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To: National Aeronautics and Space Administration, Goddard Space  
Flight Center, Electrochemical Power Sources Section (716.2),  
Space Power Technology Branch, Greenbelt, Maryland 20771

Subj: (Monthly Progress Report on National Aeronautics and Space  
Administration) Space Cell Test Program; submission of

Encl: (1) Monthly Progress Report as of 31 Jul, 1966 (3 copies)

1. The progress report for National Aeronautics and Space Administration  
purchase order W11-5192 on the space cell test program is submitted as  
enclosure (1).

E. R. PETTEBONE

C. M. AUSTIN  
By direction

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- NASA (Mr. Ernst M. Cohn, RNW), Washington, D. C. 20546
- NASA (Mr. Emil Eymowitz, 672), Greenbelt, Maryland 20771
- NASA, Scientific and Technical Information Facility (NASA REP RPT-21238),  
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1. The progress report for National Aeronautics and Space Administration  
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MONTHLY PROGRESS REPORT THROUGH 31 JULY 1966

LIFE CYCLE TESTS

TOTAL NUMBER OF PACKS IN PROGRAM: 172

SECTION I

1. Status of original Cycling Program: The cycling program has included cells from the following manufacturers; General Electric Company (G.E.), Gould-National Batteries, Inc. (Gould), Sonotone Corporation (Sonotone), and Gulton Industries, Inc. (Gulton).

TOTAL NUMBER OF PACKS IN ORIGINAL PROGRAM: 84

	Total Number of Packs			Cells Failed*	
	Cycled To Date	Cycling	Failed	Since Last Report	Total To Date
NICKEL-CADMIUM (10-cell packs)					
G.E. 3.0 a.h.	12	5	7	1	45
Gould 3.5 a.h.	12	3	9	0	62
Sonotone 5.0 a.h.	12	5	7	0	48
Gulton 6.0 a.h.	12	2	10	0	69
TOTAL	48	15	33	1	224
NICKEL-CADMIUM (5-cell packs)					
G.E. 12 a.h.	12	6	6	0	18
Gulton 20 a.h.	12	2	10	0	35
Gould 20 a.h.	12	3	9	0	27
TOTAL	36	11	25	0	80

\*All failure analysis results are cumulative. Total pack failures are shown on pages 11 through 38; partial pack failures on pages 39 through 47.

2. Test Parameters:

a. General Cycling Program:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge:

(a) 1.55 ± 0.03 volts per cell at 0° C.

(b) 1.49 ± 0.03 volts per cell at 25° C.

(c)  $1.45 \pm 0.03$  volts per cell at  $40^{\circ}$  C.

(3) Depth of Discharge:

(a) 90-minute and 3-hour orbits:

1. 15 percent and 25 percent at  $0^{\circ}$  C.
2. 25 percent and 40 percent at  $25^{\circ}$  C.
3. 15 percent and 25 percent at  $40^{\circ}$  C.

(4) Orbit Time:

- (a) 90 minutes--30-minute discharge and 60-minute charge.
- (b) 3 hours--30-minute discharge and 150-minute charge.

3. Capacity Tests:

a. Before cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted on a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt per cell average. After each 88 days of cycling, each pack was discharged immediately after the end of the regular cycle charge period, at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 61 through 65.

4. Data:

a. Under normal operation, complete data is scheduled to be recorded every 32 cycles on the 90-minute and 3-hour packs.

b. The attached data sheets give end of discharge and end of charge voltage readings for each cell on each cycle recorded.

## SECTION II

1. Status of additions to Cycling Program: The cycling program has included cells from the following manufacturers; General Electric Company (G.E.), Sonotone Corporation (Sonotone), Yardney Electric Corporation (Yardney), Gulton Industries, Inc. (Gulton) and Delco-Remy (Delco).

TOTAL NUMBER OF PACKS ADDED TO THE PROGRAM: 89

	Total Number of Packs			Cells Failed*	
	Cycled To Date	Cycling	Failed	Since Last Report	Total To Date
<b>NICKEL-CADMIUM (10-cell packs)</b>					
Gulton 3.6 a.h. SHERFEY	1	1	0	0	4
Gulton 3.6 a.h. COULOMETER	1	1	0	0	1
TOTAL	2	2	0	0	5
<b>NICKEL-CADMIUM (5-cell packs)</b>					
G.E. 5.0 a.h. NIMBUS	6	5	1	2	3
G.E. 12 a.h.	1	0	1	0	5
G.E. 12 a.h. 3rd Electrode	4	2	2	0	2
G.E. & Gulton 6.0 a.h. COUL	1	1	0	0	4
Sonotone 3.0 a.h.	6	5	1	3	6
Sonotone 5.0 a.h. COULOMETER	1	1	0	0	0
Sonotone 5.0 a.h. STABISTOR	8	2	6	0	24
Gulton 1.25 a.h.	4	4	0	0	0
Gulton 4.0 a.h. COMMERCIAL	6	4	2	0	7
Gulton 5.0 a.h. NIMBUS	6	6	0	0	2
Gulton 5.6 a.h. FOLDED SEAL	4	4	0	0	1
Gulton 5.6 a.h. NONFOLDED SEAL	4	3	1	0	4
Gulton 6.0 a.h.	1	0	1	0	3
Gulton 6.0 a.h. HSI	3	2	1	0	5
Gulton 6.0 a.h. 3rd Electrode	6	3	3	0	11
Gulton 12 a.h.	6	4	2	0	3
Gulton 50 a.h.	2	0	2	0	6
TOTAL	69	46	23	5	97
<b>SILVER-CADMIUM (10-cell packs)</b>					
Yardney 12 a.h.	2	0	2	0	16
TOTAL	2	0	2	0	16
<b>SILVER-CADMIUM (5-cell packs)</b>					
Yardney 5.0 a.h.	6	2	4	2	12
Yardney 12 a.h.	3	2	1	0	2
TOTAL	9	4	5	2	14

\*All failure analysis results are cumulative. Pack failures are shown on pages 48 through 60.

	Total Number of Packs			Cells Failed*	
	Cycled To Date	Cycling	Failed	Since Last Report	Total To Date
SILVER-ZINC (10-cell packs)					
Yardney 12 a.h.	1	0	1	0	6
Delco 25 a.h.	1	0	1	0	5
TOTAL	2	0	2	0	11
SILVER-ZINC (5-cell packs)					
Delco 25 a.h.	4	0	4	1	11
Delco 40 a.h.	1	0	1	0	2
TOTAL	5	0	5	1	13

\*All failure analysis results are cumulative. Pack failures are shown on pages 48 through 60.

## 2. Test Parameters:

### a. General Nickel-Cadmium Cycling Program:

#### (1) Ambient Temperature:

- (a) 0° C.
- (b) 25° C.
- (c) 40° C.

#### (2) Voltage limits per pack on charge:

- (a) 1.55 ± 0.03 volts per cell at 0° C.
- (b) 1.49 ± 0.03 volts per cell at 25° C.
- (c) 1.45 ± 0.03 volts per cell at 40° C.

#### (3) Depth of Discharge:

##### (a) 90-minute and 3-hour orbits:

- 1. 15 percent and 25 percent at 0° C.
- 2. 25 percent and 40 percent at 25° C.
- 3. 15 percent and 25 percent at 40° C.

##### (b) 24-hour orbits:

- 1. 50 percent at 25° C and 40° C.

(4) Orbit Times:

(a) 90 minutes--30-minute discharge and 60-minute charge.

(b) 3 hours--30-minute discharge and 150-minute charge.

(c) 24 hours--1-hour discharge and 23-hour charge.

b. Nimbus Packs:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limit per pack on charge:  $1.49 \pm 0.03$  volts per cell at each temperature.

(3) Depth of Discharge:

(a) 15 percent and 25 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90-minutes--30-minute discharge and 60-minute charge.

c. Third Electrode Packs (Gulton):

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge: None. Limit is controlled by the third electrode voltage:

(a) 150 millivolts at 0° C.

(b) 300 millivolts at 25° C.

(c) 300 millivolts at 40° C.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

d. Third Electrode Packs (General Electric):

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge: None. Limit is controlled by the third electrode voltage; 400 millivolts at all temperatures.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

e. Stabilizer Packs:

(1) Ambient Temperatures:

(a) -20° C.

(b) 0° C.

(c) 25° C.

(d) 40° C.

(2) Voltage limits per pack on charge: None. Stabilizer controls cell voltage.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at -20° C.

(b) 25 percent and 40 percent at 0° C.



(c) 25 percent and 40 percent at 25° C.

(d) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

f. Coulometer Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Coulometer controls cell voltage.

(3) Depth of Discharge:

(a) 30 percent for 5 cells (Sonotone 5 a.h.)--Coulometer built by Goddard Space Flight Center.

(b) 40 percent--coulometer built by G.E.

1. 10 cells (Gulton 3.6 a.h.)

2. 11 cells (6 Gulton 6.0 a.h. and 5 G.E. 6.0 a.h.)

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

g. Sherfey Cycling Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Pack cycled in the partially discharged state.

(3) Depth of Discharge: 40 percent at 25° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

(5) Cell Type: Gulton 3.6 a.h.

(6) This type of cycling starts with the cells in a completely discharged condition. Each cycle consists of a charge of 60 percent of the cell's rated capacity followed by a discharge of 40 percent of the cell's rated capacity. Upon completion of each fifth cycle, the cells are discharged through a resistor for 90 minutes to return the cells to the completely discharged condition for the start of the next sequence of five cycles. In this manner, the cells operate below the 100 percent charged state much of the time thereby preventing overcharging and buildup of excessive gas pressure.

h. Neoprene-Seal Packs: (Folded and Nonfolded)

(1) Ambient Temperatures:

(a)  $-20^{\circ}$  C.

(b)  $0^{\circ}$  C.

(c)  $25^{\circ}$  C.

(d)  $40^{\circ}$  C.

(2) Voltage limits per pack on charge:

(a)  $1.55 \pm 0.03$  volts per cell at  $-20^{\circ}$  C.

(b)  $1.58 \pm 0.03$  volts per cell at  $0^{\circ}$  C.

(c)  $1.49 \pm 0.03$  volts per cell at  $25^{\circ}$  C.

(d)  $1.45 \pm 0.03$  volts per cell at  $40^{\circ}$  C.

(3) Depth of Discharge: 25 percent at all temperature.

(4) Orbit Times: 90 minutes--30-minute discharge and 60-minute charge.

i. Silver-Cadmium Packs:

(1) Ambient Temperatures:

(a) 90-minute orbit:

(1)  $-20^{\circ}$  C.

(2)  $0^{\circ}$  C.

(3)  $25^{\circ}$  C.

(b) 24-hour orbit:

(1)  $0^{\circ}$  C.

(2)  $25^{\circ}$  C.

(3)  $40^{\circ}$  C.

(2) Voltage limits per pack on charge:

(a) 90-minute orbit:

(1)  $1.60 \pm 0.03$  volts per cell at  $-20^{\circ}$  C.

(2)  $1.52 \pm 0.03$  volts per cell at  $0^{\circ}$  C.

(3)  $1.55 \pm 0.03$  volts per cell at  $25^{\circ}$  C.

(b) 24-hour orbits:  $1.50 \pm 0.03$  volts per cell at  $0^{\circ}$  C.,  $25^{\circ}$  C., and  $40^{\circ}$  C.

(3) Depth of Discharge:

(a) 90-minute orbit: 25 percent at all temperatures.

(b) 24-hour orbit:

(1) 20 percent and 50 percent at  $0^{\circ}$  C.

(2) 20 percent at  $25^{\circ}$  C.

(3) 20 percent and 50 percent at  $40^{\circ}$  C.

(4) Orbit Time:

(a) 90-minute--30-minute discharge and 60-minute charge.

(b) 24-hours--1-hour discharge and 23-hour charge.

j. Silver-Zinc Packs:

(1) Ambient Temperature:  $25^{\circ}$  C.

(2) Voltage limit per pack on charge:  $1.97 \pm 0.03$  volts per cell at  $25^{\circ}$  C.

(3) Depth of Discharge:

(a) 3-hour orbit: 40 percent at  $25^{\circ}$  C.

(b) 24-hour orbit: 25 percent and 40 percent at  $25^{\circ}$  C.

(4) Orbit Times:

(a) 3 hours--30-minute discharge and 150 minute charge.

(b) 24 hours--1-hour discharge and 23-hour charge.

k. Two Step Charge Regulator:

(1) Ambient Temperature:  $25^{\circ}$  C.

(2) Voltage limit per pack on charge:

(a) Upper Voltage Limit:  $1.97 \pm 0.03$  volts per cell.

(b) Low Current Limit: 0.35 amp.

(c) Overcharge Voltage Limit:  $1.87 \pm 0.03$  volts per cell.

(3) Depth of Discharge: 40 percent at 25° C.

(4) Orbit Time: 24-hour--1-hour discharge and 23-hour charge.

(5) Cell Type: Delco-Remy 25 a.h.

(6) When silver-cadmium and silver-zinc cells are put on a long charge period with only a voltage limit, the cells begin to unbalance when the pack goes into overcharge. A new method of charging cells of these types was developed at Goddard Space Flight Center. The cell pack is charged until it reaches the pack upper voltage limit. At this time, the charge current is reduced to maintain this voltage limit. When the charge current decreases to 350 milliamperes, the on-charge voltage limit is then reduced to the lower pack voltage limit which is equal to the open circuit voltage of the cell pack. In this method, the pack receives no more charge until there is a sufficient drop in the pack voltage to reset the pack voltage limit to the upper value. This method prevents the cells from becoming unbalanced during long charge periods.

### 3. Capacity Tests:

a. Before cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted of a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt per cell average. After each 88 days of cycling, each pack was discharged immediately after the end of the regular cycle charge period, at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 65 through 71.

### 4. Data:

a. Under normal operation, complete data is scheduled to be recorded every 32 cycles on the 90-minute and 3-hour packs. On the 24-hour packs, complete data is taken every eight cycles.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS								
15	25%	1.5	25°	432	7	8065	CELL TYPE: General Electric 3.0 Ampere-Hour Nickel-Cadmium Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.								
				414	8	8254	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.								
				479	5	8714	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Migration of Active Material, Blistering on Edge of Pos Plate, Separator Deteriorated.								
				267	10	10123	Low Volt Disch, Normal Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.								
				485	4	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.								
				447	9	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.								
				427	7	3985	Low Volt Disch, Normal Volt Chg, Pos Tab Broken and Touching Case, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.								
				58	6	4473	Low Volt Disch, Normal Volt Chg, Short on One Edge of Plates, Neg Plate Material Penetrated Separator.								
				361	1	4741	Low Volt Disch, Normal Volt Chg, Shorted, Separator Deteriorated, Neg Plate Material Penetrated Separator.								
				522	5	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.								
				16	40%	1.5	25°	427	7	3985	Low Volt Disch, Normal Volt Chg, Pos Tab Broken and Touching Case, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.				
												58	6	4473	Low Volt Disch, Normal Volt Chg, Short on One Edge of Plates, Neg Plate Material Penetrated Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CRAGES COMPLETED	CELL TYPE: General Electric 3.0 Ampere-Hour FAILURE ANALYSIS Nickel-Cadmium
16	40%	1.5	25°	456	10	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
39	15%	1.5	50°	719	4	5013	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Several Small Burned Areas on Separator.
				541	2	779	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
				540	6	2083	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
				549	7	2523	Low Volt Disch, High Volt Chg, Pos Tab Burned.
40	25%	1.5	40°	527	1	7213	Low Volt Disch, Normal Volt Chg, Deposit Around Pos Terminal, Pos Tab Burned, Migration of Neg Plate Material, Separator Deteriorated.
				534	5	8109	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.5 gm, Pos Tab Burned, Migration of Active Material, Separator Deteriorated.
				550	8	8109	Low Volt Disch, Normal Volt Chg; Pinpoint Penetration, Separator Deteriorated.
				464	3	2073	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
				3131	8	2182	Low Volt Disch, Normal Volt Chg, Leaked, Loose Plate Material on Separator.
			40°	47	7	2182	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
40	25%	1.5	40°	49	5	2446	General Electric 3.0 Ampere-Hour Nickel-Cadmium Low Volt Disch, High Volt Chg, Pos Weld to Terminal Stud Burned, Poor Weld.
			40°	45	10	2461	Low Volt Disch, High Volt Chg, Loose Plate Material on Separator, Short at Outside End of Pos Plate.
			40°	466	2	2500	Low Volt Disch, High Volt Chg, Leaked, Pos Tab Burned and Shorted to Neg Tab.
			40°	441	6	2509	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
43	15%	3.0	40°	416	4	1182	Low Volt Disch, Low Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	499	3	1515	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.
			40°	412	6	1911	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			40°	426	9	2298	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Top of Separator Burned, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			40°	436	7	2515	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Poor Roll, Uneven Wind at End of Roll, Shorts at Top of Roll, Separator Deteriorated.
			40°	425	10	2656	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
44	25%	3.0	40°	222	6	1672	CELL TYPE: General Electric 3.0 Ampere-Hour Nickel-Cadmium Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused By Overheating From Poor Tab Weld.
			40°	366	8	3848	Low Volt Disch, High Volt Chg, Pinpoint Penetration, Separator Deteriorated, Blistering on Bottom Edge of Pos Plate.
			40°	459	1	3854	Shorted on Cycling, Deposit on Pos Terminal, Pinpoint Penetration, Separator Deteriorated.
			40°	77	3	3854	Low Volt Disch, Normal Volt Chg, Migration of Active Material, Separator Deteriorated.
			40°	3120	2	4487	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.
			40°	296	10	4487	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deterioration.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gould 3.5 Ampere-Hour FAILURE ANALYSIS
3	25%	1.5	25°	73	5	2785	Low Volt Disch, High Volt Chg, Short Near Center of Core, Piece of Pos Plate Material Between Plates Causing Short Through Separator.
				54	2	3090	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.7 gm, Weak Weld on Neg Tab to Plate.
				165	9	4081	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.7 gm, Deposit on Glass Seal, Short Through Separator, Short at Pos Tab Near Center of Core, Neg Tab Weld to Plate Weak.
4	40%	1.5	25°	93	6	4289	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.6 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
				97	7	4401	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.5 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
				77	4	4751	Low Volt Disch, Normal Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates.
				188	10	4751	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.1 gm, Neg Plate Material on Separator.
				81	7	1609	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, High Pres Bulge Top.
				90	8	1827	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.7 gm, High Pres Bulge Top.
				2	1	2110	Low Volt Disch, Low Volt Chg, Separator Deteriorated at Center of Core, Under Pressure When Opened.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
4	40%	1.5	25°	43	6	2954	CELL TYPE: <u>Could 3.5 Ampere-Hour</u> Nickel-Cadmium Low Volt Disch, Low Volt Chg, Leaked, Lost 1.3 gm, Plate Material on Separator.
			25°	27	3	3029	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated.
			25°	198	10	3164	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.6 gm, Separator Deteriorated, Pos Plate Material Between Plates.
7	25%	3.0	25°	49	2	3007	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.7 gm, Neg Plate Material Migrated Through Separator, Separator Deteriorated, One Weak Weld Pos Tab to Plate.
			25°	37	1	3130	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.1 gm, Glass Seal Broken, Separator Very Dry, Neg Plate Material Migration, Pinpoint Penetration, Loose Neg Plate Material on Separator, Separator Deteriorated, All Tab Welds to Plate Weak.
			25°	109	6	3483	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.0 gm, Deposit on Glass Seal, Separator Deteriorated, Pinpoint Penetration, Neg Plate Material on Separator, Weak Weld on One Tab to Pos Plate Weld.
			25°	104	5	3736	Shorted on Cycling, Deposit on Glass Seal, Leaked, Lost 1.1 gm, Weak Weld Pos Tab to Plate, Neg Plate Material on Separator, Pinpoint Penetration, Separator Deteriorated.
			25°	131	7	3884	Low Volt Disch, Normal Volt Chg, Deposit Around Glass Seal, Leaked, Lost 1.7 gm, Neg Plate Material Loose, Pinpoint Penetration, Separator Deteriorated.
			25°	62	3	4173	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.4 gm, One Weak Weld on Pos Tab to Plate, Pinpoint Penetration, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS	CELL TYPE: <u>Could 3.5 Ampere-Hour</u>
8	40%	3.0	25°	68	6	1346	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Plate Material on Separator.	Nickel-Cadmium
				112	8	1704	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, Pos Tab Weld to Bottom of Can Weak, Pos Tab Weld to Plate Weak.	
				39	1	1985	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Neg Plate Material on Separator.	
				170	10	1985	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Pos and Neg Tab Weld Weak to Plates Near Center of Core, Separator Deteriorated at Center of Core.	
				78	7	2138	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Pos Tab Weld to Case Weak, Separator Deteriorated, Neg Plate Material Penetrated Separator.	
				41	2	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.7 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, One Bad Weld Neg Tab to Plate.	
				130	9	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Separator Deteriorated, Pos and Neg Plate Material Impregnated Separator.	
				13	3	2901	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos Plate Material on Separator.	
27	15%	1.5	40°	195	8	2901	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.6 gm, Short Through Separator, Separator Burned at Center of Core, Pos Plate Material on Separator.	
				103	7	2998	Low Volt Disch, Normal Volt Chg, High Pres, Short Through Separator, Pieces of Pos Plate Material Between Plates.	

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u> FAILURE ANALYSIS
27	15%	1.5	40°	200	10	3270	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.5 gm, Short Through Separator, Separator Deteriorated at Center of Core, Pos Tab Weld to Case Weak.
				197	9	4102	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Short at Pos Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator.
				11	2	4485	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
				122	2	408	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.
				157	7	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, High Pres Bulge.
				158	8	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.9 gm, High Pres Bulge Top.
				141	5	860	Low Volt Disch, High Volt Chg, Leaked, Lost 3.5 gm.
				168	10	1293	Low Volt Disch, High Volt Chg, Weak Weld to Bottom of Case.
				121	1	1811	Low Volt Disch, Low Volt Chg, Short at Outside End of Plates, Grid Wire Penetrated Separator.
				133	3	1811	Low Volt Disch, High Volt Chg, Weak Weld on Pos Tab to Case.
28	25%	1.5	40°	140	4	1811	Low Volt Disch, Low Volt Chg, Short Around Pos Tab, Blistering on Pos Plate, Active Neg Plate Material on Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
28	25%	1.5	40°	155	6	1811	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u> Nickel-Cadmium Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case.
31	15%	3.0	40°	R166	9	1500	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case, Deposit on Glass Seal.
			40°	R179	10	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Short Through Separator, Separator Deteriorated, One Weak Tab.
			40°	R92	2	1696	Low Volt Disch, High Volt Chg, Pieces of Plate Material Shorted Through Separator, Separator Deteriorated.
			40°	126	3	2411	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Short Through Separator by Piece of Pos Plate Material Between Plates, Separator Deteriorated, Neg Plate Material Impregnated Separator, Tab to Plate Weld Poor.
			40°	R162	8	2477	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 2.4 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, Pinpoint Penetration, Poor Weld Pos Tab to Case.
			40°	72	1	2517	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.8 gm, Short Between Plates, Extra Piece of Pos Plate Between Plates, Separator Deteriorated, Pos Tabs to Plate Weld Both Weak.
			40°	143	6	2517	Low Volt Disch, Low Volt Chg, Short Through Separator at Start of Core, Extra Piece of Pos Plate Material, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Neg Tab Weld to Pigtail Weak, One Tab to Pos Plate Weld Weak, Still Under Pressure When Opened.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Could 3.5 Ampere-Hour</u> FAILURE ANALYSIS
32	25%	3.0	40°	125	6	138	Nickel-Cadmium Low Volt Disch, Normal Volt Chg, Bottom Weld Weak, Greenish Corrosion Inside at Neg Lead.
			40°	65	3	495	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.5 gm, Bad Glass Seal Around Neg Terminal.
			40°	1	1	800	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, Shorts Near Center of Core.
			40°	67	4	875	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.2 gm, Short Around Tabs, Pos Tab Weld Weak to Case.
			40°	132	7	875	Failed During Shut Down to Move to Another Chamber, Leaked, Lost 4.4 gm, High Pres. Neg Tabs Pushed Out of Cell, Short at Center and Outside Edge of Core.
			40°	149	9	974	Low Volt Disch, High Volt Chg, Leaked, Lost 1.1 gm, Piece of Pos Plate Material Shorted Through Separator, Weak Welds to Case and Plates.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Sonotone 5.0 Ampere-Hour FAILURE ANALYSIS
2	40%	1.5	25°	811	10	3155	Shorted on Cycling, Leaked Around Seal, High Pressure Bulge on Bottom, Insulators Brittle, Exposed Grid Wires at Center of Core Penetrated Separator Causing Large Burned Area at Short, Pos and Neg Tab Weld Poor.
			25°	3628	5	3992	Low Volt Disch, Normal Volt Chg, Leaked Around Seal, High Pres Bulge on Bottom, Hole in Separator Exposing Pos and Neg Plates, Neg Plate Material Penetrated Separator.
			25°	3613	2	4411	Low Volt Disch, Low Volt Chg, Two Pieces of Neg Plate Material Wore Hole in Separator at Scoring Mark, Burned Through Plates, Neg Tab Welds Poor, Separator Beginning to Deteriorate.
			25°	3630	6	5262	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Pos and Neg Plate Material on Separator, Separator Deteriorated, Neg Tab to Plate Welds Weak, Burn Marks on Separator at Tabs, High Pressure Bulge.
			25°	3631	7	5262	Low Volt Disch, Low Volt Chg, Uncoined Plate Edges Pierced Separator Causing Partial Shorts, Burn Marks Around Tab Areas, Weak Weld on All Tab to Plate Welds, Deep Pressure Points Caused by Scoring, Separator Torn at Start of Core Exposing Pos and Neg Plate, Separator Deteriorated, Neg Plate Material on Separator.
			25°	3611	1	6671	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS				
25	15%	1.5	40°	4852	5	6348	Low Volt Disch, High Volt Chg, Separator Deteriorated, Large Burned Area at Center of Core, Pinpoint Penetration, Deep Scoring Caused Hole in Separator, Partial Shorts Around Edge of Plates, Deep Pressure Points Caused by Scoring.				
				4364	4	7052	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.				
				4317	1	7758	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.				
				4350	3	9070	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Corner of Outside Neg Plates, Grid Wire Penetrated Separator and Shorted to Pos Plate, Separator Completely Deteriorated.				
				6850	6	9220	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole Through Separator Near Edge of Plate Causing Short, Small Piece of Neg Plate Material Between Plates and Separator.				
				4347	2	9328	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Neg Plate Material Migrated Through Separator, Separator Deteriorated, Weak Weld Tab to Neg Plate.				
				4323	1	2487	Grid Wire Penetrated Separator at Tabs.				
				6773	9	2902	Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.				
				26	25%	1.5	40°	4323	1	2487	Grid Wire Penetrated Separator at Tabs.
								6773	9	2902	Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Sonotone 5.0 Ampere-Hour FAILURE ANALYSIS: Nickel-Cadmium
26	25%	1.5	40°	7224	6	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Neg Tab Weld Weak, Neg Plate Material Penetrated Separator.
			40°	7232	7	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Pos Tab Weld Weak, Plate Broken at Pos Tab, Deep Pressure Points From Scoring, Separator Completely Deteriorated.
			40°	4881	3	3344	Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.
			40°	4240	4	3625	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Plate Material Penetrated Separator.
30	25%	3.0	40°	3657	7	855	Hole in Separator Allowing Pos Plate to Hit Case, Separator Damaged at Center of Cell Allowing Pos and Neg Plate to Short Together.
			40°	3643	4	3068	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Neg Tab to Plate Welds Weak, Burn Spots Around Tabs, Deep Scoring Caused Burn Spots on Separator.
			40°	809	9	3068	Low Volt Disch, Low Volt Chg, Deposit Around Glass Seal, Burn Spots Around Edge of Separator Caused By Uncoined Edge of Plates, Deep Scoring Caused Burn Spots on Separator, Burn Spots Around Tab Areas, Separator Deteriorated.
			40°	3658	8	3684	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.3 gm, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	3617	1	4141	Shorted During Cycling, Deposit on Glass Seal, Hole in Separator at Tab Weld Area Caused Short, Separator Completely Deteriorated.
			40°	7230	10	4141	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Migration of Neg Plate Material, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u> FAILURE ANALYSIS
13	25%	1.5	25°	2305	1	308	Nickel-Cadmium Low Volt Disch, High Volt Chg, Lost 12 gm, CO <sub>3</sub> Top Ceramic, High Pres Bulge.
				2355	10	502	Low Volt Disch, High Volt Chg, Lost 10 gm, High Pres Bulge.
				3134	5	2969	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
				3211	7	3084	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
				2613	4	3598	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Separator Deteriorated.
				2324	2	4021	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
				1623	4	262	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres Bulge.
14	40%	1.5	25°	1635	5	262	Voltage Fell Off During Charge, Went Flat in 3 Min. on Disch, Lost 6 gm, Concave Wall, High Pres Bulge, Ceramic Broken Inside Case, CO <sub>3</sub> on Outside of Ceramic; Pos Terminal Loose.
				2356	1	450	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres.
				2387	2	1113	Low Volt Disch, High Volt Chg, Ceramic Short.
				2391	3	1618	Low Volt Disch, Low Volt Chg, Ceramic Short.
				3208	7	2086	Low Volt Disch, Normal Volt Chg, Ceramic Short.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
17	25%	3.0	25°	1862	5	721	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u> Nickel-Cadmium Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1823	3	721	Low Volt Disch, High Volt Chg, High Pres Bulge, Burnt Spot on Neg Plate Near Bottom Second From End, Ceramic Short.
			25°	2348	10	1688	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	1757	1	2375	Low Volt Disch, Low Volt Chg, Ceramic Short, Deposit Around Ceramic Seal, High Pres Bulge.
			25°	1598	2	2449	Low Volt Disch, Low Volt Chg, Pinpoint Penetration of Separator, Blistering on Pos Plate, High Pres Bulge.
			25°	2347	9	2885	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pressure Bulge, Still Under Pressure When Opened.
18	40%	3.0	25°	1826	6	365	Low Volt Disch, Chg Volt Normal, Lost 3 gm, Concave Wall, Ceramic Short.
			25°	1615	3	608	Low Volt Disch, Normal Volt Chg, Deposit on Top of Pos Terminal, Lost 5.1 gm, High Pres Bulge.
			25°	1827	7	643	Low Volt Disch, High Volt Chg, High Pres Bulge, Ceramic Short.
			25°	2228	9	643	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1562	5	1145	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	1233	1	1550	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Neg Plate Material on Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u> FAILURE ANALYSIS
37	15%	1.5	50°	1764	3	238	Nickel-Cadmium Low Volt Disch, Volt Did Not Increase on Following Chg, (1.00 V) Lost 4 gm, Ceramic Short.
			40°	1784	8	1566	Low Volt Disch, Low Volt Chg, Lost 10.5 gm, Ceramic Short.
			40°	1802	4	2819	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate.
			40°	2333	10	2981	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	1769	7	4897	Low Volt Disch, Normal Volt Chg, Ceramic Short, Leaked, Lost 1 gm, Blistering on Pos Plate, Separator Deteriorated.
			40°	1814	6	6064	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Separator Deteriorated, Neg Plate Material on Separator, Blistering on Pos Plates, Ceramic Short.
38	25%	1.5	50°	1454	8	37	No Volt on Chg or Disch, Ceramic Short.
			50°	1815	6	114	Volt Fell Off During Disch, Chg Volt Slightly Low, Lost 3.5 gm, Ceramic Short.
			40°	1853	9	187	Rev on Disch, Chg Volt Normal, Lost 4 gm, Deposits Around Pos Terminal (Outside), Ceramic Short.
			40°	1627	3	225	Low Volt Disch, High Volt Chg on Cycle 219, Dead on 225, Lost 3.5 gm.
			40°	2405	5	1333	Low Volt Disch, Normal Volt Chg, Pos Bus Shorted to Case.
			40°	1626	2	1377	Low Volt Disch, Low Volt Chg, High Pres Bulge, Ceramic Short.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u> FAILURE ANALYSIS
41	15%	3.0	40°	1771	9	649	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	1801	6	1062	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	3135	2	1132	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1852	7	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	2221	8	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1632	3	1689	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
42	25%	3.0	50°	2309	8	96	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	2346	7	382	Low Volt Disch, Low Volt Chg, CO <sub>2</sub> on Bottom of Case, Ceramic Short.
			40°	2306	9	416	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	918	1	484	Low Volt Disch, Low Volt Chg, High Pres Bulge, Deposit on Bottom of Case, Ceramic Short, Lost 3.1 gm.
			40°	2340	6	3619	Low Volt Disch, Normal Volt Chg, Deposit Around Ceramic Seal and Bottom Seam of Can, Leaked, Lost 8.2 gm, Pinpoint Penetration, Separator Deteriorated.
			40°	2334	4	4133	Low Volt Disch, Low Volt Chg, Deposit Around Cracked Pos Terminal, Leaked, Lost 8.8 gm, Migration of Neg Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
61	15%	1.5	0°	1622	2	1	CELL TYPE: <u>Culton 6.0 Ampere-Hour</u> Nickel-Cadmium Volt Between 0.25 and 0.3 V Throughout Cycle, Side Concave, Burnt Case, End Neg Pushed Into Pos Tab. Cell Replaced in Pack Due to Early Failure.
			0°	1845	8	6	Lost 5 gm, Leak at Weld on Bottom, High Pres Bulge, Cell Replaced in Pack Due to Early Failure.
			0°	2397	5	2762	Low Volt Disch, Low Volt Chg, Ceramic Short.
			0°	1825	4	4094	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2311	10	4285	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2400	6	4413	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	1636	3	*9760	Low Volt Disch, Low Volt Chg, High Pres Bulge, Concave Sides, Leaked, Lost 2.7 gm, Rough Place on Pos Plate Shorted Through Separator, Migration of Neg Plate Material Through Separator, Blistering on Pos Plates, Separator Deteriorated, Ceramic Short.
			0°	1616	1	*10146	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Concave Sides Causing Bus to Short Against Case, Pos Tab Burned, Migration of Neg Plate Material Through Separator, Separator Very Slightly Deteriorated, Leaked, Lost 6.0 gm.

\* FAILED DURING THIS REPORTING PERIOD.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
66	25%	3.0	0°	1794	6	1045	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u> Nickel-Cadmium Low Volt Disch, High Volt Chg, High Pres Bulge, Concave Side, Ceramic Broken, No Seal, Lost 5.1 gm, Pos Bus Against Case.
				1843	8	1173	Low Volt Disch, Low Volt Chg, Wall Concave, Ceramic Short.
				1781	5	1237	Low Volt Disch, High Volt Chg, High Pres Bulge, Deposit Around Pos Terminal, Ceramic Broken on Pos Terminal, Blisters on Pos Plate, Burnt Spot on Separator at Elisters, Lost 1.3 gm.
				1634	3	1417	Low Volt Disch, Normal Volt Chg, Ceramic Short, High Pres Bulge, One Side Concave Other Convex, Pos Plates Blistered, Lost 2.3 gm.
				1823	7	2122	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.8 gm, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge, One Side Concave.
				1591	4	4414	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, High Pressure Bulge, Concave Sides Shorting Against Pos Bus, Ceramic Short, Migration of Neg Plate Material, Pinpoint Penetration of Separator.
				2982	1	149	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Ceramic Short, Very Light Migration, Blistering on Pos Plates, Separator Deteriorated.
				2984	3	164	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Ceramic Short, Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
				2983	2	545	Low Volt Disch, Normal Volt Chg, Burned Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
				2985	4	545	Low Volt Disch, Normal Volt Chg, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deterioration.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
85	15%	1.5	40°	428	4	8888	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u> NICKEL-CADMIUM Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	448	3	8947	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	455	2	9710	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
93	50%	24.0	40°	208	2	266	Low Volt Disch, Normal Volt Chg, Was Opened Up But Did Not Show Anything to be Wrong with Cell, Failure Due to Loss of Capacity.
			40°	204	1	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Pinpoint Penetration, Separator Deteriorated.
			40°	209	3	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos and Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated.
			40°	210	4	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Pinpoint Penetration, Separator Deteriorated.
			40°	211	5	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated, Plate Not Packed Evenly.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
96	40%	1.5	25°	445	3	3822	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
				446	2	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
				442	4	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
				438	2	3894	Low Volt Disch, Low Volt Chg, Deposit on Pos and Neg Terminals, Pinpoint Penetration, Separator Deteriorated.
97	40%	3.0	25°	435	3	3946	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Deteriorated.
				434	4	5002	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
				429	3	3841	Shorted on Cycling, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator, Leaked at Neg Terminal, Epoxy Lifted Up.
99	25%	1.5	40°	432	2	3841	Failed During Shut Down of Pack, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
				440	1	4853	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u> FAILURE ANALYSIS
100	25%	3.0	40°	427	3	4170	Nickel-Cadmium Shorted on Cycling, High Pressure Bulge, Still Under Pressure When Opened, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	431	2	4358	Shorted on Cycling, High Pressure Bulge, Still Under Pressure, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	436	1	4424	Shorted on Cycling, Migration of Neg Plate Material Through Separator, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 12 Ampere-Hour</u> FAILURE ANALYSIS
290	25%	1.5	40°	1460	4	3060	Nickel-Cadmium Low Volt Disch, Low Volt Chg, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1459	3	3318	Shorted on Cycling, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1461	5	5124	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
296	40%	1.5	25°	1447	4	5036	Low Volt Disch, Normal Volt Chg, Piece of Loose Neg Plate Material Between Plates, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			25°	1443	2	5152	Shorted on Cycling, High Pressure Bulge, Blistering on Pos Plates, Separator Completely Gone, Hottest Point Near Center of Pack, All Insulators Burned, Leaked, Lost 3.3 gm.
			25°	1445	3	5152	Low Volt Disch, Low Volt Chg, Deposit on Both Terminals, High Pressure Bulge, Migration of Neg Plate Material, Short Through Separator Near Center of Plate, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gulton 20 Ampere-Hour
73	25%	1.5	25°	396	3	1776	FAILURE ANALYSIS: Nickel-Cadmium Low Volt Disch, Normal Volt Chg, Concave Side, Neg Ceramic Seal Broken, Lost 23.7 gm.
				387	1	6120	Low Volt Disch, Low Volt Chg, Lost 13.2 gm, Separator Completely Deteriorated, Neg Plate Material Migration, Pinpoint Penetration, Blistering on Pos Plates, High Pressure Bulge.
				465	4	7763	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Sides Concave, Migration of Active Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.
				458	4	1184	Low Volt Disch, Low Volt Chg, Leaked, Lost 14.2 gm, Blistering on Pos Plates.
74	25%	3.0	25°	419	3	1302	Low Volt Disch, Normal Volt Chg, Leaked, Lost 21.9 gm.
				440	2	1754	Low Volt Disch, Normal Volt Chg, Leaked Around Both Terminals, Ceramic Broken on Neg Terminal, Lost 18.0 gm, Neg Plate Material Penetrated Separator, Sides Concave, Shorting Case to Bus.
76	15%	1.5	40°	453	2	7697	Shorted on Cycling, Deposit on Neg Terminal, Ceramic Broken Around Neg Terminal, Extraneous Active Material Caused Short Between Plates, Separator Completely Deteriorated.
				431	4	7698	Cell Shorted During Shut Down for Cell Removal, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Causing Shorts, Separator Completely Deteriorated.
				455	3	9348	Shorted During Cycling, High Pressure Bulge, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated, Short on Upper Corner Near Neg Tab.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
87	40%	1.5	25°	468	1	163	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 8 gm.
				388	2	208	Low Volt Disch, High Volt Chg, Lost 26.7 gm, Ceramic Short Around Pos Terminal.
				394	3	627	Low Volt Disch, High Volt Chg, Lost 16.4 gm, High Pres Bulge, Deposit on Both Terminals, Ceramic Short Neg to Case.
				454	4	627	Low Volt Disch, Low Volt Chg, Lost 21.6 gm, Deposit on Both Terminals, Sides Concave, Hit Bus on Both Sides.
				386	5	627	Low Volt Disch, Low Volt Chg, Lost 18.1 gm, High Pres Bulge, Burnt Separator 5th or 6th Neg Plate Near Top, Ceramic Short.
88	40%	3.0	25°	422	2	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
				404	1	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
				466	3	358	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 16.4 gm.
89	25%	1.5	40°	429	5	358	Low Volt Disch, Low Volt Chg, Ceramic Short Around Pos Terminal.
				452	4	2824	Low Volt Disch, Low Volt Chg, Short Through Separator at Top of Plates, High Pres Bulge on Sides, High Pres, Separator Deteriorated.
				457	5	2824	Low Volt Disch, Normal Volt Chg, Short Through Separator, Blistering on Pos Plate, High Pres Bulge on Sides, High Pres.
				378	3	4045	Normal Volt Disch, Went Dead on Chg During Cap Check, Ceramic Short, Separator Completely Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 20 Ampere-Hour</u> FAILURE ANALYSIS
91	25%	3.0	40°	395	4	2862	Nickel-Cadmium Shorted Out Following Capacity Check, Leaked, Lost 6.8 gm, Deposit on Both Terminals, Both Ceramic Seals Broken, Separator Completely Deteriorated, Neg Plate Material Migration, Separator Very Wet, Plastic Wrap Burned, Ceramic Short.
			40°	412	3	3385	Shorted on Cycling, High Pressure Bulge, Pos and Neg Plate Material on Separator, Separator Completely Deteriorated.
			40°	489	1	4480	Shorted During Cycling, Deposit on Both Terminals, Still Under Pressure When Opened, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	447	2	4480	Shorted During Cycling, Deposit on Neg Terminal, High Pressure Bulge, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
101	15%	1.5	0°	435	2	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 24.6 gm, High Pres Bulge, Separator Very Dry.
			0°	407	5	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 20.4 gm, Separator Very Dry.
			0°	438	4	3629	Low Volt Disch, High Volt Chg, Leaked, Lost 13.2 gm, High Pres Bulge, Sides Concave, Blistering on Pos Plates.
115	25%	1.5	0°	490	3	2107	Low Volt Disch, Normal Volt Chg, Walls Concave, Busses Shorted to Case, Lost 26.9 gm.
			0°	508	2	2203	High Pres Bulge, Blisters on Pos Plate, Busses Shorted to Case.
			0°	467	4	2291	Black Deposit on Outside on Neg Terminal, High Pres Bulge, Busses Shorted to Case, Blisters on Pos Plate, Burnt Spot on Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gould 20 Ampere-Hour FAILURE ANALYSIS
104	25%	1.5	25°	69	1	2672	Nickel-Cadmium Low Volt Disch, Low Volt Chg, Shorted at Bottom on Pos Plate, Pos Grid Wire Penetrated Separator, Short at Top Between Pos Grid and Neg Tab, High Pressure.
			25°	R36	5	2826	Low Volt Disch, Low Volt Chg, Short Between Plates, Grid Wire Penetrated Separator, Pos Plate Material Between Plates, High Pressure.
			25°	5	3	2980	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Short Between Plates, High Pressure.
112	15%	1.5	40°	17	1	5005	Low Volt Disch, Low Volt Chg, Short Between Plates, Short About One Inch From Bottom of Plates, Separator Completely Deteriorated, High Pressure.
			40°	25	2	5005	Low Volt Disch, Low Volt Chg, Shorted Through Separator, Shorted on Bottom Corner of Plates, Separator Completely Deteriorated, High Pressure.
			40°	38	5	5213	Low Volt Disch, Low Volt Chg, Short at Top Corner of Plate Where Pos Tabs are Connected to Plates, Separator Deteriorated Allowing Plates to Come Together, Blistering on Pos Plates.
118	40%	1.5	25°	61	2	1747	Low Volt Disch, Low Volt Chg, Short at Bottom of Pos Plate, Grid Wires Penetrated Separator Where Tape Holds Plates Together, High Pressure.
			25°	R91	4	1963	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plates, Grid Wires Through Separator, Rough Grid Showing Through at Top and Bottom of Most Plates, High Pressure.
			25°	92	5	2037	Low Volt Disch, Low Volt Chg, Short Through Separator on Side of Plates, Pos Plate Material Penetrated Separator, High Pressure.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
119	40%	3.0	25°	73	5	222	CELL TYPE: <u>Gould 20 Ampere-Hour</u> Nickel-Cadmium Normal Volt Disch, Low Volt Chg, Short Near Bottom of 5th or 6th Pos, No Obvious Cause.
			25°	80	2	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
			25°	86	3	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
122	25%	3.0	40°	16	2	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	58	3	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	18	5	983	Low Volt Disch, Low Volt Chg, Plate Material Penetrated Separator, Pos Plates Blistered, High Pressure.
126	25%	1.5	40°	9	3	1273	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Neg Plate, Grid Wire Penetrated Separator, Several Other Plates Had Grid Wires Sticking Out, High Pressure.
			40°	R29	4	1509	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plate, Grid Wire Penetrated Separator, Blistering on Pos Plates, Separator Deteriorated, High Pressure.
			40°	11	5	1569	Low Volt Disch, Low Volt Chg, Shorted on Side of Pos Plate, Grid Wire Penetrated Separator, High Pressure.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: General Electric 3.0 Ampere-Hour FAILURE ANALYSIS
20	40%	3.0	25°	421	5	3704	Nickel-Cadmium Low Volt Disch, Low Volt Chg, Blistering on Bottom and Top Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	433	2	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated, Burned Pos Tab.
			25°	711	6	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated, Deposit on Pos Terminal.
			25°	710	3	4889	Shorted on Cycling, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gould 3.5 Ampere-Hour</u> FAILURE ANALYSIS
52	25%	1.5	0°	116	8	7858	Nickel-Cadmium Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Neg Plate Material on Separator, Excess Migration of Neg Plate Material, Separator Deteriorated.
			0°	194	10	8367	Low Volt Disch, Normal Volt Chg, Under High Pressure When Opened, Pinpoint Penetration, Migration of Active Material Around Tab Areas.
			0°	108	7	9724	Low Volt Disch, High Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.
			0°	118	9	9724	Low Volt Disch, Low Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
1	25%	1.5	25°	4361	4	2995	<p>CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u></p> <p>Nickel-Cadmium</p> <p>Low Volt Disch, High Volt Chg, Inclusion on Surface of Outside Pos Plate Wore Hole Through Separator and Thin Outside Wrap, Separator Sticking to Neg Plate, Glass Seal Leaked.</p>
			25°	4335	1	4423	<p>Low Volt Disch, High Volt Chg, Neg Tabs Weak Weld to Plates, Separator Melted at Center of Core, Extreme Pressure Points on Separator From Scoring Causing High Resistance Shorts.</p>
			25°	4878	6	7782	<p>Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Short Caused by Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.</p>
5	25%	3.0	25°	4351	2	3771	<p>Low Volt Disch, High Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Neg Plate Material, Deep Pressure Points Resulting in Intermittant Shorts, Separator Deteriorated.</p>

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 5.0 Ampere-Hour</u> FAILURE ANALYSIS
6	40%	3.0	25°	4324	8	1069	Low Volt Disch, Normal Volt Chg, Separator Impregnated With Active Material, Separator Sticking to Neg Plate.
			25°	6904	10	1136	Low Volt Disch, Low Volt Chg, Small Hole in Separator at Start of Coil, Pos Plate Edge Broken Allowing Grid Wire to Penetrate Separator.
			25°	3637	4	1161	Grid Wires of Pos Plate Penetrated Separator and Shorted to Neg Plate, Active Plate Material Penetrated Separator at Three Points, Bad Tab Welds.
			25°	6875	9	3798	Low Volt Disch, Normal Volt Chg, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			25°	6882	7	4608	Low Volt Disch, Normal Volt Chg, Excess Scoring, Shorts at Edge of Plates, Neg Tab Area, and at Scoring, Weak Weld Neg Plate to Tab, Separator Deteriorated.
29	15%	3.0	40°	3626	1	1418	Shorted on Cycling, Neg Tab Welds Poor, Active Plate Material Penetrated Separator at Scoring Marks.
			40°	810	7	4835	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Burn Spots Along Top Edge of Neg Plate, Hole Burned in Separator, Weak Weld Neg Tab to Plate.
			40°	4327	8	4340	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Score Band, Separator Completely Deteriorated.

PAGE NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
49	15%	1.5	0°	6887	9	2010	<u>Sonotone 5.0 Ampere-Hour</u> Nickel-Cadmium
			0°	4370	3	10073	Low Volt Disch, Low Volt Chg, Burn on Separator, Opposite Pos Tab. Shorted During Cycling, Short Through Separator Caused By Deep Pressure Points Adjacent to Scoring, Migration of Neg Plate Material, Small Inclusion on Plates Starting to Penetrate Through Separator.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour</u> FAILURE ANALYSIS
62	25%	1.5	0°	1630	10	2995	Nickel-Cadmium Low Volt Disch, High Volt Chg, Leaked, Lost 6.8 gm, Ceramic Seal Broke, Deposit on Inside of Ceramic, High Pres Bulge, Blistering on Pos Plates.
			0°	1792	4	4066	Low Volt Disch, Low Volt Chg, Small Shorts Through Separator Near Pos Tab, Blistering on Pos Plate, Separator Deteriorated.
			0°	1806	5	4441	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	2227	7	8590	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Blistering on Pos Plates, Ceramic Short.
65	15%	3.0	0°	1284	4	5012	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Concave Sides, Edge of Pos Tab Shorted to Top of Neg Plates, Very Light Migration of Neg Plate Material, Blistering on Pos Plates.
			0°	2095	6	*5706	Low Volt Disch, Low Volt Chg, Concave Sides Shorted Pos and Neg Bus to Case, Pinpoint Migration Through Separator, Blisters on Pos Plate, Separator Deteriorated.
			0°	1808	8	*6186	Low Volt Disch, Low Volt Chg, Concave Sides Shorted Pos and Neg Bus to Case, Pos Plate Penetrated Separator and Shorted to Neg Plate, Pinpoint Migration Through Separator, Blisters on Pos Plates, Separator Deteriorated.

\* FAILED DURING THIS REPORTING PERIOD

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
98	25%	1.5	0°	77	5	3556	CELL TYPE: Could 20 Ampere-Hour FAILURE ANALYSIS: Nickel-Cadmium Low Volt Disch, Low Volt Chg, Separator Deteriorated, Neg Plate Material Penetrated Separator, Two Pos Plates Not Welded to Tabs.
			0°	47	1	3619	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Pieces of Loose Neg Plate Material Between Plates, Migration of Neg Plate Material, Separator Deteriorated, Short Through Separator at Bottom of Plates Where Tape Holds Plates Together.
			0°	14	4	*106/41	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Migration of Neg Plate Material, Short Between Pos and Neg, Separator Completely Deteriorated.
105	25%	3.0	25°	40	1	4306	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Deep Penetration by Blisters on Pos Plate, Separator Deteriorated.
			25°	23	3	*5580	Low Volt Disch, Low Volt Chg, Deposit on Pos Term, Still Under Pressure When Opened, Migration of Neg Plate Material, Short Between Pos and Neg Plates, Separator Completely Deteriorated.
			25°	41	4	*5690	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Weak Weld on Comb to Plate, Migration of Neg Plate Material, Separator Deteriorated.
108	15%	3.0	40°	81	2	4003	Shorted on Cycling, Still Under Pressure When Opened, Several Shorts Caused by Small Pieces of Metal Between Plates, Blistering on Pos Plates, Separator Deteriorated.
			40°	82	3	4233	Shorted During Cycling, Still Under Pressure When Opened, Loose Pieces of Pos Plate Material Between Plates, Pinpoint Penetration, Blistering on Pos and Neg Plates, Separator Deteriorated, Short Between Pos Plate and Neg Tab at Top of Cell.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 20 Ampere-Hour</u> FAILURE ANALYSIS
77	15%	3.0	40°	462	2	*5510	Shorted on Cycle, Deposit on Neg Term, Concave Sides, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	415	1	*5684	Shorted on Cycle, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Short Between Pos and Neg Plates at Top of Plate, Separator Completely Deteriorated.
			40°	427	4	*6032	Shorted on Cycle, Deposit on Pos and Neg Term, High Pressure Bulge, Migration of Neg Plate Material, Short Between Pos and Neg Plates, Separator Completely Deteriorated.
102	15%	3.0	0°	449	2	135	Volt Fell Suddenly at End of Chg, Burn Spots at Busses, Concave Around Spots, End Neg Pushed Into Pos Tab.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>General Electric 12.0 Ampere-Hour</u> FAILURE ANALYSIS
82	25%	1.5	25°	430	2	7527	Nickel-Cadmium Low Volt Disch, Normal Volt Chg, Pierced Separator Caused By Rough Place at Top Edge of Neg Plate, Neg Plate Material Migrated, Separator Deteriorated.
124	25%	1.5	0°	410	5	3037	Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It was Put Back on Cycling in Same Pack.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Sonotone 3.0 Ampere-Hour</u> FAILURE ANALYSIS Nickel-Cadmium
202	40%	1.5	25°	A3553	3	1630	Low Volt Disch, Normal Volt Chg, Cell Very Dry, Capacity Decay Due to Insufficient Electrolyte, Migration of Plate Material Around Tab and Scoring Areas.

PAGE NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
Sherfey	40%	1.5	25	106	2	2409	<u>Culton 3.6 Ampere-Hour</u> Nickel-Cadmium Low Volt Disch, Low Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.9 gm., Loose Active Material Pos and Neg, Pinpoint Penetration, Separator Very Dry.
				111	3	*3190	Low Volt Disch, Normal Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.0 gm, Weak Weld Neg Tab to Case, Loose Active Material Pos and Neg, Migration of Neg Plate Material, Blisters on Pos Plates. Separator Deteriorated.
				135	10	*3472	Low Volt Disch, Low Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 4.2 gm, Loose Active Material Neg, Migration of Neg Plate Material, Separator Deteriorated.
259	25%	1.5	25	134	6	*2038	Low Volt Disch, Normal Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.5 gm, Pos Active Material Loose, Migration of Neg Plate Material, Blisters on Pos Plates, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gulton 4.0 Ampere-Hour FAILURE ANALYSIS
214	40%	1.5	25	None	3	*7564	Shorted on Cycling, Gassing When Opened, Concave Sides, Weak Weld on Pos Plates to Comb For 3-Plate Group, Migration and Separator Deteriorated Heavy Between 4-Plate Group.
				None	1	*8474	Low Volt Disch, Low Volt Chg, High Pressure Bulge and Gassing, Weak Weld on Pos Plates to Comb for 3-Plate Group, Migration and Separator Deteriorated Heavy Between 4-Plate Group.
				None	5	*8474	Low Volt Disch, Low Volt Chg, High Pressure Bulge and Gassing, Migration of Neg Plate Material, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 5.0 Ampere-Hour (NIMBUS)</u> FAILURE ANALYSIS
128	25	1.5	40	291	3	2422	Nickel-Cadmium Shorted During Cycling, Neg Plate Not Welded To Case, Loose Neg Plate Material at Center of Core, Migration of Neg Plate Material, Separator Deteriorated, Ceramic Short.
318	25	1.5	25	273	2	4865	Shorted During Cycling, Pos Tab Touched Top of Neg Plate Shorting Out Cell, Burned Pos Tab, Weak Weld Neg Tab to Case, Migration of Neg Plate Material, Separator Deteriorated.

PACK NUMBER	276
DEPTH OF DISCHARGE	25%
ORBIT PERIOD (HOURS)	1.5
TEST TEMPERATURE	25°
CELL NUMBER	115
POSITION IN PACK	2
CYCLES	±20%
CELL TYPE:	Gulton 5.6 Ampere-Hour (Folded Neoprene Seal)
FAILURE ANALYSIS	Nickel-Cadmium Low Volt Disch, High Volt Chg, Deposit Around Top To Side weld, Pos Tab Burned and Broken, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
230	25%	1.5	40°	111	5	*1195	CELL TYPE: <u>Gulton 5.6 Ampere-Hour (Nonfolded Neoprene Seal)</u> Nickel-Cadmium Low Volt Disch, Low Volt Chg, Deposit Around Top to Side Weld, Leaked, Lost 1.6 gm, Weak Weld Pos Tab to Term, Migration of Neg Plate Material, Separator Deteriorated.
			40°	103	3	*1196	Low Volt Disch, High Volt Chg, Still Under Pressure When Opened, Burned Pos Tab, Separator Deteriorated.
			40°	101	1	*1175	Low Volt Disch, High Volt Chg, Still Under Pressure When Opened, Pos Tab Burned and Broken, Migration of Neg Plate Material, Separator Deteriorated.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: <u>Gulton 6.0 Ampere-Hour (HSI)</u> FAILURE ANALYSIS
218	40%	1.5	25°	5323	2	*5364	Nickel-Cadmium Low Volt Disch, Low Volt Chg, Ceramic Short, Nickel Plating Flaked Off of Pos Term, Pinpoint Migration Through Separator Blisters on Pos Plates. Separator Deteriorated.
218	25%	1.5	40°	5321	5	4350	Low Volt Disch, Low Volt Chg, Still Under Pressure when Opened, Pos Tab Burned, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Completely Deteriorated, Neg Plate Shorted Through Separator.
			40°	5318	2	*5184	Low Volt Disch, Low Volt Chg, Deposit on Pos Term, Burned Pos Tab, Ceramic Short, Migration of Neg Plate Material, Blisters on Pos Plate, Separator Deteriorated.
			40°	5320	4	*5766	Low Volt Disch, Normal Volt Chg, Burned Pos Tab, Ceramic Short, Migration of Neg Plate Material, Blisters on Pos Plate, Separator Deteriorated.



PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
11	25%	1.5	25°	147	3	2753	Gulton 6.0 Ampere-Hour (Third Electrode) Nickel-Cadmium Third Electrode Shorted to Pos, Ceramic Short, Blistering on Pos Plates, Separator Deteriorated, Leaked, Lost 1.3 gm.
47	40%	1.5	25°	153	5	*5223	Shorted on Cycling, Deposit on Neg Term Seal, Under Pressure When Opened, Migration of Neg Plate Material, Blisters on Pos Plate, Short Through Separator Between Pos and Neg Plate Near Top of Cell, Separator Deteriorated.
53	25%	1.5	0°	140	3	3222	Third Electrode Shorted to Neg Plate, Migration of Neg Plate Material, Shorted Out Third Electrode, High Pressure Bulge, Still Under Pressure When Opened, Lost 1.4 gm.
71	40%	1.5	0°	130	5	2993	Low Volt Disch, High Volt Chg, Deposit on Neg Terminal, Leaked, Lost 8.7 gm, High Pressure Bulge, Large Deposits of Loose Active Neg Plate Material, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates.
			0°	141	4	*5070	Low Volt Disch, High Volt Chg, Leaked, Lost 5.9 gm, Separator Very Dry, Migration of Neg Plate Material, Blisters on Pos Plates.

PACK NUMBER	301									
DEPTH OF DISCHARGE	25%									
ORBIT PERIOD (HOURS)	1.5									
TEST TEMPERATURE	0°									
CELL NUMBER	1455									
POSITION IN PACK	4									
CYCLES COMPLETED	*5586									
CELL TYPE:	Gulton 12.0 Ampere-Hour									
FAILURE ANALYSIS	Nickel-Cadmium									
	Low Volt Disch, High Volt Chg, High Pressure Bulge, Leaked, Lost 9.6 gm, Migration of Neg Plate Material, Blisters on Pos Plates, Separator Very Dry.									

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
95	25%	1.5	0°	109	3	2643	<u>Gulton 50 Ampere-Hour</u> Nickel-Cadmium Shorted Out While Cycling, All Plates Shorted at Bottom Center, Separator Very Dry and Stiff From Heat, Blistering on Pos Plate.
			0°	107	5	2938	Shorted Out While Cycling, Short Between Plates at Center Near Bottom of Plates, Separator Dry, Small Amount of Neg Plate Material Migration on Separator.
			0°	115	1	3227	Low Volt Disch, High Volt Chg, Separator Impregnated with Neg Plate Material, Large Blisters on Pos Plate, One Neg Plate Stuck to Can.
123	15%	1.5	40°	119	2	1873	Low Volt Disch, Low Volt Chg, Separator Decomposed, Hot Spots Through Separator Shorted Out Several Plates, High Pres Bulge, Still Under Pressure When Opened.
			40°	118	3	1873	Went Dead During Shutdown, Separator Decomposed, Several Small Hot Spots on Each Plate, Outside Neg Plates Stuck to Case, High Pres Bulge, Deposit Around Ceramic Seal of Pos Terminal.
			40°	117	4	1873	Went Dead During Shutdown, Separator Decomposed, Neg Plate Stuck to Case, High Pres Bulge, Still Under Pressure When Opened.

PAGE NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS	CELL TYPE: <u>Yardney 12 Ampere-Hour</u> <u>Silver-Cadmium</u>
33	50%	24.0	40°	3	3	58	Leaked, Dried Out.	
				2	2	126	Leaked, Dried Out.	
				1	1	152	Leaked, Dried Out.	
				8	8	197	Leaked, Dried Out.	
				4	4	210	Leaked, Dried Out.	
				10	10	210	Leaked, Dried Out.	
				1	1	162	Leaked, Electrolyte Shorted Out Cell.	
				2	2	162	Leaked, Electrolyte Shorted Out Cell.	
				10	10	162	Leaked, Electrolyte Shorted Out Cell.	
				3	3	166	Leaked, Electrolyte Shorted Out Cell.	
57	50%	24.0	0°	4	4	166	Leaked, Electrolyte Shorted Out Cell.	
				5	5	166	Leaked, Electrolyte Shorted Out Cell.	
				6	6	166	Leaked, Electrolyte Shorted Out Cell.	
				7	7	166	Leaked, Electrolyte Shorted Out Cell.	
				8	8	166	Leaked, Electrolyte Shorted Out Cell.	
				9	9	166	Leaked, Electrolyte Shorted Out Cell.	

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: FAILURE ANALYSIS
75	40%	24.0	25°			32	<u>Delco 25 Ampere-Hour</u> Silver-Zinc
89	40%	24.0	25°			80	Cell Blew Up, Pack Returned to Manufacturer.
288	40%	3.0	25°			120	Returned to Manufacturer for Analysis. Returned to Manufacturer for Analysis.

PACK NUMBER	275
DEPTH OF DISCHARGE	25%
ORBIT PERIOD (HOURS)	24.0
TEST TEMPERATURE	25°
CELL NUMBER	
POSITION IN PACK	
CYCLES COMPLETED	139
CELL TYPE: Delco 40 Ampere-Hour FAILURE ANALYSIS Silver-Zinc	Returned to Manufacturer for Analysis.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
						*(See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS		
G.E. 3 A.H.	63	1.5	15	0	3.18			3.12	3.05	3.03	3.05	2.90	3.30	3.50		
	64		25	0	3.33			3.70	3.38	3.35	3.42	3.27	3.12	2.70		
	15		25	25	4.00			3.93	3.32	3.45	1.47	1.15				
	16		40	25	4.00			2.10	1.35							
G.E. 3 A.H.	39		15	50/40	1.65	3.42 (779)		1.53	1.25	1.17	0.70					5012
	40		25	50/40	1.80	2.50 (1440)		0.88								8109
	67	3	15	0	3.63			3.40	3.53	2.97	3.25	2.95	3.04	3.08		2509
	68		25	0	3.50			3.53	3.40	2.27	3.25	2.93	2.87	3.20		
Gould 3.5 A.H.	19		25	25	3.43			2.48	3.15	3.00	2.78	2.48	2.29	2.20		
	20		40	25	3.78			2.35	2.07	1.83	2.00	1.62	1.47	1.20		
	43		15	50/40	1.77	2.63 (220)		1.61	1.65							2656
	44		25	50/40	1.60	2.00 (327)		1.19	1.15	1.10	0.95	0.88				
Gould 3.5 A.H.	51	1.5	15	0	3.62			3.33	3.41	3.21	3.35	3.15	3.47	3.00		
	52		25	0	3.33			3.53	3.18	3.30	3.24	2.80	2.65	2.96		
	3		25	25	4.00			2.92	2.25							4781
	4		40	25	3.94			2.77								2164
Gould 3.5 A.H.	27		15	50/40	1.53	2.63 (779)		1.95	1.90							4495
	28		25	50/40	1.55	2.07 (424)										1811
	55	3	15	0	3.27			3.15	3.38	3.33	3.27	3.03	2.77	3.73		
	56		25	0	3.50			3.53	3.65	3.41	3.38	3.30	3.27	3.24		
Gould 3.5 A.H.	7		25	25	4.22			3.79	3.53	2.77	2.28	2.51				
	8		40	25	4.29			3.35	3.03							2494
	31		15	50/40	1.60	1.31 (328)		1.98	2.16							2524
	32		25	50/40	1.55	1.66 (495)										975

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Still at 50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	JACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL	CAPACITY CHECKS AFTER 88-DAYS INTERVALS										CYCLES TO PACK FAILURE										
						NINTH 88 DAYS	TENTH 88 DAYS	ELEVENTH 88 DAYS	TWELFTH 88 DAYS	THIRTEENTH 88 DAYS	FOURTEENTH 88 DAYS	FIFTEENTH 88 DAYS	SIXTEENTH 88 DAYS	SEVENTEENTH 88 DAYS												
G.E. 3 A.H.	63	1.5	15 0	0			3.10	2.65																		
	64		25 0	0			2.70	2.85																		
	15		25 25	25																						
	16		40 25	25																						
	39		15 50/40	15	50/40																					
	40		25 50/40	25	50/40																					
G.E. 3 A.H.	67	3	15 0	0			2.95																			
	68		25 0	0			2.78																			
	19		25 25	25			1.88	2.00																		
	20		40 25	25																						
	43		15 50/40	15	50/40																					
	44		25 50/40	25	50/40																					
Gould 3.5 A.H.	51	1.5	15 0	0			2.83	3.21																		
	52		25 0	0			2.42																			
	3		25 25	25																						
	4		40 25	25																						
	27		15 50/40	15	50/40																					
	28		25 50/40	25	50/40																					
Gould 3.5 A.H.	45	3	15 0	0			2.60	3.15																		
	50		25 0	0			2.92																			
	7		25 25	25																						
	9		40 25	25																						
	31		15 50/40	15	50/40																					
	32		25 50/40	25	50/40																					



AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE	
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS		
Sonotone 5 A.H.	49	1.5	15	0	5.45		5.54	5.50	4.96	4.79	4.71	4.50	4.54	4.54	7.08	
	50		25	0	5.04		4.96	4.58	4.25	3.79	3.67	3.67	3.66	3.25		
	51		25	25	5.12		3.67	2.33	2.88	2.79	2.21	2.58	2.80	2.74		
	52		40	25	6.42		4.38	4.17	3.25	3.00						6671
	53		15	50/40	3.08	(763)	2.25	1.83	2.04	1.17	1.17	1.54	2.22			
	54		20	50/40	3.17	(145)	2.75	2.93								
Sonotone 5 A.H.	55	3	15	0	5.67		5.79	5.67	5.42	5.33	5.50	5.54	5.00	5.00	4.02	
	56		25	0	4.91		3.96	3.96	4.13	3.96	3.75	3.29	2.38	2.38	3.13	
	57		25	25	5.71		4.58	3.04	2.04	2.13	2.13	2.08	2.21	2.25		
	58		40	25	5.83		4.50	3.29	3.25	2.92	2.33	2.33	2.00	2.00		
	59		15	50/40	3.33	(223)	2.75	2.38	2.42	2.08	1.96	1.29	1.79			
	60		25	50/40	3.75	(183)	1.88	2.88	2.38	1.67	1.21					
Gulton 6 A.H.	61	1.5	15	0	5.00		5.10	5.40	4.45	3.15	2.60	2.15	1.75	1.75		
	62		25	0	5.00		4.75	3.80	4.35	3.55	3.30	3.30	3.95	3.85		
	63		25	25	5.80		2.75	2.85	2.70							4021
	64		40	25	6.40		3.45									2086
	65		15	50/40	2.75	(239)	1.70	2.95	1.85	2.00						6064
	66		20	50/40	2.65	(114)	1.55									1377
Gulton 6 A.H.	67	3	15	0	4.90		5.45	5.35	5.15	4.50	4.50	5.15	4.20	4.10		
	68		25	0	4.25		5.00	3.50	2.50	3.80	3.90	3.45				
	69		25	25	5.80		3.65	3.45	2.50	2.30						4414
	70		40	25	4.55		4.95	3.16								2885
	71		15	50/40	2.95	(239)	2.05	1.63								1550
	72		25	50/40	2.60	(96)	2.15	2.10	2.35	1.85	1.50	1.30				
																4133

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS							CYCLES TO PACK FAILURE			
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS		EIGHTH 88 DAYS		
G.E. 12 A.H.	111	1.5	15	0	13.9		12.7	10.4	13.0	12.5	14.1	13.7					
	124		25	0	14.2		13.5	12.9	12.8	11.4	11.5	11.7					
	108		25	25	15.1		8.00	5.55	5.50	5.40	5.70	5.00					4080
	106		40	25	14.8		6.00	7.65									
	104		15	50/40	6.80	8.20	(334)	5.00	4.70	5.00	4.90	5.00	1.90				
G.E. 12 A.H.	111		15	0	4.2		13.2	10.7	11.0	12.1	12.9	12.0					
	105		25	0	14.7		13.0	12.1	11.9	12.2	12.9	11.7					
	103		25	25	15.2		11.7	8.20	6.13	5.20	4.80	4.40					
	107		40	25	14.9		5.60	5.86	7.90	8.20	6.80	5.50					
	100		15	50/40	7.10	18.20	(205)	6.30	3.70	4.00	3.50	2.90					
G.E. 20 A.H.	104		25	0	23.5		27.7	26.5	24.2	24.7	21.7	22.3					
	118		25	0	23.1		21.2	15.2	18.7	17.2	17.5	13.5					
	118		25	25	25.0		18.5	14.0									
	112		40	25	24.7		23.3										
	126		15	50/40	9.67	6.83	(183)	15.7	15.3	12.5	12.4						
G.E. 20 A.H.	103		25	0	9.00	13.9	(1326)	15.2									
	103		15	0	23.0		23.2	21.5	20.3	25.8	19.7	18.3					
	104		25	0	23.0		17.5	25.0	18.2	18.8	16.8	17.0					
	103		25	25	23.3		23.5	22.2	21.3	21.2	20.7	10.5					
	104		40	25	24.8		24.7	21.7									
G.E. 20 A.H.	103		15	50/40	9.50	9.67	(47)	11.8	14.8	16.8	15.2	12.3					
	104		25	50/40	9.33	7.50	(756)	8.17*									

\* Preconditioning at 50°C to 40°C. Number of cycles completed at 50°C is in parentheses.

\*\* 25°C to 20°C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE										
					NINTH 88 DAY	TENTH 88 DAY	ELEVENTH 88 DAY	TWELFTH 88 DAY	THIRTEENTH 88 DAY	FOURTEENTH 88 DAY	FIFTEENTH 88 DAY	SIXTEENTH 88 DAY	SEVENTEENTH 88 DAY	EIGHTEENTH 88 DAY		NINETEENTH 88 DAY									
G.E. 12 A.H.	110	1.0	15	0																					
	124		25	0																					
	125		35	0																					
	126		40	0																					
	127		35	0																					
	128		35	0																					
	129		35	0																					
G.E. 15 A.H.	131	1.0	15	0																					
	132		25	0																					
	133		35	0																					
	134		40	0																					
	135		35	0																					
	136		35	0																					
	137		35	0																					
G.E. 20 A.H.	141	1.0	15	0																					
	142		25	0																					
	143		35	0																					
	144		40	0																					
	145		35	0																					
	146		35	0																					
	147		35	0																					

\*Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.  
 \*\*50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS							CYCLES TO PACK FAILURE			
					INITIAL	*(See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS		EIGHTH 88 DAYS		
Gulston 20 A.H.	101	1.5	15	0	17.2		12.5	5.67									3631
	115		25	0	17.7		11.2										2288
	73		25	25	23.3		7.17	9.50	7.83	8.67	8.83						7763
	87		40	25	23.3												627
	76		15	50/40	10.3	13.8	6.50	4.83	5.50	4.67	5.00	5.17					
	90		25	50/40	9.00	11.3	6.00	10.3	7.33*								
Gulston 20 A.H.	102	3	15	0	16.7		18.8	25.2	20.3	19.5	17.3	17.0	15.0	14.2			1754
	116		25	0	21.7		20.7	21.8	19.3	17.5	15.2	15.8	13.5	13.2			358
	74		25	25	20.3		6.17	7.17									
	88		40	25	19.8												
	77		15	50/40	9.50	12.7	7.33	5.33	4.83	5.33	4.67	5.00	5.17	6.16			
	91		25	50/40	9.17	10.3	6.67	6.67	7.67	6.83	7.17	5.50					
Yardney 12 A.H.	57	24	50	0	13.8		8.60										166
	33		50	40	13.5		12.0										210
Gulston 6 A.H.	79	24	50	25	6.60		3.55	4.40	4.25	4.05	3.50						
	83	24	50	40	13.0		7.60										349
Gulston 50 A.H.	125	1.5	25	0	54.6		59.6	15.4									3227
	123		15	40	27.4												

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.  
 \*\* Two cells only; pack failed during capacity check.  
 \*\*\* Changed from 25° to 40° C ambient after 173 cycles.

99

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS									CYCLES TO PACK FAILURE						
					FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS		TENTH 88 DAYS					
Sonotone (Triple Sealed) 3 A.H.	1.5	15	0	3.83	3.55	3.41	3.20	3.17	3.17											
		25	0	3.88	3.05	2.74	2.73	2.77												
		25	25	3.35	1.40	1.52	1.52													
		40	25	3.60	1.32	1.52	1.52													
		15	40	3.53	1.70	1.76	1.76													
		25	40	3.48	1.58	1.65	1.65													
Sonotone (Stabilizer) 5 A.H.	1.5	25	-20	4.14																
		40	-20	5.22																
		25	0	3.17	2.92	1.75														
		40	0	4.13	3.42	2.63														
		25	25	5.33	3.33															
		40	25	5.50	3.42															
299		25	40	4.21	1.88	1.50														
312		40/15	40	3.71	1.84	0.34														

17



AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDI-TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS									CYCLES TO PACK FAILURE				
					FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS		TENTH 88 DAYS			
Gulton (Nimbus) 5 A.H.	1.5	15	0	5.00	5.17	5.46	5.17	4.75										
		25	0	5.38	5.38	5.33	5.00	4.46										
		15	25	5.25	5.40	4.17	2.79	2.22										
		25	25	5.46	2.55	1.67	1.50	1.67										
		15	40	3.39	1.67	1.50	1.38	1.42										
		25	40	3.04	1.42	1.54	1.71	1.83										
Gulton 6 A.H. (Third elec-trode)	1.5	25	0	7.15	7.00	6.20	6.75	6.50										
		40	0	7.25	7.50	7.00	5.65											
		40	25	7.10	3.15	6.20	4.35	3.95	2.75									
		25	25	5.95	3.85	5.20	4.00	4.45	4.20									
		15	40	2.95	2.25	1.60	1.85	2.00										
		25	40	3.95	2.10	2.05	2.25											
G.E. (Nimbus) 5 A.H.	1.5	15	0	5.42	5.08	5.38	5.42											
		25	0	5.21	5.50	5.46	5.17											
		15	25	4.67	4.13	4.13	3.50	3.21										
		25	25	5.58	3.58	2.54	1.75											
		15	40	3.67	2.42	2.25	1.83											
		25	40	3.83	2.25	1.71	1.63											
G.E. 12 A.H. (Third elec-trode)	1.5	25	0	15.0	15.1													
		25	25	10.2														
		40	25	9.10														
		25/40	40/0	5.30*	15.1													

69

\* At 40° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE							
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS								
Gulton (Neoprene seal folded) 5.6 A.H.	244	1.5	25	-20																			
	200		25	0		5.32																	
	276		25	25	5.60	1.63																	
	242		25	40	4.39	1.79																	
Gulton (Neoprene seal non-folded) 5.6 A.H.	232	1.5	25	-20																			
	390		25	0		5.88																	
	396		25	25	6.30	2.23																	
	230		25	40	4.90																		
Yardney (C-3 Separator) 5 A.H.	257	2.4	20	0	3.67	1.83	1.33																
	21		20	25	4.93	.76																	
	45		20	40	6.02																		
Yardney (Radiated Separator) 5 A.H.	409		20	25	5.25																		
	233		20	25	5.20	5.95	6.13																
Yardney (Pellon Control Separator) 5 A.H.	69		20	25	5.32	4.95	4.17																



SEVENTY-TWO HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE													
					INITIAL PRECONDI-TIONING	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS		TENTH 88 DAYS												
Delco. (Silver-Zinc) 25 A.H.	609	24	40	25	29.7	30.5	27.3																					
Gulton (Neoprene seal folded) 3.6 A.H.	239	1.5	40	25	3.06	2.61	2.55																					
Yardney (Silver-Cadmium) 12 A.H.	185	1.5	25	-20	8.70	1.30	13.7																					
	197		25	0	14.2	2.00	3.50																					
		182				25	4.50	5.40																				

**AMPERE-HOUR CAPACITIES ON RECONDITIONING AND CAPACITY CHECK CYCLES**

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE				
					INITIAL	*(See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS					
Gulton 1.25 A.H.	174	1.5	25	-20	1.43		0.54												
	306		25	0	2.52		1.76												
	198		60	0	2.27		1.60												
	388		25	-20	2.64		0.52												
G.E. 5A.H. Gulton 6A.H.	338	1.5	25	40	4.66														

MFR.	CAP. (AB)	PACK NO.	TEMP. °C	ORBIT		PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	CYCLES COVERED		CELLS IN PACK THIS MONTH			
				PERIOD (HRS)	CHG.				INITIAL	FINAL	DIFF	START	END	
G. E. (pages 79-83)	3	63	0	0.5	1.0	15	115	1.55	14224	14837	4/3	10	10	
		64	0	"	"	25	"	"	14307	14709	207	"	7	
		15	25	"	"	25	125	1.49	FAILED	10392		"		
		16	25	"	"	40	"	"	FAILED	5013		"		
		39	40	"	"	15	160	1.45	FAILED	8109		"		
		40	40	"	"	25	"	1.45	FAILED	2309		"		
		67	0	"	2.5	15	115	1.55	6985	7192	207	"	10	10
		68	0	"	"	25	"	"	7043	7079	36	"	10	9
		19	25	"	"	25	125	1.49	7016	7146	126	"	10	10
		20	25	"	"	40	"	"	Failed	5410		"		
GAULD (pages 84-86)	3.5	43	40	"	"	15	160	1.45	Failed	2652		"		
		44	40	"	"	25	"	"	Failed	4437		"		
		51	0	"	1.0	15	115	1.55	4194	4407	4/3	"	10	10
		52	0	"	"	25	"	"	Failed	13729		"		
		3	25	"	"	25	125	1.45	Failed	4751		"		
		4	25	"	"	40	"	"	Failed	3164		"		
		27	40	"	"	15	160	1.45	Failed	2495		"		
		28	40	"	"	25	"	"	Failed	1711		"		
		55	0	"	2.5	15	115	1.55	7033	7280	207	"	10	10
		56	0	"	"	25	"	"	7010	7217	207	"	10	10
SONOTONE Pages 87-91	5	7	25	"	"	25	125	1.49	Failed	4173		"		
		8	25	"	"	40	"	"	Failed	2494		"		
		31	40	"	"	15	160	1.45	Failed	2517		"		
		32	40	"	"	25	"	1.45	Failed	975		"		
		49	0	0.5	1.0	15	115	1.55	13953	14414	461	"	8	8
		50	0	"	"	25	"	"	13867	14297	430	"	7	7
		1	25	"	"	25	125	1.49	Failed	11745		"		
		2	25	"	"	40	"	"	Failed	6671		"		
		25	40	"	"	15	160	1.45	Failed	9328		"		
		26	40	"	"	25	"	"	Failed	3625		"		
53	0	"	2.5	15	115	1.55	6874	7081	217	"	10	10		
54	0	"	"	25	"	"	6956	7063	209	"	10	10		
5	25	"	"	25	125	1.49	6745	6952	207	"	8	8		
6	25	"	"	40	"	"	Failed	5211		"				
29	40	"	"	15	160	1.45	Failed	5975		"				
30	40	"	"	25	"	"	Failed	4141		"				

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT		PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	CYCLES COVERED		CELLS IN PACK			
				PERIOD (HRS)	DISCH. CHG.				INITIAL	FINAL	DIFF	INITIAL	THIS MONTH START	END
GULTON (pages 92-93)	6	61	0	0.5	1.0	15	115	1.55	FAILED	10146		10		
		62	0	"	"	25	"	"	13699	14079	430	"	6	6
		13	25	"	"	25	125	1.49	FAILED	4021		"		
		14	25	"	"	40	"	"	FAILED	2086		"		
		37	40	"	"	15	160	1.45	FAILED	6064		"		
		38	40	"	"	25	"	"	FAILED	1377		"		
		65	0	"	2.5	15	115	1.55	6895	6892	207	"	7	7
		66	0	"	"	25	"	"	FAILED	4414		"		
		17	25	"	"	25	125	1.49	FAILED	2885		"		
		18	25	"	"	40	"	"	FAILED	1550		"		
		41	40	"	"	15	160	1.45	FAILED	1689		"		
		42	40	"	"	25	"	"	FAILED	4133		"		
G. E. (pages 94-99)	12	110	0	"	1.0	15	115	1.55	13740	14201	461	"	5	5
		124	0	"	"	25	"	"	13366	13827	461	"	5	4
		82	25	"	"	25	125	1.49	FAILED	10878		"		
		96	25	"	"	40	"	"	FAILED	4020		"		
		85	40	"	"	15	160	1.45	FAILED	9710		"		
		99	40	"	"	25	"	"	FAILED	4853		"		
		111	0	"	2.5	15	115	1.55	6764	6971		"	5	5
		125	0	"	"	25	"	"	6769	6976	207	"	5	5
		83	25	"	"	25	125	1.49	6869	7075	207	"	5	5
		97	25	"	"	40	"	"	FAILED	5002		"		
		86	40	"	"	15	160	1.45	6665	6872	207	"	5	5
		100	40	"	"	25	"	"	FAILED	4424		"		
GOULD (pages 100-102)	20	84	0	"	1.0	15	115	1.55	13679	14109		"	5	5
		98	0	"	"	25	"	"	FAILED	10641		"		
		104	25	"	"	25	125	1.49	FAILED	2980		"		
		118	25	"	"	40	"	"	FAILED	2937		"		
		112	40	"	"	15	160	1.45	FAILED	5213		"		
		126	40	"	"	25	"	"	FAILED	1569		"		
		80	0	"	2.5	15	115	1.55	6888	7064	212	"	5	5
		94	0	"	"	25	"	"	6691	6899	207	"	5	5
		105	25	"	"	25	125	1.49	FAILED	5690		"		
		119	25	"	"	40	"	"	FAILED	1794		"		
		108	40	"	"	15	160	1.45	FAILED	4233		"		
		122	40	"	"	25	"	"	FAILED	983		"		

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT		PERCENT DEPTH OF DISCH.	PERCENT OF RECHG.	CHG. VOLT LIMIT	CYCLES COVERED		CELLS IN PACK THIS MONTH		
				PERIOD (HRS)	CHG.				INITIAL	FINAL	DIFF	INITIAL	END
GULTON Pages 103-104	20	101	0	0.5	1.0	15	115	1.55	FAILED	3631		5	
		115	0	"	"	25	"	"	FAILED	2291		"	
		73	25	"	"	25	125	1.49	FAILED	7763		"	
		87	25	"	"	40	"	"	FAILED	627		"	
		76	40	"	"	15	160	1.45	FAILED	9349		"	
		90	40	"	"	25	"	"	FAILED	4045		"	
		102	0	"	2.5	15	115	1.55	6635	6842	207	"	4
		116	0	"	"	25	"	"	6479	6686	207	"	5
		74	25	"	"	25	125	1.49	FAILED	1755		"	"
		88	25	"	"	40	"	"	FAILED	359		"	"
		77	40	"	"	15	160	1.45	FAILED	6032		"	"
		92	40	"	"	25	"	"	FAILED	4490		"	"

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCH.	PERCENT OF RECHG. (1)	CHG. VOLT LIMIT	CYCLES COVERED		CELLS IN PACK		
				DISCH.	CHG.				INITIAL	FINAL	INITIAL	THIS MONTH START	END
G. L. (NIFRUS) Pages 105-109	5.0	103	0	0.5	1.0	15	110	1.49	6624	7054	430	5	5
		107	0	0.5	1.0	25	110	1.49	5962	6427	465	5	5
		106	25	0.5	1.0	15	120	1.49	6689	7061	413	5	5
		304	25	0.5	1.0	25	120	1.49	5927	6283	416	5	4
		113	40	0.5	1.0	15	130	1.49	FAILED	4998		5	
		114	40	0.5	1.0	25	130	1.49	5913	6146	233	5	3
G. L. (Third Electrode) Pages 110-111	12.0	53	25**	1.0	23.0	50	200***	1.49**	Failed	349		5	
		60	0	0.5	1.0	25	*	*	4134	4359	225	5	5
		12	25	0.5	1.0	25	*	*	Discontinued	1699		5	
		31	25	0.5	1.0	40	*	*	Discontinued	665		5	
		46	40/0	0.5	1.0	25/40	*	*	3472	3824	357	5	5
		331	40	0.5	1.0	40	*	*	3813	3835	22	11	8
Pages 113-118	3.0	200	0	0.5	1.0	15	115	1.55	5414	5722	238	5	5
		201	0	0.5	1.0	25	115	1.55	5499	5737	236	5	5
		202	25	0.5	1.0	25	125	1.49	5665	6059	394	5	5
		203	25	0.5	1.0	40	125	1.49	5114	5399	285	5	5
		204	40	0.5	1.0	15	160	1.45	5419	5481	67	5	5
		205	40	0.5	1.0	25	160	1.45	5260	5560	300	5	3
Pages 120-122	5.0	17	25	0.5	1.0	30	*	1.60	9420	9915	495	5	5
		210	-20	0.5	1.0	25	*	*	FAILED	2145		5	
		211	-20	0.5	1.0	40	*	*	FAILED	1530		5	
		32	0	0.5	1.0	25	*	*	4522	4994	462	5	5
		322	0	0.5	1.0	40	*	*	4186	4389	207	5	3
		273	25	0.5	1.0	25	*	*	FAILED	3742		5	
Pages 120-122	5.0	287	25	0.5	1.0	40	*	*	FAILED	2393		5	
		299	40	0.5	1.0	25	*	*	4278	4329	61	5	4
		312	40	0.5	1.0	40	*	*	Failed	3262		5	
		300	25	0.5	1.0	25	*	*	FAILED	2145		5	
		301	25	0.5	1.0	40	*	*	FAILED	1530		5	
		302	0	0.5	1.0	25	*	*	4522	4994	462	5	5

\* Does Not Apply  
 \*\* CHANGED TO 40°C, 1.45 V/Cell Limit after Cycle 173  
 \*\*\* INCREASED TO 250% after Cycle 266  
 (1) Actual percent of recharging

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCH.	PERCENT OF RECHG. (1)	CHG. VOLT LIMIT	CYCLES COVERED			CELLS IN PACK			
				DISCH.	CHG.				INITIAL	FINAL	DIFF.	INITIAL	THIS MONTH START	THIS MONTH END	
Gulton Pages 123-126	1.25	174	-20	0.5	1.0	25	*		1521	1982	461	5.0	5	5	
		388	-20	0.5	1.0	60/25	*		1160	1821	461	5.0	5	5	
		308	0	0.5	1.0	25	*		1821	2251	430	5.0	5	5	
		198	0	0.5	1.0		*		1821	2251	430	5.0	5	5	
Gulton (SHERKEY) Page 127	3.6		25	0.5	1.0	40	60		4766	5260	494	10	7	6	
Gulton (Com. meter) Page 128	3.6	239	25	0.5	1.0	40	*	1.45	3354	3816	462	10	9	9	
Gulton (Commercial) Page 129-132	1.0	315	0	0.5	1.0	15	115	1.55	10428	10889	461	5	5	5	
		326	0	0.5	1.0	25	115	1.55	10917	11300	383	5	5	5	
		204	25	0.5	1.0	25	125	1.45	10704	11169	465	5	5	5	
		214	25	0.5	1.0	40	125	1.45	FAILED	8474		5			
		228	40	0.5	1.0	15	160	1.45	10589	11063	465	5	5	5	
		240	40	0.5	1.0	25	160	1.45	FAILED	10359		5			
		117	0	0.5	1.0	15	110	1.45	6418	6849	430	5	5	5	
		121	0	0.5	1.0	25	110	1.45	5918	6383	465	5	5	5	
Gulton (NLS S) Pages 133-138	3.0	120	25	0.5	1.0	15	120	1.45	6511	6973	462	5	5	5	
		318	25	0.5	1.0	25	120	1.45	5883	6316	433	5	4	4	
		127	40	0.5	1.0	15	130	1.45	6550	7011	461	5	5	5	
		128	40	0.5	1.0	25	130	1.45	5774	6033	259	5	4	3	
Gulton (FOLDED SEAL) Pages 139-142	3.6	244	-20	0.5	1.0	25	115	1.55	2746	3211	465	5	5	5	
		200	0	0.5	1.0	25	115	1.55	2988	3393	411	5	5	5	
		276	25	0.5	1.0	25	125	1.45	3005	3435	430	5	4	4	
		242	40	0.5	1.0	25	160	1.45	3226	3625	399	5	5	5	
GULTON (NONFOLDED SEAL) Pages 143-145	5.0	232	-20	0.5	1.0	25	115	1.55	2757	3187	430	5	5	5	
		390	0	0.5	1.0	25	115	1.55	3046	3425	379	5	5	5	
		396	25	0.5	1.0	25	125	1.45	3064	3525	461	5	5	5	
		230	40	0.5	1.0	25	160	1.45	FAILED	1275		5			
		79	25	1.0	23.0	50	200	1.45	Failed	545		5			
		213	0	0.5	1.0	25	115	1.55	7556	8017	461	5	5	5	
		218	25	0.5	1.0	40	125	1.45	7516	7977	461	5	4	3	
		238	40	0.5	1.0	25	160	1.45	FAILED	5766		5			

\*Does Not Apply

(1) Actual percent of recharge may be lower due to voltage limit.

MFR.	CAP. (AH)	PACK NO.	TEMP. °C	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCH.	PERCENT OF RECHG. (1)	CHG. VOLT LIMIT	CYCLES COVERED		CELLS IN PACK		
				DISCH.	CHG.				INITIAL	FINAL	INITIAL	START END	
Gulton (Third Electrode) Pages 149 - 151a	6.0	59	0	0.5	1.0	25	*		6450	6737	287	5	4
		71	0	0.5	1.0	10	*		FAILED	5753		5	
		23	25	0.5	1.0	25	*		7614	8076	462	5	5
		11	25	0.5	1.0	10	*		7631	7743	112	5	4
		35	40	0.5	1.0	15	*		5610	6070	460	5	5
		17	40	0.5	1.0	25	*		FAILED	5521		5	
		216	0	0.5	1.0	15	115	1.55	7639	8104	465	5	5
Gulton Pages 152 - 155	12.0	201	0	0.5	1.0	25	115	1.55	8497	8958	461	5	4
		227	25	0.5	1.0	25	125	1.19	7905	8478	567	5	5
		245	25	0.5	1.0	40	125	1.19	Failed	5152		5	
		3	40	0.5	1.0	15	140	1.15	8464	8877	413	5	4
		20	40	0.5	1.0	25	150	1.15	Failed	5124		5	
		5	0	0.5	1.0	25	125	1.55	Failed	3227		5	
		233	40	0.5	1.0	15	162	1.15	Failed	1974		5	
Gulton Pages 156 - 157	12.0	1	0	1.	23.0	50	*	1.50	Failed	166		10	
		2	0	1.	23.0	50	*	1.50	Failed	210		10	
		3	0	1.	23.0	20	*	1.50	Failed	266		5	
		4	25	1.	23.0	20	*	1.50	Failed	34		5	
		5	25	1.	23.0	20	*	1.50	Failed	98		5	
		6	25	1.	23.0	20	*	1.52	034	263	29	5	5
		7	25	1.	23.0	20	*	1.50	Failed	61		5	
Gulton Pages 158 - 159	12.0	8	0	0.	1.	25	120	1.60	DISCONTINUED	214		5	
		9	0	0.	1.	25	13	1.56	1642	2104	462	5	5
		10	25	0.	1.	25	130	1.55	2496	2882	390	5	5
		11	25	1.	23.0	42	*	1.97	Failed	57		10	
		12	25	1.	23.0	40	*	1.97	Failed	119		10	
		13	25	1.	23.0	40	*	1.97	Failed	32		5	
		14	25	1.	23.0	40	*	1.97	Failed	80		5	
Gulton Pages 160 - 161	12.0	15	25	0.5	2.5	40	*	1.97	Discontinued	20		5	
		16	25	0.5	2.5	40	*	1.97	Failed	325		5	
		17	25	1.0	23.0	25	*	1.97	Discontinued	139		5	

\* Does Not Apply  
 (1) Actual percent of recharge may be lower due to voltage limit.



PACK NO. 63 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C  
 G.E. 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE		
			1	2	3	4	5	6	7	8	9	10			
14255	12.17	92	1.22	1.25	1.24	1.19	1.23	1.22	1.23	1.22	1.23	1.22	1.23	1.22	1.22
14287	12.25	90	1.22	1.23	1.23	1.19	1.23	1.24	1.23	1.24	1.23	1.22	1.23	1.22	1.22
14336	12.61	93	1.27	1.27	1.27	1.23	1.26	1.26	1.25	1.26	1.26	1.26	1.26	1.26	1.26
14368	12.57	90	1.25	1.26	1.26	1.21	1.24	1.24	1.24	1.25	1.25	1.25	1.27	1.25	1.25
14393	12.92	93	1.27	1.27	1.27	1.23	1.26	1.26	1.25	1.26	1.26	1.26	1.28	1.26	1.26
14411	11.71	85	1.24	1.24	1.24	1.21	1.25	1.25	1.24	1.25	1.24	1.25	1.25	1.25	1.25
14447	12.55	92	1.24	1.26	1.27	1.22	1.26	1.27	1.25	1.25	1.24	1.25	1.25	1.25	1.25
14511	12.42	90	1.21	1.25	1.26	1.20	1.24	1.24	1.23	1.24	1.24	1.24	1.24	1.24	1.24
14525	11.45	86	1.24	1.25	1.26	1.21	1.24	1.24	1.23	1.24	1.23	1.24	1.24	1.24	1.24
14574	12.42	90	1.25	1.25	1.26	1.20	1.24	1.25	1.23	1.23	1.23	1.23	1.24	1.23	1.23
14626	11.56	87	1.28	1.28	1.29	1.25	1.28	1.28	1.27	1.26	1.26	1.27	1.28	1.28	1.28
14637	12.35	89	1.25	1.25	1.26	1.20	1.24	1.24	1.23	1.23	1.23	1.23	1.26	1.24	1.24
14255	15.66	52	1.55	1.51	1.56	1.57	1.67	1.63	1.54	1.52	1.52	1.52	1.54	1.54	1.54
14287	12.66	27	1.56	1.51	1.53	1.57	1.68	1.63	1.54	1.52	1.52	1.52	1.56	1.56	1.56
14336	15.70	23	1.63	1.59	1.56	1.61	1.62	1.51	1.55	1.55	1.55	1.55	1.55	1.55	1.55
14368	15.73	20	1.60	1.51	1.58	1.59	1.62	1.61	1.52	1.57	1.57	1.57	1.55	1.55	1.55
14385	13.72	26	1.53	1.49	1.54	1.60	1.55	1.43	1.54	1.57	1.57	1.58	1.53	1.53	1.53
14413	13.70	20	1.54	1.47	1.56	1.56	1.49	1.49	1.50	1.54	1.54	1.52	1.51	1.51	1.51
14441	13.64	42	1.62	1.52	1.53	1.57	1.57	1.47	1.50	1.54	1.54	1.47	1.51	1.51	1.51
14469	13.62	34	1.61	1.50	1.60	1.57	1.63	1.50	1.52	1.54	1.54	1.50	1.55	1.55	1.55
14497	13.62	31	1.61	1.50	1.60	1.58	1.63	1.50	1.52	1.56	1.56	1.53	1.55	1.55	1.55
14525	13.62	31	1.61	1.50	1.60	1.58	1.63	1.50	1.52	1.56	1.56	1.53	1.55	1.55	1.55
14553	13.62	31	1.61	1.50	1.60	1.58	1.63	1.50	1.52	1.56	1.56	1.53	1.55	1.55	1.55
14581	13.62	31	1.61	1.50	1.60	1.58	1.63	1.50	1.52	1.56	1.56	1.53	1.55	1.55	1.55
14609	13.62	31	1.61	1.50	1.60	1.58	1.63	1.50	1.52	1.56	1.56	1.53	1.55	1.55	1.55
14637	13.62	31	1.61	1.50	1.60	1.58	1.63	1.50	1.52	1.56	1.56	1.53	1.55	1.55	1.55

PACK NO. 64 TEST TEMPERATURE 0 C  
 G.L. 3 A.H. DEPTH OF DISCHARGE 25 ORBIT PERIOD 90 MIN.  
 PERCENT OF RECHARGE 115

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES						END OF DISCHARGE			
			1	2	3	4	5	6		7	8	9
14444	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.20	1.18
14477	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.20	1.17
14421	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.22	1.21
14455	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.22	1.20
14402	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.22	1.19
14437	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.23	1.18
14481	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.22	1.18
14617	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.22	1.19
14644	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.20	1.18
14670	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.18	1.21	1.18
14703	11.46	1.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.20	1.18
14640	11.46	1.50	1.61	1.62	1.62	1.64	1.64	1.51	1.52	1.51	1.52	1.53
14675	11.46	1.50	1.62	1.62	1.62	1.64	1.65	1.52	1.52	1.52	1.51	1.53
14719	11.46	1.50	1.62	1.62	1.62	1.64	1.63	1.41	1.63	1.58	1.42	1.48
14663	11.46	1.50	1.59	1.56	1.58	1.59	1.52	1.51	1.55	1.52	1.50	1.57
14680	11.46	1.50	1.58	1.53	1.58	1.58	1.62	1.51	1.53	1.51	1.51	1.55
14617	11.46	1.50	1.57	1.53	1.58	1.57	1.62	1.48	1.52	1.50	1.48	1.56
14651	11.46	1.50	1.58	1.51	1.58	1.58	1.61	1.49	1.51	1.50	1.48	1.58
14688	11.46	1.50	1.63	1.57	1.63	1.63	1.63	1.51	1.53	1.50	1.52	1.54
14640*	11.46	1.50	1.64	1.60	1.64	1.64	1.63	1.50	1.52	1.50	1.50	1.51
14675*	11.46	1.50	1.60	1.57	1.60	1.60	1.61	1.51	1.52	1.50	1.51	1.53
14688*	11.46	1.50	1.60	1.57	1.60	1.60	1.64	1.51	1.52	1.50	1.51	1.53
14704	11.46	1.50	1.60	1.57	1.60	1.60	1.64	1.52	1.52	1.50	1.51	1.52

80

PACK NO. 67 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C  
 G.E. 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE				
			1	2	3	4	5	6	7	8	9	10					
7015	14.36	.82	1.24	1.25	1.22	1.23	1.23	1.23	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
7058	14.68	.90	1.23	1.28	1.26	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.26
7030	14.51	.94	1.27	1.26	1.23	1.27	1.25	1.25	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.25
7112	14.35	.85	1.24	1.24	1.21	1.24	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
7117	14.57	.81	1.24	1.25	1.24	1.26	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.24
7121	14.46	.89	1.25	1.24	1.21	1.26	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24
7015	14.91	.21	1.61	1.59	1.51	1.59	1.61	1.61	1.59	1.59	1.54	1.57	1.57	1.49	1.55	1.55	1.55
7058	15.84	.15	1.63	1.56	1.55	1.61	1.52	1.52	1.57	1.57	1.62	1.62	1.56	1.59	1.60	1.60	1.60
7030	15.26	.12	1.61	1.55	1.51	1.60	1.57	1.57	1.57	1.59	1.59	1.55	1.55	1.52	1.56	1.56	1.56
7123	14.60	.21	1.44	1.50	1.48	1.46	1.45	1.45	1.45	1.44	1.44	1.45	1.45	1.42	1.45	1.45	1.45
7152	15.71	.12	1.61	1.49	1.50	1.61	1.59	1.59	1.58	1.58	1.57	1.57	1.56	1.55	1.57	1.57	1.57
7192	14.69	.12	1.60	1.55	1.51	1.62	1.61	1.61	1.59	1.59	1.57	1.57	1.56	1.52	1.57	1.57	1.57

81

PACK NO. 68 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C  
 G.F. 3 A.H. PERCENT OF RECHARGE 115 CRUIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF CHARGE			
			1	2	3	4	5	6	7	8	9	10				
7074	10.79	1.51	1.19	1.20	1.19	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	.00	1.19	END OF DISCHARGE
7075	10.86	1.51	1.20	1.23	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.20	.00	1.21	DISCHARGE
7076	10.57	.34	1.49	1.50	1.49	1.50	1.50	1.50	1.54	1.54	1.54	1.54	1.60	.00	1.50	END OF CHARGE
7077	13.73	.37	1.61	1.46	1.49	1.46	1.51	1.51	1.50	1.50	1.50	1.50	1.50	.00	1.47	CHARGE

PACK NO. 19      DEPTH OF DISCHARGE 25      TEST TEMPERATURE 25 C  
 G.E. 3 A.H.      PERCENT OF RECHARGE 125      ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE			
			1	2	3	4	5	6	7	8	9	10				
7047.	11.81	1.50	1.17	1.19	1.18	1.19	1.19	1.19	1.18	1.18	1.18	1.18	1.17	1.18	1.17	1.17
7063.	12.17	1.53	1.21	1.21	1.21	1.22	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.19	1.20	1.20
7102.	12.04	1.51	1.20	1.21	1.21	1.21	1.21	1.20	1.20	1.20	1.19	1.19	1.19	1.19	1.19	1.20
7142.	12.02	1.49	1.20	1.21	1.21	1.21	1.21	1.20	1.20	1.20	1.19	1.19	1.19	1.19	1.21	1.19
		.38														
7047.	14.70	.37	1.47	1.49	1.47	1.45	1.48	1.48	1.45	1.45	1.47	1.47	1.45	1.47	1.45	1.45
7063.	14.82	.38	1.46	1.47	1.48	1.43	1.44	1.44	1.44	1.44	1.43	1.43	1.44	1.43	1.43	1.43
7102.	14.41	.38	1.45	1.46	1.46	1.42	1.44	1.44	1.42	1.42	1.42	1.42	1.42	1.43	1.43	1.43
7142.	14.60	.38	1.47	1.48	1.48	1.44	1.47	1.47	1.44	1.44	1.44	1.44	1.44	1.44	1.48	1.44

PACK NO. 51  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
14225.	12.33	1.05	1.24	1.23	1.21	1.25	1.23	1.20	1.23	1.22	1.25	1.25	1.25
14257.	12.29	1.05	1.24	1.23	1.21	1.24	1.23	1.20	1.23	1.20	1.24	1.24	1.25
14306.	12.61	1.05	1.26	1.25	1.24	1.26	1.27	1.27	1.25	1.25	1.26	1.26	1.26
14338.	12.52	1.05	1.26	1.25	1.23	1.25	1.26	1.26	1.24	1.24	1.28	1.24	1.24
14353.	12.68	1.06	1.27	1.26	1.24	1.28	1.27	1.27	1.26	1.26	1.28	1.27	1.27
14385.	12.58	1.06	1.26	1.25	1.23	1.25	1.24	1.27	1.26	1.27	1.28	1.25	1.25
14417.	12.56	1.07	1.26	1.25	1.24	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25
14448.	12.44	1.06	1.25	1.24	1.23	1.24	1.24	1.24	1.24	1.23	1.28	1.24	1.24
14481.	12.35	1.06	1.24	1.23	1.22	1.22	1.23	1.23	1.23	1.22	1.25	1.21	1.21
14512.	12.41	1.06	1.25	1.25	1.26	1.20	1.24	1.23	1.23	1.24	1.25	1.24	1.24
14544.	12.31	1.06	1.24	1.23	1.22	1.23	1.23	1.23	1.23	1.21	1.25	1.21	1.21
14607.	12.31	1.06	1.25	1.23	1.23	1.22	1.23	1.23	1.23	1.20	1.27	1.19	1.19
14225.	15.23	.61	1.56	1.59	1.60	1.47	1.54	1.44	1.57	1.46	1.52	1.46	1.46
14257.	15.33	.58	1.57	1.60	1.60	1.48	1.55	1.45	1.58	1.46	1.53	1.47	1.47
14306.	16.60	.61	1.61	1.61	1.64	1.56	1.74	1.76	1.69	1.71	1.61	1.57	1.57
14338.	15.84	.61	1.58	1.60	1.61	1.47	1.61	1.69	1.58	1.61	1.57	1.48	1.48
14353.	16.60	.49	1.59	1.60	1.62	1.52	1.66	1.70	1.68	1.72	1.66	1.57	1.57
14385.	16.01	.61	1.57	1.59	1.60	1.45	1.57	1.64	1.56	1.60	1.54	1.55	1.55
14417.	15.06	.61	1.49	1.51	1.51	1.39	1.48	1.50	1.50	1.48	1.44	1.41	1.41
14448.	15.58	.60	1.55	1.58	1.59	1.46	1.58	1.59	1.56	1.55	1.56	1.50	1.50
14481.	15.43	.60	1.56	1.58	1.59	1.44	1.54	1.60	1.56	1.52	1.53	1.43	1.43
14512.	15.66	.60	1.61	1.49	1.60	1.57	1.64	1.60	1.52	1.54	1.49	1.55	1.55
14544.	15.34	.61	1.56	1.59	1.60	1.45	1.48	1.62	1.56	1.46	1.54	1.42	1.42
14607.	15.35	.60	1.56	1.58	1.60	1.44	1.59	1.57	1.57	1.46	1.54	1.41	1.41

84

PACK NO. 55 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C  
 GOULD 3.5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE				
			1	2	3	4	5	6	7	8	9	10					
7064	12.34	1.07	1.24	1.24	1.24	1.23	1.23	1.23	1.23	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23
7104	12.52	1.07	1.25	1.26	1.26	1.25	1.25	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.25
7138	12.52	1.07	1.24	1.25	1.25	1.24	1.24	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.24	1.24	1.24
7168	12.38	1.06	1.24	1.23	1.24	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.23
7200	12.46	1.06	1.25	1.25	1.26	1.24	1.24	1.24	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.24	1.24
7240	12.46	1.06	1.25	1.25	1.26	1.24	1.24	1.24	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.26	1.25
7064	15.47	.24	1.54	1.59	1.54	1.55	1.55	1.55	1.53	1.53	1.54	1.54	1.55	1.53	1.53	1.52	1.52
7104	15.62	.21	1.55	1.62	1.56	1.56	1.56	1.54	1.54	1.54	1.54	1.54	1.56	1.56	1.57	1.54	1.54
7138	15.62	.23	1.53	1.57	1.53	1.53	1.53	1.53	1.51	1.51	1.51	1.51	1.53	1.53	1.50	1.50	1.50
7168	15.69	.23	1.52	1.62	1.55	1.55	1.51	1.50	1.49	1.50	1.50	1.50	1.62	1.62	1.61	1.52	1.52
7200	15.35	.24	1.53	1.56	1.54	1.54	1.54	1.53	1.52	1.52	1.52	1.52	1.53	1.53	1.51	1.51	1.51
7240	15.43	.24	1.54	1.57	1.55	1.55	1.55	1.54	1.53	1.53	1.53	1.53	1.55	1.53	1.55	1.55	1.52

PACK NO. 56  
 GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE		
			1	2	3	4	5	6	7	8	9	10			
7040	11.88	1.70	1.18	1.19	1.18	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.18
7083	12.15	1.78	1.21	1.22	1.24	1.23	1.23	1.21	1.20	1.22	1.20	1.22	1.20	1.23	1.21
7114	12.59	1.79	1.21	1.20	1.22	1.22	1.22	1.19	1.20	1.20	1.20	1.20	1.20	1.20	1.20
7177	12.12	1.73	1.21	1.21	1.22	1.22	1.22	1.21	1.20	1.21	1.21	1.20	1.20	1.20	1.20
7217	11.92	1.72	1.19	1.19	1.20	1.20	1.20	1.19	1.18	1.19	1.18	1.18	1.20	1.19	1.19
7040	15.65	.40	1.54	1.56	1.48	1.55	1.55	1.55	1.55	1.49	1.53	1.53	1.53	1.52	END OF CHARGE
7083	15.65	.22	1.54	1.55	1.58	1.63	1.56	1.55	1.55	1.57	1.53	1.53	1.54	1.55	1.55
7114	15.71	.25	1.53	1.54	1.54	1.57	1.53	1.53	1.53	1.53	1.53	1.52	1.52	1.52	1.52
7177	15.57	.26	1.55	1.55	1.52	1.60	1.56	1.55	1.55	1.55	1.53	1.53	1.54	1.55	1.55
7217	15.56	.27	1.56	1.56	1.52	1.61	1.57	1.57	1.57	1.54	1.54	1.54	1.55	1.55	1.57



PACK NO. 49      DEPTH OF DISCHARGE 15      TEST TEMPERATURE 0      C  
 SONOTONE 5 A.H.      PERCENT OF RECHARGE 115      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE	
			1	2	3	4	5	6	7	8	9	10		
13982.	9.71	1.50	1.20	1.21	.00	1.20	1.20	1.22	1.22	1.23	1.22	.00	1.22	
14014.	9.67	1.51	1.20	1.21	.01	1.19	1.21	1.22	1.22	1.23	1.22	.00	1.21	
14095.	9.91	1.50	1.21	1.22	.00	1.21	1.23	1.24	1.24	1.24	1.24	.00	1.23	
14127.	9.77	1.50	1.21	1.22	.00	1.20	1.23	1.23	1.23	1.23	1.23	.00	1.23	
14159.	9.76	1.50	1.21	1.22	.00	1.20	1.22	1.23	1.23	1.22	1.22	.00	1.22	
14191.	9.76	1.49	1.20	1.21	.01	1.20	1.22	1.23	1.23	1.22	1.22	.00	1.22	
14223.	9.74	1.50	1.20	1.20	.00	1.20	1.21	1.23	1.22	1.22	1.22	.00	1.22	
14254.	9.68	1.49	1.20	1.20	.00	1.19	1.21	1.22	1.22	1.22	1.22	.00	1.22	
14286.	9.66	1.53	1.20	1.20	.00	1.19	1.21	1.22	1.21	1.21	1.21	.00	1.21	
14318.	9.71	1.51	1.20	1.21	.00	1.20	1.22	1.23	1.23	1.22	1.22	.00	1.22	
14350.	9.68.	1.50	1.20	1.20	.01	1.20	1.21	1.22	1.22	1.22	1.22	.00	1.21	
14382.	9.78	1.49	1.22	1.22	.00	1.21	1.23	1.23	1.23	1.23	1.23	.00	1.22	
14414.	9.67	1.49	1.20	1.20	.00	1.20	1.21	1.22	1.22	1.22	1.22	.00	1.21	
13982.	12.36	.86	1.55	1.54	.01	1.55	1.58	1.55	1.53	1.55	1.53	.00	1.54	
14014.	12.45	.52	1.55	1.55	.00	1.55	1.59	1.56	1.55	1.55	1.55	.00	1.55	
14095.	12.48	.43	1.53	1.56	.00	1.54	1.65	1.55	1.54	1.54	1.54	.00	1.56	
14127.	12.48	.46	1.55	1.55	.00	1.55	1.63	1.55	1.54	1.54	1.54	.00	1.55	
14159.	12.51	.51	1.53	1.53	.02	1.52	1.58	1.53	1.52	1.52	1.52	.00	1.51	
14191.	12.53	.53	1.53	1.52	.02	1.52	1.57	1.54	1.53	1.53	1.53	.00	1.51	
14223.	12.55	.53	1.53	1.53	.02	1.53	1.57	1.54	1.53	1.53	1.53	.00	1.52	
14254.	12.49	.45	1.56	1.55	.00	1.55	1.62	1.56	1.55	1.55	1.55	.00	1.56	
14286.	12.44	.52	1.54	1.54	.00	1.54	1.63	1.55	1.53	1.53	1.53	.00	1.54	
14318.	12.44	.53	1.54	1.54	.00	1.55	1.61	1.55	1.54	1.54	1.54	.00	1.54	
14350.	12.49	.56	1.54	1.54	.01	1.55	1.59	1.57	1.61	1.61	1.61	.00	1.54	
14382.	12.37	.70	1.54	1.52	.00	1.54	1.59	1.55	1.53	1.53	1.53	.00	1.54	
14414.	12.48	.46	1.55	1.55	.01	1.55	1.63	1.56	1.54	1.54	1.54	.00	1.55	

PACK NO. 50      DEPTH OF DISCHARGE 25      TEST TEMPERATURE 0 C  
 SONOTONE 5 A.H.      PERCENT OF RECHARGE 115      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE	
			1	2	3	4	5	6	7	8	9	10		
13898.	9.28	2.52	1.08	.00	.01	1.09	.00	1.18	1.19	1.18	1.18	1.18	1.18	1.17
13931.	9.19	2.52	1.05	.00	.01	1.07	.00	1.18	1.18	1.18	1.18	1.18	1.18	1.16
13979.	9.36	2.52	1.10	.00	.00	1.11	.00	1.19	1.19	1.19	1.19	1.19	1.18	1.18
14011.	9.32	2.51	1.09	.00	.00	1.10	.00	1.18	1.19	1.18	1.18	1.18	1.17	1.17
14042.	9.28	2.51	1.09	.00	.00	1.09	.00	1.18	1.18	1.18	1.18	1.18	1.17	1.17
14075.	9.26	2.52	1.08	.00	.00	1.09	.00	1.17	1.18	1.17	1.17	1.18	1.17	1.17
14106.	9.27	2.52	1.08	.00	.00	1.09	.00	1.17	1.18	1.17	1.17	1.18	1.17	1.17
14169.	9.25	2.50	1.08	.00	.00	1.08	.00	1.18	1.18	1.18	1.18	1.19	1.17	1.17
14202.	9.23	2.51	1.07	.00	.00	1.08	.00	1.17	1.18	1.17	1.17	1.17	1.17	1.17
14232.	9.25	2.50	1.08	.00	.00	1.08	.00	1.18	1.18	1.18	1.18	1.18	1.17	1.17
14265.	9.23	2.51	1.07	.00	.00	1.08	.00	1.18	1.18	1.17	1.17	1.18	1.17	1.17
13898.	12.56	1.44	1.56	.00	.01	1.53	.00	1.57	1.51	1.59	1.52	1.52	1.70	1.70
13931.	12.56	.69	1.56	.00	.01	1.54	.00	1.58	1.51	1.59	1.52	1.69	1.69	1.69
13979.	12.42	.64	1.54	.00	.00	1.54	.00	1.55	1.50	1.58	1.50	1.64	1.64	1.64
14011.	12.41	.64	1.53	.00	.00	1.53	.00	1.55	1.49	1.57	1.49	1.67	1.67	1.67
14042.	12.38	.64	1.53	.00	.00	1.52	.00	1.55	1.48	1.56	1.49	1.67	1.67	1.67
14075.	12.49	.64	1.52	.00	.02	1.50	.00	1.54	1.47	1.55	1.46	1.64	1.64	1.64
14106.	12.49	.64	1.52	.00	.02	1.50	.00	1.53	1.47	1.55	1.47	1.65	1.65	1.65
14169.	12.41	.61	1.53	.00	.00	1.52	.00	1.55	1.49	1.58	1.52	1.68	1.68	1.68
14202.	12.39	.63	1.53	.00	.00	1.52	.00	1.55	1.48	1.57	1.49	1.67	1.67	1.67
14232.	12.35	.66	1.53	.00	.00	1.52	.00	1.55	1.48	1.56	1.49	1.67	1.67	1.67
14265.	12.56	.66	1.54	.00	.00	1.52	.00	1.55	1.49	1.56	1.49	1.67	1.67	1.67

PACK NO. 53      DEPTH OF DISCHARGE 15      TEST TEMPERATURE 0 C  
 SONOTONE 5 A.H.      PERCENT OF RECHARGE 115      ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE				
			1	2	3	4	5	6	7	8	9	10					
6905	12.20	1.50	1.19	1.22	1.22	1.23	1.24	1.23	1.24	1.22	1.22	1.23	1.22	1.22	1.21	1.21	1.21
6945	12.47	1.50	1.22	1.24	1.25	1.25	1.25	1.24	1.24	1.25	1.24	1.25	1.24	1.24	1.26	1.26	1.25
6979	12.38	1.50	1.21	1.23	1.23	1.24	1.23	1.24	1.23	1.23	1.23	1.23	1.22	1.22	1.24	1.24	1.25
7009	12.24	1.50	1.20	1.21	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.25	1.25	1.22
7041	12.31	1.50	1.21	1.22	1.24	1.24	1.24	1.24	1.23	1.23	1.23	1.23	1.22	1.22	1.23	1.23	1.24
7081	12.31	1.50	1.21	1.22	1.24	1.24	1.24	1.24	1.23	1.23	1.23	1.23	1.22	1.22	1.25	1.25	1.24
<b>35</b>																	
6905	15.59	.22	1.50	1.52	1.55	1.61	1.61	1.55	1.50	1.55	1.50	1.58	1.66	1.66	1.47	1.58	1.58
6945	15.69	.17	1.50	1.53	1.56	1.62	1.62	1.56	1.51	1.56	1.62	1.62	1.65	1.65	1.59	1.51	1.51
6979	15.72	.19	1.48	1.51	1.53	1.59	1.59	1.51	1.47	1.51	1.57	1.57	1.61	1.61	1.50	1.58	1.58
7009	15.73	.16	1.47	1.53	1.55	1.57	1.57	1.52	1.47	1.52	1.59	1.59	1.62	1.62	1.60	1.54	1.54
7041	15.59	.21	1.49	1.51	1.54	1.60	1.60	1.54	1.50	1.54	1.57	1.57	1.61	1.61	1.55	1.61	1.61
7081	15.64	.22	1.51	1.53	1.56	1.60	1.60	1.55	1.50	1.55	1.58	1.58	1.64	1.64	1.52	1.64	1.64

89

PACK NO. 54  
 SONOTONE 5 A.H.  
 DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 115  
 TEST TEMPERATURE 0 C  
 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					TEST TEMPERATURE 0 C			END OF DISCHARGE			
			1	2	3	4	5	6	7	8		9	'10	
6886	11.47	2.50	1.18	1.16	.90	1.15	1.19	1.18	1.17	1.18	1.19	1.19	1.19	1.19
6929	11.60	2.51	1.19	1.17	.92	1.16	1.21	1.19	1.18	1.19	1.22	1.20	1.20	1.20
6960	11.55	2.49	1.18	1.16	.89	1.15	1.20	1.19	1.17	1.18	1.19	1.19	1.19	1.19
6991	11.38	2.49	1.17	1.15	.86	1.13	1.18	1.17	1.16	1.17	1.18	1.18	1.18	1.18
7023	11.56	2.51	1.18	1.16	.90	1.16	1.20	1.18	1.18	1.18	1.19	1.19	1.19	1.19
7053	11.55	2.50	1.18	1.17	.91	1.15	1.20	1.19	1.17	1.18	1.21	1.19	1.19	1.19
<b>58</b>														
6886	15.59	.31	1.48	1.40	1.58	1.48	1.50	1.55	1.61	1.61	1.48	1.46	1.46	1.46
6929	15.55	.34	1.51	1.53	1.58	1.52	1.53	1.59	1.60	1.60	1.52	1.50	1.50	1.50
6960	15.61	.34	1.49	1.51	1.55	1.49	1.49	1.56	1.60	1.60	1.48	1.46	1.46	1.46
6991	15.49	.35	1.51	1.54	1.59	1.53	1.52	1.58	1.55	1.60	1.51	1.50	1.50	1.50
7023	15.49	.38	1.51	1.52	1.60	1.52	1.54	1.56	1.61	1.58	1.51	1.50	1.50	1.50
7053	15.56	.30	1.52	1.53	1.60	1.53	1.54	1.57	1.62	1.59	1.52	1.51	1.51	1.51

90

PACK NO. 5      DEPTH OF DISCHARGE 25      TEST TEMPERATURE 25 C  
 SONOTONE 5 A.H.      PERCENT OF RECHARGE 125      ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE					
			1	2	3	4	5	6	7	8	9	10						
6776.	9.34	2.51	1.15	.00	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.16	1.17	1.16	
6816.	9.54	2.52	1.18	.00	1.20	1.19	1.18	1.19	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.19	1.19
6850.	9.48	2.52	1.17	.00	1.20	1.18	1.18	1.18	1.18	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.19	1.19
6880.	9.51	2.52	1.17	.00	1.20	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.20	1.19	1.19
6912.	9.40	2.51	1.15	.00	1.19	1.17	1.17	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
6952.	9.44	2.48	1.17	.00	1.19	1.18	1.17	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.19	1.18	1.18
6776.	11.66	.62	1.45	.00	1.45	1.46	1.45	1.46	1.45	1.46	1.48	1.45	1.44	1.44	1.45	1.45	1.44	1.44
6816.	11.76	.62	1.45	.00	1.45	1.46	1.45	1.46	1.45	1.46	1.53	1.45	1.44	1.44	1.47	1.47	1.45	1.45
6850.	11.86	.63	1.44	.00	1.44	1.43	1.44	1.43	1.43	1.43	1.52	1.43	1.42	1.42	1.43	1.43	1.41	1.41
6880.	11.74	.54	1.43	.00	1.42	1.42	1.42	1.42	1.42	1.42	1.47	1.42	1.41	1.41	1.50	1.41	1.41	1.41
6912.	11.59	.62	1.44	.00	1.44	1.45	1.44	1.44	1.43	1.45	1.48	1.43	1.42	1.42	1.44	1.44	1.43	1.43
6952.	11.65	.61	1.45	.00	1.45	1.45	1.45	1.45	1.45	1.45	1.50	1.44	1.43	1.43	1.47	1.47	1.43	1.43

PACK NO. S2 TEST TEMPERATURE C  
 GULTON 6 A.H. ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE		
			1	2	3	4	5	6	7	8	9	10			
13080	8.06	3.14	1.15	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.15	1.21	.00
13110	8.04	3.14	1.12	1.17	1.13	.00	1.13	.00	1.13	.00	1.13	.00	1.15	1.20	.00
13161	8.03	3.00	1.10	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.16	1.21	.00
13175	7.99	2.90	1.11	1.13	1.15	.00	1.15	.00	1.15	.00	1.15	.00	1.15	1.21	.00
13187	8.06	3.00	1.11	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.13	1.20	.00
13201	8.05	3.05	1.11	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.13	1.19	.00
13209	8.07	3.24	1.10	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.13	1.19	.00
13221	8.06	3.15	1.07	1.17	1.20	.00	1.20	.00	1.20	.00	1.20	.00	1.20	1.23	.00
13234	8.04	3.00	1.10	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.13	1.18	.00
13246	8.03	3.00	1.11	1.17	1.14	.00	1.14	.00	1.14	.00	1.14	.00	1.14	1.19	.00
13270	7.10	3.00	1.01	1.17	1.17	.00	1.17	.00	1.17	.00	1.17	.00	1.19	1.22	.00
13300	8.00	1.72	1.52	1.59	1.53	.00	1.53	.00	1.53	.00	1.53	.00	1.53	1.45	.00
13313	8.19	.53	1.52	1.57	1.53	.00	1.53	.00	1.53	.00	1.53	.00	1.53	1.44	.00
13761	9.05	.00	1.53	1.57	1.55	.00	1.55	.00	1.55	.00	1.55	.00	1.53	1.50	.00
13773	9.20	.78	1.53	1.58	1.55	.00	1.55	.00	1.55	.00	1.55	.00	1.54	1.49	.00
13784	9.07	1.27	1.53	1.59	1.55	.00	1.55	.00	1.55	.00	1.55	.00	1.54	1.49	.00
13797	9.03	.00	1.53	1.57	1.55	.00	1.55	.00	1.55	.00	1.55	.00	1.52	1.45	.00
13800	9.07	.76	1.53	1.57	1.53	.00	1.53	.00	1.53	.00	1.53	.00	1.53	1.48	.00
13811	9.03	.75	1.53	1.57	1.54	.00	1.54	.00	1.54	.00	1.54	.00	1.43	1.46	.00
13820	9.06	.70	1.53	1.57	1.54	.00	1.54	.00	1.54	.00	1.54	.00	1.54	1.48	.00
13830	9.07	.70	1.53	1.57	1.54	.00	1.54	.00	1.54	.00	1.54	.00	1.54	1.47	.00
13840	9.07	.70	1.53	1.57	1.54	.00	1.54	.00	1.54	.00	1.54	.00	1.54	1.47	.00



PACK NO. 110 TEST TEMPERATURE 0 C  
 G.F. 12 A.H. PERCENT OF DISCHARGE 15 OPPIT PERIOD 90 MIN.  
 PERCENT OF RECHARGE 115

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES				END OF DISCHARGE
			1	2	3	4	
13769	7.01	3.60	1.24	1.24	1.24	1.24	
13770	6.91	3.60	1.23	1.23	1.23	1.23	
13771	6.81	3.60	1.22	1.22	1.22	1.22	
13772	6.71	3.60	1.21	1.21	1.21	1.21	
13773	6.61	3.60	1.20	1.20	1.20	1.20	
13774	6.51	3.60	1.19	1.19	1.19	1.19	
13775	6.41	3.60	1.18	1.18	1.18	1.18	
13776	6.31	3.60	1.17	1.17	1.17	1.17	
13777	6.21	3.60	1.16	1.16	1.16	1.16	
13778	6.11	3.60	1.15	1.15	1.15	1.15	
13779	6.01	3.60	1.14	1.14	1.14	1.14	
13780	5.91	3.60	1.13	1.13	1.13	1.13	
13781	5.81	3.60	1.12	1.12	1.12	1.12	
13782	5.71	3.60	1.11	1.11	1.11	1.11	
13783	5.61	3.60	1.10	1.10	1.10	1.10	
13784	5.51	3.60	1.09	1.09	1.09	1.09	
13785	5.41	3.60	1.08	1.08	1.08	1.08	
13786	5.31	3.60	1.07	1.07	1.07	1.07	
13787	5.21	3.60	1.06	1.06	1.06	1.06	
13788	5.11	3.60	1.05	1.05	1.05	1.05	
13789	5.01	3.60	1.04	1.04	1.04	1.04	
13790	4.91	3.60	1.03	1.03	1.03	1.03	
13791	4.81	3.60	1.02	1.02	1.02	1.02	
13792	4.71	3.60	1.01	1.01	1.01	1.01	
13793	4.61	3.60	1.00	1.00	1.00	1.00	
13794	4.51	3.60	0.99	0.99	0.99	0.99	
13795	4.41	3.60	0.98	0.98	0.98	0.98	
13796	4.31	3.60	0.97	0.97	0.97	0.97	
13797	4.21	3.60	0.96	0.96	0.96	0.96	
13798	4.11	3.60	0.95	0.95	0.95	0.95	
13799	4.01	3.60	0.94	0.94	0.94	0.94	
13800	3.91	3.60	0.93	0.93	0.93	0.93	
13801	3.81	3.60	0.92	0.92	0.92	0.92	
13802	3.71	3.60	0.91	0.91	0.91	0.91	
13803	3.61	3.60	0.90	0.90	0.90	0.90	
13804	3.51	3.60	0.89	0.89	0.89	0.89	
13805	3.41	3.60	0.88	0.88	0.88	0.88	
13806	3.31	3.60	0.87	0.87	0.87	0.87	
13807	3.21	3.60	0.86	0.86	0.86	0.86	
13808	3.11	3.60	0.85	0.85	0.85	0.85	
13809	3.01	3.60	0.84	0.84	0.84	0.84	
13810	2.91	3.60	0.83	0.83	0.83	0.83	
13811	2.81	3.60	0.82	0.82	0.82	0.82	
13812	2.71	3.60	0.81	0.81	0.81	0.81	
13813	2.61	3.60	0.80	0.80	0.80	0.80	
13814	2.51	3.60	0.79	0.79	0.79	0.79	
13815	2.41	3.60	0.78	0.78	0.78	0.78	
13816	2.31	3.60	0.77	0.77	0.77	0.77	
13817	2.21	3.60	0.76	0.76	0.76	0.76	
13818	2.11	3.60	0.75	0.75	0.75	0.75	
13819	2.01	3.60	0.74	0.74	0.74	0.74	
13820	1.91	3.60	0.73	0.73	0.73	0.73	
13821	1.81	3.60	0.72	0.72	0.72	0.72	
13822	1.71	3.60	0.71	0.71	0.71	0.71	
13823	1.61	3.60	0.70	0.70	0.70	0.70	
13824	1.51	3.60	0.69	0.69	0.69	0.69	
13825	1.41	3.60	0.68	0.68	0.68	0.68	
13826	1.31	3.60	0.67	0.67	0.67	0.67	
13827	1.21	3.60	0.66	0.66	0.66	0.66	
13828	1.11	3.60	0.65	0.65	0.65	0.65	
13829	1.01	3.60	0.64	0.64	0.64	0.64	
13830	0.91	3.60	0.63	0.63	0.63	0.63	
13831	0.81	3.60	0.62	0.62	0.62	0.62	
13832	0.71	3.60	0.61	0.61	0.61	0.61	
13833	0.61	3.60	0.60	0.60	0.60	0.60	
13834	0.51	3.60	0.59	0.59	0.59	0.59	
13835	0.41	3.60	0.58	0.58	0.58	0.58	
13836	0.31	3.60	0.57	0.57	0.57	0.57	
13837	0.21	3.60	0.56	0.56	0.56	0.56	
13838	0.11	3.60	0.55	0.55	0.55	0.55	
13839	0.01	3.60	0.54	0.54	0.54	0.54	
13840	0.00	3.60	0.53	0.53	0.53	0.53	
13841	0.00	3.60	0.52	0.52	0.52	0.52	
13842	0.00	3.60	0.51	0.51	0.51	0.51	
13843	0.00	3.60	0.50	0.50	0.50	0.50	
13844	0.00	3.60	0.49	0.49	0.49	0.49	
13845	0.00	3.60	0.48	0.48	0.48	0.48	
13846	0.00	3.60	0.47	0.47	0.47	0.47	
13847	0.00	3.60	0.46	0.46	0.46	0.46	
13848	0.00	3.60	0.45	0.45	0.45	0.45	
13849	0.00	3.60	0.44	0.44	0.44	0.44	
13850	0.00	3.60	0.43	0.43	0.43	0.43	
13851	0.00	3.60	0.42	0.42	0.42	0.42	
13852	0.00	3.60	0.41	0.41	0.41	0.41	
13853	0.00	3.60	0.40	0.40	0.40	0.40	
13854	0.00	3.60	0.39	0.39	0.39	0.39	
13855	0.00	3.60	0.38	0.38	0.38	0.38	
13856	0.00	3.60	0.37	0.37	0.37	0.37	
13857	0.00	3.60	0.36	0.36	0.36	0.36	
13858	0.00	3.60	0.35	0.35	0.35	0.35	
13859	0.00	3.60	0.34	0.34	0.34	0.34	
13860	0.00	3.60	0.33	0.33	0.33	0.33	
13861	0.00	3.60	0.32	0.32	0.32	0.32	
13862	0.00	3.60	0.31	0.31	0.31	0.31	
13863	0.00	3.60	0.30	0.30	0.30	0.30	
13864	0.00	3.60	0.29	0.29	0.29	0.29	
13865	0.00	3.60	0.28	0.28	0.28	0.28	
13866	0.00	3.60	0.27	0.27	0.27	0.27	
13867	0.00	3.60	0.26	0.26	0.26	0.26	
13868	0.00	3.60	0.25	0.25	0.25	0.25	
13869	0.00	3.60	0.24	0.24	0.24	0.24	
13870	0.00	3.60	0.23	0.23	0.23	0.23	
13871	0.00	3.60	0.22	0.22	0.22	0.22	
13872	0.00	3.60	0.21	0.21	0.21	0.21	
13873	0.00	3.60	0.20	0.20	0.20	0.20	
13874	0.00	3.60	0.19	0.19	0.19	0.19	
13875	0.00	3.60	0.18	0.18	0.18	0.18	
13876	0.00	3.60	0.17	0.17	0.17	0.17	
13877	0.00	3.60	0.16	0.16	0.16	0.16	
13878	0.00	3.60	0.15	0.15	0.15	0.15	
13879	0.00	3.60	0.14	0.14	0.14	0.14	
13880	0.00	3.60	0.13	0.13	0.13	0.13	
13881	0.00	3.60	0.12	0.12	0.12	0.12	
13882	0.00	3.60	0.11	0.11	0.11	0.11	
13883	0.00	3.60	0.10	0.10	0.10	0.10	
13884	0.00	3.60	0.09	0.09	0.09	0.09	
13885	0.00	3.60	0.08	0.08	0.08	0.08	
13886	0.00	3.60	0.07	0.07	0.07	0.07	
13887	0.00	3.60	0.06	0.06	0.06	0.06	
13888	0.00	3.60	0.05	0.05	0.05	0.05	
13889	0.00	3.60	0.04	0.04	0.04	0.04	
13890	0.00	3.60	0.03	0.03	0.03	0.03	
13891	0.00	3.60	0.02	0.02	0.02	0.02	
13892	0.00	3.60	0.01	0.01	0.01	0.01	
13893	0.00	3.60	0.00	0.00	0.00	0.00	
13894	0.00	3.60	0.00	0.00	0.00	0.00	
13895	0.00	3.60	0.00	0.00	0.00	0.00	
13896	0.00	3.60	0.00	0.00	0.00	0.00	
13897	0.00	3.60	0.00	0.00	0.00	0.00	
13898	0.00	3.60	0.00	0.00	0.00	0.00	
13899	0.00	3.60	0.00	0.00	0.00	0.00	
13900	0.00	3.60	0.00	0.00	0.00	0.00	



PACK NO. 124 TEST TEMPERATURE C  
 G.E. 12 A.H. DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 11% CHARGE PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
13395	4.65	5.88	1.16	1.17	.00	1.16	1.13	
13427	4.58	5.87	1.16	1.16	.00	1.16	1.13	
13476	4.86	5.88	1.17	1.17	.01	1.23	1.23	
13508	4.76	5.94	1.16	1.16	.00	1.21	1.17	
1354	4.72	5.93	1.17	1.17	.00	1.21	1.16	
13571	4.88	5.85	1.17	1.19	.01	1.18	1.14	
13636	4.84	5.84	1.16	1.17	.01	1.17	1.16	
13667	4.58	5.93	1.17	1.16	.01	1.17	1.14	
13699	4.63	5.86	1.17	1.16	.01	1.17	1.14	
13731	4.66	5.89	1.18	1.17	.01	1.18	1.15	
13795	4.70	5.93	1.18	1.19	.01	1.19	1.16	
13827	4.68	5.87	1.17	1.16	.01	1.17	1.14	
13395	5.98	3.45	1.47	1.46	.00	1.47	1.48	
13427	6.17	2.47	1.55	1.51	.00	1.52	1.59	
13476	6.11	3.14	1.54	1.51	.01	1.51	1.55	
13508	6.22	1.55	1.59	1.56	.00	1.57	1.51	
1354	6.36	1.52	1.62	1.55	.00	1.56	1.54	
13570	6.17	1.38	1.58	1.48	.03	1.52	1.55	
13629	6.14	1.22	1.58	1.47	.02	1.49	1.55	
13667	6.12	1.42	1.54	1.50	.00	1.49	1.50	
13699	6.10	1.41	1.54	1.49	.01	1.48	1.59	
13731	6.13	1.38	1.58	1.49	.01	1.49	1.59	
13795	6.10	1.37	1.57	1.48	.00	1.48	1.58	
13827	6.00	2.02	1.54	1.48	.01	1.49	1.59	

PACK NO. 111  
 G.L. 12 A.H.

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
 TEST PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6794.	6.13	3.61	1.23	1.23	1.23	1.23	1.23	1.22
6837.	6.14	3.55	1.24	1.24	1.24	1.24	1.24	1.22
6879.	6.16	3.64	1.23	1.23	1.23	1.24	1.24	1.22
6890.	6.12	3.59	1.23	1.23	1.23	1.23	1.23	1.22
6931.	6.15	3.56	1.23	1.23	1.23	1.23	1.23	1.22
6971.	6.17	3.77	1.23	1.23	1.23	1.24	1.24	1.22
6796.	6.07	3.93	1.57	1.57	1.55	1.48	1.56	1.56
6837.	7.76	4.0	1.56	1.56	1.56	1.53	1.56	1.56
6872.	7.80	3.6	1.56	1.56	1.53	1.49	1.54	1.54
6899.	7.79	3.2	1.56	1.57	1.57	1.53	1.53	1.53
6931.	7.77	3.6	1.56	1.56	1.55	1.51	1.53	1.53
6971.	7.81	3.26	1.56	1.53	1.53	1.52	1.53	1.53

PACK NO. 125  
 G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 11%

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	PACK CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6974	7.93	5.94	1.18	1.19	1.18	1.18	1.19	1.19
6936	5.92	6.92	1.18	1.18	1.18	1.19	1.19	1.18
6976	5.94	3.94	1.19	1.19	1.19	1.19	1.19	1.19
6977	7.72	1.98	1.57	1.57	1.58	1.58	1.57	1.47
6935	7.72	1.20	1.57	1.57	1.59	1.59	1.59	1.46
6975	7.71	1.23	1.58	1.57	1.57	1.57	1.58	1.47

PACK NO. 83 TEST TEMPERATURE 25 C  
 S.F. 12 A.H. ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	PACK CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6767.	5.74	5.01	1.15	1.15	1.16	1.16	1.16	1.16
6808.	5.85	6.04	1.17	1.19	1.19	1.18	1.17	1.17
6941.	5.73	5.49	1.15	1.16	1.16	1.16	1.16	1.16
7000.	5.75	6.1	1.15	1.15	1.15	1.16	1.14	1.14
7030.	5.66	5.75	1.14	1.16	1.14	1.14	1.14	1.13
7072.	5.82	6.06	1.17	1.17	1.16	1.16	1.16	1.16
7169.	7.43	1.49	1.46	1.43	1.46	1.44	1.39	1.39
6898.	7.39	1.48	1.45	1.43	1.44	1.43	1.39	1.39
6941.	7.30	1.53	1.46	1.45	1.48	1.47	1.44	1.44
7002.	7.32	1.53	1.48	1.45	1.49	1.47	1.44	1.44
7035.	7.23	1.52	1.47	1.44	1.47	1.46	1.43	1.43
7075.	7.24	1.53	1.47	1.44	1.47	1.46	1.43	1.43

98

PAGE NO. 86 TEST TEMPERATURE 40 C  
 6.F. 12 A.H. DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 160 PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6695	7.75	3.66	1.14	1.15	1.15	1.15	1.14	
6728	7.82	3.51	1.14	1.16	1.16	1.17	1.16	
6810	7.66	3.57	1.14	1.16	1.16	1.14	1.14	
6832	7.59	3.61	1.14	1.15	1.15	1.15	1.11	
6863	7.71	3.77	1.14	1.14	1.15	1.15	1.11	
6872	7.47	3.49	1.14	1.12	1.13	1.14	1.12	
6695	7.14	1.15	1.40	1.40	1.42	1.40	1.38	END OF CHARGE
6728	7.17	1.17	1.42	1.42	1.44	1.45	1.43	
6810	7.16	1.16	1.43	1.43	1.43	1.44	1.43	
6832	7.15	1.17	1.43	1.42	1.42	1.44	1.42	
6863	7.16	1.18	1.40	1.40	1.41	1.40	1.38	
6872	7.16	1.17	1.43	1.42	1.42	1.44	1.42	

PACK NO. 84  
 GOULD 20 A.H.  
 DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 115  
 TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
13710.	5.94	6.04	1.21	1.22	1.21	1.22	1.10	
13743.	5.97	5.96	1.21	1.21	1.21	1.22	1.15	
13791.	6.00	5.90	1.19	1.21	1.19	1.20	1.22	
13823.	6.05	6.05	1.21	1.22	1.19	1.21	1.22	
13854.	6.06	5.96	1.21	1.22	1.20	1.22	1.22	
13887.	6.10	6.10	1.21	1.22	1.22	1.23	1.22	
13918.	6.04	5.86	1.21	1.21	1.22	1.21	1.19	
13951.	6.07	5.95	1.20	1.20	1.25	1.25	1.29	
13981.	5.97	5.91	1.19	1.21	1.18	1.21	1.10	
14014.	5.97	5.96	1.21	1.21	1.20	1.21	1.18	
14045.	5.80	5.85	1.21	1.22	1.21	1.22	1.18	
14077.	5.99	5.91	1.20	1.22	1.21	1.22	1.17	
14100.	6.18	5.96	1.23	1.24	1.23	1.24	1.25	
1371.	7.62	3.45	1.55	1.54	1.54	1.54	1.47	END OF CHARGE
13743.	7.61	2.46	1.54	1.52	1.54	1.54	1.48	
13791.	7.74	2.10	1.54	1.57	1.56	1.55	1.49	
13823.	7.73	2.27	1.56	1.56	1.53	1.53	1.53	
13854.	7.79	2.43	1.56	1.57	1.57	1.54	1.52	
13887.	7.89	2.39	1.50	1.54	1.54	1.52	1.49	
13918.	7.36	3.41	1.51	1.50	1.50	1.50	1.42	
13951.	7.35	3.39	1.44	1.45	1.46	1.47	1.44	
13981.	7.35	2.12	1.57	1.54	1.53	1.51	1.47	
14014.	7.56	2.32	1.54	1.53	1.53	1.52	1.45	
14045.	7.56	2.36	1.54	1.54	1.54	1.52	1.45	
14077.	7.56	2.40	1.54	1.54	1.52	1.52	1.44	
14100.	7.46	2.98	1.50	1.50	1.51	1.47	1.48	

PACK NO. 89 TEST TEMPERATURE 0 C  
 GOULD 20 A.H. ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 115					END OF DISCHARGE
			1	2	3	4	5	
6836.	5.93	6.12	1.23	1.17	1.11	1.23	1.22	
6878.	5.14	6.11	1.26	1.22	1.18	1.26	1.24	
6912.	5.14	6.12	1.25	1.21	1.18	1.25	1.24	
6942.	5.12	6.20	1.24	1.22	1.18	1.24	1.23	
6974.	5.13	5.98	1.24	1.22	1.20	1.26	1.26	
7014.	5.28	5.97	1.24	1.22	1.21	1.26	1.25	
6836.	7.25	1.38	1.44	1.46	1.48	1.45	1.44	END OF CHARGE
6878.	7.61	1.73	1.47	1.53	1.58	1.52	1.52	
6912.	7.66	1.82	1.45	1.49	1.52	1.48	1.47	
6942.	7.81.	1.76	1.45	1.56	1.59	1.51	1.48	
6974.	7.64	1.91	1.51	1.53	1.56	1.53	1.54	
7014.	7.71	1.74	1.52	1.56	1.57	1.55	1.55	

PACK NO. 94 TEST TEMPERATURE 0 C  
 GOULD 29 A.H. ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115					END OF DISCHARGE
			1	2	3	4	5	
6722	4.87	10.07	1.16	1.10	.65	1.09	.90	
6762	6.09	10.26	1.24	1.23	1.16	1.23	1.22	
6796	6.01	10.27	1.22	1.22	1.17	1.21	1.21	
6826	5.97	9.04	1.21	1.19	1.17	1.20	1.20	
6858	5.99	10.17	1.31	1.27	1.17	1.20	1.20	
6898	5.91	9.54	1.11	1.10	1.17	1.21	1.20	
6722	7.15	1.52	1.41	1.40	1.45	1.43	1.43	END OF CHARGE
6762	7.81	.56	1.51	1.50	1.61	1.62	1.56	
6796	7.77	.56	1.47	1.47	1.57	1.55	1.53	
6826	7.74	.84	1.45	1.44	1.60	1.63	1.53	
6858	7.69	1.07	1.55	1.49	1.57	1.57	1.53	
6898	7.68	1.10	1.50	1.40	1.58	1.57	1.53	



PACK NO. 102  
 GULTON 20 A.H.

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6666	4.79	6.06	1.21	.00	1.19	1.23	1.20	
6706	4.78	6.05	1.19	.00	1.19	1.23	1.19	
6746	4.79	6.04	1.19	.00	1.18	1.23	1.19	
6776	4.74	6.04	1.19	.00	1.18	1.21	1.17	
6806	4.78	6.07	1.18	.00	1.19	1.22	1.18	
6842	4.76	6.07	1.19	.00	1.19	1.22	1.19	
6866	6.22	1.38	1.59	.00	1.58	1.52	1.55	END OF CHARGE
6706	6.21	1.32	1.59	.00	1.59	1.51	1.53	
6746	6.22	1.00	1.53	.00	1.51	1.47	1.48	
6776	6.15	1.19	1.57	.00	1.53	1.42	1.43	
6806	6.03	1.06	1.55	.00	1.54	1.48	1.49	
6842	6.12	1.09	1.56	.00	1.56	1.50	1.52	

PACK NO. 116 TEST TEMPERATURE 0 C  
 GULION 20 A.H. ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115					END OF DISCHARGE
			1	2	3	4	5	
6517	5.71	9.74	1.14	1.16	1.09	1.18	1.15	
6550	5.73	9.86	1.13	1.17	1.11	1.18	1.15	
6584	5.69	9.74	1.11	1.16	1.10	1.18	1.15	
6614	5.66	9.89	1.11	1.16	1.07	1.17	1.16	
6646	5.73	9.71	1.13	1.17	1.10	1.18	1.16	
6686	5.74	9.86	1.14	1.16	1.09	1.18	1.16	
6517	7.77	2.30	1.45	1.60	1.55	1.66	1.52	END OF CHARGE
6550	7.69	1.43	1.42	1.59	1.56	1.58	1.54	
6584	7.69	1.35	1.40	1.56	1.52	1.55	1.49	
6614	7.72	1.22	1.41	1.57	1.51	1.67	1.47	
6646	7.72	1.33	1.45	1.58	1.54	1.58	1.52	
6686	7.74	1.21	1.45	1.60	1.55	1.61	1.53	

104

PACK NO. 103  
 G.E. 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 110

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6655	6.18	1.50	1.25	1.24	1.25	1.22	1.26	
6688	6.14	1.50	1.24	1.22	1.24	1.21	1.25	
6736	6.23	1.49	1.24	1.24	1.25	1.26	1.25	
6768	6.21	1.49	1.24	1.24	1.26	1.24	1.25	
6799	6.19	1.48	1.24	1.23	1.25	1.23	1.25	
6832	6.19	1.49	1.23	1.23	1.26	1.24	1.25	
6863	6.20	1.48	1.24	1.21	1.25	1.25	1.24	
6896	6.18	1.49	1.26	1.25	1.27	1.28	1.27	
6926	6.20	1.49	1.24	1.22	1.25	1.26	1.25	
6959	6.17	1.49	1.24	1.21	1.25	1.25	1.24	
6990	6.17	1.48	1.24	1.20	1.26	1.24	1.25	
7022	6.16	1.49	1.24	1.20	1.25	1.24	1.25	
7054	6.19	1.48	1.24	1.23	1.25	1.25	1.24	
6655	7.52	.83	1.53	1.49	1.59	1.41	1.52	END OF CHARGE
6688	7.53	.50	1.54	1.46	1.60	1.42	1.53	
6736	7.52	.46	1.53	1.46	1.57	1.45	1.51	
6768	7.52	.48	1.54	1.47	1.60	1.42	1.52	
6799	7.51	.50	1.54	1.46	1.60	1.42	1.51	
6832	7.52	.52	1.51	1.43	1.57	1.38	1.48	
6863	7.67	.51	1.51	1.42	1.57	1.42	1.48	
6896	7.29	.82	1.43	1.40	1.44	1.39	1.39	
6926	7.54	.50	1.53	1.44	1.59	1.47	1.51	
6959	7.51	.52	1.53	1.43	1.60	1.47	1.51	
6990	7.51	.54	1.53	1.42	1.60	1.45	1.52	
7022	7.51	.54	1.53	1.42	1.60	1.45	1.52	
7054	7.27	.82	1.47	1.42	1.52	1.43	1.45	

PACK NO. 107 TEST TEMPERATURE 0 C  
 G.F. 5 A.H. NIMBUS ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT	DEPTH OF DISCHARGE					PSIA	END OF DISCHARGE
			25 PERCENT OF RECHARGE	110 PERCENT OF RECHARGE	1	2	3		
5995	2.47	5.95	1.19	1.19	1.20	1.20	1.20	23.002	
6027	2.46	5.95	1.19	1.19	1.20	1.20	1.20	22.954	
6076	2.48	6.13	1.23	1.23	1.23	1.23	1.23	22.473	
6103	2.43	6.24	1.21	1.21	1.21	1.21	1.21	22.326	
6141	2.47	6.14	1.21	1.21	1.21	1.21	1.21	22.108	
6170	2.48	6.06	1.19	1.19	1.19	1.19	1.19	20.643	
6236	2.47	5.94	1.19	1.18	1.18	1.18	1.18	19.502	
6267	2.46	6.93	1.19	1.19	1.19	1.19	1.19	19.825	
6284	2.46	5.94	1.19	1.19	1.20	1.19	1.19	17.876	
6297	2.47	5.92	1.18	1.18	1.19	1.19	1.19	18.998	
6331	2.46	5.89	1.18	1.18	1.18	1.18	1.18	18.427	
6395	2.46	6.01	1.21	1.21	1.21	1.21	1.21	18.114	
6427	2.46	5.91	1.18	1.18	1.18	1.18	1.18	17.733	
5995	1.38	7.33	1.47	1.47	1.47	1.47	1.47	23.525	
6027	1.60	7.35	1.48	1.47	1.46	1.47	1.47	23.392	
6076	1.70	7.34	1.47	1.47	1.48	1.47	1.47	32.968	
6103	1.52	7.41	1.50	1.48	1.48	1.48	1.50	22.621	
6141	1.71	7.54	1.53	1.50	1.49	1.50	1.53	23.525	
6170	1.57	7.52	1.47	1.45	1.45	1.44	1.45	21.318	
6236	1.58	7.58	1.48	1.45	1.44	1.44	1.45	20.244	
6267	1.54	7.41	1.47	1.47	1.47	1.47	1.50	20.291	
6284	1.46	7.36	1.49	1.47	1.47	1.47	1.49	18.237	
6297	1.34	7.34	1.49	1.46	1.46	1.46	1.49	19.293	
6331	1.35	7.35	1.49	1.46	1.46	1.46	1.49	18.703	
6395	1.39	7.39	1.48	1.46	1.46	1.46	1.48	19.578	
6427	1.71	7.25	1.49	1.46	1.47	1.47	1.49	17.876	

106

PACK NO. 106 TEST TEMPERATURE 25 C  
 G.F. 5 A.F. NIMBUS ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 120					END OF DISCHARGE
			1	2	3	4	5	
6679	6.03	1.50	1.21	1.21	1.20	1.22	1.22	
6767	6.08	1.50	1.22	1.22	1.23	1.22	1.22	
6792	6.12	1.49	1.22	1.22	1.22	1.22	1.22	
6824	6.06	1.46	1.22	1.21	1.21	1.22	1.22	
6856	6.03	1.50	1.21	1.21	1.21	1.22	1.21	
6888	6.13	1.51	1.21	1.20	1.21	1.22	1.21	
692	6.2	1.51	1.21	1.20	1.21	1.22	1.21	
6951	6.02	1.50	1.21	1.20	1.21	1.22	1.22	
6984	6.99	1.50	1.20	1.19	1.20	1.21	1.21	
7015	6.00	1.49	1.20	1.20	1.21	1.22	1.21	
6679	7.17	.90	1.44	1.44	1.42	1.44	1.44	1.44
6767	7.19	.90	1.44	1.43	1.42	1.45	1.44	1.44
6792	7.18	.90	1.44	1.44	1.41	1.44	1.44	1.44
6824	7.15	.90	1.44	1.43	1.41	1.44	1.43	1.43
6856	7.29	.89	1.42	1.42	1.38	1.41	1.40	1.40
6888	7.28	.89	1.41	1.41	1.39	1.41	1.40	1.40
692	7.56	.90	1.41	1.41	1.39	1.41	1.40	1.40
6951	7.14	.91	1.43	1.43	1.42	1.44	1.43	1.43
6984	7.11	.91	1.42	1.42	1.41	1.43	1.43	1.43
7015	7.19	.91	1.43	1.43	1.41	1.44	1.43	1.43

END OF CHARGE

PACK NO. 3 4 TEST TEMPERATURE 25 C  
 G.F. 5 A.H. NIMBUS ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES 2.5	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 120					CELL VOLTAGES	PSIA	END OF DISCHARGE
			1	2	3	4	5			
5996	4.46	2.07	1.14	1.15	1.13	.00	1.10	31.069		
5997	4.45	2.09	1.14	1.13	1.11	.00	1.09	31.119		
5998	4.42	2.09	1.14	1.10	1.10	.00	1.09	31.066		
5999	4.41	2.07	1.13	1.10	1.10	.00	1.07	31.745		
6000	4.40	2.07	1.13	1.10	1.10	.00	1.11	31.523		
6001	4.40	2.09	1.13	1.11	1.10	.00	1.09	31.795		
6002	4.40	2.10	1.13	1.11	1.10	.00	1.09	31.551		
6003	4.42	2.48	1.12	1.10	1.08	.00	1.13	27.824		
6004	4.16	2.48	1.07	1.02	1.01	.00	1.04	31.333		
6005	4.41	2.45	1.11	1.10	1.10	.00	1.06	32.263		
6006	5.94	1.57	1.46	1.48	1.53	.00	1.47	31.840		
6007	5.92	1.50	1.48	1.48	1.52	.00	1.47	30.583		
6008	5.73	1.51	1.44	1.43	1.44	.00	1.43	26.587		
6009	5.89	1.51	1.47	1.47	1.50	.00	1.46	32.454		
6010	5.88	1.51	1.46	1.47	1.50	.00	1.46	31.587		
6011	6.16	1.15	1.44	1.44	1.47	.00	1.40	24.727		
6012	6.15	1.15	1.44	1.46	1.51	.00	1.43	31.618		
6013	6.01	1.13	1.45	1.45	1.47	.00	1.45	37.951		
6014	6.33	1.07	1.44	1.43	1.48	.00	1.45	30.399		
6015	6.32	1.07	1.44	1.45	1.49	.00	1.44	32.105		

PACK NO. 114 TEST TEMPERATURE 40 C  
 G.P. 5 A.H. NIMBUS ORBIT PERIOD 90 MIN

CYCLE NO.	PACK CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 130					PSIA	END OF DISCHARGE
		1	2	3	4	5		
5046	5.25	2.47	1.57	.92	1.09	1.13	49.576	
5078	5.25	2.47	1.57	.86	1.06	1.08	50.839	
5083	5.25	2.47	1.57	1.15	1.11	.87	51.137	
5050	5.17	2.45	1.55	1.11	1.07	.84	50.868	
5174	5.13	2.44	1.53	1.09	1.07	.80	51.051	
5100	5.10	2.42	1.51	1.07	1.06	.80	51.230	

CYCLE NO.	PACK CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 130					PSIA	END OF CHARGE
		1	2	3	4	5		
5046	7.29	1.63	1.48	1.45	1.46	1.47	51.448	
5078	7.29	1.63	1.46	1.45	1.46	1.47	52.668	
5027	7.13	1.62	1.44	1.43	1.40	1.44	52.914	
5159	7.13	1.62	1.43	1.44	1.43	1.39	50.400	
5110	6.97	1.59	1.42	1.41	1.43	.80	51.912	
5146	6.97	1.59	1.41	1.40	1.44	.80	51.811	

PACK NO. 60 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C  
 G.F. 12 A.H. 3RD ELECTRODE R 3 3 3 3 OPBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	3RD ELECT VOLTAGES					CELL VOLTAGES					END OF DISCHARGE	
		1	2	3	4	5	1	2	3	4	5		
4165	5.98	6.02	.958	.023	.021	.019	1.20	1.21	1.20	1.20	1.20	1.20	.000
4197	5.98	6.07	.961	.026	.022	.018	1.20	1.21	1.20	1.20	1.20	1.20	.000
4246	6.16	6.07	.957	.019	.021	.024	1.21	1.25	1.24	1.24	1.24	1.23	.000
4294	6.15	6.16	.932	.012	.016	.019	1.24	1.25	1.24	1.25	1.25	1.23	.000
4325	6.04	6.14	.916	.015	.015	.023	1.17	1.17	1.19	1.19	1.18	1.18	.000

CYCLE NO.	PACK CURRENT	3RD ELECT VOLTAGES					CELL VOLTAGES					TRIP POINT	
		1	2	3	4	5	1	2	3	4	5		
4165	7.37	1.46	.378	.249	.116	.356	1.47	1.48	1.47	1.47	1.48	1.48	
4197	7.35	1.00	.322	.272	.130	.402	1.47	1.48	1.47	1.47	1.47	1.48	
4246	7.40	2.35	.370	.405	.225	.322	1.48	1.49	1.49	1.48	1.48	1.49	
4294	7.61	2.35	.180	.407	.224	.312	1.53	1.54	1.53	1.53	1.53	1.53	
4325	7.43	2.55	.238	.233	.308	.436	1.40	1.48	1.49	1.49	1.49	1.49	

110

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END OF CHARGE  
 1.49  
 1.48  
 1.46  
 1.51  
 1.45



PACK NO. 40 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 0 C  
 6.1 12 A.H. 3RD ELECTRODE R 3 3 3 3 ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT 3RD ELECT VOLTAGES CCELL VOLTAGES

NO.	VOLTAGE	9.6	1	2	3	4	5	1	2	3	4	5	END OF DISCHARGE
1000	1.94	0.81	0.81	0.81	0.81	0.81	0.81	1.15	1.15	1.15	1.15	1.15	0.00
1001	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.01	1.01	1.01	1.01	0.00
1002	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.19	1.19	1.19	0.00
1003	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.18	1.17	1.18	1.17	0.00
1004	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.17	1.17	1.17	1.17	0.00
1005	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.16	1.16	1.17	1.15	0.00
1006	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.20	1.20	1.20	1.20	0.00
1007	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.17	1.17	1.18	1.18	0.00

3RD ELECT VOLTAGES 3RD ELECT VOLTAGES POINT AH IN END OF CHARGE

NO.	VOLTAGE	9.6	1	2	3	4	5	1	2	3	4	5	END OF CHARGE
1008	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.49	1.50	1.49	0.00
1009	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.00	1.48	1.48	1.48	0.00
1010	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.46	1.45	1.45	1.46	0.00
1011	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.48	1.47	1.47	1.49	0.00
1012	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.47	1.47	1.46	1.49	0.00
1013	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.49	1.49	1.48	1.48	0.00
1014	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.44	1.44	1.45	1.45	0.00
1015	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.44	1.44	1.44	1.44	0.00
1016	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.46	1.45	1.45	1.48	0.00
1017	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.46	1.45	1.45	1.47	0.00
1018	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.44	1.44	1.45	1.47	0.00
1019	1.94	0.81	0.81	0.81	0.81	0.81	0.81	0.81	1.43	1.43	1.43	1.45	0.00

PACK NO. 338  
G.E./G.U. 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	1	2	3	4	5	6	7	8	9	10
	3.00											

END OF  
DISCHARGE

END OF  
CHARGE

112

Coulometer Failed; Awaiting New One.  
Will be back in cycling next month.

PACK NO. 243  
 SONOTONE 3 A.H.

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	VOLTAGE	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
5513.	6.07	.90	1.22	1.22	1.22	1.22	1.22	
5545.	6.06	.91	1.22	1.21	1.22	1.22	1.22	
5594.	6.18	.90	1.24	1.24	1.24	1.25	1.24	
5626.	6.11	.90	1.22	1.22	1.22	1.23	1.23	
5643.	6.04	.91	1.19	1.20	1.20	1.20	1.18	
5671.	5.99	.91	1.20	1.21	1.21	1.21	1.20	
5725.	6.14	.91	1.22	1.24	1.24	1.24	1.22	

5513.	7.76	.52	1.46	1.48	1.50	1.69	1.65	
5545.	7.76	.22	1.47	1.50	1.50	1.68	1.64	
5594.	7.62.	.44	1.53	1.66	1.51	1.52	1.43	
5626.	7.60	.50	1.46	1.47	1.47	1.56	1.65	
5643.	7.94	.18	1.47	1.56	1.51	1.70	1.62	
5675.	7.78	.18	1.47	1.52	1.51	1.67	1.64	
5725.	7.84	.19	1.47	1.56	1.52	1.68	1.64	

PACK NO. 251 TEST TEMPERATURE 0 C  
 SONOTONE 3 A.H. ORBIT PERIOD, 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115					END OF DISCHARGE
			1	2	3	4	5	
5528.	5.72	1.50	1.17	1.15	1.17	1.17	1.17	1.09
556.	5.74	1.51	1.17	1.16	1.16	1.17	1.17	1.10
5609.	5.92	1.51	1.19	1.18	1.20	1.20	1.20	1.19
5641.	5.38	1.35	1.18	1.19	1.18	1.19	1.19	1.15
5658.	5.71	1.50	1.16	1.16	1.17	1.16	1.16	1.08
5757.	5.76	1.35	1.18	1.17	1.18	1.17	1.17	1.09
5787.	5.77	1.33	1.18	1.17	1.18	1.18	1.18	1.09

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115					END OF CHARGE
			1	2	3	4	5	
5528.	7.69	.86	1.54	1.54	1.56	1.53	1.56	1.56
5567.	7.97	.72	1.60	1.59	1.61	1.60	1.60	1.60
5609.	7.86	.81	1.57	1.57	1.54	1.55	1.65	1.65
5641.	7.37	.86	1.49	1.48	1.48	1.47	1.47	1.47
5658.	7.76	.40	1.56	1.54	1.55	1.54	1.58	1.58
5687.	7.77	.42	1.50	1.53	1.55	1.54	1.56	1.56
5727.	7.74	.42	1.58	1.56	1.56	1.55	1.57	1.57

114

PACK NO. 203  
 SONOTONE 3 A.H.  
 CYCLE PACK CURRENT VOLTAGE 1.50  
 DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 125  
 TEST TEMPRATURE 25 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	VOLTAGE	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
5696.	5.77	1.48	1.17	1.17	1.12	1.16	1.17	
5728.	5.79	1.48	1.17	1.17	1.12	1.17	1.17	
5757.	5.77	1.48	1.17	1.16	1.12	1.16	1.16	
5789.	5.79	1.48	1.17	1.17	1.12	1.16	1.17	
5821.	5.78	1.48	1.17	1.16	1.12	1.16	1.16	
5853.	5.76	1.48	1.17	1.17	1.12	1.16	1.16	
5885.	5.76	1.48	1.17	1.16	1.12	1.16	1.16	
5933.	5.79	1.50	1.17	1.17	1.13	1.17	1.17	
5964.	5.79	1.49	1.17	1.17	1.12	1.17	1.17	
5996.	5.75	1.52	1.17	1.16	1.11	1.16	1.16	
6028.	5.68	1.49	1.18	1.18	1.13	1.19	1.19	
6059.	5.78	1.49	1.17	1.17	1.12	1.17	1.17	
5696.	7.39	.94	1.48	1.49	1.49	1.49	1.47	1.47
5728.	7.38	.94	1.48	1.49	1.48	1.49	1.47	1.47
5757.	7.27	.96	1.48	1.47	1.48	1.49	1.46	1.46
5789.	7.40	.96	1.48	1.48	1.49	1.49	1.47	1.47
5821.	7.38	.96	1.48	1.48	1.48	1.49	1.47	1.47
5853.	7.50	.95	1.48	1.46	1.46	1.46	1.43	1.43
5885.	7.55	.95	1.48	1.46	1.46	1.46	1.43	1.43
5933.	7.31	.95	1.48	1.46	1.47	1.47	1.45	1.45
5964.	7.34	.95	1.48	1.47	1.48	1.48	1.46	1.46
5996.	7.52	.95	1.47	1.47	1.48	1.48	1.46	1.46
6028.	7.36	.95	1.47	1.47	1.48	1.48	1.46	1.46
6059.	7.36	.95	1.47	1.47	1.49	1.48	1.46	1.46

PACK NO. 202 TEST TEMPERATURE 25 C  
 SONGTONE 3 A.H. ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 40 PERCENT OF RECHARGE 125					END OF DISCHARGE
			1	2	3	4	5	
5142.	3.23	2.35	1.09	1.14	.00	.00	.00	1.00
5174.	3.41	2.36	1.09	1.12	.00	.00	.00	1.09
5205.	3.31	2.35	1.09	1.13	.00	.00	.00	1.09
5238.	3.29	2.30	1.07	1.13	.00	.00	.00	1.08
5269.	3.00	1.98	1.11	1.11	.00	.00	.00	.84
5302.	3.12	2.17	1.10	1.17	.00	.00	.00	1.09
5332.	3.38	2.06	1.13	1.15	.00	.00	.00	1.11
5365.	3.33	2.01	1.10	1.15	.00	.00	.00	1.09
5396.	3.06	1.86	1.08	1.15	.00	.00	.00	.83
5399.	2.54	2.29	1.00	1.11	.00	.00	.00	.43
5142.	4.65	1.50	1.55	1.58	.00	.00	.00	1.51
5174.	4.74	1.53	1.57	1.59	.00	.00	.00	1.58
5205.	4.77	1.50	1.53	1.60	.00	.00	.00	1.59
5238.	4.81	1.22	1.53	1.55	.00	.00	.00	1.53
5269.	4.42	.50	1.41	1.39	.00	.00	.00	1.42
5302.	4.74	.79	1.49	1.55	.00	.00	.00	1.52
5332.	4.36	.51	1.44	1.44	.00	.00	.00	1.48
5365.	4.47	.67	1.48	1.52	.00	.00	.00	1.48
5396.	4.44	.71	1.48	1.48	.00	.00	.00	1.48
5399.	4.49	.76	1.49	1.51	.00	.00	.00	1.50

PACK NO. 226 TEST TEMPERATURE 40 C  
 SONOTONE 3 A.H. ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 160

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
5448.	5.55	.90	1.13	1.18	1.03	1.17	1.05	
5481.	5.45	.90	1.12	1.12	.95	1.17	1.07	
		.72						
5448.	7.10	.66	1.41	1.41	1.44	1.44	1.44	END OF CHARGE
5481.	7.13	.64	1.41	1.44	1.43	1.44	1.44	

DATE NO. 197 TEST TEMPERATURE 40 C  
 CURRENT 3 A.M. PERCENT OF DISCHARGE 25  
 PERMIT PERIOD 90 MIN. PERCENT OF RECHARGE 160

CYCLE NO.	CHARGE CURRENT	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
3701	3.97	1.35	1.36	1.35	1.35	1.35	.00
3711	4.35	1.19	.82	1.15	1.15	1.15	.00
3721	4.42	1.22	.84	1.16	1.15	1.15	.00
3731	4.11	1.20	.82	1.15	1.15	1.15	.00
3741	3.89	1.24	.81	1.15	1.15	1.15	.00
3751	4.43	1.19	.81	1.19	1.19	1.19	.00
3761	3.45	1.17	.82	1.16	1.15	1.15	.00
3771	3.22	1.14	.79	.85	.64	.64	.00
3780	5.30	1.27	1.45	1.50	1.49	1.49	.00
3791	5.23	.74	1.44	1.45	1.49	1.47	.00
3801	5.30	.70	1.44	1.47	1.50	1.49	.00
3811	5.35	.77	1.44	1.46	1.48	1.47	.00
3821	5.42	.71	1.43	1.47	1.48	1.47	.00
3831	5.04	.29	1.41	1.41	1.42	1.41	.00
3841	4.49	.27	1.48	.80	1.53	1.51	.00
3851	4.21	.47	1.43	.86	1.45	1.44	.00

118



COULOMETER DEPTH OF DISCHARGE 30 ORBIT PERIOD 90 MINUTES  
 SONOTONE A.H. TEST TEMPERATURE 25° C

CYCLE NO.	PACK VOLTAGE	CURRENT	GIM	CELL VOLTAGES				
				1	2	3	4	5
9420	5.47	3.00	-0.142	1.14	1.09	1.14	1.14	1.12
9460	5.29		-0.190	1.12	1.05	1.10	1.12	1.10
9500	5.54		-0.148	1.15	1.12	1.15	1.14	1.13
9540	5.84		-0.060	1.19	1.16	1.19	1.19	1.18
9580	5.76		-0.081	1.18	1.15	1.18	1.18	1.16
9620	5.62		-0.092	1.16	1.12	1.16	1.15	1.14
9660	5.68		-0.085	1.16	1.13	1.16	1.16	1.15
9700	5.68		-0.095	1.16	1.13	1.16	1.16	1.15
9760	5.56		-0.115	1.15	1.12	1.15	1.15	1.13
9800	5.42		-0.127	1.13	1.08	1.13	1.13	1.11
9880	5.47		-0.163	1.14	1.11	1.14	1.13	1.12
9900	5.42		-0.164	1.13	1.11	1.13	1.13	1.11

END OF DISCHARGE

TIME TO START OF TRICKLE CHARGE

9420	8.00	0.30	+0.870	1.42	1.43	1.42	1.43	1.42	28:32
9460			+0.879	1.42	1.42	1.42	1.43	1.42	28:37
9500			+0.859	1.42	1.42	1.43	1.42	1.42	30:10
9540			+0.839	1.43	1.43	1.42	1.43	1.43	28:34
9580			+0.860	1.42	1.42	1.42	1.43	1.43	28:32
9620			+0.871	1.42	1.43	1.42	1.43	1.43	28:28
9660			+0.930	1.42	1.43	1.42	1.43	1.43	28:32
9700			+0.877	1.42	1.43	1.42	1.43	1.43	28:28
9760			+0.843	1.42	1.43	1.42	1.43	1.43	28:43
9800			+0.847	1.42	1.43	1.42	1.43	1.43	28:15
9880			+0.817	1.43	1.44	1.43	1.44	1.44	28:25
9900			+0.847	1.42	1.43	1.42	1.44	1.43	28:45

END OF CHARGE



PACK NO. 322 TEST TEMPERATURE 0  
 SONGTONG 5 A.H. ORBIT PERIOD, 90 MIN.

DEPTH OF DISCHARGE 40  
 STABILIZER

CYCLE NO.	PACK CURRENT	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
4103	3.28	1.11	1.16	.00	.00	1.14	
4226	3.33	1.09	1.15	.00	.00	1.12	
4274	3.26	1.10	1.13	.00	.00	1.10	
4220	3.29	1.10	1.12	.00	.00	1.11	
4357	3.11	1.09	1.11	.00	.00	1.10	
432	3.19	1.09	1.10	.00	.00	1.09	

CYCLE NO.	PACK CURRENT	CELL VOLTAGES					END OF CHARGE
		1	2	3	4	5	
4103	3.10						
4226	4.72	1.53	1.55	.00	.00	1.60	
4270	4.71	1.51	1.56	.00	.00	1.60	
4226	4.70	1.51	1.56	.00	.00	1.61	
4357	4.71	1.5	1.56	.00	.00	1.61	
4320	4.74	1.53	1.57	.00	.00	1.61	
4380	4.74	1.57	1.56	.00	.00	1.61	

CELL NO. 209 TEMPERATURE 40 C  
 CAPACITY 5 A.H. DRAIN PERIOD 90 MIN.

NO. OF DISCHARGE 25  
 CHARACTER

CYCLE PAGE CURRENT CELL VOLTAGE  
 NO. VOLTAGE 2.50 1 2 3 4 5

END OF  
 DISCHARGE

END OF  
 CHARGE

1	2.50	1.00	1.00	1.00	1.00
2	2.50	1.00	1.00	1.00	1.00
3	2.50	1.00	1.00	1.00	1.00
4	2.50	1.00	1.00	1.00	1.00
5	2.50	1.00	1.00	1.00	1.00
6	2.50	1.00	1.00	1.00	1.00
7	2.50	1.00	1.00	1.00	1.00
8	2.50	1.00	1.00	1.00	1.00
9	2.50	1.00	1.00	1.00	1.00
10	2.50	1.00	1.00	1.00	1.00
11	2.50	1.00	1.00	1.00	1.00
12	2.50	1.00	1.00	1.00	1.00
13	2.50	1.00	1.00	1.00	1.00
14	2.50	1.00	1.00	1.00	1.00
15	2.50	1.00	1.00	1.00	1.00
16	2.50	1.00	1.00	1.00	1.00
17	2.50	1.00	1.00	1.00	1.00
18	2.50	1.00	1.00	1.00	1.00
19	2.50	1.00	1.00	1.00	1.00
20	2.50	1.00	1.00	1.00	1.00
21	2.50	1.00	1.00	1.00	1.00
22	2.50	1.00	1.00	1.00	1.00
23	2.50	1.00	1.00	1.00	1.00
24	2.50	1.00	1.00	1.00	1.00
25	2.50	1.00	1.00	1.00	1.00

PAGE NO. 174  
 GO 1.25 A.M.

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE

TEST TEMPERATURE -20 C  
 CYCLE PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	PACK CURRENT	CELL VOLTAGES				END OF DISCHARGE
			1	2	3	4	
155.	5.61	.63	1.13	1.14	1.16	1.17	1.13
156.	5.61	.63	1.14	1.15	1.17	1.18	1.14
157.	5.61	.63	1.14	1.15	1.17	1.18	1.14
158.	5.61	.63	1.14	1.15	1.17	1.18	1.14
159.	5.61	.63	1.14	1.15	1.17	1.18	1.14
160.	5.61	.63	1.14	1.15	1.17	1.18	1.14
161.	5.61	.63	1.14	1.15	1.17	1.18	1.14
162.	5.61	.63	1.14	1.15	1.17	1.18	1.14
163.	5.61	.63	1.14	1.15	1.17	1.18	1.14
164.	5.61	.63	1.14	1.15	1.17	1.18	1.14
165.	5.61	.63	1.14	1.15	1.17	1.18	1.14
166.	5.61	.63	1.14	1.15	1.17	1.18	1.14
167.	5.61	.63	1.14	1.15	1.17	1.18	1.14
168.	5.61	.63	1.14	1.15	1.17	1.18	1.14
169.	5.61	.63	1.14	1.15	1.17	1.18	1.14
170.	5.61	.63	1.14	1.15	1.17	1.18	1.14
171.	5.61	.63	1.14	1.15	1.17	1.18	1.14
172.	5.61	.63	1.14	1.15	1.17	1.18	1.14
173.	5.61	.63	1.14	1.15	1.17	1.18	1.14
174.	5.61	.63	1.14	1.15	1.17	1.18	1.14
175.	5.61	.63	1.14	1.15	1.17	1.18	1.14
176.	5.61	.63	1.14	1.15	1.17	1.18	1.14
177.	5.61	.63	1.14	1.15	1.17	1.18	1.14
178.	5.61	.63	1.14	1.15	1.17	1.18	1.14
179.	5.61	.63	1.14	1.15	1.17	1.18	1.14
180.	5.61	.63	1.14	1.15	1.17	1.18	1.14
181.	5.61	.63	1.14	1.15	1.17	1.18	1.14
182.	5.61	.63	1.14	1.15	1.17	1.18	1.14
183.	5.61	.63	1.14	1.15	1.17	1.18	1.14
184.	5.61	.63	1.14	1.15	1.17	1.18	1.14
185.	5.61	.63	1.14	1.15	1.17	1.18	1.14
186.	5.61	.63	1.14	1.15	1.17	1.18	1.14
187.	5.61	.63	1.14	1.15	1.17	1.18	1.14
188.	5.61	.63	1.14	1.15	1.17	1.18	1.14
189.	5.61	.63	1.14	1.15	1.17	1.18	1.14
190.	5.61	.63	1.14	1.15	1.17	1.18	1.14
191.	5.61	.63	1.14	1.15	1.17	1.18	1.14
192.	5.61	.63	1.14	1.15	1.17	1.18	1.14
193.	5.61	.63	1.14	1.15	1.17	1.18	1.14
194.	5.61	.63	1.14	1.15	1.17	1.18	1.14
195.	5.61	.63	1.14	1.15	1.17	1.18	1.14
196.	5.61	.63	1.14	1.15	1.17	1.18	1.14
197.	5.61	.63	1.14	1.15	1.17	1.18	1.14

PAGE NO. 388  
 GU 1.25 A.H.

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE

TEST TEMPERATURE -20 C  
 ORBIT PERIOD, 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
1180	5.49	.62	1.18	1.18	1.18	1.16	1.18	
1221	5.89	.62	1.18	1.14	1.18	1.18	1.18	
127	5.4	.62	1.17	1.17	1.22	1.21	1.22	
1307	5.51	.62	1.17	1.17	1.18	1.18	1.18	
1346	5.52	.62	1.17	1.16	1.18	1.18	1.18	
1367	5.76	.62	1.17	1.17	1.17	1.18	1.18	
143	5.55	.61	1.16	1.25	1.14	1.18	.97	
1461	5.72	.61	1.16	1.08	1.14	1.18	.92	
1497	5.49	.62	1.16	1.11	1.16	1.18	.92	
1525	5.53	.62	1.16	1.11	1.16	1.14	.94	
1557	5.52	.62	1.16	1.11	1.16	1.18	.95	
1589	5.52	.62	1.16	1.12	1.16	1.14	.92	
1621	5.51	.62	1.16	1.11	1.15	1.14	.94	
1385	5.88	1.00	1.17	1.78	1.77	1.79	1.78	
1421	5.79	1.11	1.75	1.76	1.75	1.77	1.76	
147	5.42	1.05	1.49	1.49	1.47	1.49	1.49	
1501	5.78	1.09	1.75	1.77	1.78	1.79	1.74	
1534	5.84	.86	1.77	1.76	1.75	1.78	1.74	
1561	5.11	.80	1.77	1.77	1.76	1.86	1.80	
148	5.99	.89	1.74	1.79	1.74	1.86	1.86	
1461	5.13	1.15	1.76	1.80	1.77	1.80	2.04	
1497	5.13	1.10	1.74	1.74	1.74	1.78	2.03	
1507	5.13	1.10	1.74	1.74	1.77	1.78	1.81	
1525	5.13	1.10	1.74	1.74	1.77	1.78	1.81	
1541	5.13	1.10	1.74	1.74	1.77	1.78	1.81	
1557	5.09	1.10	1.74	1.74	1.74	1.78	1.81	
1621	5.13	1.10	1.74	1.74	1.77	1.79	1.81	

124

PACK NO. 5 B TEST TEMPERATURE 0 C  
 GU 1.25 A.H. DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
1852	6.04	.63	1.20	1.21	1.20	1.20	1.20	1.73
1853	6.02	.63	1.20	1.21	1.21	1.20	1.20	1.73
1854	6.05	.63	1.20	1.21	1.21	1.20	1.20	1.73
1855	6.04	.63	1.20	1.21	1.21	1.20	1.20	1.73
1856	6.04	.63	1.20	1.21	1.21	1.20	1.20	1.73
1857	6.02	.62	1.20	1.21	1.21	1.20	1.20	1.73
1858	6.01	.62	1.20	1.21	1.21	1.20	1.20	1.73
1859	6.01	.62	1.20	1.21	1.21	1.20	1.20	1.73
1860	6.01	.62	1.20	1.21	1.21	1.20	1.20	1.73
1861	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1862	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1863	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1864	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1865	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1866	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1867	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1868	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1869	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1870	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1871	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1872	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1873	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1874	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1875	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1876	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1877	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1878	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1879	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1880	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1881	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1882	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1883	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1884	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1885	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1886	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1887	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1888	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1889	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1890	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1891	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1892	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1893	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1894	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1895	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1896	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1897	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1898	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1899	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73
1900	6.00	.60	1.20	1.21	1.20	1.20	1.20	1.73

125

PACK NO. 198  
 GO 1.25 A.H.

DEPTH OF DISCHARGE 60  
 PERCENT OF RECHARGE

TEST TEMPERATURE 2 C  
 CHARGE PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	PACK CURRENT	CELL VOLTAGES				END OF DISCHARGE
			1	2	3	4	
1852	8.59	1.51	1.77	1.77	1.77	1.77	
1853	8.59	1.51	1.77	1.77	1.77	1.77	
1854	8.59	1.51	1.77	1.77	1.77	1.77	
1855	8.59	1.51	1.77	1.77	1.77	1.77	
1856	8.59	1.51	1.77	1.77	1.77	1.77	
1857	8.59	1.51	1.77	1.77	1.77	1.77	
1858	8.59	1.51	1.77	1.77	1.77	1.77	
1859	8.59	1.51	1.77	1.77	1.77	1.77	
1860	8.59	1.51	1.77	1.77	1.77	1.77	
1861	8.59	1.51	1.77	1.77	1.77	1.77	
1862	8.59	1.51	1.77	1.77	1.77	1.77	
1863	8.59	1.51	1.77	1.77	1.77	1.77	
1864	8.59	1.51	1.77	1.77	1.77	1.77	
1865	8.59	1.51	1.77	1.77	1.77	1.77	
1866	8.59	1.51	1.77	1.77	1.77	1.77	
1867	8.59	1.51	1.77	1.77	1.77	1.77	
1868	8.59	1.51	1.77	1.77	1.77	1.77	
1869	8.59	1.51	1.77	1.77	1.77	1.77	
1870	8.59	1.51	1.77	1.77	1.77	1.77	
1871	8.59	1.51	1.77	1.77	1.77	1.77	
1872	8.59	1.51	1.77	1.77	1.77	1.77	
1873	8.59	1.51	1.77	1.77	1.77	1.77	
1874	8.59	1.51	1.77	1.77	1.77	1.77	
1875	8.59	1.51	1.77	1.77	1.77	1.77	
1876	8.59	1.51	1.77	1.77	1.77	1.77	
1877	8.59	1.51	1.77	1.77	1.77	1.77	
1878	8.59	1.51	1.77	1.77	1.77	1.77	
1879	8.59	1.51	1.77	1.77	1.77	1.77	
1880	8.59	1.51	1.77	1.77	1.77	1.77	
1881	8.59	1.51	1.77	1.77	1.77	1.77	
1882	8.59	1.51	1.77	1.77	1.77	1.77	
1883	8.59	1.51	1.77	1.77	1.77	1.77	
1884	8.59	1.51	1.77	1.77	1.77	1.77	
1885	8.59	1.51	1.77	1.77	1.77	1.77	
1886	8.59	1.51	1.77	1.77	1.77	1.77	
1887	8.59	1.51	1.77	1.77	1.77	1.77	
1888	8.59	1.51	1.77	1.77	1.77	1.77	
1889	8.59	1.51	1.77	1.77	1.77	1.77	
1890	8.59	1.51	1.77	1.77	1.77	1.77	
1891	8.59	1.51	1.77	1.77	1.77	1.77	
1892	8.59	1.51	1.77	1.77	1.77	1.77	
1893	8.59	1.51	1.77	1.77	1.77	1.77	
1894	8.59	1.51	1.77	1.77	1.77	1.77	
1895	8.59	1.51	1.77	1.77	1.77	1.77	
1896	8.59	1.51	1.77	1.77	1.77	1.77	
1897	8.59	1.51	1.77	1.77	1.77	1.77	
1898	8.59	1.51	1.77	1.77	1.77	1.77	
1899	8.59	1.51	1.77	1.77	1.77	1.77	
1900	8.59	1.51	1.77	1.77	1.77	1.77	



SHERIFF  
GULTON E. O. A. H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 60

TEST TEMPERATURE 25° C  
ORBIT PERIOD 90 MINUTES

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES											
			1	2	3	4	5	6	7	8	9	10		
4781	7.00	2.88	0.99				1.16	1.10	0.95	1.07	0.52	1.10		
4820	6.96		1.11				1.22	1.19	1.11	1.19		1.19		
4960	6.69		1.06				1.20	1.15	1.06	1.13		1.15		
4901	6.17		0.94				1.16	1.10	0.98	1.05		1.07		
4940	6.89		1.10				1.22	1.19	1.07	1.19		1.18		
4980	6.64		1.05				1.20	1.15	1.01	1.13		1.14		
5021	6.18		0.94				1.16	1.10	0.88	1.06		1.06		
5060	6.81		1.08				1.22	1.19	1.02	1.18		1.18		
5100	6.90		1.11				1.22	1.17	1.06	1.18		1.18		
5141	6.53		1.05				1.18	1.16	0.97	1.10		1.14		
5200	6.27		0.98				1.16	1.12	0.89	1.07		1.08		
5250	6.70		1.07				1.22	1.19	0.94	1.19		1.18		

END OF  
DISCHARGE

4781	10.50	2.16	1.52				1.46	1.48	1.52	1.48	1.54	1.48		
4820	9.69		1.62				1.61	1.56	1.59	1.61		1.65		
4860	9.15		1.56				1.47	1.49	1.57	1.50		1.52		
4901	9.69		1.62				1.61	1.56	1.59	1.61		1.65		
4940	9.69		1.62				1.62	1.57	1.59	1.61		1.64		
4980	9.20		1.57				1.47	1.49	1.59	1.51		1.53		
5021	9.03		1.53				1.46	1.48	1.54	1.49		1.49		
5060	9.70		1.63				1.62	1.57	1.59	1.61		1.65		
5100	9.56		1.63				1.55	1.52	1.60	1.58		1.65		
5141	9.13		1.57				1.48	1.48	1.58	1.51		1.53		
5200	9.05		1.53				1.46	1.48	1.55	1.48		1.50		
5240	9.76		1.60				1.66	1.62	1.56	1.63		1.64		

END OF  
CHARGE

PACK NO. 239 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C  
 GUF COUL 3.6 A.H. PERCENT OF RECHARGE ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
3389	8.99	1.04	1.01	1.01	1.04	1.04	1.04
3417	9.28	1.06	1.07	1.04	1.04	1.01	1.03
3456	9.11	1.15	1.12	1.09	1.10	1.12	1.12
3481	9.77	1.11	1.06	1.08	1.10	1.09	1.09
3527	9.56	1.07	1.04	1.07	1.08	1.05	1.03
3557	9.23	1.04	1.03	1.06	1.06	1.03	1.03
3594	9.31	1.04	1.04	1.06	1.05	1.02	1.02
3626	9.37	1.04	1.04	1.06	1.04	1.02	1.01
3657	9.39	1.04	1.04	1.06	1.04	1.02	1.01
3697	9.49	1.07	1.07	1.04	1.07	1.06	1.06
3721	9.21	1.04	1.05	1.04	1.03	1.02	1.01
3752	9.39	1.06	1.07	1.06	1.06	1.02	1.01
3785	9.27	1.06	1.08	1.07	1.09	1.07	1.03
3811	9.29	1.05	1.07	1.05	1.04	1.02	1.01
3861	12.64	1.43	1.43	1.43	1.46	1.43	1.42
3917	12.94	1.43	1.45	1.43	1.46	1.43	1.42
3966	13.74	1.44	1.46	1.44	1.49	1.43	1.42
4008	13.62	1.44	1.46	1.44	1.48	1.43	1.43
4037	13.87	1.43	1.45	1.43	1.47	1.43	1.42
4067	13.88	1.43	1.45	1.43	1.46	1.41	1.39
4094	13.83	1.41	1.43	1.41	1.46	1.41	1.39
4126	13.81	1.41	1.43	1.41	1.46	1.41	1.39
4167	12.84	1.43	1.44	1.44	1.46	1.43	1.42
4200	12.81	1.43	1.45	1.43	1.46	1.42	1.41
4221	13.01	1.43	1.45	1.43	1.46	1.43	1.42
4253	13.06	1.43	1.45	1.43	1.47	1.42	1.42
4281	13.04	1.43	1.45	1.43	1.47	1.43	1.42
4316	12.91	1.43	1.44	1.43	1.46	1.42	1.42

PACK NO. 315 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C  
 GULTON 4 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD, 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
10457.	6.16	1.17	1.24	1.23	1.23	1.23	1.23	1.23
10489.	6.16	1.20	1.22	1.23	1.22	1.22	1.22	1.22
10538.	6.39	1.18	1.28	1.27	1.27	1.28	1.28	1.28
10570.	6.28	1.18	1.25	1.25	1.25	1.25	1.25	1.25
10602.	6.23	1.18	1.25	1.24	1.24	1.24	1.24	1.24
10634.	6.21	1.18	1.24	1.24	1.23	1.25	1.23	1.23
10698.	6.20	1.20	1.24	1.23	1.23	1.24	1.23	1.23
10729.	6.19	1.19	1.24	1.23	1.23	1.24	1.24	1.24
10761.	6.16	1.21	1.23	1.22	1.22	1.23	1.23	1.23
10792.	6.19	1.19	1.24	1.23	1.23	1.24	1.24	1.24
10825.	6.18	1.18	1.23	1.22	1.23	1.23	1.23	1.23
10857.	6.24.	1.18	1.25	1.24	1.24	1.24	1.24	1.24
10889.	6.18	1.18	1.24	1.23	1.23	1.23	1.23	1.23
10457.	7.48	.69	1.48	1.52	1.46	1.51	1.47	1.47
10489.	7.95	.69	1.54	1.55	1.52	1.65	1.55	1.55
10538.	7.56	.68	1.51	1.50	1.50	1.51	1.49	1.49
10570.	7.90	.64	1.54	1.62	1.52	1.62	1.54	1.54
10602.	7.77	.43	1.53	1.60	1.49	1.59	1.52	1.52
10634.	7.72	.42	1.48	1.57	1.46	1.63	1.47	1.47
10608.	7.71	.37	1.48	1.57	1.47	1.60	1.47	1.47
10729.	7.77	.44	1.52	1.60	1.49	1.60	1.52	1.52
10761.	7.70	.32	1.51	1.57	1.49	1.57	1.51	1.51
10792.	7.70	.44	1.51	1.58	1.48	1.58	1.51	1.51
10825.	7.68	.47	1.51	1.57	1.48	1.56	1.51	1.51
10857.	7.67	.57	1.50	1.57	1.48	1.57	1.50	1.50
10889.	7.73	.41	1.51	1.58	1.49	1.58	1.52	1.52

PACK NO. 326  
 GULTON 4 A.H.  
 DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 115  
 TEST TEMPERATURE C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
10948.	5.92	1.92	1.19	1.20	1.18	1.18	1.18	1.19
10981.	5.92	1.91	1.19	1.20	1.18	1.18	1.18	1.19
11029.	5.91	1.90	1.19	1.20	1.19	1.19	1.16	1.17
11061.	5.94	1.90	1.19	1.19	1.18	1.18	1.18	1.19
11092.	5.93	1.98	1.19	1.19	1.18	1.18	1.18	1.19
11125.	5.93	1.90	1.19	1.19	1.19	1.19	1.19	1.17
11205.	6.03	2.93	1.21	1.21	1.21	1.21	1.20	1.20
11236.	6.03	2.90	1.21	1.21	1.21	1.21	1.20	1.21
11268.	6.01	2.01	1.21	1.21	1.21	1.21	1.20	1.20
11300.	6.07	2.01	1.22	1.21	1.21	1.21	1.21	1.21
10948.	7.73	1.64	1.56	1.53	1.55	1.57	1.54	1.54
10981.	7.79	0.65	1.55	1.53	1.55	1.56	1.53	1.53
11029.	7.82	1.08	1.57	1.55	1.57	1.57	1.55	1.55
11061.	7.86	1.00	1.58	1.55	1.57	1.58	1.56	1.56
11092.	7.86	0.94	1.58	1.55	1.57	1.59	1.56	1.56
11125.	8.07	0.92	1.56	1.53	1.55	1.56	1.51	1.51
11205.	7.91	1.14	1.59	1.56	1.60	1.60	1.57	1.57
11236.	7.94	1.15	1.59	1.56	1.60	1.61	1.57	1.57
11268.	7.94	1.15	1.59	1.56	1.60	1.61	1.57	1.57
11300.	7.94	1.16	1.47	1.45	1.47	1.48	1.46	1.46

PACK NO. 204 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C  
 GULION 4 A.H. PERCENT OF RECHARGE 125 CIRCUIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
10737	5.72	1.99	1.13	1.14	1.17	1.14	1.15	
10769	5.68	1.99	1.14	1.15	1.16	1.13	1.15	
10818	5.55	2.00	1.14	1.17	1.16	1.14	1.15	
10851	5.75	2.00	1.16	1.14	1.16	1.15	1.17	
10894	5.51	1.99	1.14	1.17	1.17	1.14	1.17	
10916	5.74	1.99	1.15	1.15	1.16	1.14	1.15	
10978	5.67	2.00	1.16	1.13	1.15	1.13	1.14	
11009	5.75	2.00	1.15	1.15	1.17	1.14	1.15	
11041	5.74	2.02	1.13	1.15	1.17	1.14	1.15	
11073	5.45	2.00	1.1	1.04	1.12	1.10	1.08	
11105	5.72	2.00	1.15	1.14	1.17	1.14	1.14	
11169	5.72	2.00	1.15	1.15	1.17	1.13	1.14	
10737	7.34	1.25	1.47	1.46	1.46	1.53	1.46	END OF CHARGE
10769	7.34	.90	1.46	1.45	1.45	1.53	1.46	
10818	7.22	1.25	1.46	1.44	1.45	1.47	1.41	
10851	7.32	1.01	1.47	1.46	1.46	1.52	1.44	
10894	7.31	1.00	1.47	1.45	1.46	1.52	1.45	
10916	7.46	1.00	1.47	1.46	1.43	1.50	1.41	
10978	7.36	.94	1.45	1.43	1.43	1.50	1.42	
11009	7.37	.98	1.47	1.46	1.46	1.54	1.46	
11041	7.37	1.00	1.46	1.45	1.45	1.53	1.45	
11073	7.05	1.00	1.47	1.45	1.46	1.54	1.45	
11105	7.26	1.12	1.47	1.46	1.46	1.53	1.45	
11169	7.26	1.00	1.47	1.45	1.46	1.54	1.46	

PACK NO. 228  
 GULTON 4 A.H.

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
 ORRIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
10631.	5.90	1.20	1.19	1.19	1.20	1.17	1.18	
10663.	5.90	1.21	1.19	1.19	1.19	1.17	1.18	
10712.	5.97	1.19	1.19	1.20	1.17	1.19		
10744.	5.94	1.18	1.19	1.19	1.17	1.19		
10777.	5.93	1.20	1.19	1.20	1.18	1.19		
10812.	5.92	1.20	1.19	1.19	1.17	1.18		
10873.	5.91	1.19	1.19	1.19	1.17	1.17		
10903.	5.99	1.19	1.19	1.19	1.17	1.18		
10935.	5.90	1.21	1.18	1.19	1.17	1.18		
10967.	5.94	1.20	1.18	1.18	1.16	1.16		
10999.	5.91	1.21	1.19	1.20	1.17	1.18		
11031.	5.91	1.20	1.19	1.20	1.18	1.18		
11063.	5.94	1.18	1.19	1.20	1.18	1.19		
10631.	7.09	.96	1.43	1.42	1.43	1.43	1.42	
10663.	7.11	.56	1.43	1.42	1.42	1.43	1.43	
10712.	7.15	.72	1.45	1.43	1.43	1.43	1.43	
10744.	7.15	.67	1.45	1.43	1.43	1.43	1.43	
10777.	7.14	.62	1.44	1.43	1.43	1.43	1.42	
10809.	7.29	.58	1.43	1.41	1.40	1.41	1.39	
10842.	7.34	.59	1.42	1.40	1.40	1.40	1.39	
10873.	7.12	.57	1.44	1.42	1.43	1.43	1.42	
10903.	7.11	.58	1.43	1.42	1.42	1.43	1.42	
10967.	7.12	.58	1.44	1.42	1.43	1.43	1.42	
10999.	7.12	.59	1.44	1.42	1.43	1.43	1.43	
11031.	7.11	.59	1.46	1.42	1.43	1.43	1.42	
11063.	7.12	.60	1.45	1.43	1.44	1.44	1.44	

END OF CHARGE

PACK NO. 117  
 GULTON 5 A.H. NUMBUS  
 TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 110					END OF DISCHARGE
			1	2	3	4	5	
6449.	5.58	1.50	1.23	1.22	1.22	1.23	1.23	1.69
6482.	5.63	1.50	1.22	1.22	1.22	1.23	1.23	1.70
6530.	6.12	1.48	1.23	1.22	1.22	1.23	1.23	1.19
6562.	5.11	1.48	1.23	1.22	1.22	1.23	1.23	1.17
6573.	5.11	1.48	1.23	1.22	1.22	1.23	1.23	1.17
6626.	5.15	1.51	1.22	1.21	1.22	1.22	1.22	1.17
6657.	5.04	1.50	1.23	1.21	1.21	1.23	1.23	1.17
672.	6.18	1.50	1.23	1.22	1.22	1.23	1.23	1.22
6752.	5.92	1.51	1.22	1.21	1.21	1.22	1.22	1.27
6784.	5.61	1.49	1.22	1.21	1.21	1.22	1.22	1.74
6816.	5.64	1.50	1.22	1.21	1.21	1.22	1.22	1.78
6848.	5.41	1.49	1.23	1.21	1.22	1.22	1.23	1.54
6449.	7.79	1.52	1.49	1.49	1.56	1.50	1.50	1.73
6482.	7.74	1.52	1.49	1.49	1.55	1.49	1.68	1.68
6530.	7.56	1.53	1.49	1.49	1.55	1.49	1.50	1.50
6562.	7.55	1.51	1.49	1.49	1.57	1.49	1.50	1.50
6573.	7.55	1.51	1.49	1.49	1.56	1.49	1.50	1.50
6626.	7.48	1.49	1.49	1.49	1.53	1.49	1.49	1.49
6657.	7.59	1.49	1.49	1.49	1.53	1.49	1.49	1.49
672.	7.56	1.52	1.49	1.49	1.59	1.49	1.50	1.50
6752.	7.57	1.51	1.48	1.48	1.54	1.48	1.52	1.52
6784.	7.76	1.51	1.48	1.48	1.54	1.48	1.73	1.73
6816.	7.72	1.51	1.49	1.49	1.55	1.49	1.67	1.67
6848.	7.27	1.46	1.43	1.43	1.49	1.43	1.44	1.44

PACK NO. 121 TEST TEMPERATURE 0 C  
 GULION 5 A.H. NIMBUS ORBIT PERIOD 90 MIN

CYCLE NO.	PACK CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 110					END OF DISCHARGE
		1	2	3	4	5	
5951.	5.75	2.46	1.04	1.17	1.18	1.17	11.214
5983.	5.70	2.48	1.06	1.16	1.17	1.17	11.284
6032.	6.03	2.48	1.22	1.20	1.20	1.20	11.356
6064.	5.92	2.48	1.10	1.18	1.19	1.19	10.852
6097.	5.93	2.47	1.12	1.19	1.19	1.19	10.921
6128.	5.84	2.49	1.15	1.17	1.18	1.17	10.933
6192.	5.56	2.47	1.24	1.15	1.16	1.15	10.528
6223.	5.77	2.48	1.11	1.16	1.17	1.17	11.179
6255.	5.73	2.47	1.08	1.15	1.17	1.16	11.035
6287.	6.12	2.49	1.22	1.23	1.23	1.23	11.167
6351.	5.91	2.49	1.15	1.19	1.20	1.20	12.104
6363.	5.73	2.47	1.06	1.15	1.18	1.17	11.132
6383.	5.73	2.47	1.08	1.15	1.17	1.16	11.284
5951.	7.26	1.38	1.45	1.47	1.45	1.46	11.401
5983.	7.28	0.81	1.45	1.47	1.46	1.47	11.518
6032.	7.29	0.82	1.45	1.47	1.46	1.47	11.565
6064.	7.30	0.69	1.46	1.47	1.47	1.45	10.991
6097.	7.31	0.79	1.45	1.48	1.46	1.46	11.331
6126.	7.37	0.81	1.43	1.45	1.46	1.46	11.448
6192.	7.51	0.78	1.43	1.45	1.43	1.42	11.179
6223.	7.31	0.79	1.45	1.45	1.47	1.45	11.413
6255.	7.28	0.93	1.44	1.47	1.46	1.46	11.386
6287.	7.28	0.90	1.45	1.48	1.46	1.46	11.167
6351.	7.24	1.12	1.43	1.48	1.45	1.45	13.252
6363.	7.30	0.85	1.45	1.48	1.46	1.47	11.249
6383.	7.29	0.83	1.45	1.48	1.46	1.46	11.495



PACK NO. 126  
 GULION 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6542	5.89	1.50	1.23	1.21	1.23	1.24	1.20	
6623	6.11	1.50	1.22	1.14	1.22	1.22	1.21	
6655	5.60	1.48	1.22	.73	1.23	1.24	1.21	
6687	5.79	1.49	1.22	.91	1.22	1.24	1.21	
6719	5.77	1.48	1.23	.69	1.23	1.23	1.20	
6751	5.64	1.49	1.23	.74	1.23	1.23	1.21	
6814	5.71	1.49	1.22	.62	1.22	1.23	1.22	
6847	5.64	1.50	1.22	.79	1.21	1.22	1.20	
6878	5.68	1.48	1.22	.91	1.22	1.23	1.21	
6911	5.74	1.40	1.23	.85	1.23	1.23	1.22	
6942	5.77	1.49	1.25	.84	1.24	1.24	1.24	
6973	5.70	1.49	1.23	.82	1.22	1.23	1.21	
6542	7.36	.91	1.44	1.57	1.45	1.46	1.44	END OF CHARGE
6623	7.32	.91	1.44	1.50	1.45	1.48	1.46	
6655	7.38	.91	1.42	1.60	1.44	1.47	1.44	
6687	7.35	.91	1.42	1.59	1.44	1.46	1.44	
6719	7.36	.92	1.41	1.56	1.41	1.43	1.40	
6751	7.38	.91	1.41	1.57	1.41	1.44	1.40	
6814	7.38	.91	1.43	1.60	1.43	1.46	1.45	
6847	7.33	.91	1.42	1.60	1.43	1.45	1.43	
6878	7.38	.91	1.41	1.60	1.43	1.46	1.44	
6911	7.35	.91	1.43	1.59	1.44	1.46	1.44	
6942	7.40	.91	1.43	1.61	1.43	1.45	1.44	
6973	7.40	.91	1.43	1.65	1.44	1.46	1.45	

PACK NO. 318 TEST TEMPERATURE 25 C  
 GULTON 5 A.H. NIMBUS ORBIT PERIOD 90 MIN

CYCLE NO.	PACK CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 120					PSIA	END OF DISCHARGE
		1	2	3	4	5		
5916.	4.08	2.44	1.14	1.13	.96	.87	14.527	
5948.	4.09	2.44	1.14	1.11	.97	.89	14.994	
5997.	4.44	2.46	1.16	1.17	1.06	1.06	8.738	
6029.	4.35	2.46	1.14	1.15	1.05	1.02	8.143	
6062.	4.38	2.46	1.15	1.14	1.06	1.03	9.555	
6093.	4.28	2.46	1.13	1.10	1.04	1.01	10.641	
6157.	3.95	2.37	1.04	1.06	.91	.93	10.979	
6188.	3.87	2.33	1.03	1.07	.92	.86	10.921	
6220.	4.07	2.45	1.06	1.09	.97	.95	11.178	
6252.	3.86	2.35	1.01	1.06	.90	.91	11.142	
6316.	4.13	2.45	1.06	1.10	1.00	.99	11.539	
6328.	4.08	2.44	1.06	1.10	.94	.99	11.481	
5916.	5.98	1.50	1.48	1.49	1.48	1.55	16.861	
5948.	5.98	.94	1.48	1.48	1.48	1.56	18.576	
5997.	5.90	1.28	1.46	1.43	1.49	1.52	14.037	
6029.	5.90	.90	1.47	1.47	1.47	1.50	11.749	
6062.	5.90	.88	1.47	1.47	1.47	1.50	13.745	
6093.	6.03	.55	1.44	1.43	1.43	1.43	12.800	
6157.	6.04	.78	1.43	1.43	1.43	1.44	11.423	
6188.	5.84	.80	1.45	1.45	1.46	1.49	11.516	
6220.	5.81	.85	1.44	1.45	1.00	1.47	12.193	
6252.	5.84	.83	1.45	1.46	1.47	1.43	11.726	
6316.	5.84	.83	1.45	1.46	1.46	1.48	12.730	
6328.	5.84	.87	1.45	1.46	1.47	1.48	12.683	

PACK NO. 127  
 GULION 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15  
 PERCENT OF RECHARGE 130

TEST TEMPERATURE 40 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
6579.	5.59	1.45	.95	1.15	1.17	1.17	1.17	1.15
6611.	4.49	1.42	.12	1.15	1.16	1.17	1.17	1.14
6627.	5.86	1.47	1.15	1.16	1.17	1.18	1.18	1.15
6724.	5.46	1.46	1.15	1.17	1.18	1.18	1.18	1.16
6757.	5.45	1.47	1.15	1.15	1.17	1.17	1.17	1.15
6811.	5.15	1.47	1.15	1.15	1.17	1.17	1.17	1.17
6893.	5.83	1.40	1.18	1.16	1.19	1.17	1.17	1.15
6915.	5.83	1.48	1.18	1.16	1.19	1.19	1.19	1.15
6947.	5.81	1.48	1.18	1.16	1.19	1.19	1.17	1.15
6979.	5.82	1.48	1.18	1.15	1.17	1.17	1.17	1.15
6579.	7.18	.99	1.43	1.44	1.43	1.44	1.44	1.43
6611.	7.18	.99	1.43	1.44	1.43	1.43	1.43	1.43
6692.	7.18	.99	1.44	1.44	1.43	1.44	1.44	1.43
6724.	7.18	1.00	1.44	1.44	1.43	1.44	1.44	1.43
6756.	7.32	.99	1.42	1.42	1.41	1.40	1.40	1.39
6851.	7.18	1.00	1.44	1.44	1.43	1.44	1.44	1.43
6883.	7.17	.99	1.44	1.44	1.43	1.43	1.43	1.43
6915.	7.16	.99	1.44	1.44	1.44	1.44	1.44	1.43
6947.	7.30	.99	1.44	1.44	1.44	1.44	1.44	1.44
6979.	7.33	.99	1.44	1.44	1.43	1.44	1.44	1.44

PACK NO. 128      DEPTH OF DISCHARGE 25      TEST TEMPERATURE 40 C  
 GULTON 5 A.H. NIMBUS      PERCENT OF RECHARGE 130      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT	CELL VOLTAGES					PSIA	END OF DISCHARGE
			1	2	3	4	5		
5807.	4.29	2.44	1.12	1.13	.00	1.14	.93	35.356	
5839.	4.23	2.45	1.11	1.12	.00	1.13	.90	36.309	
5888.	3.16	1.91	1.16	.13	.00	1.16	.98	36.421	
5935.	3.25	2.32	1.18	.10	.00	1.17	1.00	1.481	
5937.	3.27	2.41	1.16	.00	.00	1.16	.95	.964	
5969.	3.18	2.45	1.14	.00	.00	1.15	.00	.078	
6001.	3.18	2.42	1.15	.00	.00	1.15	.80	.242	
6033.	3.11	2.39	1.14	.00	.00	1.15	.82	.482	
5807.	5.92	1.63	1.47	1.48	.00	1.44	1.53	40.367	
5839.	5.92	1.62	1.47	1.49	.00	1.44	1.54	41.242	
5888.	4.57	1.44	1.45	.23	.00	1.41	1.48	39.885	
5935.	4.51	1.67	1.48	.00	.00	1.45	1.60	5.302	
5937.	4.49	1.64	1.47	.00	.00	1.44	1.59	3.823	
5969.	4.51	1.64	1.48	.00	.00	1.44	1.59	.908	
6001.	4.51	1.64	1.48	.00	.00	1.44	1.59	3.800	
6033.	4.48	1.63	1.47	.00	.00	1.44	1.57	2.051	

PACK NO. 244  
 GULTON 5.6 A.H. FRS  
 TEST TEMPERATURE -20 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115					END OF DISCHARGE
		1	2	3	4	5	
2779.	5.76	1.16	1.16	1.16	1.16	1.16	1.15
2811.	5.76	1.16	1.16	1.16	1.16	1.16	1.15
286.	5.80	1.18	1.18	1.18	1.18	1.18	1.17
2897.	.	1.17	1.17	1.17	1.17	1.17	1.16
2957.	5.74	1.14	1.14	1.14	1.14	1.14	1.13
2977.	5.66	1.14	1.14	1.14	1.14	1.14	1.13
3061.	5.77	1.15	1.14	1.14	1.14	1.14	1.14
3135.	6.74	1.36	1.35	1.35	1.35	1.35	1.35
3115.	5.61	1.14	1.13	1.13	1.13	1.13	1.12
3147.	6.46	1.29	1.31	1.30	1.29	1.29	1.28
3179.	5.70	1.15	1.14	1.15	1.15	1.15	1.14
3211.	5.66	1.14	1.13	1.13	1.14	1.14	1.13
2779.	7.71	1.55	1.55	1.55	1.55	1.55	1.55
2811.	7.73	1.55	1.55	1.55	1.55	1.55	1.56
286.	7.83	1.57	1.56	1.57	1.58	1.58	1.56
2897.	7.86	1.56	1.56	1.57	1.57	1.57	1.58
2957.	7.92	1.54	1.54	1.54	1.54	1.54	1.54
2977.	7.76	1.54	1.54	1.54	1.54	1.54	1.54
3061.	7.67	1.53	1.52	1.53	1.53	1.53	1.52
3097.	7.50	1.52	1.50	1.52	1.52	1.52	1.52
3115.	7.50	1.52	1.52	1.52	1.52	1.52	1.52
3147.	7.4	1.51	1.50	1.50	1.53	1.53	1.53
3179.	7.53	1.52	1.52	1.52	1.52	1.52	1.52
3211.	7.57	1.53	1.53	1.54	1.54	1.54	1.53

PACK NO. 200 TEST TEMPERATURE 0 C  
 GULTON 5.6 A.H. FRS ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
3013	5.77	1.16	1.16	1.15	1.15	1.15	
3045	5.76	1.16	1.15	1.15	1.15	1.15	
3094	5.81	1.17	1.16	1.16	1.16	1.17	
3126	5.77	1.17	1.16	1.16	1.16	1.16	
3158	5.81	1.17	1.16	1.15	1.16	1.16	
3203	5.97	1.17	1.16	1.16	1.16	1.20	
3244	5.86	1.18	1.17	1.17	1.17	1.17	
3267	5.83	1.17	1.17	1.16	1.16	1.16	
3296	5.84	1.17	1.17	1.16	1.16	1.17	
3331	5.84	1.18	1.17	1.17	1.17	1.17	
3393	5.89	1.18	1.18	1.17	1.17	1.18	
3013	7.74	1.55	1.56	1.54	1.56	1.54	END OF CHARGE
3045	7.75	1.55	1.56	1.54	1.56	1.55	
3094	7.75	1.55	1.55	1.54	1.56	1.54	
3126	7.76	1.56	1.56	1.54	1.56	1.55	
3158	7.75	1.56	1.56	1.53	1.56	1.54	
3203	7.50	1.47	1.48	1.47	1.48	1.46	
3234	7.63	1.52	1.53	1.51	1.53	1.52	
3267	7.62	1.52	1.53	1.51	1.52	1.51	
3296	7.61	1.53	1.53	1.51	1.53	1.52	
3331	7.58	1.52	1.53	1.52	1.53	1.51	
3393	7.81	1.53	1.53	1.51	1.53	1.52	

PACK NO. 276  
 GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
3036	4.43	2.80	1.09	1.13	1.12	1.13	1.13
3069	4.34	2.79	1.03	1.12	1.11	1.11	1.11
3117	4.32	2.82	1.03	1.12	1.10	1.10	1.10
3149	4.44	2.76	1.03	1.13	1.12	1.12	1.12
3180	4.39	2.75	1.03	1.13	1.12	1.11	1.11
3213	4.39	2.76	1.07	1.13	1.12	1.11	1.11
3244	4.05	2.73	1.04	1.12	1.11	1.10	1.10
3277	4.28	2.76	1.04	1.15	1.14	1.14	1.14
3307	4.40	2.75	1.06	1.13	1.12	1.11	1.11
3340	4.32	2.75	1.01	1.13	1.11	1.10	1.10
3371	4.43	2.72	1.07	1.14	1.12	1.12	1.12
3403	4.28	2.72	1.05	1.13	1.12	1.12	1.12
3435	4.40	2.72	1.07	1.13	1.12	1.11	1.11
3036	5.85	1.75	1.45	1.47	1.46	1.47	1.47
3069	5.84	1.58	1.45	1.47	1.46	1.47	1.47
3117	5.85	1.63	1.46	1.48	1.46	1.46	1.46
3149	5.86	1.59	1.46	1.48	1.46	1.46	1.46
3180	5.85	1.53	1.46	1.48	1.46	1.46	1.46
3213	5.97	1.51	1.44	1.45	1.43	1.42	1.42
3244	5.95	1.51	1.44	1.45	1.44	1.42	1.42
3277	5.98	1.49	1.44	1.46	1.44	1.42	1.42
3307	5.96	1.52	1.46	1.48	1.46	1.46	1.46
3340	5.84	1.56	1.45	1.48	1.46	1.45	1.45
3371	5.87	1.69	1.46	1.49	1.46	1.47	1.47
3403	5.96	1.66	1.46	1.49	1.46	1.46	1.46
3435	5.76	1.56	1.46	1.48	1.47	1.46	1.46

END OF CHARGE

14

PACK NO. 742 TEST TEMPERATURE 40 C  
 GULTON 5.6 A.H. FRS ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 160					END OF DISCHARGE
		1	2	3	4	5	
3257	5.41	2.13	.67	1.15	.95	1.34	1.04
3280	5.77	2.74	.79	1.16	.94	1.05	1.05
3338	5.73	2.75	.80	1.13	.85	1.13	1.15
3375	5.13	2.72	.87	1.10	.89	1.09	1.11
3433	4.84	2.71	.82	1.07	.81	1.06	1.09
3434	5.14	2.71	1.03	1.13	.78	1.11	1.13
3465	5.10	2.74	.88	1.05	.74	1.08	1.09
3498	5.18	2.75	.84	1.09	1.00	1.03	1.02
3520	4.70	2.69	.92	1.06	.56	1.07	1.07
3562	4.81	2.72	.87	1.05	.74	1.07	1.05
3592	4.70	2.67	.93	1.09	.53	1.08	1.05
3625	4.52	2.67	.69	1.09	.33	1.08	1.05
3257	7.33	2.24	1.47	1.48	1.47	1.48	1.46
3280	7.23	2.20	1.47	1.48	1.47	1.48	1.46
3338	7.26	2.28	1.44	1.46	1.46	1.46	1.45
3370	7.29	2.27	1.46	1.47	1.46	1.47	1.45
3407	7.21	2.27	1.44	1.45	1.45	1.45	1.43
3434	7.42	2.10	1.46	1.46	1.43	1.45	1.41
3465	7.44	2.11	1.45	1.47	1.44	1.45	1.42
3498	7.43	2.17	1.44	1.45	1.44	1.44	1.41
3520	7.16	2.14	1.46	1.47	1.46	1.47	1.44
3562	7.10	2.25	1.45	1.47	1.47	1.48	1.45
3592	7.22	2.14	1.45	1.48	1.43	1.48	1.44
3625	7.31	2.20	1.46	1.47	1.47	1.48	1.45

1/12



PACK NO. 232 TEST TEMPERATURE -20 C  
 GULION 5.6 A.H. EG DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115 OPRIT PERIOD: 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
2788	7.76	2.77	1.17	1.15	1.15	1.15	1.16	1.58
2821	7.75	2.77	1.15	1.14	1.15	1.15	1.16	1.58
2866	7.77	2.78	1.15	1.15	1.15	1.15	1.16	1.58
2911	7.75	2.78	1.15	1.15	1.15	1.15	1.16	1.58
2937	7.81	2.81	1.17	1.17	1.17	1.17	1.17	1.58
2982	7.66	2.71	1.14	1.14	1.14	1.14	1.15	1.58
3096	7.66	2.69	1.15	1.15	1.15	1.15	1.16	1.58
3101	7.60	2.60	1.15	1.15	1.15	1.15	1.16	1.58
3059	7.70	2.67	1.15	1.14	1.14	1.14	1.14	1.58
3092	7.56	2.72	1.11	1.11	1.11	1.11	1.11	1.58
3123	7.60	2.72	1.13	1.12	1.13	1.12	1.12	1.58
3155	7.66	2.73	1.12	1.11	1.12	1.12	1.12	1.58
3177	7.66	2.72	1.14	1.13	1.14	1.14	1.14	1.58
2788	7.96	1.61	1.57	1.69	1.58	1.58	1.58	1.58
2821	7.96	1.89	1.57	1.60	1.58	1.58	1.58	1.58
2859	8.03	1.96	1.60	1.65	1.61	1.60	1.58	1.58
2911	8.03	1.81	1.57	1.72	1.60	1.58	1.57	1.57
2951	7.98	1.70	1.47	1.43	1.42	1.42	1.40	1.40
2977	7.91	1.73	1.47	1.43	1.43	1.43	1.40	1.40
3006	7.97	1.87	1.47	1.43	1.43	1.43	1.40	1.40
3033	7.97	1.87	1.47	1.43	1.43	1.43	1.40	1.40
3061	7.94	1.84	1.47	1.43	1.43	1.43	1.40	1.40
3101	7.97	1.84	1.47	1.43	1.43	1.43	1.40	1.40
3131	7.97	1.84	1.47	1.43	1.43	1.43	1.40	1.40
3155	7.97	1.84	1.47	1.43	1.43	1.43	1.40	1.40
3187	7.96	1.84	1.47	1.43	1.43	1.43	1.40	1.40

PACK NO. 390  
 GULTON 5.6 A.H. RS  
 TEST TEMPERATURE 0 C  
 ORBIT PERIOD, 90 MIN.

CYCLE NO.	PACK CURRENT VOLTAGES	DEPTH OF DISCHARGE PERCENT OF RECHARGE					END OF DISCHARGE
		1	2	3	4	5	
3077.	5.80	1.17	1.16	1.16	1.16	1.16	1.15
3110.	5.78	1.17	1.16	1.15	1.16	1.16	1.14
3158.	5.74	1.16	1.14	1.15	1.15	1.15	1.14
3190.	5.74	1.16	1.14	1.14	1.15	1.15	1.13
3221.	5.74	1.14	1.14	1.14	1.15	1.15	1.14
3297.	5.69	1.15	1.13	1.14	1.15	1.15	1.13
3330.	5.64	1.14	1.12	1.12	1.13	1.11	1.11
3361.	5.65	1.14	1.12	1.13	1.14	1.12	1.12
3393.	5.56	1.12	1.10	1.11	1.12	1.10	1.10
3425.	5.94	1.20	1.18	1.18	1.19	1.18	1.18
3077.	7.78	1.57	1.55	1.55	1.54	1.58	1.58
3110.	7.77	1.56	1.55	1.55	1.53	1.57	1.57
3158.	7.46	1.49	1.50	1.48	1.49	1.50	1.50
3190.	7.47	1.50	1.49	1.49	1.47	1.51	1.51
3221.	7.45	1.50	1.49	1.49	1.47	1.51	1.51
3297.	7.10	1.42	1.42	1.42	1.42	1.42	1.42
3330.	7.10	1.42	1.42	1.41	1.42	1.42	1.42
3361.	7.11	1.42	1.42	1.41	1.42	1.42	1.42
3393.	7.11	1.42	1.42	1.42	1.42	1.42	1.42
3425.	7.09	1.42	1.42	1.42	1.42	1.42	1.42

144

PACK NO. 396  
 GULTON 5.6 A.H. RS  
 TEST TEMPERATURE 25 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT	VOLTAGES	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 125					END OF DISCHARGE
			1	2	3	4	5	
3093	4.53	2.68	.00	1.14	1.16	1.13	1.12	
3125	4.50	2.63	.00	1.13	1.15	1.12	1.11	
3174	4.61	2.89	.00	1.17	1.16	1.16	1.14	
3206	4.58	2.77	.00	1.15	1.16	1.15	1.13	
3238	4.56	2.72	.00	1.15	1.16	1.14	1.12	
3270	4.46	2.79	.00	1.13	1.14	1.11	1.09	
3334	4.47	2.79	.00	1.13	1.14	1.11	1.10	
3365	4.47	2.67	.00	1.12	1.15	1.11	1.10	
3397	4.32	2.61	.00	1.09	1.13	1.05	1.04	
3429	4.51	2.75	.00	1.13	1.16	1.12	1.11	
3461	4.58	2.77	.00	1.15	1.16	1.14	1.13	
3493	4.49	2.75	.00	1.14	1.16	1.12	1.10	
3525	4.55	2.54	.00	1.15	1.17	1.14	1.12	
3093	5.90	1.75	.00	1.46	1.49	1.47	1.47	1.47
3125	5.91	1.49	.00	1.46	1.49	1.47	1.47	1.47
3174	5.77	1.69	.00	1.43	1.44	1.45	1.45	1.45
3206	5.82	1.15	.00	1.44	1.46	1.45	1.46	1.46
3238	5.85	1.18	.00	1.44	1.48	1.46	1.46	1.46
3270	5.81	1.16	.00	1.42	1.45	1.48	1.41	1.41
3334	5.83	1.13	.00	1.42	1.45	1.46	1.41	1.41
3365	5.84	1.12	.00	1.45	1.48	1.45	1.46	1.46
3397	5.82	1.17	.00	1.44	1.47	1.44	1.45	1.45
3429	5.00	1.48	.00	1.46	1.50	1.46	1.47	1.47
3461	5.93	1.62	.00	1.46	1.52	1.47	1.47	1.47
3493	5.92	1.52	.00	1.46	1.54	1.47	1.47	1.47
3525	5.92	1.58	.00	1.46	1.53	1.47	1.47	1.47

145

PACK NO. 213  
 GULTON HSI 6 A.H.  
 TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115					END OF DISCHARGE
			1	2	3	4	5	
7585	6.01	2.99	1.21	1.21	1.21	1.21	1.21	1.21
7617	6.02	3.00	1.21	1.22	1.21	1.21	1.21	1.21
7666	6.09	2.99	1.23	1.23	1.23	1.22	1.22	1.22
7698	6.06	2.98	1.22	1.22	1.21	1.22	1.22	1.21
7730	6.04	2.99	1.21	1.21	1.21	1.21	1.21	1.21
7762	6.01	2.98	1.21	1.21	1.21	1.21	1.21	1.20
7794	5.98	2.97	1.20	1.20	1.20	1.20	1.20	1.19
7826	5.97	2.98	1.20	1.20	1.20	1.20	1.20	1.19
7889	5.96	2.99	1.19	1.20	1.20	1.20	1.20	1.19
7921	6.05	2.98	1.22	1.22	1.22	1.22	1.22	1.21
7953	6.02	3.03	1.21	1.21	1.21	1.21	1.21	1.20
7985	6.06	3.02	1.22	1.22	1.22	1.22	1.22	1.21
8017	6.02	3.02	1.21	1.21	1.21	1.21	1.21	1.20
7585	7.59	1.73	1.51	1.52	1.51	1.51	1.56	1.52
7617	7.86	1.80	1.56	1.57	1.55	1.55	1.62	1.59
7666	7.44	1.70	1.51	1.50	1.49	1.48	1.48	1.47
7698	7.82	1.09	1.56	1.56	1.55	1.59	1.59	1.58
7730	7.87	1.07	1.56	1.57	1.56	1.61	1.61	1.59
7762	7.91	.95	1.53	1.54	1.52	1.57	1.57	1.54
7794	7.72	.73	1.48	1.50	1.47	1.53	1.53	1.49
7826	7.69	.77	1.48	1.49	1.47	1.52	1.52	1.48
7889	7.89	1.35	1.56	1.57	1.55	1.63	1.63	1.60
7921	7.84	.98	1.55	1.56	1.55	1.61	1.61	1.59
7953	7.86	1.01	1.56	1.57	1.56	1.62	1.62	1.59
7985	7.80	1.24	1.54	1.56	1.55	1.60	1.60	1.57
8017	7.90	1.18	1.56	1.58	1.57	1.62	1.62	1.60

146

PACK NO. 218  
 GULTON HSI 6 A.H.  
 TEST TEMPERATURE 25 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT		DEPTH OF DISCHARGE 40 PERCENT OF RECHARGE 125					END OF DISCHARGE
	VOLTAGE	CURRENT	1	2	3	4	5	
7545.	3.80	4.68	1.06	.00	.63	1.04	1.08	
7577.	3.46	4.67	1.05	.00	.35	1.02	1.07	
		3.00						
7545.	5.96	1.17	1.52	.00	1.46	1.47	1.55	END OF CHARGE
7577.	6.01	1.17	1.54	.00	1.46	1.46	1.56	

147

PACK NO. 59      DEPTH OF DISCHARGE 25      TEST TEMPERATURE 0 C  
 GULTON 6 A.H. 3RD ELECTRODE R 10 10 10 10 10      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	3RD ELECT VOLTAGES				CELL VOLTAGES					END OF DISCHARGE	
			1	2	3	4	1	2	3	4	5		
6481	4.83	2.91	.169	.119	.000	.129	.155	1.22	1.21	.00	1.21	1.21	.000
6513	4.83	2.93	.165	.116	.000	.129	.150	1.22	1.21	.00	1.21	1.21	.000
6562	4.90	3.04	.152	.099	.000	.113	.141	1.24	1.23	.00	1.23	1.23	.000
6611	4.95	3.04	.163	.123	.000	.138	.119	1.25	1.25	.00	1.24	1.24	.000
6642	4.91	2.96	.179	.126	.000	.152	.128	1.24	1.24	.00	1.24	1.23	.000
6674	4.90	2.96	.178	.119	.000	.154	.126	1.24	1.23	.00	1.23	1.23	.000
6706	5.00	2.97	.153	.100	.000	.122	.092	1.21	1.21	.00	1.25	1.18	.000
6737	4.87	2.95	.186	.116	.000	.161	.133	1.23	1.22	.00	1.23	1.22	.000

CYCLE NO.	PACK VOLTAGE	CURRENT	3RD ELECT VOLTAGES				CELL VOLTAGES					TRIP POINT	
			1	2	3	4	1	2	3	4	5		
6481	5.87	.12	.140	.156	.000	.158	.167	1.47	1.48	.00	1.47	1.47	.000
6513	5.80	.08	.140	.166	.000	.169	.173	1.45	1.45	.00	1.45	1.45	.000
6562	5.87	.08	.153	.153	.000	.158	.181	1.48	1.48	.00	1.48	1.47	.000
6611	5.92	.10	.171	.152	.000	.192	.153	1.49	1.49	.00	1.49	1.49	.000
6642	5.90	.08	.168	.152	.000	.197	.153	1.48	1.49	.00	1.48	1.48	.000
6674	5.85	.07	.168	.149	.000	.199	.158	1.48	1.48	.00	1.47	1.47	.000
6706	5.82	.05	.162	.146	.000	.201	.163	1.46	1.46	.00	1.46	1.45	.000
6737	5.80	.05	.175	.146	.000	.202	.165	1.46	1.46	.00	1.45	1.45	.000

AH IN      END CHARGE  
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14

PACK NO. 23      DEPTH OF DISCHARGE 25      TEST TEMPERATURE 25 C  
 GULTON 6 A.H. 3RD ELECTRODE R 12 18 20 29 24      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	3RD ELECT VOLTAGES					CELL VOLTAGES					END OF DISCHARGE	
			1	2	3	4	5	1	2	3	4	5		
7645.	5.82	3.10	.161	.185	.178	.196	.233	1.18	1.18	1.17	1.17	1.17	1.16	.000
7677.	5.82	3.10	.164	.178	.172	.202	.229	1.18	1.18	1.16	1.17	1.17	1.16	.000
7726.	6.20	3.10	.020	.122	.082	.038	.112	1.25	1.00	1.25	1.25	1.24	1.24	.000
7758.	6.08	3.09	.096	.150	.152	.090	.201	1.22	1.23	1.23	1.22	1.22	1.22	.000
7790.	6.02	3.10	.114	.150	.143	.161	.201	1.20	1.23	1.22	1.21	1.21	1.20	.000
7822.	5.97	3.08	.129	.152	.152	.177	.179	1.18	1.22	1.22	1.20	1.19	1.19	.000
7854.	5.98	3.07	.132	.177	.178	.181	.295	1.18	1.22	1.22	1.20	1.19	1.19	.000
7886.	5.92	3.09	.132	.176	.176	.178	.289	1.17	1.21	1.21	1.19	1.18	1.18	.000
7917.	5.92	2.97	.128	.183	.174	.192	.338	1.17	1.21	1.21	1.20	1.18	1.18	.000
7950.	5.86	2.99	.135	.191	.172	.169	.329	1.16	1.20	1.20	1.19	1.17	1.17	.000
7981.	5.81	2.99	.123	.205	.169	.203	.319	1.13	1.19	1.19	1.19	1.16	1.16	.000
8013.	5.78	2.99	.141	.209	.169	.199	.309	1.14	1.18	1.17	1.18	1.15	1.15	.000
8045.	5.98	2.96	.128	.182	.139	.160	.280	1.15	1.17	1.16	1.21	1.13	1.13	.000
8076.	5.72	3.00	.142	.208	.162	.184	.308	1.13	1.17	1.15	1.17	1.13	1.13	.000

TRIP POINT

7645.	7.02	.02	.229	.261	.261	.268	.376	1.41	1.41	1.41	1.41	1.41	1.41	1.41
7677.	7.02	.02	.230	.251	.259	.281	.371	1.40	1.41	1.41	1.41	1.41	1.41	1.41
7726.	6.92	.03	.133	.266	.239	.152	.366	1.39	1.39	1.39	1.39	1.39	1.39	1.39
7758.	6.85	.01	.170	.233	.239	.182	.434	1.38	1.38	1.37	1.38	1.38	1.38	1.38
7790.	7.04	.03	.172	.230	.229	.239	.339	1.41	1.42	1.42	1.41	1.42	1.42	1.42
7822.	7.00	.05	.205	.252	.265	.288	.476	1.43	1.43	1.43	1.43	1.43	1.45	1.45
7854.	7.09	.04	.179	.255	.273	.263	.399	1.44	1.45	1.45	1.45	1.45	1.46	1.46
7886.	7.42	1.93	.172	.252	.266	.246	.303	1.46	1.51	1.51	1.48	1.48	1.48	1.48
7917.	6.91	.01	.172	.253	.255	.262	.448	1.39	1.39	1.38	1.39	1.39	1.39	1.39
7950.	7.10	.03	.168	.246	.239	.223	.338	1.42	1.44	1.44	1.44	1.42	1.43	1.43
7981.	7.04	.02	.159	.259	.235	.262	.390	1.41	1.43	1.42	1.42	1.42	1.41	1.41
8013.	7.03	.02	.180	.253	.234	.255	.401	1.41	1.42	1.42	1.41	1.41	1.41	1.41
8045.	7.05	.02	.195	.268	.253	.279	.429	1.41	1.42	1.42	1.41	1.41	1.41	1.41
8076.	7.08	.02	.176	.240	.226	.240	.359	1.42	1.43	1.42	1.42	1.42	1.42	1.42

AH IN

149

7645.	6.91	.01	.212	.246	.246	.257	.350	1.38	1.39	1.39	1.38	1.38	.000
7677.	6.90	.01	.214	.236	.245	.269	.348	1.38	1.39	1.38	1.39	1.38	.000
7726.	6.84	.02	.112	.242	.206	.123	.319	1.38	1.38	1.37	1.38	1.37	.000
7758.	6.80	.01	.155	.213	.219	.169	.409	1.37	1.37	1.37	1.37	1.37	.000
7790.	6.80	.01	.170	.209	.209	.240	.419	1.36	1.37	1.37	1.37	1.37	.000
7822.	6.83	.03	.196	.222	.239	.272	.452	1.39	1.39	1.39	1.40	1.41	.000
7854.	6.85	.03	.185	.246	.269	.268	.472	1.40	1.40	1.40	1.41	1.41	.000
7886.	6.85	.03	.192	.252	.271	.269	.469	1.40	1.39	1.39	1.41	1.41	.000
7917.	6.87	.01	.169	.239	.245	.252	.439	1.38	1.38	1.38	1.38	1.38	.000
7950.	6.89	.01	.184	.261	.253	.239	.444	1.39	1.38	1.38	1.39	1.39	.000
7981.	6.85	.01	.169	.270	.249	.272	.432	1.38	1.38	1.38	1.38	1.38	.000
8013.	6.87	.01	.190	.269	.250	.260	.429	1.38	1.38	1.38	1.38	1.38	.000
8045.	6.89	.01	.209	.280	.265	.278	.440	1.38	1.38	1.38	1.38	1.38	.000
8076.	6.88	.01	.192	.262	.245	.250	.428	1.38	1.39	1.38	1.38	1.38	.000

149a



PACK NO. 11 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C  
 GULTON 6 A.H. 3RD ELECTRODE R 24 24 10 8 24 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	3RD ELECT VOLTAGES					CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	1	2	3	4	5	
7662	4.30	4.63	.188	.000	.000	.192	.319	1.09	1.06	.00	1.09	1.08	.000
7694	4.33	4.66	.195	.007	.000	.104	.319	1.10	1.07	.00	1.09	1.09	.000
7743	2.27	2.72	.001	.014	.000	.032	.129	.03	.04	.00	1.17	1.20	.000
7662	5.45	.06	.217	.052	.000	.299	.428	1.38	1.36	.00	1.39	1.37	.000
7694	5.47	.06	.219	.048	.000	.297	.421	1.38	1.36	.00	1.38	1.37	.000
7743	2.64	.08	.002	.016	.000	.153	.332	.01	.02	.00	1.35	1.29	.000
7662	5.49	.06	.217	.052	.000	.299	.428	1.38	1.36	.00	1.39	1.37	.000
7694	5.47	.06	.219	.048	.000	.297	.421	1.38	1.36	.00	1.38	1.37	.000
7743	3.29	4.88	.003	.007	.000	.168	.186	.07	.45	.00	1.44	1.34	.000

TRIP POINT  
 AH IN  
 .000 END OF  
 .000 CHARGE  
 .000

PACK NO. 35      DEPTH OF DISCHARGE 15      TEST TEMPERATURE 40 C  
 GULTON 6 A.H. 3RD ELECTRODE R 47 47 47 47 47      ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	3RD ELECT VOLTAGES					CELL VOLTAGES					END OF DISCHARGE	
			1	2	3	4	5	1	2	3	4	5		
5641.	5.75	1.82	.119	.089	.096	.153	.185	1.16	1.15	1.15	1.15	1.16	1.16	.000
5673.	5.74	1.83	.121	.089	.100	.152	.179	1.15	1.15	1.15	1.15	1.16	1.16	.000
5722.	6.19	1.83	.145	.061	.057	.172	.206	1.25	1.25	1.25	1.25	1.25	1.24	.000
5754.	6.00	1.81	.138	.098	.079	.172	.200	1.21	1.22	1.21	1.21	1.21	1.20	.000
5786.	5.91	1.84	.130	.105	.085	.163	.194	1.18	1.20	1.19	1.19	1.19	1.18	.000
5818.	5.86	1.83	.125	.101	.091	.163	.173	1.17	1.18	1.18	1.18	1.19	1.18	.000
5850.	5.83	1.84	.124	.101	.089	.166	.176	1.16	1.17	1.17	1.17	1.18	1.18	.000
5880.	5.74	1.84	.105	.082	.076	.151	.161	1.14	1.16	1.15	1.15	1.17	1.16	.000
5911.	5.64	1.83	.103	.085	.078	.145	.172	1.11	1.13	1.12	1.12	1.16	1.15	.000
5944.	5.78	1.85	.119	.095	.085	.159	.185	1.15	1.17	1.16	1.16	1.18	1.17	.000
5975.	5.78	1.84	.119	.096	.082	.156	.182	1.15	1.17	1.16	1.16	1.17	1.17	.000
6007.	5.76	1.84	.116	.093	.082	.157	.179	1.15	1.16	1.15	1.15	1.17	1.17	.000
6039.	5.90	1.81	.093	.073	.057	.121	.141	1.13	1.14	1.14	1.14	1.20	1.13	.000
6070.	5.75	1.81	.115	.095	.083	.150	.176	1.15	1.16	1.15	1.15	1.17	1.16	.000

CYCLE NO.	PACK VOLTAGE	CURRENT	3RD ELECT VOLTAGES					CELL VOLTAGES					TRIP POINT	
			1	2	3	4	5	1	2	3	4	5		
5641.	6.93	.05	.239	.185	.192	.283	.428	1.39	1.39	1.39	1.39	1.39	1.39	1.39
5673.	6.94	.05	.242	.185	.192	.276	.421	1.39	1.39	1.39	1.39	1.39	1.39	1.39
5722.	6.85	.05	.259	.146	.129	.468	.449	1.38	1.38	1.38	1.38	1.38	1.37	1.37
5754.	6.86	.05	.256	.185	.151	.476	.455	1.38	1.38	1.38	1.38	1.38	1.37	1.37
5786.	6.88	.05	.248	.192	.162	.469	.448	1.38	1.39	1.39	1.39	1.38	1.38	1.38
5818.	6.90	.06	.259	.202	.190	.500	.478	1.41	1.41	1.41	1.41	1.41	1.42	1.42
5850.	6.90	.06	.259	.203	.190	.502	.478	1.41	1.41	1.41	1.41	1.42	1.42	1.42
5880.	6.88	.05	.225	.175	.149	.466	.429	1.38	1.38	1.38	1.38	1.38	1.38	1.38
5911.	6.86	.05	.246	.178	.152	.473	.439	1.38	1.38	1.38	1.38	1.38	1.37	1.37
5944.	6.89	.06	.252	.184	.168	.469	.439	1.39	1.39	1.39	1.39	1.39	1.38	1.38
5975.	6.90	.06	.248	.182	.170	.468	.436	1.39	1.39	1.39	1.39	1.38	1.38	1.38
6007.	6.90	.06	.250	.185	.176	.468	.436	1.39	1.39	1.39	1.39	1.39	1.38	1.38
6039.	6.90	.05	.246	.183	.179	.463	.429	1.39	1.39	1.39	1.39	1.38	1.38	1.38
6070.	6.90	.06	.243	.188	.180	.468	.439	1.39	1.39	1.39	1.39	1.39	1.38	1.38

151

AH IN

																						END OF CHARGE
5641.	6.82	.05	.239	.192	.412	.415	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	.000	
5673.	6.83	.05	.245	.192	.269	.416	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	.000	
5722.	6.77	.05	.256	.146	.432	.439	1.36	1.37	1.37	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	.000	
5754.	6.77	.05	.252	.193	.438	.441	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	.000	
5786.	6.78	.05	.253	.212	.438	.438	1.36	1.37	1.37	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	.000	
5818.	6.79	.05	.266	.221	.463	.463	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	.000	
5850.	6.79	.05	.263	.219	.464	.463	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	.000	
5880.	6.78	.05	.232	.196	.443	.432	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	.000	
5911.	6.75	.05	.241	.185	.425	.412	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	.000	
5944.	6.83	.06	.255	.198	.449	.431	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	.000	
5975.	6.80	.05	.246	.192	.425	.412	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	.000	
6007.	6.80	.05	.246	.195	.425	.409	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	.000	
6039.	6.80	.05	.243	.192	.419	.407	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	.000	
6070.	6.80	.05	.244	.192	.419	.412	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	.000	

PACK NO. 216  
 GULTON 12 A.H.  
 TEST TEMPERATURE 0 C  
 ORBIT PERIOD, 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
7672.	6.09	3.60	1.22	1.23	1.23	1.23	1.22	1.22
7704.	6.09	3.62	1.22	1.23	1.22	1.23	1.22	1.22
7753.	6.25	3.65	1.25	1.26	1.25	1.26	1.24	1.24
7785.	6.17	3.60	1.23	1.24	1.24	1.24	1.23	1.23
7818.	6.17	3.58	1.23	1.24	1.24	1.24	1.23	1.23
7849.	6.11	3.59	1.22	1.23	1.23	1.23	1.22	1.22
7913.	6.10	3.58	1.22	1.22	1.23	1.23	1.21	1.21
7944.	6.05	3.98	1.21	1.21	1.22	1.22	1.20	1.20
7976.	6.09	3.29	1.22	1.22	1.22	1.23	1.22	1.22
8008.	6.13	3.59	1.23	1.23	1.24	1.24	1.23	1.23
8040.	6.09	3.62	1.22	1.22	1.23	1.23	1.22	1.22
8072.	6.26.	3.56	1.26	1.26	1.26	1.26	1.26	1.26
8104.	6.16	3.63	1.23	1.24	1.24	1.24	1.24	1.23
7672.	7.18	2.07	1.46	1.45	1.44	1.44	1.44	1.44
7704.	7.20.	1.17	1.46	1.45	1.43	1.44	1.44	1.45
7753.	7.23	1.07	1.45	1.44	1.46	1.45	1.44	1.44
7785.	7.24	1.14	1.47	1.45	1.44	1.44	1.46	1.46
7818.	7.24	1.10	1.47	1.45	1.44	1.44	1.45	1.45
7849.	7.36	1.16	1.46	1.43	1.41	1.41	1.41	1.41
7913.	7.34	1.15	1.44	1.42	1.40	1.41	1.40	1.40
7944.	7.20	1.39	1.47	1.44	1.44	1.44	1.44	1.44
7976.	7.19	1.26	1.46	1.44	1.43	1.44	1.44	1.44
8008.	7.23	1.26	1.47	1.45	1.44	1.45	1.45	1.45
8040.	7.21	1.52	1.47	1.44	1.44	1.44	1.44	1.44
8072.	7.23	1.24	1.48	1.44	1.44	1.44	1.44	1.44
8104.	7.32	1.08	1.51	1.46	1.45	1.46	1.46	1.47

PACK NO. 301  
 GULION 12 A.H.

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
8526.	4.75	6.00	1.20	1.19	1.21	.00	1.18	
8558.	4.72	6.05	1.20	1.19	1.19	.00	1.18	
8607.	4.85	6.15	1.22	1.21	1.23	.70	1.21	
8639.	4.79	5.95	1.21	1.19	1.21	.00	1.19	
8671.	4.77	5.96	1.21	1.19	1.21	.00	1.19	
8705.	4.75	6.00	1.21	1.19	1.21	.00	1.19	
8767.	4.79	6.03	1.21	1.17	1.20	.00	1.17	
8798.	4.74	6.11	1.21	1.19	1.20	.00	1.18	
8827.	4.72	6.05	1.21	1.17	1.20	.00	1.17	
8862.	4.75	6.00	1.21	1.18	1.20	.00	1.18	
8894.	4.73	6.01	1.21	1.18	1.20	.00	1.18	
8926.	4.78	6.11	1.21	1.19	1.21	.00	1.19	
8958.	4.73	6.01	1.20	1.18	1.20	.00	1.18	
8526.	6.17	3.45	1.53	1.58	1.52	.00	1.56	END OF CHARGE
8558.	6.22	1.48	1.54	1.60	1.52	.00	1.58	
8607.	6.21	2.44	1.51	1.55	1.51	.00	1.51	
8639.	6.26	1.73	1.55	1.62	1.53	.00	1.57	
8671.	6.26	1.71	1.55	1.61	1.53	.00	1.58	
8705.	6.24	1.75	1.52	1.59	1.51	.00	1.55	
8738.	6.37	1.64	1.53	1.60	1.52	.00	1.57	
8767.	6.22	1.89	1.54	1.60	1.52	.00	1.57	
8798.	6.23	1.85	1.54	1.60	1.52	.00	1.57	
8827.	6.21	1.84	1.54	1.60	1.53	.00	1.57	
8862.	6.24	1.71	1.54	1.60	1.53	.00	1.57	
8894.	6.17	1.91	1.52	1.59	1.52	.00	1.55	
8926.	6.24	1.62	1.54	1.60	1.53	.00	1.57	

PACK NO. 227  
 GULTON 12 A.H.  
 TEST TEMPERATURE 25 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGE					END OF DISCHARGE
			1	2	3	4	5	
7936.	5.73	5.99	1.16	1.17	1.16	1.15	1.14	
7968.	5.75	6.00	1.16	1.17	1.16	1.15	1.14	
8049.	5.77	5.91	1.16	1.18	1.18	1.14	1.13	
8081.	5.72	5.94	1.15	1.16	1.16	1.13	1.12	
8113.	5.71	6.01	1.15	1.17	1.16	1.13	1.12	
8145.	5.72	6.04	1.16	1.17	1.16	1.13	1.12	
8177.	5.69	5.13	1.06	1.00	1.06	1.08	1.00	
8209.	5.84	5.95	1.13	1.18	1.17	1.17	1.16	
8241.	5.61	5.33	1.17	1.14	1.13	1.10	1.11	
8272.	5.78	5.03	1.18	1.15	1.16	1.16	1.16	
7936.	7.58	3.75	1.47	1.56	1.54	1.52	1.51	
7968.	7.56	3.79	1.47	1.56	1.54	1.51	1.50	
8049.	7.56	3.77	1.47	1.57	1.57	1.48	1.48	
8081.	7.51	3.75	1.46	1.56	1.55	1.47	1.47	
8113.	7.68	3.73	1.45	1.56	1.54	1.45	1.44	
8145.	7.66	3.74	1.45	1.56	1.54	1.45	1.44	
8177.	7.27	3.74	1.42	1.48	1.48	1.41	1.39	
8209.	7.54	3.77	1.47	1.57	1.56	1.48	1.49	
8241.	7.55	3.60	1.46	1.53	1.51	1.44	1.44	
8272.	7.51	3.67	1.47	1.53	1.52	1.44	1.44	

PACK NO. 78 TEST TEMPERATURE 40 C  
 GULTON 12 A.H. ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE					END OF DISCHARGE
			15	16C	15	16C	15	
8495	4.47	3.60	1.14	1.11	1.11	1.11	1.13	
8527	4.49	3.60	1.15	1.12	1.11	1.11	1.13	
8576	4.57	3.57	1.17	1.12	1.13	1.13	1.16	
8608	4.39	3.57	1.15	1.04	1.09	1.11	1.11	
8640	4.20	3.55	1.15	0.92	1.12	1.11	1.11	
8672	4.14	3.59	1.15	0.80	1.11	1.11	1.11	
8704	4.25	3.60	1.14	0.98	1.11	1.11	1.11	
8736	4.56	3.57	1.15	1.17	1.14	1.12	1.12	
8768	4.51	3.56	1.15	1.13	1.12	1.12	1.12	
8800	4.47	3.53	1.14	1.10	1.11	1.11	1.11	
8832	4.50	3.55	1.15	1.14	1.12	1.12	1.12	
8864	4.52	3.55	1.15	1.15	1.11	1.11	1.12	
8877	4.56	3.71	1.18	1.17	1.17	1.17	1.16	
8909	5.81	2.88	1.46	1.45	1.46	1.46	1.44	
8927	5.78	2.65	1.45	1.45	1.45	1.45	1.43	
8976	5.75	2.91	1.46	1.42	1.45	1.45	1.41	
9008	5.74	2.93	1.47	1.41	1.44	1.44	1.42	
9040	5.82	2.91	1.46	1.39	1.44	1.44	1.42	
9072	5.86	2.92	1.45	1.39	1.42	1.42	1.38	
9104	5.81	2.89	1.46	1.39	1.42	1.42	1.39	
9136	5.78	2.90	1.46	1.41	1.42	1.42	1.39	
9168	5.79	2.88	1.45	1.42	1.44	1.44	1.41	
9200	5.75	2.68	1.46	1.42	1.45	1.45	1.42	
9232	5.78	2.64	1.46	1.43	1.46	1.46	1.42	
9264	5.78	2.55	1.46	1.44	1.45	1.45	1.43	
9277	5.81	2.82	1.46	1.44	1.49	1.49	1.42	

PACK NO. 69 TEST TEMPERATURE 25 C  
 YARDNEY 5 A.H. ORBIT PERIOD 24 HRS.

DEPTH OF DISCHARGE 20  
 PERCENT OF RECHARGE .3A

CYCLE PACK CURRENT CELL VOLTAGES  
 NO. VOLTAGE 1.00 1 2 3 4 5

END OF  
 DISCHARGE

END OF  
 CHARGE

241.	5.34	.99	1.07	1.08	1.07	1.08	1.08	1.08	1.08
247.	5.39	1.00	1.07	1.08	1.09	1.08	1.08	1.08	1.08
255.	5.35	.99	1.07	1.07	1.08	1.08	1.08	1.08	1.05
263.	5.35	.99	1.07	1.08	1.08	1.08	1.08	1.08	1.06
241.	7.39	.56	1.47	1.48	1.48	1.49	1.49	1.50	1.50
247.	7.54	.61	1.44	1.48	1.57	1.67	1.67	1.67	1.49
255.	7.64	.61	1.41	1.40	1.61	1.60	1.60	1.60	1.37
263.	7.47	.61	1.48	1.48	1.50	1.49	1.49	1.49	1.54



CHARGE

TEST TEMPERATURE 25 C  
ORBIT PERIOD 24 HRS.

DEPTH OF DISCHARGE 20  
PERCENT OF RECHARGE .3A

PACK NO. 233  
YARDNEY 5 A.H.

CYCLE NO.	PACK CURRENT VOLTAGE	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
241.	5.38	1.08	1.09	1.08	1.08	1.08	1.08
247.	5.68	1.15	1.12	1.18	1.16	1.08	1.08
252.	5.37	1.07	1.07	1.08	1.08	1.06	1.06
262.	5.36	1.07	1.07	1.09	1.08	1.07	1.07
241.	7.27	1.45	1.49	1.47	1.45	1.48	1.48
247.	7.50	1.52	1.50	1.52	1.52	1.51	1.51
252.	7.67	1.44	1.50	1.48	1.44	1.47	1.47
262.	7.42	1.44	1.47	1.49	1.48	1.46	1.46

END OF CHARGE

PACK NO. 197 TEST TEMPERATURE 0  
 YARDNEY 12 AH AGCD ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK CURRENT VOLTAGE 4.00	DEPTH OF DISCHARGE 17 PERCENT OF RECHARGE 130					TEST TEMPERATURE 0	ORBIT PERIOD 1.5 HRS.	END OF DISCHARGE
		1	2	3	4	5			
1673.	6.22	3.96	1.25	1.25	1.25	1.25	1.25	1.25	
1754.	6.42	3.09	1.28	1.28	1.29	1.29	1.29	1.28	
1786.	6.33	4.11	1.27	1.26	1.27	1.28	1.27	1.27	
1818.	6.27	4.03	1.26	1.25	1.25	1.26	1.25	1.25	
1850.	6.53	4.09	1.24	1.23	1.23	1.23	1.22	1.22	
1882.	6.74	3.70	1.34	1.34	1.34	1.34	1.32	1.32	
1914.	6.72	3.65	1.35	1.35	1.35	1.35	1.33	1.33	
1945.	6.30	4.11	1.26	1.25	1.27	1.27	1.26	1.26	
1978.	5.17	3.99	1.04	1.03	1.04	1.04	1.02	1.02	
2009.	5.12	3.95	1.03	1.02	1.03	1.03	1.01	1.01	
2041.	6.56	4.01	1.31	1.31	1.31	1.31	1.31	1.31	
2073.	6.47	4.00	1.24	1.26	1.33	.00	1.30	1.30	

CYCLE NO.	PACK CURRENT VOLTAGE 4.00	DEPTH OF DISCHARGE 17 PERCENT OF RECHARGE 130					TEST TEMPERATURE 0	ORBIT PERIOD 1.5 HRS.	END OF CHARGE
		1	2	3	4	5			
1673.	7.89	1.06	1.59	1.56	1.57	1.60	1.60	1.60	
1754.	7.98	.85	1.61	1.59	1.60	1.61	1.59	1.59	
1786.	7.97	.98	1.62	1.56	1.58	1.61	1.60	1.60	
1818.	7.95	.99	1.62	1.56	1.58	1.60	1.60	1.60	
1850.	8.16	.95	1.60	1.54	1.54	1.57	1.56	1.56	
1882.	6.13	.88	1.60	1.53	1.55	1.58	1.56	1.56	
1914.	6.06	1.06	1.58	1.55	1.56	1.57	1.55	1.55	
1945.	7.60	1.15	1.61	1.56	1.57	1.59	1.58	1.58	
1978.	7.95	1.10	1.60	1.55	1.57	1.58	1.58	1.58	
2009.	7.89	1.01	1.60	1.55	1.57	1.59	1.59	1.59	
2041.	7.88	1.03	1.59	1.55	1.56	1.58	1.58	1.58	
2073.	7.89	1.05	1.60	1.60	1.55	.00	1.56	1.56	

158

PACK NO. 182  
YARDNEY 12 AH AGZN

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 130

TEST TEMPERATURE 25  
ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK CURRENT VOLTAGE	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
2521.	5.36	1.07	1.08	1.07	1.07	1.07	1.07
2553.	5.35	1.07	1.08	1.06	1.07	1.07	1.07
2602.	5.40	1.08	1.08	1.09	1.08	1.08	1.08
2634.	5.36	1.07	1.08	1.07	1.07	1.06	1.06
2666.	5.33	1.07	1.07	1.06	1.06	1.06	1.06
2733.	5.34	1.06	1.07	1.05	1.06	1.05	1.05
2762.	5.31	1.06	1.07	1.04	1.06	1.05	1.05
2793.	5.13	1.05	1.07	.90	1.05	1.05	1.05
2825.	5.23	1.06	1.07	.98	1.05	1.05	1.05
2857.	5.29	1.07	1.07	1.04	1.06	1.06	1.06
2889.	5.29	1.07	1.07	1.04	1.06	1.06	1.06

2521.	7.83	1.60	1.59	1.54	1.57	1.57	1.57
2553.	7.87	1.61	1.59	1.52	1.58	1.59	1.59
2602.	7.81	1.57	1.55	1.48	1.62	1.61	1.61
2634.	7.74	1.51	1.56	1.53	1.55	1.55	1.55
2666.	7.71	1.57	1.56	1.53	1.54	1.54	1.54
2733.	7.84	1.58	1.54	1.50	1.52	1.50	1.50
2762.	7.81	1.67	1.53	1.51	1.52	1.50	1.50
2793.	7.67	1.79	1.54	1.54	1.54	1.53	1.53
2825.	7.66	1.75	1.54	1.53	1.54	1.53	1.53
2857.	7.66	1.69	1.55	1.54	1.54	1.53	1.53
2889.	7.67	1.74	1.55	1.54	1.54	1.53	1.53

159