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Flight Center, Electrochemical Power Sources Section (716.2),
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Subj: Monthly Progress Report on National Aeronautics and Space
Administration Space-Cell Test Program; submission of

Encl: (1) Monthly Progress Report as of 31 October 1965 (3 copies)

1. The progress report for National Aeronautics and Space Administration
purchase order W11,252B on the space cell test program is submitted as
enclosure (1).

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By direction

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MONTHLY PROGRESS REPORT THROUGH 31 OCTOBER 1965

LIFE CYCLE TESTS

1. Status of 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), Yardney Electric Corporation (Yardney), Gulton Industries, Inc. (Gulton) and Delco-Remy (Delco).

TOTAL NUMBER OF PACKS IN PROGRAM: 150

	Total Number of Packs			Cells Failed*	
	Cycled To Date	Still Cycling	Failed	Since Last Report	Total To Date
NICKEL CADMIUM (10-cell packs)					
G.E. 3.0 a.h.	12	6	6	4	48
Gould 3.5 a.h.	12	4	8	0	59
Sonotone 5.0 a.h.	12	8	4	4	39
Gulton 6.0 a.h.	12	3	9	2	64
TOTAL	48	21	27	10	210
NICKEL CADMIUM (5-cell packs)					
Sonotone 3.0 a.h.	6	6	0	1	1
Sonotone 5.0 a.h. STABISTOR	6	6	0	0	0
G.E. 5.0 a.h. NIMBUS	6	6	0	0	0
G.E. 12 a.h.	13	7	6	2	21
G.E. 12 a.h. 3rd Elect.	4	4	0	0	2
Gulton 4.0 a.h.	6	6	0	0	0
Gulton 5.0 a.h. NIMBUS	6	6	0	0	0
Gulton 6.0 a.h.	1	0	1	1	3
Gulton 6.0 a.h. HSI	3	3	0	1	1
Gulton 6.0 a.h. 3rd Elect.	6	6	0	1	2
Gulton 12 a.h.	6	4	2	4	7
Gulton 20 a.h.	12	3	9	4	32
Gulton 50 a.h.	2	0	2	0	6
Gould 20 a.h.	12	5	7	0	24
TOTAL	89	62	27	14	99
SILVER CADMIUM (10-cell packs)					
Yardney 12 a.h.	2	0	2	0	16
SILVER CADMIUM (5-cell packs)					
Yardney 5.0 a.h.	6	6	0	0	0
SILVER ZINC (10-cell packs)					
Yardney 12 a.h.	1	0	1	0	6
SILVER ZINC (5-cell packs)					
Delco 25 a.h.	3	0	3	0	10
Delco 40 a.h.	1	0	1	0	2
TOTAL	4	0	4	0	12

* All failure analysis results are cumulative. These results are shown on pages 6 through 44.

Enclosure (1)

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 ± 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 ± 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. Silver-Cadmium Packs:

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge: 1.50 ± 0.03 volts per cell at all temperatures.

(3) Depth of Discharge:

(a) 20 percent and 50 percent at 0° C.

(b) 20 percent at 25° C.

(c) 20 percent and 50 percent at 40° C.

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

d. Silver-Zinc Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: 1.97 ± 0.03 volts per cell at 25° C.

(3) Depth of Discharge:

(a) 3-hour orbit: 40 percent at 25° C.

(b) 24-hour orbit: 25 percent and 40 percent at 25° C.

(4) Orbit Times:

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

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

e. 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.

f. 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.

g. Stabistor Packs:

(1) Ambient Temperatures:

(a) -20° C.

(b) 0° C.

(c) 25° C.

(d) 40° C.

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

(3) Depth of Discharge: 25 percent and 40 percent at all temperatures.

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

3. 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.

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

4. 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 45 through 51.

CELL TYPE: General Electric 3.0 Ampere-Hour									
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	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.		
				414	8	8245	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.		
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.		
				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.		
				456	10	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.		
				719	4	5013	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Several Small Burned Areas on Separator.		

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	Low Volt Disch, Low Volt Chg, Blistering on Bottom and Top Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
39	15%	1.5	50°	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.
				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.
			40°	550	8	8109	Low Volt Disch, Normal Volt Chg, Pinpoint Penetration, Separator Deteriorated.

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
40	25%	1.5	40°	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.
				47	7	2182	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.
				49	5	2446	Low Volt Disch, High Volt Chg, Pos Weld to Terminal Stud Burned, Poor Weld.
				45	10	2461	Low Volt Disch, High Volt Chg, Loose Plate Material on Separator, Short at Outside End of Pos Plate.
				466	2	2509	Low Volt Disch, High Volt Chg, Leaked, Pos Tab Burned and Shorted to Neg Tab.
				441	6	2509	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
				416	4	1182	Low Volt Disch, Low Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
				499	3	1515	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.
				412	6	1911	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
43	15%	3.0	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.

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
43	15%	3.0	40°	436	7	2515	Shown 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°	435	10	2656	Shown Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
	25%	3.0	40°	222	6	1672	Shown Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused By Overheating From Poor Tab Weld.
44			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.

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.
				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.
4	40%	1.5	25°	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	CELL TYPE: Gould 3.5 Ampere-Hour	
							FAILURE	ANALYSIS
4	40%	1.5	25°	43	6	2954	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.3 gm, Plate Material on Separator.	
				27	3	3029	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated.	
				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.	
				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 Plates Weak.	
				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.	
				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.	
				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	CELL TYPE: Could 3.5 Ampere-Hour FAILURE ANALYSIS
8	40%	3.0	25°	68	6	1346	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Plate Material on Separator.
			25°	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.
			25°	39	1	1985	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Neg Plate Material on Separator.
			25°	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.
			25°	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.
			25°	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.
			25°	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.

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
27	15%	1.5	40°	13	3	2901	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos Plate Material on Separator.
			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.
			40°	103	7	2998	Low Volt Disch, Normal Volt Chg, High Pres, Short Through Separator, Pieces of Pos Plate Material Between Plates.
			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.
			40°	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.
			40°	11	2	4485	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, 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>Gould 3.5 Ampere-Hour</u> FAILURE ANALYSIS
28	25%	1.5	50°	122	2	408	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.
			40°	157	7	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, High Pres Bulge.
			40°	158	8	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.9 gm, High Pres Bulge Top.
			40°	141	5	860	Low Volt Disch, High Volt Chg, Leaked, Lost 3.5 gm.
			40°	168	10	1293	Low Volt Disch, High Volt Chg, Weak Weld to Bottom of Case.
			40°	121	1	1811	Low Volt Disch, Low Volt Chg, Short at Outside End of Plates, Grid Wire Penetrated Separator.
			40°	133	3	1811	Low Volt Disch, High Volt Chg, Weak Weld on Pos Tab to Case.
			40°	140	4	1811	Low Volt Disch, Low Volt Chg, Short Around Pos Tab, Blistering on Pos Plate, Active Neg Plate Material on Separator.
			40°	155	6	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case.
			40°	163	9	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case, Deposit on Glass Seal.

Pack Number	Depth of Discharge	Orbit Period (Hours)	Test Temperature	Cell Number	Position in Pack	Cycles Completed	Cell Type: Failure Analysis
31	15%	3.0	40°	R166	9	1500	CELL TYPE: Could 3.5 Ampere-Hour FAILURE ANALYSIS Low Volt Disch, Low Volt Chg, Leaked, Lost 7.1 gm, Separator Deteriorated.
			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>Gould 3.5 Ampere-Hour</u> FAILURE ANALYSIS
32	25%	3.0	40°	125	6	138	Low Volt Disch, Normal Volt Chg, Bottom Weld Weak, Greenish Corrosion Inside at Neg Lead.
				65	3	495	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.5 gm, Bad Glass Seal Around Neg Terminal.
				1	1	800	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, Shorts Near Center of Core.
				67	4	875	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.2 gm, Short Around Tabs, Pos Tab Weld Weak to Case.
				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.
52	25%	1.5	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.
				116	8	7858	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Neg Plate Material on Separator, Excess Migration of Neg Plate Material, Separator Deteriorated.
				194	10	8367	Low Volt Disch, Normal Volt Chg, Under High Pressure When Opened, Pinpoint Penetration, Migration of Active Material Around Tab Areas.

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
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.

CELL TYPE: Sonotone 5.0 Ampere-Hour									
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	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.		
			25°	4335	1	4423	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.		
			25°	4878	6	7782	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Short Caused by Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.		
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.		

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°	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.
5	25%	3.0	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.
							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.

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
6	40%	3.0	25°	4324	8	1069	Low Volt Disch, Normal Volt Chg, Separator Impregnated With Active Material, Separator Sticking to Neg Plate.
				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.
				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.
				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	15%	1.5	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.
				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.

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
25	15%	1.5	40°	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.
26	25%	1.5	40°	6773	9	2902		Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.
				7224	6	2993		Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Neg Tab Weld Weak, Neg Plate Material Penetrated Separator.
				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.
				4881	3	3344		Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.
27	25%	1.5	40°	4240	4	3625		Low Volt Disch, Low Volt Chg, Separator Deteriorated, Plate Material Penetrated Separator.

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
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.
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.

PAGE 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
49	15%	1.5	0°	6887	9	2010	Low Volt Disch, Low Volt Chg, Burn on Separator Opposite Pos Tab.
			0°	4370	3	*10073	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: Gulton 6.0 Ampere-Hour Failure Analysis
13	25%	1.5	25°	2305	1	308	Low Volt Disch, High Volt Chg, Lost 12 gm, CO ₃ Top Ceramic, High Pres Bulge.
			25°	2355	10	502	Low Volt Disch, High Volt Chg, Lost 10 gm, High Pres Bulge.
			25°	3134	5	2969	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	3211	7	3084	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	2613	4	3598	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Separator Deteriorated.
			25°	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.
14	40%	1.5	25°	1623	4	262	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres Bulge.
			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 ₃ on Outside of Ceramic, Pos Terminal Loose.
			25°	2356	1	450	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres.
			25°	2387	2	1113	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	2391	3	1618	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	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	CELL TYPE: Gulton 6.0 Ampere-Hour FAILURE ANALYSIS
17	25%	3.0	25°	1862	5	721	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: Gulton 6.0 Ampere-Hour
							FAILURE ANALYSIS
37	15%	1.5	50°	1764	3	238	Low Volt Disch, Volt Did Not Increase on Following Chg, (1.00 V) Lost 4 gm, Ceramic Short.
				1784	8	1566	Low Volt Disch, Low Volt Chg, Lost 10.5 gm, Ceramic Short.
				1802	4	2819	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate.
				2333	10	2981	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
				1769	7	4897	Low Volt Disch, Normal Volt Chg, Ceramic Short, Leaked, Lost 1 gm, Blistering on Pos Plate, Separator Deteriorated.
				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.
				1815	6	114	Volt Fell Off During Disch, Chg Volt Slightly Low, Lost 3.5 gm, Ceramic Short.
				1853	9	187	Rev on Disch, Chg Volt Normal, Lost 4 gm, Deposits Around Pos Terminal (Outside), Ceramic Short.
				1627	3	225	Low Volt Disch, High Volt Chg on Cycle 219, Dead on 225, Lost 3.5 gm.
				2405	5	1333	Low Volt Disch, Normal Volt Chg, Pos Bus Shorted to Case.
				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: Gulton 6.0 Ampere-Hour 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.
42	25%	3.0	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.
			50°	2309	8	96	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	2346	7	382	Low Volt Disch, Low Volt Chg, CO ₃ 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.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gulton 6.0 Ampere-Hour	
							FAILURE ANALYSIS	
61	15%	1.5	0°	1622	2	1	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.	
				1845	8	6	Lost 5 gm, Leak at Weld on Bottom, High Pres Bulge, Cell Replaced in Pack Due to Early Failure.	
				2397	5	2762	Low Volt Disch, Low Volt Chg, Ceramic Short.	
				1825	4	4094	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.	
				2311	10	4285	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.	
				2400	6	4413	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.	
				1630	10	2995	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.	
				1792	4	4066	Low Volt Disch, Low Volt Chg, Small Shorts Through Separator Near Pos Tab, Blistering on Pos Plate, Separator Deteriorated.	
				1806	5	4441	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.	
				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.	
62	25%	1.5	0°					

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gulton 6.0 Ampere-Hour FAILURE ANALYSIS
66	25%	3.0	0°	1794	6	1045	Low Volt Disch, High Volt Chg, High Pres Bulge, Concave Side, Ceramic Broken, No Seal, Lost 5.1 gm, Pos Bus Against Case.
			0°	1843	8	1173	Low Volt Disch, Low Volt Chg, Wall Concave, Ceramic Short.
			0°	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 Blisters, Lost 1.3 gm.
			0°	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.
			0°	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.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: General Electric 12.0 Ampere-Hour
							FAILURE ANALYSIS
82	25%	1.5	25°	430	2	7527	Low Volt Disch, Normal Volt Chg, Pierced Separator Caused By Rough Place at Top Edge of Neg Plate, Neg Plate Material Migrated, Separator Deteriorated.
93	50%	24	40°	204	1	266	Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It Was Put Back on Cycling in Same Pack.
							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.
							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.
							Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Pinpoint Penetration, Separator Deteriorated.
							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	CELL TYPE: General Electric 12.0 Ampere-Hour
							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.
				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.
99	25%	1.5	40°	429	3	3841	Shorted on Cycling, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator, Leaked at Neg Terminal, Epoxy Lifted Up.
				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: General Electric 12.0 Ampere-Hour Failure Analysis
100	25%	3.0	40°	427	1	4170	Shorted on Cycling, High Pressure Bulge, Still Under Pressure When Opened, Blistering on Pos Plates, Separator Completely 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>Gulton 12 Ampere-Hour</u> Failure Analysis
290	25%	1.5	40°	1460	4	3060	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.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gulton 20 Ampere-Hour FAILURE ANALYSIS
73	25%	1.5	25°	396	3	1776	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.
74	25%	3.0	25°	458	4	1184	Low Volt Disch, Low Volt Chg, Leaked, Lost 14.2 gm, Blistering on Pos Plates.
				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.

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	
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.	
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.	

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
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.
				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.
90	25%	1.5	40°	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.
				395	4	2862	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.
				412	3	3385	Shorted on Cycling, High Pressure Bulge, Pos and Neg Plate Material on Separator, Separator Completely Deteriorated.
				435	2	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 24.6 gm, High Pres Bulge, Separator Very Dry.
101	15%	1.5	0°	407	5	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 20.4 gm, Separator Very Dry.
				438	4	3629	Low Volt Disch, High Volt Chg, Leaked, Lost 13.2 gm, High Pres Bulge, Sides Concave, Blistering on Pos Plates.

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
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.
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: <u>Gould 20 Ampere-Hour</u> FAILURE ANALYSIS
98	25%	1.5	0°	77	5	3556	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Neg Plate Material Penetrated Separator, Two Pos Plates Not Welded to Tabs.
104	25%	1.5	25°	69	1	2672	Low Volt Disch, Low Volt Chg, Shorted at Bottom of 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.
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.

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
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.
				25	2	5005	Low Volt Disch, Low Volt Chg, Shorted Through Separator, Shorted on Bottom Corner of Plates, Separator Completely Deteriorated, High Pressure.
				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.
				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.
				92	5	2937	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	CELL TYPE: Gould 20 Ampere-Hour FAILURE ANALYSIS
119	40%	3.0	25°	73	5	222	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: <u>Gulton 50 Ampere-Hour</u> FAILURE ANALYSIS
95	25%	1.5	0°	109	3	2643	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.

Pack Number	Depth of Discharge	Orbit Period (Hours)	Test Temperature	Cell Number	Position in Pack	Cycles Completed	Cell Type: Yardney 10 x YS-12 Failure Analysis
33	50%	24	40°		3	58	Leaked, Dried Out
					2	126	Leaked, Dried Out
					1	152	Leaked, Dried Out
					8	197	Leaked, Dried Out
					4	210	Leaked, Dried Out
					10	210	Leaked, Dried Out
57	50%	24	0°		1	162	Leaked, Electrolyte Shorted Out Cell
					2	162	Leaked, Electrolyte Shorted Out Cell
					10	162	Leaked, Electrolyte Shorted Out Cell
					3	166	Leaked, Electrolyte Shorted Out Cell
					4	166	Leaked, Electrolyte Shorted Out Cell
					5	166	Leaked, Electrolyte Shorted Out Cell
					6	166	Leaked, Electrolyte Shorted Out Cell
					7	166	Leaked, Electrolyte Shorted Out Cell
					8	166	Leaked, Electrolyte Shorted Out Cell
					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: <u>Delco 25 Ampere-Hour</u> FAILURE ANALYSIS
75	40%	24	25°			32	Cell Blew-up, Pack Returned to Manufacturer
89	40%	24	25°			80	Returned to Manufacturer for Analysis.
288	40%	3.0	25°			120	Returned to Manufacturer for Analysis.

PACK NUMBER	275	DEPTH OF DISCHARGE	25%	ORBIT PERIOD (HOURS)	24	TEST TEMPERATURE	25°	CELL NUMBER		POSITION IN PACK		CYCLES COMPLETED	139	CELL TYPE: Delco 40 Ampere-Hour FAILURE ANALYSIS	Returned to Manufacturer for Analysis.
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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	*	FIRST DAYS 88	SECOND DAYS 88	THIRD DAYS 88	FOURTH DAYS 88	FIFTH DAYS 88	SIXTH DAYS 88	SEVENTH DAYS 88	EIGHTH DAYS 88	
G.E. 3 A.H.	63	1.5	15	0	3.48		3.18	3.12	3.05	3.03	3.05	2.90	3.30		
	64		25	0	3.50		3.33	3.70	3.38	3.35	3.42	3.27	3.12		
	15		25	25	4.00		3.38	2.93	2.33	1.95	1.47	1.15	1.10		
	16		40	25	4.08		2.75	2.10	1.35						5013
	39		15	50/40	1.65	2.43 (779)	2.10	1.53	1.25	1.17	0.70				8109
	40		25	50/40	1.80	2.50 (1440)	0.88*	0.88							2509
	67	3	15	0	3.63		3.25	3.40	3.53	2.97	3.25	2.95			
	68		25	0	3.50		3.35	3.53	3.40	3.27	3.25	2.93	2.87		
G.E. 3 A.H.	19		25	25	3.93		3.78	3.48	3.15	3.00	2.78	2.48	2.29		
	20		40	25	3.78		3.00	2.35	2.07	1.83	2.00	1.62	1.47		
	43		15	50/40	1.77	2.63 (320)	2.20	1.61	1.65						2656
	44		25	50/40	1.60	2.00 (327)	1.35	1.19	1.15	1.10	0.95	0.88			
	51	1.5	15	0	3.62		4.00	3.33	3.41	3.21	3.35	3.15	3.47		
	52		25	0	3.33		3.85	3.53	3.18	3.30	3.24	2.80	2.65		
	3		25	25	4.00		3.82	2.92	2.25						4751
	4		40	25	3.94		3.38	2.77							3164
Gould 3.5 A.H.	27		15	50/40	1.53	2.63 (779)	2.07	1.95	1.90						4485
	28		25	50/40	1.55	2.07 (424)	2.86								1511
	55	3	15	0	3.27		3.59	3.15	3.38	3.33	3.27	3.03	2.77		
	56		25	0	3.50		3.91	3.53	3.65	3.41	3.38	3.30	3.27		
	7		25	25	4.32		4.03	3.79	3.53	2.77	2.28	2.51			
	8		40	25	4.29		3.65	3.35	3.03						2494
	31		15	50/40	1.60	1.31 (318)	1.75	1.98	2.16						2524
	32		25	50/40	1.55	1.66 (495)	1.49								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	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE	
					INITIAL	*	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				
	50		25	0	5.04		4.96	4.58	4.25	3.79	3.67	3.67				
	1		25	25	5.42		3.67	2.33	2.88	2.79	2.21	2.58	2.80			
	2		40	25	6.42		4.38	4.17	3.25	3.00						6671
	25		15	50/40	3.08	3.63 (703)	2.25	1.83	2.04	1.17	1.17	1.54				
	26		25	50/40	3.17	3.17 (445)	2.75	2.93								3625
Sonotone 5 A.H.	53	3	15	0	5.67		5.79	5.67	5.42	5.33	5.50	5.54				
	54		25	0	4.92		3.96	3.96	4.13	3.96	3.75	3.29				
	5		25	25	5.71		4.58	3.04	2.04	2.13	2.13	2.08				
	6		40	25	5.83		4.50	3.29	3.25	2.92	2.33	2.33	2.00			
	29		15	50/40	3.33	4.92 (223)	2.75	2.38	2.42	2.08	1.96	1.29				
	30		25	50/40	3.75	3.50 (183)	1.88	2.88	2.38	1.67	1.21					4141
Gulton 6 A.H.	61	1.5	15	0	5.00		5.10	5.40	4.45	3.15	2.60	2.15				
	62		25	0	5.00		4.75	3.80	4.35	3.55	3.30	3.30				
	13		25	25	5.80		2.75	2.85	2.70							4021
	14		40	25	6.40		3.45									2086
	37		15	50/40	2.75	3.60 (239)	1.70	2.95	1.85	2.00						6064
	38		25	50/40	2.65	2.90 (114)	1.55									1377
Gulton 6 A.H.	65	3	15	0	4.50		5.45	5.35	5.15	4.50	4.50	5.15				
	66		25	0	4.25		5.00	3.50	2.50	3.80	3.90	3.45				4414
	17		25	25	5.80		3.65	3.45	2.50	2.30						2885
	18		40	25	4.55		4.95	3.16								1550
	41		15	50/40	2.75	4.55 (239)	2.05	1.63								1689
	42		25	50/40	2.60	3.80 (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	*	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.	110	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				
	82		25	25	15.2		8.00	5.55	5.50	5.40	5.70	5.00				
	96		40	25	14.8		6.00	7.65								4020
	85		15	50/40	6.80	8.20 (334)	5.00	4.70	5.00	4.90	5.00	1.90				
	99		25	50/40	6.90	6.00 (195)	4.90	5.20	4.40							4853
G.E. 12 A.H.	111	3	15	0	14.2		13.2	10.7	11.0	12.1	12.9	12.0				
	125		25	0	14.6		13.0	12.1	11.9	12.2	12.9	11.7				
	83		25	25	15.2		11.7	8.20	6.13	5.20	4.80	4.40				
	97		40	25	14.9		5.60	5.86	7.90	8.20	6.80	5.50	5.70			
	86		15	50/40	7.10	8.20 (205)	6.30	3.70	4.00	3.50	2.90	2.30				
	100		25	50/40	7.00	9.80 (70)	3.80	4.70	5.70	5.10	4.00	4.00				
Gould 20 A.H.	84	1.5	15	0	22.5		27.7	26.5	24.2	24.7	21.7	22.3				
	98		25	0	23.1		21.2	15.2	18.7	17.2	17.5	13.5				2980
	104		25	25	25.0		18.5	14.0								2937
	118		40	25	24.7		23.3									5213
	112		15	50/40	9.67	6.83 (183)	15.7	15.3	12.5	12.4						1574
	126		25	50/40	9.00	13.9 (1326)	15.2									
Gould 20 A.H.	80	3	15	0	23.0		23.2	21.5	20.3	25.8	19.7	18.3				
	94		25	0	23.0		17.5	25.0	18.2	18.8	16.8	17.0				
	105		25	25	23.3		23.5	22.2	21.3	21.2	20.7	10.5				
	119		40	25	24.8		24.7	21.7								1793
	108		15	50/40	9.50	9.67 (47)	11.8	14.8	16.8	15.2	12.3					
	122		25	50/40	9.33	7.50 (756)	8.17*									983

* 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	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	*	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 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 (172)	6.50	4.83	5.50	4.67	5.00	5.17			4045
Gulton 20 A.H.	90		25	50/40	9.00	11.3 (65)	6.00	10.3	7.33*						
	102	3	15	0	16.7		18.8	25.2	20.3	19.5	17.3	17.0			
	116		25	0	21.7		20.7	21.8	19.3	17.5	15.2	15.8			1754
	74		25	25	20.3		6.17	7.17							358
	88		40	25	19.8										
Yardney 12 A.H.	77		15	50/40	9.50	12.7 (71)	7.33	5.33	4.83	5.33	4.67	5.00			
	91		25	50/40	9.17	10.3 (47)	6.67	6.67	7.67	6.83	7.17	5.50			
Gulton 6 A.H.	57	24	50	0	13.8		8.60								166
	33		50	40	13.5		12.0								210
Gulton 6 A.H.	79	24	50	25	6.60		3.55	4.40	4.25	4.05	3.50				
G.E. 12 A.H.	93	24	50	40***	13.0		7.60	6.50	5.00						349
Gulton 50 A.H.	95	1.5	25	0	54.6		59.6	45.4							3227

* 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.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	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 (Comm.) 4 A.H.	315	1.5	15	0	5.04	3.57	4.03	4.00	3.80							
	326		25	0	4.87	4.00	3.87	3.73								
	204		25	25	4.63	2.47	2.07	1.83	1.80	3.67						
	214		40	25	5.00	2.00	2.07	1.87	1.93	1.93						
	228		15	40	4.20	1.77	1.67	1.47	1.53							
	240		25	40	3.37	1.17	1.13	1.30	1.03							
Gulton 12 A.H.	216	1.5	15	0	14.0	14.0	14.1									
	301		25	0	14.2	14.5	14.4									
	227		25	25	14.1	5.90	3.50									
	296		40	25	13.3	4.70	5.40	5.00								
	78		15	40	6.80	4.30	3.10									
	290		25	40	11.4	5.40	3.60	3.70								
Gulton (HSI) 6 A.H.	213	1.5	25	0	7.30	7.30	7.25									
	218		40	25	6.90	3.00	3.60									
	238		25	40	5.00	1.75	2.00									
Yardney (AgZn)	9	24	42	25	14.0											57

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											
		25	0	5.38	5.38											
		15	25	5.25	5.40											
		25	25	5.46	2.55											
		15	40	3.29	1.67											
		25	40	3.04	1.42											
Gulton 6 A.H. (Third elec- trode)	1.5	25	0	7.15	7.00											
		40	0	7.25	7.50											
		40	25	7.10	3.15	6.20										
		25	25	5.95	3.85	5.20										
		15	40	2.95	2.25											
		25	40	3.95	2.10											
G.E. (Nimbus) 5 A.H.	1.5	15	0	5.42	5.08											
		25	0	5.21	5.50											
		15	25	4.67	4.13	4.13										
		25	25	5.58	3.58											
		15	40	3.67	2.42	2.25										
		25	40	3.83	2.25											
G.E. 12 A.H. (Third elec- trode)	1.5	0														
		0														
		25		10.2												
		25														
		40														
		40														

PACK FAILURE
CYCLES TO

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MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	PERIOD (HRS) CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
G.E. (pages 60- 66)	3	63	0	0.5	1.0	15	115	1.55	10085	10545	460	10	10
		64	0	"	"	25	"	"	10074	10521	447	10	10
		15	25	"	"	25	125	1.49	9823	10256	433	7	6
		16	25	"	"	40	"	"		FAILED			
		39	40	"	"	15	160	1.45		FAILED			
		40	40	"	"	25	"	1.41		FAILED			
		67	0	"	2.5	15	115	1.55	4909	5093	184	10	10
		68	0	"	"	25	"	"	4939	5151	212	10	10
		19	25	"	"	25	125	1.49	4899	5127	228	10	10
		20	25	"	"	40	"	"	4629	4864	235	7	7
		43	40	"	"	15	160	1.45		FAILED			
		44	40	"	"	25	"	"		FAILED			
Gould (pages 67- 70)	3.5	51	0	"	1.0	15	115	1.55	10103	10562	459	10	10
		52	0	"	"	25	"	"	9783	10230	447	6	6
		3	25	"	"	25	125	1.49		FAILED			
		4	25	"	"	40	"	"		FAILED			
		27	40	"	"	15	160	1.45		FAILED			
		28	40	"	"	25	"	"		FAILED			
		55	0	"	2.5	15	115	1.55	4939	5145	206	10	10
		56	0	"	"	25	"	"	4910	5122	212	10	10
		7	25	"	"	25	125	1.49		FAILED			
		8	25	"	"	40	"	"		FAILED			
		31	40	"	"	15	160	1.45		FAILED			
		32	40	"	"	25	"	1.41		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
SONOTONE (pages 71-79)	5	49	0	0.5	1.0	15	115	1.55	9867	10171	304	9	8
		50	0	"	"	25	"	"	9868	10284	416	10	10
		1	25	"	"	25	125	1.49	9529	9994	465	7	7
		2	25	"	"	40	"	"		FAILED			
		25	40	"	"	15	160	1.45	9145	9255	110	6	5
		26	40	"	"	25	"	"		FAILED			
		53	0	"	2.5	15	115	1.55	4791	5009	218	10	10
		54	0	"	"	25	"	"	4815	5033	218	10	10
		5	25	"	"	25	125	1.49	4682	4893	211	9	9
		6	25	"	"	40	"	"	4641	4875	234	5	5
		29	40	"	"	15	160	1.45	4698	4860	262	8	7
		30	40	"	"	25	"	"		FAILED			
GULTON (pages 80-82)	6	61	0	"	1.0	15	115	1.55	9017	9433	416	6	6
		62	0	"	"	25	"	"	9437	9853	416	6	6
		13	25	"	"	25	125	1.49		FAILED			
		14	25	"	"	40	"	"		FAILED			
		37	40	"	"	15	160	1.45		FAILED			
		38	40	"	"	25	"	"		FAILED			
		65	0	"	2.5	15	115	1.55	4923	5042	119	10	9
		66	0	"	"	25	"	"		FAILED			
		17	25	"	"	25	125	1.49		FAILED			
		18	25	"	"	40	"	"		FAILED			
		41	40	"	"	15	160	1.45		FAILED			
		42	40	"	"	25	"	"		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
G.E. (pages 83- 91)	12	110	0	0.5	1.0	15	115	1.55	9522	9938	416	5	5
		124	0	"	"	25	"	"	9289	9705	416	5	5
		82	25	"	"	25	125	1.49	9511	9927	416	4	4
		96	25	"	"	40	"	"		FAILED			
		85	40	"	"	15	160	1.45	9173	9619	446	3	3
		99	40	"	"	25	"	"		FAILED			
		111	0	"	2.5	15	115	1.55	4758	4971	213	5	5
		125	0	"	"	25	"	"	4751	4964	213	5	5
		83	25	"	"	25	125	1.49	4814	5026	212	5	5
		97	25	"	"	40	"	"	4706	4924	218	3	3
		86	40	"	"	15	160	1.45	4589	4819	231	5	5
		100	40	"	"	25	"	"		FAILED			
GOULD (pages 92- 96)	20	84	0	"	1.0	15	115	1.55	9470	9885	415	5	5
		98	0	"	"	25	"	"	8982	9416	434	3	3
		104	25	"	"	25	125	1.49		FAILED			
		118	25	"	"	40	"	"		FAILED			
		112	40	"	"	15	160	1.45		FAILED			
		126	40	"	"	25	"	1.41		FAILED			
		80	0	"	2.5	15	115	1.55	4705	4941	236	5	5
		94	0	"	"	25	"	"	4587	4823	236	5	5
		105	25	"	"	25	125	1.49	4505	4741	236	4	4
		119	25	"	"	40	"	"		FAILED			
		108	40	"	"	15	160	1.45		FAILED			
		122	40	"	"	25	"	1.41		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
GULTON (Pages 97-101)	20	101	0	0.5	1.0	15	115	1.55		FAILED			
		115	0	"	"	25	"	"		FAILED			
		93	25	"	"	25	125	1.49		FAILED			
		87	25	"	"	40	"	"		FAILED			
		76	40	"	"	15	160	1.45	9078	9347	269	3	0
		90	40	"	"	25	"	"		FAILED			
		102	0	"	2.5	15	115	1.55	4533	4769	236	4	4
		116	0	"	"	25	"	"	4375	4611	236	5	5
		74	25	"	"	25	125	1.49		FAILED			
		88	25	"	"	40	"	"		FAILED			
G.E. NIMBUS (Pages 102-107)	5	77	40	"	"	15	160	1.45	4542	4778	236	5	5
		91	40	"	"	25	"	"	4358	4495	127	3	0
		103	0	"	1.0	15	110	1.49	2417	2877	460	5	5
		107	0	"	"	25	"	"	1779	2234	455	5	4
		106	25	"	"	15	120	"	2395	2850	455	5	5
		304	25	"	"	25	"	"	1700	2155	455	5	5
		113	40	"	"	15	130	"	2411	2851	440	5	5
		114	40	"	"	25	"	"	1681	2123	442	5	5
		117	0	"	"	15	110	"	2211	2671	460	5	5
		121	0	"	"	25	"	"	1781	2236	455	5	5
GULTON NIMBUS (Pages 108-113)	5	120	25	"	"	15	120	"	2318	2773	455	5	5
		318	25	"	"	25	"	"	1700	2155	455	5	5
		127	40	"	"	15	130	"	2365	2820	455	5	5
		128	40	"	"	25	"	"	1661	2116	455	5	4

MFR	CAPACITY A H	PACK NO.	TEMP °C.	ORBIT DISCHARGE	PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED		CELLS REMAIN- ING IN PACK	
					CHARGE	DISCHARGE				INITIAL	FINAL	INITIAL	FINAL
YAG-100	12	57	0	1.0	23.0		50	*	1.50		FAILED		
		33	40	"	"		"	*	1.50		FAILED		
GULION (page 114)	6	79	25	1.0	23.0		50	200	1.49	527	544	3	0
G.F. (page 114)	12	93	25*	1.0	23.0		50	*** 200	1.49**		FAILED		
GULION (page 114)	50	95	0	0.5	1.0		25	115	1.55		FAILED		
		123	40	"	"		15	160	1.45		FAILED		
GULION (page 114)	25	75	25	1.0	23.0		40	*	1.97		FAILED		
		89	25	"	"		"	*	"		FAILED		
GULION (page 114)	(NaOH) →	288	25	0.5	2.5		"	*	"		DISCONTINUED		
		198	25	"	"		"	*	"		FAILED		
GULION (page 114)	40	275	25	1.0	23.0		25	*	1.97		DISCONTINUED		
GULION (page 114)	40	9	25	1.0	23.0		42 (5 cells)	* (500 Mo.)	1.97		FAILED		

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1.45 V/CELL LIMIT AFTER CYCLE 173.
1.45 V/CELL LIMIT AFTER CYCLE 266.

MFR.	CAPACITY A H	PACK NO.	TEMP °C	ORBIT PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED		CELLS REMAIN- ING IN PACK	
				DISCHARGE	CHARGE				INITIAL	FINAL	INITIAL	FINAL
17-004 (Pages 115-120)	4	315	0	0.5	1.0	15	115	1.55	6337	6773	436	5
		326	0	"	"	25	"	"	6660	7109	449	5
		304	25	"	"	25	125	1.49	6500	6960	460	5
		214	25	"	"	40	"	"	6197	6616	419	5
		228	40	"	"	15	160	1.45	6403	6815	412	5
		240	40	"	"	25	"	"	6518	6930	422	5
		216	0	"	"	15	115	1.55	3436	3896	460	5
		301	0	"	"	25	115	1.55	4380	4795	415	5
17-005 (Pages 121-126)	12	227	25	"	"	25	125	1.49	3755	4135	380	5
		296	25	"	"	40	125	1.49	4599	5014	415	5
		28	40	"	"	15	160	1.45	4322	4734	412	4
		290	40	"	"	25	160	1.45	4466	4915	449	3
		213	0	"	"	25	115	1.55	3351	3816	465	5
		218	25	"	"	40	125	1.49	3373	3828	455	5
		228	40	"	"	25	160	1.45	3354	3819	465	5
		242	0	"	"	15	115	1.55	1350	1810	460	5
17-006 (Pages 127-132)	5	231	0	"	"	25	115	"	1350	1810	460	5
		233	25	"	"	25	125	1.49	1407	1867	460	5
		223	25	"	"	40	125	"	1254	1630	376	5
		216	40	"	"	15	160	1.45	1236	1701	465	5
		227	40	"	"	25	160	"	1250	1667	417	5

	CAPACITY A.H.	TEMP. °C	CHARGE PERIOD (HRS)		PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED		CELLS REMAIN- ING IN PACK	
			DISCHARGE	CHARGE				INITIAL	FINAL		
10005 (1235)	6	0	0.5	1.0	25	—	—	2257	2683	426	5
	(THIRD RECHARGE)	0	"	"	40	—	—	2283	2666	383	5
		25	"	"	40	—	—	3427	3814	387	4
		25	"	"	25	—	—	3440	3825	385	5
		40	"	"	15	—	—	1334	1791	457	5
321 (1235)		40	"	"	25	—	—	2000	2462	462	5
	12	0	"	"	25	—	—	0	190	190	5
	(THIRD RECHARGE)	0	"	"	40	—	—				
		25	"	"	25	—	—	832	1142	310	5
		25	"	"	40	—	—	0	370	370	5
520 (1235)		40	"	"	15	—	—				
		40	"	"	25	—	—	0	188	188	5
	5	-20	"	"	25	—	—	0	45	45	5
		-20	"	"	40	—	—	0	33	33	5
		0	"	"	25	—	—	338	798	460	5
520 (1235)		0	"	"	40	—	—	344	775	431	5
		25	"	"	25	—	—	719	1184	465	5
		25	"	"	40	—	—	718	1073	354	4
		40	"	"	25	—	—	555	1015	460	5
		40	"	"	40	—	—	450	915	465	5

[illegible]

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PACK NO. 63
G.E. 3 A.H.

DEPTH OF DISCHARGE 1% TEST TEMPERATURE 0 C
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	
10112.	12.40	.90	1.27	1.27	1.26	1.24	1.26	1.25	1.25	1.25	1.28	1.25	
10165.	12.46	.91	1.27	1.27	1.27	1.25	1.26	1.25	1.25	1.26	1.26	1.25	
10190.	12.42	.90	1.26	1.27	1.27	1.24	1.26	1.25	1.25	1.26	1.28	1.25	
10227.	12.35	.90	1.26	1.26	1.26	1.24	1.25	1.24	1.24	1.25	1.27	1.24	
10252.	12.44	.90	1.26	1.26	1.26	1.23	1.24	1.24	1.24	1.25	1.28	1.24	
10289.	12.42	.90	1.26	1.26	1.26	1.23	1.25	1.24	1.24	1.25	1.24	1.24	
10321.	12.34	.90	1.26	1.25	1.27	1.24	1.25	1.24	1.24	1.25	1.25	1.25	
10353.	12.38	.91	1.27	1.27	1.27	1.25	1.26	1.25	1.25	1.26	1.26	1.26	
10384.	12.38	.91	1.26	1.26	1.26	1.24	1.25	1.25	1.25	1.25	1.25	1.25	
10417.	12.39	.89	1.26	1.26	1.27	1.24	1.27	1.25	1.25	1.25	1.25	1.25	
10445.	12.36	.90	1.28	1.28	1.28	1.27	1.28	1.27	1.26	1.26	1.29	1.28	
10481.	12.33	.90	1.26	1.26	1.25	1.24	1.25	1.24	1.24	1.24	1.25	1.24	
10513.	12.31	.90	1.27	1.27	1.28	1.26	1.27	1.26	1.25	1.26	1.27	1.27	
10545.	12.41	.90	1.25	1.25	1.25	1.22	1.24	1.23	1.23	1.23	1.23	1.23	
60													
10112.	15.60	.52	1.63	1.50	1.61	1.58	1.66	1.62	1.52	1.59	1.54	1.55	END OF CHARGE
10165.	15.57	.24	1.63	1.49	1.62	1.58	1.66	1.62	1.52	1.58	1.50	1.55	
10190.	15.63	.24	1.62	1.48	1.61	1.57	1.64	1.60	1.50	1.58	1.55	1.54	
10227.	15.60	.22	1.63	1.48	1.63	1.58	1.66	1.63	1.51	1.60	1.51	1.55	
10252.	15.56	.24	1.61	1.48	1.59	1.55	1.62	1.60	1.50	1.58	1.55	1.52	
10289.	15.63	.24	1.61	1.47	1.59	1.55	1.63	1.60	1.50	1.57	1.47	1.52	
10321.	15.35	.22	1.61	1.48	1.60	1.57	1.64	1.60	1.50	1.56	1.49	1.55	
10353.	15.56	.23	1.64	1.50	1.62	1.59	1.66	1.63	1.52	1.58	1.51	1.56	
10384.	15.58	.24	1.63	1.49	1.62	1.58	1.65	1.62	1.51	1.57	1.49	1.55	
10417.	15.65	.24	1.64	1.49	1.63	1.59	1.67	1.63	1.52	1.60	1.49	1.55	
10445.	15.38	.22	1.61	1.49	1.58	1.58	1.64	1.61	1.51	1.57	1.50	1.55	
10481.	15.36	.22	1.61	1.48	1.55	1.56	1.64	1.60	1.50	1.55	1.48	1.54	
10513.	15.33	.22	1.61	1.48	1.60	1.57	1.65	1.61	1.50	1.54	1.48	1.55	
10545.	15.51	.22	1.60	1.47	1.58	1.56	1.64	1.59	1.49	1.54	1.47	1.52	

BACK NO. 64
G.F. 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	BACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
10139.	12.14	1.52	1.23	1.24	1.23	1.23	1.23	1.23	1.22	1.22	1.23	1.21	
10169.	12.10	1.51	1.23	1.23	1.23	1.23	1.23	1.23	1.22	1.22	1.24	1.21	
10203.	12.04	1.51	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21	1.21	1.20	
10226.	12.06	1.51	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21	1.24	1.19	
10297.	11.78	1.56	1.20	1.20	1.20	1.20	1.20	1.19	1.19	1.19	1.20	1.19	
10335.	12.06	1.51	1.22	1.23	1.22	1.23	1.22	1.22	1.22	1.21	1.24	1.21	
10360.	12.05	1.51	1.22	1.23	1.23	1.23	1.22	1.22	1.22	1.21	1.22	1.21	
10393.	12.04	1.50	1.22	1.23	1.23	1.22	1.23	1.21	1.22	1.21	1.22	1.20	
10419.	12.05	1.50	1.23	1.24	1.25	1.25	1.26	1.24	1.24	1.23	1.24	1.24	
10463.	12.05	1.50	1.22	1.22	1.23	1.22	1.22	1.23	1.23	1.23	1.23	1.20	
10487.	11.99	1.50	1.23	1.23	1.00	1.25	1.25	1.23	1.23	1.22	1.24	1.23	
10521.	12.06	1.50	1.21	1.21	1.21	1.21	1.22	1.20	1.21	1.20	1.20	1.18	
.86													
10139.	15.59	.34	1.56	1.58	1.57	1.60	1.52	1.53	1.53	1.63	1.58	1.61	END OF CHARGE
10169.	15.60	.36	1.54	1.56	1.59	1.62	1.50	1.53	1.52	1.59	1.63	1.60	
10203.	15.66	.32	1.54	1.57	1.57	1.59	1.51	1.51	1.49	1.62	1.56	1.57	
10226.	15.63	.36	1.53	1.54	1.58	1.60	1.49	1.51	1.50	1.58	1.58	1.58	
10297.	14.12	.88	1.43	1.42	1.45	1.45	1.42	1.45	1.44	1.42	1.44	1.43	
10335.	15.57	.40	1.55	1.57	1.61	1.65	1.52	1.55	1.52	1.58	1.62	1.59	
10360.	15.58	.41	1.54	1.55	1.62	1.65	1.51	1.55	1.53	1.58	1.59	1.59	
10393.	15.64	.41	1.55	1.58	1.63	1.66	1.53	1.55	1.53	1.56	1.59	1.62	
10419.	15.53	.41	1.55	1.57	1.63	1.67	1.53	1.56	1.53	1.58	1.59	1.60	
10463.	15.50	.41	1.53	1.55	1.63	1.65	1.52	1.55	1.52	1.55	1.57	1.58	
10487.	15.48	.41	1.54	1.55	1.64	1.66	1.53	1.56	1.53	1.55	1.59	1.61	
10521.	15.67	.41	1.53	1.55	1.61	1.65	1.52	1.55	1.52	1.53	1.57	1.57	

PACK NO. 15
NO. 3 A. 2.

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 °C
PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

CYCLE NO.	DISCH. CURRENT VOLTS	1.50	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
0850.	1.32.	1.51	1.16	1.15	1.16	1.15	.00	1.16	.00	.00	1.17	.99	
0900.	1.28	1.51	1.15	1.14	1.17	1.15	.00	1.16	.00	.00	1.16	1.10	
0950.	1.22	1.51	1.14	1.14	1.16	1.15	.00	1.15	.00	.00	1.16	.89	
1000.	1.21	1.51	1.13	1.14	1.16	1.14	.00	1.14	.00	.00	1.17	.90	
1050.	1.20	1.51	1.14	1.13	1.16	1.15	.00	1.15	.00	.00	1.16	.76	
1100.	1.25	1.50	1.15	1.14	1.18	1.16	.00	1.16	.00	.00	1.19	.71	
1150.	1.22	1.45	1.15	1.15	1.17	1.17	.00	1.16	.00	.00	1.17	.12	
1200.	1.20	1.44	1.14	1.13	1.16	1.14	.00	1.15	.00	.00	1.16	.10	
1250.	1.18	1.48	1.12	1.11	1.21	1.09	.00	1.13	.00	.00	1.20	.00	
1300.	1.16	1.48	1.16	1.15	1.20	1.17	.00	1.17	.00	.00	1.19	.00	
1350.	1.14	1.49	1.16	1.14	1.18	1.18	.00	1.17	.00	.00	1.16	.00	
1400.	1.10	.94											
1450.	1.10	.94	1.53	1.54	1.44	1.46	.00	1.51	.00	.00	1.46	1.49	END OF CHARGE
1500.	1.08	.94	1.50	1.51	1.43	1.46	.00	1.49	.00	.00	1.43	1.48	
1550.	1.06	.94	1.51	1.52	1.45	1.46	.00	1.49	.00	.00	1.44	1.49	
1600.	1.04	.94	1.51	1.52	1.44	1.44	.00	1.48	.00	.00	1.49	1.46	
1650.	1.03	.94	1.50	1.51	1.43	1.44	.00	1.47	.00	.00	1.42	1.45	
1700.	1.02	.95	1.50	1.52	1.46	1.45	.00	1.50	.00	.00	1.46	1.50	
1750.	1.01	.95	1.50	1.53	1.45	1.47	.00	1.50	.00	.00	1.45	1.49	
1800.	1.00	.95	1.50	1.53	1.46	1.46	.00	1.50	.00	.00	1.45	1.49	
1850.	1.00	.95	1.50	1.53	1.46	1.44	.00	1.50	.00	.00	1.45	.00	
1900.	1.00	.95	1.50	1.54	1.46	1.44	.00	1.51	.00	.00	1.45	.00	
1950.	1.00	.95	1.50	1.53	1.45	1.47	.00	1.51	.00	.00	1.45	.00	

PACK NO. 67
G.F. 3 A.H.

DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF
			1	2	3	4	5	6	7	8	9	10	
5000.	12.25.	.90	1.27	1.27	1.25	1.28	1.28	1.28	1.27	1.26	1.26	1.27	1.28
5030.	12.24	.91	1.25	1.24	1.23	1.25	1.25	1.25	1.24	1.24	1.23	1.24	1.23
5044.	12.30	.91	1.25	1.25	1.23	1.25	1.25	1.24	1.25	1.24	1.24	1.25	1.24
5093.	12.42	.90	1.25	1.24	1.22	1.25	1.25	1.25	1.24	1.24	1.24	1.24	1.23
5000.	15.04	.21	1.57	1.48	1.49	1.57	1.57	1.57	1.54	1.51	1.52	1.50	1.54
5030.	15.36	.20	1.60	1.47	1.48	1.55	1.55	1.59	1.59	1.53	1.55	1.57	1.56
5064.	15.29	.20	1.60	1.48	1.49	1.57	1.57	1.59	1.57	1.53	1.53	1.51	1.56
5093.	15.68	.09	1.62	1.47	1.49	1.61	1.62	1.62	1.60	1.56	1.57	1.49	1.59

PACK NO. 68
G.E. 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
4990.	12.02	1.53	1.22	1.22	1.23	1.24	1.23	1.23	1.23	1.20	1.26	1.21	
5021.	12.05	1.53	1.20	1.20	1.22	1.22	1.21	1.21	1.22	1.21	1.21	1.21	
5053.	11.94	1.53	1.22	1.22	1.23	1.24	1.24	1.23	1.23	1.22	1.22	1.24	
5081.	11.99	1.49	1.22	1.22	1.23	1.25	1.24	1.23	1.23	1.22	1.22	1.24	
5117.	11.99	1.49	1.22	1.23	1.24	1.25	1.24	1.24	1.24	1.22	1.22	1.25	
5151.	12.03	1.49	1.20	1.19	1.20	1.21	1.21	1.21	1.20	1.20	1.19	1.20	
.34													
4990.	15.66	.19	1.63	1.63	1.55	1.63	1.60	1.59	1.52	1.60	1.51	1.50	END OF CHARGE
5021.	15.77	.16	1.61	1.63	1.57	1.59	1.61	1.60	1.50	1.61	1.42	1.48	
5053.	15.62	.18	1.62	1.65	1.59	1.64	1.63	1.62	1.52	1.62	1.46	1.51	
5081.	15.62	.16	1.65	1.67	1.61	1.59	1.62	1.62	1.53	1.63	1.44	1.51	
5117.	15.52	.15	1.64	1.67	1.60	1.56	1.63	1.62	1.52	1.62	1.43	1.51	
5151.	15.44	.11	1.60	1.63	1.54	1.53	1.58	1.57	1.49	1.59	1.39	1.47	

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
 PERCENT OF RECHARGE 125 ORBIT PERIOD 3 HOURS

		CELL VOLTAGES										END OF DISCHARGE
		3	4	5	6	7	8	9	10			
1	1.20	1.22	1.23	1.22	1.22	.00	1.21	1.21	1.22	END OF DISCHARGE		
2	1.20	1.23	1.24	1.24	1.23	.00	1.22	1.23	1.24			
3	1.20	1.20	1.21	1.21	1.20	.00	1.19	1.19	1.20			
4	1.21	1.21	1.22	1.22	1.21	.00	1.20	1.20	1.20			
5	1.21	1.22	1.21	1.21	1.20	.00	1.19	1.19	1.19			
6	1.29	1.46	1.44	1.46	1.46	.00	1.47	1.46	1.47	END OF CHARGE		
7	1.27	1.42	1.40	1.41	1.42	.00	1.40	1.42	1.42			
8	1.27	1.48	1.45	1.47	1.48	.00	1.50	1.47	1.51			
9	1.28	1.43	1.41	1.44	1.43	.00	1.41	1.43	1.41			
10	1.27	1.46	1.43	1.45	1.46	.00	1.45	1.44	1.45			

PACK NO. 20
G.F. 3 A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 125
TEST TEMPERATURE 25 C
ORRIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CFLL VOLTAGES										END OF
			1	2	3	4	5	6	7	8	9	10	
4668.	7.48	2.36	1.13	.03	1.05	.00	.00	.00	1.11	1.06	1.12	1.11	END OF
4703.	7.50	2.35	1.14	.02	1.05	.00	.00	.00	1.12	1.08	1.12	1.13	DISCHARGE
4776.	7.60	2.38	1.15	.01	1.10	.00	.00	.00	1.13	1.10	1.14	1.16	
4799.	7.34	2.34	1.12	.03	.99	.00	.00	.00	1.09	1.04	1.10	1.11	
4864.	7.63	2.41	1.12	.05	1.04	.00	.00	.00	1.11	1.10	1.10	1.11	
.60													
4668.	10.23	.60	1.45	.00	1.45	.00	.00	.00	1.50	1.43	1.44	1.50	END OF
4703.	10.34	.60	1.45	.01	1.47	.00	.00	.00	1.50	1.44	1.49	1.51	CHARGE
4776.	10.30	.53	1.47	.02	1.48	.00	.00	.00	1.52	1.45	1.47	1.55	
4799.	10.31	.57	1.46	.01	1.48	.00	.00	.00	1.52	1.45	1.45	1.53	
4864.	10.31	.61	1.45	.01	1.47	.00	.00	.00	1.49	1.44	1.43	1.51	

1. TEMPERATURE OF DISCHARGE 15 TEST TEMPERATURE 0 C
 2. PERCENT OF RECHARGE 115 ORBIT PERIOD 30 MIN.

NO.	BACK CURRENT	CELL VOLTAGES										END OF DISCHARGE
		1	2	3	4	5	6	7	8	9	10	
10100	12.00	1.27	1.25	1.24	1.22	1.25	1.26	1.26	1.22	1.20	1.25	
10100	12.50	1.28	1.26	1.25	1.21	1.27	1.27	1.27	1.27	1.27	1.30	
10200	12.50	1.27	1.25	1.25	1.21	1.26	1.27	1.27	1.25	1.28	1.20	
10200	12.28	1.27	1.26	1.26	1.22	1.27	1.26	1.26	1.25	1.27	1.26	
10200	12.00	1.26	1.25	1.24	1.25	1.24	1.25	1.25	1.24	1.27	1.22	
10300	12.39	1.26	1.25	1.24	1.25	1.25	1.26	1.26	1.24	1.23	1.21	
10300	12.28	1.27	1.25	1.25	1.25	1.24	1.26	1.26	1.22	1.23	1.22	
10370	12.29	1.27	1.26	1.25	1.20	1.23	1.27	1.26	1.22	1.24	1.22	
10400	12.31	1.27	1.25	1.24	1.30	1.21	1.26	1.26	1.21	1.22	1.23	
10400	12.33	1.27	1.25	1.25	1.29	1.24	1.26	1.25	1.22	1.23	1.23	
10462	12.24	1.28	1.27	1.26	1.30	1.23	1.28	1.27	1.22	1.23	1.25	
10408	12.22	1.26	1.25	1.24	1.28	1.20	1.26	1.25	1.21	1.20	1.21	
10500	12.19	1.27	1.26	1.26	1.30	1.22	1.27	1.27	1.21	1.22	1.23	
10562	12.20	1.25	1.24	1.23	1.26	1.20	1.25	1.24	1.18	1.20	1.19	
10100	15.18	1.57	1.59	1.59	1.48	1.59	1.57	1.55	1.45	1.54	1.44	END OF CHARGE
10100	15.58	1.57	1.59	1.60	1.54	1.59	1.58	1.56	1.65	1.47	1.53	
10200	15.48	1.56	1.59	1.60	1.52	1.57	1.57	1.56	1.59	1.49	1.53	
10200	15.30	1.57	1.58	1.59	1.49	1.59	1.58	1.56	1.61	1.47	1.45	
10200	15.20	1.55	1.57	1.58	1.45	1.54	1.55	1.54	1.57	1.51	1.41	
10200	15.10	1.55	1.57	1.57	1.44	1.54	1.55	1.54	1.59	1.42	1.30	
10200	15.00	1.57	1.59	1.60	1.46	1.53	1.57	1.55	1.46	1.44	1.44	
10200	14.90	1.57	1.59	1.60	1.50	1.45	1.58	1.56	1.45	1.46	1.44	
10200	14.80	1.56	1.58	1.59	1.52	1.44	1.57	1.55	1.44	1.42	1.44	
10200	14.70	1.56	1.58	1.60	1.52	1.46	1.58	1.56	1.45	1.44	1.44	
10200	14.60	1.57	1.59	1.60	1.50	1.44	1.59	1.56	1.44	1.44	1.45	
10200	14.50	1.57	1.59	1.60	1.49	1.43	1.57	1.55	1.44	1.42	1.43	
10200	14.40	1.57	1.59	1.61	1.49	1.44	1.58	1.56	1.44	1.42	1.44	
10200	14.30	1.57	1.59	1.61	1.47	1.43	1.57	1.54	1.42	1.42	1.42	

PACK NO. 52
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK CURRENT VOLTAGE	CELL VOLTAGES										END OF DISCHARGE
		1	2	3	4	5	6	7	8	9	10	
9848.	7.19	1.77	1.22	1.21	1.20	1.22	1.22	1.23	.00	.00	.00	.00
9878.	7.17	1.76	1.22	1.20	1.21	1.21	1.21	1.22	.00	.00	.00	.00
9912.	7.09	1.76	1.20	1.17	1.18	1.21	1.21	1.21	.00	.00	.00	.00
9935.	7.18	1.76	1.22	1.21	1.21	1.21	1.21	1.22	.00	.00	.00	.00
10006.	6.99	1.84	1.20	1.12	1.19	1.20	1.20	1.20	.00	.00	.00	.00
10044.	7.12	1.76	1.21	1.19	1.20	1.21	1.21	1.22	.00	.00	.00	.00
10069.	6.97	1.77	1.20	1.08	1.18	1.21	1.21	1.21	.00	.00	.00	.00
10102.	6.98	1.75	1.21	1.09	1.17	1.20	1.21	1.21	.00	.00	.00	.00
10128.	7.07	1.76	1.21	1.23	1.20	1.23	1.24	1.23	.00	.00	.00	.00
10172.	7.10	1.75	1.19	1.23	1.17	1.20	1.21	1.20	.00	.00	.00	.00
10196.	7.13	1.75	1.23	1.25	1.24	1.23	1.24	1.23	.00	.00	.00	.00
10230.	7.19	1.76	1.20	1.21	1.20	1.19	1.21	1.20	.00	.00	.00	.00
9848.	9.27	1.00	1.61	1.49	1.53	1.61	1.57	1.59	.00	.00	.00	.00
9878.	9.30	.59	1.59	1.46	1.56	1.60	1.55	1.57	.00	.00	.00	.00
9912.	9.69	1.00	1.69	1.48	1.50	1.69	1.61	1.62	.00	.00	.00	.00
9935.	9.66	1.00	1.64	1.48	1.60	1.64	1.59	1.62	.00	.00	.00	.00
10006.	9.41	1.02	1.65	1.45	1.53	1.67	1.61	1.63	.00	.00	.00	.00
10044.	9.48	1.01	1.63	1.48	1.59	1.66	1.62	1.64	.00	.00	.00	.00
10069.	9.12	.68	1.56	1.45	1.47	1.62	1.58	1.59	.00	.00	.00	.00
10102.	9.19	.63	1.59	1.47	1.47	1.63	1.59	1.59	.00	.00	.00	.00
10128.	9.15	.63	1.54	1.49	1.47	1.62	1.58	1.59	.00	.00	.00	.00
10172.	9.22	.76	1.54	1.51	1.48	1.63	1.59	1.60	.00	.00	.00	.00
10196.	9.29	.66	1.56	1.54	1.52	1.63	1.59	1.60	.00	.00	.00	.00
10230.	9.35	.67	1.58	1.49	1.54	1.61	1.59	1.59	.00	.00	.00	.00

PACK NO. 55
GOULD 3.5 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										
			1	2	3	4	5	6	7	8	9	10	
4986.	12.41	1.06	1.26	1.26	1.27	1.26	1.26	1.25	1.26	1.25	1.26	1.26	END OF DISCHARGE
5052.	12.35	1.04	1.27	1.27	1.27	1.27	1.27	1.26	1.26	1.25	1.27	1.27	
5082.	12.26	1.12	1.25	1.24	1.25	1.24	1.24	1.23	1.23	1.23	1.24	1.24	
5116.	12.32	1.07	1.25	1.25	1.26	1.24	1.24	1.24	1.24	1.24	1.24	1.24	
5145.	12.35	1.07	1.24	1.23	1.24	1.23	1.23	1.22	1.22	1.22	1.23	1.23	
4986.	15.27	.24	1.54	1.55	1.55	1.55	1.54	1.53	1.53	1.53	1.53	1.52	END OF CHARGE
5052.	14.95	.25	1.52	1.52	1.52	1.53	1.52	1.51	1.51	1.50	1.53	1.50	
5082.	15.20	.25	1.54	1.55	1.54	1.54	1.54	1.53	1.52	1.53	1.52	1.52	
5116.	15.00	.24	1.52	1.52	1.52	1.53	1.52	1.51	1.50	1.51	1.51	1.50	
5145.	14.79	.11	1.49	1.47	1.47	1.49	1.49	1.47	1.47	1.46	1.46	1.45	

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PACK NO. 56
 GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
 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	
4961.	11.96	1.77	1.22	1.22	1.22	1.23	1.22	1.21	1.22	1.21	1.22	1.21	1.21
4992.	12.08	1.77	1.21	1.21	1.22	1.22	1.21	1.20	1.21	1.21	1.20	1.21	1.21
5024.	11.94	1.77	1.22	1.22	1.23	1.24	1.24	1.22	1.22	1.22	1.23	1.24	1.24
5052.	11.99	1.77	1.22	1.22	1.24	1.24	1.24	1.22	1.22	1.22	1.23	1.24	1.24
5087.	11.96	1.76	1.22	1.23	1.23	1.24	1.24	1.22	1.22	1.22	1.22	1.22	1.24
5122.	12.09	1.74	1.21	1.20	1.21	1.21	1.21	1.20	1.20	1.20	1.20	1.20	1.20
.40													
4961.	15.72	.33	1.55	1.56	1.62	1.69	1.59	1.58	1.62	1.55	1.59	1.58	END OF CHARGE
4992.	15.50	.32	1.53	1.54	1.54	1.57	1.53	1.53	1.54	1.53	1.52	1.52	
5024.	15.40	.32	1.55	1.56	1.56	1.61	1.56	1.56	1.56	1.54	1.57	1.56	
5052.	15.38	.31	1.56	1.56	1.56	1.60	1.57	1.56	1.56	1.55	1.56	1.56	
5087.	15.22	.29	1.55	1.56	1.51	1.58	1.56	1.55	1.54	1.54	1.55	1.55	
5122.	15.41	.30	1.54	1.54	1.52	1.56	1.55	1.54	1.53	1.53	1.53	1.53	

TEST NO. 46
 DATE 11-5-54

DEPTH OF DISCHARGE 15
 PERCENT OF RECHARGE 115
 TEST TEMPERATURE 0 C
 ORBIT PERIOD 90 MIN.

TIME PACK CURRENT
 NO. VOLTAGE 1.50

		CELL VOLTAGES										END OF DISCHARGE
		1	2	3	4	5	6	7	8	9	10	
9982.	10.99	1.50	1.24	1.25	1.23	1.23	1.25	1.26	1.25	.00	1.25	
9983.	10.93	1.48	1.23	1.21	1.22	1.22	1.24	1.25	1.25	.00	1.24	
1027.	11.00	1.50	1.23	1.19	1.22	1.22	1.24	1.25	1.25	.00	1.24	
1059.	10.84	1.50	1.23	1.10	1.23	1.23	1.25	1.25	1.25	.00	1.25	
1075.	9.78	1.49	1.24	.01	1.22	1.23	1.25	1.25	1.25	.00	1.24	
1095.	10.63	1.52	1.23	.89	1.23	1.23	1.24	1.25	1.25	.00	1.25	
1107.	9.67	1.52	1.24	.03	1.24	1.24	1.25	1.26	1.25	.00	1.27	
1123.	9.49	1.50	1.23	.27	1.23	1.23	1.24	1.25	1.25	.00	1.24	
1143.	9.68	1.50	1.24	.03	1.24	1.24	1.26	1.26	1.25	.00	1.27	
1171.	9.77	1.52	1.21	.00	1.21	1.22	1.22	1.23	1.23	.00	1.23	

												END OF CHARGE
		1	2	3	4	5	6	7	8	9	10	
9982.	14.14	.86	1.57	1.61	1.61	1.57	1.58	1.59	1.58	.00	1.57	
9983.	14.04	.77	1.56	1.47	1.60	1.57	1.56	1.58	1.58	.00	1.57	
1027.	14.13	.86	1.59	1.39	1.55	1.52	1.66	1.57	1.58	.00	1.58	
1059.	13.96	.55	1.57	1.41	1.60	1.55	1.61	1.59	1.60	.00	1.58	
1075.	13.05	.88	1.64	.02	1.70	1.65	1.67	1.63	1.64	.00	1.65	
1095.	13.90	.61	1.57	1.41	1.61	1.57	1.60	1.59	1.59	.00	1.58	
1107.	12.32	.52	1.56	.02	1.57	1.54	1.59	1.56	1.57	.00	1.56	
1123.	13.87	.72	1.56	1.35	1.61	1.56	1.58	1.59	1.59	.00	1.57	
1143.	12.60	.62	1.57	.02	1.62	1.57	1.63	1.59	1.60	.00	1.60	
1171.	12.63	.67	1.56	.00	1.59	1.56	1.59	1.57	1.58	.00	1.56	

BATTERY NO. 50
 MONITORING IS A.H.
 DEPTH OF DISCHARGE 25
 PERCENT OF RECHARGE 115
 TEST TEMPERATURE C
 ORBIT PERIOD 90 MIN.

CYCLE NO.	BATTERY VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
9901.	11.56	2.49	1.12	1.20	1.16	1.13	1.14	1.20	1.20	1.19	1.22	1.19	
9946.	11.55	2.49	1.11	1.19	1.17	1.12	1.14	1.19	1.19	1.19	1.19	1.18	
9993.	11.61	2.54	1.12	1.19	1.17	1.13	1.13	1.19	1.20	1.19	1.22	1.17	
10060.	11.48	2.52	1.11	1.19	1.16	1.13	1.14	1.20	1.19	1.19	1.21	1.19	
10088.	11.49	2.54	1.11	1.20	1.17	1.13	1.14	1.20	1.20	1.19	1.20	1.19	
10123.	11.59	2.54	1.12	1.20	1.17	1.13	1.14	1.20	1.20	1.20	1.20	1.19	
10155.	11.59	2.48	1.14	1.21	1.20	1.16	1.17	1.22	1.21	1.21	1.22	1.22	
10186.	11.64	2.47	1.15	1.22	1.20	1.17	1.18	1.20	1.22	1.22	1.23	1.23	
10220.	11.63	2.47	1.13	1.20	1.18	1.14	1.15	1.20	1.20	1.20	1.20	1.19	
10254.	11.69	2.48	1.16	1.21	1.20	1.18	1.18	1.22	1.22	1.22	1.22	1.23	
10284.	11.75	2.48	1.13	1.19	1.17	1.14	1.15	1.19	1.19	1.19	1.19	1.18	
9901.	15.40	1.44	1.55	1.51	1.56	1.55	1.55	1.56	1.50	1.55	1.55	1.70	END OF CHARGE
9946.	15.40	.71	1.55	1.51	1.56	1.55	1.56	1.55	1.50	1.55	1.51	1.69	
9993.	15.33	.58	1.53	1.46	1.54	1.53	1.51	1.51	1.47	1.53	1.54	1.63	
10060.	15.23	.66	1.54	1.48	1.55	1.54	1.54	1.53	1.47	1.54	1.53	1.67	
10088.	15.52	.81	1.58	1.51	1.59	1.58	1.58	1.58	1.50	1.61	1.53	1.71	
10123.	15.56	.80	1.56	1.52	1.57	1.57	1.57	1.58	1.51	1.60	1.52	1.70	
10155.	15.55	.77	1.57	1.52	1.60	1.59	1.59	1.59	1.51	1.60	1.53	1.72	
10186.	15.63	.81	1.57	1.53	1.58	1.58	1.59	1.59	1.52	1.60	1.54	1.72	
10220.	15.56	.81	1.56	1.52	1.57	1.57	1.57	1.57	1.51	1.58	1.52	1.70	
10254.	15.84	.93	1.60	1.54	1.61	1.62	1.62	1.62	1.54	1.65	1.56	1.75	
10284.	15.49	.73	1.54	1.51	1.54	1.55	1.56	1.55	1.50	1.55	1.51	1.64	

PACK NO. 1
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES					END OF				
			1	2	3	4	5	6	7	8	9	10
9564.	7.97	2.52	.00	1.21	1.16	.00	1.07	.00	1.19	1.18	1.16	1.16
9642.	7.89	2.52	.00	1.21	1.16	.00	1.04	.00	1.18	1.17	1.15	1.12
9674.	7.83	2.51	.00	1.20	1.15	.00	1.03	.00	1.17	1.16	1.13	1.11
9705.	7.87	2.52	.00	1.20	1.14	.00	1.02	.00	1.17	1.16	1.14	1.10
9738.	7.89	2.52	.00	1.20	1.15	.00	1.04	.00	1.17	1.16	1.13	1.11
9770.	7.59	2.49	.00	1.18	1.11	.00	.98	.00	1.16	1.14	1.12	1.05
9806.	7.86	2.52	.00	1.20	1.14	.00	1.03	.00	1.18	1.17	1.15	1.15
9833.	7.79	2.52	.00	1.19	1.13	.00	1.00	.00	1.17	1.15	1.13	1.12
9856.	7.76	2.51	.00	1.20	1.13	.00	1.00	.00	1.17	1.16	1.14	1.13
9898.	7.74	2.49	.00	1.19	1.12	.00	1.00	.00	1.16	1.15	1.12	1.11
9966.	7.66	2.49	.00	1.20	1.14	.00	1.01	.00	1.18	1.16	1.12	1.12
9994.	7.74	2.51	.00	1.17	1.10	.00	.98	.00	1.15	1.13	1.10	1.09
9564.	10.78	1.56	.00	1.50	1.52	.00	1.59	.00	1.59	1.55	1.57	1.51
9542.	10.78	1.55	.00	1.49	1.52	.00	1.58	.00	1.59	1.55	1.57	1.51
9674.	10.74	1.56	.00	1.49	1.52	.00	1.59	.00	1.59	1.55	1.56	1.51
9705.	10.82	1.55	.00	1.48	1.50	.00	1.56	.00	1.58	1.53	1.60	1.48
9738.	10.75	1.38	.00	1.47	1.50	.00	1.55	.00	1.57	1.52	1.51	1.48
9770.	10.45	.73	.00	1.46	1.48	.00	1.54	.00	1.58	1.52	1.55	1.46
9806.	10.49	.80	.00	1.47	1.49	.00	1.55	.00	1.58	1.54	1.54	1.49
9833.	10.53	.83	.00	1.46	1.48	.00	1.54	.00	1.58	1.53	1.53	1.49
9856.	10.51	.82	.00	1.47	1.48	.00	1.55	.00	1.58	1.53	1.54	1.49
9898.	10.48	.80	.00	1.47	1.49	.00	1.55	.00	1.58	1.53	1.54	1.49
9966.	10.48	.79	.00	1.46	1.49	.00	1.55	.00	1.58	1.53	1.54	1.48
9994.	10.57	.80	.00	1.45	1.47	.00	1.55	.00	1.56	1.51	1.52	1.47

PACK NO. 25
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
PERCENT OF RECHARGE 160 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES									
			1	2	3	4	5	6	7	8	9	10
9180.	6.22	1.48	.00	1.08	.00	.00	.00	.69	1.17	1.15	1.14	1.11
9220.	5.71	1.47	.00	1.04	.00	.00	.00	.45	1.15	1.13	1.11	.92
9235.	5.21	1.46	.00	.99	.00	.00	.00	.00	1.22	1.17	1.15	.75
1.20												
9180.	8.82	.57	.00	1.47	.00	.00	.00	.00	1.45	1.44	1.48	1.47
9220.	8.79	.52	.00	1.46	.00	.00	.00	.00	1.45	1.44	1.49	1.45
9235.	7.38	1.20	.00	1.44	.00	.00	.00	.00	.00	1.52	1.51	1.58
												1.43

END OF
DISCHARGE

END OF
CHARGE

DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
 PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CELL VOLTAGES	CURRENT									
	1	2	3	4	5	6	7	8	9	10
4890.	1.22	1.23	1.25	1.25	1.25	1.24	1.24	1.23	1.25	1.22
4912.	1.23	1.24	1.26	1.27	1.27	1.25	1.25	1.24	1.27	1.24
4940.	1.23	1.24	1.26	1.27	1.27	1.26	1.26	1.25	1.27	1.25
4975.	1.18	1.19	1.22	1.24	1.24	1.22	1.22	1.21	1.23	1.21
5000.	1.23	1.24	1.25	1.26	1.26	1.25	1.25	1.24	1.25	1.18
5035.	1.53	1.55	1.59	1.62	1.58	1.51	1.63	1.65	1.60	1.59
5012.	1.56	1.56	1.58	1.63	1.59	1.52	1.64	1.66	1.61	1.44
4940.	1.54	1.56	1.58	1.63	1.58	1.52	1.62	1.67	1.60	1.53
4975.	1.39	1.38	1.38	1.38	1.37	1.37	1.36	1.36	1.36	1.36
5009.	1.49	1.48	1.46	1.45	1.46	1.46	1.45	1.46	1.43	1.37
5035.	1.35									
4890.	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
4912.	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
4940.	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
4975.	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
5009.	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40

END OF DISCHARGE

END OF CHARGE

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										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
4854.	11.59	2.51	1.20	1.17	1.08	1.19	1.22	1.21	1.19	1.19	1.21	1.22	1.22
4936.	11.58	2.52	1.21	1.19	1.07	1.20	1.24	1.22	1.20	1.21	1.22	1.24	1.24
4969.	11.54	2.49	1.18	1.16	1.03	1.16	1.21	1.19	1.18	1.19	1.20	1.20	1.20
4999.	11.74	2.55	1.20	1.18	1.09	1.18	1.22	1.20	1.19	1.20	1.21	1.21	1.21
5033.	11.71	2.54	1.19	1.16	1.04	1.16	1.21	1.19	1.18	1.18	1.19	1.19	1.19
.58													
4854.	15.55	.54	1.54	1.53	1.55	1.54	1.55	1.59	1.61	1.64	1.53	1.52	END OF CHARGE
4936.	15.44	.28	1.51	1.55	1.58	1.52	1.53	1.62	1.68	1.67	1.53	1.50	
4969.	16.04	.52	1.56	1.59	1.66	1.57	1.60	1.67	1.72	1.71	1.57	1.55	
4999.	15.78	.55	1.56	1.57	1.60	1.57	1.57	1.64	1.69	1.65	1.55	1.54	
5033.	15.79	.52	1.54	1.53	1.55	1.54	1.56	1.60	1.67	1.66	1.54	1.52	

PACK NO. 5
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
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	
4756.	10.10	2.50	1.17	.00	1.00	1.17	1.18	1.17	1.18	1.16	1.17	1.17	1.17
4787.	10.07	2.52	1.15	.00	.98	1.14	1.16	1.15	1.16	1.14	1.15	1.13	1.13
4824.	10.29	2.50	1.19	.00	1.08	1.20	1.19	1.20	1.20	1.19	1.20	1.20	1.20
4859.	10.17	2.49	1.19	.00	1.04	1.19	1.19	1.19	1.19	1.18	1.19	1.19	1.19
4893.	10.23	2.50	1.16	.00	.99	1.15	1.17	1.15	1.16	1.15	1.15	1.14	1.14
		.62											
4756.	12.90	.60	1.43	.00	1.45	1.44	1.43	1.44	1.43	1.43	1.48	1.42	1.42
4787.	12.93	.61	1.42	.00	1.44	1.42	1.41	1.42	1.42	1.41	1.41	1.40	1.40
4824.	12.77	.62	1.44	.00	1.46	1.45	1.44	1.44	1.44	1.43	1.44	1.44	1.44
4859.	12.79	.62	1.44	.00	1.47	1.45	1.45	1.45	1.44	1.44	1.44	1.45	1.45
4893.	12.92	.62	1.43	.00	1.44	1.44	1.44	1.43	1.42	1.42	1.42	1.42	1.42

DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C
 PERCENT OF RECHARGE 125 ORBIT PERIOD 3 HOURS

CELL VOLTAGES											
1	2	3	4	5	6	7	8	9	10		
4590.	1.11	1.07	1.14	.00	1.15	1.11	.00	.00	.00	END OF	DISCHARGE
4715.	1.12	1.09	1.14	.00	1.15	1.09	.00	.00	.00	.00	.00
4775.	1.14	1.11	1.16	.00	1.17	1.09	.00	.00	.00	.00	.00
4811.	1.11	1.06	1.12	.00	1.14	1.02	.00	.00	.00	.00	.00
4870.	1.12	1.09	1.13	.00	1.15	1.10	.00	.00	.00	.00	.00
1.00											
4590.	1.58	1.43	1.58	.00	1.63	1.64	.00	.00	.00	END OF	CHARGE
4715.	1.58	1.43	1.60	.00	1.64	1.64	.00	.00	.00	.00	.00
4775.	1.58	1.43	1.56	.00	1.60	1.62	.00	.00	.00	.00	.00
4811.	1.59	1.44	1.59	.00	1.63	1.62	.00	.00	.00	.00	.00
4875.	1.53	1.42	1.59	.00	1.64	1.63	.00	.00	.00	.00	.00

DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
 PERCENT OF RECHARGE 160 ORBIT PERIOD 3 HOURS

		CELL VOLTAGES										END OF DISCHARGE
		1	2	3	4	5	6	7	8	9	10	
1	1.33	.00	1.19	1.19	1.09	1.19	.94	.75	.00	1.08	1.20	
2	1.41	.00	1.18	1.18	1.08	1.17	1.10	.71	.00	1.06	1.18	
3	1.26	.00	1.20	1.19	1.09	1.21	.64	.29	.00	1.05	1.21	
4	1.33	.00	1.24	1.24	1.26	1.22	1.01	.02	.00	1.10	1.23	
5	1.48	.00	1.42	1.39	1.40	1.43	1.40	1.39	.00	1.48	1.41	END OF CHARGE
6	1.46	.00	1.40	1.38	1.38	1.41	1.38	1.37	.00	1.41	1.38	
7	1.47	.00	1.42	1.40	1.41	1.46	1.41	1.39	.00	1.44	1.42	
8	1.47	.00	1.42	1.40	1.42	1.47	1.40	.00	.00	1.42	1.43	

CHARGE 15
CHARGE 115

1
2
3
4
5
6
7

DATE	TIME	1	2	3	4	5	6	7	8	9	10
1947	11:00	1.01	1.24	1.01	1.00	1.00	1.22	1.22	1.23	1.24	1.00
1947	11:05	1.06	1.22	1.06	1.00	1.00	1.20	1.24	1.24	1.22	1.00
1947	11:10	1.07	1.22	1.07	1.00	1.00	1.21	1.22	1.23	1.23	1.00
1947	11:15	1.05	1.22	1.05	1.00	1.00	1.22	1.23	1.23	1.25	1.00
1947	11:20	1.02	1.24	1.02	1.00	1.00	1.22	1.23	1.24	1.24	1.00
1947	11:25	1.01	1.23	1.01	1.00	1.00	1.21	1.22	1.23	1.23	1.00
1947	11:30	1.00	1.23	1.00	1.00	1.00	1.21	1.23	1.24	1.24	1.00
1947	11:35	1.00	1.23	1.00	1.00	1.00	1.21	1.22	1.23	1.23	1.00
1947	11:40	1.00	1.25	1.00	1.00	1.00	1.23	1.24	1.25	1.25	1.00
1947	11:45	1.08	1.25	1.08	1.00	1.00	1.22	1.24	1.24	1.24	1.00
1947	11:50	1.08	1.22	1.08	1.00	1.00	1.20	1.22	1.22	1.22	1.00
1947	12:00	1.04	1.64	1.62	1.00	1.00	1.57	1.55	1.55	1.69	1.00
1947	12:05	1.55	1.52	1.55	1.00	1.00	1.52	1.50	1.50	1.60	1.00
1947	12:10	1.51	1.49	1.54	1.00	1.00	1.49	1.47	1.47	1.63	1.00
1947	12:15	1.54	1.46	1.55	1.00	1.00	1.51	1.49	1.49	1.70	1.00
1947	12:20	1.53	1.52	1.53	1.00	1.00	1.51	1.50	1.50	1.67	1.00
1947	12:25	1.53	1.52	1.53	1.00	1.00	1.52	1.50	1.50	1.65	1.00
1947	12:30	1.53	1.52	1.53	1.00	1.00	1.51	1.50	1.50	1.66	1.00
1947	12:35	1.54	1.53	1.54	1.00	1.00	1.52	1.51	1.51	1.64	1.00
1947	12:40	1.53	1.53	1.53	1.00	1.00	1.52	1.51	1.51	1.65	1.00
1947	12:45	1.60	1.56	1.60	1.00	1.00	1.55	1.53	1.53	1.66	1.00
1947	12:50	1.57	1.50	1.57	1.00	1.00	1.54	1.52	1.52	1.66	1.00

PAGE NO. 62
AUGUST 6 A.M.

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
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	
9470.	7.03	3.01	1.21	1.19	1.18	.00	.00	1.17	.00	1.19	1.21	.00	
9515.	7.01	3.01	1.21	1.18	1.18	.00	.00	1.16	.00	1.19	1.20	.00	
9562.	7.10	3.03	1.21	1.20	1.19	.00	.00	1.18	.00	1.20	1.21	.00	
9629.	7.05	3.01	1.21	1.20	1.19	.00	.00	1.18	.00	1.20	1.20	.00	
9657.	7.04	3.03	1.21	1.20	1.19	.00	.00	1.18	.00	1.20	1.20	.00	
9692.	6.99	3.04	1.20	1.19	1.18	.00	.00	1.16	.00	1.19	1.19	.00	
9724.	6.97	3.02	1.22	1.20	1.21	.00	.00	1.19	.00	1.21	1.22	.00	
9755.	6.99	3.01	1.22	1.21	1.21	.00	.00	1.19	.00	1.21	1.22	.00	
9789.	7.00	3.01	1.20	1.19	1.18	.00	.00	1.16	.00	1.19	1.19	.00	
9823.	7.00	3.01	1.23	1.20	1.21	.00	.00	1.19	.00	1.21	1.21	.00	
9853.	7.05	3.02	1.20	1.18	1.17	.00	.00	1.16	.00	1.18	1.19	.00	
1.72													
9470.	9.51	.91	1.60	1.67	1.56	.00	.00	1.69	.00	1.55	1.56	.00	END OF CHARGE
9515.	9.48	.94	1.57	1.65	1.54	.00	.00	1.68	.00	1.54	1.52	.00	
9562.	9.56	1.10	1.56	1.61	1.55	.00	.00	1.67	.00	1.53	1.59	.00	
9629.	9.46	.90	1.58	1.65	1.56	.00	.00	1.69	.00	1.54	1.56	.00	
9657.	9.36	.86	1.56	1.64	1.56	.00	.00	1.67	.00	1.54	1.53	.00	
9692.	9.50	.84	1.57	1.64	1.56	.00	.00	1.66	.00	1.54	1.52	.00	
9724.	9.40	.96	1.56	1.67	1.56	.00	.00	1.68	.00	1.54	1.52	.00	
9755.	9.40	.84	1.57	1.66	1.56	.00	.00	1.68	.00	1.55	1.53	.00	
9789.	9.41	.91	1.57	1.66	1.56	.00	.00	1.67	.00	1.54	1.52	.00	
9823.	9.40	1.01	1.58	1.64	1.57	.00	.00	1.64	.00	1.55	1.55	.00	
9853.	9.40	.89	1.57	1.61	1.55	.00	.00	1.65	.00	1.55	1.53	.00	

DATE: 10-10-60
 TIME: 5:00 P.M.
 DEPTH OF DISCHARGE 15
 PERCENT OF RECHARGE 115
 TEST TEMPERATURE 0 C
 ORBIT PERIOD 3 HOURS

CYCLE	BACK CURRENT	CELL VOLTAGES										END OF DISCHARGE
		1	2	3	4	5	6	7	8	9	10	
NO. 1	VOLTAGE 1.80	1.24	1.24	1.24	1.24	1.24	1.04	1.21	1.22	1.24	1.18	
NO. 2	10:30 1.80	1.24	1.24	1.24	1.24	1.24	1.04	1.21	1.22	1.24	1.18	
	.41											
NO. 3	14:04 .41	1.52	1.53	1.52	1.52	1.36	1.32	1.53	1.48	1.48	1.53	END OF CHARGE

PACK NO. 110
3.5. 12 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 1:15

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 3.60

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

9557.	6.09	3.59	1.24	1.24	1.23	1.24	1.23
9625.	6.14	3.55	1.25	1.25	1.26	1.25	1.25
9667.	6.10	3.57	1.24	1.23	1.24	1.23	1.24
9698.	6.14	3.56	1.24	1.24	1.25	1.24	1.23
9731.	6.14	3.57	1.24	1.24	1.25	1.24	1.23
9763.	6.10	3.59	1.26	1.26	1.27	1.27	1.26
9800.	6.23	3.59	1.27	1.27	1.27	1.27	1.27
9842.	6.16	3.58	1.25	1.25	1.26	1.25	1.25
9874.	6.10	3.56	1.27	1.27	1.27	1.28	1.27
9910.	6.10	3.55	1.27	1.26	1.27	1.28	1.27
9938.	6.18	3.58	1.24	1.24	1.24	1.24	1.23

END OF
CHARGE

9557.	7.69	2.07	1.59	1.59	1.50	1.53	1.45
9635.	7.88	1.40	1.61	1.60	1.55	1.58	1.50
9667.	7.86	1.43	1.63	1.60	1.54	1.61	1.52
9698.	7.83	1.68	1.58	1.58	1.56	1.62	1.48
9731.	7.81	1.70	1.57	1.57	1.54	1.55	1.50
9763.	7.81	1.84	1.61	1.60	1.54	1.60	1.51
9800.	7.78	1.02	1.61	1.60	1.53	1.61	1.51
9842.	7.70	1.11	1.59	1.60	1.55	1.59	1.49
9874.	7.62	1.14	1.60	1.60	1.54	1.58	1.48
9910.	7.70	1.16	1.60	1.59	1.53	1.58	1.49
9938.	7.78	1.17	1.59	1.58	1.52	1.57	1.47

CYCLE NO. 124
5.0. 10 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO. 124
5.0. 10 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

END OF
DISCHARGE

END OF
CHARGE

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
9402.	5.96	5.93	1.23	1.22	1.16	1.23	1.23	
9434.	5.90	5.96	1.21	1.20	1.17	1.21	1.20	
9465.	5.92	5.94	1.20	1.20	1.15	1.20	1.19	
9498.	5.89	5.95	1.20	1.20	1.16	1.20	1.19	
9530.	5.91	5.97	1.22	1.21	1.15	1.22	1.22	
9567.	5.96	5.99	1.22	1.22	1.16	1.23	1.22	
9599.	5.90	5.95	1.21	1.21	1.15	1.21	1.20	
9641.	5.96	5.92	1.23	1.22	1.16	1.22	1.23	
9677.	5.94	5.91	1.22	1.22	1.16	1.19	1.23	
9402.	7.75	3.45	1.57	1.50	1.62	1.51	1.58	END OF CHARGE
9434.	7.80	1.17	1.56	1.50	1.63	1.49	1.60	
9465.	7.88	1.05	1.56	1.50	1.61	1.48	1.54	
9498.	7.88	1.18	1.55	1.49	1.61	1.47	1.54	
9530.	7.68	1.20	1.57	1.50	1.62	1.49	1.57	
9567.	7.78	1.26	1.58	1.53	1.63	1.52	1.57	
9599.	7.74	1.41	1.58	1.53	1.62	1.52	1.57	
9641.	7.74	1.27	1.58	1.52	1.62	1.51	1.59	
9677.	7.74	1.21	1.58	1.52	1.62	1.51	1.60	

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE	PERCENT OF DISCHARGE
25	125

1950. 12. 22.

NO. 37
PAGE 5.00

CELL VOLTAGES

END OF
DISCHARGE

END OF
CHARGE

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

NO. 85
1.5. 12 A.H.

NO.	BACK CURRENT VOLTAGE 3.60	CELL VOLTAGES					END OF DISCHARGE
		1	2	3	4	5	
0200.	3.37	1.18	1.09	.00	.00	1.16	
0253.	3.45	1.17	1.17	.00	.00	1.17	
0278.	3.70	1.24	1.27	.00	.00	1.24	
0315.	3.57	1.20	1.21	.00	.00	1.20	
0340.	3.51	1.19	1.19	.00	.00	1.18	
0377.	3.48	1.19	1.16	.00	.00	1.18	
0305.	3.51	1.19	1.17	.00	.00	1.19	
0427.	3.48	1.20	1.16	.00	.00	1.19	
0455.	3.50	1.18	1.19	.00	.00	1.17	
0401.	3.46	1.18	1.15	.00	.00	1.19	
0510.	3.27	1.20	1.17	.00	.00	1.21	
0555.	3.44	1.18	1.15	.00	.00	1.16	
0507.	3.33	1.19	1.16	.00	.00	1.18	
0513.	3.45	1.19	1.11	.00	.00	1.17	
0200.	2.88						END OF CHARGE
0253.	4.20	1.43	1.42	.00	.00	1.42	
0278.	4.27	1.41	1.42	.00	.00	1.40	
0315.	4.43	1.48	1.51	.00	.00	1.45	
0340.	4.32	1.46	1.44	.00	.00	1.45	
0377.	4.40	1.45	1.42	.00	.00	1.41	
0305.	4.26	1.43	1.40	.00	.00	1.41	
0427.	4.28	1.46	1.42	.00	.00	1.45	
0455.	4.31	1.47	1.45	.00	.00	1.45	
0401.	4.20	1.46	1.44	.00	.00	1.45	
0510.	4.27	1.46	1.42	.00	.00	1.45	
0555.	4.30	1.46	1.44	.00	.00	1.45	
0507.	4.28	1.46	1.43	.00	.00	1.44	
0513.	4.23	1.44	1.42	.00	.00	1.42	
0619.	4.30	1.46	1.41	.00	.00	1.44	

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

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

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0
ORBIT PERIOD 3 HOURS

| CYCLE
NO. | PACK
VOLTAGE | CURRENT | CELL VOLTAGES | | | | |
|--------------|-----------------|---------|---------------|------|------|------|------|
| | | | 1 | 2 | 3 | 4 | 5 |
| 4790. | 5.93 | 5.98 | 1.20 | 1.20 | 1.20 | 1.21 | 1.20 |
| 4825. | 5.93 | 5.89 | 1.21 | 1.21 | 1.21 | 1.22 | 1.21 |
| 4898. | 5.99 | 6.01 | 1.21 | 1.21 | 1.21 | 1.22 | 1.21 |
| 4964. | 6.01 | 6.00 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 |
| 1.38 | | | | | | | |
| 4790. | 7.65 | .37 | 1.59 | 1.55 | 1.58 | 1.50 | 1.48 |
| 4825. | 7.75 | .41 | 1.58 | 1.57 | 1.58 | 1.50 | 1.47 |
| 4898. | 7.67 | .84 | 1.53 | 1.56 | 1.56 | 1.55 | 1.56 |
| 4964. | 7.74 | .48 | 1.58 | 1.56 | 1.59 | 1.51 | 1.40 |

PAGE 02
OF 02

PAGE 03
OF 03

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

| CELL NO. | CURRENT | CELL VOLTAGES | | | | END OF DISCHARGE |
|----------|---------|---------------|------|------|------|------------------|
| | | 1 | 2 | 3 | 4 | |
| 4850. | 5.60 | 1.15 | 1.14 | 1.14 | 1.15 | 1.11 |
| 4851. | 5.95 | 1.16 | 1.16 | 1.16 | 1.17 | 1.14 |
| 4852. | 5.95 | 1.14 | 1.14 | 1.16 | 1.15 | 1.14 |
| 4853. | 5.90 | 1.15 | 1.15 | 1.15 | 1.15 | 1.14 |
| 4854. | 5.90 | 1.44 | 1.43 | 1.43 | 1.43 | 1.41 |
| 4855. | 5.90 | 1.44 | 1.43 | 1.43 | 1.47 | 1.41 |
| 4856. | 5.91 | 1.45 | 1.44 | 1.45 | 1.45 | 1.43 |
| 4857. | 5.90 | 1.44 | 1.42 | 1.43 | 1.43 | 1.43 |

PACK NO. 86
G.E. 12 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 °
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE CURRENT

CFLV VOLTAGES

| | 1 | 2 | 3 | 4 | 5 |
|-------|------|------|------|------|------|
| 4659. | 5.37 | 3.61 | 1.17 | 1.14 | 1.16 |
| 4690. | 5.64 | 3.61 | 1.15 | 1.12 | 1.13 |
| 4725. | 5.48 | 3.61 | 1.17 | 1.15 | 1.16 |
| 4755. | 5.31 | 3.58 | 1.15 | 1.12 | 1.13 |
| 4790. | 5.66 | 3.62 | 1.16 | 1.14 | 1.15 |
| 4819. | 5.74 | 3.63 | 1.17 | 1.15 | 1.16 |

| | | | | | |
|-------|------|------|------|------|------|
| 4659. | 7.03 | 1.17 | 1.41 | 1.40 | 1.41 |
| 4690. | 7.04 | 1.17 | 1.41 | 1.41 | 1.41 |
| 4725. | 6.96 | 1.16 | 1.41 | 1.41 | 1.41 |
| 4755. | 7.04 | 1.16 | 1.42 | 1.42 | 1.43 |
| 4790. | 6.99 | 1.16 | 1.42 | 1.41 | 1.43 |
| 4819. | 7.09 | 1.15 | 1.42 | 1.41 | 1.42 |

END OF
CHARGE

PACK NO. 84
GOULD 20 A.H.

DEPTH OF DISCHARGE 1%
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 6.00

CELL VOLTAGES
1 2 3 4 5

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 9503. | 6.03 | 6.09 | 1.24 | 1.23 | 1.23 | 1.23 | 1.21 |
| 9548. | 6.03 | 6.03 | 1.24 | 1.22 | 1.23 | 1.23 | 1.21 |
| 9582. | 6.20 | 6.00 | 1.27 | 1.26 | 1.26 | 1.26 | 1.25 |
| 9662. | 5.94 | 5.81 | 1.22 | 1.22 | 1.20 | 1.21 | 1.19 |
| 9690. | 5.95 | 5.98 | 1.22 | 1.22 | 1.20 | 1.22 | 1.20 |
| 9725. | 6.18 | 6.04 | 1.26 | 1.26 | 1.25 | 1.25 | 1.24 |
| 9788. | 6.24 | 5.91 | 1.28 | 1.27 | 1.26 | 1.27 | 1.27 |
| 9821. | 6.20 | 5.89 | 1.27 | 1.26 | 1.25 | 1.25 | 1.25 |
| 9855. | 6.25 | 5.98 | 1.28 | 1.27 | 1.26 | 1.24 | 1.28 |
| 9885. | 6.20 | 6.05 | 1.25 | 1.25 | 1.24 | 1.24 | 1.22 |

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 9503. | 7.55 | 3.45 | 1.51 | 1.55 | 1.53 | 1.53 | 1.53 |
| 9548. | 7.90 | 2.38 | 1.55 | 1.61 | 1.59 | 1.55 | 1.57 |
| 9582. | 7.82 | 3.15 | 1.57 | 1.57 | 1.60 | 1.56 | 1.56 |
| 9662. | 7.15 | 2.74 | 1.44 | 1.45 | 1.44 | 1.44 | 1.45 |
| 9690. | 7.38 | 2.25 | 1.50 | 1.50 | 1.49 | 1.47 | 1.49 |
| 9725. | 7.53 | 3.28 | 1.53 | 1.55 | 1.52 | 1.50 | 1.52 |
| 9788. | 7.60 | 2.36 | 1.54 | 1.55 | 1.54 | 1.51 | 1.54 |
| 9821. | 7.65 | 2.64 | 1.54 | 1.56 | 1.55 | 1.53 | 1.55 |
| 9855. | 7.65 | 2.31 | 1.54 | 1.55 | 1.54 | 1.53 | 1.55 |
| 9885. | 7.68 | 2.39 | 1.53 | 1.55 | 1.54 | 1.53 | 1.52 |

END OF
CHARGE

PACK NO. 98
GOULD 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 10.00

CELL VOLTAGES
1 2 3 4 5

| | | | | | | | |
|-------|------|-------|-----|------|------|------|-----|
| 9015. | 3.40 | 10.04 | .00 | 1.20 | 1.12 | 1.13 | .00 |
| 9060. | 3.41 | 9.99 | .00 | 1.20 | 1.12 | 1.13 | .00 |
| 9094. | 3.41 | 9.98 | .00 | 1.20 | 1.12 | 1.13 | .00 |
| 9129. | 3.37 | 10.00 | .00 | 1.19 | 1.12 | 1.12 | .00 |
| 9156. | 3.38 | 9.94 | .00 | 1.20 | 1.13 | 1.12 | .00 |
| 9223. | 3.39 | 9.81 | .00 | 1.20 | 1.13 | 1.13 | .00 |
| 9251. | 3.40 | 9.68 | .00 | 1.20 | 1.14 | 1.14 | .00 |
| 9286. | 3.40 | 9.62 | .00 | 1.19 | 1.12 | 1.12 | .00 |
| 9348. | 3.24 | 9.89 | .00 | 1.21 | 1.11 | 1.13 | .00 |
| 9382. | 3.31 | 9.78 | .00 | 1.19 | 1.07 | 1.10 | .00 |
| 9416. | 3.19 | 9.68 | .00 | 1.20 | 1.07 | 1.13 | .00 |

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|-----|------|------|------|-----|
| 9015. | 4.63 | 5.75 | .00 | 1.54 | 1.56 | 1.58 | .00 |
| 9060. | 4.63 | 2.72 | .00 | 1.52 | 1.54 | 1.55 | .00 |
| 9094. | 4.68 | 2.98 | .00 | 1.54 | 1.56 | 1.58 | .00 |
| 9129. | 4.74 | 2.55 | .00 | 1.53 | 1.56 | 1.61 | .00 |
| 9156. | 4.80 | 2.72 | .00 | 1.53 | 1.55 | 1.57 | .00 |
| 9223. | 4.65 | 2.75 | .00 | 1.54 | 1.56 | 1.57 | .00 |
| 9251. | 4.67 | 2.70 | .00 | 1.56 | 1.57 | 1.59 | .00 |
| 9286. | 4.65 | 2.73 | .00 | 1.55 | 1.57 | 1.58 | .00 |
| 9348. | 4.52 | 2.70 | .00 | 1.51 | 1.51 | 1.55 | .00 |
| 9382. | 4.52 | 2.81 | .00 | 1.52 | 1.49 | 1.56 | .00 |
| 9416. | 4.49 | 3.68 | .00 | 1.50 | 1.48 | 1.56 | .00 |

END OF
CHARGE

PACK NO. 80
GOULD 20 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | CFL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|---------|--------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 4779. | 6.08 | 6.08 | 1.25 | 1.23 | 1.20 | 1.26 | 1.25 | |
| 4810. | 6.13 | 6.11 | 1.25 | 1.23 | 1.20 | 1.26 | 1.24 | |
| 4842. | 6.17 | 6.05 | 1.27 | 1.25 | 1.21 | 1.26 | 1.28 | |
| 4870. | 6.10 | 6.06 | 1.27 | 1.25 | 1.22 | 1.29 | 1.26 | |
| 4907. | 6.09 | 6.08 | 1.27 | 1.26 | 1.23 | 1.29 | 1.26 | |
| 4941. | 6.14 | 6.06 | 1.25 | 1.23 | 1.20 | 1.26 | 1.24 | |
| 4779. | 7.89 | 1.38 | 1.52 | 1.67 | 1.64 | 1.55 | 1.51 | END OF CHARGE |
| 4810. | 7.78 | 1.32 | 1.52 | 1.60 | 1.56 | 1.52 | 1.52 | |
| 4842. | 7.74 | 1.38 | 1.54 | 1.60 | 1.58 | 1.55 | 1.54 | |
| 4870. | 7.70 | 1.38 | 1.55 | 1.60 | 1.58 | 1.56 | 1.52 | |
| 4907. | 7.69 | 1.37 | 1.55 | 1.60 | 1.58 | 1.56 | 1.51 | |
| 4941. | 7.74 | 1.38 | 1.54 | 1.59 | 1.56 | 1.55 | 1.51 | |

PACK NO. 94
GOULD 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT 10.00 | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|---------------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 4661. | 5.89 | 10.25 | 1.22 | 1.19 | 1.17 | 1.19 | 1.20 | |
| 4692. | 5.91 | 10.09 | 1.22 | 1.20 | 1.19 | 1.21 | 1.20 | |
| 4724. | 5.77 | 10.31 | 1.23 | 1.21 | 1.19 | 1.23 | 1.22 | |
| 4752. | 5.97 | 10.21 | 1.24 | 1.21 | 1.19 | 1.21 | 1.23 | |
| 4789. | 5.98 | 10.14 | 1.24 | 1.22 | 1.19 | 1.23 | 1.23 | |
| 4823. | 5.95 | 10.14 | 1.22 | 1.19 | 1.17 | 1.20 | 1.19 | |
| 2.30 | | | | | | | | |
| 4661. | 7.83 | 1.14 | 1.49 | 1.48 | 1.67 | 1.63 | 1.60 | END OF CHARGE |
| 4692. | 7.86 | 1.30 | 1.50 | 1.50 | 1.58 | 1.56 | 1.53 | |
| 4724. | 7.69 | 1.38 | 1.51 | 1.51 | 1.61 | 1.57 | 1.55 | |
| 4752. | 7.69 | 1.26 | 1.51 | 1.51 | 1.60 | 1.57 | 1.57 | |
| 4789. | 7.74 | 1.31 | 1.52 | 1.52 | 1.61 | 1.59 | 1.58 | |
| 4823. | 7.80 | 1.33 | 1.52 | 1.51 | 1.59 | 1.58 | 1.57 | |

PACK NO. 105
GOULD 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 10.00 CURRENT

CCELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

END OF
CHARGE

| | | | | | | | | |
|-------|------|-------|-----|------|------|------|------|------|
| 4544. | 4.60 | 10.01 | .00 | 1.17 | 1.18 | 1.20 | 1.20 | 1.20 |
| 4570. | 4.56 | 10.16 | .00 | 1.17 | 1.18 | 1.19 | 1.19 | 1.19 |
| 4642. | 4.52 | 10.08 | .00 | 1.18 | 1.19 | 1.20 | 1.20 | 1.20 |
| 4675. | 4.61 | 9.76 | .00 | 1.17 | 1.16 | 1.17 | 1.17 | 1.18 |
| 4741. | 4.65 | 9.65 | .00 | 1.16 | 1.16 | 1.16 | 1.16 | 1.17 |
| 4846. | 4.86 | 9.52 | .00 | 1.47 | 1.48 | 1.48 | 1.46 | 1.46 |
| 4870. | 4.81 | 1.75 | .00 | 1.46 | 1.46 | 1.47 | 1.43 | 1.43 |
| 4642. | 4.84 | 1.68 | .00 | 1.48 | 1.48 | 1.50 | 1.46 | 1.46 |
| 4870. | 4.81 | 1.76 | .00 | 1.48 | 1.47 | 1.48 | 1.46 | 1.46 |
| 4741. | 4.8 | 1.02 | .00 | 1.47 | 1.46 | 1.46 | 1.45 | 1.45 |

PACK NO. 76
 DURATION 20 A.H.

DEPTH OF DISCHARGE 15
 PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
 OPERIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES | | | | | |
|-----------|--------------|---------|---------------|-----|------|-----|------|---------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 9111. | 3.57 | 6.10 | 1.21 | .00 | 1.21 | .00 | 1.21 | END OF
DISCHARGE |
| 9156. | 3.64 | 6.05 | 1.24 | .00 | 1.23 | .00 | 1.24 | |
| 9190. | 3.44 | 5.97 | 1.17 | .00 | 1.17 | .00 | 1.16 | |
| 9225. | 3.38 | 6.01 | 1.27 | .00 | .89 | .00 | 1.27 | |
| 9310. | 3.50 | 5.95 | 1.19 | .00 | 1.23 | .00 | 1.22 | |
| 9347. | 2.34 | 6.00 | 1.20 | .00 | .05 | .00 | 1.22 | END OF
CHARGE |
| 9111. | 4.42 | 2.90 | 1.40 | .00 | 1.56 | .00 | 1.44 | |
| 9156. | 4.47 | 3.09 | 1.52 | .00 | 1.56 | .00 | 1.45 | |
| 9190. | 4.25 | 2.22 | 1.42 | .00 | 1.47 | .00 | 1.40 | |
| 9225. | 4.42 | 4.83 | 1.55 | .00 | 1.42 | .00 | 1.48 | |
| 9310. | 4.53 | 4.85 | 1.45 | .00 | 1.62 | .00 | 1.48 | |
| 9347. | 3.14 | 4.81 | 1.52 | .00 | .16 | .00 | 1.50 | |

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

CELL VOLTAGES
VOLTAGE 6.00 1 2 3 4 5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|-----|------|------|------|
| 4572. | 4.45 | 6.05 | 1.23 | .00 | 1.22 | 1.24 | 1.21 |
| 4576. | 4.00 | 5.97 | 1.25 | .00 | 1.24 | 1.23 | 1.25 |
| 4578. | 4.80 | 6.05 | 1.24 | .00 | 1.24 | 1.26 | 1.24 |
| 4735. | 4.80 | 5.99 | 1.24 | .00 | 1.25 | 1.27 | 1.25 |
| 4760. | 4.83 | 6.02 | 1.22 | .00 | 1.21 | 1.22 | 1.21 |

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|-----|------|------|------|
| 4578. | 6.25 | 1.38 | 1.58 | .00 | 1.58 | 1.49 | 1.52 |
| 4670. | 6.18 | 1.39 | 1.59 | .00 | 1.58 | 1.52 | 1.53 |
| 4698. | 6.21 | 1.38 | 1.61 | .00 | 1.62 | 1.53 | 1.54 |
| 4735. | 6.17 | 1.36 | 1.60 | .00 | 1.60 | 1.52 | 1.53 |
| 4769. | 6.18 | 1.36 | 1.60 | .00 | 1.59 | 1.50 | 1.51 |

PACK NO. 116
 30 LTON 20 A.H.

DEPTH OF DISCHARGE 25
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
 ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT 10.00 | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|---------------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 4449. | 5.77 | 9.54 | 1.18 | 1.19 | 1.12 | 1.20 | 1.18 | |
| 4480. | 5.75 | 9.81 | 1.18 | 1.18 | 1.13 | 1.19 | 1.16 | |
| 4512. | 5.67 | 9.73 | 1.21 | 1.19 | 1.14 | 1.22 | 1.19 | |
| 4540. | 5.85 | 9.64 | 1.22 | 1.20 | 1.14 | 1.20 | 1.20 | |
| 4577. | 5.85 | 9.56 | 1.20 | 1.20 | 1.14 | 1.22 | 1.20 | |
| 4611. | 5.78 | 9.58 | 1.16 | 1.17 | 1.11 | 1.19 | 1.15 | |
| | | | | | | | | |
| 4449. | 7.70 | 2.30 | 1.44 | 1.61 | 1.55 | 1.62 | 1.51 | END OF CHARGE |
| 4480. | 7.82 | 1.47 | 1.45 | 1.59 | 1.54 | 1.57 | 1.50 | |
| 4512. | 7.68 | 1.51 | 1.47 | 1.60 | 1.57 | 1.60 | 1.54 | |
| 4540. | 7.70 | 1.46 | 1.47 | 1.60 | 1.55 | 1.61 | 1.55 | |
| 4577. | 7.71 | 1.45 | 1.46 | 1.61 | 1.56 | 1.61 | 1.55 | |
| 4611. | 7.75 | 1.42 | 1.45 | 1.60 | 1.55 | 1.60 | 1.53 | |

TEST TEMPERATURE 40 C
ORBIT PERIOD 3 HOURS

PERCENT OF DISCHARGE 15
PERCENT OF RECHARGE 160

| TIME | TEMPERATURE | CELL VOLTAGES | | | | | END OF DISCHARGE |
|------|-------------|---------------|------|------|------|------|------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 4500 | 5.12 | 5.07 | .82 | 1.12 | 1.12 | 1.12 | |
| 4510 | 5.09 | 5.02 | .86 | 1.13 | 1.15 | 1.15 | |
| 4520 | 5.07 | 5.01 | 1.07 | 1.16 | 1.16 | 1.18 | |
| 4530 | 5.04 | 5.00 | .95 | 1.14 | 1.14 | 1.15 | |
| 4540 | 5.03 | 5.12 | .99 | 1.13 | 1.13 | 1.14 | |
| 4550 | | 1.02 | | | | | |
| 4600 | 7.11 | 1.84 | 1.39 | 1.41 | 1.42 | 1.42 | |
| 4610 | 7.07 | 1.84 | 1.39 | 1.41 | 1.43 | 1.40 | |
| 4620 | 7.12 | 1.76 | 1.40 | 1.43 | 1.44 | 1.43 | |
| 4630 | 7.12 | 1.69 | 1.41 | 1.44 | 1.45 | 1.43 | |
| 4640 | 7.16 | 1.60 | 1.40 | 1.42 | 1.44 | 1.43 | |
| 4650 | | | | | | | |
| 4660 | | | | | | | |
| 4670 | | | | | | | |
| 4680 | | | | | | | |
| 4690 | | | | | | | |
| 4700 | | | | | | | |
| 4710 | | | | | | | |
| 4720 | | | | | | | |
| 4730 | | | | | | | |
| 4740 | | | | | | | |
| 4750 | | | | | | | |
| 4760 | | | | | | | |
| 4770 | | | | | | | |
| 4780 | | | | | | | |
| 4790 | | | | | | | |
| 4800 | | | | | | | |
| 4810 | | | | | | | |
| 4820 | | | | | | | |
| 4830 | | | | | | | |
| 4840 | | | | | | | |
| 4850 | | | | | | | |
| 4860 | | | | | | | |
| 4870 | | | | | | | |
| 4880 | | | | | | | |
| 4890 | | | | | | | |
| 4900 | | | | | | | |
| 4910 | | | | | | | |
| 4920 | | | | | | | |
| 4930 | | | | | | | |
| 4940 | | | | | | | |
| 4950 | | | | | | | |
| 4960 | | | | | | | |
| 4970 | | | | | | | |
| 4980 | | | | | | | |
| 4990 | | | | | | | |
| 5000 | | | | | | | |

END OF CHARGE

10

| Year | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 |
|------|
| 1970 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 |

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 | |
| 2450. | 6.15 | 1.52 | 1.25 | 1.25 | 1.25 | 1.26 | 1.25 | |
| 2495. | 6.13 | 1.51 | 1.24 | 1.24 | 1.25 | 1.25 | 1.25 | |
| 2529. | 6.12 | 1.51 | 1.24 | 1.24 | 1.25 | 1.25 | 1.24 | |
| 2564. | 6.11 | 1.51 | 1.23 | 1.23 | 1.24 | 1.24 | 1.23 | |
| 2591. | 6.13 | 1.51 | 1.23 | 1.24 | 1.24 | 1.24 | 1.23 | |
| 2658. | 6.12 | 1.50 | 1.23 | 1.23 | 1.23 | 1.24 | 1.24 | |
| 2686. | 6.14 | 1.52 | 1.25 | 1.24 | 1.24 | 1.25 | 1.25 | |
| 2721. | 6.11 | 1.52 | 1.24 | 1.24 | 1.24 | 1.25 | 1.24 | |
| 2753. | 6.11 | 1.51 | 1.26 | 1.25 | 1.27 | 1.27 | 1.27 | |
| 2813. | 6.16 | 1.51 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | |
| 2847. | 6.21 | 1.51 | 1.26 | 1.25 | 1.26 | 1.26 | 1.26 | |
| 2877. | 6.19 | 1.50 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | |
| .83 | | | | | | | | |
| 2450. | 7.37 | .49 | 1.50 | 1.50 | 1.51 | 1.49 | 1.48 | |
| 2495. | 7.43 | .48 | 1.48 | 1.47 | 1.49 | 1.47 | 1.46 | |
| 2529. | 7.40 | .47 | 1.48 | 1.48 | 1.49 | 1.47 | 1.46 | |
| 2564. | 7.33 | .47 | 1.48 | 1.48 | 1.50 | 1.48 | 1.46 | |
| 2591. | 7.47 | .47 | 1.47 | 1.47 | 1.49 | 1.46 | 1.44 | |
| 2658. | 7.30 | .47 | 1.47 | 1.47 | 1.49 | 1.47 | 1.47 | |
| 2686. | 7.39 | .47 | 1.49 | 1.49 | 1.51 | 1.49 | 1.49 | |
| 2721. | 7.36 | .49 | 1.49 | 1.49 | 1.51 | 1.49 | 1.48 | |
| 2753. | 7.38 | .50 | 1.50 | 1.49 | 1.52 | 1.50 | 1.48 | |
| 2813. | 7.36 | .45 | 1.49 | 1.49 | 1.50 | 1.49 | 1.49 | |
| 2847. | 7.37 | .45 | 1.49 | 1.49 | 1.51 | 1.49 | 1.49 | |
| 2877. | 7.40 | .45 | 1.48 | 1.48 | 1.50 | 1.48 | 1.47 | |
| END OF CHARGE | | | | | | | | |

DATA NO. 107

DATE: 6 APR. NIMBUS

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 110

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN

CELL VOLTAGE CURRENT

NO. VOLTAGES 2.50

CELL VOLTAGES

1

2

3

4

5

PSIA

END OF
DISCHARGE

| | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|--------|-----|-----|-----|
| 1811. | 6.00 | 2.47 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 09.383 | .00 | .00 | .00 |
| 1857. | 5.99 | 2.47 | 1.21 | 1.21 | 1.21 | 1.21 | 1.22 | 09.469 | .00 | .00 | .00 |
| 1857. | 5.97 | 2.46 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 | 09.536 | .00 | .00 | .00 |
| 1921. | 5.95 | 2.46 | 1.21 | 1.20 | 1.22 | 1.21 | 1.21 | 09.830 | .00 | .00 | .00 |
| 1944. | 5.95 | 2.45 | 1.20 | 1.20 | 1.21 | 1.20 | 1.20 | 09.811 | .00 | .00 | .00 |
| 2015. | 5.87 | 2.54 | 1.19 | 1.18 | 1.20 | 1.19 | 1.20 | 09.003 | .00 | .00 | .00 |
| 2059. | 5.97 | 2.47 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 | 10.021 | .00 | .00 | .00 |
| 2084. | 5.99 | 2.49 | 1.21 | 1.21 | 1.22 | 1.21 | 1.22 | 10.201 | .00 | .00 | .00 |
| 2111. | 6.02 | 2.46 | 1.21 | 1.20 | 1.22 | 1.21 | 1.22 | 10.734 | .00 | .00 | .00 |
| 2132. | 5.83 | 2.47 | 1.22 | 1.23 | 1.24 | 1.24 | 1.24 | 10.629 | .00 | .00 | .00 |
| 2176. | 5.95 | 2.47 | 1.20 | 1.20 | 1.21 | 1.21 | 1.21 | 01.690 | .00 | .00 | .00 |
| 2200. | 5.72 | 2.50 | 1.22 | 1.21 | 1.23 | 1.23 | 1.24 | 10.106 | .00 | .00 | .00 |
| 2234. | 5.94 | 2.48 | 1.19 | 1.19 | 1.19 | 1.19 | 1.20 | 09.954 | .00 | .00 | .00 |

END OF
CHARGE

| | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|--------|-----|-----|-----|
| 1511. | 7.47 | 1.38 | 1.53 | 1.51 | 1.50 | 1.51 | 1.52 | 10.582 | .00 | .00 | .00 |
| 1517. | 7.45 | .77 | 1.53 | 1.50 | 1.50 | 1.50 | 1.52 | 10.334 | .00 | .00 | .00 |
| 1647. | 7.57 | .75 | 1.51 | 1.49 | 1.48 | 1.48 | 1.50 | 10.429 | .00 | .00 | .00 |
| 1921. | 7.58 | .75 | 1.51 | 1.48 | 1.47 | 1.47 | 1.49 | 10.620 | .00 | .00 | .00 |
| 1944. | 7.77 | .78 | 1.51 | 1.48 | 1.48 | 1.47 | 1.48 | 10.715 | .00 | .00 | .00 |
| 2015. | 7.35 | 1.19 | 1.51 | 1.48 | 1.49 | 1.49 | 1.50 | 09.060 | .00 | .00 | .00 |
| 2059. | 7.43 | .79 | 1.53 | 1.51 | 1.50 | 1.50 | 1.52 | 10.857 | .00 | .00 | .00 |
| 2084. | 7.45 | .82 | 1.53 | 1.50 | 1.50 | 1.50 | 1.52 | 11.304 | .00 | .00 | .00 |
| 2111. | 7.45 | .75 | 1.53 | 1.50 | 1.51 | 1.50 | 1.52 | 11.951 | .00 | .00 | .00 |
| 2112. | 7.43 | .76 | 1.53 | 1.50 | 1.50 | 1.50 | 1.52 | 11.447 | .00 | .00 | .00 |
| 2176. | 7.43 | .82 | 1.53 | 1.50 | 1.50 | 1.50 | 1.52 | 12.536 | .00 | .00 | .00 |
| 2200. | 7.44 | .81 | 1.53 | 1.50 | 1.50 | 1.50 | 1.52 | 10.715 | .00 | .00 | .00 |
| 2234. | 7.45 | .80 | 1.53 | 1.48 | 1.48 | 1.49 | 1.51 | 10.401 | .00 | .00 | .00 |

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 120

NO. 100 100 NIMBUS

| NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-------|--------------|---------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 2422. | 6.16 | 1.49 | 1.25 | 1.25 | 1.26 | 1.25 | 1.25 | |
| 2475. | 6.12 | 1.50 | 1.24 | 1.24 | 1.25 | 1.24 | 1.24 | |
| 2500. | 6.16 | 1.50 | 1.25 | 1.24 | 1.25 | 1.24 | 1.25 | |
| 2562. | 6.13 | 1.50 | 1.24 | 1.24 | 1.25 | 1.24 | 1.23 | |
| 2595. | 6.12 | 1.50 | 1.23 | 1.23 | 1.24 | 1.23 | 1.23 | |
| 2631. | 6.13 | 1.49 | 1.24 | 1.24 | 1.24 | 1.24 | 1.25 | |
| 2663. | 6.13 | 1.49 | 1.25 | 1.24 | 1.25 | 1.25 | 1.25 | |
| 2694. | 6.11 | 1.49 | 1.24 | 1.24 | 1.25 | 1.24 | 1.24 | |
| 2727. | 6.12 | 1.45 | 1.24 | 1.24 | 1.26 | 1.24 | 1.26 | |
| 2786. | 6.10 | 1.47 | 1.24 | 1.24 | 1.25 | 1.24 | 1.24 | |
| 2818. | 6.07 | 1.50 | 1.25 | 1.24 | 1.27 | 1.26 | 1.26 | |
| 2850. | 6.10 | 1.51 | 1.22 | 1.22 | 1.23 | 1.23 | 1.23 | |

| NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES | | | | | END OF CHARGE |
|-------|--------------|---------|---------------|------|------|------|------|---------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 2422. | 7.09 | .90 | 1.45 | 1.44 | 1.43 | 1.44 | 1.44 | |
| 2475. | 7.09 | .89 | 1.43 | 1.42 | 1.41 | 1.42 | 1.41 | |
| 2500. | 7.13 | .89 | 1.44 | 1.43 | 1.42 | 1.45 | 1.42 | |
| 2562. | 7.22 | .89 | 1.43 | 1.42 | 1.41 | 1.41 | 1.39 | |
| 2595. | 7.11 | .90 | 1.42 | 1.42 | 1.41 | 1.40 | 1.39 | |
| 2631. | 7.11 | .89 | 1.45 | 1.43 | 1.43 | 1.43 | 1.44 | |
| 2663. | 7.11 | .90 | 1.45 | 1.44 | 1.43 | 1.44 | 1.43 | |
| 2694. | 7.11 | .90 | 1.45 | 1.44 | 1.44 | 1.44 | 1.43 | |
| 2727. | 7.10 | .91 | 1.45 | 1.44 | 1.44 | 1.44 | 1.43 | |
| 2786. | 7.10 | .89 | 1.45 | 1.44 | 1.44 | 1.44 | 1.43 | |
| 2818. | 7.10 | .90 | 1.45 | 1.44 | 1.44 | 1.44 | 1.43 | |
| 2850. | 7.15 | .89 | 1.44 | 1.43 | 1.42 | 1.43 | 1.43 | |

105

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C
ORRIT PERIOD 90 MIN

| CELL VOLTAGES 2.40 | CELL VOLTAGES | | | | | PSIA | END OF DISCHARGE |
|--------------------|---------------|------|------|------|------|--------|------------------|
| | 1 | 2 | 3 | 4 | 5 | | |
| 1730. | 1.20 | 1.19 | 1.18 | 1.21 | 1.19 | 08.460 | .00 |
| 1734. | 1.19 | 1.17 | 1.17 | 1.20 | 1.18 | 08.734 | .00 |
| 1738. | 1.18 | 1.17 | 1.17 | 1.20 | 1.18 | 08.734 | .00 |
| 1742. | 1.17 | 1.16 | 1.17 | 1.20 | 1.17 | 08.333 | .00 |
| 1746. | 1.17 | 1.16 | 1.16 | 1.20 | 1.16 | 08.608 | .00 |
| 1750. | 1.19 | 1.18 | 1.18 | 1.21 | 1.19 | 09.686 | .00 |
| 1754. | 1.19 | 1.17 | 1.20 | 1.23 | 1.21 | 08.597 | .00 |
| 1758. | 1.17 | 1.15 | 1.17 | 1.20 | 1.18 | 09.538 | .00 |
| 1802. | 1.18 | 1.16 | 1.19 | 1.22 | 1.20 | 09.379 | .00 |
| 1806. | 1.15 | 1.13 | 1.14 | 1.19 | 1.16 | 08.851 | .00 |

| CELL VOLTAGES 2.40 | CELL VOLTAGES | | | | | PSIA | END OF CHARGE |
|--------------------|---------------|------|------|------|------|--------|---------------|
| | 1 | 2 | 3 | 4 | 5 | | |
| 1732. | 1.48 | 1.47 | 1.48 | 1.51 | 1.47 | 14.157 | .00 |
| 1778. | 1.47 | 1.46 | 1.48 | 1.50 | 1.47 | 14.495 | .00 |
| 1808. | 1.46 | 1.45 | 1.47 | 1.48 | 1.45 | 14.157 | .00 |
| 1842. | 1.45 | 1.45 | 1.46 | 1.47 | 1.43 | 13.533 | .00 |
| 1866. | 1.45 | 1.45 | 1.46 | 1.48 | 1.44 | 13.649 | .00 |
| 1874. | 1.48 | 1.48 | 1.49 | 1.52 | 1.48 | 14.622 | .00 |
| 1882. | 1.46 | 1.46 | 1.48 | 1.51 | 1.46 | 13.597 | .00 |
| 1897. | 1.47 | 1.46 | 1.49 | 1.51 | 1.47 | 14.379 | .00 |
| 1921. | 1.46 | 1.46 | 1.48 | 1.51 | 1.47 | 14.104 | .00 |
| 1940. | 1.46 | 1.45 | 1.46 | 1.49 | 1.47 | 13.977 | .00 |

PACK NO. 113
G.E. 5 A.H. NIMBUS

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 130 | | | | | END OF DISCHARGE |
|-----------|--------------|---------|--|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 2476. | 5.83 | 1.51 | 1.19 | 1.20 | 1.20 | 1.19 | 1.16 | |
| 2501. | 5.86 | 1.50 | 1.19 | 1.20 | 1.19 | 1.19 | 1.17 | |
| 2563. | 5.83 | 1.50 | 1.18 | 1.19 | 1.19 | 1.18 | 1.16 | |
| 2600. | 5.86 | 1.50 | 1.18 | 1.19 | 1.18 | 1.18 | 1.15 | |
| 2632. | 5.87 | 1.50 | 1.20 | 1.20 | 1.19 | 1.19 | 1.18 | |
| 2664. | 5.95 | 1.47 | 1.21 | 1.22 | 1.21 | 1.21 | 1.20 | |
| 2695. | 5.91 | 1.47 | 1.21 | 1.21 | 1.21 | 1.21 | 1.18 | |
| 2728. | 5.92 | 1.39 | 1.21 | 1.21 | 1.21 | 1.21 | 1.20 | |
| 2787. | 5.88 | 1.46 | 1.20 | 1.21 | 1.21 | 1.20 | 1.17 | |
| 2819. | 5.87 | 1.48 | 1.22 | 1.22 | 1.23 | 1.23 | 1.19 | |
| 2851. | 5.88 | 1.47 | 1.20 | 1.20 | 1.19 | 1.19 | 1.14 | |
| 2476. | 7.01 | .98 | 1.41 | 1.40 | 1.39 | 1.40 | 1.38 | END OF CHARGE |
| 2501. | 6.98 | .97 | 1.40 | 1.40 | 1.40 | 1.43 | 1.38 | |
| 2563. | 7.10 | .98 | 1.40 | 1.40 | 1.39 | 1.39 | 1.36 | |
| 2600. | 7.01 | .97 | 1.40 | 1.40 | 1.40 | 1.39 | 1.37 | |
| 2632. | 7.01 | .98 | 1.42 | 1.41 | 1.41 | 1.42 | 1.41 | |
| 2664. | 7.02 | 1.00 | 1.43 | 1.42 | 1.42 | 1.42 | 1.40 | |
| 2695. | 7.02 | .99 | 1.43 | 1.43 | 1.43 | 1.43 | 1.41 | |
| 2728. | 7.02 | .99 | 1.43 | 1.42 | 1.43 | 1.43 | 1.41 | |
| 2787. | 7.02 | .98 | 1.43 | 1.42 | 1.43 | 1.43 | 1.40 | |
| 2819. | 7.03 | .98 | 1.43 | 1.42 | 1.43 | 1.43 | 1.41 | |
| 2851. | 7.07 | .98 | 1.43 | 1.42 | 1.41 | 1.42 | 1.40 | |

| DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 120 | | CELL VOLTAGES | | | | | TEST TEMPERATURE 40 °C
ORBIT PERIOD 60 MIN |
|--|------|---------------|------|------|------|------|---|
| CURRENT | | 1 | 2 | 3 | 4 | 5 | PSIA |
| 1744. | 2.47 | 1.15 | 1.14 | 1.10 | 1.15 | 1.13 | 22.237 |
| 1746. | 2.46 | 1.13 | 1.12 | 1.07 | 1.14 | 1.11 | 22.934 |
| 1747. | 2.47 | 1.13 | 1.12 | 1.06 | 1.14 | 1.12 | 22.676 |
| 1748. | 2.46 | 1.11 | 1.11 | 1.04 | 1.13 | 1.10 | 22.772 |
| 1749. | 2.47 | 1.01 | .95 | .73 | 1.06 | .98 | 22.398 |
| 1750. | 2.45 | 1.14 | 1.14 | 1.11 | 1.15 | 1.13 | 23.072 |
| 1751. | 2.48 | 1.14 | 1.14 | 1.12 | 1.15 | 1.13 | 23.842 |
| 1752. | 2.45 | 1.13 | 1.13 | 1.12 | 1.14 | 1.13 | 23.971 |
| 1753. | 2.47 | 1.14 | 1.15 | 1.13 | 1.16 | 1.14 | 24.281 |
| 1754. | 2.45 | 1.14 | 1.14 | 1.12 | 1.15 | 1.14 | 23.297 |
| 1755. | 2.47 | 1.15 | 1.15 | 1.14 | 1.17 | 1.17 | 24.067 |
| 1756. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1757. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1758. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1759. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1760. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1761. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1762. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1763. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1764. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1765. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1766. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1767. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1768. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1769. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1770. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1771. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1772. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1773. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1774. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1775. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1776. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1777. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1778. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1779. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1780. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1781. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1782. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1783. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1784. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1785. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1786. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1787. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1788. | 2.47 | 1.33 | 1.32 | 1.32 | 1.33 | 1.33 | 30.701 |
| 1789. | 2.47 | 1.33 | 1. | | | | |

PACK NO. 117
GULFON 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 | |
| 2244. | 6.11 | 1.52 | 1.25 | 1.24 | 1.23 | 1.24 | 1.24 | |
| 2289. | 6.11 | 1.52 | 1.24 | 1.23 | 1.23 | 1.24 | 1.23 | |
| 2323. | 6.11 | 1.51 | 1.24 | 1.24 | 1.23 | 1.24 | 1.23 | |
| 2358. | 6.08 | 1.51 | 1.23 | 1.23 | 1.22 | 1.23 | 1.22 | |
| 2385. | 6.10 | 1.51 | 1.23 | 1.23 | 1.23 | 1.23 | 1.22 | |
| 2452. | 6.07 | 1.50 | 1.24 | 1.23 | 1.24 | 1.24 | 1.23 | |
| 2480. | 6.12 | 1.52 | 1.25 | 1.25 | 1.25 | 1.26 | 1.24 | |
| 2515. | 6.08 | 1.52 | 1.24 | 1.23 | 1.23 | 1.24 | 1.23 | |
| 2547. | 6.15 | 1.53 | 1.26 | 1.25 | 1.24 | 1.26 | 1.26 | |
| 2607. | 6.21 | 1.50 | 1.27 | 1.26 | 1.27 | 1.27 | 1.26 | |
| 2641. | 6.21 | 1.50 | 1.28 | 1.27 | 1.29 | 1.29 | 1.28 | |
| 2671. | 6.22 | 1.51 | 1.26 | 1.24 | 1.25 | 1.25 | 1.25 | |
| .83 | | | | | | | | |
| 2244. | 7.54 | .69 | 1.54 | 1.51 | 1.57 | 1.51 | 1.51 | |
| 2289. | 7.53 | .68 | 1.51 | 1.49 | 1.55 | 1.48 | 1.48 | |
| 2323. | 7.53 | .65 | 1.51 | 1.49 | 1.55 | 1.52 | 1.48 | |
| 2358. | 7.49 | .67 | 1.52 | 1.49 | 1.56 | 1.49 | 1.48 | |
| 2385. | 7.51 | .65 | 1.50 | 1.48 | 1.54 | 1.52 | 1.46 | |
| 2452. | 7.47 | .62 | 1.52 | 1.49 | 1.55 | 1.50 | 1.49 | |
| 2480. | 7.49 | .60 | 1.52 | 1.50 | 1.55 | 1.50 | 1.50 | |
| 2515. | 7.49 | .62 | 1.52 | 1.50 | 1.55 | 1.50 | 1.50 | |
| 2547. | 7.50 | .63 | 1.52 | 1.50 | 1.56 | 1.50 | 1.50 | |
| 2607. | 7.15 | .83 | 1.45 | 1.45 | 1.45 | 1.45 | 1.44 | |
| 2641. | 7.46 | .59 | 1.52 | 1.49 | 1.55 | 1.50 | 1.49 | |
| 2671. | 7.49 | .56 | 1.51 | 1.49 | 1.54 | 1.49 | 1.50 | |

END OF CHARGE

CELL REMOVAL TIME 1.0
 CHARGE REGION 30 MIN

CELL VOLTAGES

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 | 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 | 1011 | 1012 | 1013 | 1014 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1022 | 1023 | 1024 | 1025 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1032 | 1033 | 1034 | 1035 | 1036 | 1037 | 1038 | 1039 | 1040 | 1041 | 1042 | 1043 | 1044 | 1045 | 1046 | 1047 | 1048 | 1049 | 1050 | 1051 | 1052 | 1053 | 1054 | 1055 | 1056 | 1057 | 1058 | 1059 | 1060 | 1061 | 1062 | 1063 | 1064 | 1065 | 1066 | 1067 | 1068 | 1069 | 1070 | 1071 | 1072 | 1073 | 1074 | 1075 | 1076 | 1077 | 1078 | 1079 | 1080 | 1081 | 1082 | 1083 | 1084 | 1085 | 1086 | 1087 | 1088 | 1089 | 1090 | 1091 | 1092 | 1093 | 1094 | 1095 | 1096 | 1097 | 1098 | 1099 | 1100 | 1101 | 1102 | 1103 | 1104 | 1105 | 1106 | 1107 | 1108 | 1109 | 1110 | 1111 | 1112 | 1113 | 1114 | 1115 | 1116 | 1117 | 1118 | 1119 | 1120 | 1121 | 1122 | 1123 | 1124 | 1125 | 1126 | 1127 | 1128 | 1129 | 1130 | 1131 | 1132 | 1133 | 1134 | 1135 | 1136 | 1137 | 1138 | 1139 | 1140 | 1141 | 1142 | 1143 | 1144 | 1145 | 1146 | 1147 | 1148 | 1149 | 1150 | 1151 | 1152 | 1153 | 1154 | 1155 | 1156 | 1157 | 1158 | 1159 | 1160 | 1161 | 1162 | 1163 | 1164 | 1165 | 1166 | 1167 | 1168 | 1169 | 1170 | 1171 | 1172 | 1173 | 1174 | 1175 | 1176 | 1177 | 1178 | 1179 | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 | 1186 | 1187 | 1188 | 1189 | 1190 | 1191 | 1192 | 1193 | 1194 | 1195 | 1196 | 1197 | 1198 | 1199 | 1200 | 1201 | 1202 | 1203 | 1204 | 1205 | 1206 | 1207 | 1208 | 1209 | 1210 | 1211 | 1212 | 1213 | 1214 | 1215 | 1216 | 1217 | 1218 | 1219 | 1220 | 1221 | 1222 | 1223 | 1224 | 1225 | 1226 | 1227 | 1228 | 1229 | 1230 | 1231 | 1232 | 1233 | 1234 | 1235 | 1236 | 1237 | 1238 | 1239 | 1240 | 1241 | 1242 | 1243 | 1244 | 1245 | 1246 | 1247 | 1248 | 1249 | 1250 | 1251 | 1252 | 1253 | 1254 | 1255 | 1256 | 1257 | 1258 | 1259 | 1260 | 1261 | 1262 | 1263 | 1264 | 1265 | 1266 | 1267 | 1268 | 1269 | 1270 | 1271 | 1272 | 1273 | 1274 | 1275 | 1276 | 1277 | 1278 | 1279 | 1280 | 1281 | 1282 | 1283 | 1284 | 1285 | 1286 | 1287 | 1288 | 1289 | 1290 | 1291 | 1292 | 1293 | 1294 | 1295 | 1296 | 1297 | 1298 | 1299 | 1300 | 1301 | 1302 | 1303 | 1304 | 1305 | 1306 | 1307 | 1308 | 1309 | 1310 | 1311 | 1312 | 1313 | 1314 | 1315 | 1316 | 1317 | 1318 | 1319 | 1320 | 1321 | 1322 | 1323 | 1324 | 1325 | 1326 | 1327 | 1328 | 1329 | 1330 | 1331 | 1332 | 1333 | 1334 | 1335 | 1336 | 1337 | 1338 | 1339 | 1340 | 1341 | 1342 | 1343 | 1344 | 1345 | 1346 | 1347 | 1348 | 1349 | 1350 | 1351 | 1352 | 1353 | 1354 | 1355 | 1356 | 1357 | 1358 | 1359 | 1360 | 1361 | 1362 | 1363 | 1364 | 1365 | 1366 | 1367 | 1368 | 1369 | 1370 | 1371 | 1372 | 1373 | 1374 | 1375 | 1376 | 1377 | 1378 | 1379 | 1380 | 1381 | 1382 | 1383 | 1384 | 1385 | 1386 | 1387 | 1388 | 1389 | 1390 | 1391 | 1392 | 1393 | 1394 | 1395 | 1396 | 1397 | 1398 | 1399 | 1400 | 1401 | 1402 | 1403 | 1404 | 1405 | 1406 | 1407 | 1408 | 1409 | 1410 | 1411 | 1412 | 1413 | 1414 | 1415 | 1416 | 1417 | 1418 | 1419 | 1420 | 1421 | 1422 | 1423 | 1424 | 1425 | 1426 | 1427 | 1428 | 1429 | 1430 | 1431 | 1432 | 1433 | 1434 | 1435 | 1436 | 1437 | 1438 | 1439 | 1440 | 1441 | 1442 | 1443 | 1444 | 1445 | 1446 | 1447 | 1448 | 1449 | 1450 | 1451 | 1452 | 1453 | 1454 | 1455 | 1456 | 1457 | 1458 | 1459 | 1460 | 1461 | 1462 | 1463 | 1464 | 1465 | 1466 | 1467 | 1468 | 1469 | 1470 | 1471 | 1472 | 1473 | 1474 | 1475 | 1476 | 1477 | 1478 | 1479 | 1480 | 1481 | 1482 | 1483 | 1484</ |
|--|---|---|---|---|---|---|---|---|---|-----|------|--------|
|--|---|---|---|---|---|---|---|---|---|-----|------|--------|

PACK NO. 120
GULTON 5 A.H. NIMBUS

TEST TEMPERATURE 25 C
ORRIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 120 | | | | | END OF DISCHARGE |
|-----------|--------------|---------|--|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 2345. | 5.82 | 1.49 | 1.25 | .98 | 1.23 | 1.24 | 1.22 | |
| 2398. | 5.78 | 1.50 | 1.24 | .93 | 1.22 | 1.23 | 1.21 | |
| 2423. | 5.80 | 1.49 | 1.24 | .95 | 1.23 | 1.24 | 1.22 | |
| 2460. | 5.77 | 1.49 | 1.24 | .93 | 1.23 | 1.24 | 1.22 | |
| 2485. | 5.79 | 1.49 | 1.23 | .95 | 1.22 | 1.23 | 1.21 | |
| 2522. | 5.85 | 1.51 | 1.24 | .97 | 1.22 | 1.23 | 1.22 | |
| 2554. | 5.85 | 1.49 | 1.24 | 1.00 | 1.24 | 1.24 | 1.23 | |
| 2586. | 5.85 | 1.49 | 1.25 | 1.00 | 1.23 | 1.24 | 1.23 | |
| 2617. | 5.81 | 1.49 | 1.24 | .98 | 1.23 | 1.24 | 1.22 | |
| 2650. | 6.04 | 1.50 | 1.24 | 1.21 | 1.23 | 1.24 | 1.22 | |
| 2709. | 6.05 | 1.48 | 1.24 | 1.21 | 1.22 | 1.24 | 1.22 | |
| 2741. | 6.12 | 1.48 | 1.26 | 1.23 | 1.24 | 1.24 | 1.25 | |
| 2773. | 5.80 | 1.49 | 1.23 | .94 | 1.21 | 1.22 | 1.20 | |
| | | | | | | | | |
| 2345. | 7.26 | .90 | 1.44 | 1.58 | 1.43 | 1.45 | 1.45 | END OF CHARGE |
| 2398. | 7.24 | .88 | 1.42 | 1.56 | 1.41 | 1.42 | 1.42 | |
| 2423. | 7.33 | .89 | 1.42 | 1.58 | 1.42 | 1.43 | 1.41 | |
| 2460. | 7.27 | .88 | 1.43 | 1.58 | 1.43 | 1.43 | 1.42 | |
| 2485. | 7.27 | .89 | 1.41 | 1.57 | 1.41 | 1.46 | 1.41 | |
| 2522. | 7.35 | .90 | 1.42 | 1.56 | 1.41 | 1.41 | 1.40 | |
| 2554. | 7.23 | .89 | 1.44 | 1.56 | 1.44 | 1.44 | 1.44 | |
| 2586. | 7.28 | .89 | 1.44 | 1.57 | 1.44 | 1.44 | 1.45 | |
| 2617. | 7.26 | .89 | 1.44 | 1.57 | 1.43 | 1.44 | 1.45 | |
| 2650. | 7.13 | .89 | 1.44 | 1.44 | 1.43 | 1.44 | 1.45 | |
| 2709. | 7.13 | .88 | 1.44 | 1.44 | 1.43 | 1.44 | 1.45 | |
| 2741. | 7.13 | .89 | 1.44 | 1.44 | 1.43 | 1.44 | 1.45 | |
| 2773. | 7.29 | .88 | 1.42 | 1.57 | 1.42 | 1.43 | 1.43 | |

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN

BACK CURRENT
VOLTAGE 2.50

| VOLTAGE | CURRENT | CELL VOLTAGES | | | | | PSIA | END OF DISCHARGE |
|---------|---------|---------------|------|------|------|------|--------|------------------|
| | | 1 | 2 | 3 | 4 | 5 | | |
| 1732. | 2.44 | 1.12 | 1.12 | 1.20 | 1.04 | 1.13 | 12.485 | .00 |
| 1774. | 2.50 | 1.10 | 1.07 | 1.20 | 1.00 | 1.12 | 12.508 | .00 |
| 1816. | 2.49 | 1.10 | 1.08 | 1.20 | .99 | 1.11 | 12.683 | .00 |
| 1858. | 2.49 | 1.10 | 1.07 | 1.20 | .99 | 1.11 | 12.683 | .00 |
| 1900. | 2.48 | 1.09 | 1.07 | 1.20 | .97 | 1.10 | 12.671 | .00 |
| 1942. | 2.55 | 1.11 | 1.11 | 1.21 | 1.06 | 1.12 | 12.858 | .00 |
| 1984. | 2.48 | 1.13 | 1.13 | 1.20 | 1.07 | 1.13 | 12.905 | .00 |
| 2026. | 2.49 | 1.12 | 1.11 | 1.20 | 1.03 | 1.12 | 13.138 | .00 |
| 2068. | 2.46 | 1.10 | 1.05 | 1.20 | .98 | 1.11 | 13.080 | .00 |
| 2110. | 2.49 | 1.14 | 1.10 | 1.23 | 1.07 | 1.13 | 13.768 | .00 |
| 2152. | 2.47 | 1.11 | 1.10 | 1.20 | 1.00 | 1.12 | 12.916 | .00 |
| 2194. | 2.49 | 1.13 | 1.12 | 1.22 | 1.04 | 1.15 | 13.395 | .00 |
| 2236. | 2.47 | 1.08 | 1.04 | 1.18 | .96 | 1.09 | 13.080 | .00 |
| 2278. | 1.50 | | | | | | | |
| 2320. | 1.51 | 1.48 | 1.47 | 1.48 | 1.50 | 1.47 | 19.953 | .00 |
| 2362. | 1.51 | 1.48 | 1.46 | 1.48 | 1.50 | 1.47 | 20.432 | .00 |
| 2404. | 1.51 | 1.47 | 1.46 | 1.47 | 1.49 | 1.46 | 20.899 | .00 |
| 2446. | 1.52 | 1.46 | 1.44 | 1.45 | 1.47 | 1.44 | 19.977 | .00 |
| 2488. | 1.51 | 1.46 | 1.45 | 1.46 | 1.47 | 1.44 | 20.280 | .00 |
| 2530. | 1.51 | 1.45 | 1.45 | 1.48 | 1.50 | 1.47 | 20.642 | .00 |
| 2572. | 1.50 | 1.44 | 1.47 | 1.49 | 1.51 | 1.48 | 20.759 | .00 |
| 2614. | 1.51 | 1.48 | 1.47 | 1.49 | 1.50 | 1.47 | 21.307 | .00 |
| 2656. | 1.51 | 1.47 | 1.46 | 1.48 | 1.50 | 1.47 | 21.716 | .00 |
| 2698. | 1.53 | 1.47 | 1.46 | 1.47 | 1.50 | 1.47 | 22.497 | .00 |
| 2740. | 1.53 | 1.48 | 1.46 | 1.48 | 1.50 | 1.47 | 21.634 | .00 |
| 2782. | 1.53 | 1.47 | 1.46 | 1.48 | 1.50 | 1.47 | 21.984 | .00 |
| 2824. | 1.53 | 1.47 | 1.45 | 1.46 | 1.49 | 1.47 | 22.427 | .00 |
| 2866. | 1.50 | | | | | | | |
| 2908. | 1.51 | 1.48 | 1.47 | 1.48 | 1.50 | 1.47 | 19.953 | .00 |
| 2950. | 1.51 | 1.48 | 1.46 | 1.48 | 1.50 | 1.47 | 20.432 | .00 |
| 2992. | 1.51 | 1.47 | 1.46 | 1.47 | 1.49 | 1.46 | 20.899 | .00 |
| 3034. | 1.52 | 1.46 | 1.44 | 1.45 | 1.47 | 1.44 | 19.977 | .00 |
| 3076. | 1.51 | 1.46 | 1.45 | 1.46 | 1.47 | 1.44 | 20.280 | .00 |
| 3118. | 1.51 | 1.45 | 1.45 | 1.48 | 1.50 | 1.47 | 20.642 | .00 |
| 3160. | 1.50 | 1.44 | 1.47 | 1.49 | 1.51 | 1.48 | 20.759 | .00 |
| 3202. | 1.51 | 1.48 | 1.47 | 1.49 | 1.50 | 1.47 | 21.307 | .00 |
| 3244. | 1.51 | 1.47 | 1.46 | 1.48 | 1.50 | 1.47 | 21.716 | .00 |
| 3286. | 1.53 | 1.47 | 1.46 | 1.47 | 1.50 | 1.47 | 22.497 | .00 |
| 3328. | 1.53 | 1.48 | 1.46 | 1.48 | 1.50 | 1.47 | 21.634 | .00 |
| 3370. | 1.53 | 1.47 | 1.46 | 1.48 | 1.50 | 1.47 | 21.984 | .00 |
| 3412. | 1.53 | 1.47 | 1.45 | 1.46 | 1.49 | 1.47 | 22.427 | .00 |

END OF CHARGE

PACK NO. 127
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 130

TEST TEMPERATURE 40 C
ORRIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 1.50 1

CELL VOLTAGES
2 3 4 5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 2392. | 5.66 | 1.49 | 1.14 | 1.13 | 1.16 | 1.19 | 1.16 |
| 2445. | 5.70 | 1.49 | 1.14 | 1.13 | 1.16 | 1.18 | 1.16 |
| 2470. | 5.71 | 1.48 | 1.15 | 1.14 | 1.17 | 1.19 | 1.16 |
| 2507. | 5.69 | 1.48 | 1.14 | 1.13 | 1.17 | 1.19 | 1.15 |
| 2532. | 5.65 | 1.48 | 1.12 | 1.12 | 1.15 | 1.18 | 1.14 |
| 2569. | 5.74 | 1.49 | 1.14 | 1.13 | 1.17 | 1.18 | 1.16 |
| 2601. | 5.74 | 1.48 | 1.15 | 1.14 | 1.19 | 1.20 | 1.17 |
| 2633. | 5.78 | 1.49 | 1.16 | 1.15 | 1.18 | 1.18 | 1.18 |
| 2664. | 5.73 | 1.49 | 1.15 | 1.14 | 1.17 | 1.19 | 1.16 |
| 2697. | 5.73 | 1.50 | 1.15 | 1.14 | 1.17 | 1.19 | 1.17 |
| 2756. | 5.75 | 1.49 | 1.16 | 1.14 | 1.17 | 1.19 | 1.17 |
| 2788. | 5.83 | 1.49 | 1.18 | 1.16 | 1.19 | 1.19 | 1.20 |

.98

END OF
CHARGE

| | | | | | | | |
|-------|------|-----|------|------|------|------|------|
| 2392. | 7.01 | .98 | 1.42 | 1.43 | 1.41 | 1.42 | 1.42 |
| 2445. | 7.00 | .98 | 1.41 | 1.41 | 1.40 | 1.40 | 1.39 |
| 2470. | 7.08 | .98 | 1.42 | 1.43 | 1.42 | 1.42 | 1.40 |
| 2507. | 7.05 | .98 | 1.42 | 1.42 | 1.41 | 1.41 | 1.40 |
| 2532. | 7.04 | .98 | 1.40 | 1.41 | 1.40 | 1.44 | 1.38 |
| 2569. | 7.18 | .98 | 1.41 | 1.41 | 1.40 | 1.39 | 1.38 |
| 2601. | 7.03 | .97 | 1.42 | 1.43 | 1.42 | 1.42 | 1.41 |
| 2633. | 7.07 | .98 | 1.43 | 1.43 | 1.42 | 1.42 | 1.42 |
| 2664. | 7.08 | .98 | 1.43 | 1.43 | 1.43 | 1.43 | 1.43 |
| 2697. | 7.08 | .98 | 1.43 | 1.44 | 1.43 | 1.43 | 1.43 |
| 2756. | 7.08 | .97 | 1.43 | 1.43 | 1.43 | 1.43 | 1.43 |
| 2788. | 7.14 | .97 | 1.43 | 1.43 | 1.42 | 1.43 | 1.43 |

PERCENT OF DISCHARGE 25 TEST TEMPERATURE 40 °C
PERCENT OF RECHARGE 100 CHARGE PERIOD 30 MIN.

| CELL VOLTAGES | | | | | | | | | | PSIA | | END OF
DISCHARGE |
|---------------|------|------|------|------|------|------|------|------|------|--------|-------|---------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 1.44 | 1.45 | 1.47 | 1.44 | 1.46 | 1.47 | 1.44 | 1.46 | 1.47 | 1.46 | 00.168 | 00.00 | 00.00 |
| 1.45 | 1.45 | 1.48 | 1.44 | 1.47 | 1.48 | 1.44 | 1.47 | 1.48 | 1.47 | 19.091 | 00.00 | 00.00 |
| 1.44 | 1.44 | 1.48 | 1.44 | 1.46 | 1.48 | 1.44 | 1.46 | 1.48 | 1.47 | 00.403 | 00.00 | 00.00 |
| 1.43 | 1.43 | 1.46 | 1.41 | 1.43 | 1.46 | 1.41 | 1.43 | 1.46 | 1.45 | 03.800 | 00.00 | 00.00 |
| 1.43 | 1.44 | 1.46 | 1.41 | 1.43 | 1.46 | 1.41 | 1.43 | 1.46 | 1.45 | 00.852 | 00.00 | 00.00 |
| 1.44 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 01.468 | 00.00 | 00.00 |
| 1.45 | 1.46 | 1.48 | 1.45 | 1.47 | 1.49 | 1.45 | 1.47 | 1.49 | 1.48 | 00.751 | 00.00 | 00.00 |
| 1.45 | 1.46 | 1.49 | 1.45 | 1.47 | 1.49 | 1.45 | 1.47 | 1.49 | 1.48 | 02.018 | 00.00 | 00.00 |
| 1.44 | 1.45 | 1.48 | 1.44 | 1.46 | 1.48 | 1.44 | 1.46 | 1.48 | 1.47 | 02.993 | 00.00 | 00.00 |
| 1.43 | 1.44 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.437 | 00.00 | 00.00 |
| 1.44 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.482 | 00.00 | 00.00 |
| 1.43 | 1.44 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 25.043 | 00.00 | 00.00 |
| 1.42 | 1.43 | 1.46 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.325 | 00.00 | 00.00 |
| 1.41 | 1.42 | 1.45 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.303 | 00.00 | 00.00 |
| 1.42 | 1.43 | 1.46 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 02.253 | 00.00 | 00.00 |
| 1.43 | 1.44 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.134 | 00.00 | 00.00 |
| 1.44 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 03.217 | 00.00 | 00.00 |
| 1.45 | 1.46 | 1.48 | 1.45 | 1.47 | 1.49 | 1.45 | 1.47 | 1.49 | 1.48 | 00.785 | 00.00 | 00.00 |
| 1.45 | 1.46 | 1.49 | 1.45 | 1.47 | 1.49 | 1.45 | 1.47 | 1.49 | 1.48 | 04.506 | 00.00 | 00.00 |
| 1.44 | 1.45 | 1.48 | 1.44 | 1.46 | 1.48 | 1.44 | 1.46 | 1.48 | 1.47 | 00.773 | 00.00 | 00.00 |
| 1.43 | 1.44 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.235 | 00.00 | 00.00 |
| 1.44 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.43 | 1.45 | 1.47 | 1.46 | 00.123 | 00.00 | 00.00 |

| TEST TEMPERATURE 25 C
ORBIT PERIOD 24 HOURS | | DEPTH OF DISCHARGE 50
PERCENT OF RECHARGE 200 | | CELL VOLTAGES | | | | | END OF
DISCHARGE | END OF
CHARGE |
|--|------|--|------|---------------|------|-----|------|------|---------------------|------------------|
| | | | | 1 | 2 | 3 | 4 | 5 | | |
| 1.40 | 1.40 | 2.25 | 3.00 | .00 | .51 | .00 | .32 | .61 | | |
| 1.40 | 4.27 | .26 | .00 | .00 | 1.40 | .00 | 1.40 | 1.40 | | |

BANK NO. 315
SECTION 4 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115
TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE BACK CURRENT
NO. VOLTAGE 1.20

CELL VOLTAGES
1 2 3 4 5

| | 1 | 2 | 3 | 4 | 5 | END OF
DISCHARGE |
|-------|------|------|------|------|------|---------------------|
| 6372. | 6.21 | 1.18 | 1.26 | 1.26 | 1.26 | 1.25 |
| 6450. | 6.20 | 1.18 | 1.26 | 1.26 | 1.25 | 1.25 |
| 6482. | 6.15 | 1.19 | 1.25 | 1.25 | 1.25 | 1.24 |
| 6513. | 6.22 | 1.18 | 1.25 | 1.25 | 1.25 | 1.24 |
| 6546. | 6.21 | 1.19 | 1.25 | 1.25 | 1.25 | 1.24 |
| 6578. | 6.18 | 1.20 | 1.25 | 1.25 | 1.26 | 1.25 |
| 6614. | 6.27 | 1.21 | 1.26 | 1.26 | 1.27 | 1.26 |
| 6641. | 6.19 | 1.21 | 1.26 | 1.25 | 1.26 | 1.25 |
| 6664. | 6.21 | 1.19 | 1.26 | 1.26 | 1.26 | 1.26 |
| 6705. | 6.19 | 1.19 | 1.25 | 1.25 | 1.25 | 1.25 |
| 6737. | 6.25 | 1.18 | 1.28 | 1.27 | 1.27 | 1.28 |
| 6773. | 6.24 | 1.18 | 1.27 | 1.26 | 1.25 | 1.28 |

115

| | 1.55 | 1.59 | 1.53 | 1.57 | 1.55 | END OF
CHARGE |
|-------|------|------|------|------|------|------------------|
| 6372. | 7.78 | .69 | 1.55 | 1.57 | 1.55 | |
| 6450. | 7.68 | .68 | 1.54 | 1.59 | 1.54 | |
| 6482. | 7.72 | .68 | 1.52 | 1.57 | 1.52 | |
| 6513. | 7.88 | .69 | 1.53 | 1.54 | 1.51 | |
| 6546. | 7.89 | .65 | 1.53 | 1.54 | 1.52 | |
| 6578. | 7.72 | .62 | 1.54 | 1.56 | 1.54 | |
| 6614. | 7.76 | .69 | 1.55 | 1.57 | 1.55 | |
| 6641. | 7.75 | .70 | 1.55 | 1.57 | 1.55 | |
| 6664. | 7.71 | .69 | 1.54 | 1.57 | 1.55 | |
| 6705. | 7.72 | .67 | 1.55 | 1.57 | 1.55 | |
| 6737. | 7.72 | .68 | 1.55 | 1.57 | 1.56 | |
| 6773. | 7.72 | .68 | 1.55 | 1.57 | 1.56 | |

PACK NO. 326
GULTON 4 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 2.00

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 6693. | 5.96 | 1.97 | 1.19 | 1.22 | 1.21 | 1.91 | 1.21 |
| 6738. | 5.95 | 1.98 | 1.21 | 1.21 | 1.20 | 1.20 | 1.20 |
| 6772. | 5.95 | 1.97 | 1.21 | 1.21 | 1.20 | 1.20 | 1.20 |
| 6807. | 5.90 | 1.98 | 1.20 | 1.20 | 1.19 | 1.20 | 1.19 |
| 6834. | 5.93 | 1.98 | 1.20 | 1.20 | 1.19 | 1.19 | 1.19 |
| 6901. | 5.97 | 1.94 | 1.22 | 1.22 | 1.21 | 1.21 | 1.22 |
| 6929. | 5.92 | 1.97 | 1.23 | 1.23 | 1.22 | 1.23 | 1.23 |
| 6964. | 6.03 | 1.98 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 |
| 6996. | 5.96 | 1.98 | 1.22 | 1.22 | 1.22 | 1.22 | 1.23 |
| 7011. | 5.82 | 2.02 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 |
| 7045. | 5.86 | 2.03 | 1.19 | 1.20 | 1.19 | 1.19 | 1.19 |
| 7079. | 5.82 | 2.02 | 1.21 | 1.21 | 1.21 | 1.22 | 1.22 |
| 7109. | 5.91 | 2.04 | 1.19 | 1.19 | 1.18 | 1.18 | 1.18 |

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 6693. | 7.71 | 1.15 | 1.57 | 1.53 | 1.55 | 1.57 | 1.55 |
| 6738. | 7.75 | .70 | 1.55 | 1.52 | 1.54 | 1.55 | 1.52 |
| 6772. | 7.70 | .71 | 1.55 | 1.52 | 1.54 | 1.60 | 1.52 |
| 6807. | 7.76 | .69 | 1.55 | 1.52 | 1.54 | 1.56 | 1.52 |
| 6834. | 7.84 | .69 | 1.54 | 1.51 | 1.53 | 1.54 | 1.50 |
| 6901. | 7.94 | 1.12 | 1.59 | 1.55 | 1.58 | 1.60 | 1.57 |
| 6929. | 7.86 | 1.09 | 1.59 | 1.56 | 1.58 | 1.61 | 1.57 |
| 6964. | 7.83 | 1.13 | 1.59 | 1.55 | 1.59 | 1.60 | 1.57 |
| 6996. | 7.86 | 1.14 | 1.59 | 1.56 | 1.59 | 1.61 | 1.57 |
| 7011. | 7.40 | .50 | 1.50 | 1.49 | 1.51 | 1.51 | 1.48 |
| 7045. | 7.43 | .54 | 1.51 | 1.48 | 1.51 | 1.51 | 1.48 |
| 7079. | 7.43 | .52 | 1.50 | 1.48 | 1.51 | 1.51 | 1.48 |
| 7109. | 7.15 | 1.99 | 1.43 | 1.42 | 1.43 | 1.43 | 1.42 |

PACK NO. 204
BULTON 4 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORRIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 2.00

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

| | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|
| 6572. | 5.81 | 2.00 | 1.18 | 1.17 | 1.18 | 1.18 | 1.18 | 1.18 |
| 6578. | 5.79 | 2.00 | 1.19 | 1.17 | 1.19 | 1.19 | 1.19 | 1.19 |
| 6608. | 5.79 | 2.00 | 1.18 | 1.16 | 1.19 | 1.19 | 1.19 | 1.18 |
| 6642. | 5.79 | 2.00 | 1.18 | 1.16 | 1.19 | 1.18 | 1.18 | 1.18 |
| 6665. | 5.73 | 2.00 | 1.17 | 1.15 | 1.17 | 1.17 | 1.17 | 1.16 |
| 6736. | 5.38 | 2.05 | 1.10 | 1.06 | 1.10 | 1.11 | 1.11 | 1.11 |
| 6774. | 5.78 | 2.00 | 1.18 | 1.17 | 1.18 | 1.18 | 1.18 | 1.17 |
| 6799. | 5.80 | 2.01 | 1.18 | 1.17 | 1.19 | 1.18 | 1.18 | 1.17 |
| 6832. | 5.75 | 2.00 | 1.17 | 1.15 | 1.18 | 1.17 | 1.17 | 1.17 |
| 6858. | 5.72 | 1.98 | 1.20 | 1.18 | 1.21 | 1.20 | 1.20 | 1.21 |
| 6902. | 5.76 | 2.00 | 1.17 | 1.15 | 1.19 | 1.18 | 1.18 | 1.17 |
| 6926. | 5.70 | 1.99 | 1.19 | 1.17 | 1.21 | 1.20 | 1.20 | 1.20 |
| 6960. | 5.71 | 2.00 | 1.15 | 1.12 | 1.15 | 1.16 | 1.16 | 1.15 |

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 6532. | 7.26 | 1.25 | 1.47 | 1.46 | 1.45 | 1.50 | 1.48 |
| 6578. | 7.24 | 1.26 | 1.47 | 1.45 | 1.45 | 1.50 | 1.48 |
| 6608. | 7.30 | 1.24 | 1.46 | 1.44 | 1.44 | 1.48 | 1.48 |
| 6642. | 7.26 | 1.24 | 1.45 | 1.44 | 1.43 | 1.47 | 1.44 |
| 6665. | 7.35 | 1.24 | 1.45 | 1.44 | 1.43 | 1.47 | 1.44 |
| 6736. | 7.20 | 1.27 | 1.46 | 1.44 | 1.45 | 1.49 | 1.46 |
| 6774. | 7.30 | 1.24 | 1.48 | 1.47 | 1.46 | 1.51 | 1.49 |
| 6799. | 7.27 | 1.26 | 1.47 | 1.46 | 1.46 | 1.51 | 1.48 |
| 6832. | 7.26 | 1.26 | 1.47 | 1.45 | 1.46 | 1.51 | 1.48 |
| 6858. | 7.28 | 1.24 | 1.47 | 1.46 | 1.46 | 1.51 | 1.49 |
| 6902. | 7.25 | 1.24 | 1.47 | 1.45 | 1.46 | 1.51 | 1.48 |
| 6926. | 7.25 | 1.25 | 1.47 | 1.45 | 1.46 | 1.50 | 1.48 |
| 6960. | 7.27 | 1.25 | 1.46 | 1.44 | 1.44 | 1.49 | 1.48 |

PACK NO. 214
SECTION A A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 123

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE BACK CURRENT
NO. VOLTAGE 3.20 1

CELL VOLTAGES
2 3 4 5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 6229. | 5.55 | 3.17 | 1.12 | 1.17 | 1.07 | 1.15 | 1.13 |
| 6263. | 5.59 | 3.14 | 1.12 | 1.16 | 1.11 | 1.14 | 1.14 |
| 6298. | 5.56 | 3.14 | 1.10 | 1.15 | 1.10 | 1.14 | 1.14 |
| 6360. | 5.21 | 3.16 | 1.00 | 1.12 | 1.00 | 1.10 | 1.07 |
| 6392. | 5.53 | 3.11 | 1.11 | 1.16 | 1.07 | 1.14 | 1.15 |
| 6420. | 5.41 | 3.21 | 1.08 | 1.15 | 1.05 | 1.13 | 1.12 |
| 6455. | 5.23 | 3.21 | 1.04 | 1.13 | .98 | 1.10 | 1.05 |
| 6487. | 5.28 | 3.21 | 1.09 | 1.15 | 1.02 | 1.14 | 1.13 |
| 6518. | 5.31 | 3.18 | 1.10 | 1.16 | 1.04 | 1.15 | 1.12 |
| 6586. | 5.39 | 3.20 | 1.11 | 1.15 | 1.09 | 1.15 | 1.14 |
| 6616. | 5.36 | 3.21 | 1.03 | 1.13 | 1.03 | 1.11 | 1.09 |

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 6229. | 7.27 | 2.01 | 1.44 | 1.48 | 1.44 | 1.50 | 1.42 |
| 6263. | 7.47 | 2.02 | 1.47 | 1.51 | 1.53 | 1.55 | 1.46 |
| 6298. | 7.44 | 2.01 | 1.46 | 1.51 | 1.52 | 1.54 | 1.46 |
| 6360. | 7.48 | 1.99 | 1.44 | 1.49 | 1.49 | 1.52 | 1.43 |
| 6392. | 7.44 | 1.99 | 1.46 | 1.51 | 1.53 | 1.55 | 1.47 |
| 6420. | 7.44 | 2.01 | 1.46 | 1.52 | 1.53 | 1.56 | 1.47 |
| 6455. | 7.41 | 2.04 | 1.46 | 1.52 | 1.52 | 1.56 | 1.46 |
| 6487. | 7.47 | 2.02 | 1.46 | 1.52 | 1.52 | 1.57 | 1.47 |
| 6518. | 7.44 | 2.01 | 1.47 | 1.53 | 1.52 | 1.57 | 1.47 |
| 6586. | 7.42 | 2.01 | 1.46 | 1.52 | 1.51 | 1.57 | 1.47 |
| 6616. | 7.44 | 2.00 | 1.45 | 1.51 | 1.49 | 1.55 | 1.47 |

CELL NO. 228
CAPTION A A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO. BACK CURRENT
VOLTAGE 1.20

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 6435. | 5.04 | 1.18 | 1.21 | 1.22 | 1.20 | 1.19 | 1.21 |
| 6481. | 5.05 | 1.17 | 1.21 | 1.21 | 1.21 | 1.19 | 1.21 |
| 6511. | 5.01 | 1.18 | 1.21 | 1.20 | 1.21 | 1.18 | 1.20 |
| 6545. | 5.01 | 1.20 | 1.21 | 1.20 | 1.21 | 1.18 | 1.20 |
| 6568. | 5.89 | 1.20 | 1.20 | 1.20 | 1.20 | 1.17 | 1.19 |
| 6639. | 5.93 | 1.22 | 1.21 | 1.20 | 1.21 | 1.19 | 1.21 |
| 6677. | 5.94 | 1.17 | 1.21 | 1.21 | 1.21 | 1.19 | 1.21 |
| 6702. | 5.95 | 1.18 | 1.21 | 1.21 | 1.21 | 1.20 | 1.21 |
| 6757. | 6.01 | 1.19 | 1.22 | 1.22 | 1.22 | 1.21 | 1.22 |
| 6781. | 5.88 | 1.20 | 1.23 | 1.23 | 1.24 | 1.23 | 1.24 |
| 6815. | 5.90 | 1.18 | 1.21 | 1.20 | 1.20 | 1.19 | 1.21 |

END OF
CHARGE

| | | | | | | | |
|-------|------|-----|------|------|------|------|------|
| 6435. | 7.04 | .96 | 1.44 | 1.42 | 1.42 | 1.43 | 1.42 |
| 6481. | 7.05 | .97 | 1.44 | 1.42 | 1.42 | 1.43 | 1.43 |
| 6511. | 7.09 | .94 | 1.44 | 1.42 | 1.42 | 1.42 | 1.41 |
| 6545. | 7.17 | .99 | 1.43 | 1.41 | 1.41 | 1.40 | 1.39 |
| 6568. | 7.17 | .98 | 1.43 | 1.41 | 1.41 | 1.40 | 1.39 |
| 6639. | 7.06 | .98 | 1.44 | 1.42 | 1.43 | 1.43 | 1.43 |
| 6677. | 7.00 | .96 | 1.45 | 1.44 | 1.44 | 1.44 | 1.44 |
| 6702. | 7.00 | .98 | 1.45 | 1.43 | 1.44 | 1.44 | 1.44 |
| 6757. | 7.07 | .91 | 1.45 | 1.42 | 1.44 | 1.43 | 1.44 |
| 6781. | 7.03 | .66 | 1.43 | 1.42 | 1.43 | 1.43 | 1.43 |
| 6815. | 7.06 | .64 | 1.43 | 1.41 | 1.41 | 1.42 | 1.42 |

PACK NO. 240
GULTON 4 A. H.

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160 | | | | | END OF
DISCHARGE |
|-----------|--------------|---------|--|------|------|------|------|---------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 6550. | 5.46 | 2.01 | 1.16 | 1.15 | .97 | 1.16 | 1.12 | |
| 6596. | 5.33 | 2.00 | 1.16 | 1.14 | .84 | 1.16 | 1.12 | |
| 6626. | 5.31 | 2.01 | 1.14 | 1.13 | .89 | 1.15 | 1.09 | |
| 6660. | 5.29 | 2.02 | 1.16 | 1.14 | .84 | 1.16 | 1.12 | |
| 6683. | 5.29 | 2.02 | 1.14 | 1.12 | .91 | 1.13 | 1.08 | |
| 6754. | 5.34 | 2.07 | 1.15 | 1.12 | 1.05 | 1.15 | 1.11 | |
| 6792. | 5.47 | 2.02 | 1.14 | 1.12 | 1.07 | 1.13 | 1.09 | |
| 6817. | 5.51 | 2.03 | 1.15 | 1.14 | 1.06 | 1.14 | 1.12 | |
| 6872. | 5.75 | 2.01 | 1.17 | 1.17 | 1.17 | 1.18 | 1.15 | |
| 6896. | 5.63 | 2.02 | 1.18 | 1.18 | 1.21 | 1.20 | 1.17 | |
| 6930. | 5.69 | 2.00 | 1.14 | 1.14 | 1.15 | 1.16 | 1.12 | |
| 6550. | 7.16 | 1.60 | | | | | | |
| 6596. | 7.16 | 1.30 | 1.45 | 1.48 | 1.42 | 1.48 | 1.44 | |
| 6626. | 7.21 | 1.18 | 1.45 | 1.47 | 1.42 | 1.48 | 1.44 | |
| 6660. | 7.21 | 1.15 | 1.43 | 1.46 | 1.40 | 1.46 | 1.41 | |
| 6683. | 7.30 | 1.17 | 1.43 | 1.46 | 1.40 | 1.45 | 1.40 | |
| 6754. | 7.25 | .94 | 1.42 | 1.44 | 1.39 | 1.43 | 1.39 | |
| 6792. | 7.12 | .88 | 1.44 | 1.45 | 1.43 | 1.46 | 1.43 | |
| 6817. | 7.13 | .84 | 1.45 | 1.46 | 1.43 | 1.46 | 1.44 | |
| 6872. | 7.15 | .86 | 1.45 | 1.47 | 1.44 | 1.46 | 1.44 | |
| 6896. | 7.30 | 1.62 | 1.48 | 1.50 | 1.46 | 1.51 | 1.47 | |
| 6930. | 7.30 | 1.66 | 1.47 | 1.50 | 1.47 | 1.51 | 1.47 | |
| 6930. | 7.34 | 1.64 | 1.46 | 1.49 | 1.45 | 1.50 | 1.46 | |
| | | | | | | | | END OF
CHARGE |

PACK NO. 216
GULTON 12 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 11%
TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 3.60

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 3468. | 6.12 | 3.65 | 1.24 | 1.25 | 1.24 | 1.25 | 1.24 |
| 3514. | 6.13 | 3.65 | 1.25 | 1.25 | 1.25 | 1.26 | 1.25 |
| 3544. | 6.10 | 3.65 | 1.23 | 1.24 | 1.24 | 1.25 | 1.23 |
| 3578. | 6.10 | 3.65 | 1.24 | 1.24 | 1.25 | 1.25 | 1.24 |
| 3601. | 6.09 | 3.65 | 1.23 | 1.24 | 1.24 | 1.24 | 1.22 |
| 3672. | 6.05 | 3.75 | 1.23 | 1.23 | 1.24 | 1.24 | 1.24 |
| 3710. | 6.11 | 3.63 | 1.24 | 1.25 | 1.24 | 1.25 | 1.24 |
| 3735. | 6.09 | 3.63 | 1.23 | 1.24 | 1.24 | 1.24 | 1.23 |
| 3768. | 6.11 | 3.59 | 1.24 | 1.24 | 1.25 | 1.25 | 1.25 |
| 3794. | 6.01 | 3.59 | 1.25 | 1.26 | 1.27 | 1.27 | 1.27 |
| 3862. | 6.17 | 3.60 | 1.28 | 1.28 | 1.30 | 1.30 | 1.30 |
| 3896. | 6.28 | 3.61 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 |

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 3468. | 7.26 | 2.07 | 1.51 | 1.47 | 1.45 | 1.47 | 1.47 |
| 3514. | 7.23 | 1.06 | 1.49 | 1.47 | 1.45 | 1.46 | 1.47 |
| 3544. | 7.24 | 1.09 | 1.49 | 1.46 | 1.44 | 1.46 | 1.46 |
| 3578. | 7.39 | 1.06 | 1.49 | 1.45 | 1.43 | 1.43 | 1.44 |
| 3601. | 7.38 | 1.11 | 1.48 | 1.45 | 1.42 | 1.43 | 1.43 |
| 3672. | 7.15 | 1.52 | 1.47 | 1.45 | 1.44 | 1.45 | 1.45 |
| 3710. | 7.25 | 1.18 | 1.50 | 1.47 | 1.45 | 1.46 | 1.47 |
| 3735. | 7.21 | 1.16 | 1.49 | 1.46 | 1.45 | 1.46 | 1.46 |
| 3768. | 7.26 | 1.11 | 1.52 | 1.47 | 1.46 | 1.46 | 1.47 |
| 3794. | 7.23 | 1.15 | 1.50 | 1.46 | 1.45 | 1.46 | 1.47 |
| 3862. | 7.64 | 1.19 | 1.64 | 1.54 | 1.51 | 1.52 | 1.54 |
| 3896. | 7.69 | 1.21 | 1.64 | 1.53 | 1.49 | 1.52 | 1.54 |

W. 301
ION 12 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115
TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

| TIME | VOLTAGE | CURRENT | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-------|---------|---------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 4415. | 6.00 | 6.07 | 1.23 | 1.23 | 1.22 | 1.20 | 1.22 | |
| 4493. | 6.00 | 5.88 | 1.23 | 1.23 | 1.23 | 1.21 | 1.22 | |
| 4541. | 6.09 | 5.89 | 1.24 | 1.24 | 1.23 | 1.22 | 1.23 | |
| 4572. | 6.08 | 5.94 | 1.24 | 1.24 | 1.23 | 1.22 | 1.24 | |
| 4603. | 6.06 | 6.03 | 1.24 | 1.24 | 1.23 | 1.22 | 1.24 | |
| 4635. | 6.01 | 6.04 | 1.22 | 1.23 | 1.22 | 1.20 | 1.22 | |
| 4658. | 6.03 | 5.90 | 1.24 | 1.24 | 1.24 | 1.21 | 1.23 | |
| 4700. | 6.01 | 5.95 | 1.23 | 1.23 | 1.23 | 1.20 | 1.23 | |
| 4731. | 5.95 | 6.00 | 1.24 | 1.25 | 1.25 | 1.23 | 1.25 | |
| 4767. | 5.95 | 5.97 | 1.24 | 1.24 | 1.25 | 1.23 | 1.24 | |
| 4795. | 6.03 | 5.96 | 1.22 | 1.22 | 1.21 | 1.19 | 1.22 | |
| 4415. | 7.88 | 3.45 | 1.57 | 1.55 | 1.54 | 1.68 | 1.58 | END OF CHARGE |
| 4493. | 7.84 | 2.44 | 1.57 | 1.55 | 1.54 | 1.69 | 1.56 | |
| 4540. | 8.02 | 3.34 | 1.59 | 1.57 | 1.56 | 1.68 | 1.58 | |
| 4572. | 7.86 | 2.47 | 1.58 | 1.55 | 1.54 | 1.68 | 1.58 | |
| 4608. | 7.96 | 3.07 | 1.60 | 1.57 | 1.56 | 1.71 | 1.61 | |
| 4635. | 7.94 | 3.03 | 1.59 | 1.57 | 1.56 | 1.71 | 1.59 | |
| 4658. | 7.89 | 2.75 | 1.58 | 1.57 | 1.55 | 1.71 | 1.57 | |
| 4700. | 7.88 | 2.82 | 1.59 | 1.57 | 1.56 | 1.70 | 1.59 | |
| 4731. | 7.89 | 2.78 | 1.59 | 1.57 | 1.55 | 1.71 | 1.58 | |
| 4767. | 7.90 | 2.77 | 1.59 | 1.57 | 1.56 | 1.71 | 1.58 | |
| 4795. | 7.87 | 2.60 | 1.57 | 1.55 | 1.54 | 1.69 | 1.58 | |

DATA NO. 227
 DATE 12 12 64.

TEST TEMPERATURE 25 C
 ORBIT PERIOD 90 MIN.

| SAMPLE NO. | BACK CURRENT VOLTAGE | CELL VOLTAGE | | | | | END OF DISCHARGE |
|------------|----------------------|--------------|------|------|------|------|------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 3788. | 5.64 | 1.15 | 1.14 | 1.13 | 1.15 | 1.16 | |
| 3815. | 5.49 | 1.13 | 1.11 | 1.10 | 1.12 | 1.15 | |
| 3840. | 5.57 | 1.14 | 1.13 | 1.13 | 1.14 | 1.15 | |
| 3897. | 5.47 | 1.12 | 1.11 | 1.12 | 1.13 | 1.15 | |
| 3922. | 5.48 | 1.12 | 1.11 | 1.10 | 1.11 | 1.13 | |
| 3959. | 5.49 | 1.12 | 1.11 | 1.10 | 1.12 | 1.14 | |
| 3991. | 5.58 | 1.14 | 1.13 | 1.14 | 1.14 | 1.15 | |
| 4023. | 5.69 | 1.17 | 1.16 | 1.16 | 1.17 | 1.16 | |
| 4054. | 5.60 | 1.15 | 1.14 | 1.14 | 1.14 | 1.14 | |
| 4103. | 5.31 | 1.09 | 1.07 | 1.08 | 1.08 | 1.09 | |
| 4125. | 5.71 | 1.21 | 1.19 | 1.20 | 1.20 | 1.20 | |
| 3782. | 7.20 | 1.46 | 1.46 | 1.45 | 1.47 | 1.47 | END OF CHARGE |
| 3835. | 7.17 | 1.43 | 1.43 | 1.42 | 1.43 | 1.43 | |
| 3860. | 7.20 | 1.45 | 1.45 | 1.45 | 1.45 | 1.45 | |
| 3897. | 7.16 | 1.44 | 1.45 | 1.45 | 1.45 | 1.45 | |
| 3922. | 7.28 | 1.43 | 1.44 | 1.43 | 1.43 | 1.43 | |
| 3940. | 7.25 | 1.43 | 1.44 | 1.42 | 1.43 | 1.43 | |
| 3991. | 7.17 | 1.45 | 1.44 | 1.46 | 1.46 | 1.46 | |
| 4023. | 7.31 | 1.45 | 1.46 | 1.46 | 1.47 | 1.46 | |
| 4054. | 7.19 | 1.45 | 1.46 | 1.46 | 1.47 | 1.46 | |
| 4103. | 7.16 | 1.45 | 1.45 | 1.45 | 1.46 | 1.45 | |
| 4125. | 7.19 | 1.45 | 1.45 | 1.46 | 1.46 | 1.46 | |

PACK NO. 296
 GULTON 12 A.H.
 TEST TEMPERATURE 25 C
 ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 40
 PERCENT OF RECHARGE 125

| CYCLE NO. | PACK VOLTAGE | CURRENT 9.60 | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|--------------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 4662. | 5.24 | 9.62 | 1.12 | 1.07 | 1.07 | .93 | 1.12 | |
| 4694. | 5.08 | 9.70 | 1.11 | 1.03 | 1.08 | .85 | 1.11 | |
| 4723. | 5.08 | 9.68 | 1.12 | 1.04 | 1.08 | .82 | 1.10 | |
| 4758. | 5.06 | 9.54 | 1.11 | 1.04 | 1.08 | .80 | 1.11 | |
| 4790. | 4.94 | 9.49 | 1.11 | 1.00 | 1.06 | .75 | 1.11 | |
| 4826. | 5.27 | 9.59 | 1.14 | 1.07 | 1.10 | .93 | 1.14 | |
| 4853. | 5.18 | 9.63 | 1.13 | 1.04 | 1.07 | .91 | 1.12 | |
| 4876. | 5.22 | 9.60 | 1.14 | 1.05 | 1.07 | .90 | 1.14 | |
| 4950. | 5.08 | 9.50 | 1.13 | 1.04 | 1.07 | .78 | 1.16 | |
| 4986. | 4.95 | 9.32 | 1.12 | 1.03 | 1.05 | .67 | 1.15 | |
| 5014. | 4.84 | 9.45 | 1.07 | .99 | .99 | .72 | 1.10 | |
| 4662. | 7.54 | 6.00 | 1.54 | 1.51 | 1.55 | 1.51 | 1.53 | END OF CHARGE |
| 4694. | 7.67 | 6.02 | 1.56 | 1.53 | 1.58 | 1.48 | 1.54 | |
| 4723. | 7.75 | 5.95 | 1.55 | 1.52 | 1.56 | 1.46 | 1.52 | |
| 4758. | 7.71 | 6.01 | 1.54 | 1.50 | 1.55 | 1.46 | 1.51 | |
| 4790. | 7.65 | 5.82 | 1.57 | 1.52 | 1.59 | 1.48 | 1.56 | |
| 4826. | 7.76 | 5.99 | 1.58 | 1.54 | 1.59 | 1.52 | 1.56 | |
| 4853. | 7.73 | 6.04 | 1.58 | 1.53 | 1.58 | 1.51 | 1.56 | |
| 4876. | 7.76 | 6.02 | 1.59 | 1.54 | 1.59 | 1.52 | 1.58 | |
| 4950. | 7.66 | 5.97 | 1.58 | 1.51 | 1.57 | 1.50 | 1.57 | |
| 4986. | 7.71 | 5.93 | 1.59 | 1.52 | 1.57 | 1.51 | 1.59 | |
| 5014. | 7.57 | 5.99 | 1.56 | 1.48 | 1.50 | 1.48 | 1.56 | |

100

| DEPTH OF DISCHARGE | PERCENT OF RECHARGE |
|--------------------|---------------------|
| 15 | 160 |

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

INSTRUMENT BACK CURRENT
VOLTAGE 2.50

END OF
DISCHARGE

**END OF
CHARGE**

125

PACK NO. 290
GULION 12 A.H.

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|---------|---------------|------|-----|-----|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 4409. | 3.25 | 5.91 | 1.11 | 1.09 | .00 | .00 | 1.10 | |
| 4544. | 3.26 | 5.90 | 1.12 | 1.07 | .00 | .00 | 1.11 | |
| 4613. | 3.26 | 5.96 | 1.12 | 1.07 | .00 | .00 | 1.11 | |
| 4640. | 3.23 | 5.96 | 1.10 | 1.08 | .00 | .00 | 1.09 | |
| 4707. | 3.21 | 5.85 | 1.11 | 1.05 | .00 | .00 | 1.11 | |
| 4735. | 3.28 | 5.94 | 1.12 | 1.11 | .00 | .00 | 1.14 | |
| 4770. | 3.22 | 5.89 | 1.11 | 1.04 | .00 | .00 | 1.11 | |
| 4802. | 3.28 | 5.89 | 1.12 | 1.06 | .00 | .00 | 1.15 | |
| 4885. | 3.11 | 5.79 | 1.13 | 1.09 | .00 | .00 | 1.11 | |
| 4915. | 3.23 | 5.83 | 1.08 | 1.08 | .00 | .00 | 1.09 | |
| 4409. | 4.35 | 4.80 | 1.45 | 1.46 | .00 | .00 | 1.46 | END OF CHARGE |
| 4544. | 4.38 | 3.40 | 1.45 | 1.44 | .00 | .00 | 1.44 | |
| 4613. | 4.38 | 3.42 | 1.46 | 1.46 | .00 | .00 | 1.46 | |
| 4640. | 4.36 | 3.45 | 1.43 | 1.44 | .00 | .00 | 1.42 | |
| 4707. | 4.34 | 3.22 | 1.45 | 1.45 | .00 | .00 | 1.45 | |
| 4735. | 4.42 | 3.47 | 1.49 | 1.48 | .00 | .00 | 1.49 | |
| 4770. | 4.36 | 3.30 | 1.46 | 1.46 | .00 | .00 | 1.47 | |
| 4802. | 4.44 | 3.40 | 1.49 | 1.48 | .00 | .00 | 1.50 | |
| 4885. | 4.35 | 4.30 | 1.47 | 1.46 | .00 | .00 | 1.46 | |
| 4915. | 4.37 | 4.29 | 1.46 | 1.46 | .00 | .00 | 1.47 | |

PACK NO. 213
GULTON HSI 6 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 3.00

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 3386. | 6.08 | 3.00 | 1.24 | 1.24 | 1.24 | 1.25 | 1.24 |
| 3464. | 6.04 | 3.00 | 1.23 | 1.23 | 1.23 | 1.23 | 1.22 |
| 3496. | 6.00 | 3.00 | 1.22 | 1.21 | 1.22 | 1.23 | 1.22 |
| 3527. | 6.10 | 3.00 | 1.23 | 1.22 | 1.22 | 1.22 | 1.21 |
| 3560. | 6.03 | 3.01 | 1.23 | 1.22 | 1.23 | 1.22 | 1.22 |
| 3592. | 5.99 | 2.97 | 1.22 | 1.22 | 1.23 | 1.23 | 1.22 |
| 3628. | 6.03 | 3.00 | 1.23 | 1.23 | 1.23 | 1.23 | 1.22 |
| 3655. | 6.01 | 3.01 | 1.22 | 1.22 | 1.22 | 1.23 | 1.22 |
| 3678. | 6.01 | 2.99 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| 3720. | 6.01 | 2.97 | 1.22 | 1.22 | 1.22 | 1.23 | 1.23 |
| 3788. | 5.94 | 2.97 | 1.24 | 1.23 | 1.24 | 1.25 | 1.24 |

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 3386. | 7.95 | 1.73 | 1.60 | 1.58 | 1.57 | 1.64 | 1.63 |
| 3464. | 7.98 | 1.73 | 1.59 | 1.57 | 1.56 | 1.62 | 1.61 |
| 3496. | 7.83 | 1.73 | 1.57 | 1.55 | 1.55 | 1.60 | 1.59 |
| 3527. | 8.03 | 1.72 | 1.57 | 1.56 | 1.55 | 1.60 | 1.59 |
| 3560. | 7.98 | 1.58 | 1.56 | 1.55 | 1.55 | 1.59 | 1.58 |
| 3592. | 7.69 | 1.03 | 1.54 | 1.53 | 1.52 | 1.58 | 1.56 |
| 3628. | 7.68 | .96 | 1.55 | 1.54 | 1.53 | 1.59 | 1.58 |
| 3655. | 7.68 | .98 | 1.55 | 1.54 | 1.53 | 1.59 | 1.58 |
| 3678. | 7.68 | .99 | 1.55 | 1.54 | 1.53 | 1.59 | 1.57 |
| 3720. | 7.66 | .98 | 1.54 | 1.54 | 1.53 | 1.59 | 1.58 |
| 3788. | 7.67 | .97 | 1.54 | 1.54 | 1.53 | 1.59 | 1.58 |

PACK NO. 218
 GULTON HSI 6 A.H.
 DEPTH OF DISCHARGE 40
 PERCENT OF RECHARGE 125
 TEST TEMPERATURE 25 C
 ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT 4.80 | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|--------------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 3404. | 5.73 | 4.77 | 1.17 | 1.16 | 1.18 | 1.15 | 1.17 | |
| 3445. | 5.67 | 4.78 | 1.16 | 1.14 | 1.17 | 1.14 | 1.16 | |
| 3481. | 5.72 | 4.75 | 1.17 | 1.16 | 1.18 | 1.15 | 1.16 | |
| 3546. | 5.60 | 4.74 | 1.14 | 1.13 | 1.15 | 1.12 | 1.14 | |
| 3577. | 5.61 | 4.76 | 1.16 | 1.13 | 1.16 | 1.14 | 1.16 | |
| 3609. | 5.57 | 4.78 | 1.14 | 1.11 | 1.16 | 1.12 | 1.14 | |
| 3647. | 5.60 | 4.76 | 1.16 | 1.11 | 1.16 | 1.13 | 1.15 | |
| 3731. | 5.50 | 4.76 | 1.17 | 1.11 | 1.19 | 1.16 | 1.18 | |
| 3770. | 4.31 | 4.45 | 1.14 | .18 | 1.16 | 1.12 | 1.14 | |
| 3795. | 4.12 | 4.40 | 1.15 | .18 | 1.17 | 1.14 | 1.16 | |
| 3828. | 5.32 | 4.76 | 1.15 | .79 | 1.15 | 1.13 | 1.14 | |
| | | | | | | | | |
| 3404. | 7.47 | 3.00 | 1.49 | 1.50 | 1.49 | 1.51 | 1.51 | END OF CHARGE |
| 3445. | 7.45 | 2.79 | 1.48 | 1.48 | 1.48 | 1.50 | 1.50 | |
| 3481. | 7.42 | 2.98 | 1.49 | 1.49 | 1.49 | 1.51 | 1.51 | |
| 3546. | 7.55 | 2.90 | 1.47 | 1.48 | 1.48 | 1.48 | 1.48 | |
| 3577. | 7.45 | 2.92 | 1.48 | 1.48 | 1.48 | 1.50 | 1.50 | |
| 3609. | 7.43 | 2.89 | 1.50 | 1.50 | 1.50 | 1.52 | 1.52 | |
| 3647. | 7.47 | 2.89 | 1.51 | 1.51 | 1.51 | 1.53 | 1.53 | |
| 3731. | 7.44 | 2.75 | 1.50 | 1.49 | 1.52 | 1.52 | 1.53 | |
| 3770. | 7.42 | 2.68 | 1.51 | 1.43 | 1.52 | 1.53 | 1.53 | |
| 3795. | 7.41 | 3.02 | 1.51 | 1.43 | 1.52 | 1.53 | 1.54 | |
| 3828. | 7.46 | 2.99 | 1.51 | 1.43 | 1.51 | 1.52 | 1.53 | |
| | | 2.98 | 1.51 | 1.43 | 1.51 | 1.52 | 1.53 | |

PACK NO. 238
GULTON HSI 6 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 3.00

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

| | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|
| 3387. | 5.65 | 2.98 | 1.14 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 |
| 3432. | 5.69 | 2.95 | 1.14 | 1.16 | 1.16 | 1.16 | 1.16 | 1.15 |
| 3466. | 5.63 | 2.99 | 1.13 | 1.14 | 1.15 | 1.16 | 1.16 | 1.15 |
| 3501. | 7.00 | 2.57 | 1.41 | 1.41 | 1.41 | 1.42 | 1.41 | 1.41 |
| 3563. | 5.60 | 2.96 | 1.13 | 1.13 | 1.15 | 1.14 | 1.13 | 1.13 |
| 3595. | 5.67 | 2.91 | 1.14 | 1.15 | 1.16 | 1.17 | 1.16 | 1.16 |
| 3623. | 5.63 | 2.99 | 1.16 | 1.17 | 1.18 | 1.18 | 1.17 | 1.17 |
| 3658. | 5.61 | 2.99 | 1.14 | 1.14 | 1.15 | 1.15 | 1.14 | 1.14 |
| 3690. | 5.51 | 3.02 | 1.16 | 1.15 | 1.18 | 1.18 | 1.17 | 1.17 |
| 3723. | 5.56 | 3.00 | 1.17 | 1.17 | 1.19 | 1.19 | 1.18 | 1.18 |
| 3755. | 5.69 | 2.97 | 1.15 | 1.16 | 1.16 | 1.16 | 1.15 | 1.15 |
| 3819. | 5.68 | 2.98 | 1.14 | 1.14 | 1.15 | 1.15 | 1.14 | 1.14 |

END OF
CHARGE

| | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|
| 3387. | 7.12 | 2.40 | 1.44 | 1.44 | 1.43 | 1.45 | 1.46 | 1.46 |
| 3432. | 7.19 | 2.35 | 1.43 | 1.43 | 1.42 | 1.44 | 1.44 | 1.44 |
| 3466. | 7.23 | 2.17 | 1.43 | 1.43 | 1.42 | 1.44 | 1.44 | 1.44 |
| 3501. | 7.16 | 2.19 | 1.43 | 1.43 | 1.42 | 1.44 | 1.44 | 1.44 |
| 3563. | 7.29 | 2.13 | 1.43 | 1.43 | 1.42 | 1.43 | 1.43 | 1.43 |
| 3595. | 7.16 | 1.98 | 1.44 | 1.44 | 1.44 | 1.46 | 1.46 | 1.46 |
| 3623. | 7.16 | 2.18 | 1.45 | 1.45 | 1.44 | 1.46 | 1.47 | 1.47 |
| 3658. | 7.17 | 2.08 | 1.45 | 1.45 | 1.44 | 1.46 | 1.47 | 1.47 |
| 3690. | 7.17 | 2.08 | 1.45 | 1.45 | 1.45 | 1.47 | 1.47 | 1.47 |
| 3723. | 7.19 | 1.84 | 1.45 | 1.45 | 1.45 | 1.47 | 1.48 | 1.48 |
| 3755. | 7.19 | 1.99 | 1.45 | 1.45 | 1.45 | 1.47 | 1.47 | 1.47 |
| 3819. | 7.23 | 2.09 | 1.45 | 1.44 | 1.44 | 1.47 | 1.47 | 1.47 |

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 0.90 | CELL VOLTAGES | | | | | END OF
DISCHARGE |
|-----------|------------------------------|---------------|------|------|------|------|---------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 1381. | 6.14 | .89 | 1.24 | 1.25 | 1.26 | 1.25 | |
| 1422. | 6.12 | .90 | 1.24 | 1.24 | 1.25 | 1.25 | |
| 1458. | 6.10 | .89 | 1.24 | 1.24 | 1.25 | 1.24 | |
| 1492. | 6.09 | .88 | 1.23 | 1.24 | 1.24 | 1.23 | |
| 1523. | 6.09 | .90 | 1.23 | 1.23 | 1.24 | 1.24 | |
| 1554. | 6.05 | .90 | 1.23 | 1.23 | 1.25 | 1.25 | |
| 1586. | 6.07 | .90 | 1.23 | 1.23 | 1.24 | 1.24 | |
| 1624. | 6.07 | .89 | 1.23 | 1.23 | 1.24 | 1.24 | |
| 1649. | 6.08 | .90 | 1.23 | 1.23 | 1.24 | 1.24 | |
| 1682. | 6.10 | .84 | 1.23 | 1.24 | 1.25 | 1.26 | |
| 1708. | 5.99 | .89 | 1.25 | 1.25 | 1.27 | 1.27 | |
| 1752. | 6.05 | .89 | 1.22 | 1.23 | 1.24 | 1.24 | |
| 1777. | 5.88 | .90 | 1.24 | 1.23 | 1.24 | 1.26 | |
| 1810. | 6.09 | .90 | 1.22 | 1.22 | 1.23 | 1.24 | |

| CYCLE NO. | PACK CURRENT
VOLTAGE 0.90 | CELL VOLTAGES | | | | | END OF
CHARGE |
|-----------|------------------------------|---------------|------|------|------|------|------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 1381. | 7.78 | .52 | 1.50 | 1.52 | 1.57 | 1.69 | |
| 1422. | 7.78 | .28 | 1.48 | 1.50 | 1.55 | 1.68 | |
| 1458. | 7.77 | .25 | 1.48 | 1.50 | 1.57 | 1.67 | |
| 1492. | 7.88 | .27 | 1.46 | 1.48 | 1.58 | 1.66 | |
| 1523. | 7.84 | .30 | 1.47 | 1.49 | 1.55 | 1.66 | |
| 1554. | 7.70 | .31 | 1.48 | 1.50 | 1.57 | 1.69 | |
| 1586. | 7.60 | .23 | 1.48 | 1.52 | 1.60 | 1.71 | |
| 1624. | 7.70 | .26 | 1.49 | 1.52 | 1.59 | 1.70 | |
| 1649. | 7.65 | .33 | 1.49 | 1.52 | 1.56 | 1.69 | |
| 1682. | 7.67 | .33 | 1.50 | 1.52 | 1.57 | 1.70 | |
| 1708. | 7.65 | .30 | 1.49 | 1.52 | 1.56 | 1.69 | |
| 1752. | 7.60 | .26 | 1.49 | 1.52 | 1.60 | 1.68 | |
| 1777. | 7.60 | .27 | 1.49 | 1.52 | 1.59 | 1.70 | |
| 1810. | 7.72 | .28 | 1.49 | 1.50 | 1.58 | 1.69 | |

PACK NO. 231
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 1.50

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 1381. | 5.86 | 1.49 | 1.20 | 1.19 | 1.20 | 1.20 | 1.17 |
| 1422. | 5.85 | 1.47 | 1.19 | 1.18 | 1.19 | 1.20 | 1.17 |
| 1458. | 5.82 | 1.49 | 1.19 | 1.18 | 1.19 | 1.19 | 1.16 |
| 1492. | 5.88 | 1.48 | 1.20 | 1.20 | 1.19 | 1.19 | 1.17 |
| 1523. | 5.86 | 1.50 | 1.19 | 1.19 | 1.19 | 1.19 | 1.17 |
| 1554. | 5.83 | 1.51 | 1.20 | 1.20 | 1.20 | 1.21 | 1.19 |
| 1586. | 5.84 | 1.51 | 1.19 | 1.19 | 1.19 | 1.19 | 1.17 |
| 1624. | 5.82 | 1.49 | 1.19 | 1.19 | 1.19 | 1.19 | 1.16 |
| 1649. | 5.84 | 1.50 | 1.19 | 1.19 | 1.19 | 1.19 | 1.17 |
| 1682. | 5.86 | 1.47 | 1.19 | 1.19 | 1.20 | 1.20 | 1.18 |
| 1708. | 5.72 | 1.50 | 1.20 | 1.20 | 1.21 | 1.22 | 1.20 |
| 1752. | 5.81 | 1.50 | 1.18 | 1.18 | 1.19 | 1.19 | 1.16 |
| 1777. | 5.64 | 1.50 | 1.20 | 1.19 | 1.21 | 1.21 | 1.19 |
| 1810. | 5.86 | 1.52 | 1.18 | 1.18 | 1.18 | 1.18 | 1.17 |

END OF
CHARGE

| | | | | | | |
|-------|------|------|------|------|------|------|
| 1381. | 7.72 | 1.56 | 1.55 | 1.57 | 1.55 | 1.53 |
| 1422. | 7.74 | 1.55 | 1.54 | 1.55 | 1.53 | 1.51 |
| 1458. | 7.69 | 1.55 | 1.54 | 1.56 | 1.54 | 1.52 |
| 1492. | 7.82 | 1.54 | 1.53 | 1.52 | 1.52 | 1.52 |
| 1523. | 7.80 | 1.53 | 1.52 | 1.54 | 1.52 | 1.50 |
| 1554. | 7.69 | 1.54 | 1.54 | 1.55 | 1.53 | 1.52 |
| 1586. | 7.70 | 1.57 | 1.55 | 1.58 | 1.56 | 1.55 |
| 1624. | 7.69 | 1.57 | 1.56 | 1.58 | 1.56 | 1.55 |
| 1649. | 7.64 | 1.55 | 1.54 | 1.57 | 1.55 | 1.53 |
| 1682. | 7.66 | 1.56 | 1.55 | 1.57 | 1.55 | 1.54 |
| 1708. | 7.66 | 1.56 | 1.55 | 1.58 | 1.55 | 1.54 |
| 1752. | 7.81 | 1.59 | 1.57 | 1.61 | 1.59 | 1.57 |
| 1777. | 7.79 | 1.58 | 1.57 | 1.60 | 1.58 | 1.56 |
| 1810. | 7.83 | 1.58 | 1.57 | 1.59 | 1.57 | 1.56 |

PACK NO. 203
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 1.50

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

END OF
CHARGE

| | | | | | | | | |
|-------|------|-------|------|------|------|------|------|------|
| 1434. | 5.77 | 1.51. | 1.18 | 1.17 | 1.15 | 1.18 | 1.18 | 1.18 |
| 1487. | 5.71 | 1.52 | 1.17 | 1.15 | 1.14 | 1.17 | 1.17 | 1.16 |
| 1512. | 5.76 | 1.51 | 1.18 | 1.17 | 1.16 | 1.18 | 1.18 | 1.18 |
| 1549. | 5.71 | 1.51 | 1.17 | 1.15 | 1.15 | 1.17 | 1.17 | 1.16 |
| 1574. | 5.72 | 1.51 | 1.17 | 1.15 | 1.14 | 1.16 | 1.16 | 1.15 |
| 1643. | 5.74 | 1.51 | 1.18 | 1.16 | 1.16 | 1.18 | 1.17 | 1.17 |
| 1675. | 5.76 | 1.51 | 1.19 | 1.17 | 1.16 | 1.19 | 1.18 | 1.18 |
| 1706. | 5.73 | 1.52 | 1.18 | 1.16 | 1.15 | 1.17 | 1.16 | 1.16 |
| 1739. | 5.76 | 1.48 | 1.18 | 1.16 | 1.16 | 1.18 | 1.18 | 1.18 |
| 1767. | 5.59 | 1.50 | 1.19 | 1.18 | 1.17 | 1.20 | 1.20 | 1.20 |
| 1803. | 5.72 | 1.50 | 1.17 | 1.16 | 1.15 | 1.17 | 1.17 | 1.16 |
| 1835. | 5.65 | 1.50 | 1.19 | 1.17 | 1.17 | 1.20 | 1.20 | 1.19 |
| 1867. | 5.71 | 1.52 | 1.16 | 1.14 | 1.12 | 1.15 | 1.15 | 1.15 |

| | | | | | | | | |
|-------|-------|-----|------|------|------|------|------|------|
| 1434. | 7.19 | .94 | 1.46 | 1.46 | 1.45 | 1.47 | 1.46 | 1.46 |
| 1487. | 7.23 | .94 | 1.43 | 1.43 | 1.42 | 1.43 | 1.41 | 1.41 |
| 1512. | 10.37 | .94 | 1.52 | 1.53 | 1.44 | 1.45 | .01 | .01 |
| 1549. | 7.20 | .94 | 1.44 | 1.44 | 1.45 | 1.46 | 1.43 | 1.43 |
| 1574. | 7.38 | .93 | 1.43 | 1.43 | 1.43 | 1.43 | 1.41 | 1.41 |
| 1643. | 7.15 | .94 | 1.44 | 1.44 | 1.46 | 1.46 | 1.44 | 1.44 |
| 1675. | 7.18 | .94 | 1.45 | 1.46 | 1.45 | 1.47 | 1.44 | 1.44 |
| 1706. | 7.17 | .94 | 1.45 | 1.45 | 1.46 | 1.47 | 1.45 | 1.45 |
| 1739. | 7.17 | .95 | 1.45 | 1.45 | 1.46 | 1.47 | 1.45 | 1.45 |
| 1767. | 7.18 | .94 | 1.45 | 1.46 | 1.46 | 1.47 | 1.45 | 1.45 |
| 1803. | 7.16 | .94 | 1.45 | 1.45 | 1.45 | 1.47 | 1.44 | 1.44 |
| 1835. | 7.16 | .94 | 1.45 | 1.45 | 1.45 | 1.46 | 1.45 | 1.45 |
| 1867. | 7.17 | .94 | 1.44 | 1.44 | 1.44 | 1.45 | 1.44 | 1.44 |

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 125

4.H.

CELL CURRENT

CELL VOLTAGES

END OF
DISCHARGE

END OF
CHARGE

VOLTAGE 2.40 1 2 3 4 5

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 1277. | 4.38 | 2.40 | 1.07 | 1.13 | .01 | 1.15 | 1.10 |
| 1312. | 4.38 | 2.38 | 1.07 | 1.13 | .01 | 1.15 | 1.11 |
| 1339. | 4.38 | 2.33 | 1.04 | 1.13 | .00 | 1.14 | 1.09 |
| 1374. | 4.19 | 2.30 | .98 | 1.10 | .00 | 1.12 | 1.05 |
| 1406. | 4.43 | 2.34 | 1.10 | 1.15 | .02 | 1.17 | 1.13 |
| 1434. | 4.29 | 2.40 | 1.04 | 1.12 | .01 | 1.15 | 1.08 |
| 1483. | 4.31 | 2.40 | 1.05 | 1.12 | .01 | 1.14 | 1.06 |
| 1501. | 5.14 | 2.39 | 1.04 | 1.13 | 1.01 | 1.16 | 1.09 |
| 1532. | 5.03 | 2.36 | 1.05 | 1.13 | .89 | 1.17 | 1.09 |
| 1600. | 4.77 | 2.35 | 1.06 | 1.10 | .63 | 1.16 | 1.10 |
| 1630. | 4.56 | 2.36 | .97 | 1.03 | .45 | 1.11 | 1.02 |

1.50

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 1277. | 5.87 | 1.50 | 1.46 | 1.46 | .01 | 1.46 | 1.45 |
| 1312. | 5.88 | 1.50 | 1.48 | 1.48 | .00 | 1.50 | 1.47 |
| 1339. | 5.97 | 1.49 | 1.46 | 1.46 | .02 | 1.47 | 1.44 |
| 1374. | 5.96 | 1.49 | 1.46 | 1.46 | .02 | 1.46 | 1.44 |
| 1406. | 5.88 | 1.49 | 1.48 | 1.48 | .00 | 1.51 | 1.48 |
| 1434. | 5.89 | 1.51 | 1.49 | 1.49 | .01 | 1.51 | 1.49 |
| 1483. | 5.88 | 1.51 | 1.48 | 1.48 | .01 | 1.51 | 1.48 |
| 1501. | 7.21 | 1.51 | 1.48 | 1.47 | 1.49 | 1.50 | 1.47 |
| 1532. | 7.33 | 1.50 | 1.48 | 1.48 | 1.50 | 1.50 | 1.48 |
| 1600. | 7.14 | 1.50 | 1.48 | 1.47 | 1.51 | 1.51 | 1.48 |
| 1630. | 7.19 | 1.01 | 1.44 | 1.43 | 1.47 | 1.44 | 1.44 |

PACK NO. 226
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160
TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 0.90

CYLL VOLTAGES
1 2 3 4 5

| | | | | | | | |
|-------|------|-----|------|------|------|------|------|
| 1269. | 5.74 | .91 | 1.21 | 1.15 | 1.17 | 1.15 | 1.14 |
| 1314. | 5.75 | .90 | 1.21 | 1.15 | 1.17 | 1.15 | 1.14 |
| 1348. | 5.76 | .88 | 1.21 | 1.16 | 1.17 | 1.16 | 1.15 |
| 1383. | 5.75 | .88 | 1.21 | 1.15 | 1.17 | 1.15 | 1.14 |
| 1445. | 5.76 | .89 | 1.20 | 1.14 | 1.16 | 1.14 | 1.13 |
| 1477. | 5.77 | .87 | 1.22 | 1.17 | 1.18 | 1.17 | 1.16 |
| 1505. | 5.79 | .90 | 1.21 | 1.17 | 1.18 | 1.17 | 1.16 |
| 1540. | 5.77 | .90 | 1.21 | 1.16 | 1.18 | 1.16 | 1.15 |
| 1572. | 5.70 | .90 | 1.22 | 1.18 | 1.20 | 1.19 | 1.18 |
| 1605. | 5.73 | .90 | 1.23 | 1.19 | 1.20 | 1.20 | 1.19 |
| 1637. | 5.79 | .89 | 1.21 | 1.17 | 1.18 | 1.17 | 1.15 |
| 1671. | 5.73 | .90 | 1.22 | 1.18 | 1.20 | 1.20 | 1.18 |
| 1701. | 5.82 | .91 | 1.20 | 1.16 | 1.17 | 1.16 | 1.16 |

END OF
DISCHARGE

| | | | | | | | |
|-------|------|-----|------|------|------|------|------|
| 1269. | 6.96 | .72 | 1.43 | 1.41 | 1.41 | 1.42 | 1.41 |
| 1314. | 7.00 | .73 | 1.42 | 1.40 | 1.40 | 1.40 | 1.39 |
| 1348. | 6.99 | .72 | 1.43 | 1.41 | 1.41 | 1.41 | 1.40 |
| 1383. | 6.98 | .72 | 1.42 | 1.40 | 1.41 | 1.41 | 1.40 |
| 1445. | 7.10 | .72 | 1.41 | 1.39 | 1.39 | 1.39 | 1.38 |
| 1477. | 6.98 | .72 | 1.43 | 1.41 | 1.41 | 1.42 | 1.41 |
| 1505. | 7.00 | .73 | 1.43 | 1.42 | 1.42 | 1.42 | 1.41 |
| 1540. | 7.01 | .73 | 1.44 | 1.42 | 1.42 | 1.42 | 1.41 |
| 1572. | 7.02 | .73 | 1.44 | 1.42 | 1.43 | 1.43 | 1.42 |
| 1605. | 7.04 | .73 | 1.44 | 1.42 | 1.43 | 1.43 | 1.42 |
| 1637. | 7.04 | .73 | 1.44 | 1.42 | 1.43 | 1.43 | 1.42 |
| 1671. | 7.04 | .73 | 1.45 | 1.42 | 1.43 | 1.43 | 1.42 |
| 1701. | 7.08 | .72 | 1.44 | 1.41 | 1.41 | 1.42 | 1.42 |

END OF
CHARGE

PACK NO. 237
FUNCTIONS 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 °C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
VOLTAGE 1.50

CYCLE VOLTAGES
1 2 3 4 5

| CYCLE NO. | 1 | 2 | 3 | 4 | 5 | END OF DISCHARGE |
|-----------|------|------|------|------|------|------------------|
| 1285. | 5.51 | 1.51 | 1.15 | 1.15 | 1.16 | 1.07 |
| 1363. | 5.54 | 1.50 | 1.14 | 1.15 | 1.15 | 1.05 |
| 1403. | 5.50 | 1.50 | 1.14 | 1.14 | 1.14 | 1.05 |
| 1426. | 5.50 | 1.50 | 1.12 | 1.13 | 1.13 | 1.03 |
| 1450. | 5.55 | 1.51 | 1.14 | 1.15 | 1.14 | 1.05 |
| 1491. | 5.52 | 1.50 | 1.14 | 1.15 | 1.15 | 1.05 |
| 1527. | 5.54 | 1.52 | 1.16 | 1.16 | 1.16 | 1.05 |
| 1554. | 5.49 | 1.52 | 1.14 | 1.14 | 1.14 | 1.01 |
| 1577. | 5.49 | 1.52 | 1.15 | 1.15 | 1.15 | 1.02 |
| 1619. | 5.62 | 1.51 | 1.17 | 1.17 | 1.17 | 1.06 |

| CYCLE NO. | 1 | 2 | 3 | 4 | 5 | END OF CHARGE |
|-----------|------|------|------|------|------|---------------|
| 1285. | 7.05 | 1.19 | 1.42 | 1.42 | 1.42 | 1.44 |
| 1363. | 7.10 | 1.17 | 1.42 | 1.42 | 1.42 | 1.43 |
| 1403. | 7.12 | 1.18 | 1.42 | 1.43 | 1.42 | 1.44 |
| 1426. | 7.26 | 1.20 | 1.40 | 1.41 | 1.40 | 1.41 |
| 1450. | 7.30 | 1.17 | 1.41 | 1.41 | 1.41 | 1.43 |
| 1491. | 7.13 | 1.18 | 1.42 | 1.43 | 1.43 | 1.46 |
| 1527. | 7.00 | 1.02 | 1.43 | 1.43 | 1.43 | 1.47 |
| 1554. | 7.00 | 1.02 | 1.43 | 1.43 | 1.44 | 1.47 |
| 1577. | 7.00 | 1.02 | 1.43 | 1.43 | 1.43 | 1.46 |
| 1619. | 7.00 | 1.02 | 1.44 | 1.44 | 1.44 | 1.46 |

THE UNIVERSITY OF CHICAGO

[illegible]

TRIP
POINT

[illegible]

AH IN
2.429 END OF
1.920 CHARGE

| | | | | | | | | | | | | | | | | | |
|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|
| • | 123 | • | 184 | • | 039 | • | 214 | • | 184 | • | 149 | • | 148 | • | 146 | • | 150 |
| • | 184 | • | 183 | • | 006 | • | 178 | • | 159 | • | 141 | • | 144 | • | 207 | • | 143 |
| • | 143 | • | 159 | • | 014 | • | 198 | • | 170 | • | 148 | • | 146 | • | 147 | • | 149 |
| • | 127 | • | 135 | • | 005 | • | 170 | • | 139 | • | 144 | • | 144 | • | 145 | • | 144 |
| • | 125 | • | 141 | • | 005 | • | 169 | • | 141 | • | 144 | • | 144 | • | 144 | • | 144 |
| • | 124 | • | 133 | • | 021 | • | 170 | • | 135 | • | 143 | • | 143 | • | 144 | • | 143 |
| • | 121 | • | 131 | • | 045 | • | 179 | • | 135 | • | 145 | • | 145 | • | 146 | • | 144 |

100% DISCHARGE 40 TEST TEMPERATURE 0 C
 10 10 10 10 10 TRIP PERIOD 60 MIN.

| CELL VOLTAGES | | | | | AH OUT |
|---------------|------|------|------|------|-----------------|
| 1 | 2 | 3 | 4 | 5 | |
| 1.17 | 1.19 | 1.19 | 1.19 | 1.19 | 2.231 END OF |
| 1.17 | 1.21 | 1.20 | 1.20 | 1.19 | 2.389 DISCHARGE |
| 1.17 | 1.19 | 1.19 | 1.19 | 1.17 | 2.402 |
| 1.17 | 1.19 | 1.18 | 1.18 | 1.19 | 2.392 |
| 1.17 | 1.17 | 1.17 | 1.17 | 1.18 | 2.372 |
| 1.17 | 1.20 | 1.20 | 1.20 | 1.19 | 2.368 |

| CELL VOLTAGES | | | | | TRIP POINT |
|---------------|------|------|------|------|------------|
| 1 | 2 | 3 | 4 | 5 | |
| 1.32 | 1.42 | 1.42 | 1.42 | 1.42 | 1.43 |
| 1.32 | 1.47 | 1.46 | 1.45 | 1.47 | 1.47 |
| 1.32 | 1.52 | 1.60 | 1.62 | 1.65 | 1.75 |
| 1.32 | 1.61 | 1.60 | 1.61 | 1.66 | 1.62 |
| 1.32 | 1.55 | 1.54 | 1.55 | 1.58 | 1.56 |
| 1.32 | 1.56 | 1.64 | 1.67 | 1.70 | 1.70 |

| CELL VOLTAGES | | | | | AH IN |
|---------------|------|------|------|------|--------------|
| 1 | 2 | 3 | 4 | 5 | |
| 1.25 | 1.39 | 1.38 | 1.38 | 1.38 | 2.840 END OF |
| 1.25 | 1.48 | 1.47 | 1.47 | 1.50 | 2.902 CHARGE |
| 1.25 | 1.48 | 1.48 | 1.48 | 1.50 | 2.882 |
| 1.25 | 1.48 | 1.48 | 1.48 | 1.51 | 2.938 |
| 1.25 | 1.47 | 1.47 | 1.47 | 1.49 | 2.858 |
| 1.25 | 1.48 | 1.49 | 1.49 | 1.51 | 2.903 |

10. 2 A.M. 3RD ELECTRODE B 12 18 20 29 24 TEST TEMPERATURE 25 C
 ORBIT PERIOD 90 MIN.

| C | E | BAGG | VOLTAGE | CURRENT | 3RD ELECT VOLTAGES | | | | CELL VOLTAGES | | | | | AH OUT |
|------|------|------|---------|---------|--------------------|------|------|------|---------------|------|------|------|------|--------|
| | | | | | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 1.99 | 1.99 | 5.85 | 5.85 | 3.11 | .164 | .186 | .191 | .232 | .254 | 1.17 | 1.17 | 1.17 | 1.17 | 1.17 |
| 1.77 | 1.77 | 5.71 | 5.71 | 3.07 | .151 | .170 | .169 | .214 | .231 | 1.13 | 1.13 | 1.12 | 1.20 | 1.11 |
| 1.64 | 1.64 | 5.62 | 5.62 | 3.04 | .163 | .184 | .179 | .228 | .242 | 1.15 | 1.14 | 1.14 | 1.14 | 1.13 |
| 1.71 | 1.71 | 5.79 | 5.79 | 3.10 | .170 | .184 | .189 | .229 | .251 | 1.16 | 1.16 | 1.15 | 1.17 | 1.15 |
| 1.76 | 1.76 | 5.84 | 5.84 | 3.08 | .162 | .180 | .181 | .217 | .241 | 1.16 | 1.16 | 1.16 | 1.18 | 1.15 |
| 1.75 | 1.75 | 5.76 | 5.76 | 3.07 | .140 | .160 | .149 | .190 | .203 | 1.11 | 1.12 | 1.11 | 1.10 | 1.08 |

| C | E | BAGG | VOLTAGE | CURRENT | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | TRIP POINT |
|------|------|------|---------|---------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------|
| | | | | | | | | | | | | | | | |
| 1.99 | 1.99 | 7.14 | 7.14 | 3.5 | .233 | .245 | .268 | .289 | .327 | 1.45 | 1.44 | 1.45 | 1.42 | 1.46 | |
| 1.77 | 1.77 | 7.10 | 7.10 | 1.20 | .221 | .230 | .248 | .267 | .299 | 1.44 | 1.43 | 1.44 | 1.43 | 1.44 | |
| 1.64 | 1.64 | 7.04 | 7.04 | .54 | .239 | .247 | .261 | .292 | .321 | 1.45 | 1.44 | 1.44 | 1.45 | 1.46 | |
| 1.70 | 1.70 | 7.12 | 7.12 | .95 | .221 | .230 | .245 | .265 | .292 | 1.41 | 1.41 | 1.41 | 1.41 | 1.41 | |
| 1.76 | 1.76 | 7.12 | 7.12 | .67 | .219 | .225 | .239 | .258 | .290 | 1.43 | 1.43 | 1.42 | 1.42 | 1.42 | |
| 1.75 | 1.75 | 7.06 | 7.06 | .32 | .221 | .230 | .238 | .258 | .289 | 1.42 | 1.42 | 1.42 | 1.41 | 1.42 | |

| C | E | BAGG | VOLTAGE | CURRENT | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | 3RD ELECT VOLTAGES | AH IN | END OF CHARGE |
|------|------|------|---------|---------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---------------|
| | | | | | | | | | | | | | | | | |
| 1.99 | 1.99 | 6.83 | 6.83 | .01 | .244 | .260 | .279 | .328 | .366 | 1.40 | 1.40 | 1.40 | 1.38 | 1.42 | 1.891 | |
| 1.77 | 1.77 | 6.83 | 6.83 | .01 | .224 | .237 | .251 | .293 | .317 | 1.37 | 1.37 | 1.37 | 1.38 | 1.37 | 1.847 | |
| 1.64 | 1.64 | 6.80 | 6.80 | .01 | .245 | .257 | .273 | .321 | .351 | 1.40 | 1.39 | 1.39 | 1.41 | 1.41 | 1.759 | |
| 1.70 | 1.70 | 6.86 | 6.86 | .01 | .229 | .240 | .253 | .293 | .316 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.817 | |
| 1.76 | 1.76 | 6.84 | 6.84 | .00 | .228 | .240 | .249 | .288 | .315 | 1.37 | 1.38 | 1.38 | 1.37 | 1.37 | 1.829 | |
| 1.75 | 1.75 | 6.83 | 6.83 | .01 | .228 | .240 | .247 | .287 | .311 | 1.37 | 1.37 | 1.38 | 1.37 | 1.37 | 1.757 | |

DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

| CELL VOLTAGES | | | | | AH OUT | END OF DISCHARGE |
|---------------|------|------|------|------|--------|------------------|
| 1 | 2 | 3 | 4 | 5 | | |
| 1.11 | 1.12 | 1.13 | 1.12 | 1.11 | 1.486 | |
| 1.10 | 1.10 | 1.11 | 1.12 | 1.10 | 1.490 | |
| 1.08 | 1.09 | 1.10 | 1.10 | 1.09 | 1.494 | |
| 1.09 | 1.10 | 1.10 | 1.11 | 1.09 | 1.502 | |
| 1.11 | 1.12 | 1.12 | 1.12 | 1.11 | 1.505 | |
| 1.17 | 1.18 | 1.17 | 1.17 | 1.17 | 1.507 | |

| CELL VOLTAGES | | | | | TRIP POINT |
|---------------|------|------|------|------|------------|
| 1 | 2 | 3 | 4 | 5 | |
| 1.41 | 1.41 | 1.41 | 1.41 | 1.42 | |
| 1.43 | 1.43 | 1.43 | 1.43 | 1.44 | |
| 1.44 | 1.44 | 1.44 | 1.44 | 1.45 | |
| 1.39 | 1.40 | 1.39 | 1.40 | 1.39 | |
| 1.40 | 1.40 | 1.39 | 1.39 | 1.39 | |
| 1.42 | 1.42 | 1.42 | 1.42 | 1.41 | |

| CELL VOLTAGES | | | | | AH IN | END OF CHARGE |
|---------------|------|------|------|------|-------|---------------|
| 1 | 2 | 3 | 4 | 5 | | |
| 1.38 | 1.38 | 1.38 | 1.38 | 1.39 | 1.824 | |
| 1.37 | 1.37 | 1.37 | 1.36 | 1.38 | 1.800 | |
| 1.39 | 1.39 | 1.39 | 1.38 | 1.40 | 1.958 | |
| 1.36 | 1.36 | 1.36 | 1.36 | 1.35 | 1.893 | |
| 1.37 | 1.37 | 1.37 | 1.36 | 1.36 | 1.965 | |
| 1.38 | 1.38 | 1.39 | 1.38 | 1.37 | 1.990 | |

TEST TEMPERATURE 0° C
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 25
ELECTRODE R 3 3 3 3

| BACK CURRENT
VOLTAGE 6.00 | 3RD ELECT VOLTAGES | CELL VOLTAGES | | | | | END OF
DISCHARGE |
|------------------------------|--------------------|---------------|------|------|------|------|---------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 1.32 | 104 | .118 | .366 | .323 | .275 | .71 | 2.873 |
| 1.30 | .066 | .350 | .413 | .422 | .368 | 1.22 | 3.001 |
| 1.28 | .085 | .344 | .318 | .328 | .264 | 1.20 | 3.041 |
| 1.26 | .093 | .290 | .273 | .267 | .215 | 1.18 | 3.089 |
| 1.24 | .078 | .326 | .311 | .320 | .231 | 1.18 | 3.003 |
| 1.22 | .063 | .227 | .267 | .272 | .200 | 1.20 | 3.107 |

| BACK CURRENT
VOLTAGE 6.00 | 3RD ELECT VOLTAGES | CELL VOLTAGES | | | | | TRIP
POINT |
|------------------------------|--------------------|---------------|------|------|------|------|---------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 1.01 | .199 | .187 | .406 | .351 | .305 | 1.36 | 1.37 |
| .97 | .015 | .372 | .399 | .433 | .342 | 1.43 | 1.45 |
| 1.98 | .027 | .408 | .362 | .411 | .341 | 1.45 | 1.47 |
| 2.02 | .018 | .394 | .355 | .387 | .298 | 1.43 | 1.44 |
| .93 | .017 | .382 | .363 | .397 | .298 | 1.42 | 1.42 |
| .93 | .032 | .427 | .501 | .521 | .438 | 1.41 | 1.41 |

| BACK CURRENT
VOLTAGE 6.00 | 3RD ELECT VOLTAGES | CELL VOLTAGES | | | | | AH IN | END OF
CHARGE |
|------------------------------|--------------------|---------------|------|------|------|------|-------|------------------|
| | | 1 | 2 | 3 | 4 | 5 | | |
| .95 | .284 | .241 | .548 | .643 | .481 | 1.36 | 2.546 | 1.38 |
| .94 | .011 | .420 | .448 | .480 | .380 | 1.43 | 3.073 | 1.45 |
| .95 | .019 | .572 | .570 | .666 | .567 | 1.44 | 3.421 | 1.45 |
| .94 | .006 | .565 | .569 | .613 | .524 | 1.42 | 3.431 | 1.42 |
| .89 | .012 | .567 | .589 | .642 | .515 | 1.41 | 3.339 | 1.41 |
| .92 | .034 | .489 | .552 | .575 | .498 | 1.41 | 3.401 | 1.41 |

| NO. | DATE | TIME | DEPTH OF DISCHARGE | TEST TEMPERATURE | C |
|-----|----------|-------|--------------------|------------------|---|
| 1 | 10.10.60 | 12.12 | 1 | 1 | 1 |
| 2 | 11.12.60 | 12.14 | 1 | 1 | 1 |
| 3 | 12.12.60 | 12.14 | 1 | 1 | 1 |
| 4 | 13.12.60 | 12.14 | 1 | 1 | 1 |
| 5 | 14.12.60 | 12.14 | 1 | 1 | 1 |
| 6 | 15.12.60 | 12.14 | 1 | 1 | 1 |
| 7 | 16.12.60 | 12.14 | 1 | 1 | 1 |
| 8 | 17.12.60 | 12.14 | 1 | 1 | 1 |
| 9 | 18.12.60 | 12.14 | 1 | 1 | 1 |
| 10 | 19.12.60 | 12.14 | 1 | 1 | 1 |
| 11 | 20.12.60 | 12.14 | 1 | 1 | 1 |
| 12 | 21.12.60 | 12.14 | 1 | 1 | 1 |
| 13 | 22.12.60 | 12.14 | 1 | 1 | 1 |
| 14 | 23.12.60 | 12.14 | 1 | 1 | 1 |
| 15 | 24.12.60 | 12.14 | 1 | 1 | 1 |
| 16 | 25.12.60 | 12.14 | 1 | 1 | 1 |
| 17 | 26.12.60 | 12.14 | 1 | 1 | 1 |
| 18 | 27.12.60 | 12.14 | 1 | 1 | 1 |
| 19 | 28.12.60 | 12.14 | 1 | 1 | 1 |
| 20 | 29.12.60 | 12.14 | 1 | 1 | 1 |
| 21 | 30.12.60 | 12.14 | 1 | 1 | 1 |
| 22 | 31.12.60 | 12.14 | 1 | 1 | 1 |
| 23 | 1.1.61 | 12.14 | 1 | 1 | 1 |
| 24 | 2.1.61 | 12.14 | 1 | 1 | 1 |
| 25 | 3.1.61 | 12.14 | 1 | 1 | 1 |
| 26 | 4.1.61 | 12.14 | 1 | 1 | 1 |
| 27 | 5.1.61 | 12.14 | 1 | 1 | 1 |
| 28 | 6.1.61 | 12.14 | 1 | 1 | 1 |
| 29 | 7.1.61 | 12.14 | 1 | 1 | 1 |
| 30 | 8.1.61 | 12.14 | 1 | 1 | 1 |
| 31 | 9.1.61 | 12.14 | 1 | 1 | 1 |
| 32 | 10.1.61 | 12.14 | 1 | 1 | 1 |
| 33 | 11.1.61 | 12.14 | 1 | 1 | 1 |
| 34 | 12.1.61 | 12.14 | 1 | 1 | 1 |
| 35 | 13.1.61 | 12.14 | 1 | 1 | 1 |
| 36 | 14.1.61 | 12.14 | 1 | 1 | 1 |
| 37 | 15.1.61 | 12.14 | 1 | 1 | 1 |
| 38 | 16.1.61 | 12.14 | 1 | 1 | 1 |
| 39 | 17.1.61 | 12.14 | 1 | 1 | 1 |
| 40 | 18.1.61 | 12.14 | 1 | 1 | 1 |
| 41 | 19.1.61 | 12.14 | 1 | 1 | 1 |
| 42 | 20.1.61 | 12.14 | 1 | 1 | 1 |
| 43 | 21.1.61 | 12.14 | 1 | 1 | 1 |
| 44 | 22.1.61 | 12.14 | 1 | 1 | 1 |
| 45 | 23.1.61 | 12.14 | 1 | 1 | 1 |
| 46 | 24.1.61 | 12.14 | 1 | 1 | 1 |
| 47 | 25.1.61 | 12.14 | 1 | 1 | 1 |
| 48 | 26.1.61 | 12.14 | 1 | 1 | 1 |
| 49 | 27.1.61 | 12.14 | 1 | 1 | 1 |
| 50 | 28.1.61 | 12.14 | 1 | 1 | 1 |
| 51 | 29.1.61 | 12.14 | 1 | 1 | 1 |
| 52 | 30.1.61 | 12.14 | 1 | 1 | 1 |
| 53 | 31.1.61 | 12.14 | 1 | 1 | 1 |
| 54 | 1.2.61 | 12.14 | 1 | 1 | 1 |
| 55 | 2.2.61 | 12.14 | 1 | 1 | 1 |
| 56 | 3.2.61 | 12.14 | 1 | 1 | 1 |
| 57 | 4.2.61 | 12.14 | 1 | 1 | 1 |
| 58 | 5.2.61 | 12.14 | 1 | 1 | 1 |
| 59 | 6.2.61 | 12.14 | 1 | 1 | 1 |
| 60 | 7.2.61 | 12.14 | 1 | 1 | 1 |
| 61 | 8.2.61 | 12.14 | 1 | 1 | 1 |
| 62 | 9.2.61 | 12.14 | 1 | 1 | 1 |
| 63 | 10.2.61 | 12.14 | 1 | 1 | 1 |
| 64 | 11.2.61 | 12.14 | 1 | 1 | 1 |
| 65 | 12.2.61 | 12.14 | 1 | 1 | 1 |
| 66 | 13.2.61 | 12.14 | 1 | 1 | 1 |
| 67 | 14.2.61 | 12.14 | 1 | 1 | 1 |
| 68 | | | | | |

| CYCLE NO. | BACK VOLTAGE | CURRENT | 3RD ELECT VOLTAGES | | | CELL VOLTAGES | | | | | AH OUT | |
|-----------|--------------|---------|--------------------|------|------|---------------|------|-----|------|-----|--------|-------|
| | | | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | | 4 |
| 899. | 3.51 | 6.00 | .045 | .000 | .000 | .051 | 1.19 | .00 | 1.19 | .00 | 1.18 | 3.035 |
| 974. | 3.38 | 6.10 | .120 | .000 | .024 | .163 | 1.16 | .00 | 1.13 | .00 | 1.13 | 3.057 |
| 1046. | 2.93 | 6.02 | .083 | .000 | .003 | .150 | 1.11 | .00 | .83 | .00 | 1.03 | 3.036 |
| 1142. | 4.59 | 6.06 | .079 | .000 | .077 | .105 | 1.16 | .00 | 1.15 | .00 | 1.15 | 3.032 |

[illegible]

| | 899. | 4.04 | .53 | .536 | .000 | .064 | .000 | .311 | 1.40 | .00 | 1.40 | .00 | 1.42 | 3.513 | END OF |
|---|------|------|-----|------|------|------|------|------|------|-----|------|-----|------|-------|--------|
| 1 | 899. | 4.04 | .53 | .536 | .000 | .064 | .000 | .311 | 1.40 | .00 | 1.40 | .00 | 1.42 | 3.513 | CHARGE |
| 2 | 974. | 4.08 | .48 | .560 | .000 | .287 | .000 | .490 | 1.37 | .00 | 1.38 | .00 | 1.39 | 3.589 | |
| 3 | 145. | 4.02 | .45 | .565 | .000 | .265 | .000 | .519 | 1.40 | .00 | 1.39 | .00 | 1.41 | 3.484 | |
| 4 | 142. | 5.48 | .49 | .501 | .000 | .495 | .000 | .450 | 1.38 | .00 | 1.39 | .00 | 1.38 | 3.503 | |

| DAY NO. 24 | | DEPTH OF DISCHARGE | | | | | TEST TEMPERATURE 25 C | | | | | |
|---|--------------|---------------------------|------|------|------|------|-----------------------|------|------|------|------|------|
| GEF. 5 A.H. | | 3RD ELECTRODE R 1 1 1 1 1 | | | | | ORBIT PERIOD 90 MIN. | | | | | |
| CYCLE PACK CURRENT | | 3RD ELECT VOLTAGES | | | | | CELL VOLTAGES | | | | | |
| NO. | VOLTAGE 9.60 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | |
| 25. | 6.03 | 9.42 | .007 | .054 | .008 | .003 | .006 | 1.21 | 1.20 | 1.20 | 1.22 | 1.20 |
| 93. | 5.87 | 9.53 | .035 | .213 | .015 | .051 | .021 | 1.20 | 1.18 | 1.19 | 1.19 | 1.20 |
| 159. | 5.87 | 9.44 | .032 | .216 | .027 | .059 | .014 | 1.18 | 1.16 | 1.17 | 1.18 | 1.17 |
| 220. | 5.85 | 9.41 | .038 | .224 | .044 | .086 | .015 | 1.17 | 1.15 | 1.16 | 1.17 | 1.16 |
| <div style="display: flex; justify-content: space-between;"> 4.749 END OF </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.814 DISCHARGE </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.777 </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.759 </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> TRIP POINT </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.749 END OF </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.814 CHARGE </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.777 </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.759 </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> AM IN </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 4.993 END OF </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 5.044 CHARGE </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 5.487 </div> | | | | | | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> 5.538 </div> | | | | | | | | | | | | |

CYCLE NO. 48
 5.5 A.H.

DEPTH OF DISCHARGE 25
 5 5 5 5

TEST TEMPERATURE 40 C
 ORBIT PERIOD 90 MIN.

| CYCLE PACK CURRENT | | 3RD ELECT VOLTAGES | | | | | CELL VOLTAGES | | | | | | | |
|--------------------|---------|--------------------|------|------|------|------|---------------|-------|-------|-------|-------|-------|-------|-----------|
| NO. | VOLTAGE | 6.00 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | | |
| AH OUT | | | | | | | | | | | | | | |
| 97. | 5.75 | 5.83 | .141 | .090 | .167 | .110 | .154 | 1.013 | 1.012 | 1.017 | 1.020 | 1.020 | 2.932 | END OF |
| 188. | 5.70 | 5.95 | .107 | .085 | .057 | .093 | .100 | 1.013 | 1.013 | 1.011 | 1.010 | 1.019 | 2.999 | DISCHARGE |
| | | | | | | | | | | | | | | |
| 97. | 6.86 | 1.31 | .353 | .217 | .409 | .269 | .277 | 1.038 | 1.038 | 1.039 | 1.039 | 1.040 | TRIP | |
| 188. | 6.89 | .47 | .234 | .159 | .408 | .169 | .186 | 1.039 | 1.039 | 1.039 | 1.039 | 1.039 | POINT | |
| | | | | | | | | | | | | | | |
| 97. | 6.66 | 1.34 | .339 | .203 | .425 | .335 | .352 | 1.037 | 1.036 | 1.036 | 1.036 | 1.036 | AH IN | |
| 188. | 6.84 | 1.22 | .226 | .153 | .404 | .246 | .248 | 1.038 | 1.039 | 1.037 | 1.037 | 1.038 | 4.410 | END OF |
| | | | | | | | | | | | | | 3.995 | CHARGE |

TRIP
 POINT

2.932 END OF
 2.999 DISCHARGE
 4.410 END OF
 3.995 CHARGE

PACK NO. 175
 SONOTONE 5 A.H. STABISTOR
 TEST TEMPERATURE -20 C
 ORBIT PERIOD 90 MIN.

| CYCLE
NO. | PACK
CURRENT
VOLTAGE | DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE | | | | | CELL
VOLTAGES | |
|--------------|----------------------------|--|------|------|------|------|------------------|---------------------|
| | | 1 | 2 | 3 | 4 | 5 | | |
| 3. | 6.77 | 2.52 | 1.37 | 1.38 | 1.37 | 1.41 | 1.37 | END OF
DISCHARGE |
| 45. | 6.96 | 2.44 | 1.43 | 1.36 | 1.37 | 1.39 | 1.45 | |
| | | 5.00 | | | | | | END OF
CHARGE |
| 3. | 7.97 | 5.02 | 1.60 | 1.58 | 1.62 | 1.63 | 1.63 | |
| 45. | 8.30 | 4.71 | 1.69 | 1.61 | 1.64 | 1.69 | 1.67 | |

289

CACOTONE S A.H. STABILTOR

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE

TEST TEMPERATURE -20 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 4.00

CELL VOLTAGES

| | | | | | | | |
|-----|------|------|------|------|------|------|------|
| 33. | 6.58 | 4.04 | 1.36 | 1.27 | 1.37 | 1.29 | 1.29 |
|-----|------|------|------|------|------|------|------|

33. 8.28 4.60

END OF
DISCHARGE

END OF
CHARGE

| PACK NO. 92 | | SONOTONC 5 A.H. STABISTOR | | DEPTH OF DISCHARGE 25 | | TEST TEMPERATURE 0 C | | ORBIT PERIOD 90 MIN. | |
|--------------------|------|---------------------------|------|-----------------------|------|----------------------|--|----------------------|--|
| CYCLE PACK CURRENT | | VOLTAGE 2.50 | | PERCENT OF RECHARGE | | CELL VOLTAGES | | END OF DISCHARGE | |
| NO. | | 1 | 2 | 3 | 4 | 5 | | | |
| 365. | 5.68 | 2.47 | 1.13 | 1.16 | 1.15 | 1.14 | | | |
| 418. | 5.72 | 2.47 | 1.15 | 1.17 | 1.17 | 1.16 | | | |
| 443. | 5.64 | 2.47 | 1.13 | 1.16 | 1.17 | 1.13 | | | |
| 505. | 5.74 | 2.47 | 1.14 | 1.16 | 1.16 | 1.15 | | | |
| 542. | 5.71 | 2.47 | 1.14 | 1.16 | 1.16 | 1.15 | | | |
| 574. | 5.67 | 2.48 | 1.14 | 1.16 | 1.17 | 1.15 | | | |
| 606. | 5.71 | 2.47 | 1.15 | 1.17 | 1.17 | 1.16 | | | |
| 637. | 5.68 | 2.48 | 1.13 | 1.16 | 1.16 | 1.14 | | | |
| 670. | 5.67 | 2.49 | 1.13 | 1.16 | 1.16 | 1.14 | | | |
| 698. | 5.74 | 2.44 | 1.16 | 1.17 | 1.17 | 1.17 | | | |
| 734. | 5.67 | 2.47 | 1.13 | 1.15 | 1.15 | 1.13 | | | |
| 766. | 5.72 | 2.46 | 1.15 | 1.17 | 1.17 | 1.17 | | | |
| 798. | 5.68 | 2.49 | 1.12 | 1.14 | 1.14 | 1.12 | | | |
| | | | | | | | | | |
| 365. | 7.86 | 5.02 | 1.58 | 1.58 | 1.60 | 1.63 | | | |
| 418. | 7.86 | 5.01 | 1.56 | 1.56 | 1.58 | 1.60 | | | |
| 443. | 7.91 | 5.01 | 1.58 | 1.58 | 1.60 | 1.61 | | | |
| 480. | 7.94 | 3.34 | 1.57 | 1.54 | 1.57 | 1.68 | | | |
| 505. | 7.88 | 4.99 | 1.56 | 1.54 | 1.55 | 1.62 | | | |
| 542. | 8.01 | 5.01 | 1.58 | 1.55 | 1.56 | 1.60 | | | |
| 574. | 7.90 | 4.96 | 1.60 | 1.57 | 1.59 | 1.64 | | | |
| 606. | 7.91 | 5.04 | 1.59 | 1.57 | 1.58 | 1.64 | | | |
| 637. | 7.91 | 5.04 | 1.60 | 1.57 | 1.58 | 1.65 | | | |
| 670. | 7.93 | 5.05 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 698. | 7.94 | 5.03 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 734. | 7.93 | 5.03 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 766. | 7.93 | 5.04 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 798. | 7.98 | 4.99 | 1.59 | 1.56 | 1.60 | 1.65 | | | |
| | | | | | | | | | |
| 365. | 5.00 | | | | | | | | |
| | | | | | | | | | |
| 365. | 7.86 | 5.02 | 1.58 | 1.58 | 1.60 | 1.63 | | | |
| 418. | 7.86 | 5.01 | 1.56 | 1.56 | 1.58 | 1.60 | | | |
| 443. | 7.91 | 5.01 | 1.58 | 1.58 | 1.60 | 1.61 | | | |
| 480. | 7.94 | 3.34 | 1.57 | 1.54 | 1.57 | 1.68 | | | |
| 505. | 7.88 | 4.99 | 1.56 | 1.54 | 1.55 | 1.62 | | | |
| 542. | 8.01 | 5.01 | 1.58 | 1.55 | 1.56 | 1.60 | | | |
| 574. | 7.90 | 4.96 | 1.60 | 1.57 | 1.59 | 1.64 | | | |
| 606. | 7.91 | 5.04 | 1.59 | 1.57 | 1.58 | 1.64 | | | |
| 637. | 7.91 | 5.04 | 1.60 | 1.57 | 1.58 | 1.65 | | | |
| 670. | 7.93 | 5.05 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 698. | 7.94 | 5.03 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 734. | 7.93 | 5.03 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 766. | 7.93 | 5.04 | 1.60 | 1.57 | 1.58 | 1.67 | | | |
| 798. | 7.98 | 4.99 | 1.59 | 1.56 | 1.60 | 1.65 | | | |

END OF
CHARGE

148

PACK NO. 322
SONOTONE 5 A.H. STABISTOR
DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE
TEST TEMPERATURE 0
ORBIT PERIOD 90 MIN.

| CYCLE
NO. | PACK CURRENT
VOLTAGE 4.00 | CELL VOLTAGES | | | | | END OF
DISCHARGE |
|--------------|------------------------------|---------------|------|------|------|------|---------------------|
| | | 1 | 2 | 3 | 4 | 5 | |
| 375. | 5.16 | 3.71 | 1.14 | 1.15 | .79 | 1.15 | 1.15 |
| 416. | 5.15 | 3.66 | 1.14 | 1.14 | .71 | 1.14 | 1.14 |
| 452. | 5.05 | 3.60 | 1.13 | 1.14 | .62 | 1.13 | 1.13 |
| 486. | 5.50 | 3.90 | 1.12 | 1.14 | 1.03 | 1.13 | 1.12 |
| 548. | 5.47 | 3.84 | 1.12 | 1.13 | 1.01 | 1.14 | 1.15 |
| 580. | 5.41 | 3.84 | 1.11 | 1.12 | .99 | 1.13 | 1.13 |
| 618. | 5.35 | 3.81 | 1.11 | 1.13 | .95 | 1.12 | 1.12 |
| 643. | 5.42 | 3.80 | 1.11 | 1.13 | 1.00 | 1.13 | 1.14 |
| 676. | 5.44 | 3.73 | 1.11 | 1.13 | 1.00 | 1.14 | 1.15 |
| 702. | 5.23 | 3.74 | 1.12 | 1.14 | .99 | 1.15 | 1.16 |
| 775. | 5.19 | 3.86 | 1.09 | 1.11 | .78 | 1.11 | 1.12 |
| | | | | | | | |
| 375. | 7.68 | 5.00 | 1.52 | 1.52 | 1.53 | 1.56 | 1.56 |
| 416. | 6.75 | 3.84 | 1.38 | 1.37 | 1.33 | 1.40 | 1.41 |
| 452. | 7.74 | 5.09 | 1.52 | 1.52 | 1.54 | 1.56 | 1.57 |
| 486. | 7.87 | 4.94 | 1.55 | 1.53 | 1.51 | 1.53 | 1.54 |
| 548. | 7.74 | 4.46 | 1.55 | 1.54 | 1.54 | 1.54 | 1.56 |
| 580. | 7.72 | 5.03 | 1.58 | 1.55 | 1.54 | 1.55 | 1.58 |
| 618. | 7.71 | 4.96 | 1.58 | 1.55 | 1.55 | 1.56 | 1.58 |
| 643. | 7.69 | 5.07 | 1.58 | 1.54 | 1.53 | 1.54 | 1.58 |
| 676. | 7.71 | 4.94 | 1.59 | 1.55 | 1.54 | 1.56 | 1.58 |
| 702. | 7.70 | 4.95 | 1.59 | 1.55 | 1.54 | 1.56 | 1.58 |
| 775. | 7.84 | 4.75 | 1.62 | 1.55 | 1.53 | 1.56 | 1.58 |

END OF
CHARGE

PACK NO. 273

SONOTONE 5 A.H. STABILIZER

DEPTH OF DISCHARGE PER
PERCENT OF RECHARGETEST TEMPERATURE 25 C
ORBIT PERIOD 30 MIN.

CYCLE PACK CURRENT

NO. VOLTAGE 2.50

CELL VOLTAGES

2

3

4

5

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|-----|------|------|------|
| 754. | 5.27 | 2.45 | 1.06 | .93 | 1.15 | 1.12 | 1.11 |
| 832. | 5.19 | 2.48 | 1.06 | .91 | 1.14 | 1.09 | 1.10 |
| 895. | 5.20 | 2.48 | 1.04 | .89 | 1.12 | 1.08 | 1.09 |
| 928. | 5.20 | 2.49 | 1.05 | .89 | 1.12 | 1.08 | 1.10 |
| 960. | 5.23 | 2.46 | 1.07 | .90 | 1.12 | 1.11 | 1.11 |
| 996. | 5.26 | 2.50 | 1.09 | .90 | 1.13 | 1.11 | 1.12 |
| 1023. | 5.20 | 2.49 | 1.07 | .89 | 1.12 | 1.09 | 1.10 |
| 1046. | 5.20 | 2.47 | 1.10 | .89 | 1.12 | 1.09 | 1.10 |
| 1088. | 5.20 | 2.48 | 1.08 | .92 | 1.12 | 1.08 | 1.10 |
| 1120. | 5.18 | 2.50 | 1.10 | .90 | 1.14 | 1.12 | 1.13 |
| 1156. | 4.92 | 2.52 | 1.03 | .91 | 1.10 | 1.00 | 1.09 |
| 1184. | 5.31 | 2.50 | 1.09 | .91 | 1.11 | 1.10 | 1.11 |

END OF
CHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 754. | 7.22 | 5.00 | 1.48 | 1.43 | 1.44 | 1.45 | 1.46 |
| 832. | 7.24 | 5.12 | 1.49 | 1.43 | 1.44 | 1.45 | 1.45 |
| 895. | 7.28 | 5.14 | 1.48 | 1.42 | 1.42 | 1.42 | 1.41 |
| 928. | 7.12 | 5.07 | 1.47 | 1.41 | 1.42 | 1.42 | 1.41 |
| 960. | 7.29 | 4.97 | 1.50 | 1.43 | 1.44 | 1.45 | 1.49 |
| 996. | 7.28 | 5.02 | 1.50 | 1.44 | 1.44 | 1.45 | 1.50 |
| 1023. | 7.24 | 5.04 | 1.50 | 1.43 | 1.44 | 1.45 | 1.45 |
| 1046. | 7.16 | 5.04 | 1.51 | 1.44 | 1.44 | 1.44 | 1.43 |
| 1088. | 7.31 | 5.02 | 1.51 | 1.46 | 1.47 | 1.49 | 1.40 |
| 1120. | 7.28 | 5.02 | 1.51 | 1.45 | 1.46 | 1.48 | 1.48 |
| 1156. | 7.37 | 5.03 | 1.54 | 1.45 | 1.47 | 1.50 | 1.50 |
| 1184. | 7.43 | 5.04 | 1.50 | 1.47 | 1.47 | 1.50 | 1.50 |

PACK NO. 287

SONOTONE P A.H. STABILISOR

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE

TEST TEMPERATURE 25 C
ORRIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES | | | | |
|-----------|--------------|---------|---------------|-----|------|------|------|
| | | | 1 | 2 | 3 | 4 | 5 |
| 730. | 4.16 | 3.97 | 1.02 | .00 | 1.05 | .99 | 1.12 |
| 762. | 3.99 | 3.96 | .94 | .00 | 1.04 | .97 | 1.11 |
| 793. | 3.98 | 3.95 | .93 | .00 | 1.03 | .97 | 1.10 |
| 826. | 3.94 | 3.95 | .93 | .00 | 1.03 | .94 | 1.10 |
| 858. | 4.11 | 3.95 | .98 | .01 | 1.03 | 1.09 | 1.13 |
| 921. | 4.02 | 3.97 | .97 | .01 | 1.02 | 1.00 | 1.10 |
| 944. | 3.71 | 3.87 | .98 | .40 | 1.03 | 1.06 | 1.12 |
| 948. | 2.98 | 4.00 | .89 | .75 | 1.01 | 1.00 | 1.11 |
| 986. | 4.23 | 3.90 | 1.05 | .00 | 1.04 | 1.07 | 1.12 |
| 1009. | 4.23 | 3.93 | 1.05 | .00 | 1.05 | 1.05 | 1.15 |
| 1045. | 3.93 | 4.03 | .95 | .00 | .92 | .97 | 1.13 |
| 1073. | 4.09 | 3.98 | .98 | .00 | .99 | 1.04 | 1.10 |

END OF
DISCHARGE

| | | | | | | | |
|-------|------|------|------|------|------|------|------|
| 730. | 5.81 | 5.00 | 1.45 | .00 | 1.51 | 1.43 | 1.45 |
| 762. | 5.84 | 5.40 | 1.45 | .00 | 1.51 | 1.43 | 1.45 |
| 793. | 5.79 | 5.39 | 1.45 | .01 | 1.51 | 1.45 | 1.41 |
| 826. | 5.89 | 5.24 | 1.42 | .01 | 1.51 | 1.40 | 1.41 |
| 858. | 5.90 | 5.11 | 1.43 | .01 | 1.54 | 1.45 | 1.49 |
| 921. | 5.81 | 5.06 | 1.45 | .01 | 1.56 | 1.43 | 1.45 |
| 944. | 5.15 | 5.15 | 1.45 | .01 | 1.56 | 1.43 | 1.45 |
| 948. | 7.26 | 5.15 | 1.44 | 1.43 | 1.56 | 1.43 | 1.44 |
| 986. | 7.23 | 5.19 | 1.44 | 1.43 | 1.56 | 1.43 | 1.44 |
| 1009. | 5.93 | 5.11 | 1.47 | .00 | 1.57 | 1.45 | 1.49 |
| 1045. | 5.90 | 5.11 | 1.46 | .00 | 1.58 | 1.44 | 1.48 |
| 1073. | 4.03 | 5.12 | 1.45 | .00 | 1.70 | 1.45 | 1.48 |
| 1073. | 5.99 | 5.11 | 1.45 | .00 | 1.58 | 1.46 | 1.49 |

END OF
CHARGE

PACK NO. 299
SONOTONE 5 A.H. STABILTOR

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE

TEST TEMPERATURE 40 C

ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES | | | | | END OF DISCHARGE |
|-----------|--------------|---------|---------------|------|------|------|------|------------------|
| | | | 1 | 2 | 3 | 4 | 5 | |
| 582. | 5.34 | 2.51 | 1.14 | 1.09 | 1.00 | 1.05 | 1.13 | |
| 635. | 5.37 | 2.52 | 1.14 | 1.09 | 1.02 | 1.06 | 1.13 | |
| 660. | 5.33 | 2.51 | 1.13 | 1.08 | 1.02 | 1.05 | 1.12 | |
| 697. | 5.31 | 2.51 | 1.14 | 1.08 | 1.03 | 1.05 | 1.12 | |
| 722. | 5.32 | 2.52 | 1.12 | 1.07 | 1.01 | 1.04 | 1.12 | |
| 759. | 5.39 | 2.53 | 1.13 | 1.08 | 1.05 | 1.06 | 1.12 | |
| 791. | 5.39 | 2.51 | 1.14 | 1.08 | 1.07 | 1.08 | 1.13 | |
| 823. | 5.47 | 2.51 | 1.14 | 1.10 | 1.08 | 1.10 | 1.14 | |
| 854. | 5.42 | 2.53 | 1.13 | 1.08 | 1.06 | 1.08 | 1.12 | |
| 887. | 5.44 | 2.52 | 1.13 | 1.09 | 1.07 | 1.09 | 1.12 | |
| 915. | 5.52 | 2.48 | 1.16 | 1.11 | 1.09 | 1.12 | 1.16 | |
| 951. | 5.47 | 2.51 | 1.13 | 1.09 | 1.08 | 1.09 | 1.12 | |
| 983. | 5.53 | 2.51 | 1.16 | 1.11 | 1.10 | 1.10 | 1.16 | |
| 1015. | 5.49 | 2.55 | 1.13 | 1.08 | 1.07 | 1.09 | 1.10 | |
| 582. | 7.30 | 5.00 | 1.48 | 1.47 | 1.47 | 1.48 | 1.49 | END OF CHARGE |
| 635. | 7.29 | 4.99 | 1.46 | 1.46 | 1.47 | 1.46 | 1.46 | |
| 660. | 7.28 | 4.98 | 1.46 | 1.46 | 1.46 | 1.47 | 1.46 | |
| 697. | 7.33 | 4.98 | 1.47 | 1.47 | 1.48 | 1.48 | 1.48 | |
| 722. | 7.32 | 4.97 | 1.45 | 1.46 | 1.46 | 1.50 | 1.46 | |
| 759. | 7.43 | 4.96 | 1.46 | 1.46 | 1.46 | 1.46 | 1.45 | |
| 791. | 7.33 | 4.96 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | |
| 823. | 7.34 | 5.01 | 1.48 | 1.48 | 1.48 | 1.48 | 1.49 | |
| 854. | 7.35 | 5.01 | 1.48 | 1.48 | 1.48 | 1.48 | 1.50 | |
| 887. | 7.36 | 5.00 | 1.49 | 1.48 | 1.49 | 1.49 | 1.50 | |
| 915. | 7.38 | 4.97 | 1.49 | 1.49 | 1.49 | 1.49 | 1.50 | |
| 951. | 7.37 | 4.97 | 1.49 | 1.48 | 1.49 | 1.49 | 1.50 | |
| 983. | 7.37 | 4.99 | 1.49 | 1.48 | 1.49 | 1.49 | 1.50 | |
| 1015. | 7.42 | 4.94 | 1.48 | 1.48 | 1.48 | 1.48 | 1.49 | |

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END OF
DISCHARGE

END OF
CHARGE

| | CELL VOLTAGES | | | |
|------|---------------|------|------|------|
| | 1 | 2 | 3 | 4 |
| 482. | 5.01 | 1.47 | 1.47 | 1.47 |
| 562. | 5.00 | 1.47 | 1.47 | 1.47 |
| 597. | 5.00 | 1.47 | 1.47 | 1.47 |
| 671. | 5.00 | 1.47 | 1.47 | 1.47 |
| 719. | 5.00 | 1.47 | 1.47 | 1.47 |
| 785. | 5.00 | 1.47 | 1.47 | 1.47 |
| 817. | 5.01 | 1.47 | 1.47 | 1.47 |
| 851. | 5.01 | 1.47 | 1.47 | 1.47 |
| 885. | 5.00 | 1.47 | 1.47 | 1.47 |
| 915. | 5.04 | 1.47 | 1.47 | 1.47 |
| 482. | 5.00 | 1.47 | 1.47 | 1.47 |
| 562. | 5.01 | 1.47 | 1.47 | 1.47 |
| 597. | 5.01 | 1.47 | 1.47 | 1.47 |
| 671. | 5.01 | 1.47 | 1.47 | 1.47 |
| 719. | 5.01 | 1.47 | 1.47 | 1.47 |
| 785. | 5.01 | 1.47 | 1.47 | 1.47 |
| 817. | 5.01 | 1.47 | 1.47 | 1.47 |
| 851. | 5.01 | 1.47 | 1.47 | 1.47 |
| 885. | 5.01 | 1.47 | 1.47 | 1.47 |
| 915. | 5.01 | 1.47 | 1.47 | 1.47 |

| PACK NO. 21
YARDNEY 5 A.H. | | DEPTH OF DISCHARGE 20
PERCENT OF RECHARGE .3A | | TEST TEMPERATURE 25
ORBIT PERIOD 24 HRS. | | | | |
|-------------------------------|------------------------------|--|------|---|------|------|---------------------|-----|
| CYCLE NO. | PACK CURRENT
VOLTAGE 1.00 | CELL VOLTAGES | | | | | END OF
DISCHARGE | |
| | | 1 | 2 | 3 | 4 | 5 | | |
| 19. | 5.39 1.00 | 1.10 | 1.10 | 1.10 | 1.10 | 1.09 | .01 .00 .01 .00 | .00 |
| 27. | 5.37 1.00 | 1.09 | 1.09 | 1.09 | 1.10 | 1.09 | .00 .00 .01 .00 | .01 |
| 35. | 5.37 1.02 | 1.09 | 1.10 | 1.09 | 1.10 | 1.09 | .00 .00 .01 .00 | .01 |
| | .30 | | | | | | | |
| 19. | 7.56 .03 | 1.47 | 1.50 | 1.49 | 1.49 | 1.45 | .01 .01 .01 .01 | .03 |
| 27. | 7.53 .05 | 1.51 | 1.53 | 1.54 | 1.55 | 1.51 | .01 .00 .01 .00 | .01 |
| 35. | 7.52 .01 | 1.42 | 1.57 | 1.59 | 1.58 | 1.47 | .01 .00 .01 .00 | .01 |

| PACK NO. 45
YARDNEY 5 A.H. | | DEPTH OF DISCHARGE 20
PERCENT OF RECHARGE .3A | | TEST TEMPERATURE 40
ORBIT PERIOD 24 HRS. | | | | | |
|-------------------------------|------------------------------|--|------|---|------|------|---------------------|-----|-----|
| CYCLE
NO. | PACK CURRENT
VOLTAGE 1.00 | CELL VOLTAGES | | | | | END OF
DISCHARGE | | |
| | | 1 | 2 | 3 | 4 | 5 | | | |
| 19. | 5.39 | 1.00 | 1.10 | 1.10 | 1.10 | 1.09 | .00 | .00 | .01 |
| 27. | 5.38 | .99 | 1.09 | 1.09 | 1.09 | 1.10 | .00 | .00 | .01 |
| 35. | 5.37 | .99 | 1.12 | 1.09 | 1.10 | 1.08 | .00 | .00 | .02 |
| | | .30 | | | | | | | |
| 19. | 7.65 | .01 | 1.52 | 1.43 | 1.53 | 1.53 | .01 | .01 | .04 |
| 27. | 7.48 | .02 | 1.59 | 1.16 | 1.66 | 1.61 | .00 | .00 | .01 |
| 35. | 7.46 | .09 | 1.40 | 1.52 | 1.13 | 2.05 | .01 | .00 | .01 |

PACK NO. 257
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 0
ORBIT PERIOD 24 HRS.

CYCLE PACK CURRENT
NO. VOLTAGE 1.00

CELL VOLTAGES
1 2 3 4 5

| | | | | | | | | | | | | |
|-----|------|------|------|------|------|------|------|-----|-----|-----|-----|-----------|
| 27. | 5.31 | 1.01 | 1.08 | 1.08 | 1.09 | 1.08 | .00 | .00 | .00 | .01 | .01 | END OF |
| 35. | 5.29 | 1.03 | 1.08 | 1.08 | 1.08 | 1.07 | .00 | .00 | .00 | .01 | .00 | DISCHARGE |
| | | .30 | | | | | | | | | | |
| 27. | 7.50 | .01 | 1.52 | 1.51 | 1.54 | 1.53 | 1.52 | .01 | .01 | .01 | .01 | END OF |
| 35. | 7.48 | .01 | 1.52 | 1.52 | 1.53 | 1.54 | 1.48 | .01 | .00 | .01 | .01 | CHARGE |