2D12-1994

D. IF any of the monitored cells have bent or broken sample tubes, or broken thermometer parts in the cell,
THEN record the cell number in the space provided below, and notify the Electrical Maintenance Supervisor.
IF NOT,
THEN mark this step N/A.

Supervisor Remarks:

N/A

E. IF any cell temperature deviates more than 3°C (5°F) from the other cells during inspection,
THEN notify the Electrical Maintenance Supervisor,
IF NOT,
THEN mark this step N/A.

Supervisor Remarks:

N/A

F. Calculate and record on Attachment 1 the average cell temperature of the monitored cells listed on Attachment 1. KB 13-13-94

8.3 Battery Performance Discharge Test

8.3.1 Connect any remaining battery load test set control wiring needed for load monitoring or control. R.A 13-13-94

8.3.2 Determine and record on Attachment 1 and below the discharge current correction factor (K Factor) based upon the average cell temperature obtained in Step 8.2.1 and the Table on Attachment 1.

(K Factor) Discharge Current Correction Factor: 1.006 KB 13-13-94

SECOND PERSON VERIFIER

A Second Person Verifier shall determine and record below the discharge current correction factor (K Factor) based upon the average cell temperature obtained in Step 8.2.1 and the Table on Attachment 1.

(K Factor) Discharge Current Correction Factor: 1.006

Rick Hall 13-13-94
Second Person Verifier Date

8.3.3 Calculate the actual discharge current by dividing 258 by the K Factor from Step 8.3.2.

258 amps (Rated discharge current) ÷ 1.006 (K Factor) = 256 (Actual discharge current)

258 Amps (K) = 256 Amps

R.A 13-13-94

SECOND PERSON VERIFIER

A Second Person Verifier is to calculate the actual discharge current by dividing 258 by the K Factor from Step 8.3.2 and record below.

258 amps (Rated discharge current) ÷ 1.006 (K Factor) = 256 (Actual discharge current)

258 Amps (K) = 256 Amps

Kelly Lewis WM 12-13-94
Second Person Verifier Date

8.3.4 Set up the load tester to 256 amps calculated in Steps 8.3.3 and 9 hours of discharge. KB 13-13-94

SECOND PERSON VERIFIER

A Second Person Verifier shall verify that the load tester is set up correctly for a 9 hour discharge at the current value calculated in Step 8.3.3.

Rick Hall 13-13-94
Second Person Verifier Date

8.3.5 Cognizant Supervisor shall verify calculations are correct and has granted permission to start the test.

Wallace McCullough 13-13-94
Cognizant Supervisor Date

8.3.6 Close 2D52 disconnect switch. KB 13-13-94 KB 3-13-

8.3.7 Start the discharge test. KB 13-13-94

8.3.8 Record the Start time on Data Sheet 2 and Attachment 3.

8.3.9 Adjust and maintain current throughout the test to the calculated value + 1% of setpoint, + 1 Amp. (i.e., Displayed Value may vary from setpoint by + 1%, then an additional + 1 Amp.)

AJB 3/14/94

NOTE

Extra data may be taken and attached for the following test. The discharge rate and the battery voltage should be monitored from start to stop.

NOTE

The print out from the Albers unit may be attached to this procedure to accompany the following step.

8.3.10 Monitor and record the discharge rate and the battery voltage at intervals established in Data Sheet 2.

8.3.11 IF the discharge is stopped for any reason other than a low voltage cell,
THEN record the stop and restart times below.
IF NOT,
THEN mark this step N/A. N/A /

Stop time_____ Restart time_____

Reason for discharge stop_____
_____
_____

8.3.12 IF an individual cell or cells are approaching 1.0 volts
THEN record the cell(s) number below and notify the Cognizant Supervisor immediately, continue the test closely monitoring the cell voltage to verify that no cell goes below 0.75 vdc,
If NOT,
THEN mark this step N/A:
Cell number:_____ Volts:_____
Cell number:_____ Volts:_____
Cell number:_____ Volts:_____ N/A /

8.3.13 IF at any time during the test a cell(s) voltage drops below 0.75 vdc,
THEN stop the discharge immediately, contact the Cognizant Supervisor and record the stop time below and on Attachment 3, and go to Attachment 2,
If NOT,
THEN mark this step N/A:
Discharge Stop Time:_____ N/A /

NOTE

The final readings need to be rapidly taken as the decaying overall battery voltage approaches and goes below the 105 VDC voltage level.

8.3.14 Read the individual cell voltages and battery terminal voltage (rapidly) when the battery approaches 105 VDC, and record below and in the last column of Data Sheet 2.
Final Battery readings recorded: 105.6 AWB 3/14/94

8.3.15 Decrease the test load to "0" when the overall battery voltage is 105 VDC. AWB 3/14/94

8.3.16 Turn off test load. AWB 3/14/94

8.3.17 Record the Stop Time above the last column on Data Sheet 2, and on Attachment 3.

8.3.18 Open 2D52 disconnect switch. AWB 3/14/94

8.3.19 De-energize load tester. AWB 3/14/94

WARNING

2D02 side of fuse connections are energized. Contact should be avoided when disconnecting cables.

8.3.20 Unbolt and remove the load test cables from the fuse cabinet. THE SAME CABLES WERE USED FOR THE CHARGES AS THE LOAD CELLS. WAS NOT DISCONNECTED. N/A MAW 3/14/94

8.3.21 Disconnect any remaining battery load test set control or monitoring cables connected to the battery. AWB 3/14/94

8.4 EQUALIZE CHARGE AND BATTERY RESTORATION

8.4.1 Place the battery on equalize charge by one of the following methods as directed by Cognizant Supervision. Supervision to record below the method to be used.

Method 1 _____ Method 2 _____ Method 3 X MAW 3/14/94
Supervisor

"Method 1"

A. Install the pin indicating fuses in 2D42. N/A

B. Install the 1800 Amp fuses. N/A

C. Close the 2D52 Disconnect Switch. N/A

D. Verify that the electrical lineup is restored and the charger is working properly. N/A

E. Record below the charger being used.

Charger used: _____ N/A

PC-1

F. Place the battery on an equalize charge. (Charger set point is 135.2 to 138 volts) Record below the equalizing start time and voltage.

_____ / _____ _____ N/A /
Start time Date Voltage

NOTE

Step 8.5 may be performed at any time after Step 8.4.1.F has been accomplished.

G. Record below the equalize voltage at the battery after 15 hours from the start of equalization.

Battery Terminal Voltage:_____VDC
MT&E used:_____Cal. Due:_____ N/A /

H. **WHEN** the equalize charge current reaches the range of 11-22 amps (end of charge current) **THEN**, place the battery on float charge. Record below the equalizing stop time, date, and voltage.

_____ / _____ / _____ N/A /
Stop time Date Voltage

PC-1

"Method 2"

A. Install the pin indicating fuses in 2D42. N/A /

B. Install the 1800 Amp fuses. N/A /

C. Close the 2D52 Disconnect Switch. N/A /

D. Verify that the electrical lineup is restored and the charger is working properly. N/A /

E. Record below the charger being used.

Charger used: _____ N/A /

F. Place the battery on an equalize charge and set the equalize voltage to 140 VDC (min 139 max 140) (maximum allowable system voltage). Record below the equalizing start time and voltage.

_____ / _____ _____ N/A /
Start time Date Voltage

PC-1

NOTE

Step 8.5 may be performed at any time after Step 8.4.1.F has been accomplished.

G. Monitor electrolyte temperature to ensure it does not exceed 120 deg.F during the high level equalize charge.

H. Record below the equalize voltage at the battery after 15 hours from the start of equalization.

Battery Terminal Voltage:_____VDC
MT&E used:_____Cal. Due:_____ N/A

I. **WHEN** the equalize charge current reaches the range of 11-22 amps (end of charge current) Reset the equalize charge back to 135.2 to 138 volts **THEN**, place the battery on float charge. Record below the equalizing stop time, date, and voltage.

_____ / _____ / _____ N/A
Stop time Date Voltage

"Method 3" A. Install the pin indicating fuses in 2D42. AWB 3/14/94

NOTE

A Temp. Mod. may be required to power the spare battery charger.

SEE STEP 8.3.20 CABLES WERE NOT UNBOLTED, NO NEED TO BOLT IN STEP B. "METHOD 3" MAW 3-14-94

B. Bolt 2-2/C 2/0 AWG cables or greater from the spare 200 Amp battery charger (SCI Model RCS200 or equal) to the battery side of the 1800 Amp fuse connector. NA

C. Close the 2D52 Disconnect Switch. AWB 3/14/94

NOTE

Charging at the higher equalize voltage of 144 min. - 145 max. will create more gas and heat than at the normal equalize charge of 135.2 to 138 volts

D. Place the battery bank on a high level equalize charge of 144 min. - 145 max. volts and perform the following.

29.305

1. Record below the equalizing start time and voltage.

0405 / 3/14/94 / 117.10 volts

Start time / Date / Voltage

1800 / 3-14-94 / 144

NOTE

Step 8.5 may be performed at any time after Step 8.4.1.D.1 has b accomplished.

2. Monitor the current supplied by the spare battery charger.

3. Maintain charger voltage at 144 min - 145 max

4. Monitor electrolyte temperature to ensure it does not exceed 120° F. during the high level equalize charge.

5. When the equalize charge current reaches the range of 20 amps or below, "open" Disconnect switch 2D52 and measure the current by using a Fluke Digital Multimeter 8842A across J1 an J2 of 2D42. (100mv = 20 amps)

6. Stop the equalize charge (by deenergizing the spare battery charger) when the current reaches the range of 11-22 amps as measured in 2D42. Record below the equalizing stop tim date and final measurement reading.

0850 / 3-15-94 / 29.3 / 5.86

Stop time / Date / Mv / Amps

Step D complete KB

E. Verify 2D52 Disconnect switch is open. KB

F. Verify that the spare battery charger is disconnected and determinate the cables from the charger and 2D42. KB

G. Install the 1800 amp fuses. KB

H. Close the 2D52 Disconnect switch. KB

I. Place the battery on float charge. KB

PC-1

NOTE

124.7 VDC is the Tech Spec value (lower limit) for a 58 cell bank's float voltage. However, the as left float voltage should be 127.6 to 130.5 when measured at the battery terminal.

PC-1

8.4.2 Record the float voltage measured at the battery below:

Voltage 128.27 KB

ACCEPTANCE CRITERION

IF the float voltage "is not" within 127.6 to 130.5 volts,
THEN notify the Electrical Supervisor and/or S/S for an evaluation of the problem.
IF the float voltage is below 124.7 VDC,
THEN "immediately" notify the Electrical Supervisor and S/S that a possible Tech Spec violation exists.

8.5 Battery Capacity Calculation

8.5.1 IF Attachment 2 was used,
THEN use the new calculated T_A from step 15 of Attachment 2,
If NOT,
THEN obtain T_A from Data Sheet 2,
(Start Time - Stop Time) KB

8.5.2 IF the discharge was stopped in step ~~8.2.11~~ 8.4.1.D.2,
THEN the time that the discharge was stopped (from data in ~~8.2.11~~ 8.4.1.D.2) must be subtracted from the T_A to obtain the actual length of the test (T_A) for step 8.5.3.
IF NOT,
THEN mark this step N/A. NA

WM 3/15/94 * Procedural steps were not numbered.

8.5.3 Determine the capacity of the battery by completing the following equation:

% capacity at 77°F = $(T_A / T_S) \times 100$

T_A = Actual time of the test to specified terminal voltage 105 volts if no cells were jumpered in minutes (See Data Sheet 2).

T_S = Rated time to specified terminal voltage in minutes (8hrs. or 480 minutes)

T_A (minutes) $\frac{540}{480 \text{ minutes}} \times 100 =$ 112.5 % capacity

KE

SECOND PERSON VERIFIER

A Second Person Verifier shall repeat the calculations for determining the capacity of the battery.

T_A (minutes) $\frac{540}{480 \text{ minutes}} \times 100 =$ 112.5 % capacity

Raymond Yates
Second Person Verifier

8.5.4 IF the capacity calculated is less than 90%, THEN notify maintenance engineer for evaluation, IF the capacity is greater than or equal to 90% THEN mark this step N/A. NA

8.6 Battery Maintenance

NOTE

When tightening the terminal connectors, two insulated wrenches should be applying one as counter-torque to prevent damage to the terminal post. If checking the torque of a 5/16 inch stainless bolt connection that was not assembled then 125 in/lb is the proper value. If the connection was loose or disassembled then torque to 165 in/lbs. Step 8.6.1 through 8.6.7 may b accomplished at any time after Step 8.4.* has been accomplished. Steps 8. through 8.6.10 may be accomplished after equalize charge current diminishe a low enough level such that charge current does not affect resistance readings.

8.6.1 Verify that all battery connections are tight by torquing each intercell/intertier connection to 125 in/lbs

KB

* procedural step misnumbered. WM 3-15-94

ATTACHMENT 1

DISCHARGE CURRENT CORRECTION
FACTOR K FOR TEMPERATURE

Temperature (F)	Factor K

Cell No.	Temp. (F)
1	76
6	77
12	76
18	76
24	76
30	75
36	76
43	76
48	77
54	74

Temp. Total for 10 cells = 762

Temp. Total for 10 cells / 10 = Avg. Temp.

Average Temp. = 76 °F

Req. Factor K = 1.006

Average Temp. (F)	Factor K
62	1.098
63	1.092
64	1.086
65	1.080
66	1.072
67	1.064
68	1.056
69	1.048
70	1.040
71	1.034
72	1.029
73	1.023
74	1.017
75	1.011
76	1.006
77	1.000
78	0.994
79	0.987
80	0.980
81	0.976
82	0.972
83	0.968
84	0.964
85	0.960
86	0.956
87	0.952
88	0.948
89	0.944
90	0.940
91	0.938
92	0.936

Test Equip. # D.I. - 061 Cal. Due: 6-8-94

Kathleen Wilson — 3/13/94
Performed By — Date

Rick Hall — 3/13/94
Second Person Verifier — Date

Attachment 3
Calculation For Total Down Time

1. Start Time, Stop Time

(A) Start Time: 1658 (B) Stop Time: 0158 Aug 1

(C) Start Time: _____ (D) Stop Time: _____ _____/

(E) Start Time: _____ (F) Stop Time: _____ _____/

(G) Start Time: _____ (H) Stop Time: _____ _____/

SECOND PERSON VERIFIER

A Second Person Verifier shall verify the "Start, Stop" time in step 1 is correct.

William Kaufman /
Second Person Verifier D

NOTE
The Total Down Time Calculation is for the Total Time the test is stopped for jumpering cell(s), broken test equipment etc; The Final Stop Time (last stop time from above) shall not be used in the calculation.

2. Total Down Time

Total Down Time (in minutes) = (C - B) + (E - D) + (G - F)

Total Down Time
(in minutes) = (____ -____) + (____-____) + (____-____) = _____

N/A /

SECOND PERSON VERIFIER

A Second Person Verifier shall verify the "Start, Stop" time in step 1 is correct.

N/A /
Second Person Verifier Da

3. Old T_A Calculation

Old T_A = (A) - (Final Stop Time)

Old T_A = _____

N/A /

SECOND PERSON VERIFIER

A Second Person Verifier shall verify calculations are correct in step 3.

N/A /
Second Person Verifier Dat

DATA SHEET 2

Performance Discharge Test
Battery Bank and Cell Voltages

Battery Bank 2D12
Start Time 1658

Cell No.	30 Min.	1 Hour	1 Hour 30 Min.	2 Hours	2 Hours 30 Min.	3 Hours	3 Hours 30 Min.	4 Hours	4 Hours 30 Min.
1	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93
2	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93
3	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
4	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
5	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94
6	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93
7	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.94	1.94
8	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.94
9	1.99	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94
10	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93	1.92
11	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.93
12	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
13	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94
14	1.99	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94
15	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
16	1.98	1.97	1.97	1.97	1.96	1.95	1.95	1.94	1.93
17	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94
18	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93
19	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94
20	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93	1.92
21	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.94
22	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
23	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93	1.93
24	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.93
25	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
26	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93	1.92
27	1.97	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93
28	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93	1.93
29	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.93
* 30	1.98	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94
31	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
32	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
Bank Volts	115.2	115	114.7	114.4	114.1	113.7	113.3	113.0	112.5

Performed by [signature] 3/14/94
Signature Date

cell #30 voltage will be taken with Dmm 155 Cal 8-23-94. WM 3-15-94
The cable from the cell unit is bad, made connection with Dmm on other cell to make sure that all other wires were good. All other reading were SAT.

DATA SHEET 2

Performance Discharge Test
Battery Bank and Cell Voltages

Battery Bank 2D12

Cell No.	30 Min.	1 Hour	1 Hour 30 Min.	2 Hours	2 Hours 30 Min.	3 Hours	3 Hours 30 Min.	4 Hours	4 Hours 30 Min.
33	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
34	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93
35	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93	1.92
36	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93
37	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
38	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94
39	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
40	1.97	1.96	1.96	1.95	1.95	1.94	1.93	1.93	1.92
41	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
42	1.98	1.97	1.97	1.96	1.96	1.95	1.95	1.94	1.93
43	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94
44	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94
45	1.97	1.97	1.97	1.96	1.95	1.95	1.94	1.93	1.93
46	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94
47	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
48	1.99	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94
49	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.93
50	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94
51	1.98	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.93
52	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
53	1.99	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94
54	1.98	1.98	1.98	1.97	1.96	1.96	1.95	1.94	1.94
55	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93
56	1.98	1.97	1.97	1.96	1.96	1.95	1.94	1.94	1.93
57	1.98	1.98	1.97	1.96	1.96	1.95	1.95	1.94	1.93
58	1.98	1.98	1.97	1.97	1.96	1.95	1.95	1.94	1.93
Disch Rate (Amps)	258A ~~254A~~	257	256	256	256	256	255	255	255

RB-3-18-94

Performed by [signature] 3/14/94
Signature Date

Test Equip: BCT002
Dmm-155

Cal. Due: 2-28-95
8-28-94

DATA SHEET 2

Performance Discharge Test
Battery Bank and Cell Voltages

Battery Bank 2D12

Cell No.	5 Hours	5 Hours 30 Min.	6 Hours	6 Hours 30 Min.	7 Hours	7 Hours 30 Min.	8 Hours	8 Hours 30 Min.	9 Hours
1	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83	1.80
2	1.92	1.91	1.90	1.89	1.88	1.86	1.85	1.82	1.80
3	1.92	1.91	1.91	1.90	1.88	1.87	1.85	1.83	1.81
4	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.83	1.81
5	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
6	1.92	1.91	1.90	1.90	1.88	1.87	1.87	1.84	1.81
7	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.85	1.83
8	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.85	1.83
9	1.93	1.92	1.92	1.91	1.90	1.88	1.87	1.85	1.84
10	1.91	1.90	1.89	1.88	1.87	1.86	1.84	1.81	1.78
11	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
12	1.92	1.91	1.91	1.90	1.88	1.87	1.85	1.83	1.81
13	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83
14	1.93	1.92	1.92	1.91	1.90	1.88	1.87	1.85	1.84
15	1.93	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
16	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83	1.81
17	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83
18	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
19	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
20	1.91	1.90	1.90	1.89	1.87	1.86	1.85	1.82	1.80
21	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
22	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
23	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82	1.79
24	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
25	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
26	1.91	1.91	1.90	1.89	1.87	1.86	1.84	1.82	1.79
27	1.92	1.91	1.90	1.89	1.88	1.86	1.85	1.83	1.80
28	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82	1.79
29	1.92	1.92	1.91	1.89	1.88	1.87	1.85	1.83	1.81
* 30	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.84
Bank Volts	111.9	111.5	111.0	110.4	109.7	109.0	108.1	106.9	105.6

Performed by [illegible] 1/31/94
Signature Date

NOTE
Terminal voltage of 105 volts may be reached before a hour or ½ hour reading can be taken. Indicate the number of minutes past the hour or half hour above the column where the last reading was taken at test completion.

DATA SHEET 2

Performance Discharge Test
Battery Bank and Cell Voltages

Bank Voltage: 115.2
Start Time: 15 58
Stop Time: 01:58

Battery Bank 2D12

Cell No.	5 Hours	5 Hours 30 Min.	6 Hours	6 Hours 30 Min.	7 Hours	7 Hours 30 Min.	8 Hours	8 Hours 30 Min.	9 Hours
31	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
32	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
33	1.92	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
34	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83	1.80
35	1.91	1.91	1.90	1.89	1.87	1.86	1.84	1.82	1.79
36	1.92	1.91	1.91	1.89	1.88	1.87	1.85	1.84	1.81
37	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.81
38	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
39	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.81
40	1.91	1.90	1.89	1.88	1.87	1.86	1.84	1.82	1.79
41	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.81
42	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83	1.81
43	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83
44	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.85	1.83
45	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82	1.79
46	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
47	1.92	1.92	1.91	1.90	1.88	1.87	1.86	1.84	1.81
48	1.93	1.92	1.91	1.91	1.89	1.88	1.87	1.85	1.83
49	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
50	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83
51	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
52	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.81
53	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83
54	1.93	1.92	1.91	1.90	1.89	1.88	1.86	1.84	1.82
55	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83	1.80
56	1.92	1.91	1.90	1.89	1.88	1.87	1.85	1.83	1.80
57	1.92	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.82
58	1.93	1.92	1.91	1.90	1.89	1.87	1.86	1.84	1.81
Disch Rate (Amps)	255	256	256	255	255	255	256	255	256

Performed by M. Bishop 13/14/94
Signature Time

NOTE

Terminal voltage of 105 volts may be reached before a hour or ½ hour reading can be taken. Indicate the number of minutes past the hour or half hour above the column where the last reading was taken at test completion.