



COMPANY : PATTERON PETROLEUM LP
LEASE : PADDY STATE "13"
WELL NO. : # 1
FIELD : WILDCAT
COUNTY/STATE : LEA / NEW MEXICO

TEST DATE : 10/08/04
D.S.T. NO. : 1
TEST TKT. NO. : 23007
INVOICE NO. : 21008
ORDER NO. :

FORMATION : PADDOCK
INTERVAL (ft) : 5866 TO 5886
TOTAL DEPTH (ft) : 6206
ELEVATION (ft) : 4117

HOLE SIZE (in) : 8.750
DRILL PIPE ID (in) : 3.82
DRILL COLLAR ID(in) : 2.25
DRILL COLLAR feet : 317
ANCHOR LENGTH (ft): 20
TOOL LENGTH (ft) : 82
TOOL O.D. (in) : 5
PACKER SIZE (in) : 7.500

RECORDER DATA
AK-1KUSTER / ZIPROBE

TOP RECORDER: IN
RECORDER NO. : 50014
CAPACITY (psi): 10000
DEPTH (ft) : 5873
CLOCK NO. : 50014
DURATION (hrs): 99

BOTTOM RECORDER: OUT
RECORDER NO. : 13815
CAPACITY (psi): 8275
DEPTH (ft) : 5878
CLOCK NO. : 17908
DURATION (hrs): 24

MUD PROPERTIES

MUD TYPE : S.GEL & STARCH
MUD WT. (#/gal) : 9.90

WATER LOSS (cc) : 10.0
FILTER CAKE (in) : 2/32
VISCOSITY (sec) : 60
CHLORIDE PPM : 160000
RESISTIVITY (ohm-m): .064

EQUIPMENT DATA

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

ROTARY JARS : YES
NO. OF PACKERS : 3
SAFETY JOINT : YES
CIRCULATING SUB : YES
REVERSED OUT : NO

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 : 7:10 AM

TOTAL TEST TIME: 351

INITIAL FLOW : 31
SECOND FLOW : 60
THIRD FLOW :

INITIAL SHUT-IN: 60
SECOND SHUT-IN : 200
THIRD SHUT IN :

TEST TOOL OPERATOR: TOMMY WILLIAMS

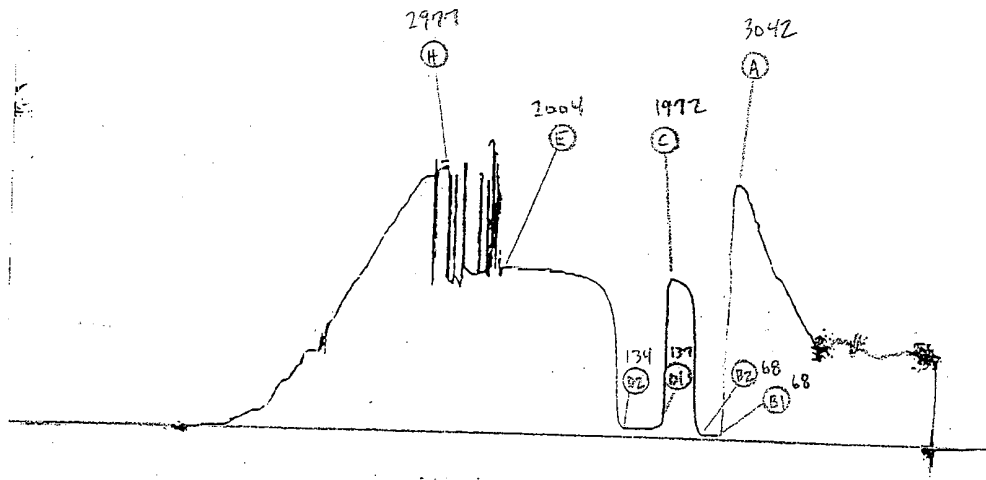


PATTERON PETROLEUM LP

PADDY STATE "13" # 1
D.S.T. NO. : 1

	CORRECTED READING	FIELD READING
A INITIAL HYDROSTATIC:	3040 PSI	3040 PSI
B-1 INITIAL FIRST FLOW :	54 PSI	54 PSI
B-2 FINAL FIRST FLOW :	66 PSI	66 PSI
C FIRST SHUT-IN :	1969 PSI	1969 PSI
D-1 INITIAL SECOND FLOW:	90 PSI	90 PSI
D-2 FINAL SECOND FLOW :	135 PSI	135 PSI
E SECOND SHUT-IN :	2001 PSI	2001 PSI
H FINAL HYDROSTATIC :	2974 PSI	3030 PSI

TKT- 23007 REC- 13815 WT- 8275
AK-1 KUSTER 24 HB. CLOCK
BOTTOM RECORDER: OUTSIDE



RECOVERY DATA

PIPE RECOVERY
180 FT. OF TOTAL FLUID
10 FT. OF GAS CUT MUD (TRACE OF OIL)
110 FT. OF GAS CUT MUD
60 FT. OF FORMATION WATER
115,000 MG/L CHLORIDES- .086 OHMS @ 85 DEGREES

B.H. TEMP. (deg F) : 102

SAMPLE CHAMBER

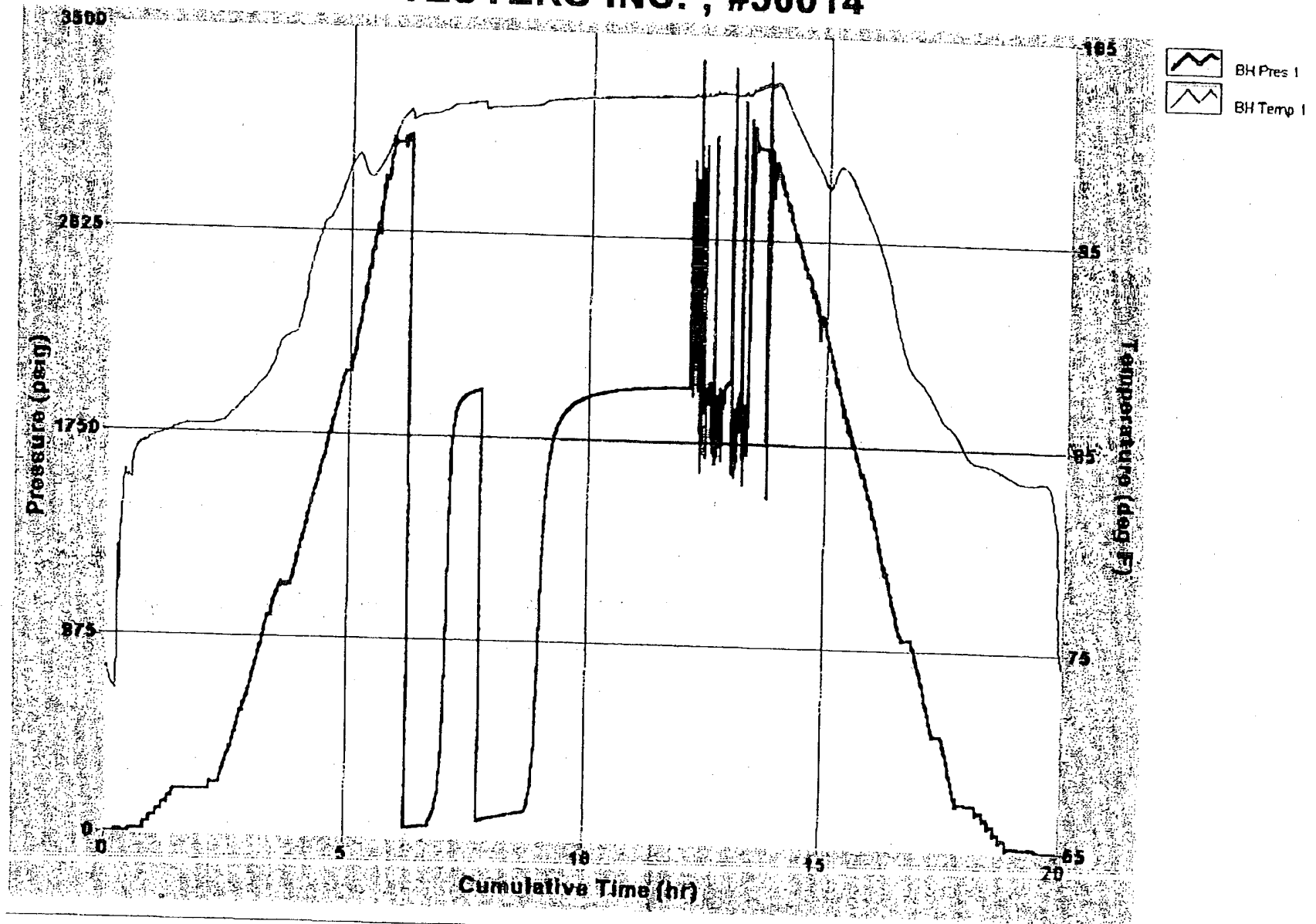
120 LBS. OF PRESSURE
.50 CU. FT. OF GAS
TRACE OF OIL
2000 CC'S OF FORMATION WATER
115,000 MG/L CHLORIDES
.086 OHMS @ 85 DEGREES

TEST REMARKS

TOOL OPENED WITH VERY WEAK BLOW (TOP OF WATER) WHICH BUILT SLOWLY TO (3.5" IN WATER) AT END OF THE 30 MIN. FIRST FLOW. REOPENED TOOL WITH VERY WEAK BLOW (1/4" IN WATER) WHICH BUILT SLOWLY TO (4" IN WATER) AT END OF THE 60 MIN. FINAL FLOW PERIOD.

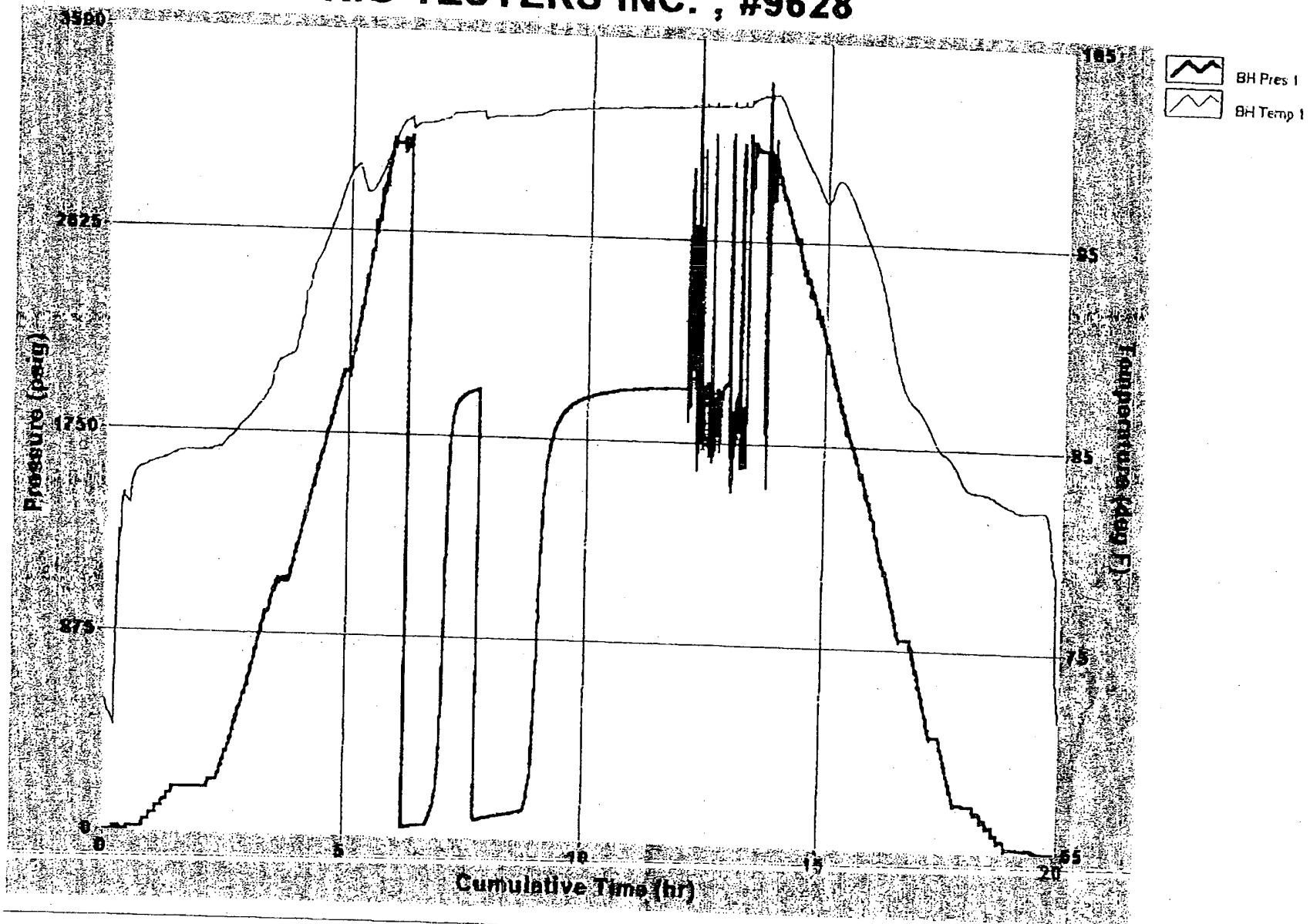
Company Name PATTERSON PETROLEUM L.P.
Well Name PADDY #13 STATE # 1; PADDOCK; LEA CO.
Type of Test DST # 1; Straddle; 20' Tested; 20' of pay
Date(s) of Test 10-8-04; Tester - TOMMY WILLIAMS

RIG TESTERS INC. ; #50014



Company Name PATTERSON PETROLEUM
Well Name PADDY #13 STATE #1; PADDOCK; LEA CO.
Type of Test DST #1; Straddle; 20' Tested; 20' of pay
Date(s) of Test 10-8-04; Tester - TOMMY WILLIAMS

RIG TESTERS INC. ; #9628





INCREMENTAL PRESSURE DATA

RECORDER NO : 50014

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 5873 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			54.40	.00
2.0	2.0			53.72	-.68
4.0	4.0			55.78	1.38
6.0	6.0			54.40	.00
8.0	8.0			56.33	1.93
10.0	10.0			57.98	3.58
12.0	12.0			59.00	4.60
14.0	14.0			60.20	5.80
16.0	16.0			61.00	6.60
18.0	18.0			62.20	7.80
20.0	20.0			62.88	8.48
22.0	22.0			63.69	9.29
24.0	24.0			64.10	9.70
26.0	26.0			64.88	10.48
28.0	28.0			65.40	11.00
30.0	30.0			66.00	11.60
31.3	31.3			66.80	12.40
FIRST SHUT-IN					
31.3	31.3	.00	.000	66.80	.00
31.8	31.3	.50	63.520	80.28	13.48
32.3	31.3	1.00	32.260	84.05	17.25
32.8	31.3	1.50	21.840	87.60	20.80
33.3	31.3	2.00	16.630	91.81	25.01
33.8	31.3	2.50	13.504	95.13	28.33
34.3	31.3	3.00	11.420	99.20	32.40
34.8	31.3	3.50	9.931	102.73	35.93
35.3	31.3	4.00	8.815	107.13	40.33
35.8	31.3	4.50	7.947	111.90	45.10
36.3	31.3	5.00	7.252	116.78	49.98
37.3	31.3	6.00	6.210	127.40	60.60
38.3	31.3	7.00	5.466	139.52	72.72
39.3	31.3	8.00	4.908	154.78	87.98
40.3	31.3	9.00	4.473	171.90	105.10
41.3	31.3	10.00	4.126	192.73	125.93
43.3	31.3	12.00	3.605	254.20	187.40
45.3	31.3	14.00	3.233	363.67	296.87
47.3	31.3	16.00	2.954	574.13	507.33
49.3	31.3	18.00	2.737	956.70	889.90
51.3	31.3	20.00	2.563	1368.25	1301.45
54.3	31.3	23.00	2.359	1722.19	1655.39
57.3	31.3	26.00	2.202	1836.47	1769.67
60.3	31.3	29.00	2.078	1884.67	1817.87
63.3	31.3	32.00	1.977	1909.71	1842.91
66.3	31.3	35.00	1.893	1925.87	1859.07

INCREMENTAL PRESSURE DATA

RECORDER NO : 50014

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 5873 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 SHUT-IN					
69.3	31.3	38.00	1.823	1936.26	1869.46
72.3	31.3	41.00	1.762	1943.74	1876.94
75.3	31.3	44.00	1.710	1949.53	1882.73
78.3	31.3	47.00	1.665	1954.74	1887.94
81.3	31.3	50.00	1.625	1959.41	1892.61
84.3	31.3	53.00	1.590	1962.61	1895.81
87.3	31.3	56.00	1.558	1966.02	1899.22
90.3	31.3	59.00	1.530	1968.72	1901.92
90.8	31.3	59.52	1.525	1969.10	1902.30
SECOND FLOW					
92.5	33.0			90.90	.00
95.5	36.0			94.30	3.40
98.5	39.0			98.00	7.10
101.5	42.0			100.20	9.30
104.5	45.0			102.50	11.60
107.5	48.0			104.90	14.00
110.5	51.0			107.00	16.10
113.5	54.0			109.40	18.50
116.5	57.0			111.60	20.70
119.5	60.0			114.10	23.20
122.5	63.0			115.20	24.30
125.5	66.0			117.90	27.00
128.5	69.0			120.20	29.30
131.5	72.0			122.20	31.30
134.5	75.0			124.20	33.30
137.5	78.0			126.40	35.50
140.5	81.0			128.50	37.60
143.5	84.0			130.60	39.70
146.5	87.0			132.70	41.80
149.5	90.0			134.60	43.70
152.0	92.5			135.90	45.00
SECOND SHUT-IN					
152.0	92.5	.00	.000	135.90	.00
153.0	92.5	1.00	93.520	147.90	12.00
154.0	92.5	2.00	47.260	160.08	24.18
155.0	92.5	3.00	31.840	174.40	38.50
156.0	92.5	4.00	24.130	191.97	56.07
157.0	92.5	5.00	19.504	211.36	75.46

INCREMENTAL PRESSURE DATA

RECORDER NO : 50014

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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					
158.0	92.5	6.00	16.420	234.80	98.90
159.0	92.5	7.00	14.217	265.28	129.38
160.0	92.5	8.00	12.565	301.07	165.17
161.0	92.5	9.00	11.280	345.70	209.80
162.0	92.5	10.00	10.252	408.58	272.68
164.0	92.5	12.00	8.710	577.90	442.00
166.0	92.5	14.00	7.609	830.65	694.75
168.0	92.5	16.00	6.783	1098.07	962.17
170.0	92.5	18.00	6.140	1310.20	1174.30
172.0	92.5	20.00	5.626	1466.37	1330.47
175.0	92.5	23.00	5.023	1609.33	1473.43
178.0	92.5	26.00	4.558	1694.35	1558.45
181.0	92.5	29.00	4.190	1750.33	1614.43
184.0	92.5	32.00	3.891	1790.53	1654.63
187.0	92.5	35.00	3.643	1820.78	1684.88
190.0	92.5	38.00	3.435	1844.05	1708.15
197.0	92.5	45.00	3.056	1882.10	1746.20
202.0	92.5	50.00	2.850	1900.78	1764.88
207.0	92.5	55.00	2.682	1915.70	1779.80
212.0	92.5	60.00	2.542	1927.20	1791.30
217.0	92.5	65.00	2.423	1936.95	1801.05
222.0	92.5	70.00	2.322	1945.15	1809.25
227.0	92.5	75.00	2.234	1952.10	1816.20
232.0	92.5	80.00	2.157	1958.13	1822.23
237.0	92.5	85.00	2.088	1963.35	1827.45
242.0	92.5	90.00	2.028	1968.00	1832.10
247.0	92.5	95.00	1.974	1971.41	1835.51
252.0	92.5	100.00	1.925	1975.12	1839.22
257.0	92.5	105.00	1.881	1978.30	1842.40
262.0	92.5	110.00	1.841	1981.01	1845.11
267.0	92.5	115.00	1.805	1983.40	1847.50
272.0	92.5	120.00	1.771	1985.50	1849.60
277.0	92.5	125.00	1.740	1987.31	1851.41
282.0	92.5	130.00	1.712	1989.02	1853.12
287.0	92.5	135.00	1.685	1990.30	1854.40
292.0	92.5	140.00	1.661	1991.70	1855.80
297.0	92.5	145.00	1.638	1992.92	1857.02
302.0	92.5	150.00	1.617	1994.10	1858.20
307.0	92.5	155.00	1.597	1995.10	1859.20
312.0	92.5	160.00	1.578	1996.00	1860.10

PATTERON PETROLEUM LP


 PADDY STATE "13" # 1
 D.S.T. NO. : 1

INCREMENTAL PRESSURE DATA

RECORDER NO : 50014

RECORDER CAPACITY : 10000 psi

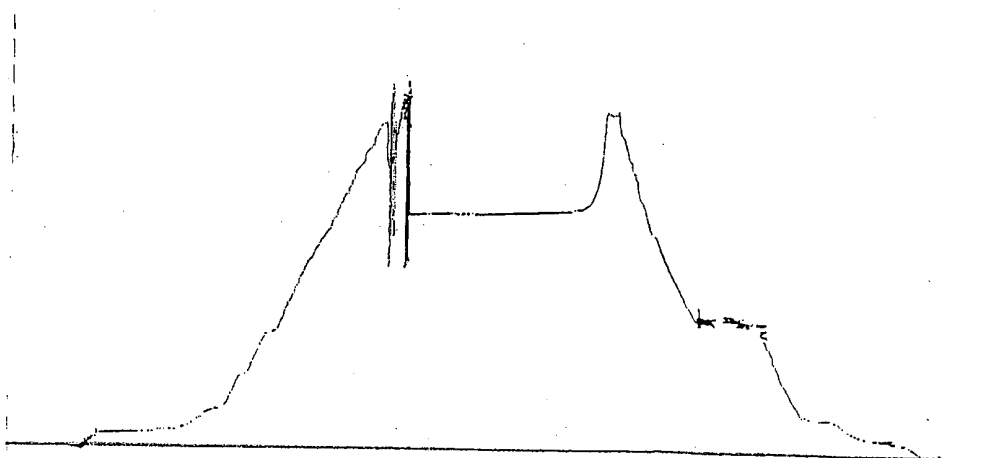
RECORDER DEPTH : 5873 ft

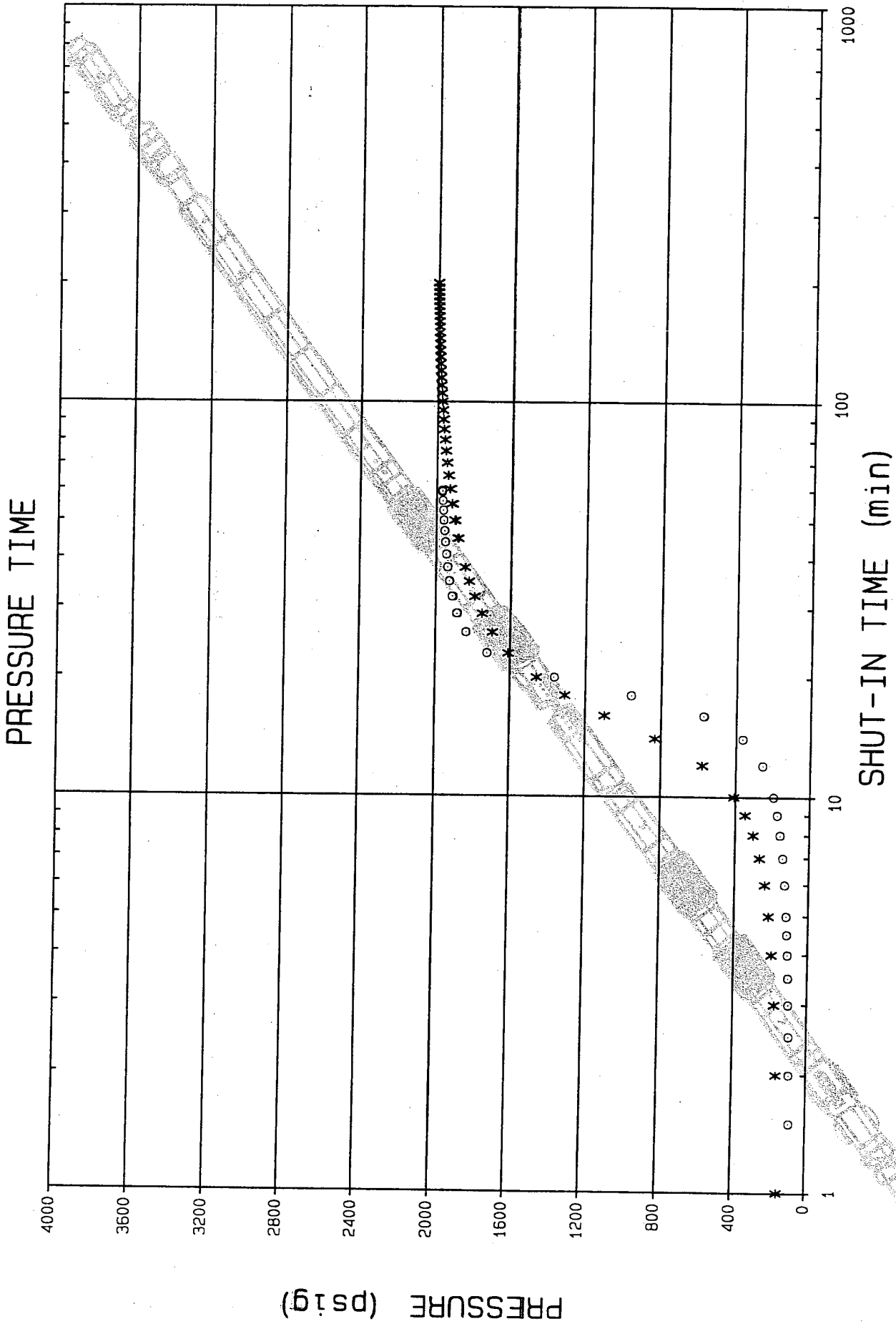
ELAPSED TIME ---MIN---	TOTAL FLOW TIME, T ---MIN---	INCREMENTAL SHUT-IN TIME, DT ---MIN---	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
SECOND SHUT-IN					
317.0	92.5	165.00	1.561	1996.80	1860.90
322.0	92.5	170.00	1.544	1997.61	1861.71
327.0	92.5	175.00	1.529	1998.30	1862.40
332.0	92.5	180.00	1.514	1999.00	1863.10
337.0	92.5	185.00	1.500	1999.60	1863.70
342.0	92.5	190.00	1.487	2000.20	1864.30
347.0	92.5	195.00	1.474	2000.70	1864.80
352.0	92.5	200.00	1.463	2001.20	1865.30
352.5	92.5	200.46	1.462	2001.20	1865.30

REMARKS

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

TKT-2300T REF-6232 WT-6975
 AK-1 KUSTER 24 HR. CLOCK
 STRADDLE TEST: DIAPHRAGM CHART





PATTERON PETROLEUM LP
PADDY STATE "13" # 1

○ FIRST SHUT-IN
* SECOND SHUT-IN



Well Test Report

RigTesters, Inc.
ABILENE - MIDLAND - GRAHAM

PATTERSON PETROLEUM LP PADDY STATE "13" #1

Well identification

Well ID	PADDY "13" #1	Well location	S.W. MALJAMAR
County/District	LEA	State, Country	NEW MEXICO
Company	PATTERON PETRO	Division	SNYDER

Fluid properties

Prod/Inj fluid	WATER	GOR	
Water cut	100%	Condensate yield	UNKNOWN
API gravity		Gas spec. grav.	0.7
Viscosity	0.8333 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)	15.856 e-6/psi	Formation vol factor	1.0066 RB/STB

Reservoir properties

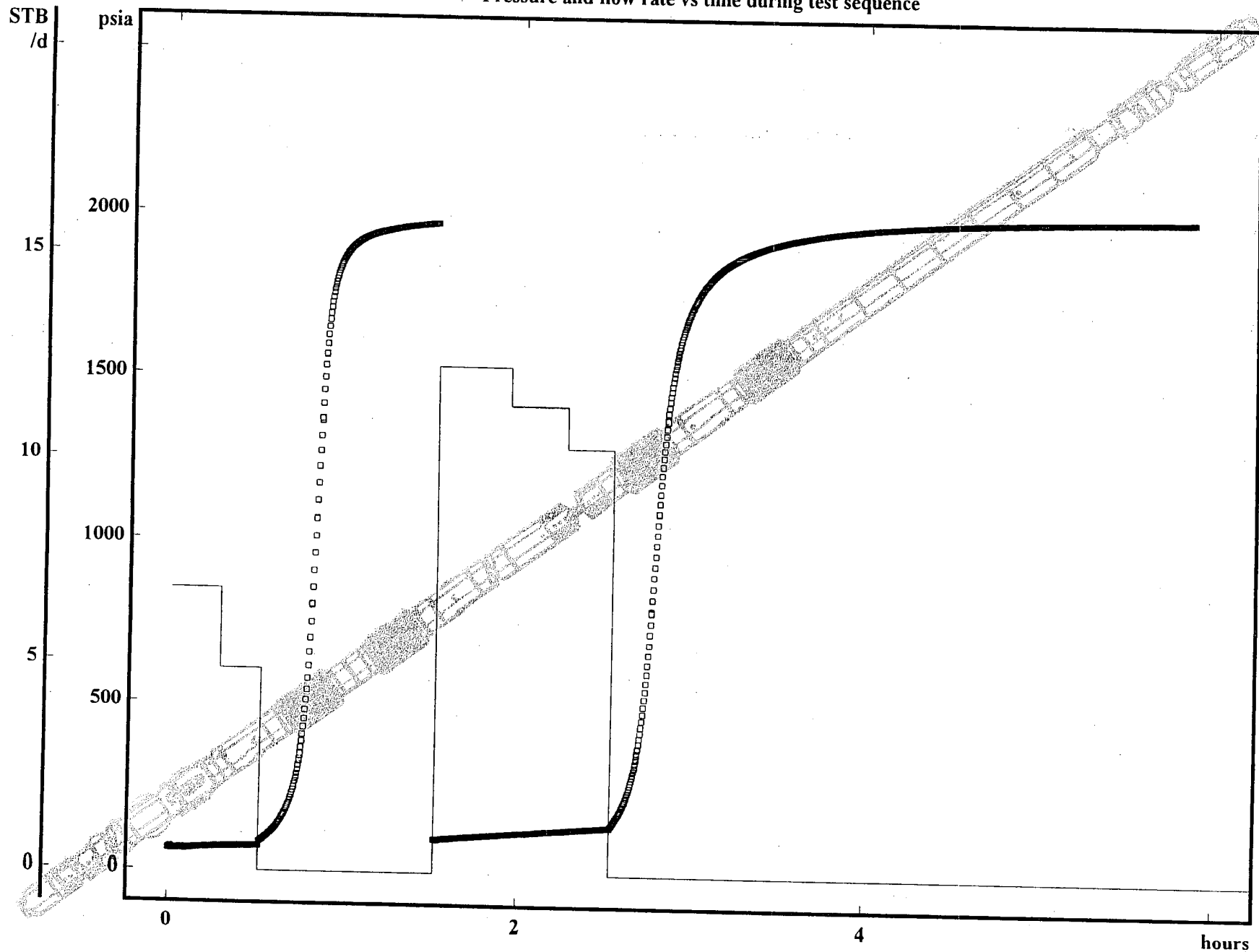
Porosity	0.12 frac	Formation thickness	20 ft
Wellbore radius	0.36458 ft	Prod-observer distance	N/A
Water-Oil Contact	UNKNOWN	Gas-Oil Contact	N/A
Gas-Water Contact	N/A	Rock compressibility	
Reservoir temperature	102 deg F	Pressure for properties	2026 psia

Comments

THE DERIVATIVES INDICATE A RESERVOIR WITH LOW PERMEABILITY AND FAIRLY HIGH BUT IMPROVING SKIN. THE INITIAL SHUT-IN PERIOD WAS IN TRANSITION TOWARDS BUT HAD NOT ACHIEVED TRUE RADIAL FLOW WHICH WOULD MAKE ITS CALCULATIONS SUBJECT TO QUESTION. THE SLOW DOWNWARD TREND DURING LATE TIME DATA ON THE FINAL SHUT-IN PERIOD INDICATES SPHERICAL FLOW OR PARTIALLY PENETRATED POROSITY. A REGRESSION VERIFIED MODEL ANALYSIS WAS PERFORMED TO BETTER DETERMINE FORMATION PARAMETERS AND IS REPRESENTED BY A SOLID LINE PLOTTED OVER ACTUAL DATA WITH CONFIDENCE INTERVALS (MARGIN OF ERROR) SHOWN NEXT TO MAJOR PARAMETERS. THE FIXED PARAMETERS USED WERE AN EST. 12% POROSITY, 20 FT. OF NET PAY REPORTED AND AN AVERAGE (TIME WEIGHTED) PRODUCTION OF 11 BBLS. OF WATER FOR THE FINAL FLOW PERIOD. THE RATES WERE BASED ON DENSITY OF FLUID RECOVERED VS. FLOWING PRESSURES. THE TOTAL RADIUS OF INVESTIGATION CALCULATED TO APPROX. 20 FT. FROM WELLBORE.

PATTERSON PETROLEUM LP PADDY STATE "13" #1

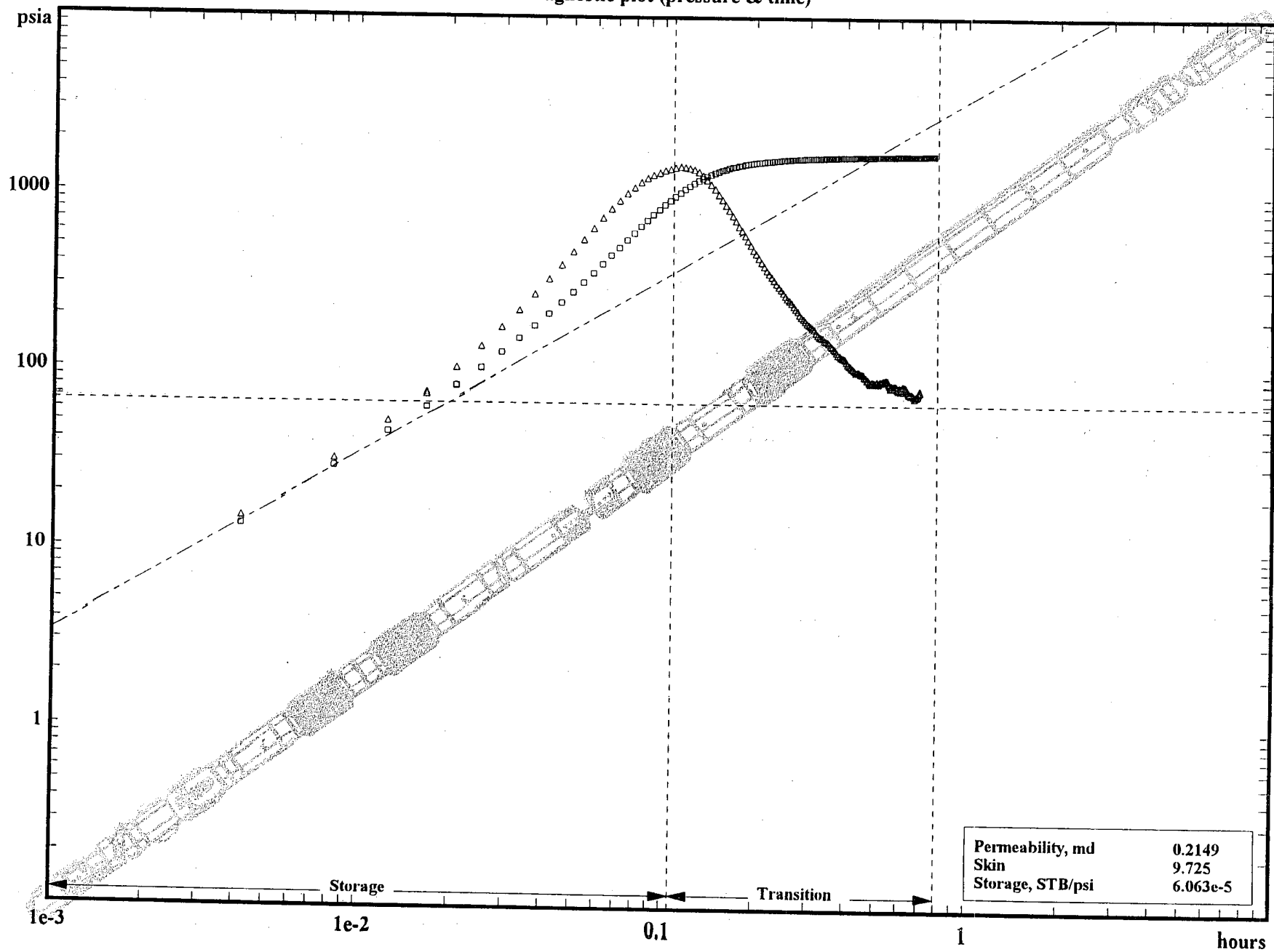
Pressure and flow rate vs time during test sequence



DST #1 5866 - 5886 FT. PADDOCK

PATTERSON PETROLEUM LP PADDY STATE "13" #1

Diagnostic plot (pressure & time)



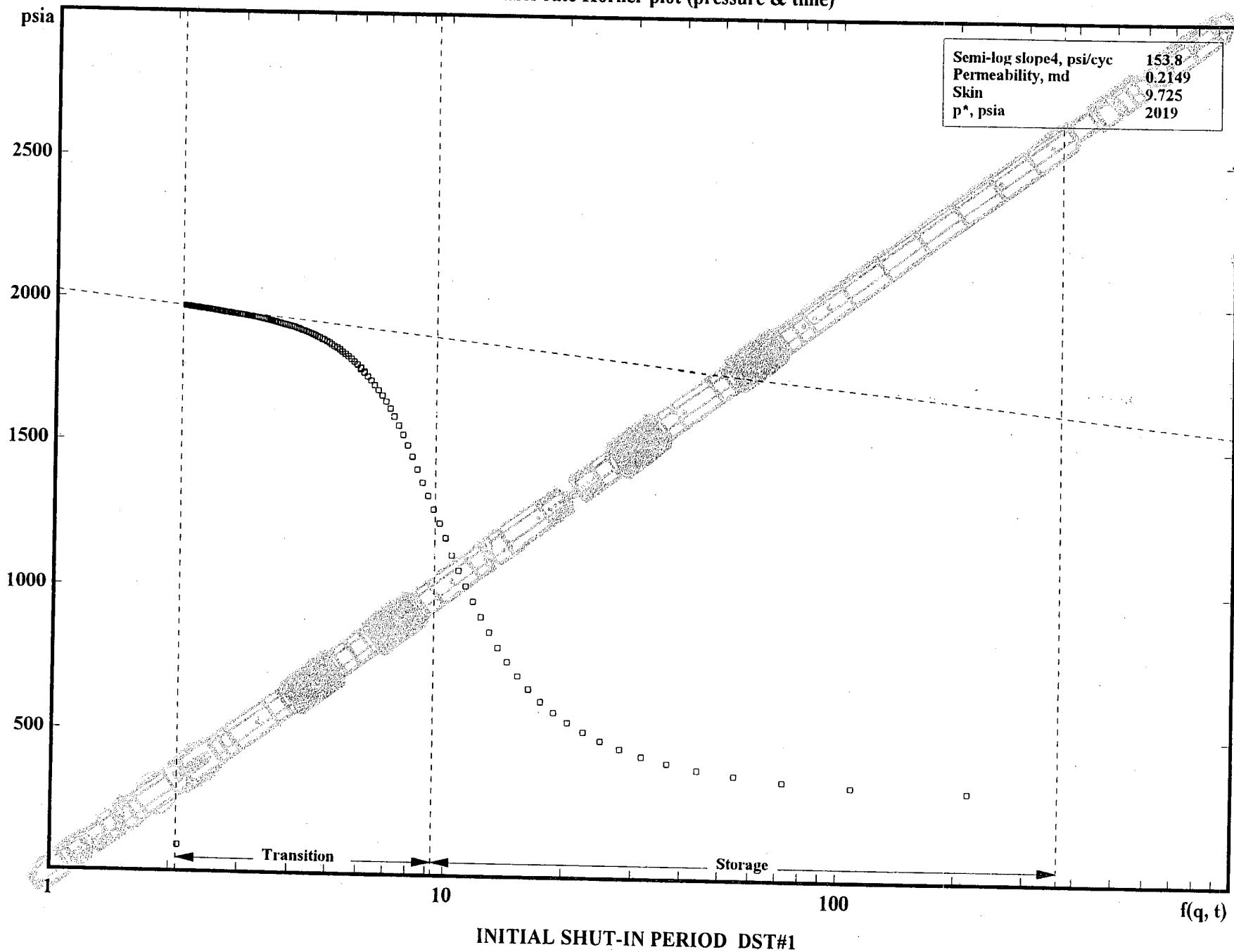
INITIAL SHUT-IN PERIOD DST#1

Permeability, md	0.2149
Skin	9.725
Storage, STB/psi	6.063e-5



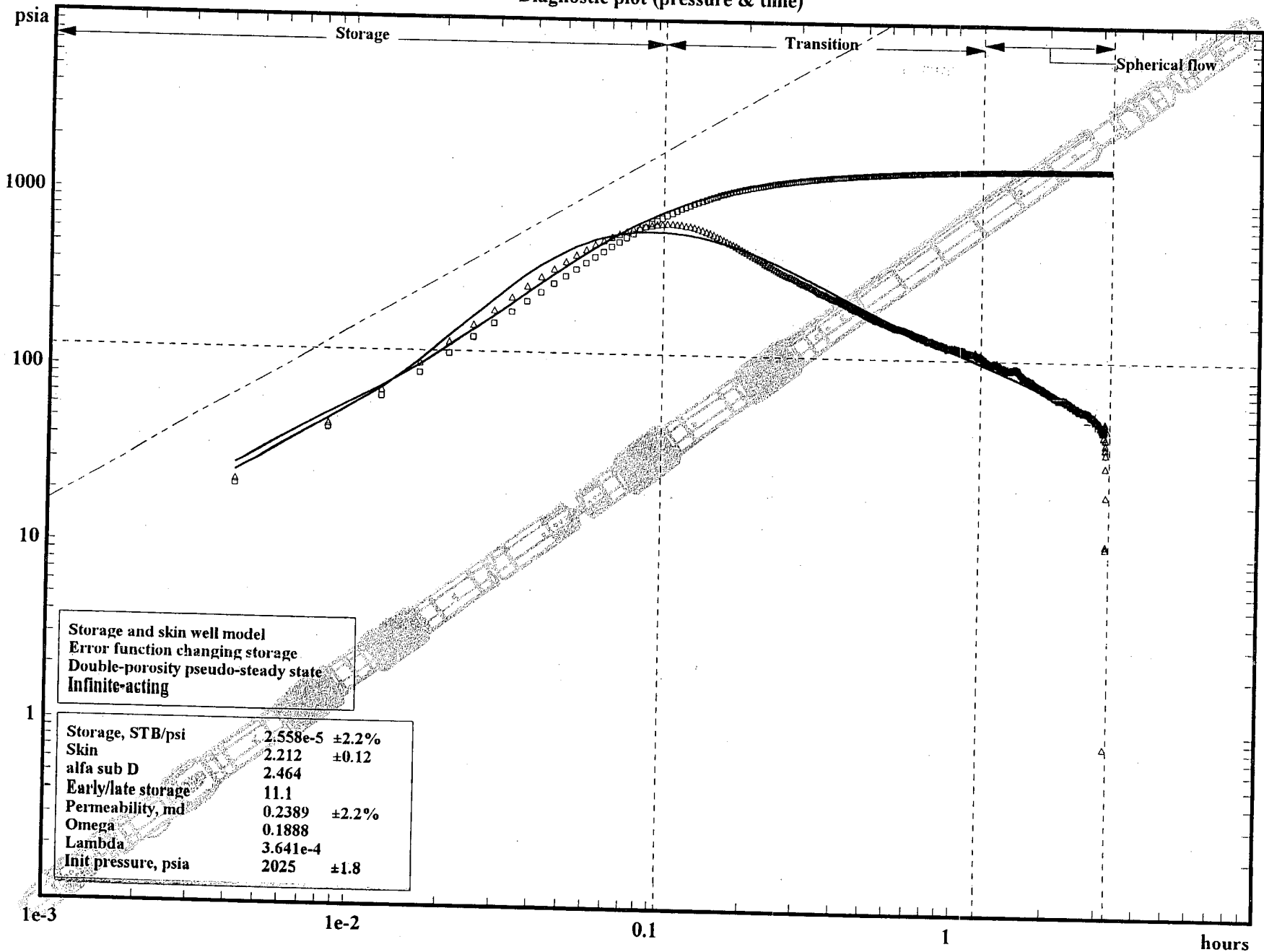
PATTERSON PETROLEUM LP PADDY STATE "13" #1

Variable rate Horner plot (pressure & time)



PATTERSON PETROLEUM LP PADDY STATE "13" #1

Diagnostic plot (pressure & time)

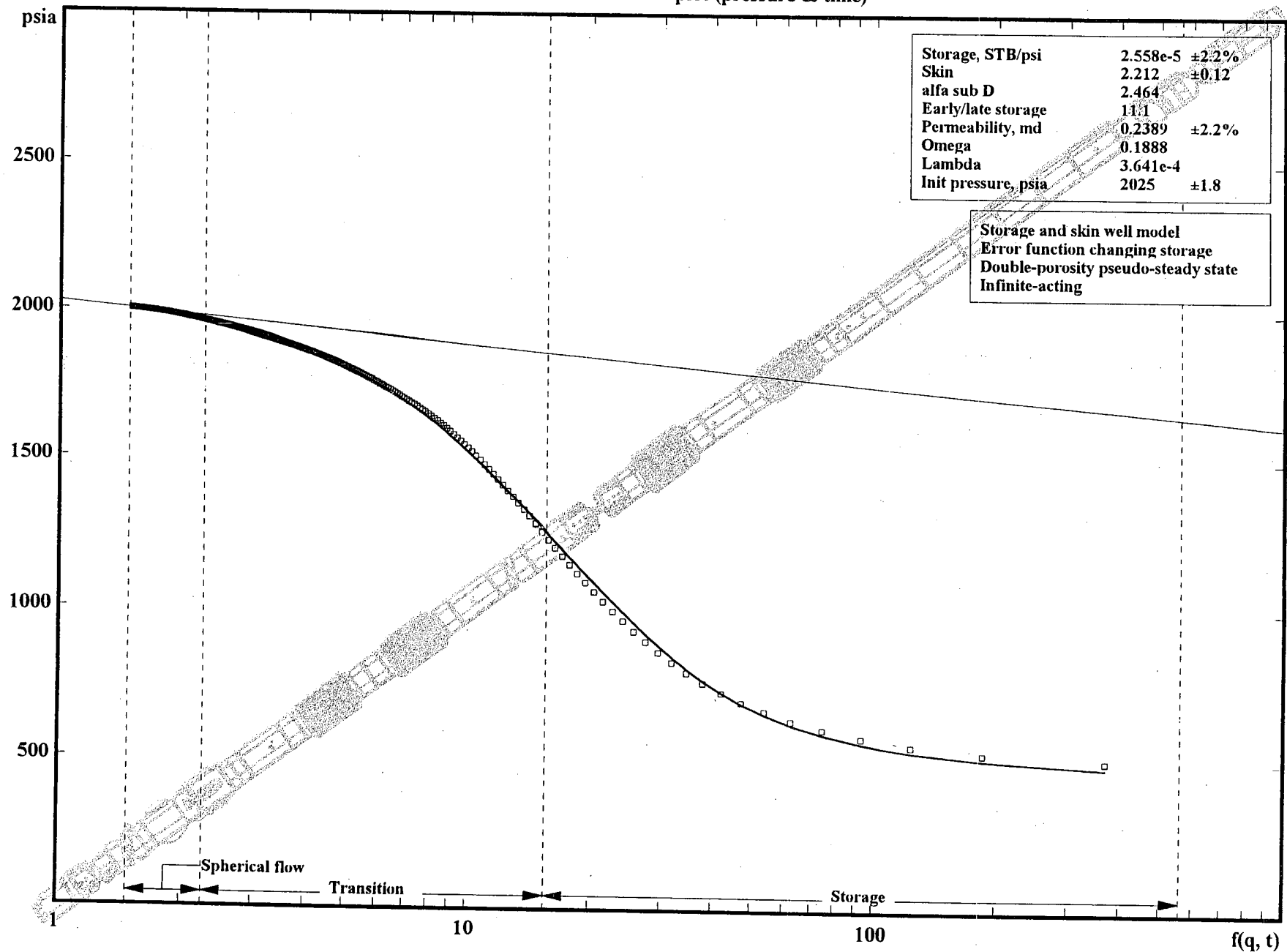


FINAL SHUT-IN PERIOD DST#1 REGRESSION VERIFIED MODEL



PATTERSON PETROLEUM LP PADDY STATE "13" #1

Variable rate Horner plot (pressure & time)

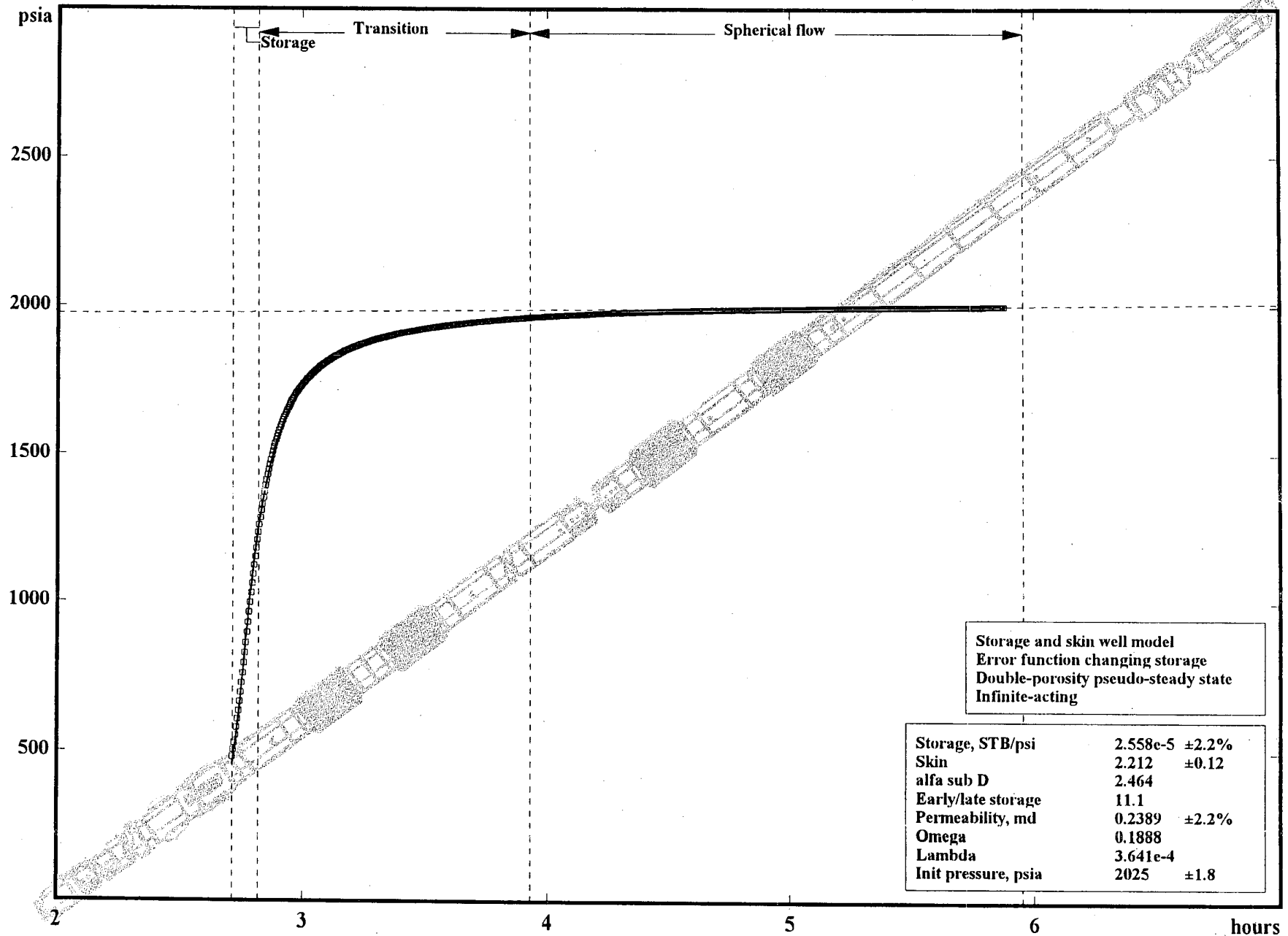


FINAL SHUT-IN PERIOD DST#1 REGRESSION VERIFIED MODEL



PATTERSON PETROLEUM LP PADDY STATE "13" #1

Cartesian plot (pressure & time)



FINAL SHUT-IN PERIOD DST#1 REGRESSION VERIFIED MODEL

