



COMPANY : J.W. MULLOY & ASSOC.
LEASE : DAN FIELD
WELL NO. : # 1
FIELD : WILDCAT
COUNTY/STATE : LEA / NEW MEXICO

TEST DATE : 03-08-04
D.S.T. NO. : 1
TEST TKT. NO. : 22816
INVOICE NO. : 20747
ORDER NO. :

FORMATION : PENN. "B"
INTERVAL (ft) : 10690 TO 10776
TOTAL DEPTH (ft) : 10776
ELEVATION (ft) :
HOLE SIZE (in) : 8.750
DRILL PIPE ID (in) : 3.82
DRILL COLLAR ID(in) : 2.25
DRILL COLLAR feet : 801
ANCHOR LENGTH (ft): 86
TOOL LENGTH (ft) : 68
TOOL O.D. (in) : 5
PACKER SIZE (in) : 7.50

RECORDER DATA
AK-1KUSTER / ZIPROBE

TOP RECORDER: IN
RECORDER NO. : 9634
CAPACITY (psi): 10000
DEPTH (ft) : 10706
CLOCK NO. : 9634
DURATION (hrs): 99

BOTTOM RECORDER: OUT
RECORDER NO. : 16709
CAPACITY (psi): 7350
DEPTH (ft) : 10772
CLOCK NO. : 17180
DURATION (hrs): 24

MUD PROPERTIES

MUD TYPE : FRESH/CUT BRINE
MUD WT. (#/gal) : 9.00

WATER LOSS (cc) : 15.0
FILTER CAKE (in) :
VISCOSITY (sec) : 28

CHLORIDE PPM : 60000
RESISTIVITY(ohm-m): .160

EQUIPMENT DATA

CONVENTIONAL : YES
STRADDLE : NO
SELECTIVE ZONE : NO
SAMPLE CHAMBER : YES
GAS ANALYSIS : NO

ROTARY JARS : YES
NO. OF PACKERS : 2
SAFETY JOINT : YES
CIRCULATING SUB : YES
REVERSED OUT : YES

MULTIFLOW : NO
MILEAGE : NO
OPERATOR TIME : NO
OTHER : YES
ZI ELECTRONICS(2)

SUCCESSFUL : YES

PACKER FAILURE : NO

TOOL PLUG : NO

DECIDED NOT TO TEST : NO

FAIL TO REACH BOTTOM : NO

TIME INTERVAL DATA (min)

TOOL OPENED : 3:45 PM

TOTAL TEST TIME: 165

INITIAL FLOW : 16
SECOND FLOW : 30
THIRD FLOW :

INITIAL SHUT-IN: 59
SECOND SHUT-IN : 61
THIRD SHUT IN :

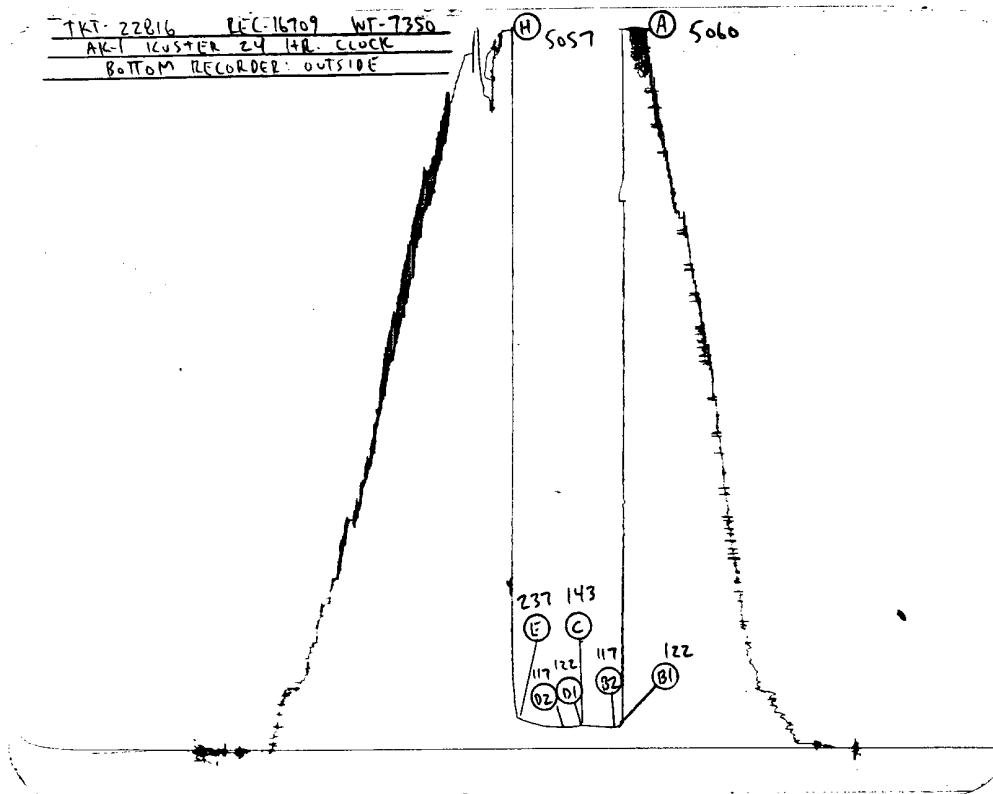
TEST TOOL OPERATOR: DANIEL SAMPLES



J.W. MULLOY & ASSOC.

DAN FIELD # 1
D.S.T. NO. : 1

		CORRECTED READING	FIELD READING
A	INITIAL HYDROSTATIC:	5030 PSI	5031 PSI
B-1	INITIAL FIRST FLOW :	83 PSI	83 PSI
B-2	FINAL FIRST FLOW :	91 PSI	95 PSI
C	FIRST SHUT-IN :	133 PSI	133 PSI
D-1	INITIAL SECOND FLOW:	104 PSI	104 PSI
D-2	FINAL SECOND FLOW :	110 PSI	109 PSI
E	SECOND SHUT-IN :	223 PSI	223 PSI
H	FINAL HYDROSTATIC :	5027 PSI	4957 PSI



TEST REMARKS

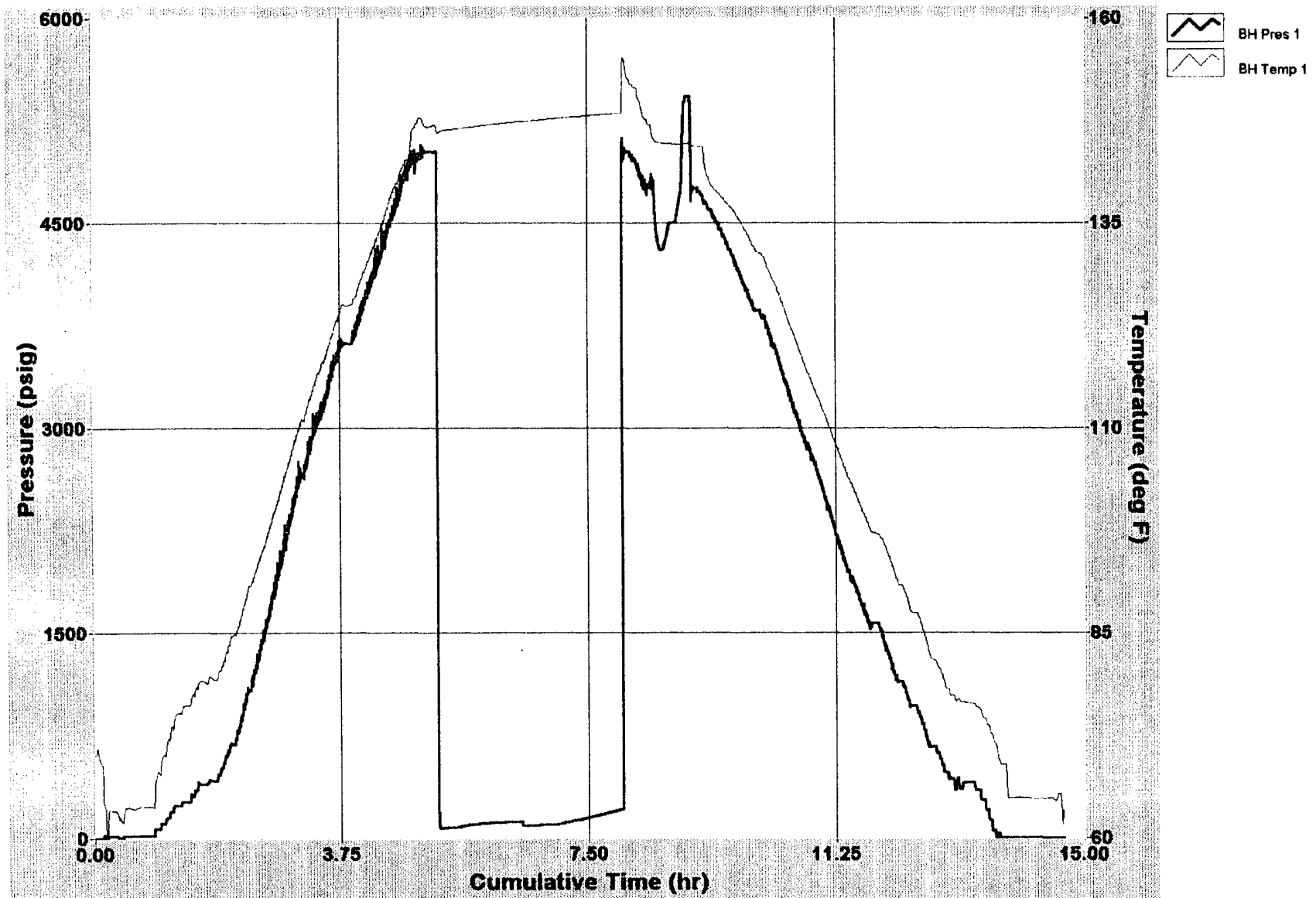
OPENED TOOL & SLID 5 FT. TO BOTTOM WITH FAIR BLOW ON 1/8" CHOKE, 4 OZS. IN 5 MIN., 5 OZS. IN 10 MIN. & 5.5 OZS. AT END OF THE 15 MIN. FIRST FLOW. REOPENED TOOL ON 1/8" CHOKE WITH 2 OZS. IN 10 MIN., 2.5 OZS. IN 20 MIN. & REMAINED THROUGHOUT THE 30 MIN. FINAL FLOW PERIOD.

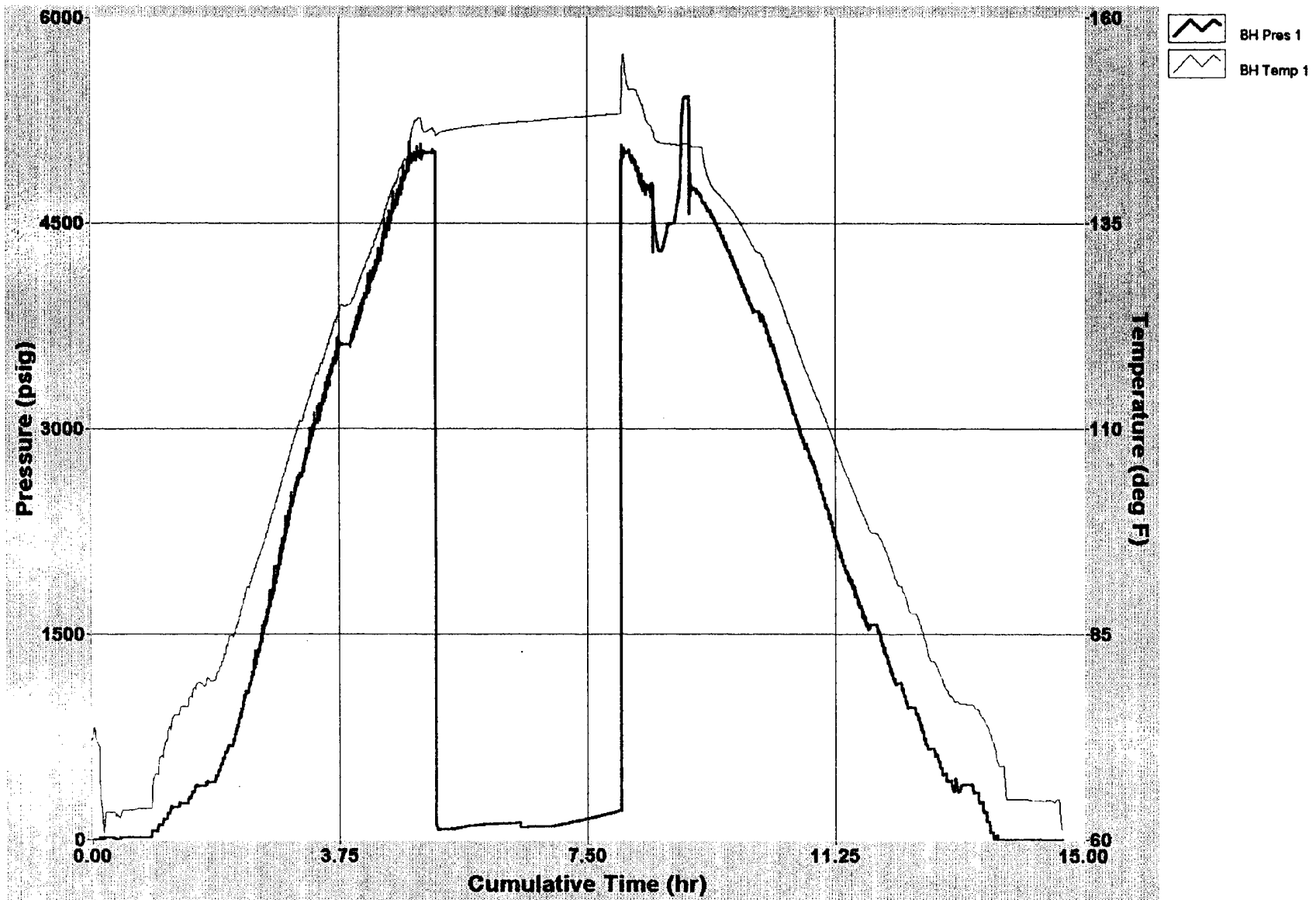


Company Name J.W. MULLOY
Well Name DAN FIELD #1; LEA,N.M.; PENN B
Type of Test DST#1; 86' TESTED; 35' OF PAY
Date(s) of Test 3/8/04; TESTER- DANIEL SAMPLES



RIG TESTERS INC #9634



RIG TESTERS INC#9635

INCREMENTAL PRESSURE DATA

RECORDER NO : 9634

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 10706 ft

ELAPSED TIME ---MIN----	TOTAL FLOW TIME, T ---MIN----	INCREMENTAL SHUT-IN TIME, DT ---MIN----	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
FIRST FLOW					
.0	.0			83.80	.00
2.0	2.0			84.93	1.13
4.0	4.0			85.47	1.67
6.0	6.0			86.70	2.90
8.0	8.0			87.60	3.80
10.0	10.0			88.43	4.63
12.0	12.0			88.10	4.30
14.0	14.0			90.30	6.50
15.5	15.5			91.20	7.40
FIRST SHUT-IN					
15.5	15.5	.00	.000	91.20	.00
16.0	15.5	.50	32.080	92.25	1.05
16.5	15.5	1.00	16.540	93.37	2.17
17.0	15.5	1.50	11.360	94.30	3.10
17.5	15.5	2.00	8.770	95.53	4.33
18.0	15.5	2.50	7.216	96.38	5.18
18.5	15.5	3.00	6.180	97.30	6.10
19.0	15.5	3.50	5.440	98.14	6.94
19.5	15.5	4.00	4.885	99.07	7.87
20.0	15.5	4.50	4.453	100.00	8.80
20.5	15.5	5.00	4.108	100.74	9.54
21.5	15.5	6.00	3.590	102.30	11.10
22.5	15.5	7.00	3.220	104.05	12.85
23.5	15.5	8.00	2.943	105.53	14.33
24.5	15.5	9.00	2.727	107.00	15.80
25.5	15.5	10.00	2.554	108.45	17.25
27.5	15.5	12.00	2.295	110.90	19.70
29.5	15.5	14.00	2.110	113.32	22.12
31.5	15.5	16.00	1.971	115.13	23.93
33.5	15.5	18.00	1.863	116.80	25.60
35.5	15.5	20.00	1.777	118.51	27.31
38.5	15.5	23.00	1.676	120.52	29.32
41.5	15.5	26.00	1.598	122.11	30.91
44.5	15.5	29.00	1.536	123.43	32.23
47.5	15.5	32.00	1.486	124.91	33.71
50.5	15.5	35.00	1.444	126.11	34.91
53.5	15.5	38.00	1.409	127.20	36.00
56.5	15.5	41.00	1.379	128.21	37.01
59.5	15.5	44.00	1.353	129.30	38.10
62.5	15.5	47.00	1.331	130.21	39.01
65.5	15.5	50.00	1.311	131.20	40.00
68.5	15.5	53.00	1.293	132.01	40.81
71.5	15.5	56.00	1.278	132.91	41.71
74.3	15.5	58.74	1.265	133.60	42.40

INCREMENTAL PRESSURE DATA

RECORDER NO : 9634

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 10706 ft

ELAPSED TIME ---MIN---	TOTAL FLOW TIME, T ---MIN---	INCREMENTAL SHUT-IN TIME, DT ---MIN---	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
SECOND FLOW					
74.8	16.0			104.60	.00
76.8	18.0			104.51	-.09
78.8	20.0			105.39	.79
80.8	22.0			105.60	1.00
82.8	24.0			106.19	1.59
84.8	26.0			106.40	1.80
86.8	28.0			106.80	2.20
88.8	30.0			107.09	2.49
90.8	32.0			107.40	2.80
92.8	34.0			107.70	3.10
94.8	36.0			108.19	3.59
96.8	38.0			108.49	3.89
98.8	40.0			108.80	4.20
100.8	42.0			109.10	4.50
102.8	44.0			109.39	4.79
105.0	46.3			110.20	5.60
SECOND SHUT-IN					
105.0	46.3	.00	.000	110.20	.00
105.5	46.3	.50	93.520	111.03	.83
106.0	46.3	1.00	47.260	111.87	1.67
106.5	46.3	1.50	31.840	112.90	2.70
107.0	46.3	2.00	24.130	113.62	3.42
107.5	46.3	2.50	19.504	114.47	4.27
108.0	46.3	3.00	16.420	115.40	5.20
108.5	46.3	3.50	14.217	116.15	5.95
109.0	46.3	4.00	12.565	117.07	6.87
109.5	46.3	4.50	11.280	117.90	7.70
110.0	46.3	5.00	10.252	118.73	8.53
111.0	46.3	6.00	8.710	120.60	10.40
112.0	46.3	7.00	7.609	122.26	12.06
113.0	46.3	8.00	6.783	123.93	13.73
114.0	46.3	9.00	6.140	125.70	15.50
115.0	46.3	10.00	5.626	127.36	17.16
117.0	46.3	12.00	4.855	130.70	20.50
119.0	46.3	14.00	4.304	134.12	23.92
121.0	46.3	16.00	3.891	137.57	27.37
123.0	46.3	18.00	3.570	140.90	30.70
125.0	46.3	20.00	3.313	144.42	34.22

INCREMENTAL PRESSURE DATA

RECORDER NO : 9634

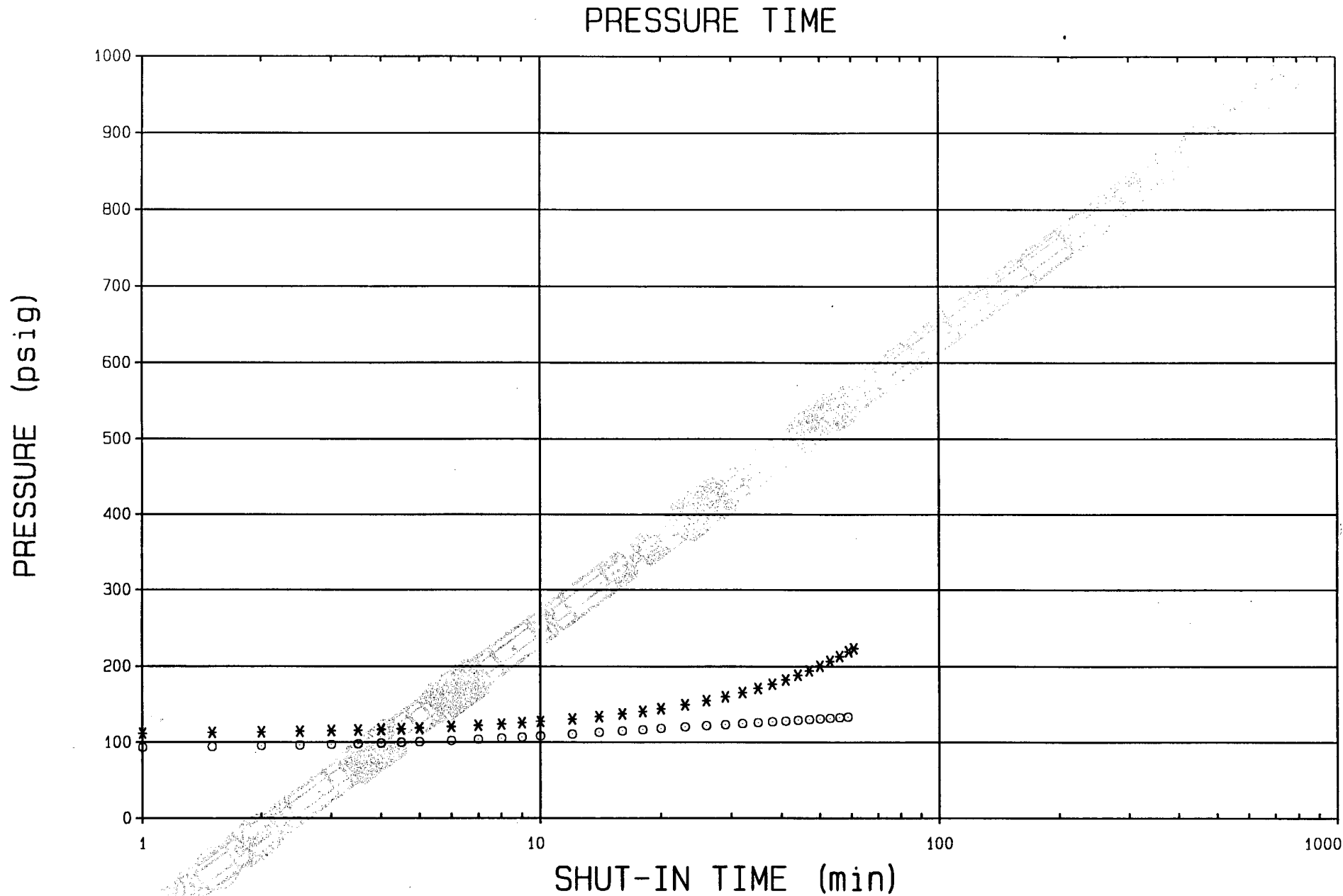
RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 10706 ft

ELAPSED TIME ---MIN---	TOTAL FLOW TIME, T ---MIN---	INCREMENTAL SHUT-IN TIME, DT ---MIN---	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
SECOND SHUT-IN					
128.0	46.3	23.00	3.011	149.53	39.33
131.0	46.3	26.00	2.779	154.82	44.62
134.0	46.3	29.00	2.595	160.03	49.83
137.0	46.3	32.00	2.446	165.42	55.22
140.0	46.3	35.00	2.322	171.02	60.82
143.0	46.3	38.00	2.217	176.62	66.42
146.0	46.3	41.00	2.128	182.42	72.22
149.0	46.3	44.00	2.051	188.52	78.32
152.0	46.3	47.00	1.984	194.50	84.30
155.0	46.3	50.00	1.925	200.70	90.50
158.0	46.3	53.00	1.873	206.92	96.72
161.0	46.3	56.00	1.826	213.32	103.12
164.0	46.3	59.00	1.784	219.72	109.52
165.8	46.3	60.78	1.761	223.50	113.30

REMARKS

THE INCREMENTAL DATA, PLOTS AND ANALYSIS ARE FROM THE ELECTRONIC RECORDER
 PLEASE REFER TO DERIVATIVE DIAGNOSTICS ANALYSIS FOR FURTHER INFORMATION
 (DST PRESSURE ASCII FILE IS AVAILABLE ON DISKETTE UPON REQUEST)



J.W. MULLOY & ASSOC.

DAN FIELD # 1

○ FIRST SHUT-IN
* SECOND SHUT-IN



Well Test Report

RigTesters, Inc.
ABILENE - MIDLAND - GRAHAM
J.W. MULLOY & ASSOC. DAN FIELD #1



Well identification

Well ID	DAN FIELD #1	Well location	W. LOVINGTON
County/District	LEA	State, Country	NEW MEXICO
Company	J.W. MULLOY	Division	MIDLAND

Fluid properties

Prod/Inj fluid	DRLG. MUD	GOR	
Water cut	0%	Condensate yield	UNKNOWN
API gravity		Gas spec. grav.	0.7
Viscosity	1.37 cp	Pseudo-critical T	382.97 deg R
Pseudo-critical P	664.37 psia	H2S mole fraction	UNKNOWN
CO2 mole fraction	UNKNOWN	N2 mole fraction	UNKNOWN
Compressibility(t)	30.483 e-6/psi	Formation vol factor	1.1013 RB/STB

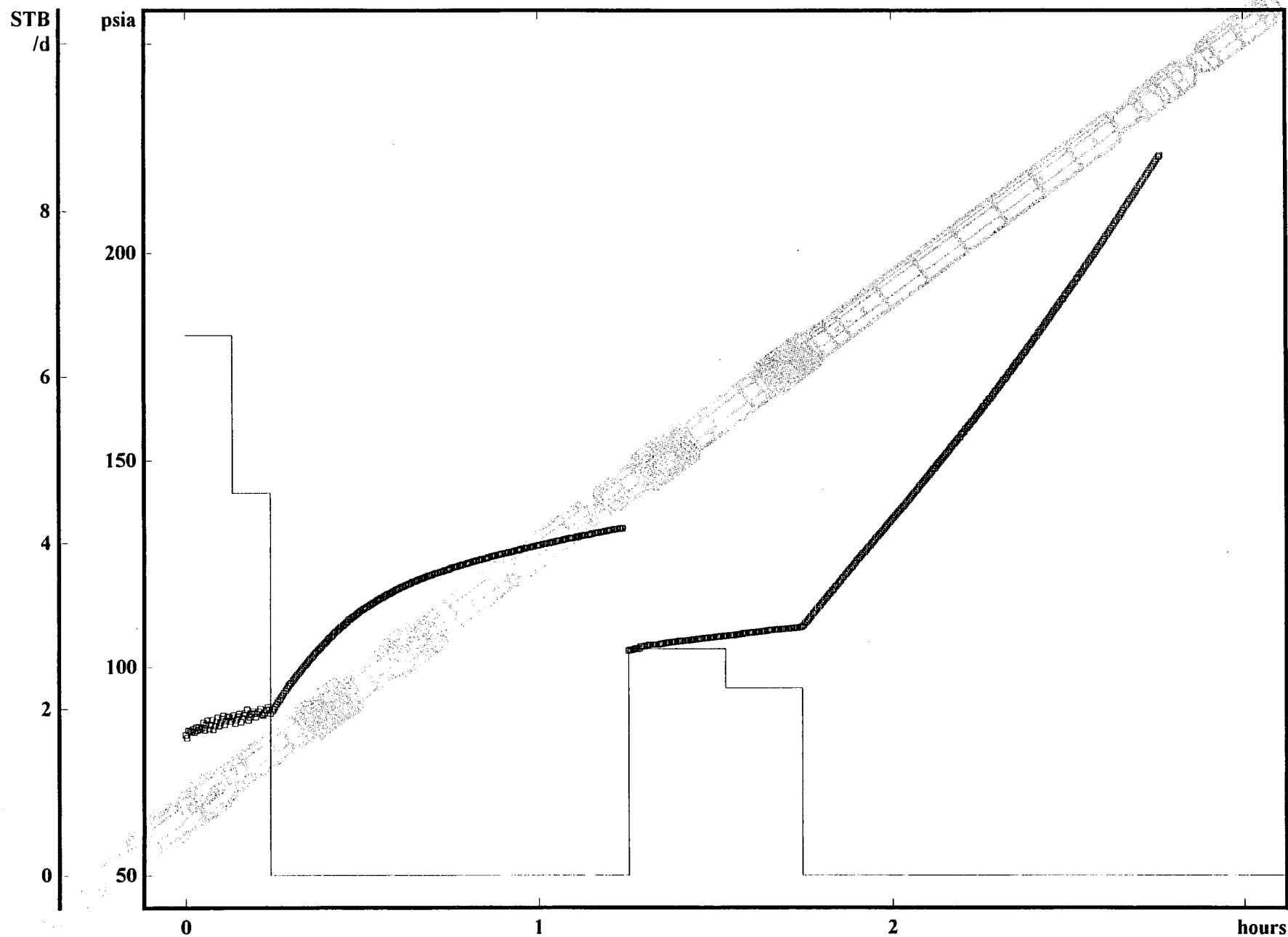
Reservoir properties

Porosity	0.1 frac	Formation thickness	35 ft
Wellbore radius	0.36458 ft	Prod-observer distance	N/A
Water-Oil Contact	UNKNOWN	Gas-Oil Contact	N/A
Gas-Water Contact	N/A	Rock compressibility	
Reservoir temperature	155 deg F	Pressure for properties	500 psia

Comments

THE DERIVATIVES INDICATE COMPLETE DOMINATION OF WELLBORE STORAGE EFFECT ON BOTH SHUT-IN PERIODS. ANY CALCULATIONS (EXTRAPOLATIONS, PERMEABILITY AND SKIN) UNDER THESE CONDITIONS ARE AMBIGUOUS AND UNRELIABLE. THE FIXED PARAMETERS USED WERE AN EST. 10% POROSITY, 35 FT. OF NET PAY REPORTED AND AN AVERAGE (TIME WEIGHTED) PRODUCTION OF 2.513 BBLs. OF FLUID FOR THE FINAL FLOW PERIOD. THE RATES WERE BASED ON DENSITY OF FLUID RECOVERED VS. FLOWING PRESSURES.

J.W. MULLOY & ASSOC. DAN FIELD #1
Pressure and flow rate vs time during test sequence

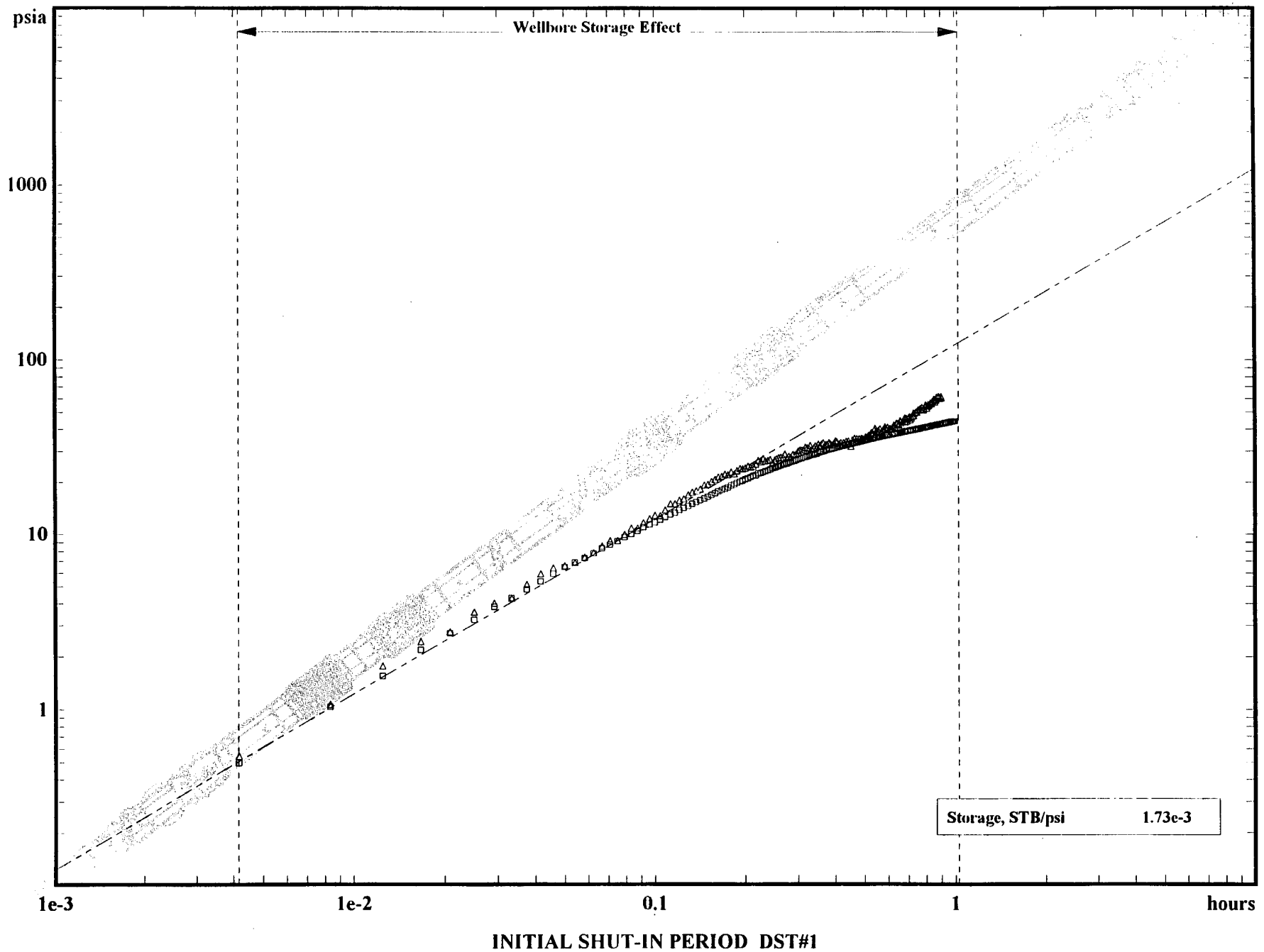


DST #1 10690 - 10776 FT. PENN. "B"



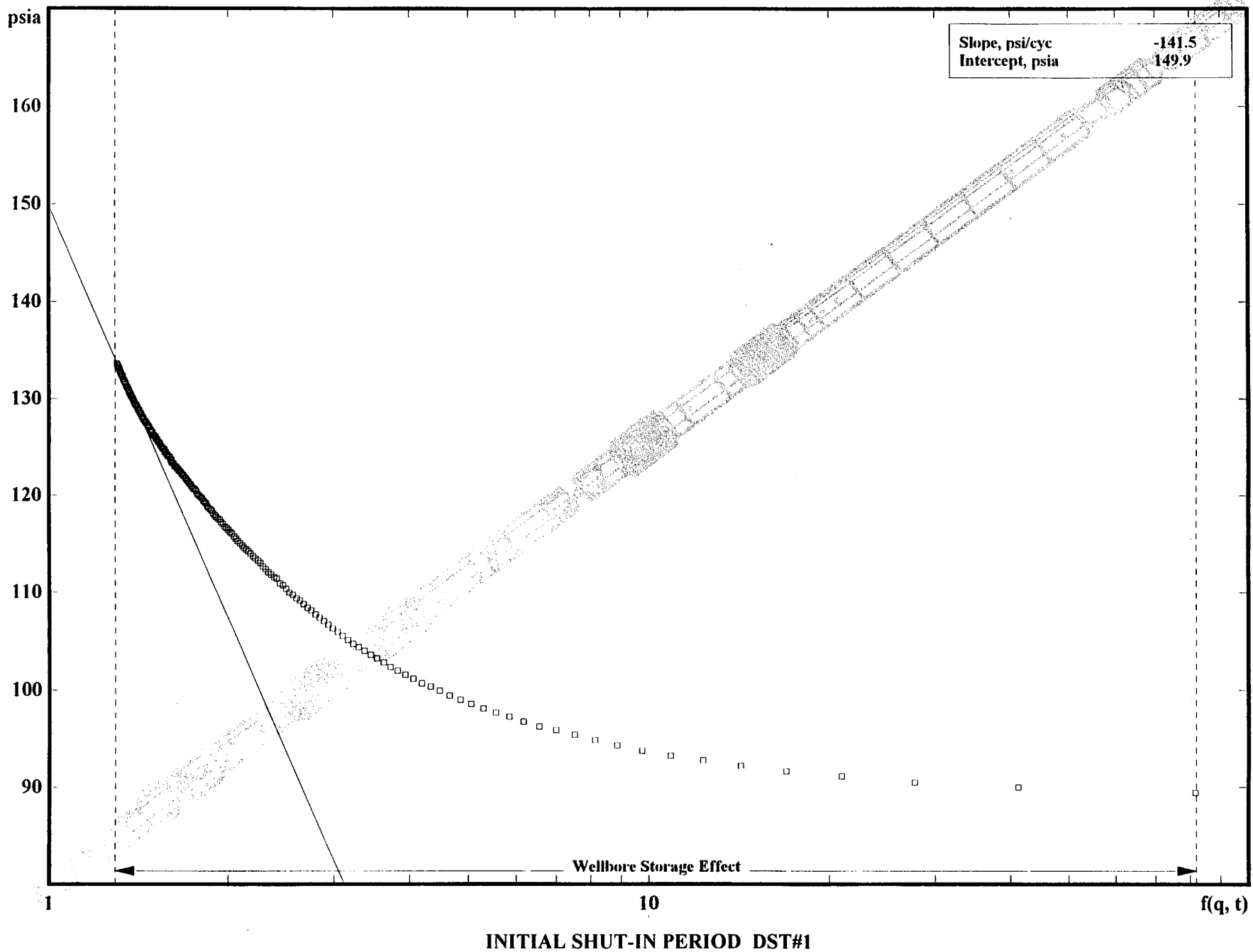
J.W. MULLOY & ASSOC. DAN FIELD #1

Diagnostic plot (pressure & time)



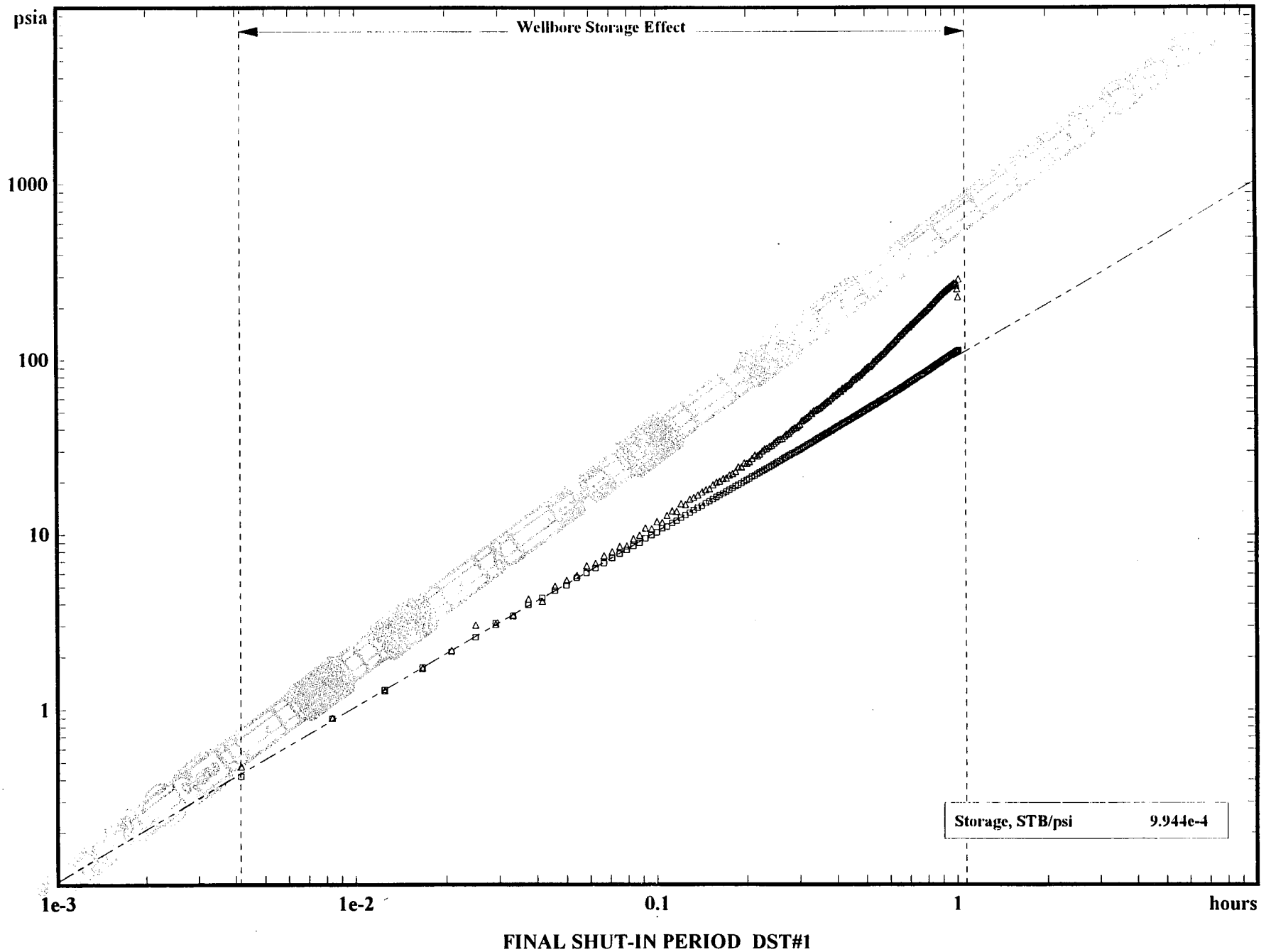
J.W. MULLOY & ASSOC. DAN FIELD #1

Variable rate Horner plot (pressure & time)



J.W. MULLOY & ASSOC. DAN FIELD #1

Diagnostic plot (pressure & time)



J.W. MULLOY & ASSOC. DAN FIELD #1

Variable rate Horner plot (pressure & time)

