



HOBBS OCD

30-025-4149J

JUN 03 2015

RECEIVED

COMPANY : PRIMERO OPERATING, INC.
LEASE : GARRETT
WELL NO. : # 1
FIELD : SHIPP-STRAWN
COUNTY/STATE : LEA / NEW MEXICO

TEST DATE : 05/03/14
D.S.T. NO. : 2
TEST TKT. NO. : 27149
INVOICE NO. : 24972
ORDER NO. :

FORMATION : STRAWN LIME
INTERVAL (ft) : 11500 TO 11680
TOTAL DEPTH (ft) : 13184
ELEVATION (ft) :
HOLE SIZE (in) : 7.875
DRILL PIPE ID (in) : 3.82
DRILL COLLAR ID (in) : 2.25
DRILL COLLAR feet : 0
ANCHOR LENGTH (ft) : 180
TOOL LENGTH (ft) : 82
TOOL O.D. (in) : 5
PACKER SIZE (in) : 7.00

RECORDER DATA
AK-1KUSTER / STELLAR

TOP RECORDER: IN
RECORDER NO. : 9634
CAPACITY (psi) : 10000
DEPTH (ft) : 11507
CLOCK NO. : 9634
DURATION (hrs) : 99

BOTTOM RECORDER: OUT
RECORDER NO. : 9635
CAPACITY (psi) : 10000
DEPTH (ft) : 11508
CLOCK NO. : 9635
DURATION (hrs) : 99

MUD PROPERTIES

MUD TYPE : SALT / GEL
MUD WT. (#/gal) : 10.2

WATER LOSS (cc) : 22.0
FILTER CAKE (in) : 1/32
VISCOSITY (sec) : 54

CHLORIDE PPM : 160000
RESISTIVITY (ohm-m) : .0355

EQUIPMENT DATA

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

ROTARY JARS : YES
NO. OF PACKERS : 4
SAFETY JOINT : YES
CIRCULATING SUB : YES
REVERSED OUT : NO

MULTIFLOW : NO
MILEAGE : NO
OPERATOR TIME : YES
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 : 1:00 PM

TOTAL TEST TIME: 346

INITIAL FLOW : 39
SECOND FLOW : 60
THIRD FLOW :

INITIAL SHUT-IN: 60
SECOND SHUT-IN : 186
THIRD SHUT IN :

TEST TOOL OPERATOR: PAUL MYERS

JUL 13 2015

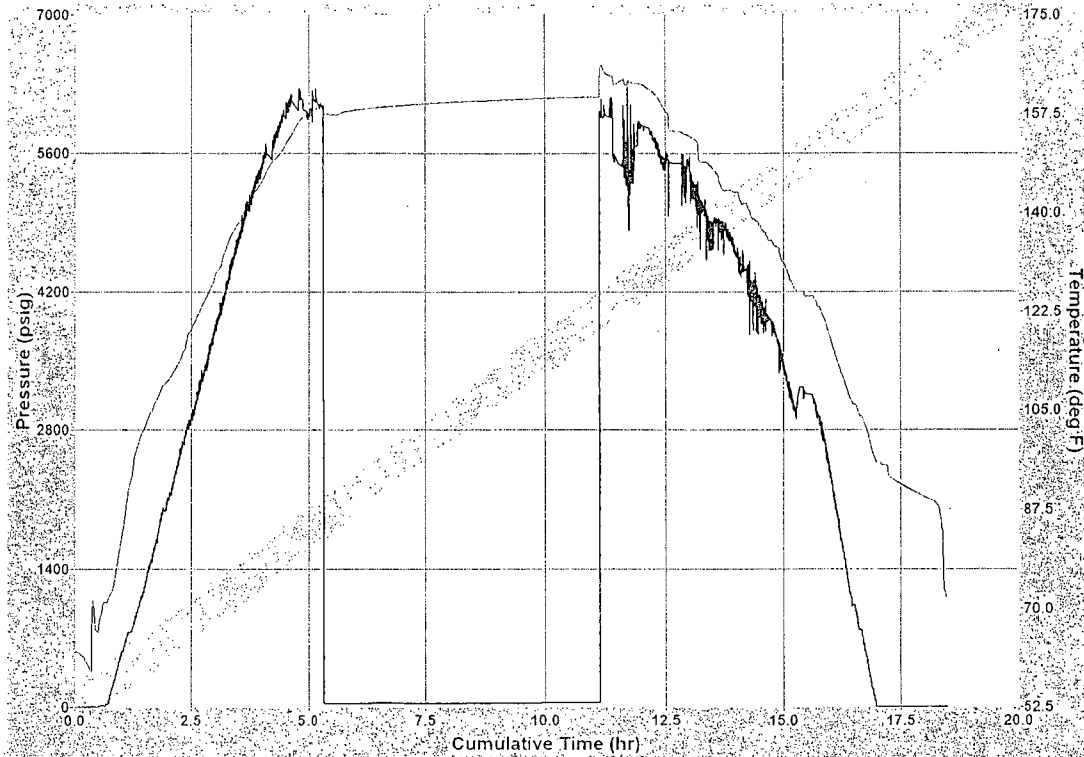
PRIMERO OPERATING, INC.



GARRETT # 1
D.S.T. NO. :2

	CORRECTED READING	FIELD READING
A INITIAL HYDROSTATIC:	6097 PSI	6097 PSI
B-1 INITIAL FIRST FLOW :	52 PSI	52 PSI
B-2 FINAL FIRST FLOW :	52 PSI	52 PSI
C FIRST SHUT-IN :	59 PSI	56 PSI
D-1 INITIAL SECOND FLOW:	56 PSI	50 PSI
D-2 FINAL SECOND FLOW :	49 PSI	49 PSI
E SECOND SHUT-IN :	58 PSI	58 PSI
H FINAL HYDROSTATIC :	5987 PSI	5987 PSI

RIG TESTERS, INC. RECORDER# 9635



PIPE RECOVERY

RECOVERY DATA
B.H. TEMP. (deg F) : 166

SAMPLE CHAMBER

40 FT. OF SLIGHTLY GAS CUT DRLG. MUD

45 LBS. OF PRESSURE
.02 CU. FT. OF GAS
2000 CC'S OF SLIGHTLY GAS CUT MUD

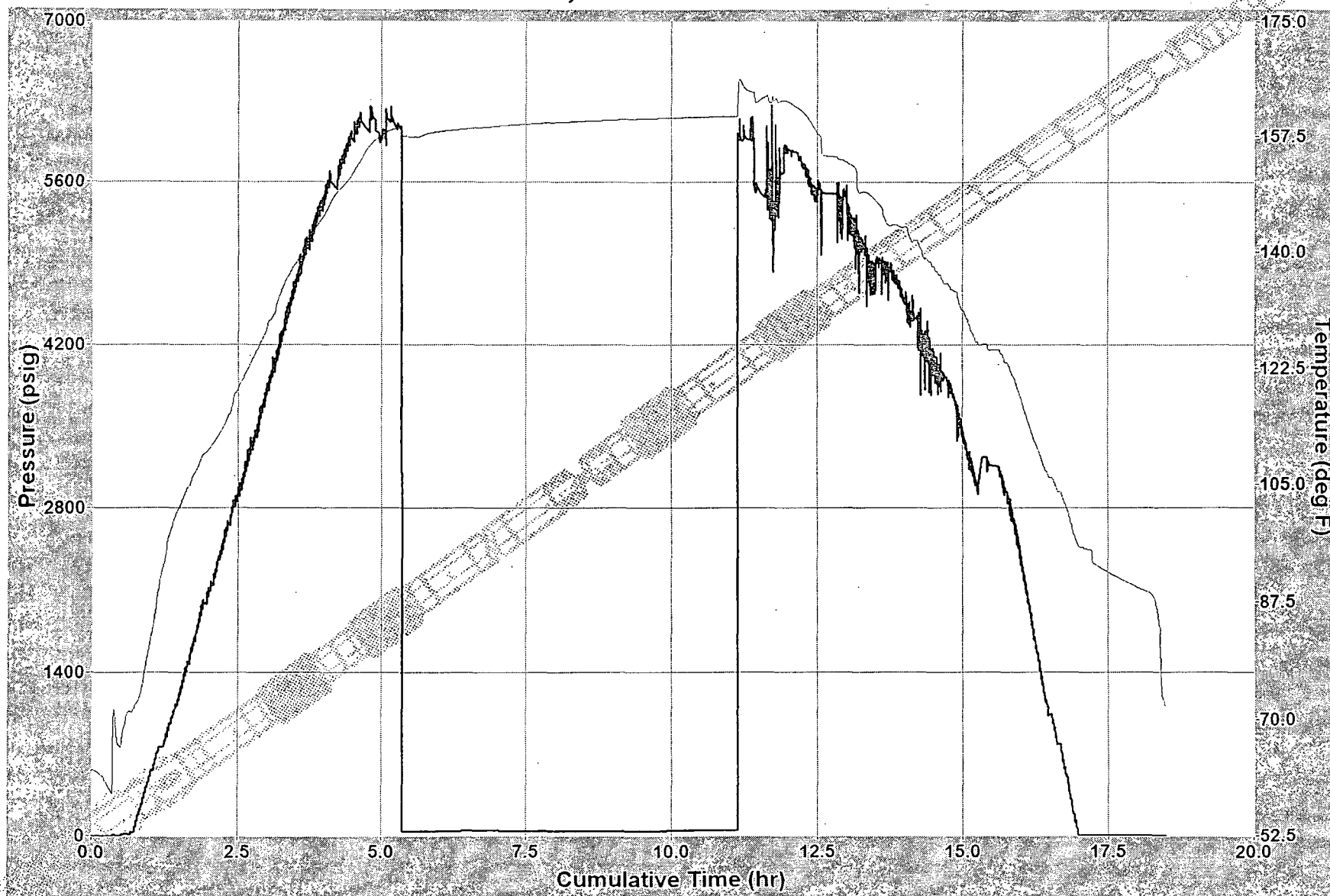
TEST REMARKS

TOOL OPENED WITH WEAK BLOW (1" IN WATER) & REMAINED THROUGHOUT THE 40 MIN. FIRST FLOW. REOPENED TOOL WITH NO BLOW & REMAINED THROUGHOUT THE 60 MIN. FINAL FLOW PERIOD.



Company Name PRIMERO OPERATING, INC.
Well Name GARRETT #1
Type of Test DST #2 (11,500 - 11,680 FT.; STRAWN LIME)
Date(s) of Test 5-3-14

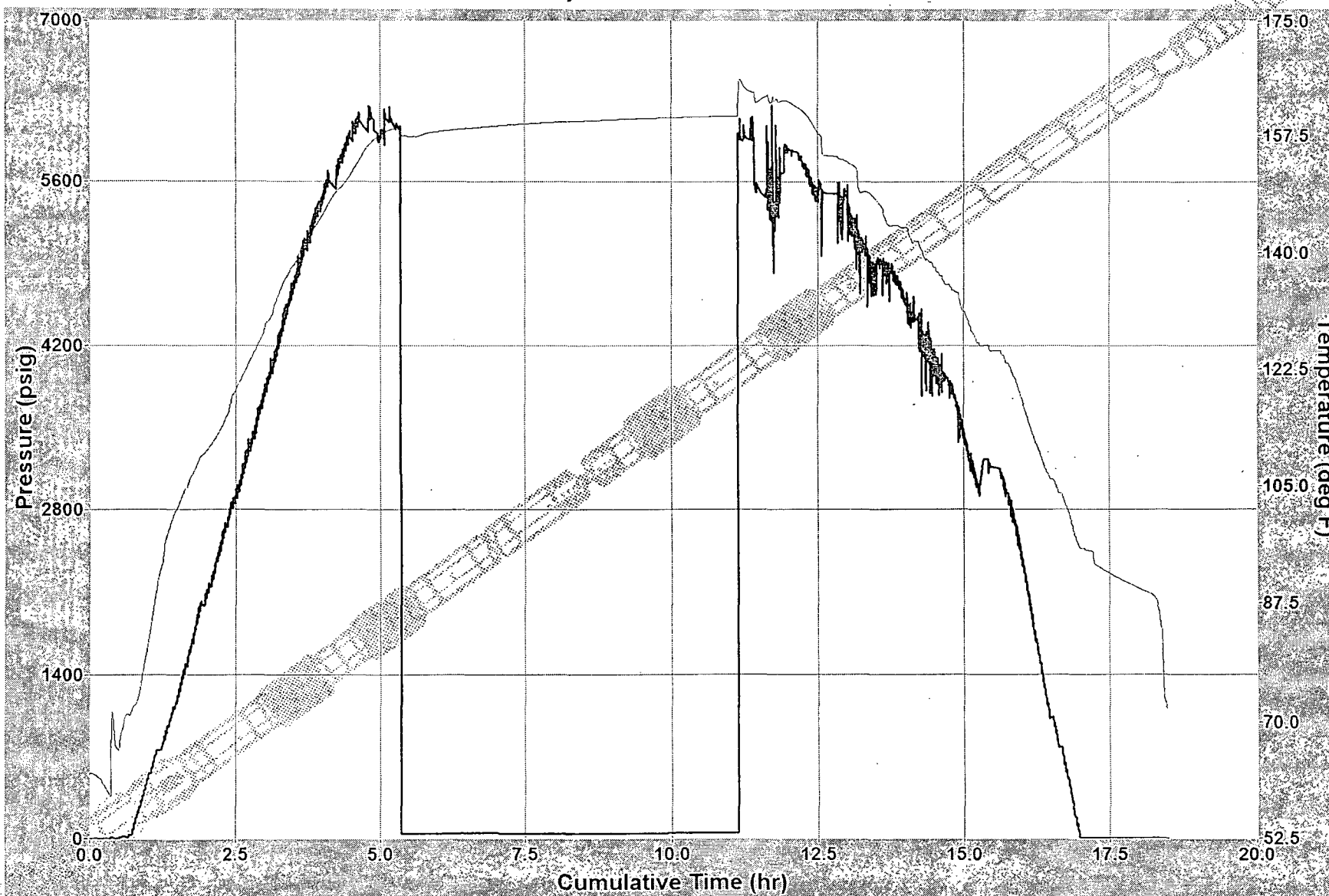
RIG TESTERS, INC. RECORDER# 9634





Company Name PRIMERO OPERATING, INC.
Well Name GARRETT #1
Type of Test DST #2 (11,500 - 11,680 FT.; STRAWN LIME)
Date(s) of Test 5-3-14

RIG TESTERS, INC. RECORDER# 9635





INCREMENTAL PRESSURE DATA

RECORDER NO : 9635

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 11508 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			52.90	.00
2.0	2.0			52.46	-.44
4.0	4.0			53.59	.69
6.0	6.0			53.70	.80
8.0	8.0			53.63	.73
10.0	10.0			53.24	.34
12.0	12.0			54.00	1.10
14.0	14.0			53.77	.87
16.0	16.0			53.81	.91
18.0	18.0			53.60	.70
20.0	20.0			53.41	.51
22.0	22.0			53.49	.59
24.0	24.0			53.20	.30
26.0	26.0			53.31	.41
28.0	28.0			53.31	.41
30.0	30.0			52.50	-.40
32.0	32.0			51.91	-.99
34.0	34.0			52.29	-.61
36.0	36.0			52.40	-.50
38.0	38.0			52.50	-.40
39.5	39.5			52.60	-.30
FIRST SHUT-IN					
39.5	39.5	.00	.000	52.60	.00
40.5	39.5	1.00	40.480	52.80	.20
41.5	39.5	2.00	20.740	52.90	.30
42.5	39.5	3.00	14.160	53.00	.40
43.5	39.5	4.00	10.870	53.29	.69
44.5	39.5	5.00	8.896	53.30	.70
45.5	39.5	6.00	7.580	53.40	.80
46.5	39.5	7.00	6.640	53.60	1.00
47.5	39.5	8.00	5.935	53.69	1.09
48.5	39.5	9.00	5.387	53.70	1.10
49.5	39.5	10.00	4.948	53.89	1.29
51.5	39.5	12.00	4.290	54.00	1.40
53.5	39.5	14.00	3.820	54.29	1.69
55.5	39.5	16.00	3.468	54.60	2.00
57.5	39.5	18.00	3.193	55.00	2.40
59.5	39.5	20.00	2.974	55.20	2.60
62.5	39.5	23.00	2.717	55.59	2.99
65.5	39.5	26.00	2.518	55.89	3.29
68.5	39.5	29.00	2.361	56.71	4.11
71.5	39.5	32.00	2.234	57.11	4.51
74.5	39.5	35.00	2.128	57.29	4.69
77.5	39.5	38.00	2.039	57.49	4.89



INCREMENTAL PRESSURE DATA

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FIRST SHUT-IN					
80.5	39.5	41.00	1.963	57.70	5.10
83.5	39.5	44.00	1.897	58.10	5.50
86.5	39.5	47.00	1.840	58.20	5.60
89.5	39.5	50.00	1.790	58.29	5.69
92.5	39.5	53.00	1.745	58.60	6.00
95.5	39.5	56.00	1.705	58.80	6.20
98.5	39.5	59.00	1.669	58.90	6.30
99.2	39.5	59.76	1.661	59.00	6.40
SECOND FLOW					
99.7	40.0			56.10	.00
102.7	43.0			51.40	-4.70
105.7	46.0			50.40	-5.70
108.7	49.0			50.50	-5.60
111.7	52.0			50.60	-5.50
114.7	55.0			50.60	-5.50
117.7	58.0			50.40	-5.70
120.7	61.0			50.40	-5.70
123.7	64.0			50.00	-6.10
126.7	67.0			50.10	-6.00
129.7	70.0			50.40	-5.70
132.7	73.0			50.50	-5.60
135.7	76.0			50.10	-6.00
138.7	79.0			50.10	-6.00
141.7	82.0			49.50	-6.60
144.7	85.0			50.10	-6.00
147.7	88.0			49.70	-6.40
150.7	91.0			49.70	-6.40
153.7	94.0			49.60	-6.50
156.7	97.0			49.60	-6.50
159.7	100.0			49.33	-6.77
160.0	100.3			49.40	-6.70
SECOND SHUT-IN					
160.0	100.3	.00	.000	49.40	.00
161.0	100.3	1.00	101.260	49.60	.20
162.0	100.3	2.00	51.130	49.60	.20
163.0	100.3	3.00	34.420	49.60	.20
164.0	100.3	4.00	26.065	49.69	.29
165.0	100.3	5.00	21.052	49.60	.20



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SECOND SHUT-IN					
166.0	100.3	6.00	17.710	49.80	.40
167.0	100.3	7.00	15.323	49.60	.20
168.0	100.3	8.00	13.533	49.70	.30
169.0	100.3	9.00	12.140	49.80	.40
170.0	100.3	10.00	11.026	49.89	.49
172.0	100.3	12.00	9.355	50.20	.80
174.0	100.3	14.00	8.161	50.20	.80
176.0	100.3	16.00	7.266	50.20	.80
178.0	100.3	18.00	6.570	50.20	.80
180.0	100.3	20.00	6.013	50.21	.81
183.0	100.3	23.00	5.359	50.41	1.01
186.0	100.3	26.00	4.856	50.60	1.20
189.0	100.3	29.00	4.457	50.80	1.40
195.0	100.3	35.00	3.865	51.00	1.60
200.0	100.3	40.00	3.507	51.50	2.10
205.0	100.3	45.00	3.228	51.90	2.50
210.0	100.3	50.00	3.005	52.30	2.90
215.0	100.3	55.00	2.823	52.10	2.70
220.0	100.3	60.00	2.671	52.30	2.90
225.0	100.3	65.00	2.542	52.60	3.20
230.0	100.3	70.00	2.432	53.00	3.60
235.0	100.3	75.00	2.337	53.60	4.20
240.0	100.3	80.00	2.253	53.90	4.50
245.0	100.3	85.00	2.180	54.40	5.00
250.0	100.3	90.00	2.114	54.30	4.90
255.0	100.3	95.00	2.055	54.41	5.01
260.0	100.3	100.00	2.003	54.69	5.29
265.0	100.3	105.00	1.955	54.90	5.50
270.0	100.3	110.00	1.911	55.20	5.80
275.0	100.3	115.00	1.872	55.40	6.00
280.0	100.3	120.00	1.836	55.70	6.30
285.0	100.3	125.00	1.802	55.80	6.40
290.0	100.3	130.00	1.771	56.00	6.60
295.0	100.3	135.00	1.743	56.20	6.80
300.0	100.3	140.00	1.716	56.50	7.10
305.0	100.3	145.00	1.691	56.70	7.30
310.0	100.3	150.00	1.668	57.00	7.60
315.0	100.3	155.00	1.647	57.10	7.70
320.0	100.3	160.00	1.627	57.30	7.90
325.0	100.3	165.00	1.608	57.50	8.10



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SECOND SHUT-IN					
330.0	100.3	170.00	1.590	57.60	8.20
335.0	100.3	175.00	1.573	57.70	8.30
340.0	100.3	180.00	1.557	57.90	8.50
345.0	100.3	185.00	1.542	58.10	8.70
346.5	100.3	186.48	1.538	58.20	8.80

REMARKS

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

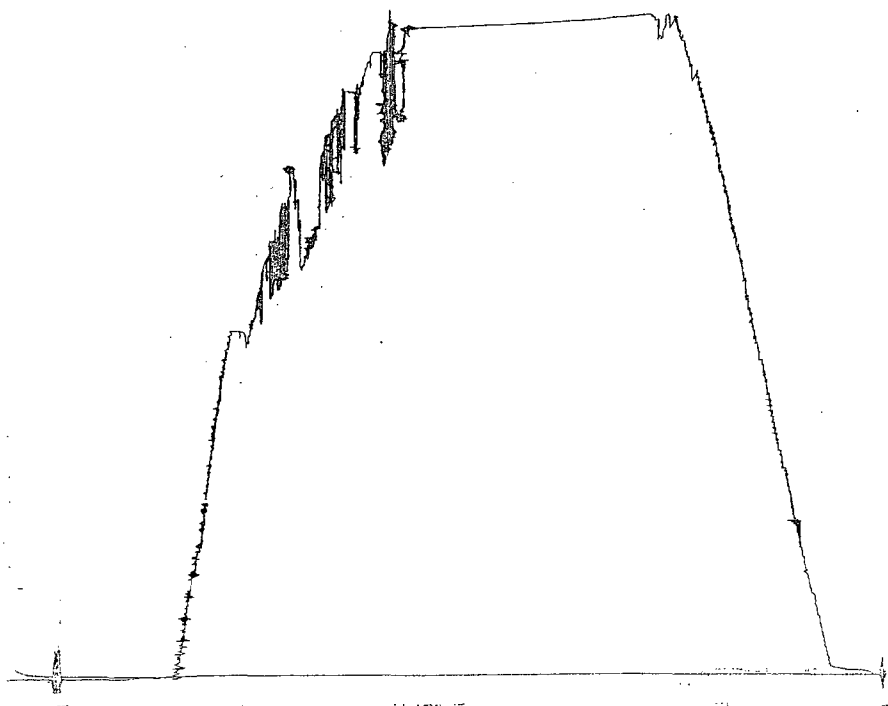
TKT-27149

REC-16550

WT-7350

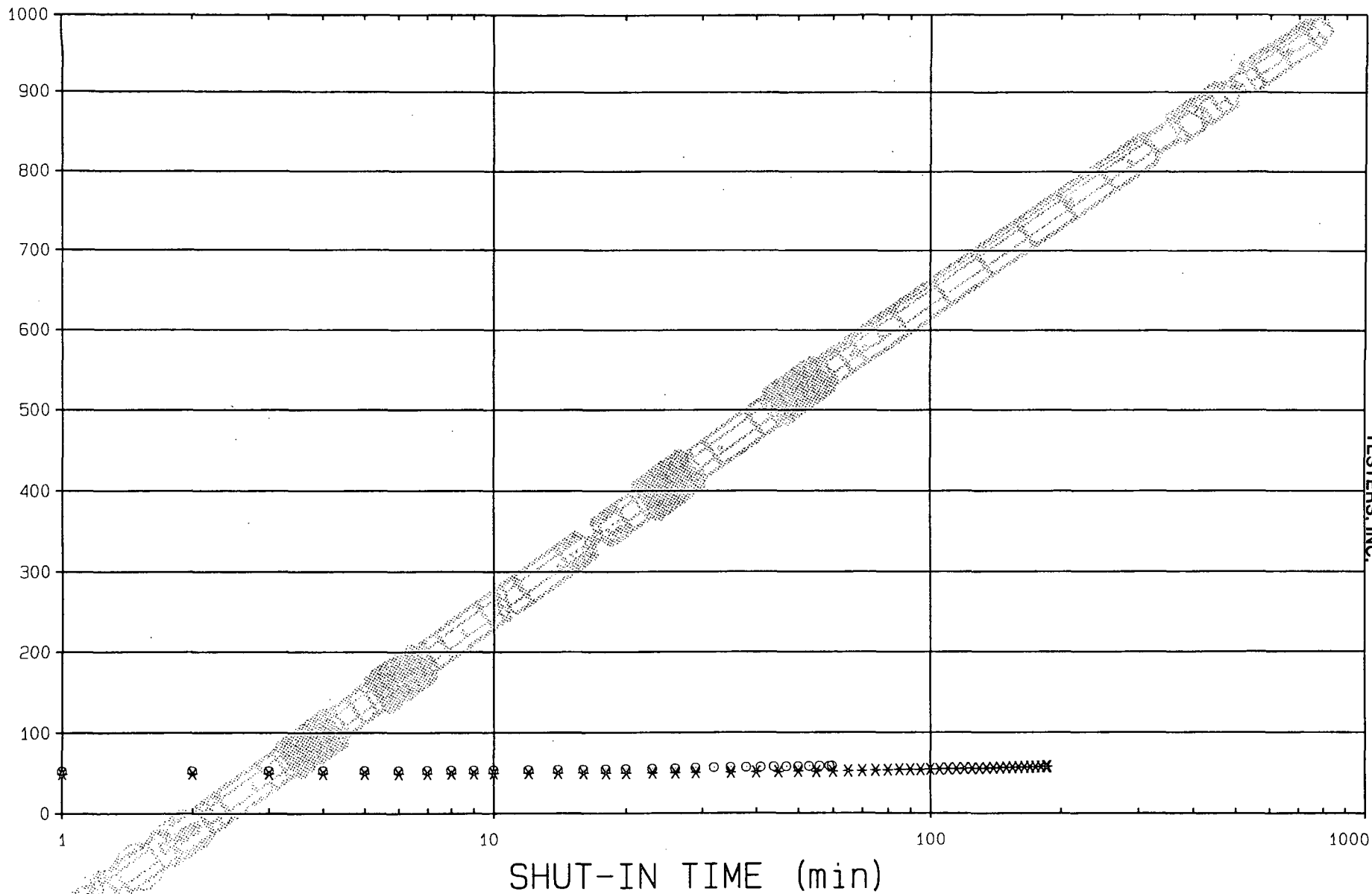
AK-1 KUSTER 24 HR. CLOCK

HOOKWALL STRADDLE TEST: BLANK-OFF CHART



PRESSURE TIME

PRESSURE (psig)



PRIMERO OPERATING, INC.

GARRETT # 1

○ FIRST SHUT-IN

× SECOND SHUT-IN



	Analysis comments	FINAL SHUT-IN PERIOD	
	Company PRIMERO OPERATING, INC. Well GARRETT #1	Field SHIPP-STRAWN Test Name / # DST #2 (11,500 - 11,680 FT.; STRAWN LIM...	

THE DERIVATIVES INDICATE COMPLETE DOMINATION OF WELLBORE STORAGE EFFECT ON BOTH SHUT-IN PERIODS. ANY CALCULATIONS (EXTRAPOLATIONS PERMEABILITY & SKIN) UNDER THESE CONDITIONS ARE AMBIGUOUS AND UNRELIABLE.

THE FIXED PARAMETERS USED WERE AN EST. 8% POROSITY, 30 FT. OF NET PAY AND A FINAL PRODUCTION RATE OF 5 BBLS. OF FLUID PER DAY FOR THE FINAL FLOW PERIOD. * THE OVERALL TEST INDICATES A RESERVOIR WITH LOW POROSITY & VERY LOW PERMEABILITY.



Main results		FINAL SHUT-IN PERIOD
Company PRIMERO OPERATING, INC. Well GARRETT #1		Field SHIPP-STRAWN Test Name / # DST #2 (11,500 - 11,680 FT.; STRAWN LIM...
Test date / time 5-3-14 Formation interval 11,500-11,680 FT.; STRAWN LIME Perforated interval Gauge type / # STELLAR# 9635 Gauge depth Analyzed by Analysis date / time TEST TYPE Standard Porosity Phi (%) 8 Well Radius rw 0.328125 ft Pay Zone h 30 ft Form. compr. 3E-6 psi-1 Water Salt (ppm) 10000 So 0.8 Sg 0 Sw 0.2 Reservoir T 166 °F Reservoir P 4672 psia Fluid type Oil Volume Factor B 1.23732 B/STB Viscosity 0.792283 cp Total Compr. ct 9.76523E-6 psi-1 Derived & Secondary Parameters		



History plot

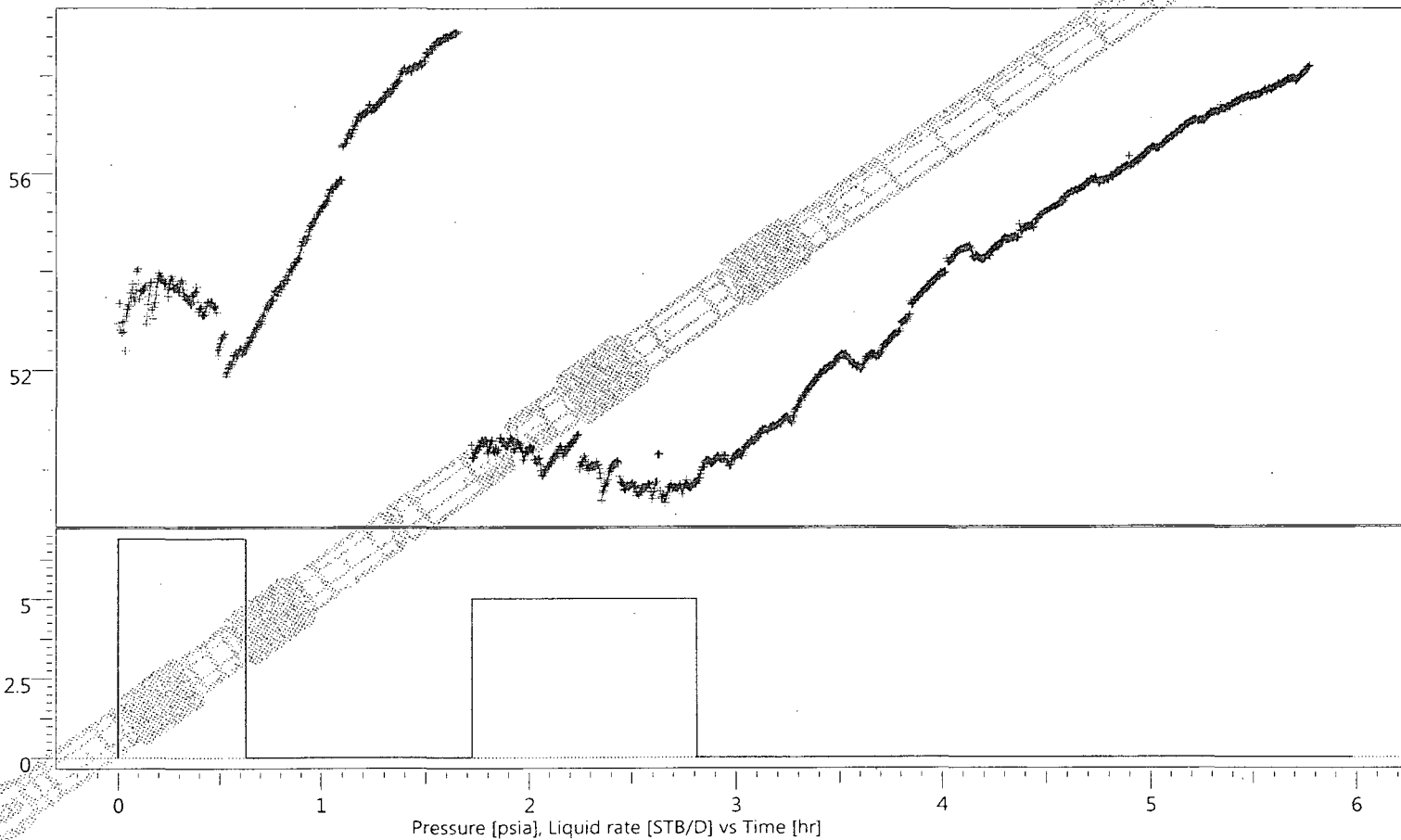
Analysis

Company PRIMERO OPERATING, INC.
Well GARRETT #1

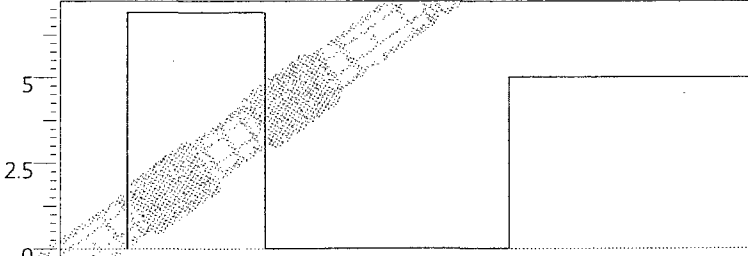
Field SHIPP-STRAWN
Test Name / # DST #2 (11,500' - 11,680 FT.; STRAWN LIME)



[psia]



[STB/D]



Pressure [psia], Liquid rate [STB/D] vs Time [hr]



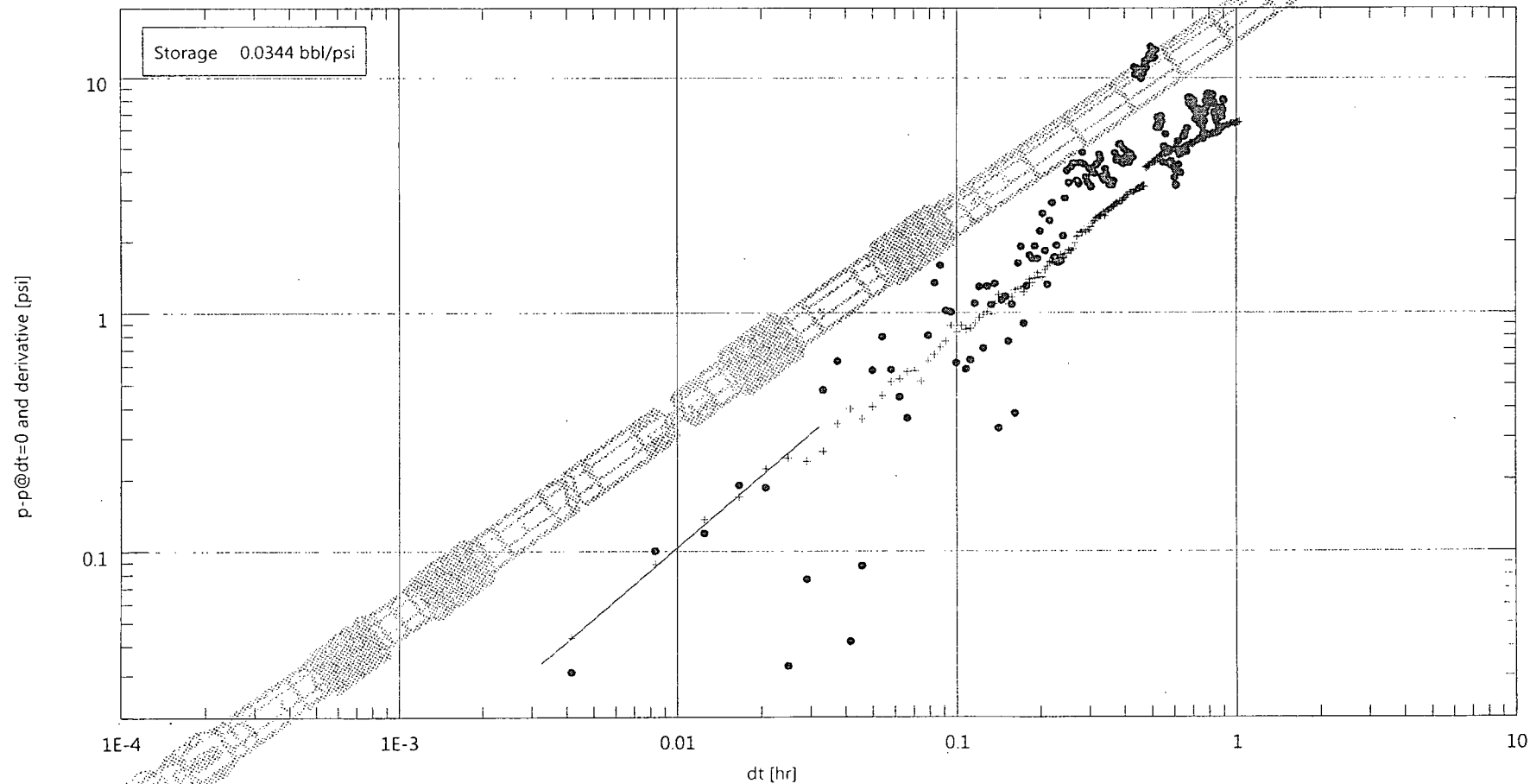


Log-Log plot

INITIAL SHUT-IN PERIOD

Company PRIMERO OPERATING, INC.
Well GARRETT #1

Field SHIPP-STRAWN
Test Name / # DST #2 (11,500 - 11,680 FT.; STRAWN LIME)



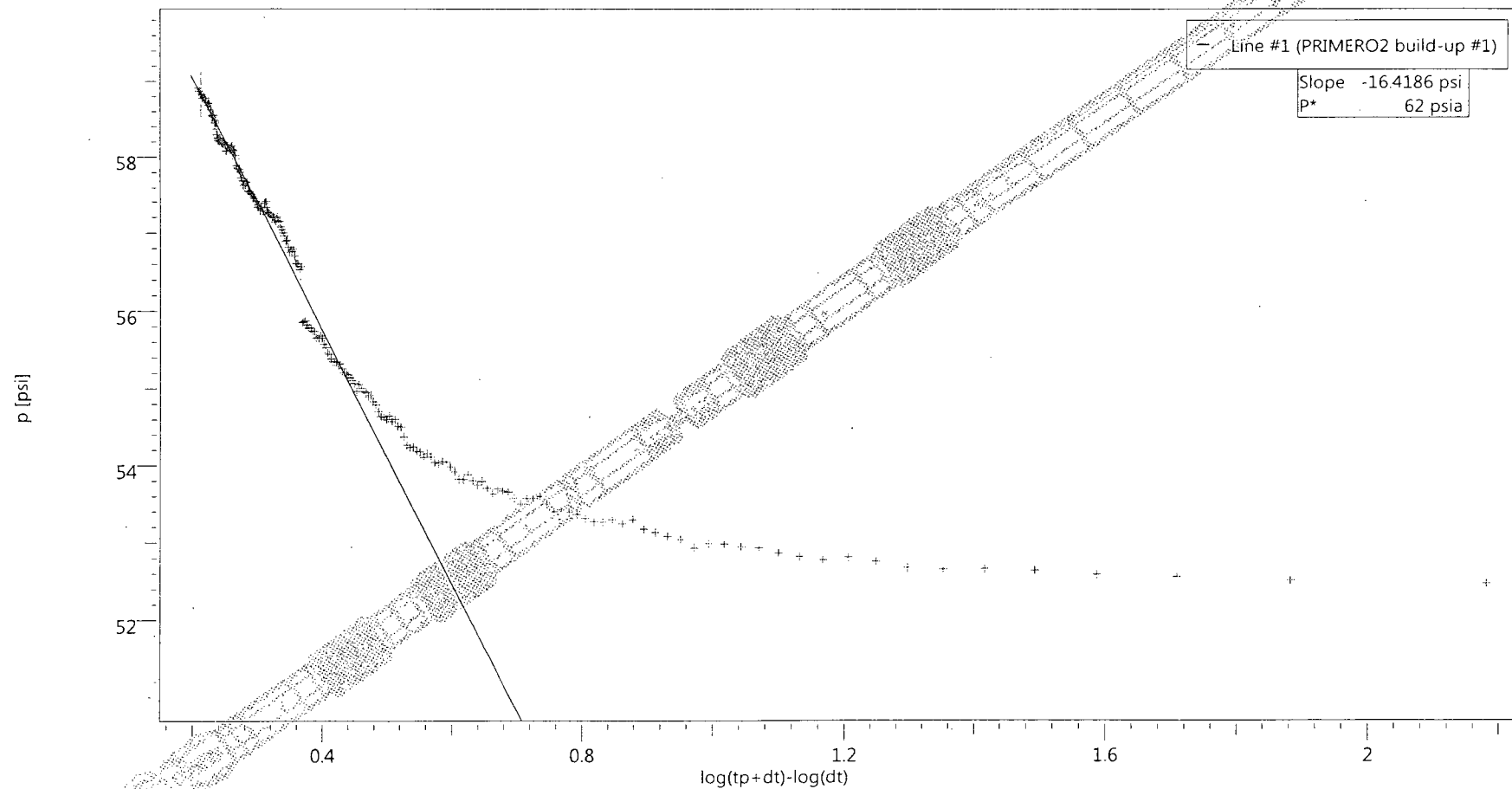


Hörner plot

INITIAL SHUT-IN PERIOD

Company PRIMERO OPERATING, INC.
Well GARRETT #1

Field SHIPP-STRAWN
Test Name / # DST #2 (11,500 - 11,680 FT.; STRAWN LIME)



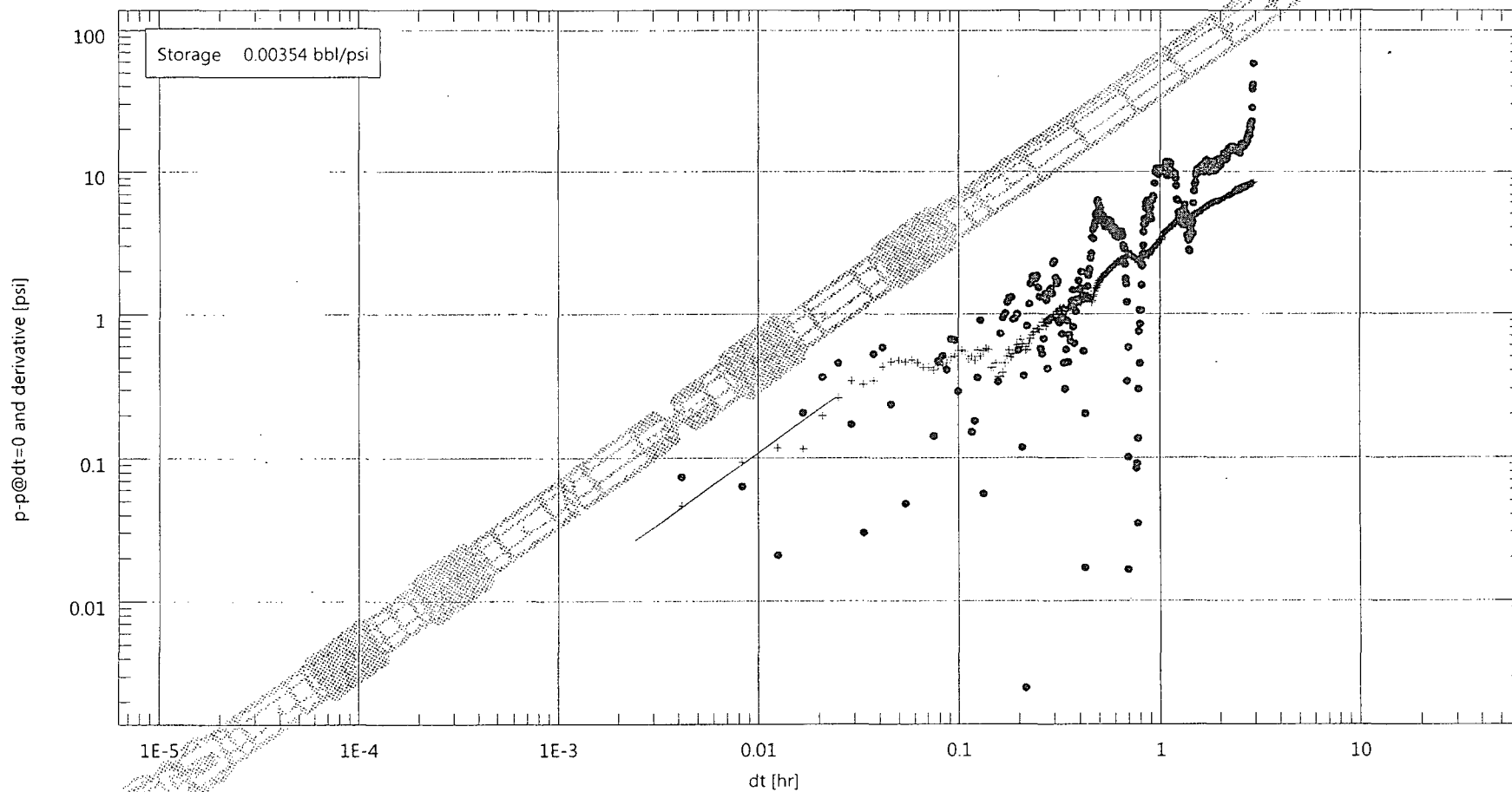


Log-Log plot

FINAL SHUT-IN PERIOD

Company PRIMERO OPERATING, INC.
Well GARRETT #1

Field SHIPP-STRAWN
Test Name / # DST #2 (11,500 - 11,680 FT.; STRAWN LIME)





Horner plot

FINAL SHUT-IN PERIOD

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