

U. S. NAVAL AMMUNITION DEPOT
CRANE, INDIANA 47522

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16 DEC 1964

From: Commanding Officer, U. S. Naval Ammunition Depot, Crane, Indiana
To: National Aeronautics and Space Administration, Goddard Space Flight Center, Electrochemical Power Sources Section (636.2), Space Power Technology Branch, Greenbelt, Maryland 20771

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

Encl: (1) Monthly Progress Report as of 30 November 1964 (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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FACILITY FORM 502

N65-24986

(ACCESSION NUMBER)

(THRU)

(PAGES)

(CODE)

(NASA CR OR TMX OR AD NUMBER)

(CATEGORY)

GPO PRICE \$ _____

OTS PRICE(S) \$ _____

Hard copy (HC) 4.00

Microfiche (MF) .75

MONTHLY PROGRESS REPORT THROUGH 30 NOVEMBER 1964

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 PLACED IN PROGRAM: 99

Cell Type	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 ah	12	10	2	2	21
Gould 3.5 ah	12	7	5	4	44
Sonotone 5.0 ah	12	11	1	0	17
Gulton 6.0 ah	12	7	5	5	55
TOTAL	48	35	13	11	137
NICKEL CADMIUM (5-cell packs)					
G.E. 12 ah	13	12	1	0	5
Gulton 4.0 ah	6	6	0	0	0
Gulton 6.0 ah	1	1	0	0	2
Gulton 20 ah	12	6	6	1	23
Gulton 50 ah	2	1	1	3	3
Gould 20 ah	12	6	6	0	16
TOTAL	46	32	14	4	49
SILVER CADMIUM (10-cell packs)					
Yardney 12 ah	2	0	2	0	16
TOTAL	2	0	2	0	16
SILVER ZINC (5-cell packs)					
Delco 25 ah	2	1	1	0	5
Delco 40 ah	1	1	0	2	2
TOTAL	3	2	1	2	7

* All failure analysis results are cumulative. These results are shown on pages 4 through 23.

Enclosure (1)

2. Test Parameters:

a. Ambient Temperatures:

- (1) 0° C.
- (2) 25° C.
- (3) 40° C.

b. Voltage limits per pack on charge:

- (1) 1.55 ± 0.03 volts per cell at 0° C.
- (2) 1.49 ± 0.03 volts per cell at 25° C.
- (3) 1.45 ± 0.03 volts per cell at 40° C.
- (4) 1.97 ± 0.03 volts per cell at 25° C. on the silver zinc packs.

c. Depth of Discharge:

- (1) 90-minute and 3-hour orbits:
 - (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.
- (2) 24-hour orbits:
 - (a) 50 percent at 0° C, 25° C and 40° C.
 - (b) 40 percent at 25° C on the silver zinc packs.

d. Orbit Times:

- (1) 90 minutes--30-minute-discharge and 60-minute charge.
- (2) 3 hours--30-minute discharge and 150-minute charge.
- (3) 24 hours--1-hour discharge and 23-hour charge.

3. Data:

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

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

4. Capacity Tests:

a. Prior to 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/cell average. After each 88 days of cycling, each pack was discharged at the c/2 rate to 1.0 volt/cell average following a charge at the cycle rate. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt/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 24 through 27.

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
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.
			25°	58	6	4473	Low Volt. Disch, Normal Volt. Chg, Short on One Edge of Plates, Neg. Plate Material Penetrated Separator.
			25°	361	1	4741	Low Volt. Disch, Normal Volt. Chg, Shorted, Separator Deteriorated, Neg. Plate Material Penetrated Separator.
39	15%	1.5	50°	541	2	780	Low Volt. Disch, High Volt. Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos. Tab Burned.
			40°	540	6	2083	Low Volt. Disch, High Volt. Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos. Tab Burned.
			40°	549	7	2523	Low Volt. Disch, High Volt Chg, Pos. Tab Burned.
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
			40°	3131	8	2182	Low Volt. Disch, Normal Volt. Chg, Leaked, Loose Plate Material on Separator.
			40°	47	7	2182	Low Volt. Disch, High Volt. Chg, Shorted at Top of Core, Separator Too Short, Pos. Tab Burned and Broken.
			40°	49	5	2446	Low Volt. Disch, High Volt. Chg, Pos. Weld to Terminal Stud Burned, Poor Weld.
			40°	45	10	2461	Low Volt, Disch, High Volt. Chg, Loose Plate Material on Separator, Short at Outside End of Pos. Plate.
			40°	466	2	2509	Low Volt. Disch, High Volt. Chg, Leaked, Pos. Tab Burned and Shorted to Neg. Tab.
			40°	441	6	2509	Low Volt. Disch, High Volt, Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos. Tab Burned.

PACK NUMBER	DEPTH OF DISCHARGE	CHARGE 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°	416	4	1182	Low Volt. Disch, Low Volt. Chg, Shorted at Top of Core, Separator Too Short, Pos. Tab Burned.
			40°	499	3	1515	Low Volt. Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos. Tab Burned and Broken.
			40°	412	6	1911	Showed Open Circuit at Start of Cycle, Pos. Tab Broken, Burned Tape on Tab Caused by Over Heating From Poor Tab Weld.
44	25%	3.0	40°	222	6	1672	Showed Open Circuit at Start of Cycle, Pos. Tab Broken, Burned Tape on Tab Caused By Over Heating From Poor Tab Weld.

BACK NUMBER	PERCENT OF DISCHARGE	CHARGE PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
3	25%	1.5	25°	73	5	2785	CELL TYPE: Gould 3.5 Ampere Hour 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.
4	40%	1.5	25°	77	4	4751*	Low Volt. Disch, Normal Volt. Chg, Separator Deteriorated, Separator Impregnated with Neg. Plate Material, Blistering on Pos. Plates.
				188	10	4751*	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 2.1 gm, Neg. Plate Material on Separator.
				81	7	1609	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 3.2 gm, High Pres. Bulge Top.
				90	8	1862	Low Volt. Disch, Low Volt. Chg, Leaked, Lost 2.7 gm, High Pres. Bulge Top.
				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.

* TESTED DURING THIS REPORTING PERIOD

NO. OF PACKS	PERCENT OF DISCHARGE	CHARGE PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	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.
				112	8	1705	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 2.0 gm, Pos. Tab Weld to Bottom of Can Weak, Pos. Tab Weld to Plate Weak.
				39	1	1985	Low Volt. Disch, Normal Volt. Chg, Deposit on Glass Seal, Separator Deteriorated, Neg. Plate Material on Separator.
				170	10	1985	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 1.8 gm, Pos. and Neg, Tab Weld Weak to Plates Near Center of Core, Separator Deteriorated at Center of Core.
27	15%	1.5	40°	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.
				13	3	2901	Low Volt. Disch, Low Volt. Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos. Plate Material on Separator.
				195	8	2901	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 3.6 gm, Short Through Separator, Separator Burned at Center of Core, Pos. Plate Material on Separator.
				103	7	2998	Low Volt. Disch, Normal Volt. Chg, High Pres, Short Through Separator, Pieces of Pos. Plate Material Between Plates.
			40°	200	10	3270	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 2.5 gm, Short Through Separator, Separator Deteriorated at Center of Core, Pos. Tab Weld to Case Weak.
				197	9	4102	Low Volt. Disch, High Volt. Chg, Leaked Around Glass Seal, Lost 1.4 gm, Short at Pos. Tab, Separator Deteriorated, Neg. Plate Material Penetrated Separator.
				11	2	4885*	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: Gould 3.5 Ampere-Hour
28	25%	1.5	50°	122	2	408	FAILURE ANALYSIS Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.
			40°	157	7	494	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 2.0 gm, High Pres. Bulge.
			40°	158	8	860	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.
			40°	R166	9	1500	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.
31	15%	3.0	40°				

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gould 3.5 Ampere-Hour
32	25%	3.0	40°	125	6	138	FAILURE ANALYSIS Low Volt. Disch, Normal Volt. Chg, Bottom Weld Weak, Greenish Corrosion Inside at Neg. Lead.
			40°	65	3	495	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 1.5 gm, Bad Glass Seal Around Neg. Terminal.
			40°	1	1	800	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 3.2 gm, Shorts near Center of Core.
			40°	67	4	875	Low Volt. Disch, Low Volt. Chg, Leaked, Lost 2.2 gm, Short Around Tabs, Pos. Tab Weld Weak to Case.
			40°	132	7	875	Failed During Shut Down to Move to Another Chamber, Leaked, Lost 4.4 gm, High Pressure, Neg. Tabs Pushed Out of Cell, Short at Center and Outside Edge of Core.
			40°	149	9	975	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.

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.
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 Pressure 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 Thru Plates, Neg. Tab Welds Poor, Separator Beginning to Deteriorate.
6	40%	3.0	25°	4324	8	1069	Low Volt. Disch, Normal Volt. Chg, Separator Impregnated With Active Material, Separator Sticking to Neg. Plate.
			25°	6904	10	1136	Low Volt. Disch, Low Volt. Chg, Small Hole in Separator at Start of Coil, Pos. Plate Edge Broken Allowing Grid Wire to Penetrate Separator.
			25°	3637	4	1161	Grid Wires of Pos. Plate Penetrated Separator and Shorted to Neg. Plate, Active Plate Material Penetrated Separator at Three Points, Bad Tab Welds.

PACK NUMBER	DEPTH OF DISCHARGE	CHARGE PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Sonotone 5.0 Ampere Hour
26	25%	1.5	40°	4323	1	2487	Grid Wire Penetrated Separator at Tabs.
			40°	6773	9	2902	Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg. Plate Material Penetrated Separator, Tab Welds Weak.
			40°	7224	6	2993	Low Volt. Disch, Normal Volt. Chg, High Pressure Bulge, Deposit Around Seal, Neg. Tab Weld Weak, Neg. Plate Material Penetrated Separator.
			40°	7232	7	2993	Low Volt. Disch, Normal Volt. Chg, High Pressure Bulge, Deposit Around Seal, Pos. Tab Weld Weak, Plate Broken at Pos. Tab, Deep Pressure Points From Scoring, Separator Completely Deteriorated.
			40°	4881	3	3344	Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.
			40°	4240	4	3625	Low Volt. Disch, Low Volt. Chg, Separator Deteriorated, Plate Material Penetrated Separator.
29	15%	3.0	40°	3626	1	1418	Shorted on Cycling, Neg. Tab Welds Poor, Active Plate Material Penetrated Separator at Scoring Marks.
30	25%	3.0	40°	3657	7	856	Hole in Separator Allowing Pos. Plate to Hit Case, Separator Damaged at Center of Cell Allowing Pos. and Neg. Plate to Short Together.
49	15%	1.5	0°	6887	9	2010	Low Volt. Disch, Low Volt. Chg, Burn on Separator Opposite Pos. Tab.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS	CELL TYPE: Gulton 6.0 Ampere-Hour
13	25%	1.5	25°	2305	1	308	Low Volt. Disch, High Volt. Chg, Lost 12 gm, CO ₂ 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 ₂ 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.	
			25°	1862	5	721	Low Volt. Disch, High Volt. Chg, Ceramic Short.	
17	25%	3.0	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	1638	Low Volt. Disch, Low Volt. Chg, Ceramic Short.	
			25°	1757	1	2375*	Low Volt. Disch, Low Volt. Chg, Ceramic Short, Separator Around Ceramic Seal, High Pres. Bulge.	

PACK NUMBER	DEPTH OF DISCHARGE	DRAIN PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gulton 6.0 Ampere-Hour	
							FAILURE ANALYSIS	
18	40%	3.0	25°	1826	6	365	Low Volt. Disch, Chg. Volt. Normal, Lost 3 gm, Concave Wall, Ceramic Short.	
				1615	3	608	Low Volt. Disch, Normal Volt. Chg, Deposit on Top of Pos. Terminal, Lost 5.1 gm, High Pres. Bulge.	
				1827	7	643	Low Volt. Disch, High Volt. Chg, High Pres. Bulge, Ceramic Short	
				2228	9	643	Low Volt. Disch, High Volt. Chg, Ceramic Short.	
				1562	5	1145	Low Volt. Disch, Low Volt. Chg, Ceramic Short, Blistering on Pos. Plates.	
				1233	1	1550	Low Volt. Disch, Low Volt. Chg, Ceramic Short, Blistering on Pos. Plate, Neg. Plate Material on Separator.	
		1.5	50°	1764	3	239	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.	
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.	

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
38	25%	1.5	40°	2405	5	1333	Low Volt. Disch., Normal Volt. Chg., Pos. Bus Shorted to Case	Low Volt. Disch., Normal Volt. Chg., Pos. Bus Shorted to Case
41	15%	3.0	40°	1626	2	1377	Low Volt. Disch., Low Volt. Chg., High Pres. Bulge, Ceramic Short	Low Volt. Disch., Low Volt. Chg., High Pres. Bulge, Ceramic Short
			40°	1771	9	650	Low Volt. Disch., High Volt. Chg., Ceramic Short	Low Volt. Disch., High Volt. Chg., Ceramic Short
			40°	1801	6	1063	Low Volt. Disch., Normal Volt. Chg., Ceramic Short	Low Volt. Disch., Normal Volt. Chg., Ceramic Short
			40°	3135	2	1132	Low Volt. Disch., Normal Volt. Chg., Ceramic Short	Low Volt. Disch., Normal Volt. Chg., Ceramic Short
			40°	1852	7	1157	Low Volt. Disch., Normal Volt. Chg., Ceramic Short, Blistering on Pos. Plates	Low Volt. Disch., Normal Volt. Chg., Ceramic Short, Blistering on Pos. Plates
42	15%	3.0	40°	2221	8	1157	Low Volt. Disch., Normal Volt. Chg., Ceramic Short	Low Volt. Disch., Normal Volt. Chg., Ceramic Short
			40°	1632	3	1689	Low Volt. Disch., Normal Volt. Chg., Ceramic Short, Blistering on Pos. Plates	Low Volt. Disch., Normal Volt. Chg., Ceramic Short, Blistering on Pos. Plates
			50°	2309	8	96	Low Volt. Disch., Normal Volt. Chg., Ceramic Short	Low Volt. Disch., Normal Volt. Chg., Ceramic Short
			40°	2346	7	383	Low Volt. Disch., Low Volt. Chg., CO ₂ on Bottom of Case, Ceramic Short	Low Volt. Disch., Low Volt. Chg., CO ₂ on Bottom of Case, Ceramic Short
			40°	2306	9	417	Low Volt. Disch., High Volt. Chg., Ceramic Short	Low Volt. Disch., High Volt. Chg., Ceramic Short
61	15%	1.5	40°	918	1	484	Low Volt. Disch., Low Volt. Chg., High Pres. Bulge, Deposit on Bottom of Case, Ceramic Short, Lost 3.1 gm.	Low Volt. Disch., Low Volt. Chg., High Pres. Bulge, Deposit on Bottom of Case, Ceramic Short, Lost 3.1 gm.
			0°	1622	2	1	Volt. Between 0.25 and 0.3 V. Throughout Cycle, Side Connave, Burnt Case, End Neg. Pushed Into Pos. Tab	Volt. Between 0.25 and 0.3 V. Throughout Cycle, Side Connave, Burnt Case, End Neg. Pushed Into Pos. Tab
			0°	1845	8	6	Lost 5 gm., Leak at Weld on Bottom, High Pres. Bulge	Lost 5 gm., Leak at Weld on Bottom, High Pres. Bulge
			0°	2397	5	2762	Low Volt. Disch., Low Volt. Chg., Ceramic Short	Low Volt. Disch., Low Volt. Chg., Ceramic Short

BACK NUMBER	PERCENT 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°	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.	
62	25%	1.5	0°	1630	10	2995	Low Volt. Disch, High Volt. Chg, Leaked, Lost 6.8 gm, Ceramic Seal Braoke, 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.	
				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.	
66	25%	3.0	0°	1843	8	1174	Low Volt. Disch, Low Volt. Chg, Wall Concave, Ceramic Short.	
				1781	5	1237	Low Volt. Disch, High Volt. Chg, High Pres. Bulge, Deposit Around Pos. Terminal, Ceramic Broken on Pos. Terminal, Blisters on Pos. Plate, Burnt Spot on Separator at Blisters, Lost 1.3 gm.	
				1634	3	1417	Low Volt. Disch, Normal Volt. Chg, Ceramic Short, High Pres. Bulge, One Side Concave Other Convex, Pos. Plates Elistered, 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.	

CELL TYPE: General Electric 12.0 Ampere-Hour

PACK NUMBER	DEPTH OF DISCHARGE	CHARGE PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
96	40%	1.5	25°	445	3	3822	Low Volt. Disch, Low Volt. Chg, Separator Penetrated By Neg. Plate Material, Pin Point Shorts Through Separator.
			25°	446	2	4020	Low Volt. Disch, Low Volt. Chg, Separator Penetrated by Neg. Plate Material, Pin Point Shorts Through Separator.
			25°	442	4	4020	Low Volt. Disch, Low Volt. Chg, Separator Penetrated by Neg. Plate Material, Pin Point Shorts Through Separator.
99	25%	1.5	40°	429	3	3841	Shorted on Cycling, Separator Penetrated by Neg. Plate Material, Pin Point Shorts Through Separator, Leaked at Neg. Terminal, Epoxy Lifted Up.
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	CRUIT 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.	
	25%	3.0	25°	458	4	1184	Low Volt. Disch, Low Volt. Chg, Leaked, Lost 14.2 gm, Blistering on Pos. Plates	
87			25°	419	3	1303	Low Volt. Disch, Normal Volt. Chg, Leaked, Lost 21.9 gm	
			25°	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 Concaved, Shorting Case to Bus	
	40%	1.5	25°	468	1	163	Low Volt. Disch, High Volt. Chg, High Pres. Bulge, Lost 8 gm	
			25°	388	2	209	Low Volt. Disch, High Volt. Chg, Lost 26.7 gm, Ceramic Short Around Pos. Terminal	
88			25°	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	
			25°	454	4	627	Low Volt. Disch, Low Volt. Chg, Lost 21.6 gm, Deposit on Both Terminals, Sides Concave Hit Bus on Both Sides	
			25°	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	
	40%	3.0	25°	422	2	153	Low Volt. Disch, High Volt. Chg, High Pres. Bulge, Bottom Ceramic Leak, Lost 25 gm.	
			25°	404	1	153	Low Volt. Disch, High Volt. Chg, High Pres. Bulge, Bottom Ceramic Leak, Lost 25 gm	
			25°	466	3	358	Low Volt. Disch, High Volt. Chg, High Pres. Bulge, Lost 16.4 gm	
			25°	429	5	358	Low Volt. Disch, Low Volt. Chg, Ceramic Short Around Pos. Terminal	

CELL TYPE: Gulton 20 Ampere-Hour				
BACK NUMBER	PERCENTAGE DISCHARGE	PERCENTAGE CHARGE (HOURS)	TEMPERATURE	TIME
90	25%	1.5	40°	452
				457
			40°	378
101	15%	1.5	0°	435
			0°	407
			0°	438
102	15%	3.0	0°	449
115	25%	1.5	0°	490
			0°	508
			0°	467

BACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gould 20 Ampere-Hour
104	25%	1.5	25°	69	1	2672	FAILURE ANALYSIS 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
118	40%	1.5	25°	61	2	1748	Low Volt. Disch, Low Volt. Chg, Short at Bottom of Pos. Plate, Grid Wires Penetrated Separator Where Tape Holds Plates Together, High Pressure
			25°	R91	4	1963	Low Volt. Disch, Low Volt. Chg, Shorted at Bottom Corner of Pos. Plates, Grid Wires Through Separator, Rough Grid Showing Through at Top and Bottom of Most Plates, High Pressure
			25°	92	5	2937	Low Volt. Disch, Low Volt. Chg, Short Through Separator on Side of Plates, Pos. Plate Material Penetrated Separator, High Pressure
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	1794	Low Volt. Disch, Normal Volt. Chg, Neg. Plate Material Penetrated Separator, High Pressure, Blistering on Pos. Plate
			25°	86	3	1794	Low Volt. Disch, Normal Volt. Chg, Neg. Plate Material Penetrated Separator, High Pressure, Blistering on Pos. Plate

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
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

CELL TYPE:	Gulton 50 Ampere-Hour					
FAILURE ANALYSIS	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	TEMPERATURE (°C)	EXPOSURE TO RADIATION (HOURS)	ANALYSIS
Low Volt. Disch, Low Volt. Chg, Separator Decomposed, Hot Spots through Separator Shorted Out Several Plates, High Pres. Bulge, Still Under Pressure When Opened.	119	2	1873*	40°	1.5	123
Went Dead During Shut-Down, 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.	118	3	1873*	40°		
Went Dead During Shut Down, Separator Decomposed, Neg. Plate Stuck to Case, High Pres. Bulge, Still Under Pressure When Opened.	117	4	1873*	40°		

PACK NUMBER	75	DEPTH OF DISCHARGE	100%	ORBIT TIME (HOURS)	24	TEST TEMPERATURE	25°	CELL NUMBER		POSITION IN PACK		CYCLES COMPLETED	30	CELL TYPE: Delco FAILURE ANALYSIS	Cell Blew-up, Pack Returned to Manufacturer
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AMPERE-HOUR CAPACITIES ON PRECONDITIONING CYCLES AND CAPACITY CHECKS

TYPE	PERCENT DEPTH OF DISCHARGE	TEMP. °C.	ORBIT PERIOD	DISCHARGE AMPERE-HOURS*						
				(1)	(2)	(3)	(4)	(5)	(6)	(7)
G.E. 3 A.H.	15	0	90 Min	3.48		3.18	3.12	3.07		
	25	0		3.53		3.25	3.17	3.10		
	25	25		4.00		3.35	3.21	3.11		
	40	25		4.00		3.45	3.31	3.22		
	15	50/40		1.15	3.17 (727)	3.15	3.11	3.05		
	25	50/40		1.52	3.21 (739)	3.18	3.13	3.07		
G.E. 3 A.H.	15	0	3 Hrs	3.68		3.15	3.07	3.03		
	25	0		3.56		3.25	3.18	3.13		
	25	25		3.15		3.22	3.15	3.10		
	40	25		3.73		3.30	3.22	3.15		
	15	50/40		1.77	3.42 (740)	3.40	3.31	3.25		
	25	50/40		1.60	3.40 (737)	3.35	3.28	3.22		
Gould 3.5 A.H.	15	0	90 Min	3.62		3.05	2.97	2.91		
	25	0		3.35		3.25	3.13	3.09		
	25	25		4.10		3.52	3.42	3.35		
	40	25		3.94		3.33	3.27	3.20		
	15	50/40		1.52	3.42 (779)	3.67	3.45	3.40		
	25	50/40		1.55	3.67 (784)	3.95	3.62	3.58		
Gould 3.5 A.H.	15	0	3 Hrs	3.87		3.59	3.45	3.35		
	25	0		3.50		3.71	3.53	3.45		
	25	25		4.30		4.02	3.79	3.73		
	40	25		4.09		3.69	3.55	3.48		
	15	50/40		1.62	4.21 (783)	4.15	3.98	3.91		
	25	50/40		1.55	4.41 (785)	4.08	3.90	3.83		
Sonotone 5 A.H.	15	0	90 Min	5.45		5.19	5.07	4.96		
	25	0		5.21		4.76	4.58	4.45		
	25	25		5.42		5.67	5.33	5.25		
	40	25		6.42		4.87	4.17	3.25		
	15	50/40		3.08	3.13 (723)	2.25	1.83	2.01		
	25	50/40		3.17	3.17 (725)	2.75	2.33	2.40		
Sonotone 5 A.H.	15	0	3 Hrs	5.67		5.79	5.67	5.52		
	25	0		4.82		5.26	5.17	5.05		
	25	25		5.71		4.55	3.51	3.10		
	40	25		5.68		4.50	3.31	3.25		
	15	50/40		3.84	4.11 (726)	3.15	2.83	3.01		
	25	50/40		3.73	4.11 (727)	3.30	2.97	3.15		

* (1) Initial Preconditioning.

(2) Preconditioning at Change to 40° C. Number of cycles completed at 50° C. is in parentheses.

(3) Capacity check after First 88 days of cycling. (** still at 50° C.)

(4) Capacity check after Second 88 days.

(5) Capacity check after Third 88 days.

(6) Capacity check after Fourth 88 days.

(7) Capacity check after Fifth 88 days.

AMPERE-HOUR CAPACITIES ON
PRECONDITIONING CYCLES AND CAPACITY CHECKS

TYPE	PERCENT DEPTH OF DISCHARGE	TEMP. °C.	ORBIT PERIOD	DISCHARGE AMPERE-HOURS*						
				(1)	(2)	(3)	(4)	(5)	(6)	(7)
Gulton 6 A.H.	15	0	90 Min	5.00		5.00	5.00	5.00		
	25	0		5.00		5.00	5.00	5.00		
	25	25		5.00		5.00	5.00	5.00		
	40	25		5.00		5.00	5.00	5.00		
	15	50/40		5.00	5.00 (100)	5.00	5.00	5.00		
	25	50/40		5.00	5.00 (100)	5.00	5.00	5.00		
Gulton 6 A.H.	15	0	3 Hrs	4.50		4.50	4.50	4.50		
	25	0		4.50		4.50	4.50	4.50		
	25	25		4.50		4.50	4.50	4.50		
	40	25		4.50		4.50	4.50	4.50		
	15	50/40		4.50	4.50 (100)	4.50	4.50	4.50		
	25	50/40		4.50	4.50 (100)	4.50	4.50	4.50		
G.E. 12 A.H.	15	0	90 Min	13.9		13.7	13.4	13.0		
	25	0		14.2		13.5	13.2	12.8		
	25	25		15.2		13.00	12.55	12.50		
	40	25		14.8		12.00	11.65	11.60		
	15	50/40		6.80	6.80 (100)	5.00	4.70	4.60		
	25	50/40		6.90	6.90 (100)	4.90	5.20	4.40		
G.E. 12 A.H.	15	0	3 Hrs	14.2		13.2	12.0	11.0		
	25	0		14.6		13.0	12.1	11.1		
	25	25		15.2		11.7	10.00	9.13		
	40	25		14.8		11.00	9.00	8.00		
	15	50/40		7.10	7.10 (100)	5.00	4.70	4.60		
	25	50/40		7.00	7.00 (100)	4.80	4.70	4.70		
Gould 20 A.H.	15	0	90 Min	23.5		22.7	22.5	22.2		
	25	0		23.0		21.2	21.0	20.7		
	25	25		25.0		19.5	19.0	18.0		
	40	25		24.7		19.3	18.0	17.0		
	15	50/40		9.67	9.63 (100)	15.7	15.3	15.5		
	25	50/40		9.00	13.9 (1522)	15.2	15.2	15.2		
Gould 20 A.H.	15	0	3 Hrs	23.0		22.2	21.5	20.8		
	25	0		23.0		19.5	19.0	18.0		
	25	25		23.3		19.5	18.2	17.3		
	40	25		24.8		19.7	18.0	17.0		
	15	50/40		9.50	9.67 (100)	15.0	14.0	14.0		
	25	50/40		9.00	13.9 (1522)	15.2	15.2	15.2		

* (1) Initial Preconditioning.

(2) Preconditioning at Change to 40° C. Number of cycles completed at 50° C. in parentheses.

(3) Capacity check after First 88 days of cycling. (** Still at 50° C.)

(4) Capacity check after Second 88 days.

(5) Capacity check after Third 88 days.

(6) Capacity check after Fourth 88 days.

(7) Capacity check after Fifth 88 days.

AMPERE-HOUR CAPACITIES ON
PRECONDITIONING CYCLES AND CAPACITY CHECKS

TYPE	PERCENT DEPTH OF DISCHARGE	TEMP. °C.	ORBIT PERIOD	DISCHARGE AMPERE-HOURS*						
				(1)	(2)	(3)	(4)	(5)	(6)	(7)
Gulton 20 A.H.	15	0	90 Min	17.2		12.5	5.27	PACK FAILED: CYCLE 3671		
	25	0		17.7		11.2	PACK FAILED: CYCLE 3758			
	25	25		23.2		7.17	3.50	7.83		
	40	25		23.3	PACK FAILED: CYCLE 627					
	15	50/40		10.2	12.3 (172)	4.50	4.23	6.50		
	25	50/40		2.00	11.3 (65)	6.00	10.5	7.33**	PACK FAILED: CYCLE 2645	
Gulton 20 A.H.	15	0	3 Hrs	16.7		12.3	25.2	20.3		
	25	0		21.7		20.7	31.9	12.3		
	25	25		22.3		6.17	7.17	PACK FAILED: CYCLE 1754		
	40	25		12.8	PACK FAILED: CYCLE 3758					
	15	50/40		9.50	12.7 (71)	7.33	5.33	4.23		
	25	50/40		2.17	10.3 (47)	6.67	6.67	7.67		
Mardney 12 A.H.	50	0	24 Hrs	12.3		9.60	PACK FAILED: CYCLE 1742			
	50	40		13.5		12.0	PACK FAILED: CYCLE 210			
Gulton 6 A.H.	50	25	24 Hrs	6.40		3.55	4.40			
G.E. 12 A.H.	50	40***	24 Hrs	12.0		7.40	(40°C) 6.50			

- * (1) Initial Preconditioning.
 (2) Preconditioning at Change to 40° C. Number of cycles completed at 50° C. is in parentheses.
 (3) Capacity check after First 88 days of cycling.
 (4) Capacity check after Second 88 days.
 (5) Capacity check after Third 88 days.
 (6) Capacity check after Fourth 88 days.
 (7) Capacity check after Fifth 88 days.
 ** Two cells only; pack failed during capacity check.
 *** Changed from 25° to 40° C ambient after 173 cycles.

C.A. IX

- * (1) Initial Preconditioning.
- (2) Capacity check after First 88 days of cycling.
- (3) Capacity check after Second 88 days.
- (4) Capacity check after Third 88 days.
- (5) Capacity check after Fourth 88 days.
- (6) Capacity check after Fifth 88 days.

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT DISCHARGE	PERIOD (HRS) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED			CELLS REMAIN- ING IN PACK	
									INITIAL	FINAL	DIFFERENCE	INITIAL	FINAL
G.E.	3	63	0	0.5	1.0	15	115	1.55	4981	5435	454	10	10
		64	0	"	"	25	"	"	4962	5413	451	10	10
		15	25	"	"	25	125	1.49	5024	5515	491	10	10
		16	25	"	"	40	"	"	4918	5013	95	7	5
		39	40	"	"	15	160	1.45	4691	5182	491	7	7
		110	40	"	"	25	"	1.41		FAILED			
		67	0	"	2.5	15	115	1.55	2379	2615	236	10	10
		68	0	"	"	25	"	"	2378	2624	246	10	10
		19	25	"	"	25	125	1.49	2389	2590	200	10	10
		20	25	"	"	40	"	"	2342	2593	251	10	10
Gould	3.5	43	40	"	"	15	160	1.45	2310	2452	142	7	6
		44	40	"	"	25	"	"	2141	2373	232	9	9
		51	0	"	1.0	15	115	1.55	5046	5429	491	10	10
		52	0	"	"	25	"	"	5042	5493	451	10	10
		3	25	"	"	25	125	1.49	4719	4751	42	5	0
		4	25	"	"	40	"	"		FAILED			
		27	40	"	"	15	160	1.45	4296	4435	109	5	5
		28	40	"	"	25	"	"		FAILED			
		55	0	"	2.5	15	115	1.55	2379	2615	236	10	10
		56	0	"	"	25	"	"	2412	2607	246	10	10
		7	25	"	"	25	125	1.49	2378	2626	248	10	10
		8	25	"	"	40	"	"	2344	2494	150	5	0
		31	40	"	"	15	160	1.45	2141	2373	232	7	7
		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	INITIAL	FINAL
JONOTONE	5	49	0	0.5	1.0	15	115	1.55	4760	5239	479	9
		50	0	"	"	25	"	"	4718	5199	481	10
		1	25	"	"	25	125	1.49	4606	5084	478	8
		2	25	"	"	40	"	"	4647	5170	473	7
		25	40	"	"	15	160	1.45	4559	5027	478	10
		26	40	"	"	25	"	"		FAILED		
		53	0	"	2.5	15	115	1.55	2221	2464	243	10
		54	0	"	"	25	"	"	2251	2492	242	10
		5	25	"	"	25	125	1.49	2278	2521	243	10
		6	25	"	"	40	"	"	2202	2444	242	7
		29	40	"	"	15	160	1.45	2164	2382	218	9
		30	40	"	"	25	"	"	2109	2350	211	9
DULTON	6	61	0	"	1.0	15	115	1.55	4373	4671	298	7
		62	0	"	"	25	"	"	4401	4889	422	8
		13	25	"	"	25	125	1.49	3880	4021	141	5
		14	25	"	"	40	"	"		FAILED		
		37	40	"	"	15	160	1.45	3804	4327	418	6
		38	40	"	"	25	"	"		FAILED		
		65	0	"	2.5	15	115	1.55	2253	2592	212	10
		66	0	"	"	25	"	"	2123	2315	192	6
		17	25	"	"	25	125	1.49	2223	2545	319	7
		18	25	"	"	40	"	"		FAILED		
		41	40	"	"	15	160	1.45		FAILED		
		42	40	"	"	25	"	"	1929	2116	317	6

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
G.F.	12	110	0	0.5	1.0	15	115	1.55	4340	4869	529	5
		124	0	"	"	25	"	"	4231	4684	453	4
		82	25	"	"	25	125	1.49	4536	5065	529	5
		96	25	"	"	40	"	"		FAILED		
		85	40	"	"	15	160	1.45	4299	4687	388	5
		99	40	"	"	25	"	"	3842	4231	349	4
		111	0	"	2.5	15	115	1.55	2216	2458	242	5
		125	0	"	"	25	"	"	2215	2457	242	5
		83	25	"	"	25	125	1.49	2257	2499	242	5
		97	25	"	"	40	"	"	2247	2457	210	5
		86	40	"	"	15	160	1.45	2173	2370	217	5
		100	40	"	"	25	"	"	2010	2257	217	5
Gould	20	84	0	"	1.0	15	115	1.55	4378	4804	426	5
		98	0	"	"	25	"	"	4185	4611	426	4
		104	25	"	"	25	125	1.49		FAILED		
		118	25	"	"	40	"	"		FAILED		
		112	40	"	"	15	160	1.45	4148	4577	429	5
		126	40	"	"	25	"	1.41		FAILED		
		20	0	"	2.5	15	115	1.55	2187	2477	242	5
		94	0	"	"	25	"	"	2050	2295	217	5
		105	25	"	"	25	125	1.49	2123	2350	217	5
		119	25	"	"	40	"	"		FAILED		
		109	40	"	"	15	160	1.45	2017	2255	218	5
		120	40	"	"	25	"	1.41		FAILED		

CELL 5. RTP. TO CYCLING @ CYCLE 41875.

[illegible]

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
YARDNEY	12	57	0	1.0	23.0	50	*	1.50		FAILED		
		33	40	"	"	"	*	1.50		FAILED		
		79	25	1.0	23.0	50	200	1.49	209	226	3	3
G.E.	12	93	25*	1.0	23.0	50	200	1.49**	208	225	5	5
		95	0	0.5	1.0	25	115	1.55	2147	2598	5	5
		123	40	"	"	15	160	1.45		FAILED		
GULTON	50	75	25	1.0	23.0	40	*	1.97		FAILED		
		89	25	"	"	"	*	"	41	67	5	4
DELCO	25	275	25	1.0	23.0	25	*	1.97	1	34	5	3

* DOES NOT APPLY
** CHANGED TO 1.45, 1.45 V/CELL LIMIT AFTER CYCLE 173.

PACK NO. 63 G.E. 3 A.H.		DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 115		TEST TEMPERATURE 0 C ORBIT PERIOD 90 MIN.								
CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES									
			1	2	3	4	5	6	7	8	9	10
5013.	12.29	.90	1.23	1.23	1.23	1.21	1.23	1.21	1.22	1.25	1.21	1.20
5121.	12.29	.90	1.24	1.24	1.24	1.22	1.23	1.22	1.23	1.24	1.22	1.22
5149.	12.27	.90	1.23	1.23	1.24	1.22	1.22	1.22	1.22	1.24	1.22	1.22
5176.	12.27	.90	1.24	1.23	1.24	1.22	1.22	1.22	1.23	1.24	1.22	1.22
5208.	12.26	.90	1.24	1.24	1.24	1.22	1.23	1.22	1.22	1.24	1.22	1.22
5252.	12.28	.90	1.23	1.23	1.23	1.21	1.22	1.22	1.22	1.24	1.22	1.22
5306.	12.32	.91	1.24	1.24	1.24	1.22	1.23	1.22	1.23	1.24	1.22	1.22
5345.	12.30	.90	1.24	1.24	1.24	1.22	1.23	1.22	1.22	1.24	1.22	1.22
5370.	12.29	.90	1.23	1.24	1.24	1.22	1.23	1.22	1.23	1.24	1.22	1.22
5398.	12.28	.90	1.23	1.23	1.24	1.22	1.23	1.22	1.22	1.24	1.22	1.21
5435.	12.31	.90	1.23	1.24	1.24	1.22	1.23	1.22	1.22	1.24	1.22	1.22
5013.	15.70	.52	1.62	1.48	1.60	1.55	1.65	1.61	1.52	1.64	1.46	1.51
5121.	15.47	.29	1.59	1.47	1.57	1.54	1.61	1.59	1.51	1.59	1.47	1.51
5149.	15.52	.30	1.61	1.47	1.57	1.54	1.62	1.61	1.51	1.60	1.47	1.51
5176.	15.55	.28	1.61	1.47	1.58	1.54	1.63	1.62	1.51	1.61	1.47	1.51
5208.	15.52	.29	1.61	1.47	1.57	1.54	1.62	1.61	1.51	1.60	1.47	1.50
5252.	15.50	.29	1.61	1.46	1.58	1.53	1.62	1.60	1.50	1.60	1.46	1.50
5306.	15.66	.26	1.63	1.47	1.61	1.55	1.63	1.62	1.51	1.62	1.47	1.51
5345.	15.46	.26	1.59	1.47	1.58	1.53	1.62	1.60	1.50	1.60	1.46	1.50
5370.	15.52	.27	1.61	1.47	1.59	1.54	1.63	1.61	1.50	1.60	1.46	1.50
5398.	15.57	.28	1.61	1.47	1.59	1.54	1.63	1.62	1.51	1.61	1.46	1.50
5435.	15.61	.28	1.62	1.47	1.61	1.55	1.63	1.61	1.51	1.61	1.46	1.51

END OF
CHARGE

END OF
DISCHARGE

PACK NO. 64
G.E. 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
5 4 3 2 1

6 7 8 9 10

END OF
DISCHARGE

4990.	12.03	1.50	1.16	1.17	1.17	1.18	1.19	1.18	1.20	1.23	1.21	1.20
5100.	12.01	1.51	1.21	1.21	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.18
5187.	11.98	1.51	1.21	1.21	1.20	1.20	1.20	1.19	1.20	1.20	1.20	1.19
5230.	11.98	1.52	1.20	1.20	1.20	1.20	1.20	1.19	1.20	1.20	1.19	1.18
5285.	12.02	1.52	1.20	1.21	1.20	1.20	1.20	1.19	1.20	1.20	1.20	1.19
5333.	12.03	1.52	1.21	1.21	1.21	1.21	1.21	1.20	1.20	1.20	1.20	1.19
5347.	12.07	1.51	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.20	1.19
5377.	11.98	1.51	1.20	1.20	1.20	1.20	1.21	1.19	1.20	1.20	1.19	1.18
5413.	11.98	1.51	1.20	1.20	1.20	1.20	1.20	1.19	1.19	1.20	1.19	1.18

.86

END OF
CHARGE

4990.	15.72	1.56	1.58	1.52	1.58	1.64	1.46	1.47	1.65	1.51	1.51	1.58
5100.	15.34	1.54	1.53	1.52	1.53	1.56	1.51	1.51	1.56	1.52	1.52	1.54
5187.	15.62	1.55	1.57	1.53	1.58	1.62	1.48	1.48	1.64	1.53	1.53	1.61
5230.	15.57	1.55	1.56	1.53	1.57	1.61	1.47	1.48	1.62	1.53	1.53	1.60
5285.	15.73	1.57	1.57	1.55	1.60	1.63	1.48	1.48	1.65	1.54	1.54	1.61
5333.	15.82	1.58	1.58	1.55	1.62	1.66	1.49	1.49	1.66	1.55	1.55	1.62
5347.	15.54	1.55	1.55	1.52	1.58	1.63	1.48	1.48	1.63	1.52	1.52	1.58
5377.	15.47	1.54	1.57	1.52	1.58	1.60	1.47	1.47	1.61	1.51	1.51	1.58
5413.	15.45	1.54	1.56	1.52	1.57	1.60	1.46	1.46	1.61	1.51	1.51	1.58

PACK NO. 15
G.E. 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
5056.	11.82	1.51	1.18	1.18	1.18	1.17	1.18	1.20	1.17	1.17	1.21	1.18	1.18
5164.	11.82	1.51	1.20	1.20	1.18	1.17	1.17	1.19	1.17	1.17	1.18	1.19	1.18
5192.	11.80	1.51	1.20	1.20	1.18	1.17	1.17	1.19	1.16	1.18	1.17	1.17	1.18
5219.	11.79	1.44	1.20	1.20	1.18	1.17	1.17	1.19	1.16	1.18	1.18	1.18	1.18
5251.	11.76	1.50	1.20	1.20	1.18	1.17	1.16	1.19	1.16	1.17	1.17	1.18	1.18
5295.	11.82	1.51	1.20	1.20	1.18	1.17	1.17	1.19	1.17	1.18	1.18	1.18	1.18
5349.	11.80	1.51	1.20	1.20	1.18	1.16	1.16	1.19	1.16	1.17	1.17	1.18	1.18
5388.	11.80	1.51	1.20	1.20	1.18	1.17	1.17	1.19	1.16	1.17	1.17	1.18	1.18
5413.	11.79	1.51	1.20	1.20	1.18	1.17	1.17	1.20	1.16	1.17	1.17	1.18	1.18
5441.	11.77	1.51	1.20	1.19	1.18	1.16	1.16	1.19	1.16	1.17	1.17	1.18	1.18
5478.	11.75	1.51	1.19	1.19	1.18	1.16	1.16	1.19	1.15	1.16	1.16	1.17	1.17
5515.	11.74	1.51	1.19	1.19	1.18	1.17	1.16	1.19	1.16	1.16	1.16	1.18	1.18
5056.	14.82	.94	1.49	1.51	1.45	1.44	1.46	1.49	1.43	1.48	1.45	1.49	END OF CHARGE
5164.	14.77	.83	1.50	1.52	1.45	1.45	1.45	1.50	1.44	1.46	1.46	1.51	
5192.	14.77	.83	1.51	1.52	1.45	1.45	1.45	1.50	1.44	1.47	1.45	1.51	
5219.	14.77	.80	1.50	1.52	1.46	1.45	1.45	1.50	1.44	1.47	1.46	1.51	
5251.	14.77	.79	1.50	1.52	1.45	1.45	1.45	1.50	1.44	1.47	1.46	1.51	
5295.	14.76	.80	1.50	1.51	1.45	1.45	1.45	1.50	1.44	1.47	1.45	1.51	
5349.	14.71	.83	1.49	1.50	1.45	1.45	1.45	1.49	1.43	1.46	1.46	1.50	
5388.	14.71	.82	1.49	1.50	1.45	1.46	1.45	1.49	1.44	1.46	1.46	1.50	
5413.	14.79	.82	1.50	1.52	1.46	1.46	1.45	1.50	1.45	1.47	1.46	1.51	
5441.	14.72	.83	1.49	1.50	1.45	1.45	1.45	1.49	1.44	1.46	1.46	1.50	
5478.	14.75	.84	1.49	1.51	1.46	1.46	1.45	1.50	1.44	1.46	1.46	1.50	
5515.	14.79	.79	1.51	1.53	1.45	1.45	1.45	1.51	1.44	1.46	1.46	1.51	

PACK NO. G.E. 3 A.H.	CYCLE NO.	PACK VOLTAGE	CURRENT 2.40	DEPTH OF DISCHARGE 40 PERCENT OF RECHARGE 125					TEST TEMPERATURE 25 C ORBIT PERIOD 90 MIN.					END OF DISCHARGE	
				1	2	3	4	5	6	7	8	9	10		
	4936.	5.14	2.41	.00	1.10	1.12	1.11	.00	.00	.00	.00	.00	.76	1.08	.00
	4972.	5.45	2.43	.00	1.15	1.16	1.07	.00	.00	.00	.00	.00	1.02	1.10	.00
	4982.	3.74	1.82	.00	1.10	1.14	.05	.00	.00	.00	.00	.00	.56	1.02	.00
	5013.	4.29	2.10	.00	1.14	1.15	.12	.00	.00	.00	.00	.00	1.04	1.11	.00
	4936.	7.43	1.50	.00	1.50	1.50	1.46	.00	.00	.00	.00	.00	1.50	1.48	.00
	4972.	7.54	.90	.00	1.51	1.51	1.45	.00	.00	.00	.00	.00	1.55	1.51	.00
	4982.	7.47	1.17	.00	1.49	1.52	1.46	.00	.00	.00	.00	.00	1.52	1.48	.00
	5013.	7.56	.93	.00	1.52	1.51	1.46	.00	.00	.00	.00	.00	1.55	1.52	.00

PACK NO. 39
G.E. 3 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE .90

CELL VOLTAGES

6 7 8 9 10

	8.28	.90	1.16	.00	1.19	1.19	1.19	1.19	1.19	.00	1.19	1.17	1.18	END OF DISCHARGE
4723.	8.32	.89	1.18	.00	1.21	1.19	1.19	1.20	1.20	.00	1.18	1.18	1.18	1.19
4831.	8.31	.89	1.17	.00	1.20	1.19	1.19	1.20	1.20	.00	1.18	1.18	1.19	1.19
4859.	8.30	.86	1.17	.00	1.20	1.19	1.19	1.19	1.19	.00	1.19	1.18	1.20	1.20
4886.	8.31	.89	1.16	.00	1.21	1.19	1.19	1.19	1.19	.00	1.19	1.18	1.19	1.20
4918.	8.31	.89	1.17	.00	1.19	1.19	1.19	1.19	1.19	.00	1.18	1.18	1.19	1.19
4962.	8.31	.89	1.17	.00	1.19	1.19	1.19	1.19	1.19	.00	1.18	1.19	1.19	1.19
5016.	8.34	.89	1.18	.00	1.20	1.21	1.21	1.20	1.20	.00	1.18	1.18	1.19	1.19
5055.	8.29	.89	1.17	.00	1.20	1.20	1.20	1.20	1.20	.00	1.16	1.18	1.19	1.19
5080.	8.41	.89	1.16	.00	1.22	1.22	1.22	1.21	1.21	.00	1.20	1.20	1.20	1.20
5108.	8.31	.89	1.16	.00	1.20	1.20	1.20	1.20	1.20	.00	1.18	1.18	1.19	1.19
5145.	8.31	.89	1.16	.00	1.21	1.19	1.19	1.19	1.19	.00	1.15	1.18	1.19	1.19
5182.	8.26	.90	1.16	.00	1.21	1.19	1.19	1.19	1.19	.00	1.15	1.18	1.19	1.19

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PACK NO. G.E. 3 A.H.	67	CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE					TEST TEMPERATURE 0 C ORBIT PERIOD 3 HOURS					END OF DISCHARGE
					1	2	3	4	5	6	7	8	9	10	
2445.	12.43	.91	1.25	1.25	1.24	1.25	1.24	1.25	1.25	1.24	1.00	1.25	1.24	1.24	1.24
2489.	12.36	.89	1.24	1.24	1.23	1.24	1.23	1.24	1.23	1.23	1.23	1.24	1.23	1.23	1.23
2521.	12.35	.90	1.24	1.24	1.23	1.24	1.23	1.24	1.23	1.23	1.23	1.24	1.22	1.22	1.22
2556.	12.41	.88	1.24	1.25	1.24	1.24	1.24	1.24	1.25	1.24	1.24	1.24	1.23	1.23	1.23
2583.	12.34	.91	1.24	1.24	1.23	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.22	1.22	1.22
2615.	12.36	.90	1.24	1.24	1.23	1.24	1.23	1.24	1.24	1.24	1.24	1.24	1.22	1.22	1.23
2445.	15.54	.21	1.53	1.48	1.60	1.53	1.60	1.60	1.52	1.60	1.60	1.57	1.52	1.58	END OF CHARGE
2489.	15.55	.14	1.60	1.45	1.51	1.60	1.51	1.60	1.60	1.55	1.54	1.51	1.60	1.54	
2521.	15.60	.09	1.60	1.45	1.51	1.60	1.51	1.60	1.60	1.57	1.56	1.52	1.60	1.54	
2556.	15.67	.08	1.61	1.45	1.52	1.61	1.52	1.61	1.62	1.58	1.57	1.52	1.61	1.55	
2583.	15.60	.10	1.60	1.45	1.51	1.61	1.51	1.61	1.61	1.57	1.56	1.51	1.60	1.55	
2615.	15.53	.08	1.59	1.44	1.50	1.60	1.50	1.60	1.60	1.57	1.56	1.50	1.59	1.54	

PACK NO. 68
 G.E. 3 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	
2493.	12.17	1.49	1.21	1.22	1.23	1.22	1.22	1.22	1.22	1.22	1.23	1.22	1.21
2560.	12.11	1.49	1.20	1.21	1.22	1.22	1.22	1.21	1.21	1.22	1.22	1.20	1.20
2587.	12.09	1.49	1.20	1.21	1.22	1.22	1.21	1.21	1.21	1.21	1.21	1.20	1.20
2624.	12.04	1.49	1.19	1.20	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.19	1.20
2493.	15.68	.34	1.61	1.61	1.59	1.60	1.60	1.57	1.50	1.62	1.49	1.49	END OF CHARGE
2560.	15.65	.15	1.62	1.62	1.57	1.61	1.61	1.59	1.47	1.63	1.45	1.46	
2587.	15.55	.13	1.60	1.62	1.55	1.60	1.60	1.58	1.47	1.62	1.44	1.45	
2624.	15.53	.14	1.61	1.62	1.54	1.60	1.60	1.58	1.46	1.62	1.44	1.45	

PACK NO. 19
G.E. 3 A.H.

DEF	F	DISCHARGE	25	TEST TEMPERATURE	25	C
PER		OF RECHARGE	125	ORBIT PERIOD	3	HOURS

CYCLE PACK CURRENT
NO. VOLTAGE 1.50

CELL VOLTAGES⁴₅

END OF
DISCHARGE

[illegible]

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

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

CYCLE PACK CURRENT
NO. VOLTAGE 2.40

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF

2509. 11.28 2.39 1.15 1.13 1.14 1.12 1.11 1.13 1.12 1.11 1.15 1.12 END OF
2536. 11.23 2.39 1.15 1.13 1.14 1.11 1.08 1.13 1.12 1.10 1.15 1.12 DISCHARGE
2573. 11.32 2.39 1.15 1.13 1.15 1.12 1.16 1.13 1.13 1.11 1.15 1.12

.60

2442. 14.71 1.49 1.47 1.45 1.45 1.47 1.47 1.47 1.47 1.49 1.47 END OF
2509. 14.68 .52 1.46 1.45 1.45 1.47 1.46 1.46 1.47 1.47 CHARGE
2536. 14.73 .51 1.47 1.46 1.46 1.47 1.47 1.46 1.49 1.48
2573. 14.74 .51 1.49 1.47 1.46 1.48 1.47 1.46 1.48 1.47

PACK NO. 43 G.E. 3 A.H.		DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 160					TEST TEMPERATURE 40 C ORBIT PERIOD 3 HOURS						
CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES					6	7	8	9	10	END OF DISCHARGE
			1	2	3	4	5						
2282.	8.17	.89	1.23	1.22	.00	.00	1.17	.00	1.18	1.22	.97	1.19	
2326.	7.23	.79	1.23	1.23	.00	.00	1.18	.00	1.17	1.23	.00	1.20	
2358.	7.18	.79	1.23	1.23	.00	.00	1.18	.00	1.13	1.22	.00	1.19	
2393.	7.01	.90	1.22	1.22	.00	.00	1.17	.00	1.01	1.21	.00	1.18	
2420.	6.93	.90	1.22	1.22	.00	.00	1.17	.00	.96	1.21	.00	1.18	
2452.	6.90	.90	1.22	1.22	.00	.00	1.17	.00	.92	1.21	.00	1.18	
2282.	9.98	.29	1.41	1.41	.00	.00	1.42	.00	1.42	1.42	1.47	1.43	END OF CHARGE
2326.	8.49	.29	1.40	1.40	.00	.00	1.41	.00	1.42	1.42	.00	1.43	
2358.	8.47	.27	1.40	1.40	.00	.00	1.41	.00	1.43	1.41	.00	1.42	
2393.	8.54	.25	1.41	1.41	.00	.00	1.42	.00	1.46	1.42	.00	1.43	
2420.	8.53	.23	1.41	1.41	.00	.00	1.42	.00	1.46	1.42	.00	1.42	
2452.	8.53	.23	1.40	1.41	.00	.00	1.41	.00	1.47	1.42	.00	1.42	

PACK NO. 44
G.E. 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT
VOLTAGE 1.50

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF
DISCHARGE

2257. 10.19 1.50 1.13 1.15 1.14 1.14 1.13 1.14 1.13 1.13 1.12
2324. 10.30 1.50 1.14 1.16 1.15 1.16 1.15 1.14 1.15 1.14 1.12
2351. 10.30 1.50 1.14 1.16 1.15 1.16 1.15 1.13 1.16 1.14 1.12
2388. 10.22 1.50 1.13 1.15 1.14 1.15 1.14 1.13 1.15 1.14 1.11

.48

END OF
CHARGE

2257. 12.90 .39 1.43 1.45 1.44 1.42 1.42 1.43 1.46 1.42 1.43
2324. 12.96 .38 1.43 1.46 1.44 1.43 1.43 1.44 1.46 1.42 1.43
2351. 12.96 .38 1.43 1.46 1.45 1.43 1.43 1.44 1.46 1.42 1.44
2388. 12.95 .38 1.43 1.46 1.44 1.43 1.43 1.44 1.46 1.42 1.43

44.

PACK NO. 51
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES						END OF DISCHARGE
			1	2	3	4	5	6	
5078.	12.35	1.06	1.22	1.22	1.21	1.22	1.23	1.23	1.23
5186.	12.36	1.06	1.24	1.24	1.23	1.21	1.24	1.25	1.24
5214.	12.36	1.06	1.24	1.23	1.23	1.22	1.24	1.24	1.24
5241.	12.37	1.06	1.24	1.23	1.23	1.25	1.24	1.25	1.24
5273.	12.38	1.06	1.24	1.23	1.23	1.26	1.24	1.24	1.24
5317.	12.40	1.06	1.24	1.23	1.22	1.26	1.23	1.24	1.24
5371.	12.48	1.06	1.25	1.24	1.23	1.27	1.24	1.24	1.24
5410.	12.49	1.06	1.25	1.24	1.23	1.29	1.25	1.25	1.24
5435.	12.49	1.06	1.25	1.24	1.23	1.28	1.24	1.25	1.24
5463.	12.50	1.06	1.25	1.24	1.23	1.28	1.25	1.25	1.24
5500.	12.47	1.06	1.24	1.23	1.23	1.26	1.24	1.25	1.23
5537.	12.41	1.07	1.24	1.23	1.23	1.25	1.24	1.24	1.23
5078.	15.41	.60	1.55	1.57	1.58	1.44	1.66	1.54	1.51
5186.	15.29	.49	1.54	1.56	1.57	1.43	1.61	1.54	1.53
5214.	15.34	.50	1.55	1.56	1.57	1.43	1.63	1.54	1.52
5241.	15.35	.48	1.55	1.56	1.57	1.46	1.62	1.54	1.53
5273.	15.37	.48	1.55	1.56	1.57	1.47	1.63	1.54	1.53
5317.	15.36	.48	1.54	1.55	1.57	1.46	1.62	1.53	1.52
5371.	15.43	.47	1.55	1.56	1.57	1.47	1.62	1.53	1.53
5410.	15.46	.46	1.55	1.56	1.57	1.49	1.62	1.54	1.53
5435.	15.48	.48	1.56	1.57	1.58	1.49	1.63	1.54	1.54
5463.	15.46	.47	1.55	1.56	1.58	1.48	1.62	1.54	1.53
5500.	15.48	.48	1.55	1.57	1.58	1.47	1.63	1.54	1.53
5537.	15.40	.48	1.55	1.56	1.57	1.46	1.62	1.54	1.53
									END OF CHARGE

PACK NO. 52
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 1.75

CELL VOLTAGES
4 5 6 7 8 9 10

END OF
DISCHARGE

5180.	11.86	1.77	1.21	1.21	1.05	1.20	1.21	1.20	1.19	1.15	1.20	1.21
5267.	12.14	1.77	1.21	1.21	1.23	1.20	1.21	1.20	1.21	1.24	1.21	1.21
5310.	12.03	1.77	1.21	1.20	1.19	1.20	1.20	1.20	1.19	1.21	1.20	1.20
5365.	12.11	1.77	1.21	1.21	1.21	1.20	1.21	1.20	1.21	1.22	1.20	1.21
5413.	12.00	1.77	1.21	1.20	1.20	1.20	1.21	1.20	1.18	1.19	1.19	1.20
5427.	12.21	1.77	1.22	1.22	1.24	1.21	1.22	1.22	1.22	1.23	1.21	1.22
5457.	11.93	1.77	1.21	1.20	1.17	1.20	1.20	1.20	1.17	1.17	1.19	1.20
5493.	11.76	1.77	1.20	1.20	1.09	1.20	1.20	1.20	1.17	1.07	1.19	1.20

1.00

END OF
CHARGE

5180.	15.49	.85	1.59	1.59	1.47	1.58	1.56	1.56	1.54	1.48	1.57	1.53
5267.	15.72	.80	1.60	1.61	1.50	1.60	1.57	1.58	1.57	1.53	1.59	1.55
5310.	15.50	.71	1.59	1.59	1.46	1.59	1.56	1.56	1.53	1.48	1.57	1.53
5365.	15.69	.72	1.59	1.60	1.49	1.59	1.57	1.57	1.59	1.51	1.58	1.55
5413.	15.65	.77	1.60	1.62	1.48	1.60	1.58	1.59	1.55	1.49	1.59	1.55
5427.	15.51	.62	1.58	1.60	1.48	1.58	1.56	1.57	1.54	1.48	1.56	1.54
5457.	15.41	.69	1.58	1.60	1.46	1.59	1.56	1.57	1.49	1.46	1.56	1.53
5493.	15.37	.68	1.58	1.59	1.45	1.58	1.56	1.56	1.49	1.45	1.54	1.52

PACK NO. 3
GOULD 3.5 A.H.

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

CYCLE NO.	PACK CURRENT VOLTAGE	CELL VOLTAGES				TEST TEMPERATURE 25 C			
		1	2	3	4	5	6	7	8 9 10
4751.	3.88 1.60 1.15	.00	.96	.55	.00	.00	.00	.00	.00 .21
									END OF DISCHARGE
4751.	7.40 .87 1.50	.00	1.47	1.47	.00	.00	.00	1.47	.00 1.47
									END OF CHARGE

PACK NO. 27
GOULD 3.5 A.H.

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

CYCLE NO.	PACK VOLTAGE	CURRENT	1	2	3	4	5	6	7	8	9	10	
		1.05											
4408.	5.29	1.05	.90	.90	.00	1.15	1.20	1.05	.00	.00	.00	.00	END OF DISCHARGE
4485.	4.07	1.04	.83	.25	.00	1.18	1.23	1.11	.00	.00	.00	.00	
4408.	7.40	.40	1.49	1.53	.00	1.44	1.45	1.44	.00	.00	.00	.00	END OF CHARGE
4485.	7.46	.53	1.49	1.51	.00	1.49	1.49	1.51	.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 PACK CURRENT
NO. VOLTAGE 1.05

CELL VOLTAGES

	1	2	3	4	5	6	7	8	9	10	
2445.	12.44	1.06	1.25	1.24	1.24	1.23	1.24	1.25	1.24	1.24	1.24
2489.	12.41	1.06	1.25	1.23	1.23	1.23	1.24	1.25	1.23	1.23	1.24
2521.	12.40	1.06	1.24	1.23	1.23	1.23	1.24	1.25	1.23	1.23	1.23
2556.	12.45	1.06	1.25	1.24	1.25	1.24	1.24	1.25	1.24	1.24	1.24
2583.	12.42	1.06	1.24	1.24	1.24	1.23	1.24	1.25	1.23	1.23	1.23
2615.	12.42	1.06	1.24	1.24	1.24	1.23	1.24	1.25	1.23	1.23	1.23

END OF
DISCHARGE

2445.	15.32	.24
2489.	15.33	.23
2521.	15.31	.22
2556.	15.29	.21
2583.	15.30	.21
2615.	15.31	.22

END OF
CHARGE

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 PACK CURRENT
NO. VOLTAGE 1.75

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF
DISCHARGE

END OF
CHARGE

2477. 12.11 1.78 1.21 1.22 1.21 1.21 1.20 1.21 1.22 1.20 1.21
2544. 12.13 1.77 1.21 1.22 1.22 1.21 1.20 1.20 1.22 1.20 1.21
2571. 12.11 1.77 1.21 1.22 1.22 1.21 1.20 1.21 1.22 1.20 1.21
2608. 12.08 1.77 1.20 1.22 1.21 1.21 1.20 1.21 1.21 1.20 1.20

40
2477. 15.39 .30 1.54 1.54 1.55 1.55 1.53 1.54 1.55 1.53 1.52
2544. 15.43 .31 1.54 1.54 1.56 1.54 1.54 1.54 1.55 1.53 1.52
2571. 15.42 .32 1.54 1.54 1.55 1.55 1.54 1.53 1.54 1.55 1.53
2608. 15.44 .32 1.54 1.54 1.56 1.56 1.54 1.54 1.54 1.55 1.53

PACK NO. 7
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT
NO. VOLTAGE 1.75

CELL VOLTAGES

10

9

8

7

6

5

4

3

2

1

END OF
DISCHARGE

END OF
CHARGE

2456. 11.96 1.76 1.19 1.20 1.19 1.21 1.22 1.20 1.21
2500. 11.93 1.76 1.19 1.20 1.19 1.19 1.22 1.20 1.20
2532. 11.93 1.76 1.19 1.20 1.19 1.20 1.21 1.20 1.20
2567. 11.94 1.76 1.21 1.21 1.20 1.22 1.22 1.20 1.20
2594. 11.87 1.76 1.21 1.21 1.19 1.20 1.21 1.20 1.20
2626. 11.83 1.76 1.21 1.21 1.19 1.19 1.21 1.20 1.20

2456. 14.67 .44
2500. 14.69 .40
2532. 14.62 .42
2567. 14.63 .41
2594. 14.60 .42
2626. 14.63 .42

1.46 1.47 1.46 1.47 1.46 1.47 1.48 1.45 1.45
1.46 1.47 1.46 1.47 1.46 1.47 1.48 1.45 1.45
1.45 1.46 1.45 1.46 1.46 1.47 1.47 1.45 1.44
1.46 1.46 1.45 1.46 1.46 1.47 1.47 1.45 1.44
1.46 1.46 1.45 1.46 1.46 1.47 1.47 1.45 1.45
1.43 1.47 1.46 1.49 1.48 1.48 1.48 1.45 1.45

PACK NO. 8
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT
NO. VOLTAGE 2.80

CELL VOLTAGES

6 7 8 9 10

2368.	5.40	2.81	.00	1.15	1.13	1.14	.00	.00	.00	1.10	.00	END OF DISCHARGE
2435.	5.25	2.80	.00	1.15	1.14	1.15	.00	.00	.00	1.03	.00	
2462.	4.79	2.78	.00	1.15	1.12	1.14	.00	.00	.00	.84	.00	
2494.	3.82	2.24	.00	1.15	1.13	1.15	.00	.00	.00	.42	.00	

2368.	7.32	.75	.00	1.44	1.47	1.47	.00	.00	.00	1.47	.00	END OF CHARGE
2435.	7.29	.67	.00	1.45	1.48	1.48	.00	.00	.00	1.44	.00	
2462.	7.26	.74	.00	1.45	1.47	1.47	.00	.00	.00	1.43	.00	
2494.	7.30	.74	.00	1.45	1.47	1.47	.00	.00	.00	1.44	.00	

PACK NO. 31 GOULD 3.5 A.H.		DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 160		TEST TEMPERATURE 40 C ORBIT PERIOD 3 HOURS								
CYCLE NO.	PACK CURRENT VOLTAGE 1.05	1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
2203.	7.78	1.05	1.11	.91	1.22	1.20	1.08	1.22	1.10	.00	.00	
2247.	7.69	1.04	1.10	.92	1.21	1.19	1.02	1.21	1.06	.00	.00	
2279.	7.53	1.04	.98	.90	1.19	1.18	1.05	1.21	1.05	.00	.00	
2314.	7.38	1.05	.89	.89	1.22	1.19	1.02	1.21	.99	.00	.00	
2341.	7.41	1.05	.89	.87	1.21	1.19	1.11	1.21	.96	.00	.00	
2373.	7.21	1.03	.89	.82	1.18	1.19	1.02	1.21	.94	.00	.00	
2203.	10.14	.34	1.43	1.46	1.45	1.49	1.40	1.44	1.50	.00	.00	END OF CHARGE
2247.	10.09	.33	1.42	1.46	1.44	1.49	1.39	1.43	1.47	.00	.00	
2279.	10.11	.27	1.39	1.47	1.42	1.48	1.41	1.43	1.54	.00	.00	
2314.	10.25	.23	1.42	1.48	1.45	1.50	1.41	1.43	1.59	.00	.00	
2341.	10.26	.22	1.42	1.47	1.44	1.50	1.42	1.43	1.61	.00	.00	
2373.	10.19	.21	1.42	1.45	1.42	1.50	1.42	1.44	1.60	.00	.00	

PACK NO. 49
SONOTONE 5 A.H.

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

CYCLE NO. 1.50
PACK CURRENT
VOLTAGE 1.50

CELL VOLTAGES

	1	2	3	4	5	6	7	8	9	10	END OF DISCHARGE
4887.	1.22	1.21	1.21	1.20	1.21	1.22	1.23	1.24	.00	1.22	
4926.	1.21	1.21	1.21	1.20	1.21	1.22	1.23	1.24	.00	1.22	
4954.	1.21	1.22	1.21	1.20	1.21	1.22	1.23	1.24	.00	1.22	
4985.	1.21	1.21	1.21	1.20	1.21	1.22	1.23	1.24	.00	1.21	
5017.	1.21	1.21	1.21	1.20	1.20	1.21	1.23	1.23	.00	1.22	
5051.	1.21	1.21	1.21	1.21	1.21	1.22	1.23	1.24	.00	1.22	
5081.	1.22	1.22	1.21	1.21	1.21	1.22	1.23	1.24	.00	1.22	
5146.	1.22	1.22	1.22	1.22	1.22	1.23	1.24	1.25	.00	1.22	
5175.	1.21	1.22	1.21	1.21	1.22	1.23	1.24	1.24	.00	1.22	
5207.	1.21	1.21	1.20	1.20	1.21	1.22	1.23	1.23	.00	1.22	
5239.	1.22	1.22	1.22	1.21	1.22	1.23	1.24	1.24	.00	1.22	

.86

4887. 13.92
4926. 13.88
4954. 14.00
4985. 13.99
5017. 13.92
5051. 13.95
5081. 14.05
5146. 14.03
5175. 14.11
5207. 14.03
5239. 14.04

END OF CHARGE

1.53	1.53	1.53	1.53	1.53	1.51	1.62	1.53	1.54	.00	1.51	
1.52	1.52	1.62	1.53	1.51	1.51	1.64	1.53	1.54	.00	1.50	
1.54	1.54	1.64	1.54	1.51	1.51	1.66	1.54	1.55	.00	1.51	
1.53	1.53	1.64	1.54	1.51	1.51	1.65	1.54	1.55	.00	1.51	
1.52	1.52	1.65	1.52	1.50	1.50	1.64	1.52	1.54	.00	1.50	
1.52	1.52	1.63	1.53	1.51	1.51	1.65	1.53	1.54	.00	1.50	
1.54	1.54	1.64	1.54	1.52	1.52	1.65	1.54	1.56	.00	1.52	
1.55	1.55	1.62	1.55	1.54	1.54	1.63	1.55	1.56	.00	1.52	
1.55	1.54	1.64	1.56	1.53	1.53	1.66	1.55	1.56	.00	1.52	
1.54	1.53	1.63	1.55	1.53	1.53	1.65	1.54	1.55	.00	1.52	
1.54	1.54	1.63	1.55	1.53	1.53	1.64	1.54	1.56	.00	1.52	

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

END OF
CHARGE

PACK NO. 1		DEPTH OF DISCHARGE 25		TEST TEMPERATURE 25 C								
SONOTONE 5 A.H.		PERCENT OF RECHARGE 125		ORBIT PERIOD 90 MIN.								
CYCLE NO.	PACK CURRENT VOLTAGE 2.50	CELL VOLTAGES										
		1	2	3	4	5	6	7	8	9	10	
4639.	9.33	2.53	.00	1.20	1.17	.00	1.09	1.10	1.19	1.20	1.18	1.17
4732.	9.29	2.52	.00	1.20	1.17	.00	1.09	1.09	1.19	1.19	1.18	1.17
4771.	9.18	2.52	.00	1.19	1.15	.00	1.07	1.06	1.18	1.18	1.17	1.17
4799.	9.20	2.51	.00	1.20	1.16	.00	1.08	1.07	1.19	1.18	1.17	1.17
4830.	9.19	2.51	.00	1.19	1.15	.00	1.07	1.07	1.18	1.18	1.17	1.17
4862.	9.04	2.51	.00	1.17	1.13	.00	1.05	1.03	1.17	1.16	1.15	1.15
4896.	9.27	2.51	.00	1.19	1.16	.00	1.08	1.09	1.19	1.19	1.17	1.17
4926.	9.27	2.51	.00	1.19	1.16	.00	1.08	1.09	1.19	1.19	1.18	1.17
4960.	9.36	2.52	.00	1.21	1.18	.00	1.10	1.1	1.20	1.20	1.19	1.18
4991.	9.14	2.52	.00	1.18	1.15	.00	1.07	1.06	1.18	1.17	1.16	1.16
5020.	9.19	2.52	.00	1.19	1.16	.00	1.07	1.07	1.18	1.18	1.17	1.16
5052.	9.08	2.53	.00	1.18	1.13	.00	1.06	1.04	1.17	1.16	1.16	1.15
5084.	9.15	2.52	.00	1.19	1.15	.00	1.07	1.06	1.18	1.17	1.17	1.16
4639.	11.87	1.56	.00	1.45	1.46	.00	1.50	1.48	1.48	1.50	1.46	1.46
4732.	11.81	1.55	.00	1.46	1.46	.00	1.50	1.48	1.47	1.48	1.46	1.46
4771.	11.80	1.43	.00	1.46	1.46	.00	1.50	1.48	1.47	1.48	1.46	1.46
4799.	11.87	1.44	.00	1.46	1.47	.00	1.50	1.49	1.48	1.50	1.47	1.48
4830.	11.87	1.45	.00	1.46	1.47	.00	1.50	1.49	1.48	1.50	1.47	1.47
4862.	11.83	1.42	.00	1.46	1.47	.00	1.50	1.48	1.47	1.48	1.46	1.47
4896.	11.86	1.45	.00	1.46	1.46	.00	1.50	1.49	1.47	1.49	1.46	1.47
4926.	11.88	1.45	.00	1.46	1.47	.00	1.50	1.49	1.47	1.49	1.46	1.47
4960.	11.88	1.45	.00	1.47	1.48	.00	1.51	1.49	1.48	1.49	1.47	1.48
4991.	11.84	1.44	.00	1.46	1.47	.00	1.50	1.49	1.47	1.48	1.46	1.47
5020.	11.85	1.48	.00	1.46	1.47	.00	1.50	1.49	1.47	1.48	1.46	1.47
5052.	11.82	1.46	.00	1.45	1.46	.00	1.50	1.49	1.46	1.48	1.46	1.46
5084.	11.86	1.43	.00	1.46	1.47	.00	1.50	1.49	1.48	1.48	1.46	1.47

END OF
CHARGE

END OF
DISCHARGE

PACK NO. SONOTONE	2 5 A.H.	CYCLE NO.	PACK VOLTAGE	CURRENT 4.00	DEPTH OF DISCHARGE 40 PERCENT OF RECHARGE 125					TEST TEMPERATURE 25 C ORBIT PERIOD 90 MIN.					END OF DISCHARGE
					1	2	3	4	5	6	7	8	9	10	
CELL VOLTAGES															
4731.	7.61	3.97	1.09	.00	1.09	1.08	.00	1.08	1.09	1.11	1.09	1.11	1.09	.00	.00
4849.	7.89	3.98	1.14	.00	1.14	1.12	.00	1.10	1.13	1.16	1.13	1.16	1.12	.00	.00
4859.	7.77	3.98	1.13	.00	1.13	1.11	.00	1.08	1.11	1.14	1.11	1.14	1.12	.00	.00
4890.	7.79	3.96	1.13	.00	1.13	1.12	.00	1.07	1.11	1.14	1.11	1.14	1.12	.00	.00
4920.	8.04	3.97	1.14	.00	1.16	1.15	.00	1.15	1.14	1.17	1.14	1.17	1.17	.00	.00
4952.	7.43	3.94	1.10	.00	1.12	1.12	.00	1.07	.81	1.11	1.11	1.11	1.11	.00	.00
4968.	8.00	3.97	1.16	.00	1.15	1.15	.00	1.12	1.13	1.16	1.13	1.16	1.15	.00	.00
4982.	7.95	4.02	1.15	.00	1.14	1.13	.00	1.11	1.15	1.15	1.15	1.15	1.13	.00	.00
5010.	7.93	4.00	1.15	.00	1.14	1.13	.00	1.09	1.14	1.15	1.14	1.15	1.14	.00	.00
5053.	7.78	4.01	1.14	.00	1.14	1.13	.00	.98	1.12	1.14	1.12	1.14	1.13	.00	.00
5078.	7.79	4.01	1.15	.00	1.15	1.14	.00	.99	1.13	1.15	1.13	1.15	1.14	.00	.00
5105.	7.78	4.03	1.14	.00	1.14	1.13	.00	1.00	1.12	1.14	1.12	1.14	1.14	.00	.00
5138.	5.96	3.97	1.10	.00	1.10	1.10	.00	.12	.62	1.09	.62	1.09	1.10	.00	.00
5147.	6.97	4.00	1.09	.00	1.09	1.10	.00	.77	.78	1.07	.77	1.07	1.08	.00	.00
5170.	7.76	4.00	1.13	.00	1.13	1.13	.00	1.02	1.13	1.13	1.13	1.13	1.12	.00	.00
END OF CHARGE															
4731.	11.05	2.50	1.56	.00	1.56	1.58	.00	1.58	1.57	1.56	1.57	1.56	1.62	.00	.00
4849.	11.21	2.50	1.59	.00	1.59	1.60	.00	1.60	1.58	1.60	1.58	1.60	1.64	.00	.00
4859.	10.64	1.20	1.51	.00	1.53	1.55	.00	1.49	1.51	1.51	1.51	1.51	1.54	.00	.00
4890.	10.40	.45	1.48	.00	1.48	1.49	.00	1.46	1.47	1.48	1.47	1.48	1.57	.00	.00
4920.	10.51	1.09	1.44	.00	1.47	1.49	.00	1.56	1.45	1.48	1.45	1.48	1.62	.00	.00
4952.	10.33	1.40	1.45	.00	1.47	1.50	.00	1.47	1.43	1.46	1.43	1.46	1.52	.00	.00
4968.	10.59	.77	1.49	.00	1.51	1.54	.00	1.50	1.45	1.49	1.45	1.49	1.59	.00	.00
4982.	10.43	1.34	1.49	.00	1.47	1.50	.00	1.49	1.47	1.47	1.47	1.47	1.51	.00	.00
5010.	10.75	.98	1.53	.00	1.53	1.56	.00	1.49	1.52	1.50	1.52	1.50	1.62	.00	.00
5053.	11.05	1.24	1.57	.00	1.58	1.61	.00	1.51	1.55	1.55	1.55	1.55	1.66	.00	.00
5078.	10.87	1.05	1.55	.00	1.56	1.59	.00	1.48	1.52	1.54	1.52	1.54	1.64	.00	.00
5105.	10.90	1.09	1.55	.00	1.56	1.59	.00	1.49	1.52	1.54	1.52	1.54	1.64	.00	.00
5138.	10.42	.59	1.48	.00	1.49	1.53	.00	1.45	1.42	1.46	1.42	1.46	1.58	.00	.00
5147.	10.55	1.14	1.49	.00	1.50	1.54	.00	1.54	1.47	1.47	1.47	1.47	1.54	.00	.00
5170.	10.46	1.21	1.50	.00	1.50	1.52	.00	1.48	1.48	1.48	1.48	1.48	1.50	.00	.00

PACK NO. 25
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 1.50

CELL VOLTAGES

1

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END OF
DISCHARGE

4595.	11.39	1.50	1.12	1.14	1.14	1.09	1.07	1.15	1.17	1.20	1.11	1.14
4685.	12.96	1.36	1.29	1.29	1.30	1.30	1.31	1.29	1.29	1.31	1.28	1.29
4724.	11.67	1.51	1.15	1.18	1.18	1.12	1.10	1.19	1.21	1.21	1.16	1.17
4752.	11.70	1.50	1.16	1.18	1.18	1.13	1.10	1.19	1.21	1.21	1.16	1.18
4783.	11.71	1.50	1.16	1.18	1.18	1.13	1.11	1.19	1.21	1.22	1.17	1.18
4815.	12.46	1.50	1.24	1.26	1.26	1.22	1.20	1.25	1.26	1.27	1.24	1.24
4849.	11.73	1.45	1.16	1.18	1.18	1.13	1.10	1.19	1.20	1.21	1.16	1.17
4879.	11.72	1.49	1.16	1.18	1.18	1.13	1.10	1.19	1.21	1.21	1.17	1.18
4913.	11.84	1.50	1.17	1.20	1.20	1.15	1.11	1.20	1.22	1.22	1.18	1.19
4944.	11.65	1.50	1.15	1.18	1.18	1.12	1.10	1.20	1.21	1.21	1.16	1.18
4973.	11.70	1.50	1.15	1.18	1.18	1.13	1.10	1.20	1.21	1.21	1.16	1.18
5005.	11.61	1.51	1.14	1.16	1.17	1.12	1.08	1.18	1.19	1.20	1.15	1.17
5037.	11.65	1.49	1.15	1.17	1.18	1.13	1.09	1.19	1.20	1.20	1.15	1.17

END OF
CHARGE

4595.	14.46	1.20	1.44	1.42	1.42	1.44	1.54	1.42	1.41	1.45	1.41	1.42
4685.	14.65	.77	1.47	1.44	1.45	1.48	1.58	1.44	1.43	1.45	1.43	1.45
4724.	14.59	.97	1.46	1.44	1.44	1.48	1.56	1.44	1.43	1.45	1.43	1.44
4752.	14.59	1.02	1.46	1.44	1.44	1.48	1.57	1.44	1.43	1.45	1.43	1.44
4783.	14.61	.99	1.46	1.44	1.44	1.48	1.57	1.44	1.42	1.45	1.43	1.45
4815.	14.60	.95	1.46	1.44	1.44	1.48	1.57	1.43	1.42	1.45	1.42	1.44
4849.	14.59	1.00	1.46	1.43	1.44	1.48	1.57	1.43	1.42	1.45	1.43	1.44
4879.	14.61	1.01	1.46	1.44	1.44	1.48	1.57	1.43	1.42	1.45	1.43	1.44
4913.	14.70	.98	1.47	1.45	1.45	1.49	1.60	1.44	1.43	1.46	1.43	1.45
4944.	14.69	.94	1.47	1.45	1.46	1.50	1.60	1.45	1.43	1.45	1.43	1.45
4973.	14.70	.98	1.46	1.45	1.45	1.49	1.61	1.45	1.43	1.45	1.43	1.45
5005.	14.69	.93	1.46	1.44	1.45	1.49	1.60	1.44	1.42	1.45	1.43	1.45
5037.	14.67	.93	1.46	1.44	1.45	1.49	1.60	1.44	1.43	1.45	1.43	1.45

PACK NO. 53
SONOTONE 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										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
2302.	12.30	1.51	1.22	1.22	1.24	1.23	1.24	1.23	1.23	1.24	1.24	1.22	
2338.	12.31	1.51	1.21	1.22	1.23	1.24	1.24	1.23	1.24	1.24	1.23	1.22	
2403.	12.39	1.52	1.23	1.08	1.26	1.27	1.23	1.26	1.26	1.21	1.27	1.27	
2432.	12.32	1.52	1.21	1.22	1.24	1.24	1.24	1.23	1.24	1.24	1.23	1.22	
2464.	12.33	1.52	1.21	1.22	1.24	1.24	1.24	1.23	1.23	1.24	1.23	1.22	
2302.	15.64	.35	1.53	1.53	1.54	1.58	1.54	1.49	1.58	1.66	1.52	1.65	END OF CHARGE
2338.	15.56	.23	1.53	1.52	1.53	1.56	1.54	1.49	1.55	1.66	1.52	1.65	
2403.	15.35	.26	1.51	1.50	1.50	1.54	1.52	1.47	1.53	1.63	1.49	1.62	
2432.	15.60	.23	1.53	1.53	1.52	1.58	1.54	1.50	1.55	1.66	1.52	1.65	
2464.	15.49	.24	1.52	1.52	1.51	1.56	1.53	1.48	1.53	1.64	1.51	1.64	

PACK NO. 54 SULFONE 5 A.H.	CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115		TEST TEMPERATURE C ORBIT PERIOD 3 HOURS									
				1	2	3	4	5	6	7	8	9	10		
															END OF DISCHARGE
2333.		11.68	2.51	1.19	1.16	1.03	1.16	1.20	1.19	1.19	1.20	1.19	1.19		
2357.		11.67	2.51	1.19	1.16	1.03	1.16	1.20	1.19	1.18	1.20	1.19	1.19		
2399.		11.80	2.52	1.19	1.17	1.05	1.17	1.21	1.20	1.19	1.21	1.20	1.20		
2451.		11.66	2.52	1.18	1.15	1.01	1.16	1.20	1.18	1.18	1.20	1.19	1.19		
2461.		11.71	2.52	1.19	1.16	1.03	1.16	1.21	1.19	1.19	1.20	1.19	1.19		
2493.		11.70	2.43	1.19	1.16	1.04	1.16	1.20	1.19	1.18	1.20	1.19	1.19		
2333.		15.49	.58	1.49	1.36	1.58	1.50	1.51	1.58	1.65	1.63	1.50	1.48		END OF CHARGE
2357.		15.84	.32	1.51	1.60	1.61	1.52	1.54	1.64	1.69	1.68	1.53	1.51		
2399.		15.58	.42	1.51	1.56	1.57	1.52	1.53	1.58	1.61	1.63	1.52	1.50		
2451.		15.70	.39	1.51	1.57	1.59	1.52	1.53	1.61	1.66	1.66	1.51	1.50		
2461.		15.59	.40	1.51	1.56	1.57	1.52	1.53	1.58	1.64	1.64	1.52	1.50		
2493.		15.55	.42	1.51	1.57	1.58	1.52	1.53	1.59	1.63	1.63	1.51	1.49		

PACK NO. 5
SONOTONE 5 A.H.

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

CYCLE NO. PACK VOLTAGE 2.50 CURRENT

CELL VOLTAGES

6 7 8 9 10

2359.	10.90	2.51	1.10	.95	1.07	1.07	1.11	1.11	1.16	1.09
2395.	10.31	2.50	1.02	.83	1.02	1.06	1.06	1.05	1.13	1.02
2460.	11.35	2.50	1.17	.86	1.13	1.14	1.17	1.12	1.20	1.17
2489.	10.99	2.51	1.12	.92	1.06	1.12	1.11	1.15	1.14	1.12
2521.	11.15	2.50	1.13	.94	1.08	1.13	1.11	1.16	1.15	1.14

DISCHARGE

2359.	14.29	.62
2395.	14.27	.61
2460.	14.29	.62
2489.	14.29	.62
2521.	14.31	.61

END OF CHARGE

1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.41
1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.41
1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.41
1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.41
1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.41

PACK NO. 6 SODOTONE 5 A.H.		DEPTH OF DISCHARGE 40 PERCENT OF RECHARGE 125		TEST TEMPERATURE 25 C ORBIT PERIOD 3 HOURS								
CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES							END OF DISCHARGE		
			1	2	3	4	5	6	7		8	9
2284.	7.89	4.01	1.15	1.16	1.15	.00	1.14	1.11	1.13	.00	1.11	.00
2318.	7.92	4.02	1.15	1.16	1.15	.00	1.15	1.12	1.13	.00	1.11	.00
2350.	8.00	4.09	1.16	1.16	1.16	.00	1.16	1.13	1.14	.00	1.12	.00
2382.	7.83	4.03	1.14	1.15	1.14	.00	1.14	1.09	1.12	.00	1.09	.00
2412.	7.96	4.03	1.16	1.16	1.16	.00	1.16	1.13	1.14	.00	1.11	.00
2444.	7.97	3.93	1.16	1.16	1.16	.00	1.16	1.12	1.13	.00	1.11	.00
2284.	10.31	1.00	1.46	1.48	1.46	.00	1.45	1.44	1.48	.00	1.55	.00
2318.	10.41	1.00	1.47	1.51	1.46	.00	1.45	1.45	1.49	.00	1.61	.00
2350.	10.35	.99	1.46	1.50	1.46	.00	1.44	1.45	1.47	.00	1.56	.00
2382.	10.50	.96	1.47	1.53	1.48	.00	1.46	1.45	1.50	.00	1.62	.00
2412.	10.40	.98	1.46	1.50	1.46	.00	1.45	1.45	1.48	.00	1.61	.00
2444.	10.35	.96	1.46	1.51	1.47	.00	1.45	1.45	1.48	.00	1.55	.00
												END OF CHARGE

PACK NO. 29
SODIUM 5 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 100

TEST TEMPERATURE 40 C
ORCHIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
2220.	11.03	1.51	.00	1.24	1.24	1.24	1.24	1.24	1.23	1.23	1.19	1.20	1.22
2250.	10.82	1.49	.00	1.22	1.23	1.22	1.22	1.22	1.22	1.22	1.15	1.17	1.20
2321.	10.89	1.51	.00	1.10	1.25	1.25	1.25	1.24	1.23	1.12	1.20	1.24	
2350.	10.79	1.51	.00	1.22	1.23	1.22	1.22	1.21	1.21	1.14	1.16	1.19	
2382.	10.79	1.50	.00	1.22	1.22	1.22	1.22	1.21	1.20	1.21	1.13	1.16	1.19
2220.	12.68	.46	.00	1.40	1.41	1.41	1.40	1.42	1.40	1.40	1.43	1.40	1.39
2250.	12.70	.47	.00	1.40	1.41	1.41	1.41	1.43	1.40	1.41	1.43	1.40	1.39
2321.	12.83	.48	.00	1.42	1.42	1.42	1.44	1.47	1.40	1.41	1.44	1.40	1.40
2350.	12.77	.48	.00	1.41	1.41	1.41	1.42	1.45	1.40	1.41	1.44	1.40	1.39
2382.	12.74	.46	.00	1.41	1.41	1.41	1.41	1.44	1.40	1.40	1.43	1.40	1.39

END OF CHARGE

PACK NO. 30
SONOTONE 5 A.II.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
CHRGIT PERIOD 3 HOURS

CYCLE PACK CURRENT
NO. VOLTAGE 2.50

CELL VOLTAGES

10

9

8

7

6

5

4

3

2

1

END OF
DISCHARGE

END OF
CHARGE

2191. 10.02 2.53 1.14 1.13 1.02 1.14 1.13 .00 1.12 1.08 1.13
2256. 10.89 2.51 1.22 1.22 1.23 1.20 1.20 .00 1.22 1.20 1.19
2288. 10.40 2.52 1.17 1.17 1.15 1.17 1.16 .00 1.14 1.10 1.16
2318. 10.54 2.46 1.18 1.18 1.16 1.19 1.18 .00 1.16 1.14 1.16
2350. 10.44 2.46 1.17 1.18 1.14 1.18 1.17 .00 1.15 1.13 1.16

.80
2191. 12.89 .50
2256. 12.86 .76
2288. 13.04 .71
2318. 13.00 .70
2350. 12.97 .71

1.43 1.43 1.41 1.44 1.42 1.43 1.42 .00 1.42 1.42 1.47
1.42 1.43 1.41 1.43 1.42 1.43 1.42 .00 1.43 1.42 1.43
1.43 1.44 1.41 1.44 1.43 1.43 1.43 .00 1.43 1.44 1.52
1.43 1.44 1.42 1.46 1.43 1.43 1.43 .00 1.43 1.45 1.48
1.43 1.43 1.41 1.46 1.43 1.43 1.43 .00 1.43 1.43 1.49

PACK NO. 61 GULTON 6 A.H.		DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 115		TEST TEMPERATURE 0 C ORBIT PERIOD 90 MIN.									
CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										
			1	2	3	4	5	6	7	8	9	10	
4409.	8.09	1.80	1.02	1.25	1.19	.00	.00	.98	1.21	1.23	1.21	.00	END OF DISCHARGE
4413.	6.32	1.80	1.06	1.26	1.22	.00	.00	.93	1.25	1.25	1.24	.00	
4417.	7.21	1.81	1.09	1.25	1.19	.00	.00	.00	1.24	1.24	1.23	.00	
4449.	7.10	1.81	1.02	1.24	1.20	.00	.00	.00	1.22	1.23	1.22	.00	
4463.	7.16	1.81	1.03	1.25	1.21	.00	.00	.00	1.23	1.24	1.23	.00	
4513.	7.19	1.81	1.04	1.25	1.22	.00	.00	.00	1.23	1.25	1.24	.00	
4547.	7.19	1.80	1.04	1.25	1.22	.00	.00	.00	1.23	1.24	1.24	.00	
4578.	7.10	1.80	1.01	1.24	1.21	.00	.00	.00	1.22	1.23	1.23	.00	
4607.	7.07	1.80	1.00	1.23	1.20	.00	.00	.00	1.22	1.23	1.22	.00	
4639.	7.07	1.80	.99	1.23	1.19	.00	.00	.00	1.21	1.22	1.22	.00	
4671.	7.07	1.80	1.00	1.24	1.20	.00	.00	.00	1.22	1.23	1.22	.00	
4409.	10.70	1.04	1.67	1.50	1.55	.00	.00	1.37	1.51	1.53	1.55	.00	END OF CHARGE
4413.	10.88	.65	1.71	1.58	1.55	.00	.00	1.44	1.53	1.54	1.55	.00	
4417.	10.09	1.05	1.80	1.68	1.61	.00	.00	.00	1.67	1.67	1.67	.00	
4449.	9.32	.77	1.67	1.54	1.54	.00	.00	.00	1.52	1.52	1.54	.00	
4463.	9.61	.91	1.72	1.61	1.58	.00	.00	.00	1.56	1.56	1.57	.00	
4513.	9.39	.62	1.68	1.57	1.55	.00	.00	.00	1.52	1.52	1.54	.00	
4547.	9.38	.67	1.68	1.56	1.54	.00	.00	.00	1.53	1.53	1.54	.00	
4578.	9.26	.61	1.65	1.54	1.53	.00	.00	.00	1.52	1.52	1.53	.00	
4607.	9.28	.63	1.66	1.53	1.52	.00	.00	.00	1.52	1.53	1.53	.00	
4639.	9.24	.64	1.65	1.53	1.51	.00	.00	.00	1.51	1.51	1.52	.00	
4671.	9.26	.64	1.66	1.53	1.51	.00	.00	.00	1.52	1.52	1.52	.00	

END OF
CHARGE

END OF
DISCHARGE

PACK NO. 62
GULFON 6 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE				
			1	2	3	4	5	6	7	8	9	10
4441.	8.39	3.02	1.18	1.15	1.16	.00	.12	1.19	1.19	2.90	.88	.00
4504.	8.25	3.00	1.20	1.18	1.18	.00	.00	1.17	1.18	1.19	1.20	.00
4514.	8.17	3.00	1.19	1.16	1.17	.00	.00	1.16	1.17	1.18	1.19	.00
4545.	8.24	3.00	1.20	1.18	1.17	.00	.00	1.17	1.18	1.20	1.20	.00
4575.	7.56	2.98	1.13	1.05	1.08	.00	.00	1.06	1.08	1.07	1.13	.00
4607.	8.22	2.99	1.19	1.18	1.17	.00	.00	1.16	1.18	1.18	1.19	.00
4641.	8.35	3.00	1.21	1.20	1.18	.00	.00	1.18	1.20	1.21	1.21	.00
4669.	8.35	3.01	1.21	1.20	1.18	.00	.00	1.18	1.19	1.20	1.20	.00
4712.	8.29	3.02	1.21	1.19	1.17	.00	.00	1.17	1.19	1.20	1.20	.00
4737.	8.26	3.01	1.20	1.18	1.17	.00	.00	1.17	1.18	1.19	1.19	.00
4765.	8.23	3.02	1.20	1.18	1.16	.00	.00	1.16	1.17	1.19	1.19	.00
4797.	8.19	3.01	1.20	1.17	1.15	.00	.00	1.16	1.17	1.19	1.19	.00
4829.	8.19	3.00	1.19	1.17	1.16	.00	.00	1.16	1.17	1.19	1.19	.00
4441.	12.64	1.72	1.57	1.68	1.69	.00	1.40	1.66	1.54	1.56	1.51	.00
4504.	11.12	.92	1.55	1.63	1.66	.00	.00	1.59	1.56	1.57	1.54	.00
4514.	11.18	.99	1.57	1.65	1.71	.00	.00	1.59	1.56	1.57	1.53	.00
4545.	11.10	1.03	1.59	1.65	1.68	.00	.00	1.62	1.56	1.58	1.54	.00
4575.	10.15	.94	1.46	1.46	1.46	.00	.00	1.44	1.43	1.45	1.44	.00
4607.	10.47	1.43	1.50	1.50	1.51	.00	.00	1.49	1.48	1.50	1.47	.00
4641.	11.09	1.08	1.58	1.63	1.64	.00	.00	1.60	1.55	1.56	1.53	.00
4669.	11.25	.89	1.58	1.68	1.70	.00	.00	1.65	1.55	1.56	1.53	.00
4712.	11.20	.83	1.60	1.67	1.64	.00	.00	1.63	1.56	1.56	1.53	.00
4737.	11.19	.93	1.58	1.63	1.71	.00	.00	1.62	1.55	1.56	1.52	.00
4765.	10.96	.92	1.56	1.58	1.61	.00	.00	1.58	1.55	1.56	1.52	.00
4797.	10.98	.94	1.56	1.59	1.63	.00	.00	1.57	1.54	1.56	1.52	.00
4829.	10.97	.92	1.55	1.59	1.64	.00	.00	1.58	1.55	1.56	1.52	.00
4829.	10.97	.91	1.55	1.59	1.64	.00	.00	1.58	1.55	1.56	1.52	.00

END OF CHARGE

PACK NO. 13
GULTON 6 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 3.00

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

3954. 5.90 3.00 .00 1.19 1.20 .00 .00 1.18 .00 1.18 1.18 .00 END OF
3993. 5.43 3.00 .00 .75 1.19 .00 .00 1.18 .00 1.17 1.17 .00 DISCHARGE
4021. 4.77 2.87 .00 .10 1.19 .00 .00 1.18 .00 1.18 1.17 .00

1.88
3954. 7.26 1.90 .00 1.43 1.46 .00 .00 1.46 .00 1.46 1.44 .00
3993. 7.27 1.91 .00 1.42 1.47 .00 .00 1.46 .00 1.47 1.45 .00
4021. 7.31 1.90 .00 1.43 1.48 .00 .00 1.47 .00 1.48 1.46 .00

END OF
CHARGE

PACK NO. 37
GULTON 6 A.H.

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

CYCLE PACK CURRENT
NO. VOLTAGE 1.80

CELL VOLTAGES

10

9

8

7

6

5

4

3

2

1

END OF
DISCHARGE

.00

1.23

.00

1.25

1.05

1.23

.00

.00

.00

1.03

1.25

1.80

7.00

3880.

3914.

3942.

3972.

4005.

4039.

4069.

4103.

4134.

4163.

4195.

4227.

4257.

4287.

4317.

4347.

4377.

4407.

4437.

4467.

4497.

4527.

4557.

4587.

4617.

4647.

4677.

4707.

4737.

4767.

4797.

4827.

4857.

4887.

4917.

4947.

4977.

5007.

5037.

5067.

5097.

5127.

5157.

5187.

5217.

5247.

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6687.

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6777.

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7017.

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7077.

7107.

7137.

7167.

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7227.

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7317.

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8607.

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8667.

8697.

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8757.

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9627.

9657.

9687.

9717.

9747.

9777.

9807.

9837.

9867.

9897.

9927.

9957.

9987.

10017.

10047.

10077.

10107.

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11607.

11637.

11667.

PACK NO. 65
GULTON 6 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES										END OF DISCHARGE
			1	2	3	4	5	6	7	8	9	10	
2434.	12.43	1.81	1.25	1.26	1.25	1.25	1.25	1.24	1.22	1.25	1.25	1.20	
2535.	12.45	1.85	1.27	1.08	1.28	1.28	1.23	1.28	1.25	1.20	1.28	1.24	
2564.	12.38	1.82	1.24	1.25	1.25	1.25	1.25	1.25	1.22	1.25	1.24	1.18	
2596.	12.42	1.81	1.25	1.25	1.25	1.25	1.25	1.24	1.22	1.25	1.25	1.19	
2434.	15.72	.41	1.61	1.64	1.55	1.54	1.52	1.51	1.65	1.52	1.49	1.68	END OF CHARGE
2535.	15.50	.36	1.57	1.60	1.55	1.54	1.52	1.52	1.56	1.52	1.50	1.56	
2564.	15.83	.34	1.63	1.64	1.57	1.54	1.53	1.52	1.66	1.53	1.50	1.69	
2596.	15.77	.37	1.61	1.61	1.57	1.54	1.52	1.52	1.66	1.52	1.50	1.69	

PACK NO. 66
CULTON 6 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT
NO. VOLTAGE 3.00

CELL VOLTAGES
5

10

9

8

7

6

5

4

3

2

1

END OF
DISCHARGE

END OF
CHARGE

2155. 5.91 2.93 1.19 1.21 .00 1.15 .00 .00 .00 1.19 1.20
2189. 5.89 2.91 1.19 1.20 .00 1.14 .00 .00 .00 1.19 1.19
2221. 5.88 2.92 1.19 1.20 .00 1.14 .00 .00 .00 1.19 1.19
2253. 5.87 2.91 1.18 1.20 .00 1.14 .00 .00 .00 1.18 1.19
2283. 5.88 2.92 1.18 1.20 .00 1.14 .00 .00 .00 1.19 1.19
2315. 5.87 2.91 1.18 1.20 .00 1.14 .00 .00 .00 1.18 1.19

2155. 7.76 .69 1.57 1.57 .00 1.54 .00 .00 .00 1.55 1.54
2189. 7.61 .65 1.53 1.53 .00 1.51 .00 .00 .00 1.52 1.51
2221. 7.64 .41 1.53 1.55 .00 1.50 .00 .00 .00 1.53 1.52
2253. 7.70 .43 1.55 1.56 .00 1.51 .00 .00 .00 1.54 1.53
2283. 7.68 .43 1.54 1.55 .00 1.51 .00 .00 .00 1.54 1.53
2315. 7.66 .44 1.54 1.56 .00 1.51 .00 .00 .00 1.53 1.52

PACK NO. 17
GULTON 6 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT
VOLTAGE 3.00

CELL VOLTAGES

10

9

8

7

6

5

4

3

2

1

END OF
DISCHARGE

END OF
CHARGE

2309. 7.96 2.96 1.08 1.17 .00 1.11 .00 1.13 1.16 1.18 1.15 .00
2377. 7.29 2.91 .00 1.14 .00 1.13 .00 1.13 1.15 1.19 1.15 .00
2388. 7.19 2.99 .00 1.03 .00 1.24 .00 1.23 1.23 1.16 1.24 .00
2417. 6.75 3.00 .00 1.20 .00 1.06 .00 1.09 1.17 1.16 1.10 .00
2449. 6.05 2.79 .00 .41 .00 1.11 .00 1.11 1.15 1.16 1.12 .00
2545. 7.52 2.92 .00 1.04 .00 1.05 .00 1.10 1.11 1.16 1.11 .00

.75
2309. 9.99 .75 1.43 1.42 .00 1.42 .00 1.43 1.42 1.44 1.42 .00
2377. 9.93 .72 .00 1.41 .00 1.42 .00 1.43 1.42 1.44 1.41 .00
2388. 8.59 .74 .00 1.40 .00 1.43 .00 1.45 1.42 5.36 1.44 .00
2417. 8.56 .75 .00 1.42 .00 1.43 .00 1.44 1.42 1.44 1.42 .00
2449. 8.55 .74 .00 1.41 .00 1.43 .00 1.43 1.42 1.44 1.42 .00
2545. 9.96 .72 .00 1.42 .00 1.42 .00 1.43 1.42 1.44 1.42 .00

PACK NO. 42 GULTON 6 A.H.		DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 160		TEST TEMPERATURE 40 C ORBIT PERIOD 3 HOURS										
CYCLE NO.	PACK VOLTAGE 3.00	CURRENT	CELL VOLTAGES											
			1	2	3	4	5	6	7	8	9	10		
2045.	6.21	2.97	.00	1.14	1.15	1.05	1.05	.73	.00	.00	.00	.00	1.13	END OF DISCHARGE
2077.	6.95	2.99	.00	1.17	1.18	1.16	1.13	1.18	.00	.00	.00	.00	1.15	
2114.	7.02	3.03	.00	1.18	1.19	1.17	1.17	1.19	.00	.00	.00	.00	1.16	
2146.	6.96	3.04	.00	1.17	1.18	1.15	1.16	1.18	.00	.00	.00	.00	1.15	
2045.	8.92	.96	.00	1.56	1.45	1.58	1.43	1.44	.00	.00	.00	.00	1.48	END OF CHARGE
2077.	8.86	.77	.00	1.52	1.44	1.57	1.43	1.44	.00	.00	.00	.00	1.46	
2114.	8.92	.87	.00	1.50	1.45	1.58	1.45	1.49	.00	.00	.00	.00	1.48	
2146.	9.00	.84	.00	1.52	1.45	1.60	1.45	1.51	.00	.00	.00	.00	1.48	

PACK NO. 110
G.E. 12 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

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

4424.	6.21	3.66	1.25	1.24	1.24	1.24	1.24	1.24
4517.	6.24	3.65	1.25	1.25	1.25	1.25	1.25	1.25
4556.	6.19	3.65	1.24	1.24	1.24	1.25	1.25	1.24
4584.	6.25	3.65	1.26	1.25	1.26	1.26	1.25	1.25
4615.	6.24	3.65	1.26	1.25	1.26	1.25	1.25	1.25
4647.	6.28	3.65	1.26	1.25	1.26	1.26	1.26	1.26
4681.	6.23	3.64	1.25	1.24	1.25	1.25	1.25	1.24
4711.	6.24	3.64	1.25	1.25	1.26	1.25	1.25	1.25
4745.	6.26	3.65	1.26	1.25	1.26	1.26	1.26	1.26
4776.	6.23	3.63	1.26	1.25	1.25	1.25	1.25	1.25
4805.	6.19	3.63	1.25	1.24	1.25	1.24	1.24	1.24
4837.	6.17	3.64	1.24	1.23	1.24	1.24	1.24	1.23
4869.	6.15	3.62	1.23	1.22	1.23	1.23	1.23	1.23

END OF
CHARGE

4424.	7.77	2.07	1.57	1.57	1.54	1.55	1.53	1.53
4517.	7.62	1.95	1.53	1.52	1.53	1.52	1.52	1.52
4556.	8.05	2.08	1.61	1.66	1.59	1.60	1.59	1.59
4584.	8.09	1.76	1.63	1.66	1.60	1.60	1.60	1.60
4615.	8.01	1.01	1.60	1.00	1.00	1.00	1.00	1.00
4647.	8.05	1.72	1.62	1.66	1.58	1.59	1.59	1.59
4681.	8.01	1.75	1.61	1.65	1.58	1.58	1.58	1.58
4711.	8.06	1.67	1.63	1.66	1.59	1.59	1.59	1.59
4745.	8.04	1.66	1.62	1.65	1.58	1.59	1.59	1.59
4776.	7.93	1.45	1.60	1.61	1.57	1.57	1.57	1.57
4805.	8.00	1.45	1.61	1.65	1.57	1.58	1.58	1.58
4837.	7.94	1.42	1.60	1.63	1.56	1.57	1.57	1.57
4869.	7.44	1.58	1.49	1.49	1.43	1.49	1.49	1.49

PACK NO. 124 G.E. 12 A.H.		DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 115		TEST TEMPERATURE 0 C ORBIT PERIOD 90 MIN.		END OF DISCHARGE		
CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES					END OF CHARGE
			1	2	3	4	5	
4315.	4.81	5.97	1.21	1.22	1.18	1.21	.01*	
4408.	6.05	6.02	1.22	1.22	1.18	1.21	1.25	
4447.	5.81	5.98	1.17	1.18	1.11	1.17	1.21	
4506.	6.03	6.03	1.22	1.22	1.17	1.22	1.23	
4538.	6.08	6.04	1.22	1.23	1.19	1.22	1.24	
4572.	5.98	5.71	1.21	1.21	1.16	1.21	1.22	
4602.	5.99	6.03	1.21	1.21	1.16	1.21	1.22	
4636.	6.03	6.00	1.22	1.22	1.18	1.22	1.23	
4652.	6.07	5.88	1.22	1.22	1.18	1.22	1.23	
4684.	6.04	5.92	1.22	1.22	1.17	1.22	1.23	
4315.	6.54	3.45	1.65	1.61	1.69	1.60	.01	
4408.	8.02	2.13	1.65	1.61	1.70	1.61	1.49	
4447.	7.01	2.84	1.40	1.40	1.43	1.39	1.42	
4506.	7.89	2.99	1.60	1.57	1.60	1.56	1.57	
4538.	8.17	2.83	1.66	1.60	1.69	1.60	1.63	
4572.	7.99	2.43	1.62	1.57	1.66	1.57	1.59	
4602.	8.03	2.24	1.62	1.57	1.66	1.57	1.61	
4626.	8.23	2.56	1.66	1.61	1.71	1.61	1.66	
4652.	8.38	3.47	1.68	1.64	1.73	1.64	1.69	
4684.	7.97	2.35	1.59	1.58	1.66	1.58	1.59	

END OF
CHARGE

* Cell # 5 returned to cycling on cycle 4375 at manufacturer's suggestion.
This cell had not failure criteria due to memory effect.

PACK NO. 82
G.E. 12 A.H.

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE CURRENT

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

4620.	5.80	6.05	1.16	1.15	1.16	1.16	1.16	1.18
4713.	5.77	6.00	1.17	1.16	1.15	1.15	1.15	1.17
4752.	5.75	6.01	1.16	1.16	1.15	1.15	1.15	1.16
4780.	5.74	6.00	1.16	1.16	1.15	1.15	1.15	1.16
4811.	5.74	5.99	1.17	1.16	1.15	1.15	1.15	1.16
4877.	5.79	6.00	1.17	1.16	1.16	1.16	1.17	1.17
4907.	5.76	5.99	1.17	1.16	1.14	1.14	1.16	1.16
4941.	5.84	6.00	1.18	1.18	1.17	1.17	1.18	1.18
4972.	5.69	5.97	1.16	1.15	1.13	1.13	1.16	1.16
5001.	5.70	5.96	1.16	1.15	1.14	1.14	1.16	1.16
5033.	5.64	5.93	1.15	1.14	1.11	1.11	1.12	1.15
5065.	5.72	5.96	1.16	1.15	1.14	1.14	1.14	1.16

END OF
CHARGE

4620.	7.26	3.75	1.46	1.45	1.44	1.44	1.44	1.46
4713.	7.29	3.68	1.48	1.46	1.46	1.46	1.45	1.46
4752.	7.32	3.72	1.49	1.47	1.46	1.46	1.46	1.47
4780.	7.35	3.71	1.50	1.47	1.47	1.47	1.46	1.48
4811.	8.24	2.59	1.65	1.61	1.71	1.61	1.61	1.66
4877.	7.34	3.71	1.49	1.47	1.46	1.46	1.46	1.47
4907.	7.36	3.73	1.49	1.47	1.46	1.46	1.46	1.48
4941.	7.35	3.75	1.49	1.47	1.47	1.47	1.46	1.48
4972.	7.35	3.71	1.50	1.47	1.47	1.47	1.47	1.48
5001.	7.33	3.72	1.49	1.47	1.47	1.47	1.46	1.48
5033.	7.31	3.70	1.49	1.46	1.46	1.46	1.46	1.47
5065.	7.36	3.69	1.50	1.47	1.47	1.47	1.47	1.48

PACK NO. 99 G.E. 12 A.H.	CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 160					END OF DISCHARGE
				1	2	3	4	5	
	3860.	2.98	5.55	.75	.00	.00	1.15	1.08	
	3967.	3.41	6.01	1.13	.00	.00	1.15	1.14	
	3995.	3.46	5.98	1.17	.00	.00	1.16	1.15	
	4022.	3.41	5.99	1.15	.00	.00	1.15	1.14	
	4054.	3.38	6.00	1.14	.00	.00	1.14	1.14	
	4108.	3.43	5.99	1.15	.00	.00	1.15	1.14	
	4141.	3.47	5.98	1.17	.00	.00	1.16	1.16	
	4166.	3.40	5.97	1.14	.00	.00	1.15	1.13	
	4194.	3.46	5.97	1.16	.00	.00	1.16	1.15	
	4231.	3.41	5.97	1.12	.00	.00	1.16	1.15	
	3860.	4.36	4.80	1.44	.00	.00	1.48	1.43	END OF CHARGE
	3967.	4.45	3.99	1.46	.00	.00	1.51	1.50	
	3995.	4.44	3.70	1.47	.00	.00	1.49	1.49	
	4022.	4.40	3.48	1.46	.00	.00	1.48	1.48	
	4054.	4.40	3.36	1.46	.00	.00	1.48	1.48	
	4108.	4.39	3.57	1.45	.00	.00	1.48	1.47	
	4141.	4.42	3.32	1.47	.00	.00	1.48	1.48	
	4166.	4.33	3.34	1.43	.00	.00	1.45	1.45	
	4194.	4.42	3.75	1.46	.00	.00	1.48	1.49	
	4231.	4.36	3.38	1.44	.00	.00	1.47	1.47	
			2.95						

PACK NO. 125
G.E. 12 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	
2297.	5.99	6.04	1.21	1.21	1.21	1.20	1.21	
2331.	6.00	5.99	1.20	1.21	1.21	1.21	1.20	
2363.	5.99	6.04	1.20	1.21	1.21	1.20	1.20	
2395.	5.99	6.02	1.20	1.20	1.21	1.20	1.20	
2425.	5.93	6.06	1.19	1.19	1.20	1.19	1.20	
2457.	5.93	5.98	1.19	1.20	1.20	1.20	1.19	
2297.	7.86	1.38	1.61	1.59	1.61	1.55	1.54	END OF CHARGE
2331.	7.93	1.05	1.62	1.60	1.62	1.56	1.55	
2363.	7.91	1.03	1.62	1.60	1.62	1.55	1.54	
2395.	7.79	.84	1.58	1.57	1.60	1.54	1.53	
2425.	7.48	.93	1.51	1.50	1.47	1.52	1.51	
2457.	7.47	.96	1.51	1.51	1.47	1.51	1.50	

PACK NO. 111 C.E. 12 A.H.	CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 115					TEST TEMPERATURE 0 C ORBIT PERIOD 3 HOURS	END OF DISCHARGE
				1	2	3	4	5		
	2298.	6.20	3.68	1.24	1.25	1.23	1.24	1.24		
	2332.	6.19	3.66	1.25	1.25	1.23	1.24	1.24		
	2364.	6.19	3.67	1.24	1.24	1.23	1.24	1.23		
	2396.	6.18	3.66	1.23	1.24	1.22	1.23	1.23		
	2426.	6.15	3.61	1.23	1.24	1.22	1.23	1.23		
	2458.	6.15	3.60	1.23	1.24	1.22	1.23	1.23		
			83							
	2298.	7.89	.71	1.61	1.54	1.63	1.52	1.56		END OF CHARGE
	2332.	7.85	.69	1.63	1.54	1.63	1.52	1.56		
	2364.	7.90	.69	1.62	1.53	1.63	1.52	1.55		
	2396.	7.85	.58	1.61	1.52	1.62	1.51	1.54		
	2426.	7.81	.54	1.60	1.51	1.61	1.49	1.54		
	2458.	7.78	.55	1.60	1.51	1.60	1.49	1.53		

PACK NO. 83
G.E. 12 A.H.

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 125					END OF DISCHARGE
			1	2	3	4	5	
2339.	5.75	6.07	1.17	1.15	1.14	1.14	1.15	
2373.	5.75	6.05	1.17	1.15	1.15	1.15	1.15	
2405.	5.81	6.07	1.18	1.16	1.16	1.16	1.15	
2437.	5.59	6.02	1.14	1.12	1.10	1.11	1.11	
2467.	5.75	5.96	1.17	1.15	1.14	1.14	1.14	
2499.	5.77	5.95	1.17	1.15	1.14	1.14	1.14	
2339.	7.15	1.50	1.43	1.42	1.42	1.42	1.42	END OF CHARGE
2373.	7.16	1.52	1.44	1.43	1.43	1.42	1.42	
2405.	7.14	1.51	1.43	1.42	1.42	1.41	1.41	
2437.	7.18	1.55	1.43	1.43	1.42	1.42	1.42	
2467.	7.14	1.53	1.43	1.42	1.42	1.41	1.41	
2499.	7.16	1.52	1.43	1.43	1.42	1.42	1.41	

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

TEST TEMPERATURE 40 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 160					END OF DISCHARGE
			1	2	3	4	5	
2264.	5.90	3.58	1.20	1.18	1.18	1.19	1.18	
2296.	5.85	3.56	1.19	1.16	1.17	1.18	1.17	
2331.	5.91	3.59	1.20	1.18	1.18	1.19	1.19	
2358.	5.90	3.58	1.20	1.17	1.18	1.20	1.19	
2390.	5.91	3.49	1.20	1.18	1.18	1.19	1.19	
2264.	6.99	1.15	1.41	1.41	1.41	1.40	1.40	END OF CHARGE
2296.	6.98	1.16	1.41	1.40	1.40	1.40	1.40	
2331.	7.03	1.17	1.41	1.41	1.41	1.41	1.41	
2358.	7.03	1.16	1.41	1.41	1.41	1.41	1.41	
2390.	7.02	1.16	1.41	1.41	1.41	1.41	1.42	

PACK NO. 97
G.E. 12 A.H.

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 40 PERCENT OF RECHARGE 125					END OF DISCHARGE
			1	2	3	4	5	
2329.	5.51	9.58	1.12	1.13	1.08	1.11	1.11	
2363.	5.54	9.49	1.12	1.13	1.10	1.12	1.11	
2395.	5.56	9.51	1.12	1.13	1.10	1.12	1.12	
2427.	5.33	9.45	1.08	1.10	1.02	1.08	1.09	
2457.	5.49	9.38	1.11	1.12	1.07	1.11	1.12	
2329.	7.32	2.40	1.47	1.49	1.45	1.47	1.47	END OF CHARGE
2363.	7.35	2.21	1.47	1.49	1.44	1.48	1.48	
2395.	7.28	2.22	1.46	1.48	1.44	1.47	1.46	
2427.	7.35	1.85	1.47	1.50	1.46	1.48	1.48	
2457.	7.26	1.91	1.45	1.47	1.45	1.46	1.46	

PACK NO. 100 G.E. 12 A.H.	CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 25 PERCENT OF RECHARGE 160					TEST TEMPERATURE 40 C ORBIT PERIOD 3 HOURS	END OF DISCHARGE
				1	2	3	4	5		
	2112.	5.50	5.89	1.13	1.13	1.13	1.08	1.05		
	2156.	5.64	5.92	1.16	1.15	1.14	1.11	1.10		
	2188.	5.55	5.90	1.15	1.13	1.13	1.08	1.07		
	2225.	5.79	5.95	1.18	1.17	1.16	1.15	1.15		
	2257.	5.75	5.93	1.18	1.16	1.15	1.14	1.13		
			1.92							
	2112.	7.19	1.65	1.45	1.45	1.44	1.43	1.43		END OF CHARGE
	2156.	7.17	1.71	1.45	1.44	1.44	1.42	1.43		
	2188.	7.16	1.74	1.45	1.44	1.43	1.42	1.42		
	2225.	7.17	1.94	1.45	1.44	1.43	1.42	1.42		
	2257.	7.19	1.94	1.46	1.44	1.44	1.42	1.43		

PACK NO. 73
GULTON 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
4258.	4.58	9.99	1.15	1.18	.00	1.14	1.15	
4351.	4.47	10.12	1.13	1.15	.00	1.11	1.12	
4390.	4.42	10.12	1.11	1.15	.00	1.10	1.11	
4418.	4.43	10.15	1.11	1.15	.00	1.10	1.11	
4449.	4.40	10.17	1.10	1.14	.00	1.10	1.11	
4481.	4.23	10.18	1.07	1.10	.00	1.03	1.06	
4515.	4.47	10.15	1.12	1.15	.00	1.12	1.12	
4545.	4.45	10.16	1.11	1.15	.00	1.11	1.12	
4579.	4.55	10.09	1.13	1.17	.00	1.14	1.15	
4610.	4.37	10.13	1.09	1.13	.00	1.09	1.10	
4639.	4.37	10.14	1.09	1.13	.00	1.09	1.10	
4671.	4.34	10.07	1.08	1.11	.00	1.08	1.08	
4703.	4.40	10.13	1.09	1.14	.00	1.10	1.10	
4258.	5.89	6.25	1.51	1.48	.00	1.44	1.47	
4351.	5.88	6.35	1.52	1.48	.00	1.45	1.46	
4390.	5.90	6.34	1.52	1.49	.00	1.45	1.46	
4418.	5.94	6.13	1.53	1.50	.00	1.46	1.47	
4449.	5.94	6.15	1.54	1.50	.00	1.45	1.47	
4481.	5.89	6.14	1.52	1.48	.00	1.44	1.46	
4515.	5.93	6.09	1.53	1.49	.00	1.45	1.47	
4545.	5.94	6.13	1.53	1.50	.00	1.45	1.47	
4579.	5.96	6.10	1.53	1.50	.00	1.46	1.48	
4610.	5.92	6.11	1.53	1.50	.00	1.46	1.48	
4639.	5.92	6.20	1.52	1.49	.00	1.45	1.47	
4671.	5.90	6.12	1.51	1.49	.00	1.45	1.47	
4703.	5.94	6.15	1.53	1.50	.00	1.46	1.48	

END OF CHARGE

PACK NO. 76
GULTON 20 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
4294.	5.48	5.99	1.15	1.09	1.07	1.13	1.09	
4304.	5.61	6.02	1.16	1.10	1.12	1.14	1.13	
4365.	5.71	5.97	1.17	1.12	1.14	1.15	1.15	
4394.	5.73	5.86	1.18	1.13	1.14	1.15	1.16	
4436.	5.81	6.10	1.19	1.13	1.17	1.17	1.18	
4461.	5.73	6.09	1.18	1.12	1.15	1.16	1.17	
4488.	5.76	6.00	1.18	1.12	1.16	1.16	1.17	
4520.	5.53	6.02	1.15	1.07	1.10	1.12	1.12	
4552.	5.60	6.01	1.15	1.10	1.13	1.14	1.13	
4294.	7.21	4.80	1.44	1.48	1.43	1.46	1.43	END OF CHARGE
4304.	7.22	3.03	1.45	1.49	1.43	1.46	1.44	
4365.	7.23	3.49	1.45	1.49	1.42	1.46	1.43	
4394.	7.23	4.73	1.45	1.49	1.42	1.46	1.43	
4436.	7.32	4.80	1.47	1.51	1.44	1.49	1.44	
4461.	7.25	4.65	1.45	1.50	1.43	1.47	1.44	
4488.	6.26	4.76	1.62	1.53	1.56	1.57	.00	
4520.	7.25	2.11	1.45	1.49	1.43	1.48	1.44	
4552.	7.19	2.77	1.44	1.48	1.43	1.46	1.43	
		2.82						

PACK NO. 90
GULTON 20 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	
3979.	3.84	8.42	1.28	1.28	1.28	.00	.00	END OF DISCHARGE
3989.	2.96	10.02	.89	1.05	1.03	.00	.00	
4020.	2.85	9.96	.90	1.04	.94	.00	.00	
3979.	4.52	8.00	1.47	1.55	1.50	.00	.00	END OF CHARGE
3989.	4.34	3.85	1.43	1.47	1.44	.00	.00	
4020.	4.48	3.71	1.47	1.57	1.46	.00	.00	

PACK NO. 102
GULTON 20 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
2069.	4.89	6.02	1.24	.00	1.24	1.23	1.22	
2145.	4.91	6.01	1.26	.00	1.28	1.27	1.23	
2174.	4.91	6.01	1.24	.00	1.25	1.23	1.23	
2206.	4.92	5.99	1.24	.00	1.24	1.24	1.23	
2069.	6.08	1.38	1.54	.00	1.54	1.48	1.53	END OF CHARGE
2145.	6.17	.77	1.55	.00	1.57	1.48	1.58	
2174.	6.09	.91	1.58	.00	1.60	1.45	1.50	
2206.	6.06	.91	1.55	.00	1.56	1.46	1.52	

PACK NO. 116 GULTON 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	1	2	CELL VOLTAGES					END OF DISCHARGE
					3	4	5	6	7	
1926.	5.90	9.99	1.20	1.19	1.15	1.20	1.18			
1962.	5.88	9.96	1.20	1.19	1.15	1.20	1.18			
2031.	6.01	10.02	1.22	1.21	1.18	1.21	1.20			
2063.	5.97	10.14	1.21	1.20	1.16	1.20	1.19			
		2.30								
1926.	7.76	1.58	1.55	1.58	1.55	1.56	1.54			END OF CHARGE
1962.	7.90	1.42	1.58	1.63	1.57	1.60	1.56			
2031.	8.03	2.04	1.63	1.63	1.65	1.58	1.55			
2063.	7.94	1.84	1.61	1.61	1.59	1.57	1.54			

PACK NO. 77
GULTON 20 A.H.

TEST TEMPERATURE 40 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 160					END OF DISCHARGE
			1	2	3	4	5	
2126.	5.56	5.89	1.13	1.11	1.09	1.11	1.16	
2160.	5.58	5.89	1.13	1.11	1.10	1.11	1.16	
2192.	5.65	5.94	1.14	1.13	1.11	1.13	1.16	
2200.	5.96	6.06	1.20	1.19	1.20	1.20	1.20	
2230.	5.82	6.06	1.19	1.15	1.15	1.16	1.20	
2262.	5.77	6.04	1.19	1.14	1.14	1.15	1.19	
2126.	7.07	1.92	1.43	1.41	1.42	1.42	1.43	END OF CHARGE
2160.	7.07	1.95	1.43	1.41	1.41	1.42	1.42	
2192.	7.05	1.94	1.42	1.41	1.41	1.41	1.42	
2200.	7.11	1.95	1.43	1.42	1.42	1.43	1.43	
2230.	7.09	1.94	1.43	1.42	1.42	1.42	1.44	
2262.	7.10	1.94	1.43	1.42	1.42	1.42	1.44	

PACK NO. 84
GOULD 20 A.H.

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

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF DISCHARGE
			6.00	1	2	3	4	5
4479.	6.11	6.10	1.23	1.23	1.24	1.22	1.21	1.22
4489.	6.33	6.01	1.28	1.28	1.28	1.27	1.25	1.27
4520.	6.24	5.99	1.25	1.25	1.26	1.24	1.23	1.24
4550.	6.28	5.99	1.27	1.27	1.27	1.26	1.24	1.25
4582.	6.29	5.94	1.27	1.27	1.27	1.20	1.25	1.27
4616.	6.28	5.97	1.26	1.26	1.26	1.25	1.23	1.25
4644.	6.32	5.94	1.27	1.27	1.27	1.26	1.25	1.26
4687.	6.29	5.97	1.26	1.26	1.27	1.25	1.23	1.25
4712.	6.36	5.97	1.28	1.28	1.28	1.26	1.25	1.26
4734.	6.35	5.98	1.28	1.28	1.28	1.26	1.25	1.26
4772.	6.17	6.06	1.25	1.25	1.25	1.23	1.22	1.23
4804.	6.19	6.05	1.25	1.25	1.25	1.23	1.22	1.23

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES					END OF CHARGE
			3.45	1	2	3	4	5
4479.	7.42	3.45	1.49	1.49	1.50	1.50	1.47	1.47
4489.	7.79	2.44	1.57	1.57	1.57	1.59	1.52	1.54
4520.	7.70	1.87	1.53	1.55	1.55	1.55	1.52	1.52
4550.	7.69	2.76	1.54	1.55	1.55	1.55	1.52	1.53
4582.	7.73	2.51	1.54	1.55	1.55	1.56	1.53	1.53
4616.	7.73	2.54	1.54	1.55	1.55	1.55	1.53	1.53
4644.	7.73	2.59	1.54	1.55	1.55	1.57	1.55	1.55
4687.	7.82	2.48	1.56	1.56	1.57	1.58	1.55	1.57
4712.	7.85	2.70	1.56	1.57	1.57	1.58	1.55	1.57
4734.	7.97	2.81	1.61	1.58	1.58	1.60	1.58	1.57
4772.	7.29	2.12	1.47	1.48	1.48	1.42	1.44	1.44
4804.	7.61	2.53	1.51	1.52	1.52	1.53	1.51	1.51
4804.	7.57	2.63	1.50	1.51	1.51	1.51	1.51	1.51

PACK NO. 91
GULTON 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT
NO. VOLTAGE 10.00

CELL VOLTAGES
1 2 3 4 5

2039.	4.65	9.95	.93	.91	.99	.97	.88	END OF DISCHARGE
2073.	5.13	10.05	1.02	1.02	1.05	1.06	1.00	
2105.	5.65	10.17	1.13	1.13	1.13	1.15	1.12	
2113.	5.81	10.10	1.16	1.17	1.16	1.17	1.15	
2143.	5.78	9.98	1.17	1.16	1.15	1.18	1.15	
2175.	5.73	9.95	1.15	1.15	1.14	1.15	1.14	

2039.	7.17	3.20	1.43	1.43	1.44	1.45	1.42	END OF CHARGE
2073.	7.30	1.89	1.45	1.45	1.46	1.50	1.44	
2105.	7.24	2.47	1.44	1.44	1.44	1.50	1.43	
2113.	7.31	2.62	1.45	1.44	1.44	1.54	1.44	
2143.	7.32	3.14	1.46	1.45	1.45	1.54	1.44	
2175.	7.31	3.06	1.46	1.45	1.47	1.50	1.44	

PACK NO. 98
GOULD 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 10.00

1 2 3 4 5

CELL VOLTAGES

END OF
DISCHARGE

END OF
CHARGE

4286. 3.78 7.23 .76 1.09 .81 1.13 .00
4296. 4.31 9.62 .85 1.20 1.07 1.20 .00
4327. 4.62 9.83 .99 1.24 1.19 1.24 .00
4357. 4.42 8.40 .92 1.20 1.12 1.20 .00
4389. 4.13 8.87 .81 1.16 1.02 1.15 .00
4423. 4.56 9.82 .96 1.23 1.17 1.23 .00
4451. 4.65 9.87 .99 1.25 1.20 1.25 .00
4484. 4.57 9.96 .99 1.22 1.17 1.22 .00
4519. 4.64 10.07 1.00 1.23 1.20 1.24 .00
4546. 4.61 10.06 .99 1.23 1.19 1.24 .00
4579. 4.56 10.08 .96 1.22 1.18 1.23 .00
4611. 4.40 8.42 .93 1.19 1.13 1.19 .00

5.75
4286. 5.91 4.41 1.58 1.44 1.48 1.44 .00
4296. 6.13 4.57 1.64 1.48 1.52 1.49 .00
4327. 6.09 2.58 1.58 1.49 1.52 1.53 .00
4357. 5.93 4.34 1.57 1.44 1.47 1.46 .00
4389. 5.97 4.98 1.60 1.45 1.49 1.45 .00
4423. 6.09 4.13 1.60 1.48 1.52 1.52 .00
4451. 6.39 3.13 1.67 1.51 1.56 1.65 .00
4484. 6.27 4.61 1.65 1.51 1.55 1.59 .00
4519. 6.32 3.27 1.64 1.53 1.57 1.60 .00
4546. 6.23 4.02 1.63 1.51 1.55 1.56 .00
4579. 6.06 2.16 1.56 1.50 1.52 1.51 .00
4611. 5.85 3.56 1.54 1.44 1.46 1.45 .00

PACK NO. 112
GOULD 20 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT
VOLTAGE 6.00

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

4304.	5.30	5.24	1.05	1.12	.91	1.15	1.10
4314.	5.35	5.31	1.06	1.14	.91	1.16	1.12
4345.	5.83	5.82	1.10	1.19	1.23	1.18	1.13
4389.	5.56	5.45	1.05	1.14	1.19	1.12	1.06
4417.	5.56	5.46	1.05	1.11	1.16	1.16	1.10
4460.	6.47	5.33	1.21	1.29	1.29	1.32	1.30
4485.	6.48	5.36	1.22	1.31	1.30	1.32	1.30
4512.	5.61	5.34	1.04	1.12	1.18	1.16	1.10
4545.	5.89	6.05	1.13	1.19	1.25	1.17	1.15
4577.	5.61	5.94	1.06	1.13	1.17	1.15	1.09

22

END OF
CHARGE

4304.	7.17	4.80	1.46	1.47	1.42	1.43	1.44
4314.	7.46	2.06	1.53	1.56	1.44	1.46	1.48
4345.	7.34	3.40	1.49	1.47	1.43	1.46	1.47
4389.	7.20	1.59	1.45	1.47	1.40	1.42	1.42
4417.	7.32	2.12	1.48	1.49	1.43	1.44	1.45
4460.	7.31	2.64	1.47	1.48	1.42	1.44	1.45
4485.	7.32	2.14	1.47	1.48	1.42	1.45	1.45
4512.	7.27	2.24	1.47	1.48	1.42	1.44	1.44
4545.	7.20	2.25	1.46	1.45	1.40	1.42	1.44
4577.	7.47	1.26	1.51	1.57	1.44	1.46	1.48
		3.89					

PACK NO. 80
GOULD 20 A.H.

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

CYCLE NO. PACK CURRENT
VOLTAGE 6.00

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

END OF
CHARGE

2267.	6.16	6.11	1.25	1.24	1.21	1.25	1.25	1.25
2303.	6.16	6.09	1.24	1.24	1.20	1.25	1.24	1.24
2368.	6.26	6.09	1.27	1.26	1.15	1.28	1.28	1.28
2397.	6.15	6.08	1.24	1.24	1.21	1.25	1.25	1.25
2429.	6.17	6.08	1.25	1.24	1.21	1.25	1.25	1.25
2267.	7.75	1.38	1.53	1.58	1.58	1.53	1.56	1.56
2303.	7.77	1.09	1.54	1.58	1.58	1.54	1.55	1.55
2368.	7.76	1.14	1.53	1.57	1.57	1.53	1.55	1.55
2397.	7.77	1.10	1.54	1.57	1.58	1.54	1.56	1.56
2429.	7.73	1.12	1.54	1.56	1.57	1.54	1.55	1.55

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	
2138.	6.05	9.63	1.23	1.21	1.21	1.22	1.22	
2243.	6.14	9.99	1.26	1.24	1.22	1.23	1.22	
2275.	6.17	9.87	1.25	1.23	1.22	1.24	1.23	
		2.30						
2138.	7.81	1.56	1.51	1.51	1.60	1.60	1.60	
2243.	7.54	2.30	1.48	1.47	1.53	1.54	1.53	
2275.	7.88	1.52	1.54	1.54	1.59	1.61	1.60	END OF CHARGE

PACK NO. 105
GOULD 20 A.H.

TEST TEMPERATURE 25 C
ORBIT PERIOD 3 HOURS

CYCLE NO.
PACK VOLTAGE 10.00
CURRENT

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

END OF
CHARGE

2215.	5.87	10.11	1.15	1.18	1.20	1.20	1.20	1.19
2256.	5.98	9.94	1.18	1.20	1.21	1.21	1.21	1.21
2288.	5.91	10.15	1.16	1.19	1.20	1.20	1.20	1.20
2318.	5.92	10.10	1.17	1.19	1.21	1.21	1.21	1.20
2350.	5.92	10.19	1.16	1.19	1.20	1.21	1.21	1.20
2215.	7.35	2.50	1.51	1.47	1.47	1.46	1.47	
2256.	7.28	2.52	1.50	1.45	1.45	1.44	1.46	
2288.	7.35	2.48	1.51	1.46	1.47	1.46	1.48	
2318.	7.29	2.47	1.49	1.45	1.46	1.45	1.47	
2350.	7.32	2.49	1.50	1.46	1.47	1.46	1.47	

PACK NO. 108
GOULD 20 A.H.

TEST TEMPERATURE 40 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 160					END OF DISCHARGE
			1	2	3	4	5	
2134.	5.99	6.04	1.21	1.20	1.21	1.19	1.22	END OF DISCHARGE
2205.	6.07	6.06	1.22	1.21	1.22	1.20	1.23	
2235.	6.06	6.05	1.22	1.21	1.23	1.20	1.23	
2134.	7.19	1.92	1.44	1.45	1.43	1.45	1.44	END OF CHARGE
2205.	7.19	1.75	1.45	1.44	1.41	1.44	1.43	
2235.	7.17	1.93	1.44	1.44	1.42	1.44	1.43	

PACK NO. 79
GULTON 6 A.H.

DEPTH OF DISCHARGE 50
PERCENT OF RECHARGE 200

TEST TEMPERATURE 25 C
ORBIT PERIOD 24 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES				
			1	2	3	4	5
218.	3.48	2.84	.00	1.18	.00	1.17	1.17
226.	3.27	3.01	.00	1.12	.00	1.12	1.07
		.26					
218.	4.20	.27	.00	1.41	.00	1.40	1.41
226.	4.18	.26	.00	1.41	.00	1.39	1.40

END OF
DISCHARGE

END OF
CHARGE

PACK NO.	93	G.E. 12 A.II.	PACK VOLTAGE	CURRENT	DEPTH OF DISCHARGE 50 PERCENT OF RECHARGE 200 CELL VOLTAGES					TEST TEMPERATURE 40 C ORBIT PERIOD 24 HOURS	END OF DISCHARGE
					1	2	3	4	5		
217.	4.68	5.87	.99	.92	.94	.93	.94				
225.	4.16	5.41	.97	.81	.86	.74	.80				
217.	6.93	.52	1.40	1.40	1.39	1.39	1.39	1.39			END OF CHARGE
225.	6.91	.53	1.39	1.39	1.39	1.39	1.39	1.39			

PACK NO. <u>275</u> MFR. <u>DELCO</u> CAPACITY <u>40</u> A.H.	DEPTH OF DISCHARGE: <u>25%</u>	TEST TEMPERATURE: <u>25°C</u> ORBIT PERIOD: 24 HOURS
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	CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES				
				1	2	3	4	5
END OF DISCHARGE	13	6.19	10.35	1.52	1.54	1.53	—	1.52
	21	6.06	10.20	1.51	1.52	1.51	—	1.51
	29	6.10	10.25	1.33	1.52	1.42	—	1.51
	34						—	.45 *
END OF CHARGE	13	7.98	0.45	2.06	2.05	2.05	—	1.83
	21	7.90	0.11	2.08	2.05	2.05	—	1.70
	29	7.85	0.19	2.10	2.08	2.10	—	1.59
	34	7.82		2.14	2.10	2.04	—	1.60

* CELL 5 REMOVED @ END CHARGE, CYCLE 34

PACK NO. 95
GULTON 50 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 25.0	CELL VOLTAGES					END OF DISCHARGE
			1	2	3	4	5	
2285.	5.94	24.93	1.18	1.20	1.18	1.21	1.19	
2372.	6.00	24.94	1.19	1.21	1.23	1.20	1.19	
2415.	5.92	24.90	1.18	1.19	1.21	1.17	1.19	
2470.	6.05	24.86	1.18	1.21	1.22	1.21	1.22	
2518.	6.10	24.80	1.20	1.22	1.23	1.23	1.24	
2532.	6.00	24.76	1.17	1.21	1.22	1.22	1.23	
2562.	5.96	24.92	1.18	1.19	1.21	1.20	1.22	
2598.	6.01	24.70	1.17	1.19	1.22	1.21	1.23	

CYCLE NO.	PACK VOLTAGE	CURRENT 25.0	CELL VOLTAGES					END OF CHARGE
			1	2	3	4	5	
2285.	7.40	14.38	1.57	1.48	1.45	1.49	1.45	
2372.	7.93	13.93	1.67	1.59	1.71	1.52	1.48	
2415.	7.82	13.93	1.75	1.52	1.63	1.46	1.48	
2470.	7.87	13.97	1.66	1.53	1.65	1.51	1.54	
2518.	7.87	11.01	1.67	1.49	1.64	1.53	1.58	
2532.	7.78	11.83	1.71	1.48	1.58	1.50	1.54	
2562.	7.62	13.73	1.65	1.44	1.54	1.48	1.54	
2598.	7.88	13.89	1.66	1.45	1.67	1.53	1.61	

PACK NO. 204
GULTON 4 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 2.0

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

1444.	5.82	2.00	1.13	1.12	1.15	1.16	1.16
1503.	6.06	2.01	1.22	1.21	1.22	1.21	1.21
1556.	6.00	2.01	1.21	1.20	1.21	1.20	1.21
1588.	5.98	2.01	1.20	1.20	1.21	1.20	1.20
1631.	5.96	2.01	1.20	1.19	1.20	1.20	1.20
1686.	5.95	2.02	1.20	1.18	1.20	1.20	1.20
1734.	5.95	2.02	1.19	1.18	1.20	1.20	1.20
1748.	5.99	2.00	1.20	1.19	1.21	1.21	1.21
1778.	5.94	2.00	1.19	1.18	1.20	1.20	1.20
1814.	5.93	2.00	1.19	1.17	1.20	1.19	1.20

END OF
CHARGE

1444.	7.19	1.25	1.42	1.43	1.43	1.42	1.46
1503.	7.23	1.20	1.45	1.46	1.44	1.44	1.47
1556.	7.22	1.29	1.45	1.46	1.44	1.45	1.46
1588.	7.25	1.25	1.46	1.46	1.45	1.45	1.47
1631.	7.25	1.25	1.46	1.46	1.44	1.45	1.47
1686.	7.25	1.26	1.46	1.46	1.45	1.45	1.47
1734.	7.26	1.23	1.46	1.47	1.45	1.46	1.48
1748.	7.27	1.26	1.46	1.47	1.45	1.46	1.48
1778.	7.25	1.20	1.46	1.46	1.45	1.45	1.47
1814.	7.25	1.26	1.45	1.46	1.45	1.45	1.47

PACK NO. 214
GULTON 4 A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 3.2 1

CELL VOLTAGES
3 4 5

END OF
DISCHARGE

1441.	5.34	3.15	1.10	1.09	1.04	1.07	1.11
1520.	5.69	3.18	1.14	1.14	1.14	1.14	1.16
1551.	5.65	3.16	1.14	1.14	1.13	1.12	1.14
1581.	5.64	3.16	1.14	1.14	1.12	1.12	1.14
1613.	5.70	3.16	1.15	1.15	1.14	1.13	1.15
1647.	5.59	3.16	1.13	1.13	1.10	1.11	1.13
1675.	5.69	3.15	1.15	1.15	1.13	1.14	1.15
1718.	5.63	3.16	1.14	1.15	1.11	1.12	1.15
1747.	5.55	3.15	1.13	1.12	1.10	1.10	1.14
1770.	5.57	3.17	1.13	1.12	1.11	1.11	1.14
1803.	5.54	3.16	1.13	1.11	1.11	1.09	1.12
1835.	5.60	3.16	1.13	1.12	1.13	1.11	1.14

END OF
CHARGE

1441.	7.30	2.00	1.47	1.45	1.47	1.45	1.48
1520.	7.31	1.86	1.49	1.46	1.47	1.46	1.48
1551.	7.34	1.96	1.49	1.47	1.48	1.46	1.48
1581.	7.33	1.95	1.49	1.46	1.47	1.46	1.48
1613.	7.34	1.94	1.49	1.46	1.47	1.46	1.48
1647.	7.33	1.94	1.49	1.46	1.47	1.46	1.48
1675.	7.36	1.96	1.49	1.47	1.47	1.47	1.48
1718.	7.36	1.94	1.49	1.46	1.49	1.47	1.48
1747.	7.36	1.96	1.49	1.46	1.49	1.48	1.49
1770.	7.35	1.96	1.48	1.46	1.49	1.48	1.48
1803.	7.34	1.98	1.48	1.45	1.48	1.47	1.48
1835.	7.38	1.92	1.49	1.47	1.50	1.48	1.49

PACK NO. 228
GULTON 4 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT
NO. VOLTAGE 1.2

CELL VOLTAGES
5

END OF
DISCHARGE

	1	2	3	4	5
1443.	1.20	1.02	1.19	1.15	1.15
1502.	1.18	1.25	1.25	1.23	1.25
1557.	1.18	1.23	1.22	1.21	1.22
1589.	1.16	1.23	1.22	1.20	1.22
1632.	1.20	1.22	1.21	1.20	1.21
1687.	1.20	1.21	1.21	1.19	1.20
1735.	1.19	1.23	1.22	1.20	1.22
1749.	1.19	1.21	1.20	1.18	1.20
1779.	1.20	1.22	1.22	1.20	1.22
1815.	1.20	1.21	1.21	1.18	1.21

END OF
CHARGE

1443.	.96	1.39	1.39	1.39	1.40
1502.	.98	1.41	1.42	1.41	1.41
1557.	.97	1.42	1.43	1.42	1.42
1589.	.97	1.42	1.42	1.42	1.42
1632.	.96	1.42	1.42	1.42	1.42
1687.	.97	1.41	1.41	1.41	1.41
1735.	.96	1.43	1.44	1.43	1.44
1749.	.96	1.41	1.40	1.40	1.40
1779.	.98	1.44	1.43	1.43	1.43
1815.	.79	1.42	1.42	1.42	1.42

PACK NO: 240
GULTON 4 A. H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

NO. VOLTAGE 2.0
CYCLE PACK CURRENT

1 2 3 4 5
CELL VOLTAGES

END OF
DISCHARGE

1443.	5.53	2.00	1.06	1.08	1.08	1.08	1.10
1559.	5.61	2.01	1.13	1.14	1.13	1.13	1.12
1591.	5.62	2.01	1.13	1.14	1.13	1.13	1.12
1634.	5.63	2.01	1.13	1.14	1.13	1.13	1.12
1689.	5.49	2.01	1.10	1.11	1.11	1.09	1.10
1737.	5.69	2.02	1.14	1.15	1.14	1.14	1.14
1751.	5.44	2.00	1.09	1.10	1.11	1.09	1.09
1781.	5.73	2.00	1.15	1.16	1.15	1.16	1.14
1817.	5.70	2.00	1.14	1.15	1.14	1.14	1.14

END OF
CHARGE

1443.	7.10	1.60	1.40	1.40	1.41	1.39	1.42
1559.	7.22	1.54	1.46	1.45	1.46	1.44	1.45
1591.	7.22	1.58	1.46	1.45	1.46	1.44	1.45
1634.	7.19	1.46	1.45	1.44	1.45	1.43	1.44
1689.	7.17	1.49	1.44	1.43	1.45	1.43	1.44
1737.	7.24	1.41	1.46	1.45	1.46	1.45	1.46
1751.	7.08	1.58	1.43	1.42	1.43	1.42	1.43
1781.	7.23	1.42	1.46	1.45	1.46	1.44	1.46
1817.	7.23	1.39	1.46	1.45	1.46	1.44	1.46

PACK NO. 315 GULTON 4 A.H.		DEPTH OF DISCHARGE 15 PERCENT OF RECHARGE 115		CELL VOLTAGES					TEST TEMPERATURE 0 C ORBIT PERIOD 90 MIN.	
CYCLE NO.	PACK VOLTAGE	CURRENT 1.2	1	2	3	4	5			
1592.	6.06	1.20	1.21	1.21	1.21	1.20	1.20			
1674.	6.24	1.19	1.25	1.25	1.25	1.24	1.24			
1702.	7.10	.02	1.42	1.42	1.43	1.41	1.41			
1733.	6.20	1.18	1.24	1.24	1.24	1.23	1.23			
1765.	6.19	1.19	1.24	1.24	1.24	1.24	1.24			
1799.	6.21	1.20	1.24	1.24	1.24	1.24	1.24			
1829.	6.22	1.18	1.24	1.24	1.24	1.24	1.24			
1863.	6.24	1.17	1.25	1.25	1.24	1.24	1.24			
1894.	6.21	1.17	1.24	1.24	1.24	1.24	1.24			
1923.	6.18	1.19	1.24	1.24	1.23	1.23	1.23			
1955.	6.17	1.19	1.23	1.23	1.23	1.23	1.22			
1987.	6.20	1.20	1.24	1.24	1.24	1.24	1.23			
									END OF DISCHARGE	
1592.	7.66	.69	1.52	1.53	1.52	1.52	1.52			
1674.	7.64	.65	1.51	1.54	1.54	1.52	1.53			
1702.	7.74	.64	1.54	1.56	1.55	1.55	1.55			
1733.	7.58	.69	1.51	1.53	1.52	1.52	1.51			
1765.	7.72	.61	1.53	1.55	1.53	1.55	1.55			
1799.	7.72	.64	1.54	1.55	1.54	1.54	1.54			
1829.	7.74	.64	1.54	1.55	1.54	1.55	1.55			
1863.	7.75	.64	1.55	1.56	1.54	1.55	1.56			
1894.	7.75	.62	1.55	1.56	1.54	1.55	1.55			
1923.	7.76	.64	1.55	1.56	1.54	1.55	1.55			
1955.	7.73	.63	1.55	1.55	1.53	1.55	1.55			
1987.	7.74	.63	1.55	1.55	1.53	1.55	1.55			
									END OF CHARGE	

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 2.0

CELL VOLTAGES
1 2 3 4 5

END OF
DISCHARGE

1676.	6.09	2.01	1.22	1.23	1.21	1.21	1.21	1.21
1707.	6.02	2.00	1.22	1.22	1.21	1.21	1.21	1.21
1737.	6.05	2.00	1.22	1.22	1.21	1.21	1.20	1.21
1769.	6.02	2.00	1.20	1.20	1.20	1.20	1.19	1.20
1803.	5.98	2.01	1.20	1.21	1.20	1.20	1.19	1.20
1831.	6.01	2.00	1.21	1.21	1.21	1.21	1.20	1.21
1874.	5.99	2.02	1.20	1.21	1.21	1.21	1.20	1.20
1899.	6.00	2.02	1.20	1.21	1.21	1.21	1.20	1.21
1926.	6.00	2.02	1.20	1.21	1.20	1.20	1.20	1.21
1959.	5.98	2.01	1.20	1.20	1.20	1.20	1.20	1.20
1991.	6.00	2.00	1.20	1.21	1.21	1.21	1.20	1.21

END OF
CHARGE

1676.	7.81	1.15	1.57	1.55	1.57	1.57	1.57	1.56
1707.	7.86	1.12	1.59	1.56	1.58	1.59	1.59	1.58
1737.	7.77	.88	1.56	1.54	1.56	1.56	1.56	1.55
1769.	7.76	.78	1.55	1.52	1.53	1.56	1.56	1.54
1803.	7.70	.80	1.55	1.52	1.55	1.56	1.56	1.54
1831.	7.74	.81	1.56	1.53	1.56	1.56	1.56	1.55
1874.	7.72	.78	1.55	1.53	1.56	1.56	1.57	1.54
1899.	7.73	.77	1.56	1.53	1.56	1.56	1.56	1.56
1926.	7.71	.79	1.55	1.53	1.55	1.56	1.56	1.55
1959.	7.73	.78	1.55	1.53	1.55	1.56	1.56	1.55
1991.	7.72	.78	1.56	1.53	1.56	1.56	1.56	1.55