

Initial Closed In Time 30 Minutes			Date 4-6-59		LOCATION 19-20S-21W
Tool Open Flow Period 6-60 Minutes			Ticket No. 187787		
Final Closed In Time 30 Minutes			HOWCO DISTRICT Hays		
Depth Top Gauge 4301 Ft.			Kind of Job Open Hole		
BT. P.R.D. No 397		12 Hr. Clock		CONTRACTOR LEBEN DRILLING INC.	
Pressure Readings Field		Office Corrected		HOLE & TOOL DATA	
Initial Hydro Mud Pressure 2343		2324		Elevation 2338 D.F. Top Packer Depth 4300'	
Initial Closed in Pres. 768		772		Total Depth 4360' Bottom Packer Depth -	
Initial Flow Pres. 13		42		Casing or Hole Size 7 7/8" Size & Type Wall Packer 6 3/4" ESWP	
Final Flow Pres. 13		22-37		Liner or Rathole Size 7 7/8" Size Bottom Choke 5/8"	
Final Closed in Pres. 173		190		Casing Perforations Top Bottom Size Surface Choke 1 1/4"	
Final Hydro Mud Pressure 2343		2303		Interval Tested 4300-4360' ID & Length Air Chamber -	
Depth Center Gauge 4356 Ft.		Blanked Off yes		Formation Tested - ID & Length Drill Collars -	
BT. P.R.D. No 1872		8 Hr. Clock		Est. Gauge Depth Temp. Calc. 100 F° Size Drill Pipe 4 1/2" API FH	
Pressure Readings Field		Office Corrected		MUD DATA Weight 9.9 Viscosity 46	
Initial Hydro Mud Pressure				All depths measured from KELLY BUSHING No...Folders Reproduced 15	
Initial Closed in Pres.				REMARKS: Set opened tool and took a 6 Minute	
Initial Flow Pres.				Initial flow. Rotated tool for a 30 Minute	
Final Flow Pres.				Initial closed in pressure. Tool opened	
Final Closed in Pres.				with a weak blow for 15 minutes then died.	
Final Hydro Mud Pressure					
Depth Bottom Gauge Ft.		Blanked Off			
BT. P.R.D. No		Hr. Clock			
Pressure Readings Field		Office Corrected			
Initial Hydro Mud Pressure					
Initial Closed in Pres.				Recovered 50 Feet of very slightly oil cut mud	
Initial Flow Pres.				Recovered Feet of	
Final Flow Pres.				Recovered Feet of	
Final Closed in Pres.				Recovered Feet of	
Final Hydro Mud Pressure				Witnessed By	
Amount-Type of Cushion -				Tester R.C.Kuhn	

BORDENO

LEASE NAME

WELL NO. 1

TEST NO. 1

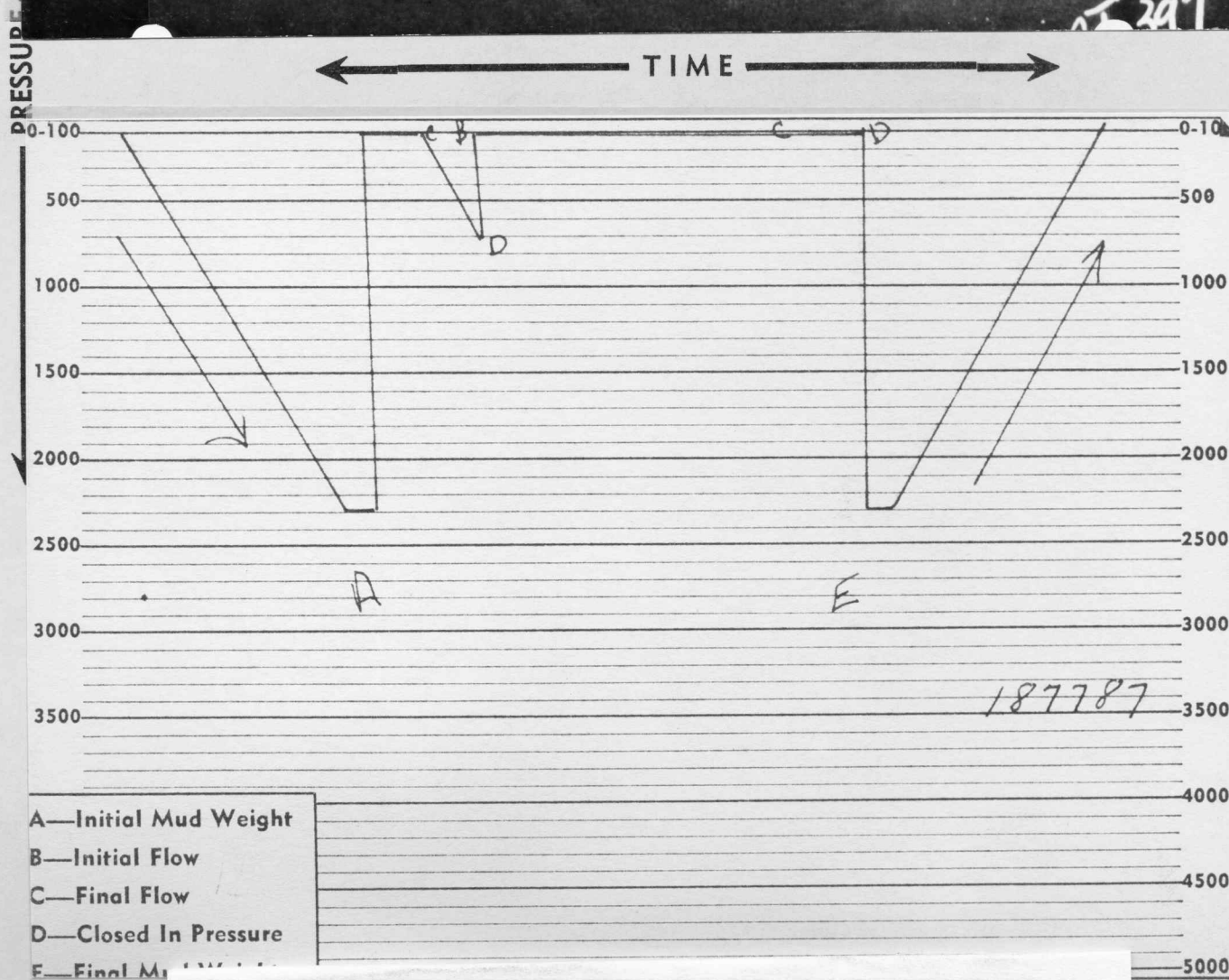
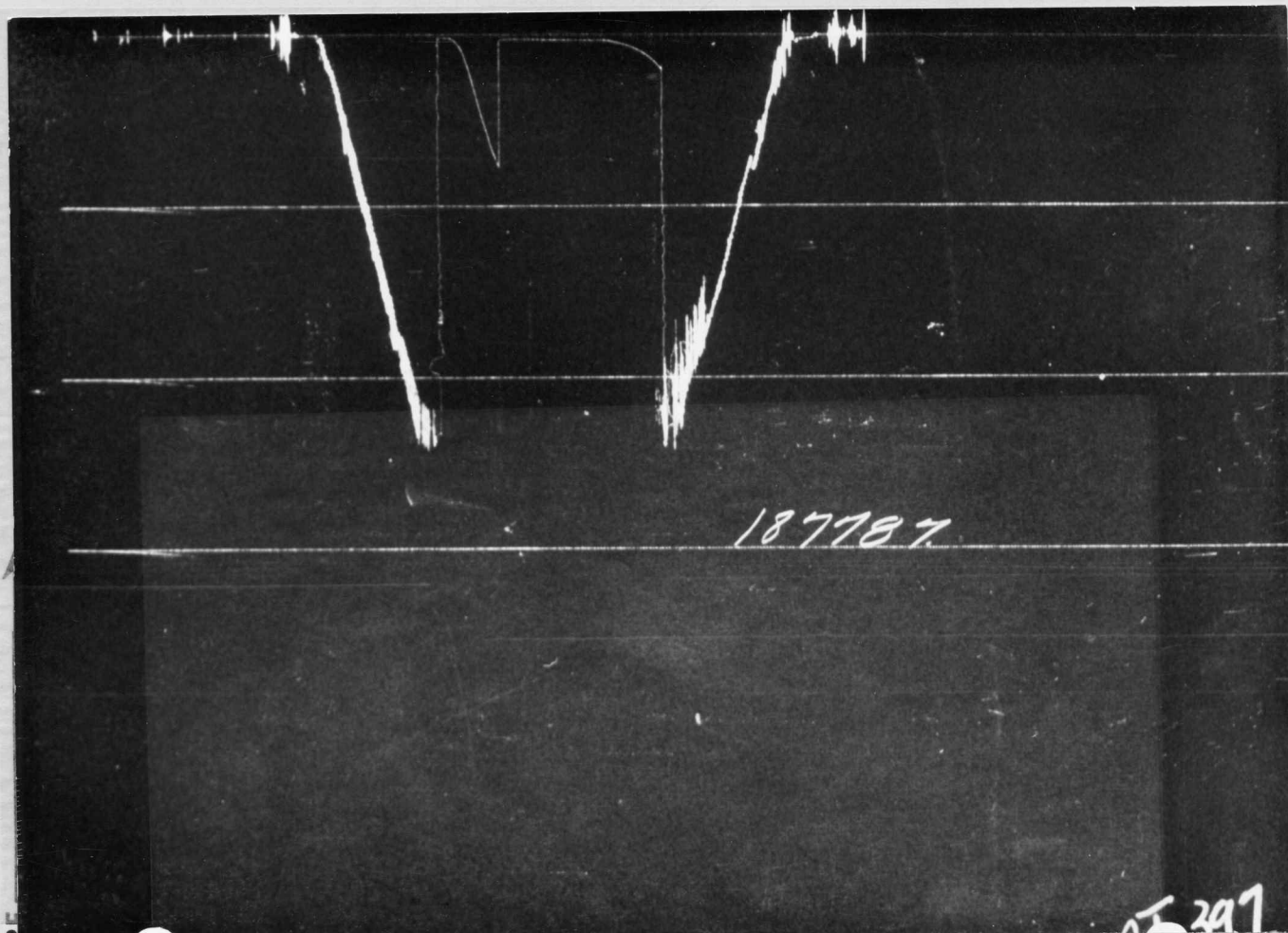
OSAGE AND ARNETT

LEASE OWNER

WICHITA

OWNERS DISTRICT

7-20-24W



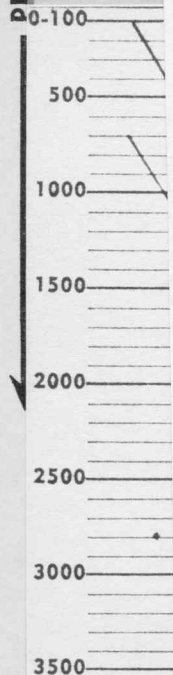
OSAGE AND ARTNELL
BORDENO LEASE
WELL 1-TEST 1
Ticket # 187787

INITIAL FLOW

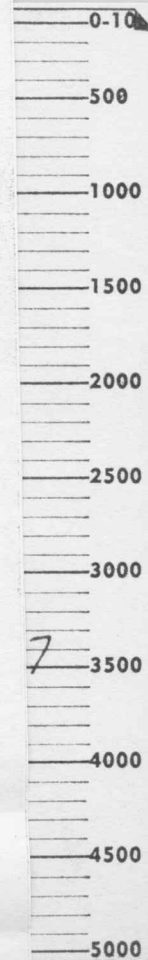
	TIME DEFL. .000 0.000	PSI TEMP. CORR. 25
P0	0.000	25
P1	.009	22
P2	.018	22
P3	.027	22
P4	.036	22
P5	.045	22

1.12 Minute Interval

PRESSURE



A—Initial A
B—Initial F
C—Final Fl
D—Closed I
E—Final Ma



Company OSAGE AND ARTNELL

Date

4-6-59Lease BORDENOWell No. 1Test No. 1Ticket No. 187787

	Time	PSI
Initial Hydro Mud Pressure		2324
Initial Closed In Pressure	30 Minutes	772
Initial Flow		42
Final Flow	6 Minutes 60 Minutes	22-37
Final Closed In Pressure	30 Minutes	190
Final Hydro Mud Pressure		2303

Total Depth 4360'Packer Depth 4300'BT No. 397 Depth 4301'12 Hr. Clock No. 1736Temperature Corrected to Calc. 100 ° F

	Initial CIP		Flow Pressure		Final CIP	
	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.
P0	.000	22	.000	42	.000	37
P1	.020	39	.109	30	.0215	45
P2	.040	83	.218	34	.043	52
P3	.060	139	.327	36	.0645	61
P4	.080	231	.436	37	.086	71
P5	.100	333			.1075	85
P6	.120	444			.129	99
P7	.140	545			.1505	120
P8	.160	628			.172	141
P9	.180	714			.1935	172
P10	.200	772			.215	190
	3 Minute Intervals		15 Minute Intervals		3 Minute Intervals	

Remarks:

A—Initial M
B—Initial F
C—Final F
D—Closed I
E—Final M

0-100

500

1000

1500

2000

2500

3000

3500

4000

4500

5000

Initial Closed In Time	30	Minutes		Date	4-7-59	
Tool Open Flow Period	5-90	Minutes		Ticket No.	187788	
Final Closed In Time	45	Minutes		HOWCO DISTRICT	HAYS, KANSAS	
Depth Top Gauge	4354'	Ft.	Blanked Off	NO	Kind of Job	OPEN HOLE
BT. P.R.D. No	397		12	Hr. Clock	CONTRACTOR LEHEN DRILLING COMPANY	
Pressure Readings	Field		Office Corrected		HOLE & TOOL DATA	
Initial Hydro Mud Pressure	2373		2345		Elevation	2338 DF
Initial Closed in Pres.	342		345		Total Depth	4440'
Initial Flow Pres.	13		36		Casing or Hole Size	7 7/8"
Final Flow Pres.	13		22-27		Liner or Rathole Size	7 7/8"
Final Closed in Pres.	115		111		Casing Perforations	Top Bottom
Final Hydro Mud Pressure	2373		2332		Interval Tested	4352' to 4440'
Depth Center Gauge		Ft.	Blanked Off		Formation Tested	-
BT. P.R.D. No				Hr. Clock	Est. Gauge Depth Temp.	106 F°
Pressure Readings	Field		Office Corrected		MUD DATA Weight	9.9
Initial Hydro Mud Pressure					All depths measured from	KELLY BUSHING
Initial Closed in Pres.					No. Folders Reproduced	15
Initial Flow Pres.					REMARKS: Set packer, opened tool 2:25 PM	
Final Flow Pres.					and received a weak blow for 5 minute	
Final Closed in Pres.					first flow pressure. Rotated tool	
Final Hydro Mud Pressure					closed for a 30 minute Initial Closed	
Depth Bottom Gauge	4437'	Ft.	Blanked Off	YES	in Pressure. Tool opened with a weak	
BT. P.R.D. No	1872		8	Hr. Clock	blow dead in 58 minutes.	
Pressure Readings	Field		Office Corrected			
Initial Hydro Mud Pressure						
Initial Closed in Pres.					Recovered	31 Feet of Drilling fluid
Initial Flow Pres.					Recovered	Feet of
Final Flow Pres.					Recovered	Feet of
Final Closed in Pres.					Recovered	Feet of
Final Hydro Mud Pressure					Witnessed By Virgil E. Spradlin	
Amount-Type of Cushion	NONE				Tester R.C. KUHN	

LOCATION 19 - NW - SE
20S - 24W

FIELD

WILDCAT

COUNTY NESS

STATE KANSAS

LEASE NAME

WELL NO.

TEST NO.

LEASE OWNER

OWNERS DISTRICT

BORDENO

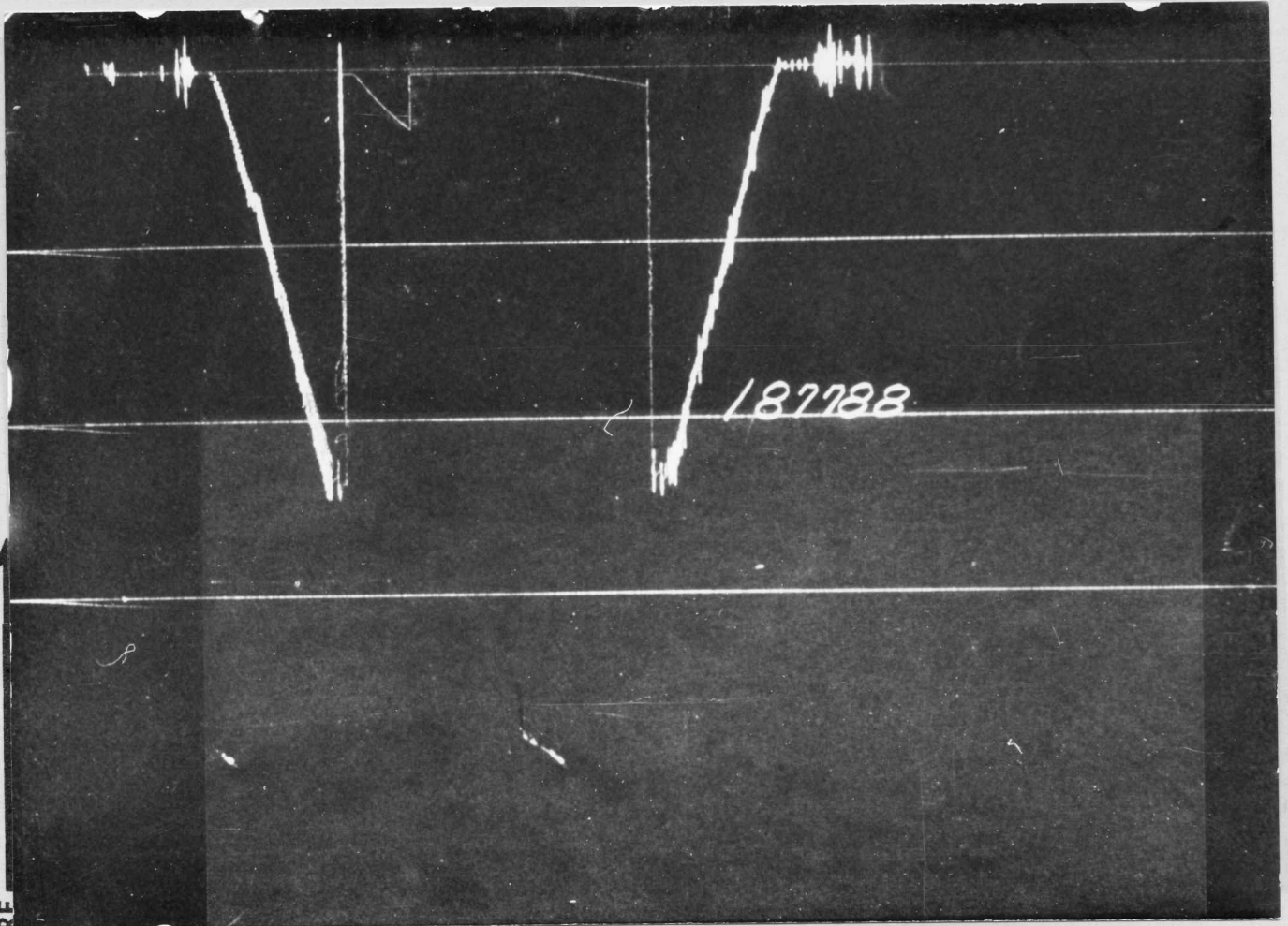
1

2

OSAGE AND ARTNELL

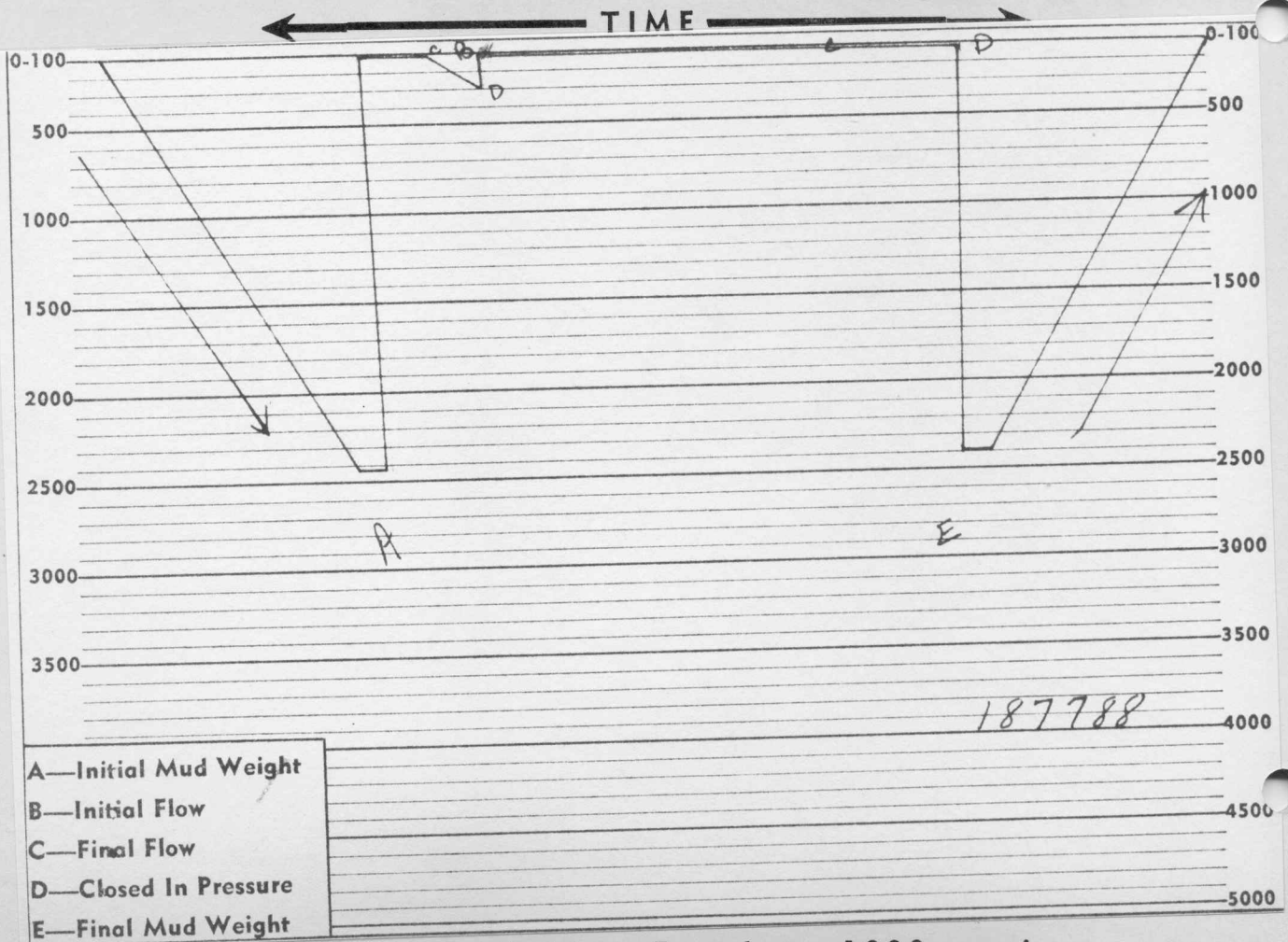
WICHITA

9-20-24W



↑
PRESSURE
↓

← TIME →



Each Horizontal Line Equal to 1000 p.s.i.

OSAGE AND ARTNELL
 BORDENO LEASE
 WELL # 1 TEST # 2
 TICKET # 187788 B.T. # 397

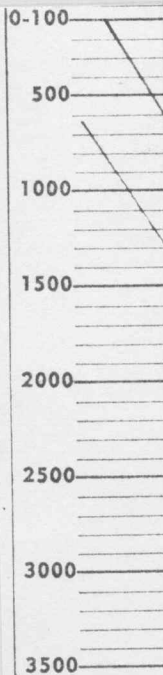
	FIRST FLOW PRESSURE	
	TIME	PSI
	DEFL.	TEMP.
	.000"	CORR.

P-0	.000	24
P-1	.010	22
P-2	.020	22
P-3	.030	22
P-4	.040	22
P-5	.050	22

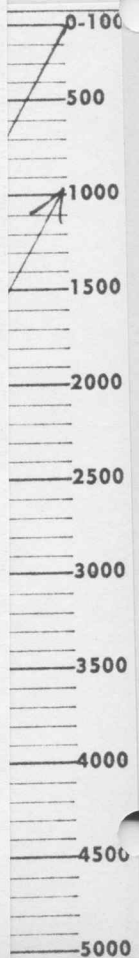
* MINUTE INTERVALS

* B.T. Chart time and time given
 on data sheet does not coincide,
 cut up in 5 equal intervals of
 no time value.

PRESSURE



A—Initial A
 B—Initial F
 C—Final FI
 D—Closed
 E—Final M



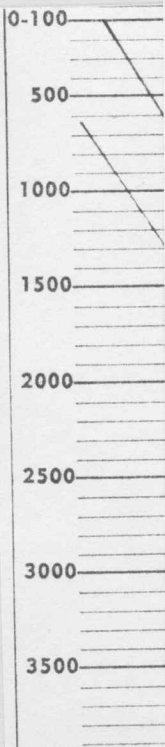
187788

Company OSAGE AND ARTNELL Date 4-7-59 15
 Lease BORDENO Well No. 1 Test No. 2 Ticket No. 187788

	Time	PSI
Initial Hydro Mud Pressure		2345
Initial Closed In Pressure	30 Min.	345
Initial Flow		36
Final Flow	5 Min. 90 Min.	22-27
Final Closed In Pressure	45 Min.	111
Final Hydro Mud Pressure		2332

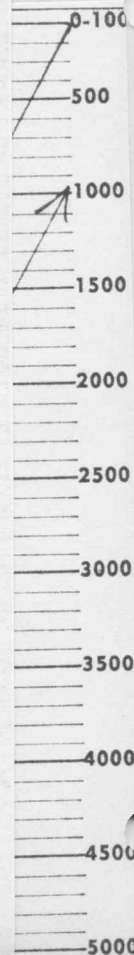
Total Depth 4440'
 Packer Depth 4346'-4352'
 ST No. 397 Depth 4354'
12 Hr. Clock No. 1736
 Temperature Corrected to 106 ° F

PRESSURE



A—Initial A
 B—Initial F
 C—Final FI
 D—Closed
 E—Final M

	Initial CIP		Flow Pressure		Final CIP	
	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.
P0	.000	22	.000	36	.000	27
P1	.0225	52	.104	24	.0315	34
P2	.045	92	.208	24	.063	40
P3	.0675	132	.312	24	.0945	47
P4	.090	167	.416	25	.126	56
P5	.1125	201	.520	25	.1575	65
P6	.135	235	.624	27	.189	72
P7	.1575	265			.2205	83
P8	.180	293			.252	92
P9	.2025	320			.2835	102
P10	.225	345			.315	111
	3 Minute Intervals		15 Minute Intervals		4.5 Minute Intervals	



Remarks:



Initial Closed In Time 30 Minutes				Date 4-9-59	
Tool Open Flow Period 6-75 Minutes				Ticket No. 187789	
Final Closed In Time 40 Minutes				HOWCO DISTRICT Hays	
Depth Top Gauge 4434 Ft.				Kind of Job Open Hole	
Blanked Off No		CONTRACTOR Leben Drilling Co.			
BT. P.R.D. No 397 12 Hr. Clock		HOLE & TOOL DATA			
Pressure Readings Field Office Corrected					
Initial Hydro Mud Pressure 2403 2366		Elevation 2338' DF		Top Packer Depth 4426'	
Initial Closed in Pres. 1365 1369		Total Depth 4450'		Bottom Packer Depth 4432'	
Initial Flow Pres. 45 52		Casing or Hole Size 7 7/8"		Size & Type Wall Packer 6 3/4"ESWP	
Final Flow Pres. 72 30-87		Liner or Rathole Size 7 7/8"		Size Bottom Choke 5/8"	
Final Closed in Pres. 1365 1356		Casing Perforations Top Bottom		Size Surface Choke 1" x 1/4"	
Final Hydro Mud Pressure 2403 2327		Interval Tested 4432-4450'		ID & Length Air Chamber -	
Depth Center Gauge Ft. Blanked Off		Formation Tested Mississippi		ID & Length Drill Collars 60'	
BT. P.R.D. No Hr. Clock		Est. Gauge Depth Temp. actual 106 F°		Size Drill Pipe 4 1/2" FH	
Pressure Readings Field Office Corrected		MUD DATA Weight 9.8		Viscosity 45	
Initial Hydro Mud Pressure		All depths measured from Kelly Bushing		No...Folders Reproduced 15	
Initial Closed in Pres.		REMARKS: Set packer, opened tool and took a			
Initial Flow Pres.		6 minute First Flow Pressure - receiving a			
Final Flow Pres.		weak blow increasing. Rotated tool closed			
Final Closed in Pres.		for a 30 minute Initial Closed in Pressure.			
Final Hydro Mud Pressure		Tool opened with a weak blow increasing for			
Depth Bottom Gauge 4447 Ft. Blanked Off Yes		10 minutes.			
BT. P.R.D. No 1872 Hr. Clock					
Pressure Readings Field Office Corrected					
Initial Hydro Mud Pressure					
Initial Closed in Pres.		Recovered 165 Feet of Watery mud			
Initial Flow Pres.		Recovered Feet of			
Final Flow Pres.		Recovered Feet of			
Final Closed in Pres.		Recovered Feet of			
Final Hydro Mud Pressure		Witnessed By Virgil E. Spradlin			
Amount-Type of Cushion -		Tester R. C. Kuhn			

LOCATION W2 NW SE 19-20S-24W

FIELD

WILDCAT

COUNTY

NESS

STATE KANSAS

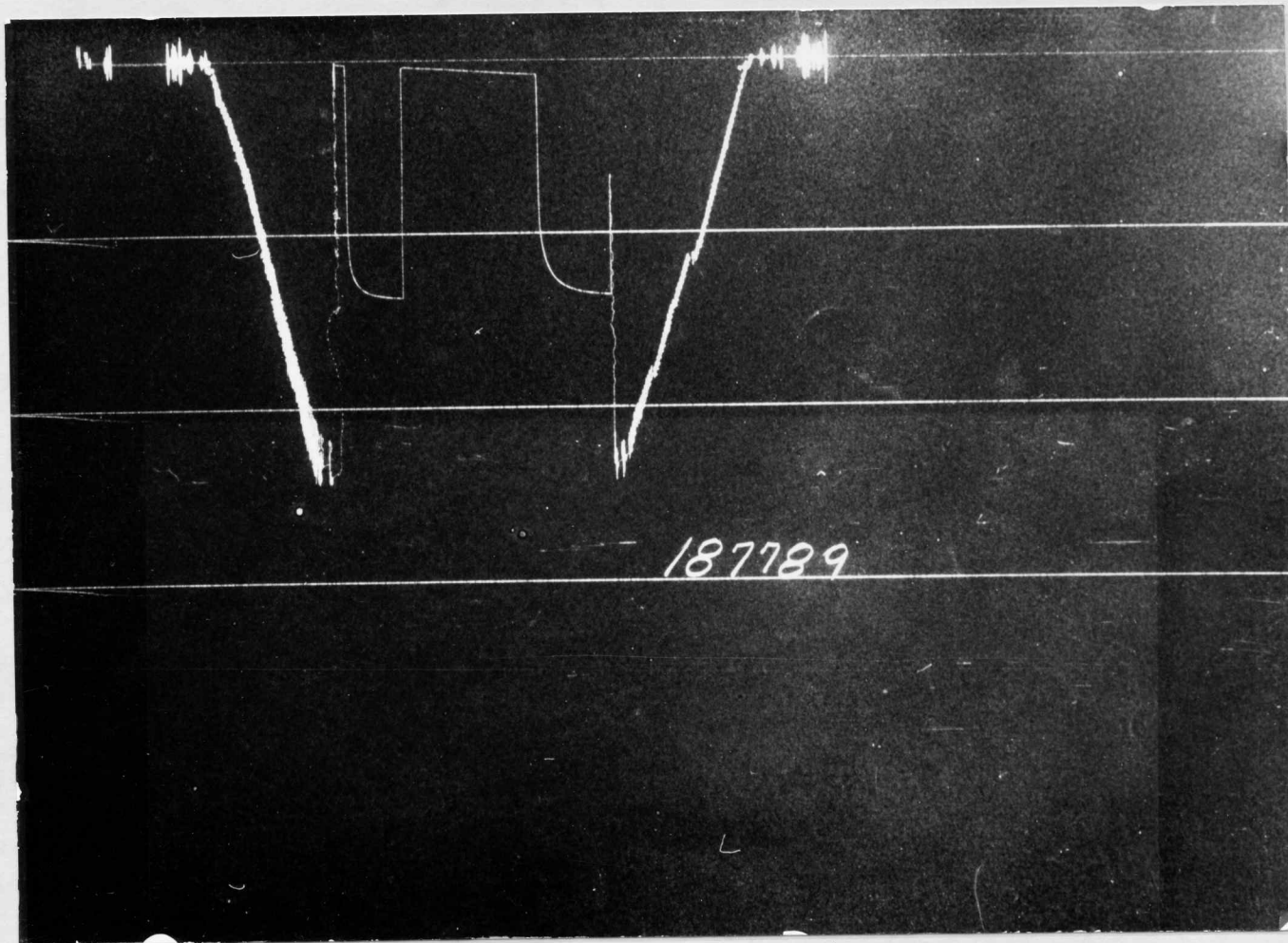
BORDEN O
LEASE NAME

WELL NO. 1

TEST NO. 3

OSAGE & ARNETT
LEASE OWNERWICHITA
OWNERS DISTRICT

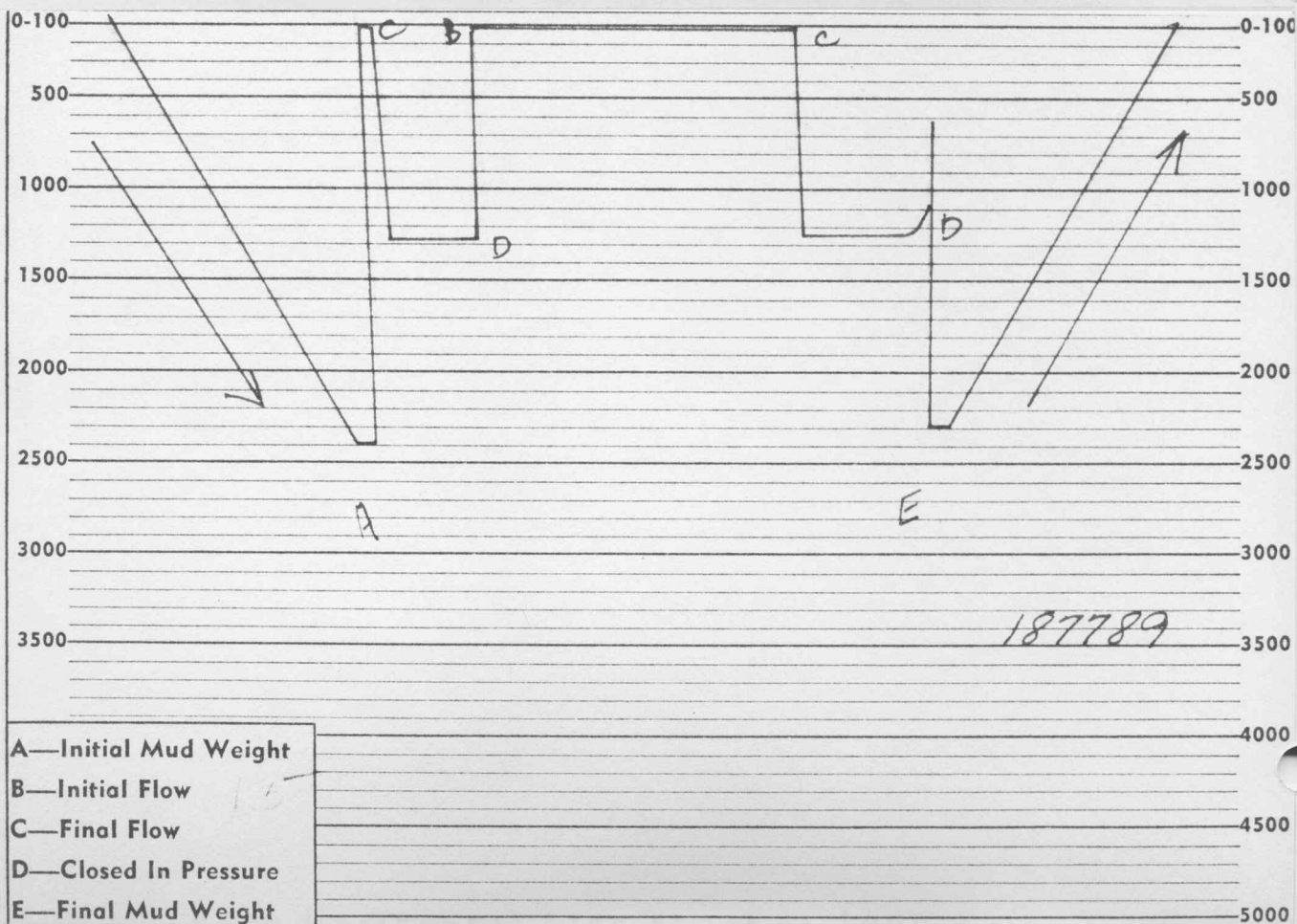
19-20-24W

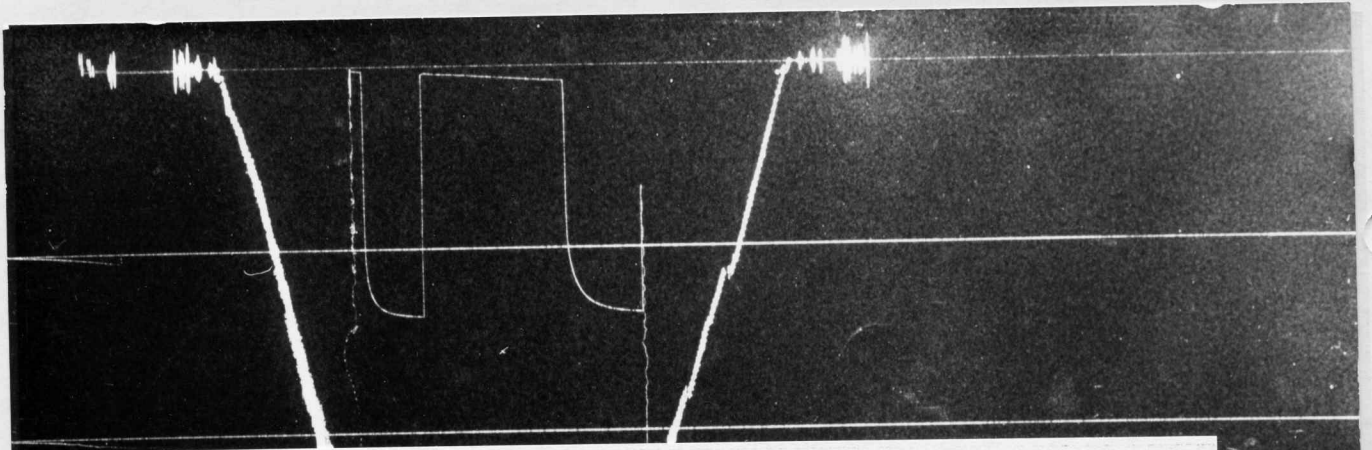


PRESSURE ↑

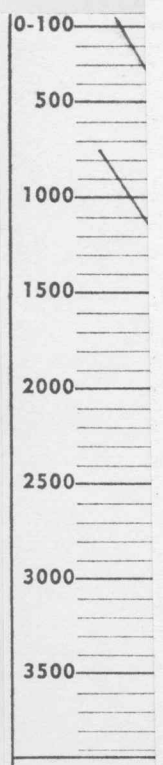
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← TIME →





↑
PRESSURE
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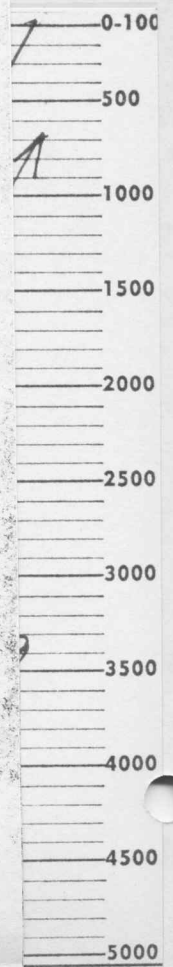
- A—Initial
- B—Initial I
- C—Final F
- D—Closed
- E—Final M

OSAGE & ARTNELL 4-9-59
BORDENO NO. 1
TKT. NO. 187789 B.T. NO. 397

FIRST FLOW PRESSURES

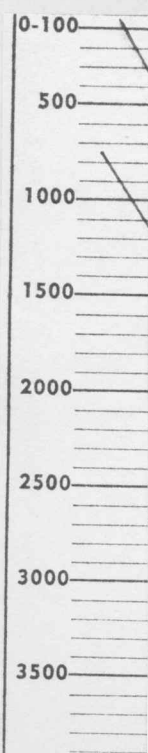
	Time Defl. .000"	PSI Temp. Corr.
P-0	.000	24
P-1	.008	25
P-2	.016	25
P-3	.024	27
P-4	.032	28
P-5	.040	30

1.12 minute intervals



Company **OSAGE & ARTNELL**Date **4-9-59**Lease **BORDENO**Well No. **1**Test No. **3**Ticket No. **187789**

	Time	PSI
Initial Hydro Mud Pressure		2366
Initial Closed In Pressure	30 minutes	1369
Initial Flow		52
Final Flow	6 minutes 75 minutes	30-87
Final Closed In Pressure	40 minutes	1356
Final Hydro Mud Pressure		2327

Total Depth **4450'**Packer Depth **4426'-4432'**BT No. **397** Depth **4434'**12 Hr. Clock No. **1736**Temperature Corrected to Actual **106** ° F

A—Initial
B—Initial
C—Final F
D—Closed
E—Final M

	Initial CIP		Flow Pressure		Final CIP	
	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.
P0	.000	30	.000	52	.000	87
P1	.0225	1222	.107	50	.029	1136
P2	.045	1293	.214	59	.058	1235
P3	.0675	1325	.321	70	.087	1283
P4	.090	1343	.428	80	.116	1309
P5	.1125	1351	.535	87	.145	1325
P6	.135	1357			.174	1337
P7	.1575	1363			.203	1344
P8	.180	1364			.232	1350
P9	.2025	1367			.261	1353
P10	.225	1369			.290	1356
	3 Minute Intervals		15 Minute Intervals		4 Minute Intervals	

Remarks:

