

| CRUISE<br>IG-24-3a |  |      |  | AREA<br>Costa Rica |  |      |  | PROJECT<br>Mid America Trench |  |      |  | DATE<br>93/77 |       |      |        |
|--------------------|--|------|--|--------------------|--|------|--|-------------------------------|--|------|--|---------------|-------|------|--------|
| TIME               |  | TIME |  | TIME               |  | TIME |  | TIME                          |  | TIME |  | TIME          |       | TIME |        |
| 0000               |  | 0300 |  | 0600               |  | 0900 |  | 1200                          |  | 1500 |  | 1800          |       | 2100 | 37552  |
| 05                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37552  |
| 10                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37544  |
| 15                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37530  |
| 20                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37532  |
| 25                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37527  |
| 0030               |  | 0330 |  | 0630               |  | 0930 |  | 1230                          |  | 1530 |  | 1830          |       | 2130 | 37515  |
| 35                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37497  |
| 40                 |  |      |  |                    |  |      |  |                               |  |      |  |               |       |      | 37478  |
| 45                 |  |      |  |                    |  |      |  |                               |  |      |  | BEGIN         |       |      | 37462  |
| 50                 |  |      |  |                    |  |      |  |                               |  |      |  | RECORDING     |       |      | 37448  |
| 55                 |  |      |  |                    |  |      |  |                               |  |      |  | IG-24-3       |       |      | 37442  |
| 0100               |  | 0400 |  | 0700               |  | 1000 |  | 1300                          |  | 1600 |  | 1900          |       | 2200 | 37441  |
| 05                 |  |      |  |                    |  |      |  |                               |  |      |  | 37477         |       |      | 37442  |
| 10                 |  |      |  |                    |  |      |  |                               |  |      |  | 37482         |       |      | 37463  |
| 15                 |  |      |  |                    |  |      |  |                               |  |      |  | 37489         |       |      |        |
| 20                 |  |      |  |                    |  |      |  |                               |  |      |  | 37504         |       |      | Maggie |
| 25                 |  |      |  |                    |  |      |  |                               |  |      |  | 37520         |       |      | tunnel |
| 0130               |  | 0430 |  | 0730               |  | 1030 |  | 1330                          |  | 1630 |  | 1930          | 37540 | 2230 | off    |
| 35                 |  |      |  |                    |  |      |  |                               |  |      |  | 37553         |       |      |        |
| 40                 |  |      |  |                    |  |      |  |                               |  |      |  | 37555         |       |      |        |
| 45                 |  |      |  |                    |  |      |  |                               |  |      |  | 37553         |       |      |        |
| 50                 |  |      |  |                    |  |      |  |                               |  |      |  | 37548         |       |      |        |
| 55                 |  |      |  |                    |  |      |  |                               |  |      |  | 37541         |       |      |        |
| 0200               |  | 0500 |  | 0800               |  | 1100 |  | 1400                          |  | 1700 |  | 2000          | 37537 | 2300 |        |
| 05                 |  |      |  |                    |  |      |  |                               |  |      |  | 37539         |       |      |        |
| 10                 |  |      |  |                    |  |      |  |                               |  |      |  | 37541         |       |      |        |
| 15                 |  |      |  |                    |  |      |  |                               |  |      |  | 37545         |       |      |        |
| 20                 |  |      |  |                    |  |      |  |                               |  |      |  | 37549         |       |      |        |
| 25                 |  |      |  |                    |  |      |  |                               |  |      |  | 37551         |       |      |        |
| 0230               |  | 0530 |  | 0830               |  | 1130 |  | 1430                          |  | 1730 |  | 2030          | 37552 | 2330 |        |
| 35                 |  |      |  |                    |  |      |  |                               |  |      |  | 37552         |       |      |        |
| 40                 |  |      |  |                    |  |      |  |                               |  |      |  | 37555         |       |      |        |
| 45                 |  |      |  |                    |  |      |  |                               |  |      |  | 37563         |       |      |        |
| 50                 |  |      |  |                    |  |      |  |                               |  |      |  | 37560         |       |      |        |
| 55                 |  |      |  |                    |  |      |  |                               |  |      |  | 37556         |       |      |        |

April 3

MAGGIE

Maggie  
tunnel065  
1100

## MAGNETICS

## LOG

PAGE 2

OF 13

| CRUISE   |  |  | AREA       |       |      | PROJECT |       |       | DATE      |       |       |       |                    |       |       |       |       |
|----------|--|--|------------|-------|------|---------|-------|-------|-----------|-------|-------|-------|--------------------|-------|-------|-------|-------|
| 1G-24-3a |  |  | COSTA RICA |       |      | MAT     |       |       | 94/77     |       |       |       |                    |       |       |       |       |
| TIME     |  |  | TIME       |       |      | TIME    |       |       | TIME      |       |       | TIME  |                    |       |       |       |       |
| 0000     |  |  | 0300       |       |      | 0600    | 37478 | 0900  | 37364     | 1200  | 37817 | 1500  | 38033              | 2100  | 38031 |       |       |
| 05       |  |  |            |       |      |         | 37490 |       | 37365     |       | 37818 | on    | 0                  |       | 38028 |       |       |
| 10       |  |  |            |       |      |         | 37495 |       | 37367     |       | 37821 | 37880 |                    |       | 38026 |       |       |
| 15       |  |  |            |       |      |         | 37495 |       | 37373     |       | 37823 | 37884 |                    |       | 38031 |       |       |
| 20       |  |  |            |       |      |         | 37492 |       | 37386     |       | 37816 | 37890 |                    |       | 38038 |       |       |
| 25       |  |  |            |       |      |         | 37486 |       | 37399     |       | 37819 | 37908 |                    |       | 38043 |       |       |
| 0030     |  |  | 0330       |       |      | 0630    | 37482 | 0930  | 37415     | 1230  | 37823 | 1530  | 37920              | 1830  | 38071 |       |       |
| 35       |  |  |            |       |      |         | 37474 |       | 37429     |       | 37822 | 37912 |                    |       | 38045 |       |       |
| 40       |  |  |            |       |      |         | 37466 |       | 37440     |       | 37831 | 37908 |                    |       | 38047 |       |       |
| 45       |  |  |            |       |      |         | 37460 |       | 37452     |       | 37823 | 37898 | switched generator | 0     | 38048 |       |       |
| 50       |  |  |            |       |      |         | 37450 |       | 37467     |       | 37822 | 37892 |                    |       | 38044 |       |       |
| 55       |  |  |            |       |      |         | 37436 |       | 37577     |       | 37819 | 37892 |                    |       | 38097 |       |       |
| 0100     |  |  | 0400       | 37668 | 0700 | 37427   | 1000  | 37590 | 1300      | 37814 | 1600  | 37905 | 1900               | 38098 | 2200  | 38102 |       |
| 05       |  |  |            | 37662 |      | 37415   |       | 37501 |           | 37816 |       | 37913 |                    |       | 38035 | 38082 |       |
| 10       |  |  |            | 37655 |      | 37404   |       | 37512 |           | 37813 |       | 37921 |                    |       | 38031 | 38088 |       |
| 15       |  |  |            | 37649 |      | 37401   |       | 37526 |           | 37810 |       | 37932 |                    |       | 38030 | 38093 |       |
| 20       |  |  |            | 37645 |      | 37398   |       | 37537 |           | 37806 |       | 37940 |                    |       | 38018 | 38097 |       |
| 25       |  |  |            | 37645 |      | 37397   |       | 37549 |           | 37808 |       | 37945 |                    |       | 38010 | 38100 |       |
| 0130     |  |  | 0430       | 37639 | 0730 | 37397   | 1030  | 37567 | 1330      | 37819 | 1630  | 37947 | 1930               | 38104 | 2230  | 37993 |       |
| 35       |  |  |            | 37631 |      | 37398   |       | 37591 |           | 37820 |       | 37953 |                    |       | 37979 | 38108 |       |
| 40       |  |  |            | 37621 |      | 37398   |       | 37594 |           | 37821 |       | 37955 |                    |       | 37964 | 38116 |       |
| 45       |  |  |            | 37611 |      | 37397   |       | 37610 |           | 37823 |       | 37962 |                    |       | 37954 | 38112 |       |
| 50       |  |  |            | 37605 |      | 37392   |       | 37629 |           | 37835 |       | 37967 |                    |       | 37956 | 38106 |       |
| 55       |  |  |            | 37599 |      | 37385   |       | 37642 |           | 37837 |       | 37983 |                    |       | 37958 | 38103 |       |
| 0200     |  |  | 0500       | 37596 | 0800 | 37380   | 1100  | 37655 | 1400      | off   | 0     | 1700  | 38008              | 2000  | 38100 | 2300  | 37949 |
| 05       |  |  |            | 37590 |      | 37380   |       | 37669 |           | 0     |       |       | 38031              |       | 38099 | 37943 | 38099 |
| 10       |  |  |            | 37575 |      | 37372   |       | 37673 | Deploying | 0     |       |       | 38043              |       | 38094 | 37939 | 38094 |
| 15       |  |  |            | 37558 |      | 37361   |       | 37694 | OBSS      | 0     |       |       | 38043              |       | 38090 | 37933 | 38090 |
| 20       |  |  |            | 37535 |      | 37350   |       | 37705 |           | 0     |       |       | 38048              |       | 38082 | 37924 | 38082 |
| 25       |  |  |            | 37531 |      | 37335   |       | 37717 |           | 0     |       |       | 38052              |       | 38075 | 37914 | 38075 |
| 0230     |  |  | 0530       | 37522 | 0830 | 37328   | 1130  | 37732 | 1430      | 0     | 1730  | 38056 | 2030               | 38066 | 2330  | 37909 | 38066 |
| 35       |  |  |            | 37517 |      | 37333   |       | 37753 |           | 0     |       |       | 38057              |       | 38057 | 37899 | 38057 |
| 40       |  |  |            | 37512 |      | 37342   |       | 37779 |           | 0     |       |       | 38047              |       | 38055 | 37895 | 38055 |
| 45       |  |  |            | 37504 |      | 37351   |       | 37792 |           | 0     |       |       | 38040              |       | 38048 | 37887 | 38048 |
| 50       |  |  |            | 37492 |      | 37358   |       | 37807 |           | 0     |       |       | 38035              |       | 38039 | 37879 | 38039 |
| 55       |  |  |            | 37481 |      | 37363   |       | 37813 |           | 0     |       |       | 38034              |       | 38034 | 37874 | 38034 |

file 9

| CRUISE   |       | AREA       |       | PROJECT |       | DATE   |       |
|----------|-------|------------|-------|---------|-------|--------|-------|
| IG-24-3a |       | COSTA RICA |       | MAT     |       | 9/5/77 |       |
| TIME     |       | TIME       |       | TIME    |       | TIME   |       |
| 0000     | 37867 | 0300       | 37795 | 0600    | 37585 | 0900   | 37711 |
| 05       | 37867 |            | 37790 |         | 37570 |        | 37710 |
| 10       | 37866 |            | 37787 |         | 37558 |        | 37708 |
| 15       | 37864 |            | 37784 |         | 37550 |        | 37707 |
| 20       | 37864 |            | 37788 |         | 37542 |        | 37704 |
| 25       | 37865 |            | 37786 |         | 37532 |        | 37696 |
| 0030     | 37870 | 0330       | 37777 | 0630    | 37521 | 0930   | 37690 |
| 35       | 37877 |            | 37763 |         | 37507 |        | 37687 |
| 40       | 37880 |            | 37749 |         | 37490 |        | 37685 |
| 45       | 37878 |            | 37743 |         | 37468 |        | 37681 |
| 50       | 37879 |            | 37734 |         | 37441 |        | 37688 |
| 55       | 37880 |            | 37729 |         | 37417 |        | 37599 |
| 0100     | 37881 | 0400       | 37722 | 0700    | 37391 | 1000   | 37708 |
| 05       | 37882 |            | 37716 |         | 37375 |        | 37720 |
| 10       | 37884 |            | 37708 |         | 37394 |        | 37723 |
| 15       | 37887 |            | 37699 |         | 37412 |        | 37730 |
| 20       | 37889 |            | 37691 |         | 37428 |        | 37740 |
| 25       | 37888 |            | 37688 |         | 37430 |        | 37760 |
| 0130     | 37886 | 0430       | 37686 | 0730    | 37432 | 1030   | 37780 |
| 35       | 37883 |            | 37694 |         | 37499 |        | 37788 |
| 40       | 37881 |            | 37691 |         | 37515 |        | 37794 |
| 45       | 37872 |            | 37696 |         | 37525 |        | 37797 |
| 50       | 37864 |            | 37699 |         | 37535 |        | 37797 |
| 55       | 37862 |            | 37699 |         | 37545 |        | 37797 |
| 0200     | 37855 | 0500       | 37700 | 0800    | 37555 | 1100   | off   |
| 05       | 37851 |            | 37740 |         | 37566 |        | 1400  |
| 10       | 37851 |            | 37705 |         | 37576 |        | 1700  |
| 15       | 37850 |            | 37707 |         | 37586 |        | 2000  |
| 20       | 37844 |            | 37702 |         | 37600 |        | 2300  |
| 25       | 37837 |            | 37690 |         | 37614 |        | 37747 |
| 0230     | 37822 | 0530       | 37676 | 0830    | 37626 | 1130   |       |
| 35       | 37821 |            | 37666 |         | 37645 |        | 1430  |
| 40       | 37808 |            | 37640 |         | 37659 |        | 1730  |
| 45       | 37807 |            | 37615 |         | 37674 |        | 2030  |
| 50       | 37808 |            | 37610 |         | 37693 |        | 37529 |
| 55       | 37801 |            | 37598 |         | 37706 |        | 37531 |

5 Apr 1977

02616  
0202

37700

file 10

38226

37960

38540

37660

37942

| CRU. SE<br>IG-24-3a |        |      |  | AREA<br>COSTA RICA |  |      |  | PROJECT<br>MAT |  |      |  | DATE<br>96/77 |  |      |  |
|---------------------|--------|------|--|--------------------|--|------|--|----------------|--|------|--|---------------|--|------|--|
| TIME                |        | TIME |  | TIME               |  | TIME |  | TIME           |  | TIME |  | TIME          |  | TIME |  |
| 0000                | 37695  | 0300 |  | 0600               |  | 0900 |  | 1200           |  | 1500 |  | 1800          |  | 2100 |  |
| 05                  | 37820  |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 10                  | 37670  |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 15                  | 37775  |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 20                  | 37785  |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 25                  | 37600  |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 0030                | 37228  | 0330 |  | 0630               |  | 0930 |  | 1230           |  | 1530 |  | 1830          |  | 2130 |  |
| 35                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 40                  | Maggie |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 45                  | turned |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 50                  | off    |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 55                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 0100                |        | 0400 |  | 0700               |  | 1000 |  | 1300           |  | 1600 |  | 1900          |  | 2200 |  |
| 05                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 10                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 15                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 20                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 25                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 0130                |        | 0430 |  | 0730               |  | 1030 |  | 1330           |  | 1630 |  | 1930          |  | 2230 |  |
| 35                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 40                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 45                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 50                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 55                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 0200                |        | 0500 |  | 0800               |  | 1100 |  | 1400           |  | 1700 |  | 2000          |  | 2300 |  |
| 05                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 10                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 15                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 20                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 25                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 0230                |        | 0530 |  | 0830               |  | 1130 |  | 1430           |  | 1730 |  | 2030          |  | 2330 |  |
| 35                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 40                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 45                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 50                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |
| 55                  |        |      |  |                    |  |      |  |                |  |      |  |               |  |      |  |

6 Apr 1977  
END IG 24-3

Return to  
Puntarenas  
General  
Reprints  
END IG 24-3

File 11

| CRL SE<br>IG-24-36 |  |      |  | AREA<br>Costa Rica |  |      |  | PROJECT<br>Middle America Trench |  |          |          | DATE<br>J.D.<br>April 9, 1977 |          |      |       |
|--------------------|--|------|--|--------------------|--|------|--|----------------------------------|--|----------|----------|-------------------------------|----------|------|-------|
| TIME               |  | TIME |  | TIME               |  | TIME |  | TIME                             |  | TIME     |          | TIME                          |          | TIME |       |
| 0000               |  | 0300 |  | 0600               |  | 0900 |  | 1200                             |  | 1500     |          | 1800                          | 37469    | 2100 | 37456 |
| 05                 |  |      |  |                    |  |      |  |                                  |  |          |          |                               | 0        |      | 37455 |
| 10                 |  |      |  |                    |  |      |  |                                  |  |          |          |                               | 0        |      | 37451 |
| 15                 |  |      |  |                    |  |      |  |                                  |  | Be 914   |          |                               | 37387    |      | 37445 |
| 20                 |  |      |  |                    |  |      |  |                                  |  | Mag      |          |                               |          |      | 37433 |
| 25                 |  |      |  |                    |  |      |  |                                  |  | IG-24-36 |          |                               | erratic  |      | 37423 |
|                    |  |      |  |                    |  |      |  |                                  |  | ---      |          |                               | readings |      | 37415 |
| 0030               |  | 0330 |  | 0630               |  | 0930 |  | 1230                             |  | 1530     | 37806    | 1830                          | ---      | 2130 | 37415 |
| 35                 |  |      |  |                    |  |      |  |                                  |  |          | 37864    |                               | ---      |      | 37415 |
| 40                 |  |      |  |                    |  |      |  |                                  |  |          | 37902    |                               | 37360    |      | 37415 |
| 45                 |  |      |  |                    |  |      |  |                                  |  |          | 37893    |                               | 37345    |      | 37414 |
| 50                 |  |      |  |                    |  |      |  |                                  |  |          | 37873    |                               | 37320    |      | 37416 |
| 55                 |  |      |  |                    |  |      |  |                                  |  |          | 37829    |                               | 37305    |      | 37421 |
| 0100               |  | 0400 |  | 0700               |  | 1000 |  | 1300                             |  | 1600     | erratic  | 1900                          | 37310    | 2200 | 37427 |
| 05                 |  |      |  |                    |  |      |  |                                  |  |          | readings |                               | 37315    |      | 37434 |
| 10                 |  |      |  |                    |  |      |  |                                  |  |          | 0        |                               | 37320    |      | 37443 |
| 15                 |  |      |  |                    |  |      |  |                                  |  |          | 0        |                               | 37322    |      | 37456 |
| 20                 |  |      |  |                    |  |      |  |                                  |  |          | 37780    |                               | 37321    |      | 37468 |
| 25                 |  |      |  |                    |  |      |  |                                  |  |          | 37755    |                               | 37320    |      | 37480 |
| 0130               |  | 0430 |  | 0730               |  | 1030 |  | 1330                             |  | 1630     | 37740    | 1930                          | 37336    | 2230 | 37491 |
| 35                 |  |      |  |                    |  |      |  |                                  |  |          | 37703    |                               | 37348    |      | 37500 |
| 40                 |  |      |  |                    |  |      |  |                                  |  |          | 37671    |                               | 37371    |      | 37506 |
| 45                 |  |      |  |                    |  |      |  |                                  |  |          | 37645    |                               | 37398    |      | 37510 |
| 50                 |  |      |  |                    |  |      |  |                                  |  |          | 37597    |                               | 37406    |      | 37513 |
| 55                 |  |      |  |                    |  |      |  |                                  |  |          | 37556    |                               | 37411    |      | 37513 |
| 0200               |  | 0500 |  | 0800               |  | 1100 |  | 1400                             |  | 1700     | 37554    | 2000                          | 37396    | 2300 | 37514 |
| 05                 |  |      |  |                    |  |      |  |                                  |  |          | 37530    |                               | 37391    |      | 37514 |
| 10                 |  |      |  |                    |  |      |  |                                  |  |          | 37535    |                               | 37399    |      | 37514 |
| 15                 |  |      |  |                    |  |      |  |                                  |  |          | 37539    |                               | 37420    |      | 37513 |
| 20                 |  |      |  |                    |  |      |  |                                  |  |          | 37561    |                               | 37441    |      | 37512 |
| 25                 |  |      |  |                    |  |      |  |                                  |  |          | 37580    |                               | 37464    |      | 37513 |
| 0230               |  | 0530 |  | 0830               |  | 1130 |  | 1430                             |  | 1730     | 37607    | 2030                          | 37487    | 2330 | 37515 |
| 35                 |  |      |  |                    |  |      |  |                                  |  |          | 37607    |                               | 37484    |      | 37514 |
| 40                 |  |      |  |                    |  |      |  |                                  |  |          | 37588    |                               | 37467    |      | 37512 |
| 45                 |  |      |  |                    |  |      |  |                                  |  |          | 37569    |                               | 37468    |      | 37511 |
| 50                 |  |      |  |                    |  |      |  |                                  |  |          | 37539    |                               | 37464    |      | 37511 |
| 55                 |  |      |  |                    |  |      |  |                                  |  |          | 37500    |                               | 37457    |      | 37511 |

Magnetics

file 14

09 Apr 1977  
Start 2624-38

| CRUISE   |       |      |       | AREA       |       |      |       | PROJECT |       |      |       | DATE   |       |      |       |
|----------|-------|------|-------|------------|-------|------|-------|---------|-------|------|-------|--------|-------|------|-------|
| TG 24-36 |       |      |       | Costa Rica |       |      |       | MAT     |       |      |       | 100/77 |       |      |       |
| TIME     |       | TIME |       | TIME       |       | TIME |       | TIME    |       | TIME |       | TIME   |       | TIME |       |
| 0000     | 37511 | 0300 | 37393 | 0600       | 37261 | 0900 | 37229 | 1200    | 37487 | 1500 | 37773 | 1800   | 37923 | 2100 | 37928 |
| 05       | 37512 |      | 37388 |            | 37257 |      | 37246 |         | 37489 |      | 37783 |        | 37924 |      | 37924 |
| 10       | 37511 |      | 37382 |            | 37255 |      | 37265 |         | 37489 |      | 37790 |        | 37923 |      | 37918 |
| 15       | 37511 |      | 37379 |            | 37271 |      | 37282 |         | 37491 |      | 37801 |        | 37920 |      | 37912 |
| 20       | 37510 |      | 37378 |            | 37294 |      | 37301 |         | 37491 |      | 37814 |        | 37920 |      | 37907 |
| 25       | 37510 |      | 37375 |            | 37320 |      | 37318 |         | 37500 |      | 37822 |        | 37919 |      | 37900 |
| 0030     | 37513 | 0330 | 37372 | 0630       | 37349 | 0930 | 37337 | 1230    | 37508 | 1530 | 37830 | 1830   | 37917 | 2130 | 37904 |
| 35       | 37516 |      | 37370 |            | 37380 |      | 37355 |         | 37517 |      | 37832 |        | 37915 |      | 37912 |
| 40       | 37516 |      | 37368 |            | 37406 |      | 37375 |         | 37529 |      | 37836 |        | 37913 |      | 37920 |
| 45       | 37516 |      | 37369 |            | 37415 |      | 37387 |         | 37543 |      | 37841 |        | 37909 |      | 37922 |
| 50       | 37511 |      | 37370 |            | 37413 |      | 37402 |         | 37563 |      | 37847 |        | 37908 |      | 37928 |
| 55       | 37508 |      | 37370 |            | 37400 |      | 37413 |         | 37580 |      | 37854 |        | 37907 |      | 37931 |
| 0100     | 37502 | 0400 | 37369 | 0700       | 37392 | 1000 | 37417 | 1300    | 37591 | 1600 | 37860 | 1900   | 37916 | 2200 | 37937 |
| 05       | 37499 |      | 37368 |            | 37385 |      | 37421 |         | 37597 |      | 37866 |        | 37913 |      | 37941 |
| 10       | 37496 |      | 37367 |            | 37378 |      | 37430 |         | 37605 |      | 37870 |        | 37915 |      | 37945 |
| 15       | 37495 |      | 37366 |            | 37372 |      | 37442 |         | 37615 |      | 37878 |        | 37917 |      | 37951 |
| 20       | 37489 |      | 37362 |            | 37375 |      | 37459 |         | 37624 |      | 37879 |        | 37922 |      | 37955 |
| 25       | 37484 |      | 37364 |            | 37390 |      | 37480 |         | 37631 |      | 37884 |        | 37926 |      | 37960 |
| 0130     | 37481 | 0430 | 37370 | 0730       | 37418 | 1030 | 37494 | 1330    | 37636 | 1630 | 37888 | 1930   | 37930 | 2230 | 37956 |
| 35       | 37477 |      | 37375 |            | 37439 |      | 37509 |         | 37639 |      | 37895 |        | 37932 |      | 37957 |
| 40       | 37472 |      | 37379 |            | 37439 |      | 37519 |         | 37643 |      | 37896 |        | 37938 |      | 37957 |
| 45       | 37469 |      | 37382 |            | 37419 |      | 37525 |         | 37649 |      | 37903 |        | 37940 |      | 37956 |
| 50       | 37466 |      | 37382 |            | 37377 |      | 37529 |         | 37654 |      | 37912 |        | 37941 |      | 37950 |
| 55       | 37461 |      | 37383 |            | 37322 |      | 37534 |         | 37661 |      | 37914 |        | 37943 |      | 37945 |
| 0200     | 37454 | 0500 | 37376 | 0800       | 37276 | 1100 | 37540 | 1400    | 37671 | 1700 | 37914 | 2000   | 37945 | 2300 | 37939 |
| 05       | 37445 |      | 37374 |            | 37241 |      | 37550 |         | 37679 |      | 37916 |        | 37943 |      | 37951 |
| 10       | 37437 |      | 37370 |            | 37209 |      | 37559 |         | 37684 |      | 37914 |        | 37941 |      | 37950 |
| 15       | 37428 |      | 37368 |            | 37187 |      | 37561 |         | 37687 |      | 37915 |        | 37940 |      | 37957 |
| 20       | 37424 |      | 37361 |            | 37180 |      | 37554 |         | 37691 |      | 37915 |        | 37938 |      | 37956 |
| 25       | 37419 |      | 37350 |            | 37178 |      | 37543 |         | 37699 |      | 37914 |        | 37936 |      | 37956 |
| 0230     | 37421 | 0530 | 37339 | 0830       | 37176 | 1130 | 37526 | 1430    | 37707 | 1730 | 37914 | 2030   | 37935 | 2330 | 37958 |
| 35       | 37416 |      | 37325 |            | 37174 |      | 37514 |         | 37714 |      | 37919 |        | 37931 |      | 37961 |
| 40       | 37416 |      | 37315 |            | 37175 |      | 37503 |         | 37725 |      | 37920 |        | 37931 |      | 37961 |
| 45       | 37402 |      | 37304 |            | 37184 |      | 37497 |         | 37736 |      | 37919 |        | 37930 |      | 37963 |
| 50       | 37399 |      | 37289 |            | 37196 |      | 37492 |         | 37748 |      | 37921 |        | 37928 |      | 37965 |
| 55       | 37398 |      | 37275 |            | 37214 |      | 37487 |         | 37740 |      | 37923 |        | 37930 |      | 37965 |

Apr 10

1977

file 15

graphic

| CRUISE  |        | AREA       |       | PROJECT |       | DATE    |       |
|---------|--------|------------|-------|---------|-------|---------|-------|
| IT 2438 |        | Costa Rica |       | MAT     |       | 10/1/77 |       |
| TIME    |        | TIME       |       | TIME    |       | TIME    |       |
| 0000    | 379118 | 0300       | 38038 | 0600    | 38112 | 0900    | 38219 |
| 05      | 37970  |            | 38043 |         | 38114 |         | 38223 |
| 10      | 37974  |            | 38046 |         | 38118 |         | 38228 |
| 15      | 37975  |            | 38047 |         | 38118 |         | 38232 |
| 20      | 37981  |            | 38049 |         | 38118 |         | 38237 |
| 25      | 37985  |            | 38045 |         | 38117 |         | 38242 |
| 0030    | 37990  | 0330       | 38048 | 0630    | 38119 | 0930    | 38250 |
| 35      | 37992  |            | 38047 |         | 38123 |         | 38250 |
| 40      | 37994  |            | 38044 |         | 38128 |         | 38258 |
| 45      | 37996  |            | 38048 |         | 38133 |         | 38262 |
| 50      | 37999  |            | 38048 |         | 38136 |         | 38270 |
| 55      | 37999  |            | 38058 |         | 38139 |         | 38280 |
| 0100    | 38000  | 0400       | 38057 | 0700    | 38141 | 1000    | 38280 |
| 05      | 38001  |            | 38060 |         | 38144 |         | 38286 |
| 10      | 38002  |            | 38050 |         | 38146 |         | 38291 |
| 15      | 38011  |            | 38064 |         | 38150 |         | 38293 |
| 20      | 38019  |            | 38064 |         | 38149 |         | 38295 |
| 25      | 38025  |            | 38068 |         | 38152 |         | 38301 |
| 0130    | 38030  | 0430       | 38075 | 0730    | 38152 | 1030    | 38302 |
| 35      | 38034  |            | 38080 |         | 38157 |         | 38307 |
| 40      | 38039  |            | 38086 |         | 38160 |         | 38310 |
| 45      | 38045  |            | 38093 |         | 0     |         | 38314 |
| 50      | 38043  |            | 38094 |         | 0     |         | 38323 |
| 55      | 38045  |            | 38092 |         | 38170 |         | 38325 |
| 0200    | 38042  | 0500       | 38096 | 0800    | 38172 | 1100    | 38329 |
| 05      | 38042  |            | 38100 |         | 38176 |         | 38331 |
| 10      | 38037  |            | 38096 |         | 38186 |         | 38335 |
| 15      | 38036  |            | 38102 |         | 38184 |         | 38333 |
| 20      | 38036  |            | 38101 |         | 38191 |         | 38333 |
| 25      | 38046  |            | 38103 |         | 38194 |         | 38332 |
| 0230    | 38045  | 0530       | 38103 | 0830    | 38196 | 1130    | 38336 |
| 35      | 38038  |            | 38106 |         | 38204 |         | 38342 |
| 40      | 38040  |            | 38106 |         | 38206 |         | 38346 |
| 45      | 38043  |            | 38101 |         | 38208 |         | 38351 |
| 50      | 38038  |            | 38110 |         | 38212 |         | 38356 |
| 55      | 38040  |            | 38126 |         | 38216 |         | 38357 |
| 0300    | 38038  | 0600       | 38112 | 0900    | 38219 | 1200    | 38357 |
| 1500    | 37980  | 1800       | 38223 | 2100    | 38484 |         |       |
| 38040   |        | 38218      |       | 38493   |       |         |       |
| 37820   |        | 38225      |       | 38496   |       |         |       |
| 37993   |        | 38223      |       | 38493   |       |         |       |
| 38056   |        | 38224      |       | 38486   |       |         |       |
| 38062   |        | 38230      |       | 38488   |       |         |       |
| 38109   | 1830   | 38290      | 2130  | 38493   |       |         |       |
| 38195   |        | 38255      |       | 38484   |       |         |       |
| 38167   |        | 38260      |       | 38484   |       |         |       |
| 38195   |        | 38270      |       | Turn    |       |         |       |
| 38170   |        | 38280      |       | Maggie  |       |         |       |
| 38100   |        | 38290      |       | off     |       |         |       |
| 38201   | 1900   | 38300      | 2200  | 0       |       |         |       |
| 38243   |        | 38323      |       | 0       |       |         |       |
| 38348   |        | 38345      |       | 0       |       |         |       |
| 38410   |        | 38360      |       | 0       |       |         |       |
| 38480   |        | 38368      |       | 0       |       |         |       |
| 38498   |        | 38376      |       | 0       |       |         |       |
| 38598   | 1930   | 38384      | 2230  | 0       |       |         |       |
| 38712   |        | 38392      |       | 0       |       |         |       |
| 38675   |        | 38396      |       | 0       |       |         |       |
| 38690   |        | 38398      |       | 0       |       |         |       |
| 38810   |        | 38400      |       | 0       |       |         |       |
| 38515   |        | 38418      |       | 0       |       |         |       |
| 38335   | 2000   | 38422      | 2300  | 0       |       |         |       |
| 38210   |        | 38432      |       | 0       |       |         |       |
| 38165   |        | 38437      |       | 0       |       |         |       |
| 38130   |        | 38443      |       | 0       |       |         |       |
| 38068   |        | 38448      |       | 0       |       |         |       |
| 37987   |        | 38457      |       | 0       |       |         |       |
| 37993   | 2030   | 38470      | 2330  | 0       |       |         |       |
| 38075   |        | 38472      |       | 0       |       |         |       |
| 38055   |        | 38467      |       | 0       |       |         |       |
| 38137   |        | 38473      |       | 0       |       |         |       |
| 38180   |        | 38475      |       | 0       |       |         |       |
| 38150   |        | 38484      |       | 0       |       |         |       |

Apr 11, 77

magnetics

File 16

## MAGNETICS

## LOG

PAGE 8 OF 13

| CRUISE  |       |   | AREA                   |       |             | PROJECT |      |       | DATE   |       |      |       |      |       |              |       |
|---------|-------|---|------------------------|-------|-------------|---------|------|-------|--------|-------|------|-------|------|-------|--------------|-------|
| 7624-36 |       |   | Costa Rica - Nicaragua |       |             | MAT     |      |       | 102/77 |       |      |       |      |       |              |       |
| TIME    |       |   | TIME                   |       |             | TIME    |      |       | TIME   |       |      | TIME  |      |       |              |       |
| 0000    |       | 0 | 0300                   | 38540 | 0600        | 38545   | 0900 | 38783 | 1200   | 38778 | 1500 | 38884 | 1800 | 38936 | 2100         | 38922 |
| 05      |       | 0 |                        | 38545 |             | 38548   |      | 38797 |        | 38777 |      | 38886 |      | 38922 |              | 38925 |
| 10      |       | 0 |                        | 38550 |             | 38567   |      | 38804 |        | 38780 |      | 38890 |      | 38926 |              | 38926 |
| 15      |       | 0 |                        | 38554 |             | 38582   |      | 38806 |        | 38787 |      | 38890 |      | 38925 |              | 38930 |
| 20      |       | 0 |                        | 38558 |             | 38591   |      | 38808 |        | 38789 |      | 38891 |      | 38918 |              | 38934 |
| 25      |       | 0 |                        | 38564 |             | 38602   |      | 38806 |        | 38783 |      | 38893 |      | 38922 |              | 38933 |
| 0030    |       | 0 | 0330                   | 38565 | 0630        | 38613   | 0930 | 38806 | 1230   | 38782 | 1530 | 38895 | 1830 | 38917 | 2130         | 38936 |
| 35      |       | 0 |                        | 38568 | Per VP<br>→ | ←       |      | 38802 |        | 38790 |      | 38896 |      | 38918 |              | 38943 |
| 40      |       | 0 |                        | 38565 |             | 38636   |      | 38797 |        | 38797 |      | 38896 |      | 38913 |              | 38946 |
| 45      |       | 0 |                        | 38565 |             | 38640   |      | 38797 |        | 38798 |      | 38898 |      | 38912 |              | 38946 |
| 50      |       | 0 |                        | 38564 |             | 38645   |      | 38795 |        | 38805 |      | 38899 |      | 38911 |              | 38948 |
| 55      |       | 0 |                        | 38562 |             | 38648   |      | 38794 |        | 38809 |      | 38900 |      | 38910 |              | 38952 |
| 0100    |       | 0 | 0400                   | 38559 | 0700        | 38651   | 1000 | 38775 | 1300   | 38811 | 1600 | 38901 | 1900 | 38911 | 2200         | 38954 |
| 05      |       | 0 |                        | 38562 |             | 38654   |      | 38789 |        | 38821 |      | 38900 |      | 38911 |              | 38961 |
| 10      |       | 0 |                        | 38565 |             | 38656   |      | 38788 |        | 38822 |      | 38907 |      | 38909 |              | 38965 |
| 15      |       | 0 |                        | 38562 |             | 38657   |      | 38786 |        | 38828 |      | 38908 |      | 38913 |              | 38969 |
| 20      |       | 0 |                        | 38567 |             | 38658   |      | 38784 |        | 38825 |      | 38907 |      | 38912 |              | 38973 |
| 25      |       | 0 |                        | 38572 |             | 38661   |      | 38781 |        | 38824 |      | 38910 |      | 38914 |              | 38978 |
| 0130    |       | 0 | 0430                   | 38572 | 0730        | 38665   | 1030 | 38779 | 1330   | 38831 | 1630 | 38909 | 1930 | 38912 | 2230         | 38980 |
| 35      |       | 0 |                        | 38571 |             | 38669   |      | 38776 |        | 38837 |      | 38915 |      | 38913 |              | 38981 |
| 40      |       | 0 |                        | 38571 |             | 38673   |      | 38773 |        | 38832 |      | 38917 |      | 38914 |              | 38983 |
| 45      |       | 0 |                        | 38568 |             | 38679   |      | 38770 |        | 38836 |      | 38920 |      | 38913 |              | 38981 |
| 50      |       | 0 |                        | 38569 |             | 38685   |      | 38767 |        | 38840 |      | 38924 |      | 38911 |              | 38983 |
| 55      |       | 0 |                        | 38568 |             | 38691   |      | 38767 |        | 38845 |      | 38928 |      | 38910 |              | 38989 |
| 0200    | 38502 | 2 | 0500                   | 38562 | 0800        | 38701   | 1100 | 38766 | 1400   | 38848 | 1700 | 38933 | 2000 | 38910 | 2300         | 38991 |
| 05      | 38563 |   |                        | 38554 |             | 38704   |      | 38766 |        | 38852 |      | 38935 |      | 38911 |              | 38993 |
| 10      | 38502 |   |                        | 38546 |             | 38712   |      | 38766 |        | 38852 |      | 38939 |      | 38914 | paper<br>2nd | 39000 |
| 15      | 38501 |   |                        | 38531 |             | 38719   |      | 38771 |        | 38856 |      | 38939 |      | 38910 |              | 39002 |
| 20      | 38505 |   |                        | 38522 |             | 38728   |      | 38773 |        | 38861 |      | 38942 |      | 38912 |              | 39006 |
| 25      | 38511 |   |                        | 38512 |             | 38736   |      | 38765 |        | 38867 |      | 38944 |      | 38909 |              | 39010 |
| 0230    | 38511 | 1 | 0530                   | 38507 | 0830        | 38749   | 1130 | 38765 | 1430   | 38859 | 1730 | 38943 | 2030 | 38905 | 2330         | 39016 |
| 35      | 38515 |   |                        | 38505 |             | 38759   |      | 38764 |        | 38857 |      | 38939 |      | 38912 |              | 39018 |
| 40      | 38519 |   |                        | 38504 |             | 38766   |      | 38770 |        | 38869 |      | 38945 |      | 38914 |              | 39019 |
| 45      | 38523 |   |                        | 38509 |             | 38770   |      | 38771 |        | 38870 |      | 38942 |      | 38916 |              | 39021 |
| 50      | 38531 |   |                        | 38521 |             | 38775   |      | 38779 |        | 38875 |      | 38942 |      | 38916 |              | 39024 |
| 55      | 38538 |   |                        | 38532 |             | 38784   |      | 38780 |        | 38877 |      | 38940 |      | 38920 |              | 39030 |

Apr 12

magnetics

00

File 17

| CRUISE   |        |      |        | AREA                 |        |      |        | PROJECT |        |      |        | DATE   |        |
|----------|--------|------|--------|----------------------|--------|------|--------|---------|--------|------|--------|--------|--------|
| IG 24 36 |        |      |        | Costa Rica Nicaragua |        |      |        | MAT     |        |      |        | 103/77 |        |
| TIME     |        | TIME |        | TIME                 |        | TIME |        | TIME    |        | TIME |        | TIME   |        |
| 0000     | 391033 | 0300 | 391114 | 0600                 | 392119 | 0900 | 392275 | 1200    | 394393 | 1500 | 395567 | 1800   | 397754 |
| 05       | 391040 |      | 391118 |                      | 392228 |      | 392295 |         | 394316 |      | 395567 |        | 397760 |
| 10       | 391045 |      | 391116 |                      | 392224 |      | 392298 |         | 394406 |      | 395576 |        | 397762 |
| 15       | 391048 |      | 391119 |                      | 392227 |      | 392296 |         | 394409 |      | 395583 |        | 397768 |
| 20       | 391055 |      | 391121 |                      | 392226 |      | 392298 |         | 394415 |      | 395584 |        | 397777 |
| 25       | 391063 |      | 391126 |                      | 392232 |      | 392297 |         | 394418 |      | 395588 |        | 397782 |
| 0030     | 391065 | 0330 | 391132 | 0630                 | 392300 | 0930 | 392299 | 1230    | 394421 | 1530 | 395594 | 1830   | 397791 |
| 35       | 391069 |      | 391132 |                      | 392334 |      | 392300 |         | 394427 |      | 395599 |        | 397791 |
| 40       | 391072 |      | 391139 |                      | 392339 |      | 392301 |         | 394430 |      | 395600 |        | 397798 |
| 45       | 391074 |      | 391145 |                      | 392346 |      | 392307 |         | 394432 |      | 395611 |        | 397799 |
| 50       | 391077 |      | 391153 |                      | 392342 |      | 392311 |         | 394440 |      | 395614 |        | 397803 |
| 55       | 391079 |      | 391155 |                      | 392344 |      | 392310 |         | 394444 |      | 395622 |        | 397813 |
| 0100     | 391081 | 0400 | 391161 | 0700                 | 392352 | 1000 | 392314 | 1300    | 394451 | 1600 | 395626 | 1900   | 397816 |
| 05       | 391084 |      | 391167 |                      | 392349 |      | 392315 |         | 394456 |      | 395631 |        | 397819 |
| 10       | 391090 |      | 391171 |                      | 392353 |      | 392321 |         | 394461 |      | 395636 |        | 397824 |
| 15       | 391091 |      | 391172 |                      | 392352 |      | 392325 |         | 394465 |      | 395640 |        | 397831 |
| 20       | 391096 |      | 391178 |                      | 392351 |      | 392325 |         | 394468 |      | 395640 |        | 397836 |
| 25       | 391099 |      | 391179 |                      | 392358 |      | 392329 |         | 394473 |      | 395652 |        | 397830 |
| 0130     | 391103 | 0430 | 391180 | 0730                 | 392355 | 1030 | 392390 | 1330    | 394480 | 1630 | 395654 | 1930   | 397831 |
| 35       | 391105 |      | 391186 |                      | 392360 |      | 392337 |         | 394486 |      | 395646 |        | 397828 |
| 40       | 391107 |      | 391187 |                      | 392360 |      | 392343 |         | 394491 |      | 395655 |        | 397822 |
| 45       | 391111 |      | 391190 |                      | 392362 |      | 392345 |         | 394498 |      | 395663 |        | 397820 |
| 50       | 391113 |      | 391191 |                      | 392362 |      | 392351 |         | 394501 |      | 395668 |        | 397819 |
| 55       | 391116 |      | 391193 |                      | 392366 |      | 392356 |         | 394506 |      | 395674 |        | 397822 |
| 0200     | 391116 | 0500 | 391193 | 0800                 | 392370 | 1100 | 392338 | 1400    | 394511 | 1700 | 395682 | 2000   | 397831 |
| 05       | 391123 |      | 391198 |                      | 392370 |      | 392361 |         | 394517 |      | 395688 |        | 397826 |
| 10       | 391122 |      | 391196 |                      | 392377 |      | 392364 |         | 394522 |      | 395697 | OK     | 397817 |
| 15       | 391125 |      | 392002 |                      | 392376 |      | 392368 |         | 394528 |      | 395702 |        | 397830 |
| 20       | 391126 |      | 391199 |                      | 392379 |      | 392375 |         | 394536 |      | 395704 |        | 397833 |
| 25       | 391129 |      | 392002 |                      | 392382 |      | 392375 |         | 394537 |      | 395717 |        | 397835 |
| 0230     | 391122 | 0530 | 392004 | 0830                 | 392382 | 1130 | 392376 | 1430    | 394539 | 1730 | 395722 | 2030   | 397836 |
| 35       | 391124 |      | 392008 |                      | 392381 |      | 392383 |         | 394546 |      | 395727 |        | 397840 |
| 40       | 391105 |      | 392110 |                      | 392385 |      | 392387 |         | 394552 |      | 395736 |        | 397844 |
| 45       | 391117 |      | 392112 |                      | 392390 |      | 392390 |         | 394555 |      | 395742 |        | 397841 |
| 50       | 391116 |      | 392114 |                      | 392393 |      | 392395 |         | 394560 |      | 395743 |        | 397845 |
| 55       | 391117 |      | 392117 |                      | 392397 |      | 392393 |         | 394565 |      | 395746 |        | 397849 |

Apr. 13

magnetics

file 18

Apr. 13

## MAGNETICS

## LOG

PAGE 10 OF 13

| CRUISE |       | AREA                    |       | PROJECT |       | DATE    |       |
|--------|-------|-------------------------|-------|---------|-------|---------|-------|
| T-2436 |       | Nicaragua - El Salvador |       | MAS     |       | 10/1/77 |       |
| TIME   |       | TIME                    |       | TIME    |       | TIME    |       |
| 0000   | 39862 | 0300                    | 39764 | 0600    | 39638 | 0900    | 39673 |
| 05     | 39868 |                         | 39752 |         | 39636 |         | 39685 |
| 10     | 39865 |                         | 39751 |         | 39638 |         | 39661 |
| 15     | 39862 |                         | 39761 |         | 39633 |         | 39661 |
| 20     | 39856 |                         | 39742 |         | 39638 |         | 39652 |
| 25     | 39853 |                         | 39748 |         | 39638 |         | 39653 |
| 0030   | 39854 | 0330                    | 39736 | 0630    | 39642 | 0930    | 39654 |
| 35     | 39853 |                         | 39721 |         | 39647 |         | 39651 |
| 40     | 39851 |                         | 39731 |         | 39649 |         | 39648 |
| 45     | 39845 |                         | 39730 |         | 39648 |         | 39646 |
| 50     | 39848 |                         | 39730 |         | 39646 |         | 39646 |
| 55     | 39844 |                         | 39715 |         | 39637 |         | 39645 |
| 0100   | 39848 | 0400                    | 39713 | 0700    | 39636 | 1000    | 39646 |
| 05     | 39856 |                         | 39704 |         | 39640 |         | 39644 |
| 10     | 39851 |                         | 39696 |         | 39639 |         | 39648 |
| 15     | 39849 |                         | 39685 |         | 39640 |         | 39645 |
| 20     | 39854 |                         | 39687 |         | 39638 |         | 39644 |
| 25     | 39847 |                         | 39677 |         | 39640 |         | 39646 |
| 0130   | 39846 | 0430                    | 39667 | 0730    | 39640 | 1030    | 39647 |
| 35     | 39838 |                         | 39659 |         | 39639 |         | 39645 |
| 40     | 39831 |                         | 39650 |         | 39642 |         | 39643 |
| 45     | 39830 |                         | 39645 |         | 39644 |         | 39643 |
| 50     | 39826 |                         | 39645 |         | 39643 |         | 39641 |
| 55     | 39821 |                         | 39642 |         | 39645 |         | 39638 |
| 0200   | 39812 | 0500                    | 39646 | 0800    | 39648 | 1100    | 39638 |
| 05     | 39812 |                         | 39648 |         | 39646 |         | 39636 |
| 10     | 39813 |                         | 39651 |         | 39653 |         | 39639 |
| 15     | 39811 |                         | 39652 |         | 39652 |         | 39638 |
| 20     | 39800 |                         | 39644 |         | 39658 |         | 39637 |
| 25     | 39800 |                         | 39643 |         | 39674 |         | 39637 |
| 0230   | 39786 | 0530                    | 39636 | 0830    | 39679 | 1130    | 39635 |
| 35     | 39780 |                         | 39641 |         | 39680 |         | 39634 |
| 40     | 39781 |                         | 39634 |         | 39685 |         | 39636 |
| 45     | 39782 |                         | 39632 |         | 39681 |         | 39637 |
| 50     | 39772 |                         | 39632 |         | 39680 |         | 39672 |
| 55     | 39768 |                         | 39638 |         | 39675 |         | 39638 |

2115

Apr 14

magnetics

file 19



## MAGNETICS

## LOG

PAGE 120 OF 13

| CRUISE |       |      |       | AREA    |       |      |       | PROJECT |       |      |       | DATE   |       |      |       |
|--------|-------|------|-------|---------|-------|------|-------|---------|-------|------|-------|--------|-------|------|-------|
| T-2436 |       |      |       | Gardens |       |      |       | MAS-NAT |       |      |       | 106/77 |       |      |       |
| TIME   |       | TIME |       | TIME    |       | TIME |       | TIME    |       | TIME |       | TIME   |       | TIME |       |
| 0000   | 40254 | 0300 | 40075 | 0600    | 40026 | 0900 | 40206 | 1200    | 40195 | 1500 | 40046 | 1800   | 39962 | 2100 | 39891 |
| 05     | 40252 |      | 40076 |         | 40025 |      | 40212 |         | 40172 |      | 40043 |        | 39960 |      | 39894 |
| 10     | 40234 |      | 40076 |         | 40030 |      | 40218 |         | 40157 |      | 40037 |        | 39958 |      | 39894 |
| 15     | 40266 |      | 40075 |         | 40030 |      | 40216 |         | 40134 |      | 40035 |        | 39956 |      | 39902 |
| 20     | 40247 |      | 40069 |         | 40034 |      | 40236 |         | 40127 |      | 40025 |        | 39952 |      | 39909 |
| 25     | 40248 |      | 40066 |         | 40041 |      | 40248 |         | 40121 |      | 40012 |        | 39953 |      | 39922 |
| 0030   | 40241 | 0330 | 40065 | 0630    | 40043 | 0930 | 40254 | 1230    | 40114 | 1530 | 40014 | 1830   | 39951 | 2130 | 39936 |
| 35     | 40234 |      | 40060 |         | 40037 |      | 40259 |         | 40108 |      | 40004 |        | 39952 |      | 39964 |
| 40     | 40240 |      | 40052 |         | 40039 |      | 40268 |         | 40106 |      | 39993 |        | 39959 |      | 39980 |
| 45     | 40236 |      | 40056 |         | 40050 |      | 40274 |         | 40102 |      | 39991 |        | 39956 |      | 39998 |
| 50     | 40228 |      | 40050 |         | 40054 |      | 40279 |         | 40099 |      | 39984 |        | 39960 |      | 40005 |
| 55     | 40217 |      | 40050 |         | 40058 |      | 40286 |         | 40091 |      | 39991 |        | 39967 |      | 40009 |
| 0100   | 40207 | 0400 | 40050 | 0700    | 40068 | 1000 | 40293 | 1300    | 40082 | 1600 | 39984 | 1900   | 39970 | 2200 | 40000 |
| 05     | 40193 |      | 40050 |         | 40076 |      | 40297 |         | 40074 |      | 39988 |        | 39975 |      | 39987 |
| 10     | 40183 |      | 40045 |         | 40078 |      | 0     |         | 40054 |      | 39992 |        | 39976 |      | 39976 |
| 15     | 40174 |      | 40045 |         | 40099 |      | 0     |         | 40038 |      | 39992 |        | 39970 |      | 39973 |
| 20     | 40174 |      | 40032 |         | 40101 |      | 40334 |         | 40024 |      | 40002 |        | 39968 |      | 39965 |
| 25     | 40167 |      | 40037 |         | 40103 |      | 40347 |         | 40004 |      | 40006 |        | 39968 |      | 39950 |
| 0130   | 40162 | 0430 | 40035 | 0730    | 40115 | 1030 | 40352 | 1330    | 39996 | 1630 | 40013 | 1930   | 39968 | 2230 | 39958 |
| 35     | 40145 |      | 40026 |         | 40117 |      | 40355 |         | 39993 |      | 40023 |        | 39962 |      | 39926 |
| 40     | 40144 |      | 40020 |         | 40122 |      | 40360 |         | 39999 |      | 40029 |        | 39957 |      | 39909 |
| 45     | 40133 |      | 40019 |         | 40128 |      | 40364 |         | 40010 |      | 40032 |        | 39945 |      | 39895 |
| 50     | 40130 |      | 40026 |         | 40140 |      | 40361 |         | 40021 |      | 40028 |        | 39927 |      | 39869 |
| 55     | 40120 |      | 40029 |         | 40145 |      | 40355 |         | 40035 |      | 40032 |        | 39890 |      | 39867 |
| 0200   | 40113 | 0500 | 40012 | 0800    | 40148 | 1100 | 40348 | 1400    | 40051 | 1700 | 40032 | 2000   | 39878 | 2300 | 39855 |
| 05     | 40107 |      | 40014 |         | 40151 |      | 40327 |         | 40066 |      | 40030 |        | 39856 |      | 39845 |
| 10     | 40100 |      | 40018 |         | 40152 |      | 40326 |         | 40072 |      | 40027 |        | 39873 |      | 39836 |
| 15     | 40091 |      | 40020 |         | 40158 |      | 40317 |         | 40076 |      | 40023 |        | 39816 |      | 39824 |
| 20     | 40092 |      | 40015 |         | 40162 |      | 40310 |         | 40073 |      | 40018 |        | 39810 |      | 39813 |
| 25     | 40086 |      | 40015 |         | 40166 |      | 40299 |         | 40086 |      | 40016 |        | 39816 |      | 39811 |
| 0230   | 40084 | 0530 | 40006 | 0830    | 40170 | 1130 | 40213 | 1430    | 40085 | 1730 | 40008 | 2030   | 39821 | 2330 | 39811 |
| 35     | 40079 |      | 40011 |         | 40174 |      | 40283 |         | 40085 |      | 40003 |        | 39823 |      | 39807 |
| 40     | 40065 |      | 40014 |         | 40178 |      | 40273 |         | 40079 |      | 39994 |        | 39836 |      | 39807 |
| 45     | 40078 |      | 40021 |         | 40183 |      | 40257 |         | 40066 |      | 39982 |        | 39846 |      | 39806 |
| 50     | 40079 |      | 40026 |         | 40192 |      | 40239 |         | 40056 |      | 39972 |        | 39865 |      | 39801 |
| 55     | 40075 |      | 40020 |         | 40200 |      | 40216 |         | 40051 |      | 39968 |        | 39884 |      | 39794 |

Apr 16

Magnetics

file 21

| CRUISE   |       | AREA                  |       | PROJECT |       | DATE    |       |
|----------|-------|-----------------------|-------|---------|-------|---------|-------|
| TG 24-36 |       | Guatemala El Salvador |       | MAS-NAT |       | 10/7/77 |       |
| TIME     |       | TIME                  |       | TIME    |       | TIME    |       |
| 0000     | 39787 | 0300                  | 39789 | 0600    | 39778 | 0900    | 39668 |
|          |       |                       |       |         |       | 1200    | 39848 |
|          |       |                       |       |         |       | 1500    | 39817 |
|          |       |                       |       |         |       | 1800    | 40264 |
|          |       |                       |       |         |       | 2100    |       |
| 05       | 39781 |                       | 39782 |         | 39778 |         | 39668 |
| 10       | 39777 |                       | 39776 |         | 39777 |         | 39674 |
| 15       | 39774 |                       | 39772 |         | 39770 |         | 39678 |
| 20       | 39773 |                       | 39763 |         | 39765 |         | 39684 |
| 25       | 39773 |                       | 39756 |         | 39757 |         | 39691 |
|          |       |                       |       |         |       |         | 39838 |
| 0030     | 39776 | 0330                  | 39749 | 0630    | 39750 | 0930    | 39698 |
|          |       |                       |       |         |       | 1230    | 39837 |
|          |       |                       |       |         |       | 1530    | 39872 |
|          |       |                       |       |         |       | 1830    |       |
|          |       |                       |       |         |       | 2130    |       |
| 35       | 39783 |                       | 39743 |         | 39746 |         | 39702 |
| 40       | 39787 |                       | 39744 |         | 39743 |         | 39710 |
| 45       | 39789 |                       | 39743 |         | 39740 |         | 39716 |
| 50       | 39792 |                       | 39737 |         | 39744 |         | 39723 |
| 55       | 39796 |                       | 39733 |         | 39747 |         | 39734 |
|          |       |                       |       |         |       |         | 39819 |
| 0100     | 39801 | 0400                  | 39730 | 0700    | 39752 | 1000    | 39740 |
|          |       |                       |       |         |       | 1300    | 39817 |
|          |       |                       |       |         |       | 1600    | 39926 |
|          |       |                       |       |         |       | 1900    |       |
|          |       |                       |       |         |       | 2200    |       |
| 05       | 39804 |                       | 39726 |         | 39752 |         | 39747 |
| 10       | 39808 |                       | 39723 |         | 39754 |         | 39752 |
| 15       | 39810 |                       | 39722 |         | 39753 |         | 39757 |
| 20       | 39814 |                       | 39719 |         | 39748 |         | 39763 |
| 25       | 39815 |                       | 39716 |         | 39744 |         | 39769 |
|          |       |                       |       |         |       |         | 39973 |
| 0130     | 39817 | 0430                  | 39715 | 0730    | 39736 | 1030    | 39770 |
|          |       |                       |       |         |       | 1330    | down  |
|          |       |                       |       |         |       | 1630    | 39988 |
|          |       |                       |       |         |       | 1930    |       |
|          |       |                       |       |         |       | 2230    |       |
| 35       | 39818 |                       | 39716 |         | 39728 |         | 39771 |
| 40       | 39816 |                       | 39716 |         | 39719 |         | 39773 |
| 45       | 39816 |                       | 39715 |         | 39708 |         | 39777 |
| 50       | 39815 |                       | 39721 |         | 39702 |         | 39779 |
| 55       | 39815 |                       | 39724 |         | 39696 |         | 39779 |
|          |       |                       |       |         |       |         | 40036 |
| 0200     | 39814 | 0500                  | 39727 | 0800    | 39690 | 1100    | 39779 |
|          |       |                       |       |         |       | 1400    |       |
|          |       |                       |       |         |       | 1700    | 40046 |
|          |       |                       |       |         |       | 2000    |       |
|          |       |                       |       |         |       | 2300    |       |
| 05       | 39813 |                       | 39730 |         | 39682 |         | 39781 |
| 10       | 39812 |                       | 39733 |         | 39680 |         | 39786 |
| 15       | 39805 |                       | 39740 |         | 39676 |         | 39793 |
| 20       | 39802 |                       | 39744 |         | 39674 |         | 39799 |
| 25       | 39798 |                       | 39746 |         | 39671 |         | 39812 |
|          |       |                       |       |         |       |         | 40121 |
| 0230     | 39800 | 0530                  | 39755 | 0830    | 39665 | 1130    | 39824 |
|          |       |                       |       |         |       | 1430    |       |
|          |       |                       |       |         |       | 1730    | 40142 |
|          |       |                       |       |         |       | 2030    |       |
|          |       |                       |       |         |       | 2330    |       |
| 35       | 39799 |                       | 39758 |         | 39657 |         | 39835 |
| 40       | 39799 |                       | 39764 |         | 39655 |         | 39845 |
| 45       | 39798 |                       | 39768 |         | 39649 |         | 39850 |
| 50       | 39795 |                       | 39770 |         | 39652 |         | 39851 |
| 55       | 39794 |                       | 39774 |         | 39659 |         | 39849 |
|          |       |                       |       |         |       |         | 40243 |

END TG 24-36

ARRIVE  
Acojutla,  
El Salvador

Apr 17

magnetics

File 22