



COMPANY : D.J. SIMMONS, INC.  
LEASE : PINTO  
WELL NO. : # 1-7  
FIELD : PAPOOSE CANYON  
COUNTY/STATE : DOLORES / COLORADO

TEST DATE : 11/22/13  
D.S.T. NO. : 2  
TEST TKT. NO. : 26113  
INVOICE NO. : 24845  
ORDER NO. :

FORMATION : L. DESERT CREEK  
INTERVAL (ft) : 6255 TO 6314  
TOTAL DEPTH (ft): 6314  
ELEVATION (ft) :  
HOLE SIZE (in) : 7.875  
DRILL PIPE ID (in) : 3.82  
DRILL COLLAR ID(in): 2.25  
DRILL COLLAR feet : 663  
ANCHOR LENGTH (ft): 59  
TOOL LENGTH (ft) : 69  
TOOL O.L. (in) : 5  
PACKER SIZE (in) : 7.00

RECORDER DATA  
AK-1KUSTER / STELLAR

TOP RECORDER: IN  
RECORDER NO. : 9635  
CAPACITY (psi): 10000  
DEPTH (ft) : 6262  
CLOCK NO. : 9635  
DURATION (hrs): 99

BOTTOM RECORDER: OUT  
RECORDER NO. : 16550  
CAPACITY (psi): 7350  
DEPTH (ft) : 6314  
CLOCK NO. : 30397  
DURATION (hrs): 24

MUD PROPERTIES

MUD TYPE : FRESH GEL/CHEM  
MUD WT. (#/gal) : 8.80

WATER LOSS (cc) : 7.00  
FILTER CAKE (in) : 1/32  
VISCOSITY (sec) : 51

CHLORIDE PPM : 1485  
RESISTIVITY(ohm-m): 2.00

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  
STELLAR 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 : 9:15 AM

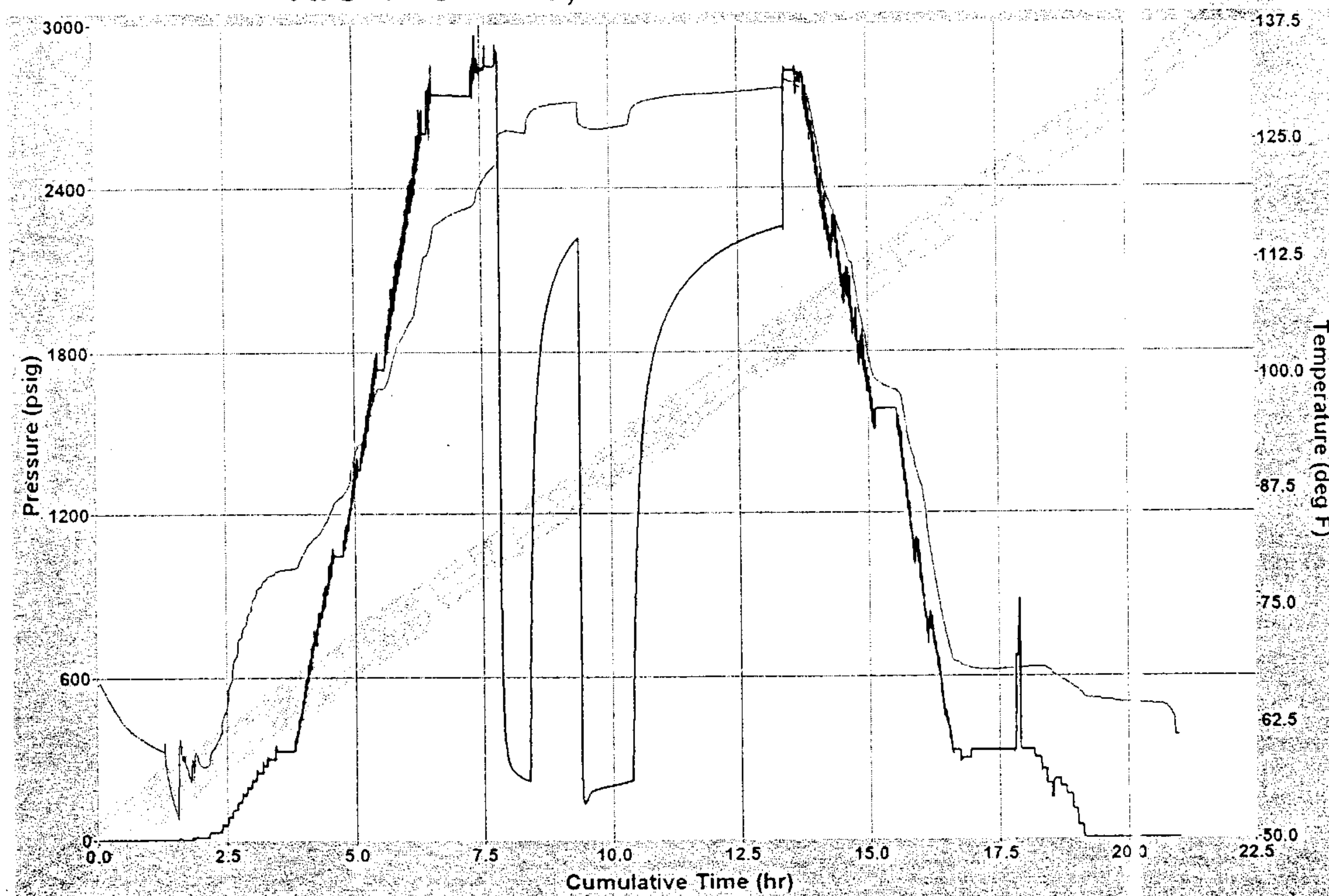
TOTAL TEST TIME: 328

INITIAL FLOW : 31  
SECOND FLOW : 56  
THIRD FLOW :

INITIAL SHUT-IN: 61  
SECOND SHUT-IN : 180  
THIRD SHUT IN :

TEST TOOL OPERATOR: PAUL MYERS

		CORRECTED READING	FIELD READING
A	INITIAL HYDROSTATIC:	2888 PSI	2910 PSI
B-1	INITIAL FIRST FLOW :	726 PSI	726 PSI
B-2	FINAL FIRST FLOW :	231 PSI	242 PSI
C	FIRST SHUT-IN :	2233 PSI	2225 PSI
D-1	INITIAL SECOND FLOW:	146 PSI	148 PSI
D-2	FINAL SECOND FLOW :	233 PSI	233 PSI
E	SECOND SHUT-IN :	2274 PSI	2257 PSI
H	FINAL HYDROSTATIC :	2843 PSI	2807 PSI

**RIG TESTERS, INC. RECORDER# 9635**RECOVERY DATA

PIPE RECOVERY                      B.H. TEMP. (deg F) : 131

GAS TO SURFACE 15 MIN. INTO FIRST FLOW PERIOD  
 PULLED TO FLUID @ 780 FT. & ATTEMPTED TO REVERSE OUT  
 IN TRANSPORT BUT WAS UNSUCCESSFUL; LOST RETURNS ON  
 REVERSE; SUSPECTED FLUID LOSS BACK INTO FORMATION  
 EST- 180 FT. OF OIL CUT DRLG. MUD (40% OIL)  
 EST- 210 FT. OF FREE OIL (46.3 GRAVITY @ 60 DEGREES)  
 EST- 300 FT. OF SALTWATER (165,000 MG/L CHLORIDES)  
 90 FT. OF SALTWATER- BELOW CIRC SUB

## SAMPLE CHAMBER

230 LBS. OF PRESSURE  
 .62 CU. FT. OF GAS  
 400 CC'S OF FREE OIL  
 (46.3 GRAVITY @ 60 DEGREES)  
 800 CC'S OF SALTWATER  
 165,000 MG/L CHLORIDES  
 .034 OHMS @ 35 DEGREES

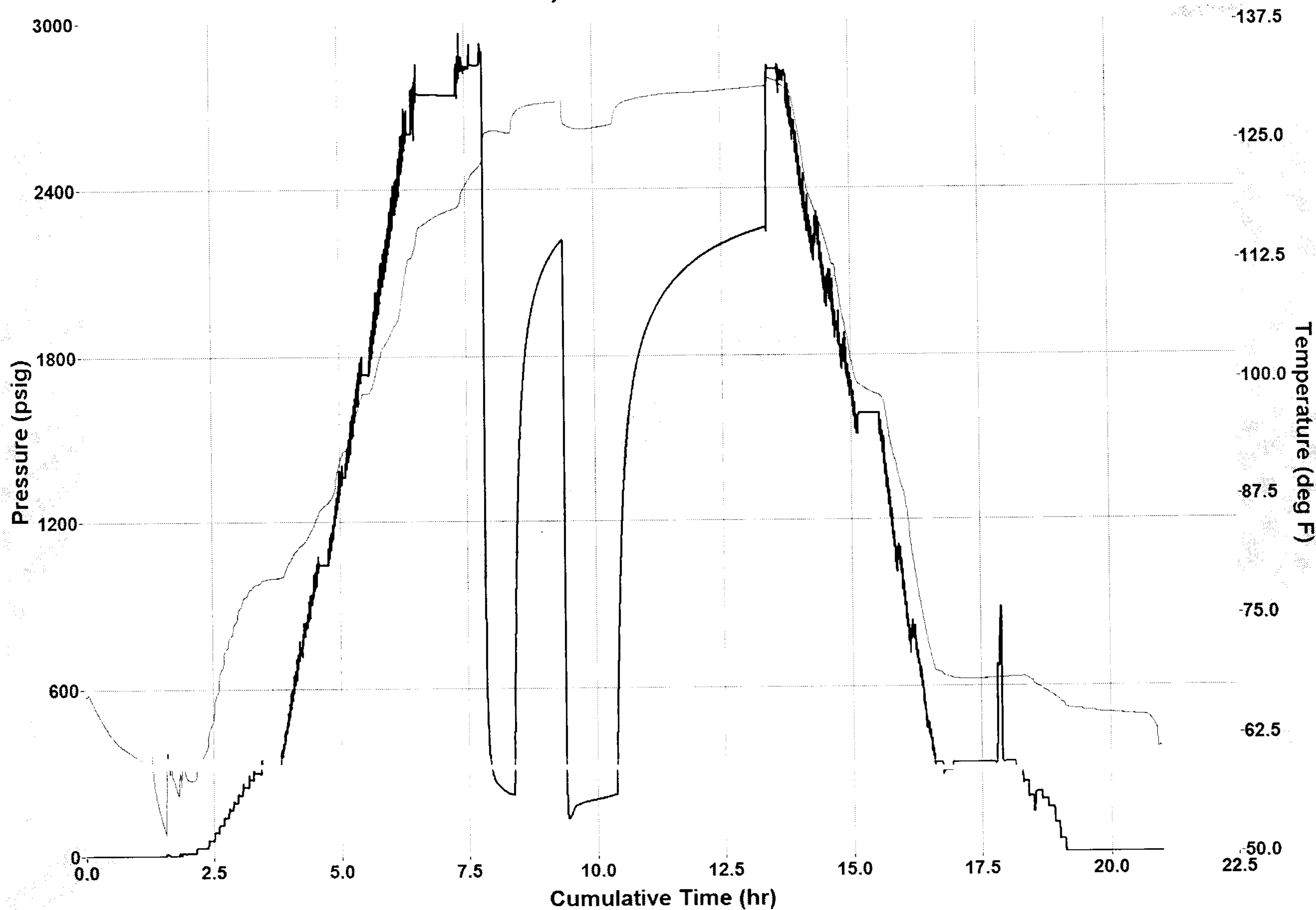
TEST REMARKS

TOOL OPENED WITH FAIR BLOW WHICH BUILT TO GOOD BLOW (BOTTOM OF BUCKET) IN  
 1 MIN., 14 LBS. ON 1/8" CHOKE IN 10 MIN., GAS TO SURFACE IN 15 MIN. W/21  
 LBS.(121 MCFPD) ON 3/8" CHOKE, 21 LBS.(121 MCFPD) IN 20 MIN. & 19 LBS.(114  
 MCFPD) AT END OF 30 MIN. FIRST FLOW. REOPENED TOOL ON 3/8" CHOKE W/14 LBS.  
 (97 MCFPD) IN 15 MIN., DECREASING TO 6 LBS.(70 MCFPD) IN 30 MIN., 2 LBS.  
 (56 MCFPD) IN 45 MIN. & 1 LB.(53 MCFPD) ON 3/8" CHOKE AT END OF THE 60  
 MIN. FINAL FLOW PERIOD.



Company Name D.J. SIMMONS, INC.  
Well Name PINTO #1-7  
Type of Test DST #2 (6255-6314 FT.; LOWER DESERT CREEK)  
Date(s) of Test 11-22-13

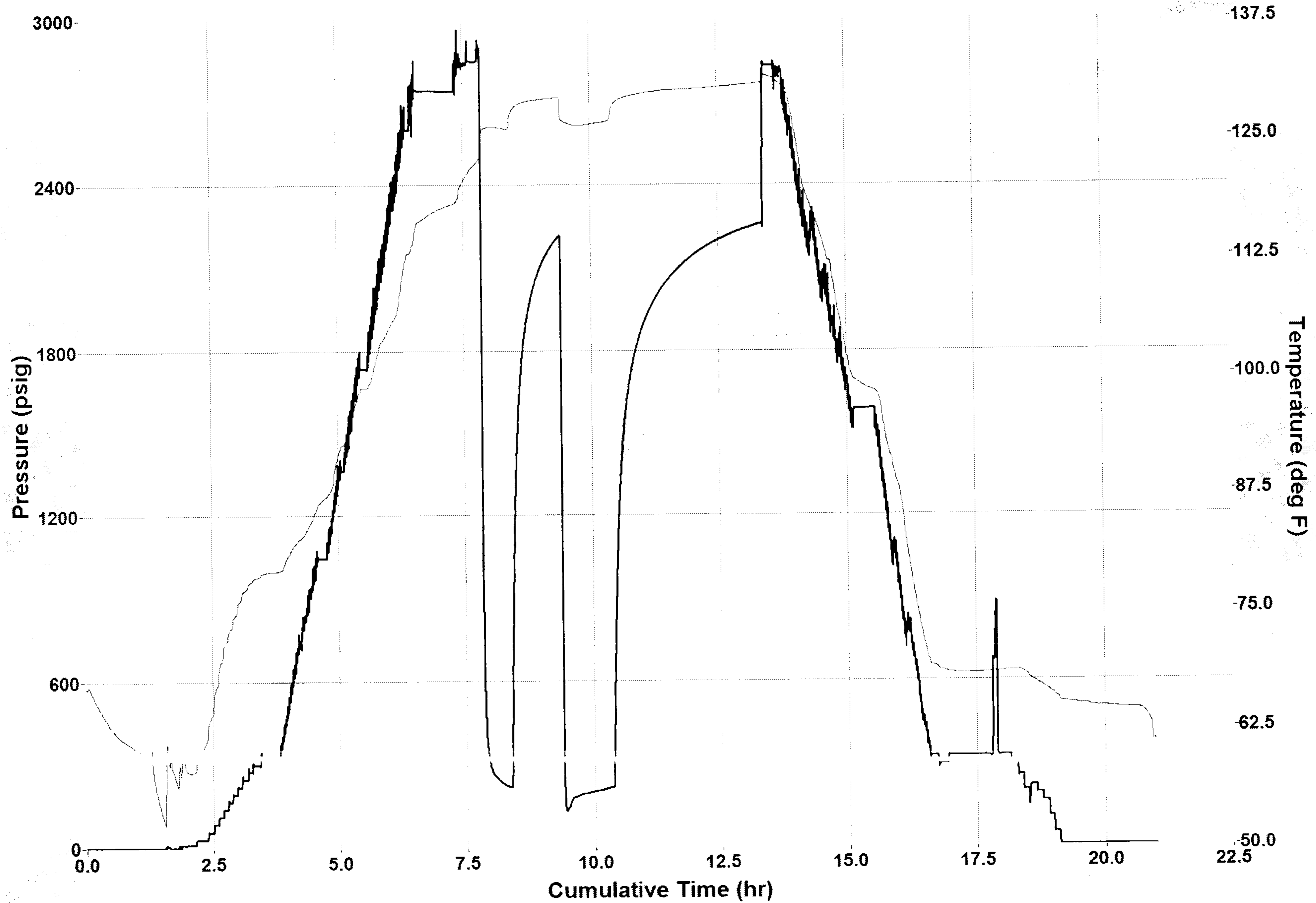
## RIG TESTERS, INC. RECORDER# 9635





Company Name D.J. SIMMONS, INC.  
Well Name PINTO #1-7  
Type of Test DST #2 (6255-6314 FT.; LOWER DESERT CREEK)  
Date(s) of Test 11-22-13

## RIG TESTERS, INC. RECORDER# 9634



## INCREMENTAL PRESSURE DATA

RECORDER NO : 9635

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 6262 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			726.20	.00
2.0	2.0			432.44	-293.76
4.0	4.0			351.81	-374.39
6.0	6.0			312.60	-413.60
8.0	8.0			292.14	-434.06
10.0	10.0			279.29	-446.91
12.0	12.0			271.10	-455.10
14.0	14.0			265.95	-460.25
16.0	16.0			260.46	-465.74
18.0	18.0			254.40	-471.80
20.0	20.0			248.85	-477.35
22.0	22.0			243.64	-482.56
24.0	24.0			238.70	-487.50
26.0	26.0			236.42	-489.78
28.0	28.0			235.09	-491.11
30.0	30.0			234.20	-492.00
31.3	31.3			231.30	-494.90
FIRST SHUT-IN					
31.3	31.3	.00	.000	231.30	.00
32.3	31.3	1.00	32.260	425.14	193.84
33.3	31.3	2.00	16.630	638.80	407.50
34.3	31.3	3.00	11.420	831.20	599.90
35.3	31.3	4.00	8.815	988.25	756.95
36.3	31.3	5.00	7.252	1123.91	892.61
37.3	31.3	6.00	6.210	1245.00	1013.70
38.3	31.3	7.00	5.466	1342.94	1111.64
39.3	31.3	8.00	4.908	1427.91	1196.61
40.3	31.3	9.00	4.473	1504.20	1272.90
41.3	31.3	10.00	4.126	1566.55	1335.25
43.3	31.3	12.00	3.605	1671.40	1440.10
45.3	31.3	14.00	3.233	1750.20	1518.90
47.3	31.3	16.00	2.954	1814.59	1583.29
49.3	31.3	18.00	2.737	1867.30	1636.00
51.3	31.3	20.00	2.563	1909.83	1678.53
54.3	31.3	23.00	2.359	1963.08	1731.78
57.3	31.3	26.00	2.202	2006.36	1775.06
60.3	31.3	29.00	2.078	2042.24	1810.94
63.3	31.3	32.00	1.977	2072.68	1841.38
66.3	31.3	35.00	1.893	2098.83	1867.53
69.3	31.3	38.00	1.823	2121.86	1890.56
72.3	31.3	41.00	1.762	2141.90	1910.60
75.3	31.3	44.00	1.710	2160.00	1928.70
78.3	31.3	47.00	1.665	2176.04	1944.74
81.3	31.3	50.00	1.625	2190.65	1959.35

## INCREMENTAL PRESSURE DATA

RECORDER NO : 9635

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 6262 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					
84.3	31.3	53.00	1.590	2203.58	1972.28
87.3	31.3	56.00	1.558	2215.68	1984.38
90.3	31.3	59.00	1.530	2226.79	1995.49
92.0	31.3	60.78	1.514	2233.00	2001.70
SECOND FLOW					
95.0	34.3			146.40	.00
98.0	37.3			158.50	12.10
101.0	40.3			183.60	37.20
104.0	43.3			194.60	48.20
107.0	46.3			197.30	50.90
110.0	49.3			200.50	54.10
113.0	52.3			203.80	57.40
116.0	55.3			206.80	60.40
119.0	58.3			208.90	62.50
122.0	61.3			211.50	65.10
125.0	64.3			213.50	67.10
128.0	67.3			215.40	69.00
131.0	70.3			216.70	70.30
134.0	73.3			218.40	72.00
137.0	76.3			221.00	74.60
140.0	79.3			224.10	77.70
143.0	82.3			226.30	79.90
146.0	85.3			228.70	82.30
149.0	88.3			231.00	84.60
151.3	90.5			233.20	86.80
SECOND SHUT-IN					
151.3	90.5	.00	.000	233.20	.00
152.3	90.5	1.00	91.480	390.19	156.99
153.3	90.5	2.00	46.240	548.42	315.22
154.3	90.5	3.00	31.160	694.90	461.70
155.3	90.5	4.00	23.620	818.00	584.80
156.3	90.5	5.00	19.096	927.68	694.48
157.3	90.5	6.00	16.080	1028.80	795.60
158.3	90.5	7.00	13.926	1112.99	879.79
159.3	90.5	8.00	12.310	1188.19	954.99
160.3	90.5	9.00	11.053	1257.60	1024.40
161.3	90.5	10.00	10.048	1315.72	1082.52
163.3	90.5	12.00	8.540	1416.80	1183.60

## INCREMENTAL PRESSURE DATA

RECORDER NO : 9635

RECORDER CAPACITY : 10000 psi

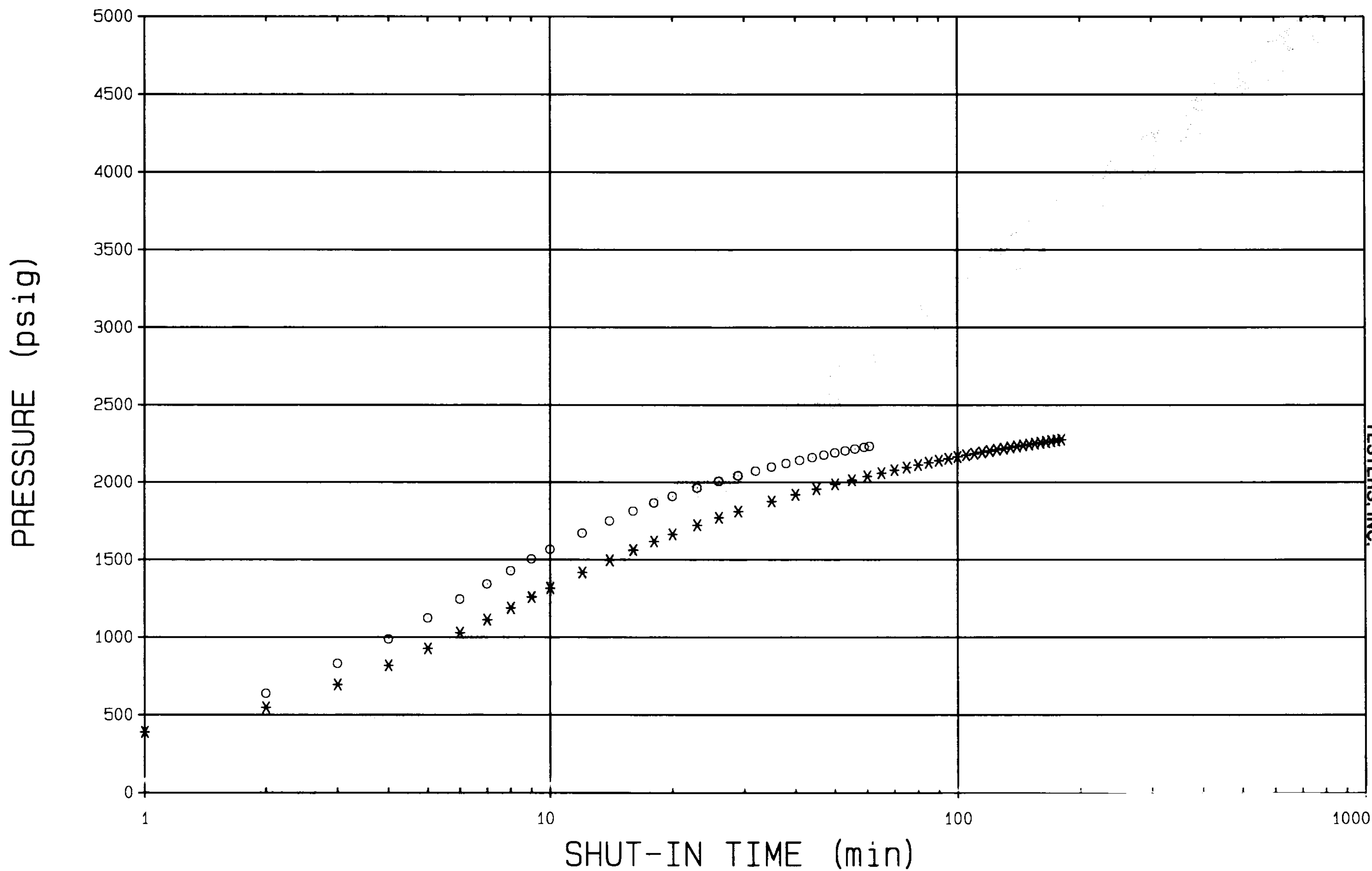
RECORDER DEPTH : 6262 ft

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			
165.3	90.5	14.00	7.463	1495.59	1262.39
167.3	90.5	16.00	6.655	1561.88	1328.68
169.3	90.5	18.00	6.027	1617.60	1384.40
171.3	90.5	20.00	5.524	1663.58	1430.38
174.3	90.5	23.00	4.934	1722.50	1489.30
177.3	90.5	26.00	4.480	1770.99	1537.79
180.3	90.5	29.00	4.120	1811.47	1578.27
186.3	90.5	35.00	3.585	1876.57	1643.37
191.3	90.5	40.00	3.262	1919.63	1686.43
196.3	90.5	45.00	3.011	1955.90	1722.70
201.3	90.5	50.00	2.810	1986.69	1753.49
206.3	90.5	55.00	2.645	2013.90	1780.70
211.3	90.5	60.00	2.508	2038.20	1805.00
216.3	90.5	65.00	2.392	2059.17	1825.97
221.3	90.5	70.00	2.293	2078.33	1845.13
226.3	90.5	75.00	2.206	2095.70	1862.50
231.3	90.5	80.00	2.131	2111.68	1878.48
236.3	90.5	85.00	2.064	2126.43	1893.23
241.3	90.5	90.00	2.005	2139.80	1906.60
246.3	90.5	95.00	1.952	2152.12	1918.92
251.3	90.5	100.00	1.905	2164.15	1930.95
256.3	90.5	105.00	1.862	2175.00	1941.80
261.3	90.5	110.00	1.823	2184.46	1951.26
266.3	90.5	115.00	1.787	2193.76	1960.56
271.3	90.5	120.00	1.754	2202.30	1969.10
276.3	90.5	125.00	1.724	2210.36	1977.16
281.3	90.5	130.00	1.696	2217.97	1984.77
286.3	90.5	135.00	1.670	2225.20	1992.00
291.3	90.5	140.00	1.646	2231.95	1998.75
296.3	90.5	145.00	1.624	2238.38	2005.18
301.3	90.5	150.00	1.603	2244.60	2011.40
306.3	90.5	155.00	1.584	2250.16	2016.96
311.3	90.5	160.00	1.566	2255.48	2022.28
316.3	90.5	165.00	1.548	2260.80	2027.60
321.3	90.5	170.00	1.532	2265.66	2032.46
326.3	90.5	175.00	1.517	2270.48	2037.28
331.3	90.5	180.00	1.503	2274.90	2041.70

## REMARKS

THE INCREMENTAL DATA, PLOTS & ANALYSIS ARE FROM ELECTRONIC RECORDER DATA  
 PLEASE REFER TO DERIVATIVE DIAGNOSTICS ANALYSIS FOR FURTHER INFORMATION  
 (DST PRESSURE ASCII FILES CAN FORWARDED BY E-MAIL UPON REQUEST)

# PRESSURE TIME



RIG  
TESTERS, INC.

D.J. SIMMONS, INC.

PINTO # 1-7

○ FIRST SHUT-IN

\* SECOND SHUT-IN



	Analysis comments	FINAL SHUT-IN PERIOD	
	Company D.J. SIMMONS, INC. Well PINTO #1-7	Field PAPOOSE CANYON / DOLORES CO., COL... Test Name / # DST #2 (6255-6314 FT.; L. DESERT CREEK)	

THE DERIVATIVES INDICATE A HOMOGENEOUS RESERVOIR WITH FAIRLY LOW PERMEABILITY AND NO (NEGATIVE) SKIN. BOTH SHUT-IN PERIODS HAD ACHIEVED RADIAL FLOW REGIME AS INDICATED BY THE FLATTENING ON DERIVATIVE CURVES. A REGRESSION VERIFIED MODEL ANALYSIS WAS PERFORMED TO BETTER DETERMINE FORMATION PARAMETERS AND IS REPRESENTED BY A SOLID LINE PLOTTED OVER ACTUAL DATA.

THE FIXED PARAMETERS USED WERE AN EST. 12% POROSITY, 11 FT. OF NET PAY REPORTED AND AN AVERAGE (TIME WEIGHTED) PRODUCTION OF 78 BBLs. OF FLUID PER DAY (33% OIL - 67% WATER; ACCORDING TO SAMPLE CHAMBER RECOVERY) FOR THE FINAL FLOW PERIOD. THE RATES WERE BASED ON DENSITY OF FLUIDS RECOVERED VS. FLOWING PRESSURES. THE TOTAL RADIUS OF INVESTIGATION CALCULATED TO APPROX. 45.2 FT. FROM WELLBORE.

Main results		FINAL SHUT-IN PERIOD
Company D.J. SIMMONS, INC. Well PINTO #1-7		Field PAPOOSE CANYON / DOLORES CO., COL... Test Name / # DST #2 (6255-6314 FT.; L. DESERT CREEK)
<div> <div>           Test date / time            Formation interval            Perforated interval            Gauge type / #            Gauge depth            Analyzed by            Analysis date / time         </div> <div>           11-22-13            6255-6314 FT.; LOWER DESERT CREEK            STELLAR# 9635         </div> </div>		
<div> <div>TEST TYPE</div> <div>Standard</div> </div>		
<div> <div>Porosity Phi (%)</div> <div>Well Radius rw</div> <div>Pay Zone h</div> </div> <div> <div>12</div> <div>0.328125 ft</div> <div>11 ft</div> </div>		
<div> <div>Form. compr.</div> <div>Water Salt (ppm)</div> <div>So</div> <div>Sg</div> <div>Sw</div> <div>Reservoir T</div> <div>Reservoir P</div> </div> <div> <div>3E-6 psi-1</div> <div>1.65E+5</div> <div>0.7</div> <div>0</div> <div>0.3</div> <div>131 °F</div> <div>2480 psia</div> </div>		
<div> <div>Fluid type</div> </div> <div> <div>Oil</div> </div>		
<div> <div>Volume Factor B</div> <div>Viscosity</div> <div>Total Compr. ct</div> </div> <div> <div>1.08478 B/STB</div> <div>0.698021 cp</div> <div>1.20809E-5 psi-1</div> </div>		
<div>Derived &amp; Secondary Parameters</div>		

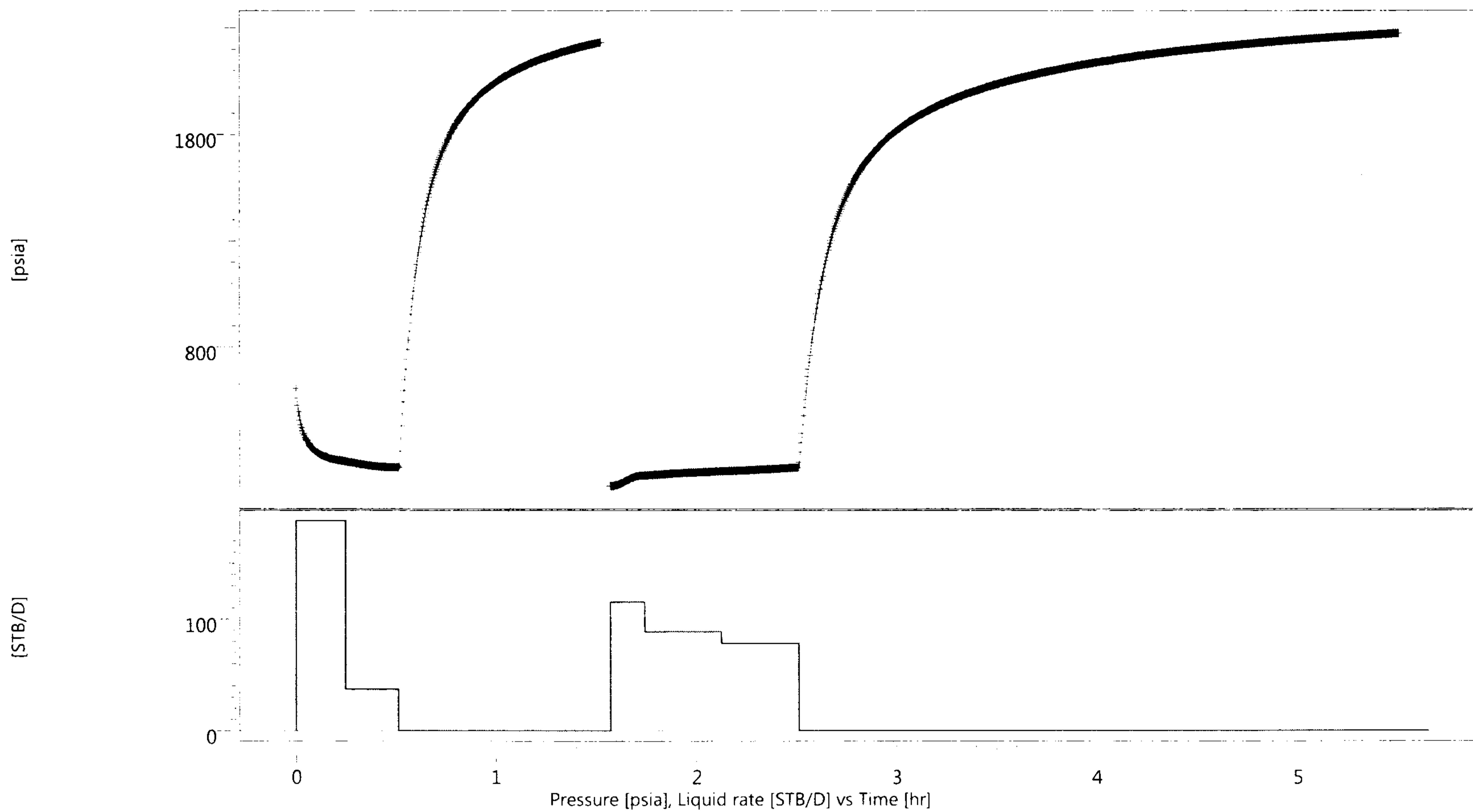


History plot

Analysis 1

Company D.J. SIMMONS, INC.  
Well PINTO #1-7

Field PAPOOSE CANYON / DOLORES CO., COLORADO  
Test Name / # DST #2 (6255-6314 FT.; L. DESERT CREEK)



TESTERS, INC.



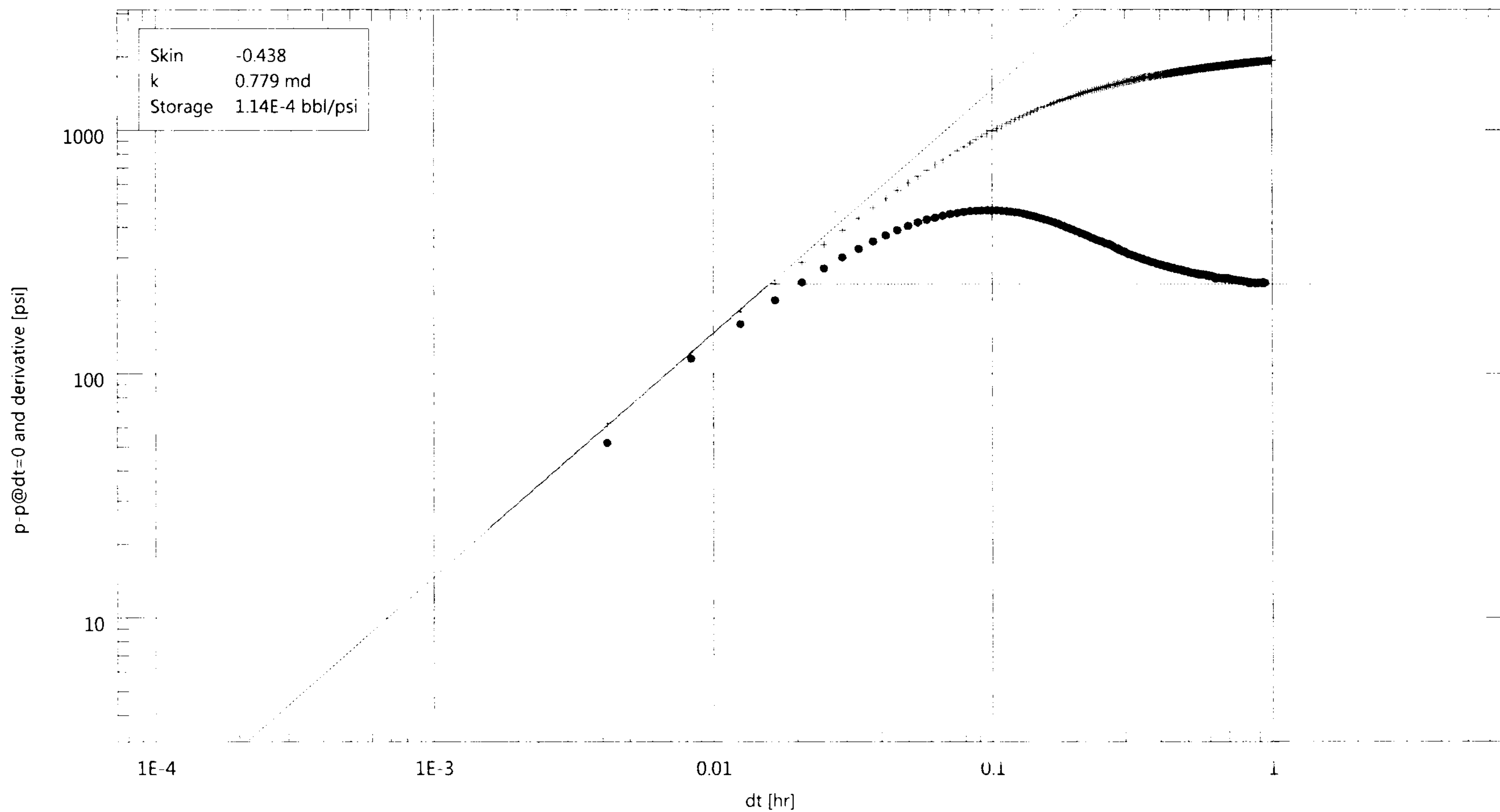


Log-Log plot

INITIAL SHUT-IN PERIOD

Company D.J. SIMMONS, INC.  
Well PINTO #1-7

Field PAPOOSE CANYON / DOLORES CO., COLORADO  
Test Name / # DST #2 (6255-6314 FT.; L. DESERT CREEK)



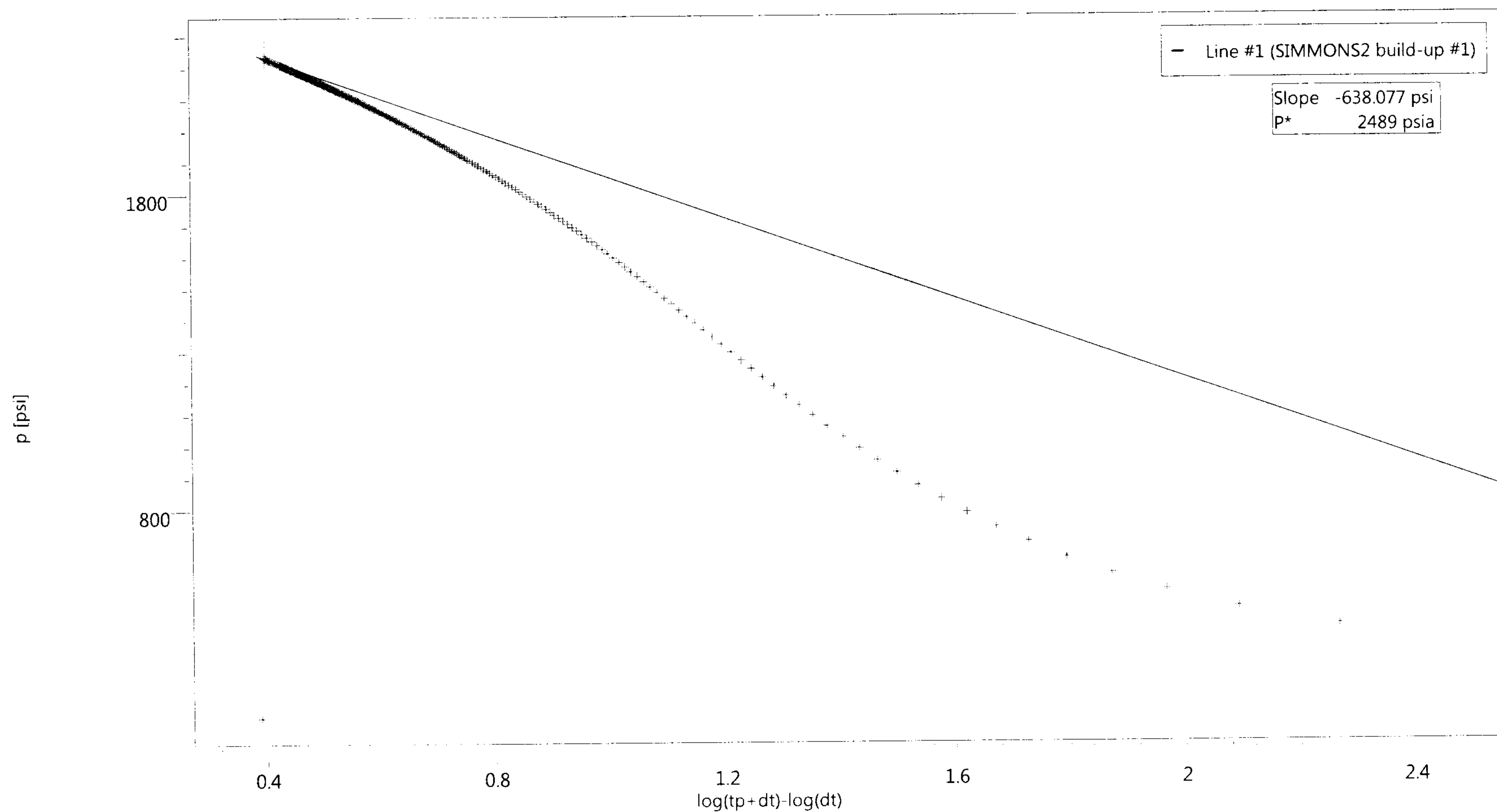


Horner plot

INITIAL SHUT-IN PERIOD

Company D.J. SIMMONS, INC.  
Well PINTO #1-7

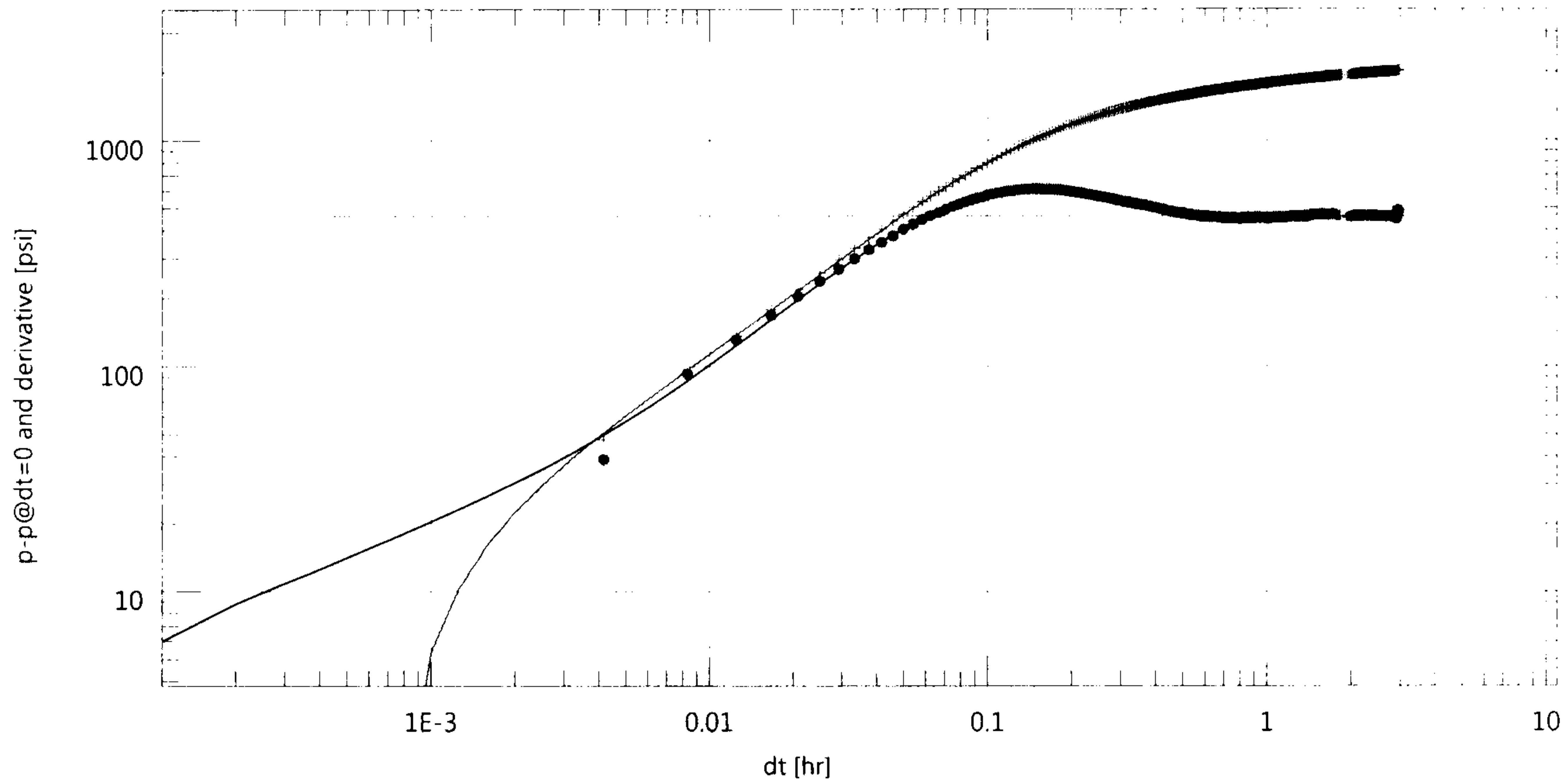
Field PAPOOSE CANYON / DOLORES CO., COLORADO  
Test Name / # DST #2 (6255-6314 FT.; L. DESERT CREEK)



TESTERS, INC.



	Log-Log plot	FINAL SHUT-IN PERIOD	
	Company D.J. SIMMONS, INC. Well PINTO #1-7	Field PAPOOSE CANYON / DOLORES CO., COL... Test Name / # DST #2 (6255-6314 FT.; L. DES RT CREEK)	



SIMMONS2 build-up #2

Rate	0 STB/D
Rate change	78.1532 STB/D
P@dt=0	258.095 psia
Pi	2480.54 psia
Smoothing	0.05

Selected Model

Model Option	Standard Model
Well	Vertical, Changing Storage (Fair)
Reservoir	Homogeneous
Boundary	Infinite

Model Parameters

Well & Wellbore parameters (PINTO #1-7)

C	3.18E-6 bbl/psi
Ci/Cf	4.7
delta_t	0.195 hr
Skin	-1.99

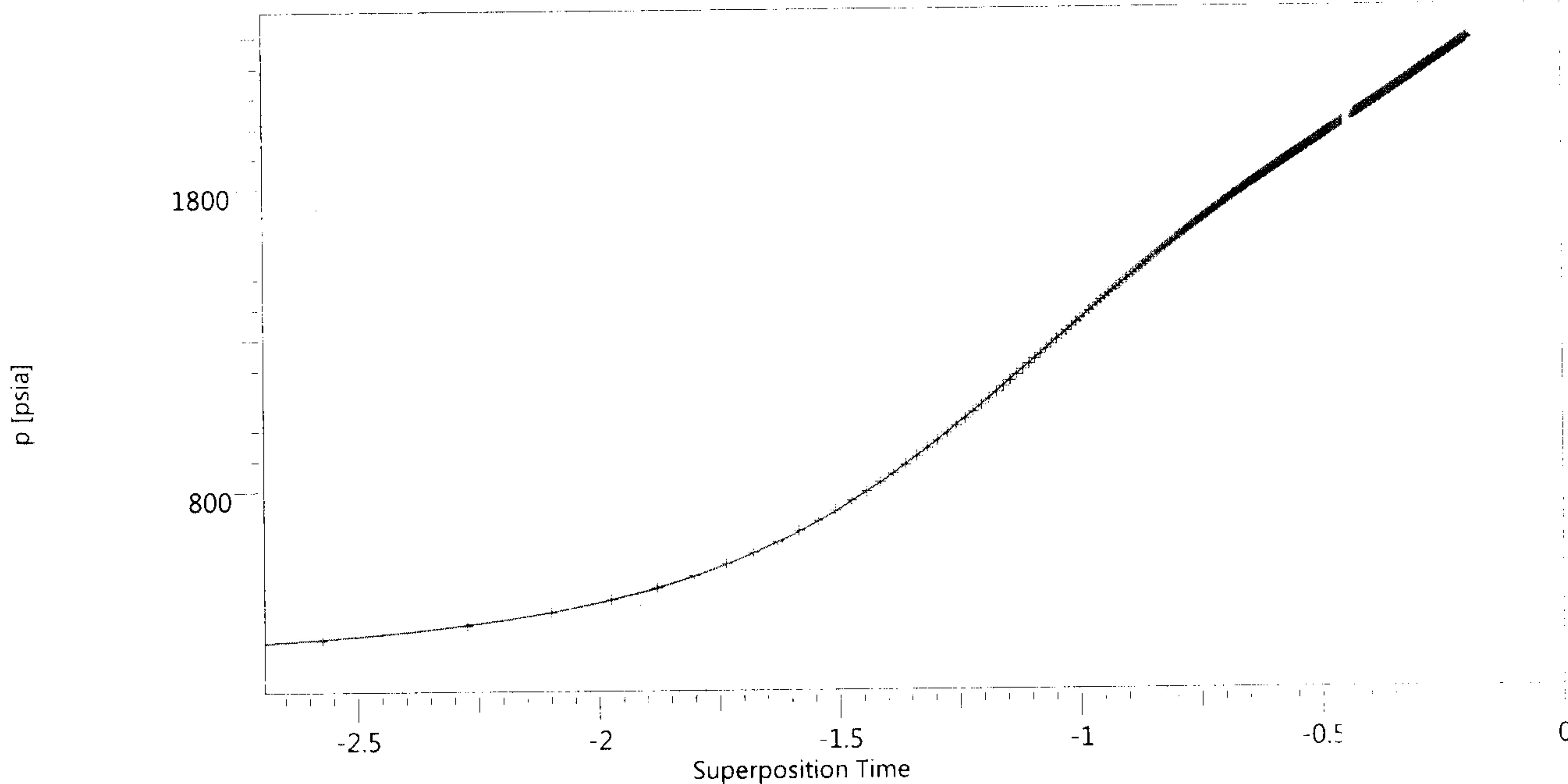
Reservoir & Boundary parameters

Pi	2480.54 psia
k.h	9.05 md.ft
k	0.823 md

Derived & Secondary Parameters

Rinv	45.2 ft
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	Semi-Log plot	FINAL SHUT-IN PERIOD	
	Company D.J. SIMMONS, INC. Well PINTO #1-7	Field PAPOOSE CANYON / DOLORIS CO., COL... Test Name / # DST #2 (6255-6314 FT.; L. DES RT CREEK)	



SIMMONS2 build-up #2

Rate 0 STB/D

Rate change 78.1532 STB/D

P@dt=0 258.095 psia

Pi 2480.54 psia

Smoothing 0.05

Selected Model

Model Option Standard Model

Well Vertical, Changing Storage (Fair)

Reservoir Homogeneous

Boundary Infinite

Model Parameters

Well & Wellbore parameters (PINTO #1-7)

C 3.18E-6 bbl/psi

Ci/Cf 4.7

delta\_t 0.195 hr

Skin -1.99

Reservoir & Boundary parameters

Pi 2480.54 psia

k.h 9.05 md.ft

k 0.823 md

Derived & Secondary Parameters

Rinv 45.2 ft