1180.9
12:12:2003:16:57:30	2060	2488	-23	50	6.8	98	1187.6
12:12:2003:16:58:30	2092	2516	-23	50	6.7	104.6	1194.3
12:12:2003:16:59:30	2060	2489	-23	50	6.7	111.4	1201.1
12:12:2003:17:00:30	2062	2488	-23	50	6.8	118.2	1207.8
12:12:2003:17:01:30	2058	2486	-23	50	6.7	124.9	1214.6
12:12:2003:17:02:30	2053	2465	-23	50	6.8	131.7	1221.4
12:12:2003:17:02:59	**Start 18th Step**						
12:12:2003:17:02:59	1839	2257	-23	50	7.2	134.9	1224.5
12:12:2003:17:03:30	2102	2547	-23	50	7.2	3.7	1228.3
12:12:2003:17:04:30	2106	2554	-23	50	7.2	10.9	1235.5
12:12:2003:17:05:30	2104	2557	-23	50	7.2	18.2	1242.7
12:12:2003:17:06:30	2103	2554	-23	50	7.2	25.4	1249.9
12:12:2003:17:07:31	2102	2556	-23	50	7.2	32.7	1257.2
12:12:2003:17:08:31	2104	2564	-23	50	7.2	39.9	1264.5
12:12:2003:17:09:31	2105	2580	-23	50	7.2	47.1	1271.7
12:12:2003:17:10:31	2028	2487	-23	50	7.2	54.2	1278.8
12:12:2003:17:11:31	2112	2571	-23	50	7.3	61.5	1286
12:12:2003:17:12:31	2110	2571	-23	50	7.2	68.7	1293.2
12:12:2003:17:13:31	2109	2563	-23	50	7.2	75.9	1300.4
12:12:2003:17:14:31	2112	2582	-23	50	7.3	83.1	1307.6
12:12:2003:17:15:31	2109	2574	-23	50	7.2	90.2	1314.7
12:12:2003:17:16:31	2106	2566	-23	50	7.2	97.4	1321.9
12:12:2003:17:17:32	1626	1112	-23	50	0	103.1	1327.6
12:12:2003:17:17:36	**ISIP**						

12:12:2003:17:17:36		1638	1134	-23	50	0	103.1	1327.6
12:12:2003:17:18:32		1634	1175	-23	50	0	103.1	1327.6
12:12:2003:17:19:32		1623	1172	-23	50	0	103.1	1327.6
12:12:2003:17:20:32		1616	1167	-23	50	0	103.1	1327.6
12:12:2003:17:21:32		1611	1163	-23	50	0	103.1	1327.6
12:12:2003:17:22:32		1607	1158	-23	50	0	103.1	1327.6
12:12:2003:17:22:36	**5 min.**							
12:12:2003:17:22:36		1607	1158	-23	50	0	103.1	1327.6
12:12:2003:17:23:32		1602	1154	-23	50	0	103.1	1327.6
12:12:2003:17:24:32		1597	1146	-23	50	0	103.1	1327.6
12:12:2003:17:25:32		1598	1140	-23	50	0	103.1	1327.6
12:12:2003:17:26:32		1593	1135	-23	50	0	103.1	1327.6
12:12:2003:17:27:32		1622	1159	-23	50	0	103.1	1327.6
12:12:2003:17:27:44	**10 min.**							
12:12:2003:17:27:44		1587	1127	-23	50	0	103.1	1327.6
12:12:2003:17:28:33		1588	1123	-23	50	0	103.1	1327.6
12:12:2003:17:29:33		1584	1117	-23	50	0	103.1	1327.6
12:12:2003:17:30:33		1584	1112	-23	50	0	103.1	1327.6
12:12:2003:17:31:33		1579	1107	-23	50	0	103.1	1327.6
12:12:2003:17:32:33		1579	1099	-23	46	0	103.1	1327.6
12:12:2003:17:32:37	**15 min.**							
12:12:2003:17:32:37		1579	1099	-23	50	0	103.1	1327.6
12:12:2003:17:33:33		1575	1094	-23	46	0	103.1	1327.6
12:12:2003:17:34:33		1282	821	-23	46	0	103.1	1327.6
12:12:2003:17:35:33		1570	1081	-23	46	0	103.1	1327.6
12:12:2003:17:35:49	Remark							
12:12:2003:17:35:49		1565	1080	-23	50	0	103.1	1327.6
12:12:2003:17:36:04	Bleed Off Pressure							
12:12:2003:17:36:04		-57	-40	-23	46	0	103.1	1327.6
12:12:2003:17:36:18	End Job							
12:12:2003:17:36:18		-137	-3	-23	46	0	103.1	1327.6

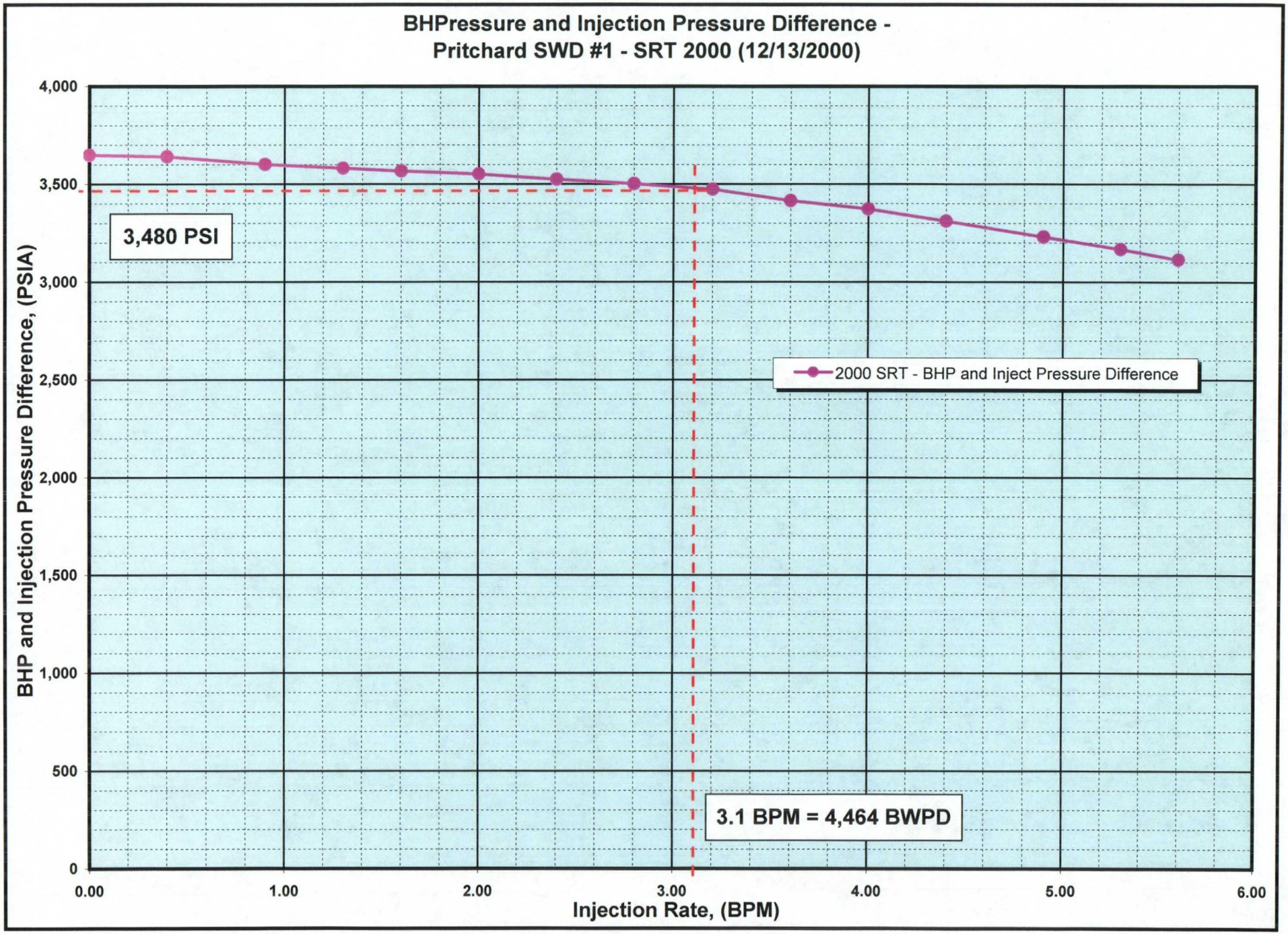
Attachment #4


Injection Rate and BHP versus Time - Pritchard SWD#1- 2003 SRT (12/12/2003)
2003 SRT - BHPressure vs Real Time
2003 SRT - Injection Rate vs Real Time
Bottom Hole Pressure, (PSI)
Injection Rate, (BPM)
Time, (hh:mm:ss)
6,000
5,750
5,500
5,250
5,000
4,750
4,500
4,250
4,000
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00

Attachment #5


BHP vs Injection Rate - Pritchard SWD #1 - 2003 SRT (12/12/2003)
Bottom Hole Injection Pressure, (PSIA)
5,500
5,450
5,400
5,350
5,300
5,250
5,200
5,150
5,100
5,323 PSI
3.1 BPM = 4,464 BWPD
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
Injection (Pumping) Rate, (BPM)
BHP vs Injection (Pumping) Rate
Data Points After Parting
Data Points Before Parting
Linear (Data Points Before Parting)
Linear (Data Points After Parting)

Attachment #6


BHPressure and Injection Pressure Difference -
Pritchard SWD #1 - SRT 2000 (12/13/2000)
BHP and Injection Pressure Difference, (PSIA)
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
3,480 PSI
2000 SRT - BHP and Inject Pressure Difference
3.1 BPM = 4,464 BWPD
0.00
1.00
2.00
3.00
4.00
5.00
6.00
Injection Rate, (BPM)

Attachment #7

Schlumberger

FracCAT Treatment Report

Well : **Pritchard SWD 1**
Field : **Blanco PC**
Formation : **Injection test**

Well Location : .
County : San Juan
State : New Mexico
Country : United States

Prepared for
Client : Amoco
Client Rep : Greg Nelson
Proposal No. :
Date Prepared : 12-13-2000

Prepared by
Name : Paul Culek
Division : Dowell
Phone : 325-5096

Service Point : Farmington
Fax No. :

Comments :

Schlumberger

Client : Amoco
Well Pritchard SWD 1
Formation . Injection test
District : Farmington
Country United States
Loadcase Acq Load Case

Section 1: As Measured Pump Schedule

As Measured Pump Schedule

Stg #	Stage Name	Slurry Volume (bbl)	Slurry Rate (bbl/min)	Pump Time (min)	Fluid Name	Fluid Volume (gal)	Proppant Name	Max Prop Conc (PPA)	Prop Conc (PPA)	Prop Mass (lb)
1	Pre Pad	0.0	0.3	0.2	2% KCL Water	1	None	0.0	0.0	0
2	Step 1	7.3	0.4	20.2	2% KCL Water	308	None	0.0	0.0	0
3	Step 2	17.0	0.9	19.7	2% KCL Water	715	None	0.0	0.0	0
4	Step 3	25.8	1.3	20.0	2% KCL Water	1083	None	0.0	0.0	0
5	Step 4	31.8	1.6	20.0	2% KCL Water	1335	None	0.0	0.0	0
6	Step 5	39.4	2.0	20.0	2% KCL Water	1654	None	0.0	0.0	0
7	Step 6	47.5	2.4	19.9	2% KCL Water	1996	None	0.0	0.0	0
8	Step 7	55.4	2.8	20.1	2% KCL Water	2324	None	0.0	0.0	0
9	Step 8	64.0	3.2	19.9	2% KCL Water	2688	None	0.0	0.0	0
10	Step 9	73.3	3.6	20.1	2% KCL Water	3079	None	0.0	0.0	0
11	Step 10	80.0	4.0	20.0	2% KCL Water	3360	None	0.0	0.0	0
12	Step 11	87.3	4.4	19.9	2% KCL Water	3666	None	0.0	0.0	0
13	Step 12	97.4	4.9	19.9	2% KCL Water	4091	None	0.0	0.0	0
14	Step 13	109.4	5.3	20.5	2% KCL Water	4596	None	0.0	0.0	0
15	Step 14	112.2	3.1	35.8	2% KCL Water	4717	None	0.0	0.0	0

As Measured Totals

Slurry (bbl)	Pump Time (min)	Clean Fluid (gal)	Proppant (lb)	Liquid 1 (gal)	Liquid 2 (gal)
848.0	296.5	35614	0	0.0	0.0

Average Treating Pressure: 1815 psi
Maximum Treating Pressure: 2435 psi
Average Injection Rate: 3.1 bbl/min
Maximum Injection Rate: 6.4 bbl/min
Average Horsepower: 153.5 hhp
Maximum Horsepower 381.2 hhp
Maximum Prop Concentration 0.0 PPA

Section 2: Message Log

Schlumberger

Client : Amoco
Well : Pritchard SWD 1
Formation : Injection test
District : Farmington
Country : United States
Loadcase : Acq Load Case

#	Time	Message	Treating Pressure (psi)	Annulus Pressure (psi)	Total Slurry (bbl)
1	10:02:52	Pressure Test Lines	2898	5	0.0
2	10:28:16	Started Pre Pad	0	0	0.0
3	10:28:26	Started Step 1 Manually	1515	417	0.0
4	10:48:39	Started Step 2 Manually	1671	307	7.4
5	11:08:20	Started Step 3 Manually	1707	27	24.4
6	11:28:21	Started Step 4 Manually	1735	-18	50.2
7	11:48:24	Started Step 5 Manually	1781	-14	82.0
8	12:08:27	Started Step 6 Manually	1804	-14	121.4
9	12:28:23	Started Step 7 Manually	1849	-18	168.9
10	12:48:29	Started Step 8 Manually	1826	-14	224.3
11	13:08:22	Started Step 9 Automatically	1978	-18	288.3
12	13:28:30	Started Step 10 Manually	2014	-14	361.6
13	13:48:33	Started Step 11 Automatically	2055	-14	441.6
14	14:08:28	Started Step 12 Manually	2156	-14	528.9
15	14:28:21	Started Step 13 Manually	2252	-14	626.3
16	14:48:53	Started Step 14 Manually	2293	-14	735.7
17	15:09:30	Shutdown - ISIP	1717	-18	844.9
18	15:19:10	Pressure Test Lines	325	366	847.2
19	15:33:11	Deactivated Extend Stage	471	476	848.0
20	15:33:14	10 Min	471	476	848.0

Section 3: Designed Pump Schedule Ramp

Designed Pump Schedule Ramp

Stg #	Stage Name	Slurry Volume (bbl)	Pump Rate (bbl/min)	Pump Time (min)	Fluid Name	Fluid Volume (gal)	Prop Name	Prop Conc (PPA)	Prop Mass (lb)
1	Pre Pad	8.0	0.4	20.0	2% KCL Water	336		0.0	0
2	Step 1	8.0	0.4	20.0	2% KCL Water	336		0.0	0
3	Step 2	16.0	0.8	20.0	2% KCL Water	672		0.0	0
4	Step 3	24.0	1.2	20.0	2% KCL Water	1008		0.0	0
5	Step 4	32.0	1.6	20.0	2% KCL Water	1344		0.0	0
6	Step 5	40.0	2.0	20.0	2% KCL Water	1680		0.0	0
7	Step 6	48.0	2.4	20.0	2% KCL Water	2016		0.0	0
8	Step 7	56.0	2.8	20.0	2% KCL Water	2352		0.0	0
9	Step 8	64.0	3.2	20.0	2% KCL Water	2688		0.0	0
10	Step 9	72.0	3.6	20.0	2% KCL Water	3024		0.0	0
11	Step 10	80.0	4.0	20.0	2% KCL Water	3360		0.0	0
12	Step 11	88.0	4.4	20.0	2% KCL Water	3696		0.0	0
13	Step 12	96.0	4.8	20.0	2% KCL Water	4032		0.0	0
14	Step 13	104.0	5.2	20.0	2% KCL Water	4368		0.0	0
15	Step 14	112.0	5.6	20.0	2% KCL Water	4704		0.0	0

Designed Ramp Totals

Slurry (bbl)	Pump Time (min)	Clean Fluid (gal)	Proppant (lb)

Schlumberger

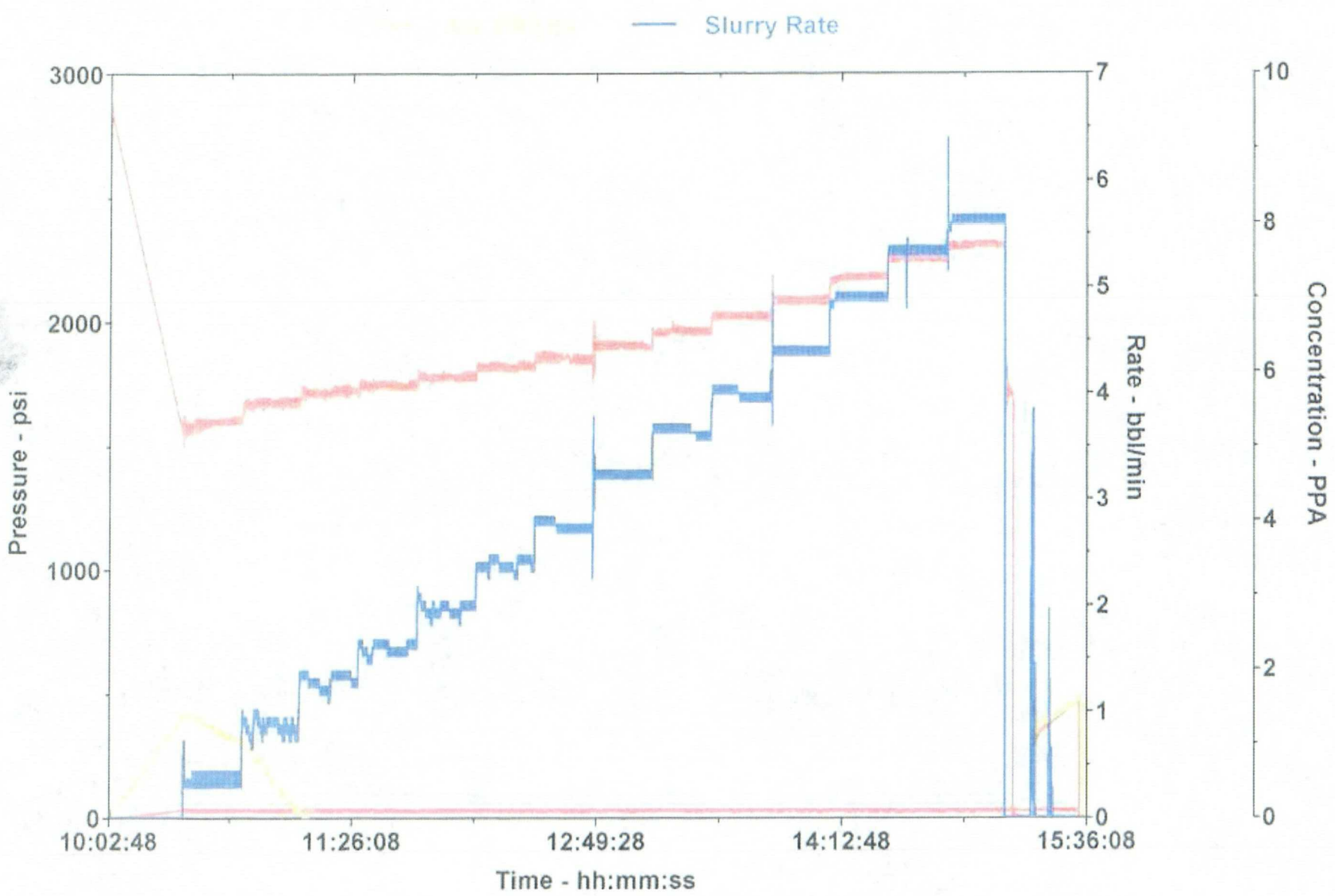
Client : Amoco
Well : Pritchard SWD 1
Formation : Injection test
District : Farmington
Country : United States
Loadcase : Acq Load Case

Designed Ramp Totals			
Slurry (bbl)	**Pump Time** (min)	**Clean Fluid** (gal)	**Proppant** (lb)
848.0	390.0	35616	0

FracCAT*

PRC Post Job Plot

Amoco
Pritchard SWD 1
12-13-2000



Schlumberger

PRITCHARD SWD # 1 STEP RATE TEST - 12/13/00 12/14/00
FIELD NOTES GMK

① WELL SI @ 12/12 @ 5:30 AM
② RUN BOMBS @ ± 9:00 AM ON 12/13, SET IN F-NIPPLE @ 8806'
③ STEP RATE TEST

STEP	START TIME	± RATE BPM	AVG TP PSIG	Σ WTR PUMPED BBL	STAGE VOL WTR BBL	ESTD BHP (PSIA)
0	10:28:26		1570 PSIG			
1	10:28:26	0.4	1611	7.3		5221
2	10:48:35	0.9	1685	24.4		5289
3	11:08:20	1.3	1720	50.2		5324
4	11:28:24	1.6	1750	82.0		5347
5	11:48:24	2.0	1780	121.4		5363
6	12:08:27	2.35	1818	168.9		5379
7	12:28:23	2.8	1849	224.3		5377
8	12:48:29	3.2	1890	288.3		5351
9	1:08:22	3.6	1964	361.6		5376
10	1:28:30	4.0	2029	441.6		5387
11	1:48:33	4.4	2092	528.9		5394
12	2:08:28	4.9	2185	626.3		5394
13	2:28:21	5.3	2257	735.7		5378
14	2:48:53	5.6	2312	844.9		5368
END	3:08:30					

KEY LEARNING: FRICTION ALGORITHM WAS PROBABLY INCORRECT BASED ON Q VS BHP PLOT

→ DISCONNECT LINE FROM TBG & HOOK UP TO CSG FOR MIT

IP ≈ 348 PSI AFTER 20 MIN P > 450# TEMP EFFECTS

KEY LEARNING: RUN ~~STEP RATE~~ MIT TEST PRIOR TO SET & FOLLOWING 24 HR SI OR RUN MIT DURING NORMAL OPERATIONS TO AVOID TEMP EFFECTS ON CP

Amoco Production Co.

Step Rate Test

Pritchard SWD

1

Dec 13, 00 to Dec 14, 00

Service Company Contact Info			
Report Writer	Glen Risher, 505-325-5006	Service Company	SCHLUMBERGER
Operator	Glen Risher, 505-325-5006	Job ID: Pritchard SWD-Step Rate	Test Date: Dec 13, 00 to Dec 14, 00

Gauge: Lee Memory Recorder Model 3000s (Quartz)
Manufacturer: Lee Tool, Division of Schlumberger Canada Limited

Step Rate Test

Amoco Production Co.
New Mexico, US

Dec 13, 00 to Dec 14, 00

Pritchard SWD | **1** | **Entrada**

Well

Client: Amoco Production Co.		State: New Mexico	Country: US
Well Name: Pritchard SWD		Deviated Well:	Well Status: Injection
Well No: 1		KB Elevation:	GF Elevation:
Field: Entrada	Pool:	Perf Datum:	

Test

Test Name: Step Rate Test			Atmospheric: 14.69 PSIA		
Test Start (mm/dd/yy): 12/13/00	07:49 AM	Test Finish: 12/14/00	10:04 AM	Casing ID:	Tubing ID:
On Bottom: 12/13/00	08:50 AM	Off Bottom: 12/14/00	09:33 AM	C. Pres. Before:	T. Pres. Before:
Shut In:		ETD: 12/13/00	07:49 AM	C. Pres. After:	T. Pres. After:
	Meas. Depth [ftKB]	TVD [ftKB]	Est. Pressure [PSIA]	Est. Gradient [PSI/ft] / Est. Temperature [DegF]	Grad. Threshold / Grad. Recorder
Well Datum					
Landed Depth	8306.00	8306.00			
Avg. MPP Depth	8491.00	8491.00			
Operator: Glen Risher, 505-325-5006				Service Company: SCHLUMBERGER	
Remarks					

Depth References

Depth Reference	Offset [ft]	Elevation [ftMSL]
Kelly Bushing (KB)		

Perforations

Perf Top MD, [ftKB]	Perf Bottom MD, [ftKB]	MPP TVD, [ftKB]	Pressure	Gradient
8382.00	8600.00	8491.00		

Top Recorder

Model: LMR-3000S	Serial: 9656Q-10E	Latest Calibration: 07/31/98	
Max. Rated Press: 9999.99 PSIA	Max. Rated Temp.: 301.93 DegF		

Bottom Recorder

Model: LMR-3000S	Serial: 9657Q-10E	Latest Calibration: 09/15/98	
Max. Rated Press: 10000.02 PSIA	Max. Rated Temp.: 301.91 DegF		

Tool Summary

Amoco Production Co.
New Mexico, US **Dec 13, 00 to Dec 14, 00**

Pritchard SWD **1** **Entrada**

Top Recorder

Tool	Serial	Latest Calibration	Battery Serial
LMR-3000S	9656Q-10E	07/31/98	
Logged Depth	**Depth Offset**	**Min. Battery**	
8300.00 ftKB	-6.00 ft	17.67 V	

Program: 40 Days @ 10 sec.

	Intervals				Expected Samples			Actual Samples				
Mode	Interval [d hh:mm:ss]	Rate [hh:mm:ss]	Delta [PSI]	Periodic [hh:mm:ss]	Regular Samples	Percent Storage	Energy [Ahr]	Regular Samples	Delta Samples	Percent Storage	Energy [Ahr]	Duration [d hh:mm:ss]
HB	40	10			345600	98.9%	7.2996	9449		2.7%	0.1996	1 2:14:50
Totals:	40				345600	98.9%	7.2996	9449		2.7%	0.1996	1 2:14:50

Bottom Recorder

Tool	Serial	Latest Calibration	Battery Serial
LMR-3000S	9657Q-10E	09/15/98	
Logged Depth	**Depth Offset**	**Min. Battery**	
8306.00 ftKB	0.00 ft	0.19 V	

Program: 40 Days @ 10 sec.

	Intervals				Expected Samples			Actual Samples				
Mode	Interval [d hh:mm:ss]	Rate [hh:mm:ss]	Delta [PSI]	Periodic [hh:mm:ss]	Regular Samples	Percent Storage	Energy [Ahr]	Regular Samples	Delta Samples	Percent Storage	Energy [Ahr]	Duration [d hh:mm:ss]
HB	40	10			345600	98.9%	7.2996	9448		2.7%	0.1996	1 2:14:40
Totals:	40				345600	98.9%	7.2996	9448		2.7%	0.1996	1 2:14:40

Recorded Data

Amoco Production Co.
New Mexico, US

Dec 13, 00 to Dec 14, 00

Pritchard SWD **1** **Entrada**

Data

9657Q-10E Real Time (mm/dd/yy 24 hr.)	Elapsed Time (DDD:HH:MM:SS)	9657Q-10E Pressure (PSI A)	9656Q-10E Pressure (PSI A)	9657Q-10E vs 9656Q-10E Press. Diff. (PSI)	9657Q-10E Temperature (DegF)	9656Q-10E Temperature (DegF)
12/13/00 07:49:00	0:00:00:00	9.015	13.429	-4.414	48.84	47.73
07:54:00	0:00:05:00	8.908	13.322	-4.414	45.52	44.77
07:59:00	0:00:10:00	8.588	13.046	-4.458	42.76	41.98
08:04:00	0:00:15:00	8.275	12.755	-4.481	40.37	39.66
08:09:00	0:00:20:00	7.919	12.449	-4.531	38.50	37.93
08:14:00	0:00:25:00	7.381	12.469	-5.088	37.10	36.48
08:19:00	0:00:30:00	9.234	12.761	-3.527	35.98	35.31
08:24:00	0:00:35:00	1839.984	1842.702	-2.718	45.25	44.06
08:29:00	0:00:40:00	2569.732	2574.298	-4.566	59.98	60.05
08:34:00	0:00:45:00	3167.460	3171.010	-3.550	79.60	80.52
08:39:00	0:00:50:00	3768.903	3773.979	-5.076	103.07	104.65
08:44:00	0:00:55:00	4439.121	4444.851	-5.730	126.34	128.22
08:49:00	0:01:00:00	5087.062	5090.589	-3.527	160.54	163.25
08:54:00	0:01:05:00	5126.908	5128.809	-1.901	182.98	185.31
08:59:00	0:01:10:00	5127.348	5127.832	-0.484	194.12	195.94
09:04:00	0:01:15:00	5127.422	5127.094	0.328	199.38	200.89
09:09:00	0:01:20:00	5127.402	5126.525	0.876	201.62	203.12
09:14:00	0:01:25:00	5127.992	5126.811	1.181	202.16	203.85
09:19:00	0:01:30:00	5128.133	5126.925	1.208	202.49	204.22
09:24:00	0:01:35:00	5128.162	5126.915	1.247	202.90	204.54
09:29:00	0:01:40:00	5128.192	5126.865	1.327	203.20	204.80
09:34:00	0:01:45:00	5128.197	5126.828	1.369	203.37	204.99
09:39:00	0:01:50:00	5128.174	5126.781	1.393	203.50	205.15
09:44:00	0:01:55:00	5128.152	5126.736	1.416	203.62	205.28
09:49:00	0:02:00:00	5128.113	5126.687	1.426	203.72	205.40
09:54:00	0:02:05:00	5128.078	5126.642	1.436	203.82	205.52
09:59:00	0:02:10:00	5128.041	5126.602	1.439	203.91	205.63
10:04:00	0:02:15:00	5127.981	5126.604	1.377	204.00	205.73
10:09:00	0:02:20:00	5127.945	5126.439	1.506	204.16	205.78
10:14:00	0:02:25:00	5127.649	5126.006	1.642	203.89	205.53
10:19:00	0:02:30:00	5127.731	5126.194	1.538	203.49	205.12
10:24:00	0:02:35:00	5168.559	5167.783	0.776	203.35	204.82
10:29:00	0:02:40:00	5188.995	5185.359	3.636	204.33	205.37
10:34:00	0:02:45:00	5199.539	5197.318	2.221	204.44	205.17
10:39:00	0:02:50:00	5205.095	5202.004	3.090	204.12	204.69
10:44:00	0:02:55:00	5246.291	5243.926	2.365	204.10	204.64
10:49:00	0:03:00:00	5257.036	5257.566	-0.530	204.63	205.19
10:54:00	0:03:05:00	5263.921	5261.680	2.240	204.63	205.12
10:59:00	0:03:10:00	5264.494	5266.025	-1.531	203.06	203.46
11:04:00	0:03:15:00	5281.488	5284.040	-2.551	201.37	201.73
11:09:00	0:03:20:00	5291.203	5287.477	3.726	198.66	198.94
11:14:00	0:03:25:00	5288.566	5295.415	-6.849	195.32	195.54
11:19:00	0:03:30:00	5299.033	5294.363	4.670	192.16	192.37
11:24:00	0:03:35:00	5301.257	5300.093	1.164	189.22	189.43
11:29:00	0:03:40:00	5304.602	5302.672	1.930	186.10	186.28
11:34:00	0:03:45:00	5305.320	5304.026	1.294	182.91	183.09
11:39:00	0:03:50:00	5302.825	5301.881	0.944	180.13	180.32
11:44:00	0:03:55:00	5312.462	5311.358	1.104	177.67	177.86
11:49:00	0:04:00:00	5316.832	5312.710	4.121	174.34	174.48

Data

9657Q-10E		9657Q-10E	9656Q-10E	9657Q-10E vs 9656Q-10E	9657Q-10E	9656Q-10E
Real Time (mm/dd/yy 24 hr.)	Elapsed Time (DDD:HH:MM:SS)	Pressure (PSI A)	Pressure (PSI A)	Press. Diff. (PSI)	Temperature (DegF)	Temperature (DegF)
11:54:00	0:04:05:00	5317.070	5314.384	2.686	171.19	171.33
11:59:00	0:04:10:00	5322.252	5315.940	6.312	168.38	168.52
12:04:00	0:04:15:00	5325.351	5327.542	-2.191	165.74	165.88
12:09:00	0:04:20:00	5328.233	5332.937	-4.704	162.33	162.43
12:14:00	0:04:25:00	5326.075	5327.819	-1.744	158.85	158.92
12:19:00	0:04:30:00	5339.351	5337.264	2.087	155.80	155.87
12:24:00	0:04:35:00	5336.472	5335.692	0.780	152.81	152.88
12:29:00	0:04:40:00	5336.548	5336.209	0.339	149.30	149.33
12:34:00	0:04:45:00	5335.858	5340.919	-5.061	145.86	145.87
12:39:00	0:04:50:00	5341.543	5335.237	6.306	142.75	142.76
12:44:00	0:04:55:00	5347.524	5346.665	0.859	139.87	139.89
12:49:00	0:05:00:00	5349.770	5349.998	-0.227	136.32	136.30
12:54:00	0:05:05:00	5351.683	5351.069	0.614	132.83	132.79
12:59:00	0:05:10:00	5353.119	5354.996	-1.877	129.71	129.67
13:04:00	0:05:15:00	5359.920	5362.177	-2.257	126.88	126.85
13:09:00	0:05:20:00	5363.772	5360.988	2.784	123.54	123.48
13:14:00	0:05:25:00	5364.571	5365.731	-1.160	120.44	120.37
13:19:00	0:05:30:00	5364.705	5366.441	-1.736	117.79	117.73
13:24:00	0:05:35:00	5369.410	5372.504	-3.093	115.49	115.45
13:29:00	0:05:40:00	5375.194	5379.785	-4.591	112.86	112.80
13:34:00	0:05:45:00	5380.809	5383.005	-2.195	110.38	110.32
13:39:00	0:05:50:00	5378.198	5382.380	-4.182	108.32	108.27
13:44:00	0:05:55:00	5386.042	5392.891	-6.850	106.58	106.55
13:49:00	0:06:00:00	5383.656	5386.813	-3.157	104.58	104.53
13:54:00	0:06:05:00	5384.645	5388.099	-3.454	102.69	102.64
13:59:00	0:06:10:00	5387.060	5386.969	0.091	101.09	101.05
14:04:00	0:06:15:00	5392.795	5396.722	-3.927	99.71	99.68
14:09:00	0:06:20:00	5397.103	5400.948	-3.845	97.97	97.92
14:14:00	0:06:25:00	5397.876	5402.337	-4.460	96.32	96.26
14:19:00	0:06:30:00	5398.072	5402.425	-4.353	94.93	94.88
14:24:00	0:06:35:00	5402.834	5408.112	-5.278	93.76	93.72
14:29:00	0:06:40:00	5409.588	5413.988	-4.400	92.44	92.40
14:34:00	0:06:45:00	5409.796	5414.636	-4.840	91.30	91.27
14:39:00	0:06:50:00	5412.463	5415.502	-3.039	90.36	90.34
14:44:00	0:06:55:00	5415.381	5421.962	-6.581	89.58	89.57
14:49:00	0:07:00:00	5417.033	5422.232	-5.199	88.73	88.72
14:54:00	0:07:05:00	5419.707	5422.786	-3.080	87.98	87.97
14:59:00	0:07:10:00	5417.776	5423.491	-5.715	87.33	87.32
15:04:00	0:07:15:00	5348.211	5347.727	0.484	86.94	86.97
15:09:00	0:07:20:00	5309.175	5308.921	0.254	90.92	91.51
15:14:00	0:07:25:00	5289.262	5289.011	0.251	98.33	97.86
15:19:00	0:07:30:00	5275.747	5275.309	0.438	105.64	104.42
15:24:00	0:07:35:00	5265.693	5265.192	0.501	112.29	110.92
15:29:00	0:07:40:00	5258.112	5257.450	0.662	118.42	116.86
15:34:00	0:07:45:00	5251.687	5250.865	0.822	123.70	121.93
15:39:00	0:07:50:00	5246.382	5245.424	0.958	128.41	126.43
15:44:00	0:07:55:00	5241.898	5240.841	1.057	132.51	130.36
15:49:00	0:08:00:00	5238.027	5236.862	1.165	136.15	133.83
15:54:00	0:08:05:00	5234.608	5233.344	1.263	139.36	136.86
15:59:00	0:08:10:00	5231.538	5230.230	1.309	142.23	139.55
16:04:00	0:08:15:00	5228.774	5227.409	1.364	144.82	142.01
16:09:00	0:08:20:00	5226.242	5224.857	1.385	147.20	144.35
16:14:00	0:08:25:00	5223.891	5222.498	1.393	149.38	146.63
16:19:00	0:08:30:00	5221.723	5220.283	1.439	151.40	148.69
16:24:00	0:08:35:00	5219.682	5218.216	1.466	153.30	150.62
16:29:00	0:08:40:00	5217.775	5216.308	1.467	155.10	152.46
16:34:00	0:08:45:00	5215.985	5214.514	1.472	156.80	154.21
16:39:00	0:08:50:00	5214.308	5212.803	1.504	158.40	155.87

Data

9657Q-10E		9657Q-10E	9656Q-10E	9657Q-10E vs 9656Q-10E	9657Q-10E	9656Q-10E
Real Time (mm/dd/yy 24 hr.)	Elapsed Time (DDD:HH:MM:SS)	Pressure (PSI A)	Pressure (PSI A)	Press. Diff. (PSI)	Temperature (DegF)	Temperature (DegF)
16:44:00	0:08:55:00	5212.720	5211.190	1.530	159.91	157.44
16:49:00	0:09:00:00	5211.206	5209.674	1.533	161.35	158.93
16:54:00	0:09:05:00	5209.788	5208.253	1.535	162.72	160.38
16:59:00	0:09:10:00	5208.441	5206.869	1.572	164.01	161.71
17:04:00	0:09:15:00	5207.156	5205.606	1.550	165.25	163.01
17:09:00	0:09:20:00	5205.953	5204.366	1.587	166.44	164.28
17:14:00	0:09:25:00	5204.797	5203.202	1.596	167.57	165.44
17:19:00	0:09:30:00	5203.707	5202.103	1.604	168.65	166.56
17:24:00	0:09:35:00	5202.665	5201.043	1.621	169.67	167.62
17:29:00	0:09:40:00	5201.661	5200.062	1.599	170.65	168.65
17:34:00	0:09:45:00	5200.721	5199.123	1.598	171.59	169.72
17:39:00	0:09:50:00	5199.814	5198.214	1.600	172.49	170.66
17:44:00	0:09:55:00	5198.941	5197.337	1.604	173.36	171.60
17:49:00	0:10:00:00	5198.102	5196.506	1.596	174.19	172.49
17:54:00	0:10:05:00	5197.298	5195.662	1.635	174.99	173.27
17:59:00	0:10:10:00	5196.530	5194.896	1.634	175.76	174.08
18:04:00	0:10:15:00	5195.785	5194.167	1.618	176.50	174.90
18:09:00	0:10:20:00	5195.075	5193.449	1.625	177.21	175.68
18:14:00	0:10:25:00	5194.370	5192.740	1.629	177.89	176.39
18:19:00	0:10:30:00	5193.699	5192.052	1.646	178.54	177.09
18:24:00	0:10:35:00	5193.044	5191.408	1.637	179.18	177.83
18:29:00	0:10:40:00	5192.406	5190.759	1.647	179.78	178.48
18:34:00	0:10:45:00	5191.792	5190.152	1.640	180.38	179.08
18:39:00	0:10:50:00	5191.190	5189.569	1.621	180.95	179.68
18:44:00	0:10:55:00	5190.608	5188.988	1.620	181.50	180.32
18:49:00	0:11:00:00	5190.048	5188.412	1.636	182.03	180.86
18:54:00	0:11:05:00	5189.505	5187.868	1.637	182.55	181.39
18:59:00	0:11:10:00	5188.971	5187.340	1.631	183.04	181.97
19:04:00	0:11:15:00	5188.445	5186.816	1.629	183.51	182.48
19:09:00	0:11:20:00	5187.941	5186.308	1.633	183.98	182.97
19:14:00	0:11:25:00	5187.441	5185.814	1.627	184.43	183.46
19:19:00	0:11:30:00	5186.959	5185.328	1.631	184.86	183.94
19:24:00	0:11:35:00	5186.495	5184.854	1.641	185.29	184.41
19:29:00	0:11:40:00	5186.020	5184.407	1.612	185.69	184.89
19:34:00	0:11:45:00	5185.581	5183.944	1.637	186.08	185.32
19:39:00	0:11:50:00	5185.131	5183.513	1.619	186.46	185.72
19:44:00	0:11:55:00	5184.696	5183.077	1.619	186.83	186.11
19:49:00	0:12:00:00	5184.273	5182.644	1.629	187.20	186.52
19:54:00	0:12:05:00	5183.856	5182.231	1.625	187.56	186.90
19:59:00	0:12:10:00	5183.444	5181.818	1.626	187.90	187.29
20:04:00	0:12:15:00	5183.045	5181.397	1.648	188.23	187.62
20:09:00	0:12:20:00	5182.643	5180.991	1.651	188.55	187.98
20:14:00	0:12:25:00	5182.259	5180.629	1.630	188.66	188.32
20:19:00	0:12:30:00	5181.879	5180.246	1.633	189.17	188.64
20:24:00	0:12:35:00	5181.503	5179.874	1.629	189.46	188.97
20:29:00	0:12:40:00	5181.136	5179.499	1.637	189.75	189.26
20:34:00	0:12:45:00	5180.781	5179.142	1.639	190.04	189.60
20:39:00	0:12:50:00	5180.418	5178.786	1.631	190.31	189.89
20:44:00	0:12:55:00	5180.074	5178.422	1.651	190.57	190.13
20:49:00	0:13:00:00	5179.729	5178.085	1.644	190.83	190.45
20:54:00	0:13:05:00	5179.390	5177.751	1.639	191.08	190.74
20:59:00	0:13:10:00	5179.057	5177.414	1.644	191.32	191.01
21:04:00	0:13:15:00	5178.725	5177.081	1.644	191.56	191.25
21:09:00	0:13:20:00	5178.399	5176.773	1.626	191.79	191.52
21:14:00	0:13:25:00	5178.076	5176.439	1.637	192.02	191.77
21:19:00	0:13:30:00	5177.768	5176.124	1.644	192.24	191.99
21:24:00	0:13:35:00	5177.452	5175.816	1.636	192.45	192.22
21:29:00	0:13:40:00	5177.143	5175.499	1.644	192.66	192.47

Data

9657Q-10E		9657Q-10E	9656Q-10E	9657Q-10E vs 9656Q-10E	9657Q-10E	9656Q-10E
Real Time (mm/dd/yy 24 hr.)	Elapsed Time (DDD:HH:MM:SS)	Pressure (PSI A)	Pressure (PSI A)	Press. Diff. (PSI)	Temperature (DegF)	Temperature (DegF)
21:34:00	0:13:45:00	5176.841	5175.193	1.649	192.87	192.66
21:39:00	0:13:50:00	5176.540	5174.921	1.619	193.07	192.92
21:44:00	0:13:55:00	5176.246	5174.627	1.619	193.26	193.15
21:49:00	0:14:00:00	5175.960	5174.338	1.622	193.45	193.34
21:54:00	0:14:05:00	5175.676	5174.061	1.615	193.63	193.55
21:59:00	0:14:10:00	5175.395	5173.789	1.607	193.81	193.75
22:04:00	0:14:15:00	5175.111	5173.525	1.586	193.99	193.93
22:09:00	0:14:20:00	5174.836	5173.267	1.569	194.16	194.09
22:14:00	0:14:25:00	5174.568	5173.022	1.546	194.33	194.30
22:19:00	0:14:30:00	5174.287	5172.747	1.541	194.50	194.45
22:24:00	0:14:35:00	5174.026	5172.463	1.563	194.66	194.63
22:29:00	0:14:40:00	5173.757	5172.203	1.554	194.82	194.83
22:34:00	0:14:45:00	5173.502	5171.943	1.559	194.97	195.00
22:39:00	0:14:50:00	5173.255	5171.666	1.589	195.12	195.14
22:44:00	0:14:55:00	5172.996	5171.415	1.581	195.27	195.31
22:49:00	0:15:00:00	5172.745	5171.164	1.581	195.42	195.46
22:54:00	0:15:05:00	5172.498	5170.905	1.593	195.56	195.60
22:59:00	0:15:10:00	5172.254	5170.673	1.581	195.70	195.76
23:04:00	0:15:15:00	5172.014	5170.427	1.587	195.83	195.91
23:09:00	0:15:20:00	5171.766	5170.189	1.577	195.96	196.08
23:14:00	0:15:25:00	5171.538	5169.940	1.598	196.09	196.21
23:19:00	0:15:30:00	5171.298	5169.722	1.575	196.22	196.37
23:24:00	0:15:35:00	5171.072	5169.485	1.587	196.34	196.50
23:29:00	0:15:40:00	5170.839	5169.262	1.577	196.46	196.63
23:34:00	0:15:45:00	5170.611	5169.035	1.576	196.57	196.76
23:39:00	0:15:50:00	5170.387	5168.805	1.582	196.69	196.89
23:44:00	0:15:55:00	5170.161	5168.587	1.574	196.80	197.03
23:49:00	0:16:00:00	5169.941	5168.352	1.588	196.92	197.14
23:54:00	0:16:05:00	5169.718	5168.123	1.595	197.03	197.26
23:59:00	0:16:10:00	5169.511	5167.918	1.593	197.13	197.39
12/14/00 00:04:00	0:16:15:00	5169.292	5167.714	1.578	197.24	197.51
00:09:00	0:16:20:00	5169.088	5167.504	1.585	197.34	197.64
00:14:00	0:16:25:00	5168.878	5167.287	1.592	197.45	197.74
00:19:00	0:16:30:00	5168.672	5167.088	1.584	197.54	197.83
00:24:00	0:16:35:00	5168.475	5166.882	1.593	197.64	197.95
00:29:00	0:16:40:00	5168.273	5166.674	1.599	197.74	198.06
00:34:00	0:16:45:00	5168.066	5166.480	1.585	197.84	198.16
00:39:00	0:16:50:00	5167.867	5166.274	1.592	197.93	198.26
00:44:00	0:16:55:00	5167.672	5166.078	1.595	198.02	198.36
00:49:00	0:17:00:00	5167.482	5165.877	1.604	198.11	198.46
00:54:00	0:17:05:00	5167.286	5165.699	1.588	198.20	198.56
00:59:00	0:17:10:00	5167.094	5165.505	1.589	198.29	198.66
01:04:00	0:17:15:00	5166.907	5165.312	1.595	198.37	198.75
01:09:00	0:17:20:00	5166.714	5165.125	1.589	198.45	198.84
01:14:00	0:17:25:00	5166.536	5164.942	1.594	198.53	198.91
01:19:00	0:17:30:00	5166.347	5164.760	1.587	198.61	199.02
01:24:00	0:17:35:00	5166.162	5164.573	1.589	198.69	199.09
01:29:00	0:17:40:00	5165.982	5164.403	1.579	198.77	199.18
01:34:00	0:17:45:00	5165.807	5164.214	1.593	198.84	199.26
01:39:00	0:17:50:00	5165.626	5164.046	1.580	198.92	199.34
01:44:00	0:17:55:00	5165.454	5163.864	1.590	198.99	199.43
01:49:00	0:18:00:00	5165.288	5163.702	1.586	199.06	199.52
01:54:00	0:18:05:00	5165.111	5163.531	1.579	199.13	199.61
01:59:00	0:18:10:00	5164.944	5163.350	1.594	199.20	199.67
02:04:00	0:18:15:00	5164.776	5163.186	1.590	199.27	199.75
02:09:00	0:18:20:00	5164.602	5163.027	1.575	199.34	199.82
02:14:00	0:18:25:00	5164.444	5162.862	1.582	199.40	199.89
02:19:00	0:18:30:00	5164.285	5162.705	1.580	199.47	199.98

Data

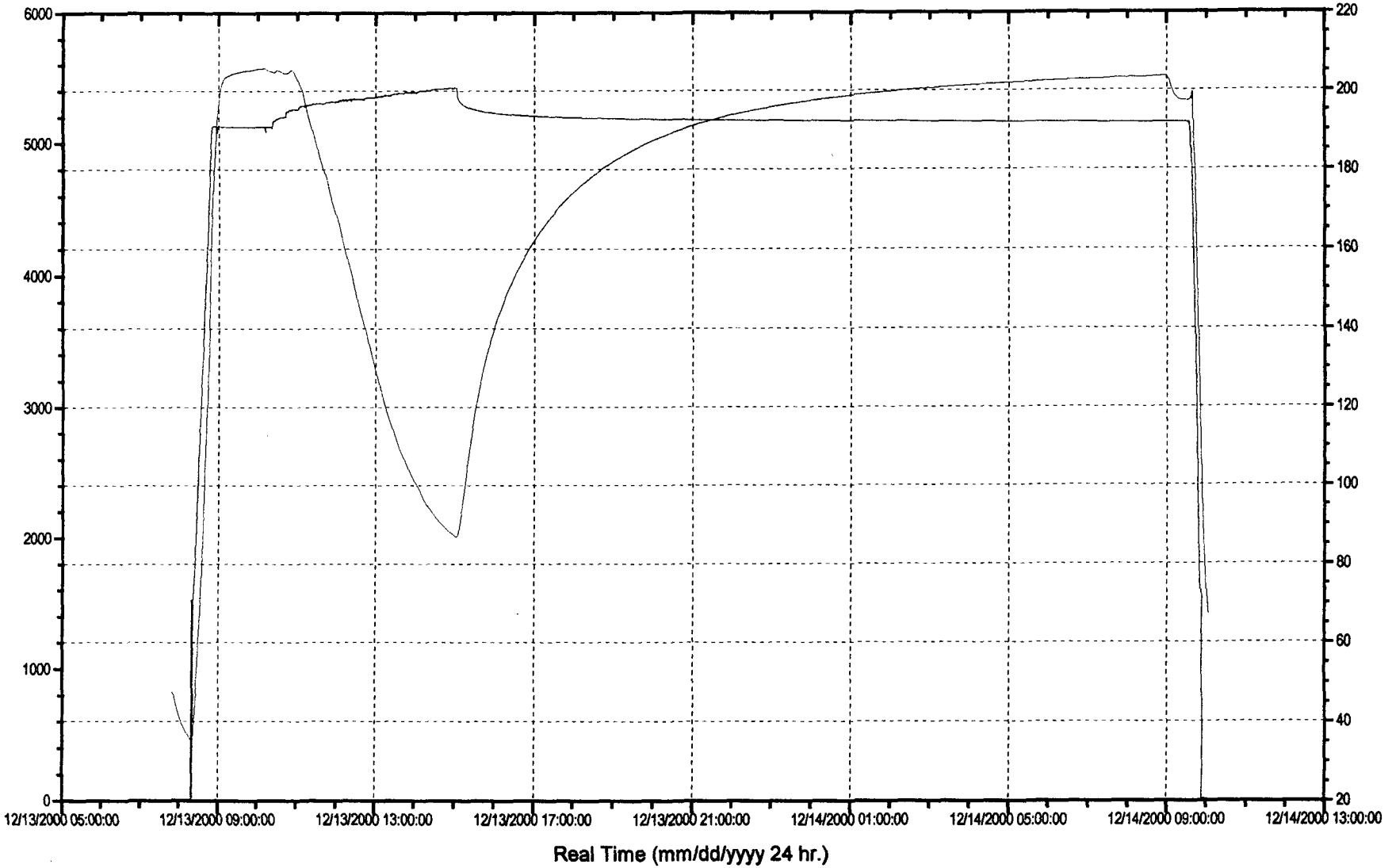
9657Q-10E Real Time (mm/dd/yy 24 hr.)	Elapsed Time (DDD:HH:MM:SS)	9657Q-10E Pressure (PSI A)	9656Q-10E Pressure (PSI A)	9657Q-10E vs 9656Q-10E Press. Diff. (PSI)	9657Q-10E Temperature (DegF)	9656Q-10E Temperature (DegF)
02:24:00	0:18:35:00	5164.120	5162.534	1.586	199.53	200.05
02:29:00	0:18:40:00	5163.966	5162.375	1.591	199.59	200.12
02:34:00	0:18:45:00	5163.806	5162.220	1.586	199.66	200.19
02:39:00	0:18:50:00	5163.641	5162.062	1.579	199.72	200.26
02:44:00	0:18:55:00	5163.491	5161.900	1.591	199.78	200.33
02:49:00	0:19:00:00	5163.330	5161.753	1.577	199.84	200.41
02:54:00	0:19:05:00	5163.174	5161.602	1.572	199.90	200.47
02:59:00	0:19:10:00	5163.023	5161.447	1.576	199.96	200.53
03:04:00	0:19:15:00	5162.871	5161.286	1.585	200.01	200.57
03:09:00	0:19:20:00	5162.724	5161.138	1.586	200.07	200.64
03:14:00	0:19:25:00	5162.583	5160.996	1.587	200.12	200.72
03:19:00	0:19:30:00	5162.430	5160.848	1.582	200.17	200.77
03:24:00	0:19:35:00	5162.282	5160.690	1.592	200.23	200.82
03:29:00	0:19:40:00	5162.145	5160.557	1.588	200.28	200.87
03:34:00	0:19:45:00	5161.996	5160.416	1.580	200.33	200.94
03:39:00	0:19:50:00	5161.853	5160.269	1.583	200.38	201.00
03:44:00	0:19:55:00	5161.714	5160.116	1.599	200.43	201.04
03:49:00	0:20:00:00	5161.565	5159.991	1.574	200.48	201.10
03:54:00	0:20:05:00	5161.431	5159.848	1.583	200.52	201.17
03:59:00	0:20:10:00	5161.291	5159.702	1.589	200.57	201.22
04:04:00	0:20:15:00	5161.156	5159.577	1.579	200.61	201.29
04:09:00	0:20:20:00	5161.022	5159.442	1.581	200.66	201.33
04:14:00	0:20:25:00	5160.882	5159.302	1.579	200.70	201.37
04:19:00	0:20:30:00	5160.741	5159.174	1.568	200.75	201.42
04:24:00	0:20:35:00	5160.617	5159.039	1.578	200.79	201.48
04:29:00	0:20:40:00	5160.482	5158.910	1.572	200.84	201.53
04:34:00	0:20:45:00	5160.357	5158.767	1.590	200.88	201.57
04:39:00	0:20:50:00	5160.221	5158.642	1.579	200.92	201.62
04:44:00	0:20:55:00	5160.096	5158.516	1.580	200.97	201.67
04:49:00	0:21:00:00	5159.966	5158.381	1.584	201.01	201.72
04:54:00	0:21:05:00	5159.834	5158.251	1.584	201.05	201.77
04:59:00	0:21:10:00	5159.709	5158.123	1.586	201.09	201.82
05:04:00	0:21:15:00	5159.588	5157.999	1.589	201.13	201.87
05:09:00	0:21:20:00	5159.462	5157.874	1.589	201.17	201.92
05:14:00	0:21:25:00	5159.336	5157.756	1.580	201.21	201.96
05:19:00	0:21:30:00	5159.209	5157.630	1.579	201.25	202.00
05:24:00	0:21:35:00	5159.087	5157.505	1.582	201.28	202.04
05:29:00	0:21:40:00	5158.966	5157.374	1.592	201.32	202.07
05:34:00	0:21:45:00	5158.844	5157.258	1.587	201.36	202.12
05:39:00	0:21:50:00	5158.717	5157.137	1.580	201.40	202.17
05:44:00	0:21:55:00	5158.594	5157.013	1.581	201.43	202.21
05:49:00	0:22:00:00	5158.483	5156.895	1.588	201.47	202.24
05:54:00	0:22:05:00	5158.365	5156.777	1.588	201.50	202.28
05:59:00	0:22:10:00	5158.242	5156.660	1.582	201.53	202.32
06:04:00	0:22:15:00	5158.125	5156.544	1.581	201.57	202.36
06:09:00	0:22:20:00	5158.012	5156.424	1.589	201.60	202.40
06:14:00	0:22:25:00	5157.889	5156.305	1.584	201.63	202.43
06:19:00	0:22:30:00	5157.771	5156.190	1.580	201.67	202.48
06:24:00	0:22:35:00	5157.658	5156.075	1.583	201.70	202.52
06:29:00	0:22:40:00	5157.539	5155.959	1.581	201.73	202.55
06:34:00	0:22:45:00	5157.426	5155.837	1.588	201.76	202.57
06:39:00	0:22:50:00	5157.312	5155.726	1.587	201.79	202.62
06:44:00	0:22:55:00	5157.199	5155.611	1.588	201.82	202.65
06:49:00	0:23:00:00	5157.086	5155.503	1.583	201.85	202.69
06:54:00	0:23:05:00	5156.967	5155.382	1.586	201.88	202.72
06:59:00	0:23:10:00	5156.859	5155.270	1.589	201.91	202.75
07:04:00	0:23:15:00	5156.740	5155.151	1.589	201.94	202.79
07:09:00	0:23:20:00	5156.631	5155.040	1.592	201.97	202.83

Data

9657Q-10E Real Time (mm/dd/yy 24 hr.)	Elapsed Time (DDD:HH:MM:SS)	9657Q-10E Pressure (PSI A)	9656Q-10E Pressure (PSI A)	9657Q-10E vs 9656Q-10E Press. Diff. (PSI)	9657Q-10E Temperature (DegF)	9656Q-10E Temperature (DegF)
07:14:00	0:23:25:00	5156.518	5154.926	1.593	202.00	202.85
07:19:00	0:23:30:00	5156.404	5154.820	1.584	202.03	202.88
07:24:00	0:23:35:00	5156.296	5154.705	1.590	202.06	202.92
07:29:00	0:23:40:00	5156.186	5154.592	1.594	202.09	202.95
07:34:00	0:23:45:00	5156.072	5154.484	1.589	202.11	202.99
07:39:00	0:23:50:00	5155.963	5154.373	1.589	202.14	203.03
07:44:00	0:23:55:00	5155.853	5154.262	1.591	202.17	203.06
07:49:00	1:00:00:00	5155.744	5154.147	1.597	202.19	203.10
07:54:00	1:00:05:00	5155.635	5154.044	1.591	202.22	203.12
07:59:00	1:00:10:00	5155.525	5153.926	1.599	202.25	203.14
08:04:00	1:00:15:00	5155.416	5153.820	1.596	202.27	203.17
08:09:00	1:00:20:00	5155.300	5153.714	1.586	202.30	203.20
08:14:00	1:00:25:00	5155.190	5153.603	1.588	202.32	203.24
08:19:00	1:00:30:00	5155.091	5153.496	1.594	202.34	203.27
08:24:00	1:00:35:00	5154.981	5153.384	1.597	202.37	203.30
08:29:00	1:00:40:00	5154.870	5153.276	1.594	202.39	203.32
08:34:00	1:00:45:00	5154.754	5153.166	1.589	202.41	203.34
08:39:00	1:00:50:00	5154.649	5153.064	1.586	202.43	203.37
08:44:00	1:00:55:00	5154.550	5152.948	1.602	202.46	203.40
08:49:00	1:01:00:00	5154.440	5152.848	1.592	202.48	203.43
08:54:00	1:01:05:00	5154.334	5152.737	1.597	202.50	203.45
08:59:00	1:01:10:00	5154.224	5152.640	1.584	202.53	203.48
09:04:00	1:01:15:00	5154.220	5152.137	2.084	200.32	201.97
09:09:00	1:01:20:00	5154.028	5152.112	1.915	197.92	199.59
09:14:00	1:01:25:00	5153.790	5152.011	1.779	196.56	198.16
09:19:00	1:01:30:00	5153.633	5151.948	1.685	195.87	197.49
09:24:00	1:01:35:00	5153.488	5151.861	1.627	195.57	197.31
09:29:00	1:01:40:00	5153.383	5151.777	1.606	195.41	197.27
09:34:00	1:01:45:00	5153.152	5142.300	10.852	195.50	197.33
09:39:00	1:01:50:00	4522.512	4550.222	-27.710	196.27	198.05
09:44:00	1:01:55:00	3303.115	3337.707	-34.592	169.27	169.58
09:49:00	1:02:00:00	1806.127	1825.768	-19.641	131.20	130.43
09:54:00	1:02:05:00	19.113	16.257	2.856	98.42	96.66
09:59:00	1:02:10:00	14.960	14.896	0.064	78.75	76.25

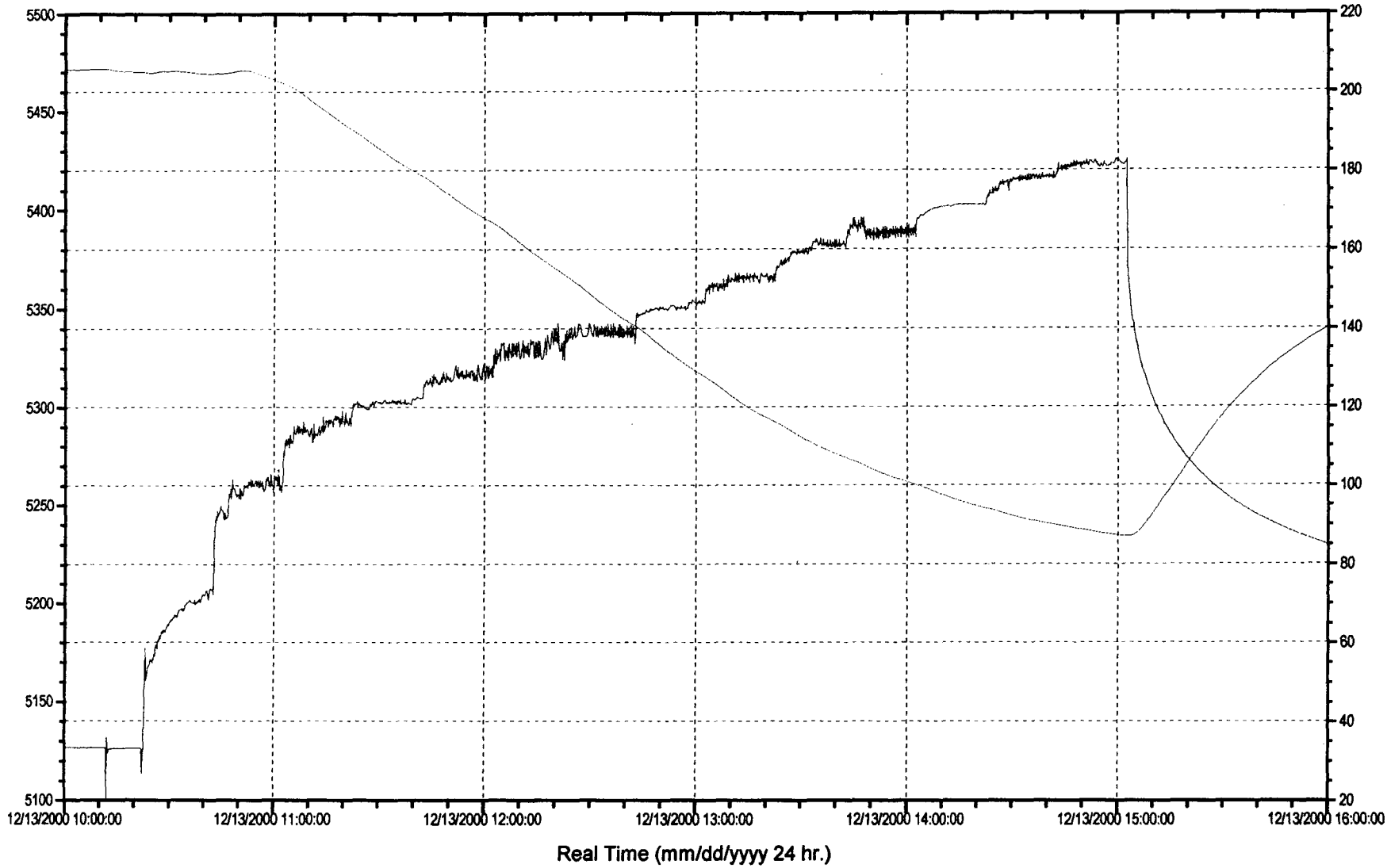
Pressure & Temperature vs. Real Time

Company:	SCHLUMBERGER	*Field:*	Entrada
Client:	Amoco Production Co.	*Well Name:*	Pritchard SWD
Remarks:		*Well Number:*	1



Pressure & Temperature vs. Real Time

Company:	SCHLUMBERGER	*Field:*	Entrada
Client:	Amoco Production Co.	*Well Name:*	Pritchard SWD
Remarks:		*Well Number:*	1

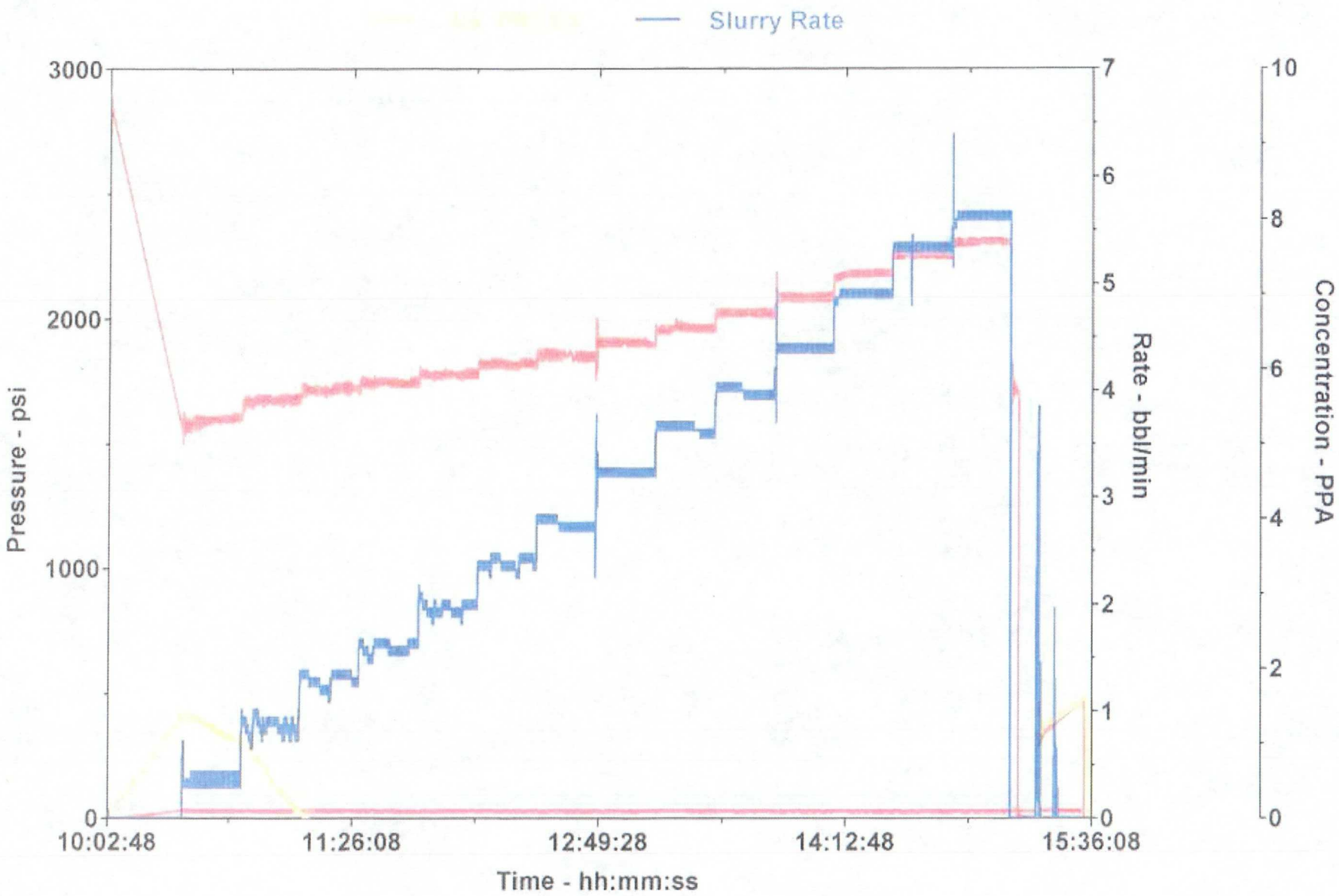


Attachment #8

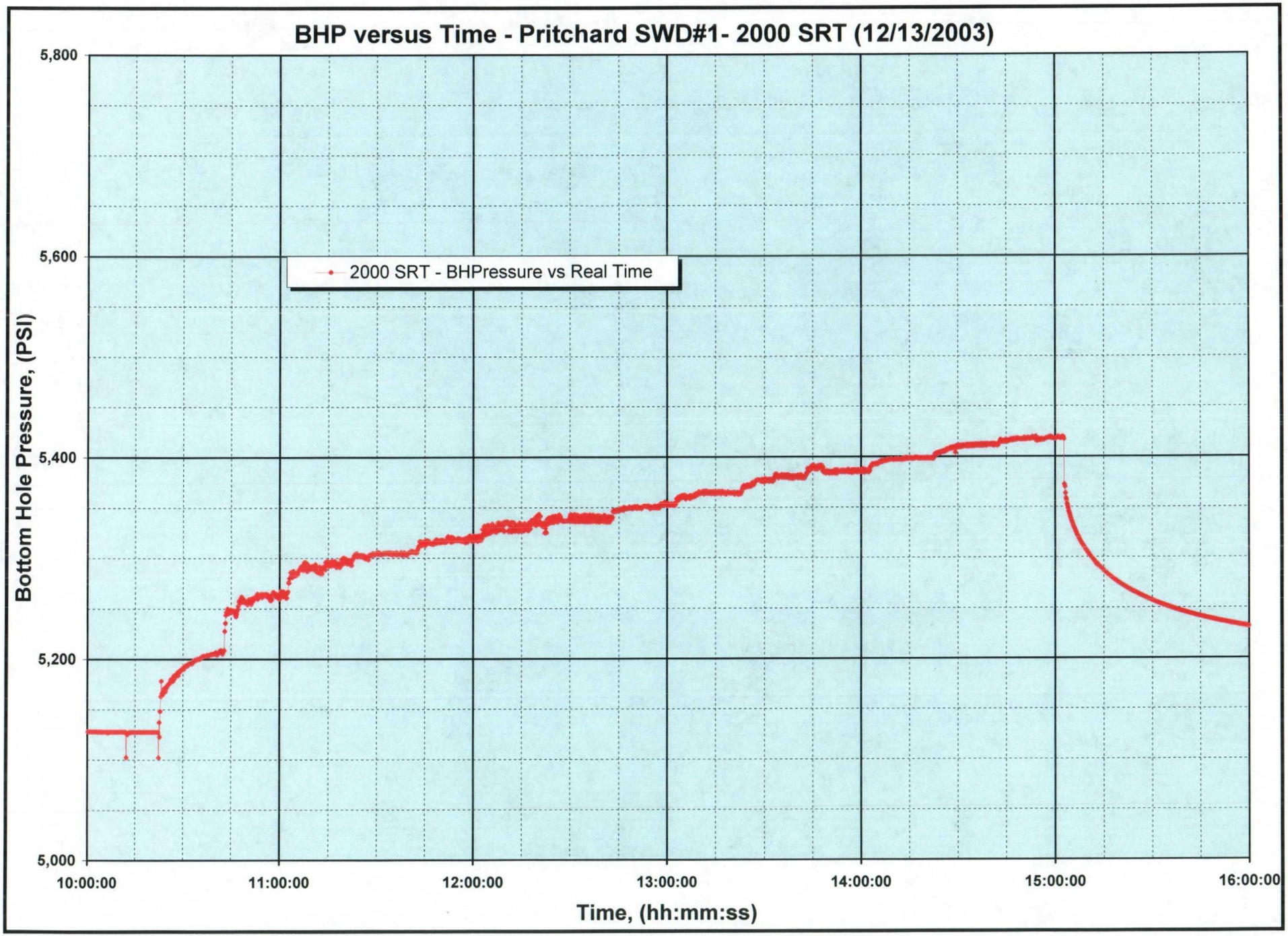
FracCAT*

PRC Post Job Plot

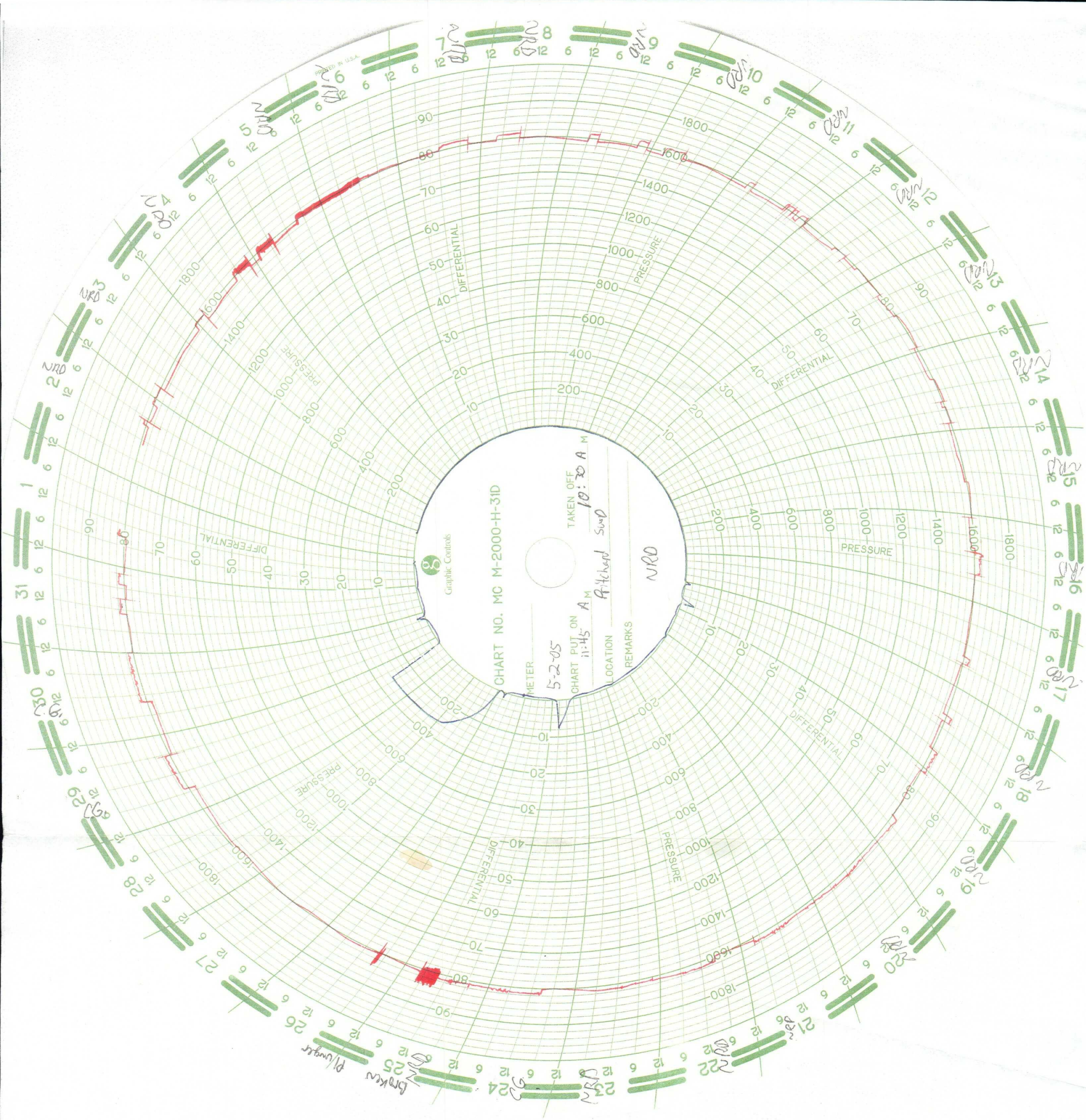
Amoco
Pritchard SWD 1
12-13-2000



Schlumberger


BHP versus Time - Pritchard SWD#1- 2000 SRT (12/13/2003)
2000 SRT - BHPressure vs Real Time
Bottom Hole Pressure, (PSI)
5,800
5,600
5,400
5,200
5,000
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
Time, (hh:mm:ss)

Attachment #9


Graphic Controls
CHART NO. MC M-2000-H-31D
METER
5-2-05
CHART PUT ON 11:45 A M
TAKEN OFF 10:30 A M
LOCATION
REMARKS
NRD
PRESSURE
DIFFERENTIAL
Broken Plunger