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SC-DC-64-1869K

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THE WURLITZER COMPANY,

NORTH TONAWANDA DIVISION
NORTH TONAWANDA NEW YORK

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW
1st Review Date: 6/18/97
Authority: ADD
Name: RB Cramer
2nd Review Date:
Authority: ADD
Name:
Determination (Circle Numbers)
1. Classification Retained
2. Classification Changed to:
3. Contains No DOE Classified Information
4. Coordinate With:
5. Contains UCAI?
6. Comments:

PRE-FIRING AND CONSTRUCTION DATA

P. O. 14-5532

PRODUCTION OF XMC-913 POWER SUPPLY

APRIL 2, 1959

(Unit Nos. 201,203, 205, 206, 207, 208)

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW
DOE/OSTI CLASSIFICATION STAMP
U
Emilda Seiph 7/22/97
W. C. Layne
97SN2540
Carmela Gallegos 7/22/97
PERSON VERIFYING MARKING & DATE
7-01-97

Approved By: John B. Ivanhoe
John B. Ivanhoe
Senior Engineer

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Following is the chemical composition of the calcium strip used in units 201, 203, 205, 206, 207, and 208 as given by the suppliers.

Peerless Roll Leaf Co. - Lot "P"

Element		Per Cent
N_2		.038
Fe	less than	.001
Al		.04
Mg		.21
Mn		.0008
Si	less than	.001
Cr		.001
Ni	less than	.001
Co		not detected
B		not detected
Cu		.001
Na	less than	.005
Li	less than	.005
K	less than	.005
Ca		Balance

Charles Hardy, Inc.

Element	Per Cent
Fe	.006
Mn	.018
Ni	.390
Al	.250
Mg	.285
Ca	Balance

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XMC-913 PRE-FIRING DATA

Unit No. 201	Date Assembled 3/17/59		Disposition Shipped
Assembled By: R.A.N.	Date Closed 3/18/59		Drying Time 15 Hrs.
Checked By: W.R.T.	Leak Test OK	Hi-Pot Test: OK	Drying Temp. 140°F

Squib Res. ohms	
S1	S2
4.540	4.586

Monitor Switch Resistance ohms
0.460

TERMINAL	-	#7	#14	#110	#220	#350	#450	S1	S2	M
Cold Voltage (volts)		5.0	6.6	1.8	1.4	1.3	1.3			
Polarity		OK	OK	OK	OK	OK	OK			
Resistance to Case (Megohm)	#50K	#50K	#50K	#50K	#50K	30K	10K	#50K	#50K	#50K
Resistance, Terminal to all other Terminals before Destructive Test (Megohm)	37	17	35	1.7K	3.5K	4K	2.8K	50K	50K	#50K
Resistance, Terminal to all other Terminals after Destructive Test (Megohm)										

STACK NUMBER	1	2	3	4	5
Mean Heat Content (cal./pad)	1087	1087	879	879	879
Mean Wt. of Electrolyte (gr./pad)	1.050	1.050	1.050	1.050	1.050
Mean Wt. of Depolarizer (gr./pad)	.650	.700	.700	.700	.700
Total Wt. of Cell Stack (gr.)	435.1	463.3	462.4	461.0	462.5
Total Wt. of Heat Pads (gr.)	102.7	110.5	104.8	104.8	105.5
Total Wt. of Stack Assembly (gr.)	537.8	573.8	567.2	565.8	568.0

CALCIUM METAL
Rolled By: Charles Hardy [redacted]
Source of Block Calcium: New England Lime Co. [redacted]

Remarks:

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XMC-913 PRE-FIRING DATA

Unit No. 203	Date Assembled 3/18/59	Disposition Shipped	
Assembled By: R.A.N.	Date Closed 3/19/59	Drying Time 15 Hrs.	
Checked By: W.R.T.	Leak Test OK / Air-Pot Test: OK	Drying Temp. 140°F	

Squib Res. ohms	
S1	S2
4.400	4.580

Monitor Switch Resistance ohms
0.500

TERMINAL	-	#7	#14	#110	#220	#350	#450	S1	S2	M
Cold Voltage (volts)	X	5.6	8.3	87mv.	96mv.	160mv.	180mv.	X	X	X
Polarity	X	OK	OK	*	OK	OK	OK	X	X	X
Resistance to Case (Megohm)	#50K	#50K	#50K	#50K	#50K	.38K	1.8K	#50K	#50K	#50K
Resistance, Terminal to all other Terminals before Destructive Test (Megohm)	30	15	30	20K	2.2K	2.5K	1.8K	20K	20K	#50K
Resistance, Terminal to all other Terminals after Destructive Test (Megohm)										

STACK NUMBER	1	2	3	4	5
Mean Heat Content (cal./pad)	1090	1090	906	897	897
Mean Wt. of Electrolyte (gr./pad)	1.050	1.050	1.050	1.050	1.050
Mean Wt. of Depolarizer (gr./pad)	.650	.650	.650	.700	.650
Total Wt. of Cell Stack (gr.)	435.1	461.0	462.8	466.9	461.0
Total Wt. of Heat Pads (gr.)	101.6	109.2	105.6	105.6	105.6
Total Wt. of Stack Assembly (gr.)	536.7	570.2	568.4	572.5	566.6

CALCIUM METAL
Rolled By: Peerless Roll Leaf Co. (Lot P)
Source of Block Calcium: Metal Hydrides

Remarks: *No definite indication due to non-prefusion of cells in #2 stack.

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XMC-913 PRE-FIRING DATA

Unit No. 205	Date Assembled 3/18/59	Disposition Shipped	
Assembled By: R.A.N.	Date Closed 3/19/59	Drying Time 1½ Hrs.	
Checked By: W.R.T.	Leak Test OK	Hi-Pot Test: OK	Drying Temp. 140°F

Squib Res. ohms	
S1	S2
4.337	0.11

Monitor Switch Resistance ohms
0.540

TERMINAL	-	#7	#14	#110	#220	#350	#450	S1	S2	M
Cold Voltage (volts)		6.6	9.6	88mv.	120mv.	160mv.	170mv.			
Polarity		OK	OK	*	OK	OK	OK			
Resistance to Case (Megohm)	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K
Resistance, Terminal to all other Terminals before Destructive Test (Megohm)	20	9	15	20K	2.0K	2.0K	1.6K	20K	20K	#50K
Resistance, Terminal to all other Terminals after Destructive Test (Megohm)										

STACK NUMBER	1	2	3	4	5
Mean Heat Content (cal./pad)	1090	1090	906	897	897
Mean Wt. of Electrolyte (gr./pad)	1.050	1.050	1.050	1.050	1.050
Mean Wt. of Depolarizer (gr./pad)	.650	.650	.650	.650	.650
Total Wt. of Cell Stack (gr.)	432.6	464.2	463.5	440.8	462.9
Total Wt. of Heat Pads (gr.)	101.6	109.2	105.4	105.5	105.6
Total Wt. of Stack Assembly (gr.)	534.2	573.4	568.9	566.3	568.5

CALCIUM METAL
Rolled By: Peerless Roll Leaf Co. (Lot P)
Source of Block Calcium: Metal Hydrides

Remarks: *No definite indication due to non-prefusion of cells in #2 stack.

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XMC-913 PRE-FIRING DATA

Unit No. 206	Date Assembled 3/18/59	Disposition Shipped	
Assembled By: R.A.N.	Date Closed 3/19/59	Drying Time 15 Hrs.	
Checked By: W.R.T.	Leak Test OK / Hi-Pot Test: OK	Drying Temp. 140°F	

Squib Res. ohms	
S1	S2
4.575	4.620

Monitor Switch Resistance ohms
0.51

TERMINAL	-	#7	#14	#110	#220	#350	#450	S1	S2	M
Cold Voltage (volts)		6.8	9.4	87mv.	130mv.	160mv.	170mv.			
Polarity		OK	OK	*	OK	OK	OK			
Resistance to Case (Megohm)	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K
Resistance, Terminal to all other Terminals before Destructive Test (Megohm)	23	10	18	20K	3.5K	2.5K	1.9K	20K	20K	#50K
Resistance, Terminal to all other Terminals after Destructive Test (Megohm)										

STACK NUMBER	1	2	3	4	5
Mean Heat Content (cal./pad)	1090	1090	906	906	906
Mean Wt. of Electrolyte (gr./pad)	1.050	1.050	1.050	1.050	1.050
Mean Wt. of Depolarizer (gr./pad)	.650	.650	.650	.650	.650
Total Wt. of Cell Stack (gr.)	433.5	462.4	463.5	460.9	460.2
Total Wt. of Heat Pads (gr.)	102.0	110.0	105.4	105.1	105.1
Total Wt. of Stack Assembly (gr.)	535.5	572.4	568.9	566.0	565.3

CALCIUM METAL
Rolled By: Peerless Roll Leaf Co. (Lot P)
Source of Block Calcium: Metal Hydrides

Remarks: *No definite indication due to non-prefusion of cells in #2 stack.

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XMC-913 PRE-FIRING DATA

Unit No. 207	Date Assembled 3/17/59	Disposition Shipped	
Assembled By: R.A.N.	Date Closed 3/18/59	Drying Time 15 Hrs.	
Checked By: W.R.T.	Leak Test OK	Hi-Pot Test: OK	Drying Temp. 140°F

Squib Res. ohms	
S1	S2
4.657	4.549

Monitor Switch Resistance ohms
0.560

TERMINAL	-	#7	#14	#110	#220	#350	#450	S1	S2	M
Cold Voltage (volts)		6.0	7.3	84mv.	91mv.	155mv.	160mv.			
Polarity		OK	OK	*	OK	OK	OK			
Resistance to Case (Megohm)	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K
Resistance, Terminal to all other Terminals before Destructive Test (Megohm)	35	16	30	20K	3.0K	3.0K	2.4K	20K	20K	#50K
Resistance, Terminal to all other Terminals after Destructive Test (Megohm)										

STACK NUMBER	1	2	3	4	5
Mean Heat Content (cal./pad)	1090	1090	906	906	906
Mean Wt. of Electrolyte (gr./pad)	1.050	1.050	1.050	1.050	1.050
Mean Wt. of Depolarizer (gr./pad)	.650	.650	.650	.650	.650
Total Wt. of Cell Stack (gr.)	433.7	465.6	461.5	461.5	461.5
Total Wt. of Heat Pads (gr.)	102.0	110.0	105.6	105.2	105.2
Total Wt. of Stack Assembly (gr.)	535.7	575.6	567.1	566.7	566.7

CALCIUM METAL
Rolled By: Peerless Roll Leaf Co. (Lot P)
Source of Block Calcium: Metal Hydrides

Remarks: *No definite indication due to non-prefusion of cells in #2 stack.

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UNCLASSIFIED [redacted]

XMC-913 PRE-FIRING DATA

Unit No. 208	Date Assembled 3/17/59	Disposition Shipped	
Assembled By: R.A.N.	Date Closed 3/18/59	Drying Time 15 Hrs.	
Checked By: W.R.T.	Leak Test OK	Hi-Pot Test: OK	Drying Temp. 140°F

Squib Res. ohms	
S1	S2
4.612	4.543

Monitor Switch Resistance ohms
0.52

TERMINAL	-	#7	#14	#110	#220	#350	#450	S1	S2	M
Cold Voltage (volts)		4.8	6.7	84mv.	90mv.	150mv.	160mv.			
Polarity		OK	OK	*	OK	OK	OK			
Resistance to Case (Megohm)	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K	#50K
Resistance, Terminal to all other Terminals before Destructive Test (Megohm)	40	18	35	20K	3.4K	3K	2.6K	20K	20K	#50K
Resistance, Terminal to all other Terminals after Destructive Test (Megohm)										

STACK NUMBER	1	2	3	4	5
Mean Heat Content (cal./pad)	1090	1090	906	906	906
Mean Wt. of Electrolyte (gr./pad)	1.050	1.050	1.050	1.050	1.050
Mean Wt. of Depolarizer (gr./pad)	.650	.650	.650	.650	.650
Total Wt. of Cell Stack (gr.)	433.7	463.8	461.2	459.1	459.6
Total Wt. of Heat Pads (gr.)	102.0	110.0	105.0	105.1	105.3
Total Wt. of Stack Assembly (gr.)	535.7	573.8	566.2	564.2	564.9

CALCIUM METAL
Rolled By: Peerless Roll Leaf Co. (Lot P)
Source of Block Calcium: Metal Hydrides

Remarks: *No definite indication due to non-prefusion of cells in #2 stack.

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