

ARROW TESTING COMPANY

P. O. BOX 1051

GREAT BEND, KANSAS 67530

DRILL-STEM TEST DATA

Well Name	Baldwin	Test No.	1
Well Number	2-36	Zone Tested	Arb
Company	Balcron Oil Company	Date	8-23-88
Comp. Rep.	C. Landes	Tester	Don Fabricius
Contractor	Allen Drilling	Ticket No.	2645
Location	36-16-20	Elevation	

Recorder No. <u>3088</u>	Clock Range <u>12</u>	Recorder No. <u>4377</u>	Clock Range <u>12</u>
Depth <u>3813</u>		Depth <u>3828</u>	
Initial Hydro Mud Press. <u>1935</u>		Initial Hydro Mud Press. <u>1935</u>	
Initial Shut-in Press. <u>1232</u>		Initial Shut-in Press. <u>1226</u>	
Initial Flow Press. <u>23-28</u>		Initial Flow Press. <u>23-23</u>	
Final Flow Press. <u>35-58</u>		Final Flow Press. <u>46-58</u>	
Final Shut-in Press. <u>1232</u>		Final Shut-in Press. <u>1226</u>	
Final Hydro Mud Press. <u>1935</u>		Final Hydro Mud Press. <u>1935</u>	
Temperature _____		Tool Open Before I. S. I. <u>30</u>	Mins.
Mud Weight <u>9.3</u>	Viscosity <u>45</u>	Initial Shut-in <u>45</u>	Mins.
Fluid Loss <u>11.6</u>		Flow Period <u>45</u>	Mins.
Interval Tested <u>3827-32</u>		Final Shut-in <u>60</u>	Mins.
Top Packer Depth <u>3822</u>		Surface Choke Size <u>1"</u>	
Bottom Packer Depth <u>3827</u>		Bottom Choke Size <u>3/4"</u>	
Total Depth <u>3832</u>		Main Hole Size <u>7 7/8</u>	
Drill Pipe Size <u>4 1/2 X H</u>	Wt. <u>16.60</u>	Rubber Size <u>6 3/4</u>	
Drill Collar I. D. _____	Ft. Run _____		
Recovery—Total Feet _____			
Recovered <u>270</u>	Feet Of <u>gas in pipe</u>		
Recovered <u>135</u>	Feet Of <u>clean gassy oil 42 gravity</u>		
Recovered <u>15</u>	Feet Of <u>water chlorides 8,000</u>		
Recovered _____	Feet Of _____		

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Remarks

Weak building to strong blow thru-test

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Arrow Testing Company shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Arrow Testing Company, nor whether resulting from the acts or omissions of Arrow Testing Company, or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

It is expressly understood and agreed that Arrow Testing Company, shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Arrow Testing Company has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

By _____

Owner, Operator or his Agent

ARROW TESTING COMPANY

DATA SUMMARY

COMPANY : BALCRON OIL COMPANY
DATE OF TEST : 8-23-1988
DST. NO : 1

WELL NAME : BALDWIN #2-36
LOCATION : 36-16-20
SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp):	152.59
Gas (md.ft/cp):	0.00

EFFECTIVE PERMEABILITY

Oil (md):	27.10
Gas (md):	0.00

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TOTAL MOBILITY (md/cp):	38.40
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TOTAL COMPRESSIBILITY (psi-1):	8.48E-06
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ESTIMATED DAMAGE RATIO:	8.92
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CALCULATED DAMAGE RATIO:	7.71
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Reservoir Temperature (F):	0.00
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Formation Porosity :	.18
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Formation Thickness (ft):	5.00
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Wellbore Radius (in):	3.94
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Reservoir Compressibility (psi-1):	4.80E-07
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Calculated Skin Factor :	40.43
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PRODUCTION WITH DAMAGE REMOVED (bbl/D):	212.78
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PRODUCTIVITY INDEX (bbl/psi):	.02
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Final Flow Pressure (psi):	59.00
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APPROXIMATE RADIUS OF INVESTIGATION (ft):	181.03
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Total Flowing Time (min):	75.00
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EXTRAPOLATED RESERVOIR PRESSURE (psi):	1246.00
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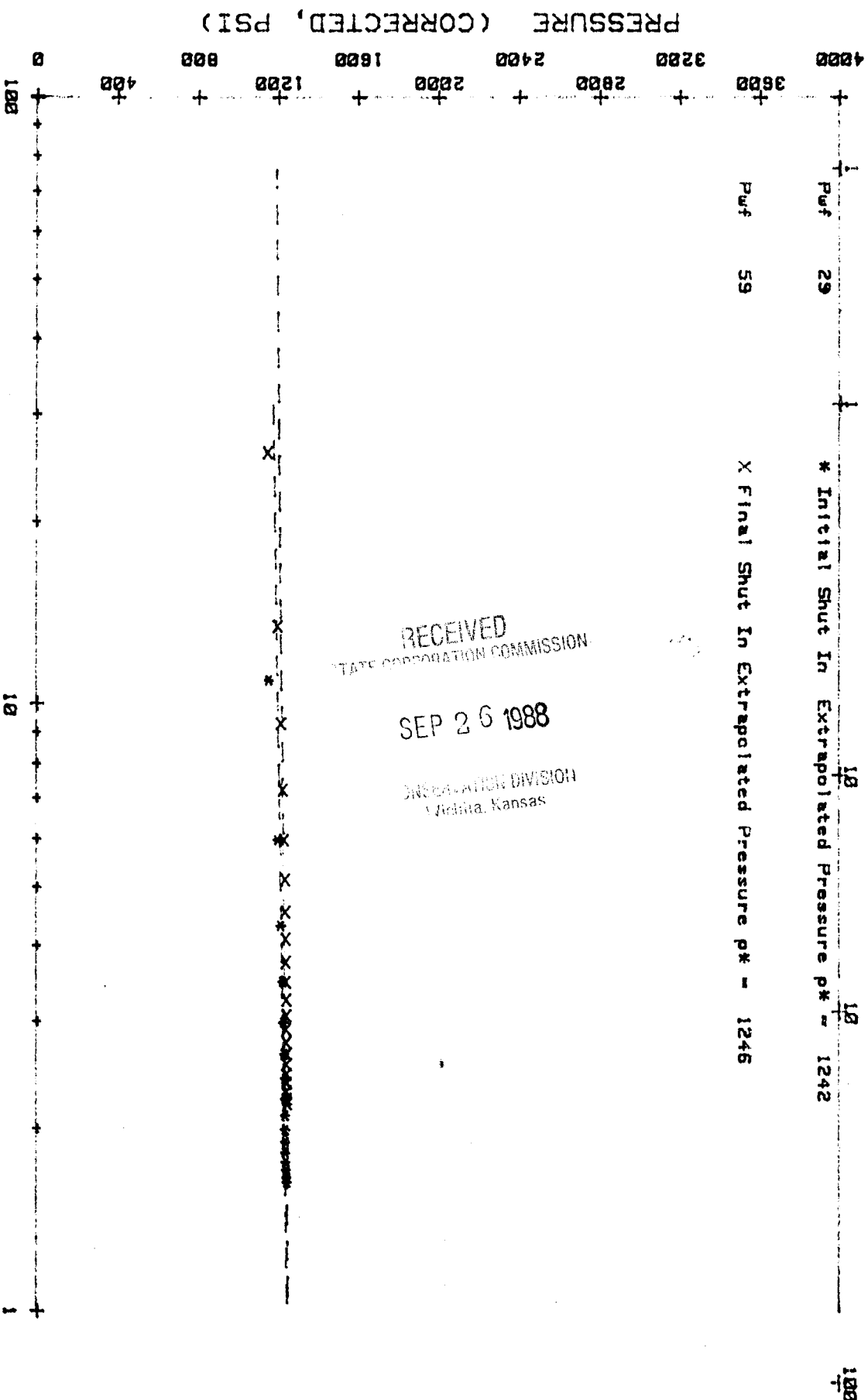
Slope of Build-up Curve (psi/log cycle):	29.41
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Effective Producing Time (min):	75.00
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LOCATION : 36-16-20

DATE : 8-23-1988

Gauge # : 4333



ARROW TESTING COMPANY

SUBSURFACE PRESSURE MEASUREMENTS

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COMPANY : BALCRON OIL COMPANY
DATE OF TEST : 8-23-1988
DEPTH : 3813.0

WELL NAME : BALDWIN #2-36
LOCATION : 36-16-20
SERIAL NO. :

COMMENTS	TIME min	DEFL in	----- CALC	PRESSURE PSIG CORR	----- CORRECTED
TEST NO.:1					
Depth : 3813.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.634	1910.96	23.47	1934.43
-1ST FLOW	0.0	.020	52.87	-28.94	23.92
- 0:05	5.0	.020	52.87	-28.94	23.92
- 0:10	10.0	.020	52.87	-28.94	23.92
- 0:15	15.0	.020	52.87	-28.94	23.92
- 0:20	20.0	.021	54.02	-28.90	25.12
- 0:25	25.0	.021	54.02	-28.90	25.12
-END FLOW	30.7	.024	57.47	-28.76	28.71
- 0:03	3.0	.960	1135.03	10.17	1145.20
- 0:06	6.0	.996	1176.47	10.88	1187.35
- 0:09	9.0	1.008	1190.29	11.12	1201.41
- 0:12	12.0	1.016	1199.49	11.28	1210.77
- 0:15	15.0	1.020	1204.10	11.36	1215.46
- 0:18	18.0	1.023	1207.55	11.42	1218.97
- 0:21	21.0	1.026	1211.01	11.48	1222.48
- 0:24	24.0	1.027	1212.16	11.49	1223.65
- 0:27	27.0	1.027	1212.16	11.49	1223.65
- 0:30	30.0	1.027	1212.16	11.49	1223.65
- 0:33	33.0	1.028	1213.31	11.51	1224.82
- 0:36	36.0	1.028	1213.31	11.51	1224.82
- 0:39	39.0	1.029	1214.46	11.53	1226.00
- 0:42	42.0	1.030	1215.61	11.55	1227.17
- 0:45	45.0	1.032	1217.91	11.59	1229.51
- 0:47	47.0	1.033	1219.07	11.61	1230.68
-1ST SHUT-IN	0.0	1.033	1219.07	11.61	1230.68
-2ND FLOW	0.0	.029	63.23	-28.54	34.69
- 0:05	5.0	.032	66.68	-28.40	38.28
- 0:10	10.0	.032	66.68	-28.40	38.28
- 0:15	15.0	.033	67.83	-28.36	39.47
- 0:20	20.0	.034	68.98	-28.31	40.67
- 0:25	25.0	.037	72.44	-28.18	44.26
- 0:30	30.0	.039	74.74	-28.09	46.65
- 0:35	35.0	.042	78.19	-27.96	50.24
- 0:40	40.0	.045	81.65	-27.82	53.83
- 0:45	45.0	.049	86.25	-27.64	58.61
-END FLOW	0.0	.049	86.25	-27.64	58.61
- 0:03	3.0	.954	1128.12	10.05	1138.17
- 0:06	6.0	.996	1176.47	10.88	1187.35
- 0:09	9.0	1.009	1191.44	11.14	1202.58
- 0:12	12.0	1.016	1199.49	11.28	1210.77

ARROW TESTING COMPANY

HORNER ANALYSIS

COMPANY : BALCRON OIL COMPANY

WELL NAME : BALDWIN #2-36

LOCATION : 36-16-20

STATE & COUNTY : KANSAS,

DATE OF TEST : 8-23-1988

TEST INT. KB : 3827 to 3832

TOTAL INTERVAL (ft) K.B. : 5.00

ELEV. (GR) : (KB) :

FIELD :

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ELEMENT SERIAL NO. :

LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES ----- CORR PSIG
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Refer. depth : 3813.0 ft-kb

-END FLOW	30.70	1.98	28.71
	3.00	11.00	1148.33
	6.00	6.00	1191.39
	9.00	4.33	1205.74
	12.00	3.50	1215.31
	15.00	3.00	1220.10
	18.00	2.67	1223.68
	21.00	2.43	1227.27
	24.00	2.25	1228.47
	27.00	2.11	1228.47
	30.00	2.00	1228.47
	33.00	1.91	1229.67
	36.00	1.83	1229.67
	39.00	1.77	1230.86
	42.00	1.71	1232.06
	45.00	1.67	1234.45
	47.00	1.64	1235.65
-1ST SHUT-IN	0.00	0.00	1235.65

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SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : BALCRON OIL COMPANY
DATE OF TEST : 8-23-1988
DEPTH : 3813.0

WELL NAME : BALDWIN #2-36
LOCATION : 36-16-20
SERIAL NO. :

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.:1					
- 0:15	15.0	1.021	1205.25	11.38	1216.63
- 0:18	18.0	1.025	1209.86	11.46	1221.31
- 0:21	21.0	1.026	1211.01	11.48	1222.48
- 0:24	24.0	1.027	1212.16	11.49	1223.65
- 0:27	27.0	1.028	1213.31	11.51	1224.82
- 0:30	30.0	1.029	1214.46	11.53	1226.00
- 0:33	33.0	1.030	1215.61	11.55	1227.17
- 0:36	36.0	1.030	1215.61	11.55	1227.17
- 0:39	39.0	1.030	1215.61	11.55	1227.17
- 0:42	42.0	1.031	1216.76	11.57	1228.34
- 0:45	45.0	1.032	1217.91	11.59	1229.51
- 0:48	48.0	1.032	1217.91	11.59	1229.51
- 0:51	51.0	1.032	1217.91	11.59	1229.51
- 0:54	54.0	1.032	1217.91	11.59	1229.51
- 0:57	57.0	1.032	1217.91	11.59	1229.51
- 1:00	60.0	1.033	1219.07	11.61	1230.68
- 1:02	62.0	1.034	1220.22	11.63	1231.85
-2ND SHUT-IN	0.0	1.034	1220.22	11.63	1231.85
-2ND HYDROSTATIC	0.0	1.633	1909.81	23.45	1933.26

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HORNER ANALYSIS

COMPANY : BALCRON OIL COMPANY
 WELL NAME : BALDWIN #2-36
 LOCATION : 36-16-20
 STATE & COUNTY : KANSAS,
 DATE OF TEST : 8-23-1988
 TEST INT. KB : 3827 to 3832
 TOTAL INTERVAL (ft) K.B. : 5.00
 ELEV. (GR) : (KB) :
 FIELD :

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ELEMENT SERIAL NO. :
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG	-----
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Refer. depth : 3813.0 ft-kb

-END FLOW	0.00	0.00	58.61	
	3.00	26.00	1141.15	
	6.00	13.50	1191.39	
	9.00	9.33	1206.94	
	12.00	7.25	1215.31	
	15.00	6.00	1221.29	
	18.00	5.17	1226.08	
	21.00	4.57	1227.27	
	24.00	4.13	1228.47	
	27.00	3.78	1229.67	
	30.00	3.50	1230.86	
	33.00	3.27	1232.06	
	36.00	3.08	1232.06	
	39.00	2.92	1232.06	
	42.00	2.79	1233.25	
	45.00	2.67	1234.45	
	48.00	2.56	1234.45	
	51.00	2.47	1234.45	
	54.00	2.39	1234.45	
	57.00	2.32	1234.45	
	60.00	2.25	1235.65	
	62.00	2.21	1236.84	
-2ND SHUT-IN	0.00	0.00	1236.84	

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DATA SUMMARY

COMPANY : BALCRON OIL COMPANY
DATE OF TEST : 8-23-1988
DST. NO : 1

WELL NAME : BALDWIN #2-36
LOCATION : 36-16-20
SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

EXTRAPOLATED RESERVOIR PRESSURE (psi):	1242.00
Slope of Build-up Curve (psi/log cycle):	44.96
Effective Producing Time (min):	30.00

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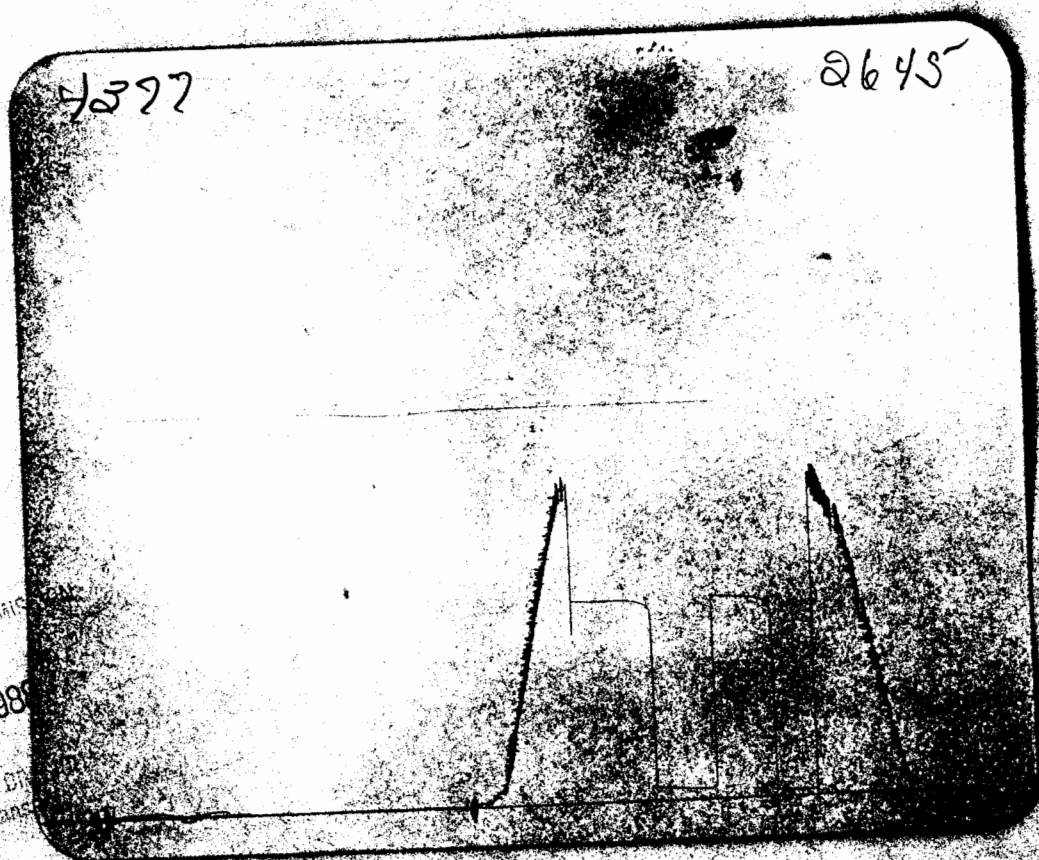
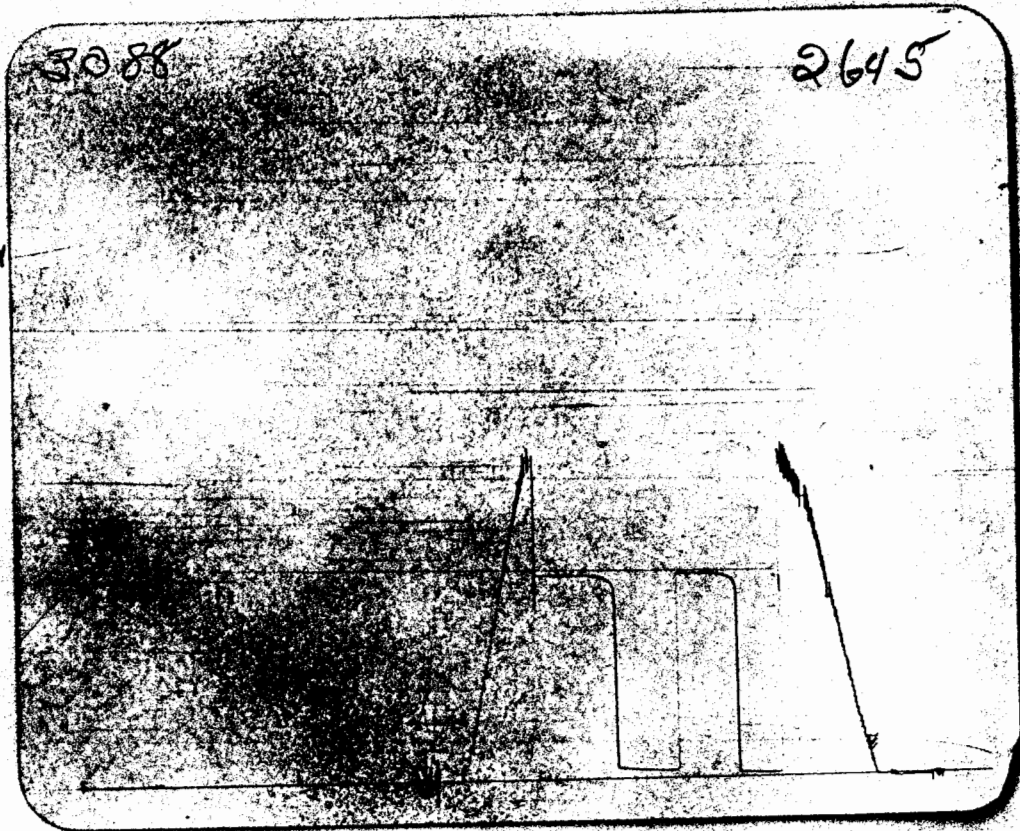
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WICHITA BRANCH

MAR 20 1980

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Date: MAR 6 1980

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