

CONSERVATION MEASURE 144/XVI
Exploratory Fishery for *Dissostichus* spp. taken by the Trawl Method
in Statistical Division 58.4.3 in the 1997/98 Season

The Commission hereby adopts the following Conservation measure in accordance with Conservation Measure 65/XII:

1. Fishing for *Dissostichus* spp. by trawl in Statistical Division 58.4.3 north of 60°S shall be limited to the exploratory fishery by Australian flagged vessels only. The total catch of *Dissostichus* spp. in the 1997/98 season shall not exceed 963 tonnes taken by the trawl method.
2. For the purposes of this Conservation Measure the 1997/98 season is defined as the period from 8 November 1997 to the end of the Commission meeting in 1998 or until the catch limit is reached, whichever is the sooner.
3. Each vessel participating in the exploratory fishery for *Dissostichus* spp. in Statistical Division 58.4.3 shall have at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation on board throughout all fishing activities within the Division.
4. Each vessel operating in the exploratory fishery for *Dissostichus* spp. in Statistical Division 58.4.3 shall have a VMS¹ at all times.
5. For the purpose of implementing this Conservation Measure:
 - (i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 51/XII shall apply; and
 - (ii) the monthly fine-scale biological data, as required under Conservation Measure 121/XVI, shall be recorded and reported in accordance with the System of International Scientific Observation.
6. If in the course of a directed fishery for *Dissostichus* spp., the by-catch in any one haul of the species *Lepidonotothen squamifrons*, *Notothenia rossii*, *Channichthys rhinoceratus* or *Bathyraja* spp. either,
 - (i) is greater than 100 kg and exceeds 5% of the total catch of fish species by weight; or,
 - (ii) is equal to, or greater than 2 tonnes, then

the fishing vessel shall move to another fishing location at least 5 n miles distant². The fishing vessel shall not return to any point within 5 n miles of the location where the by-catch exceeded 5% for a period of at least five days³. The location where the by-catch exceeded 5% is defined as the path followed by the fishing vessel from the point at which the fishing gear was first deployed from the fishing vessel to the point at which the fishing gear was retrieved by the fishing vessel.

7. The total number and weight of *Dissostichus* spp. discarded, including those with the jellymeat condition, shall be reported. These fish will count towards the total allowable catch.

8. The data collection plan in Annex 144/A will be implemented and the results reported to CCAMLR not later than three months after the closure of the fishery.

¹ As described in Resolution 12/XVI.

² This provision is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.

³ The specified period is adopted in accordance with the reporting period specified in Conservation Measure 51/XII, pending the adoption of a more appropriate period by the Commission.

RESEARCH AND FISHERY OPERATIONS PLAN

During the early stages of exploratory fishing on the Elan and BANZARE Banks, subject to the catch limits set by CCAMLR, Australian vessels will conduct a trawl survey to assess the biomass of commercially important species on each of the banks down to 1 500 m depth. Exploration and surveys might not occur on both banks in the same season, but commercial exploration will not occur unless a survey is conducted at the same time. The survey, once commenced, will be completed in as short a time period as possible.

The survey on each bank will comprise 40 hauls at randomly chosen positions. Because the suitability of the bottom on these banks for fishing is not well known, and even the positions of some parts of the banks are not precisely known, it is likely that a high proportion of the sites will be unsuitable for trawling. To make the survey as practicable as possible, the ground shallower than 1 500 m on each bank has been divided into just over 40 squares, each of 15 n miles square for Elan Bank and 25 n miles square for BANZARE Bank (Figures 1 and 2). Within each square, five randomly chosen trawling positions have been nominated (Tables 1 and 2), and the vessel will trawl at one of the five positions in each square. If no nominated trawl position in a square is suitable, then that square will be abandoned. More accurate charts of these areas will be available soon, and it may be necessary alter the positions of the sampling squares.

PERMIT CONDITIONS AND DATA COLLECTION PLAN

The vessels will comply with all express and implied conditions set by CCAMLR. General conditions include 120 mm minimum mesh size (Conservation Measure 2/III), and no net monitor cables to be used (Conservation Measure 30/X). The five-day catch and effort reporting system (Conservation Measure 51/XII) and the monthly effort and biological data reporting required by Conservation Measures 121/XVI and 122/XVI will also apply in Division 58.4.3.

In addition to conditions set by CCAMLR, the Australian Fisheries Management Authority (AFMA) will require that the vessels carry an operating VMS which will enable AFMA to know their position at all times. An inspector/scientific observer will also be aboard all vessels at all times to monitor activities and catches and to collect biological data.

The following data and material will be collected from both the survey and commercial fishing operations, as required by the CCAMLR *Scientific Observers Manual* for finfish fisheries:

- (i) haul-by-haul catch and catch per effort by species;
- (ii) haul-by-haul length frequency of common species;
- (iii) sex and gonad state of common species;
- (iv) diet and stomach fullness;
- (v) scales and/or otoliths for age determination;
- (vi) by-catch of fish and other organisms; and
- (vii) observations on the occurrence of seabirds and mammals in relation to fishing operations, and details of any incidental mortality of these animals.

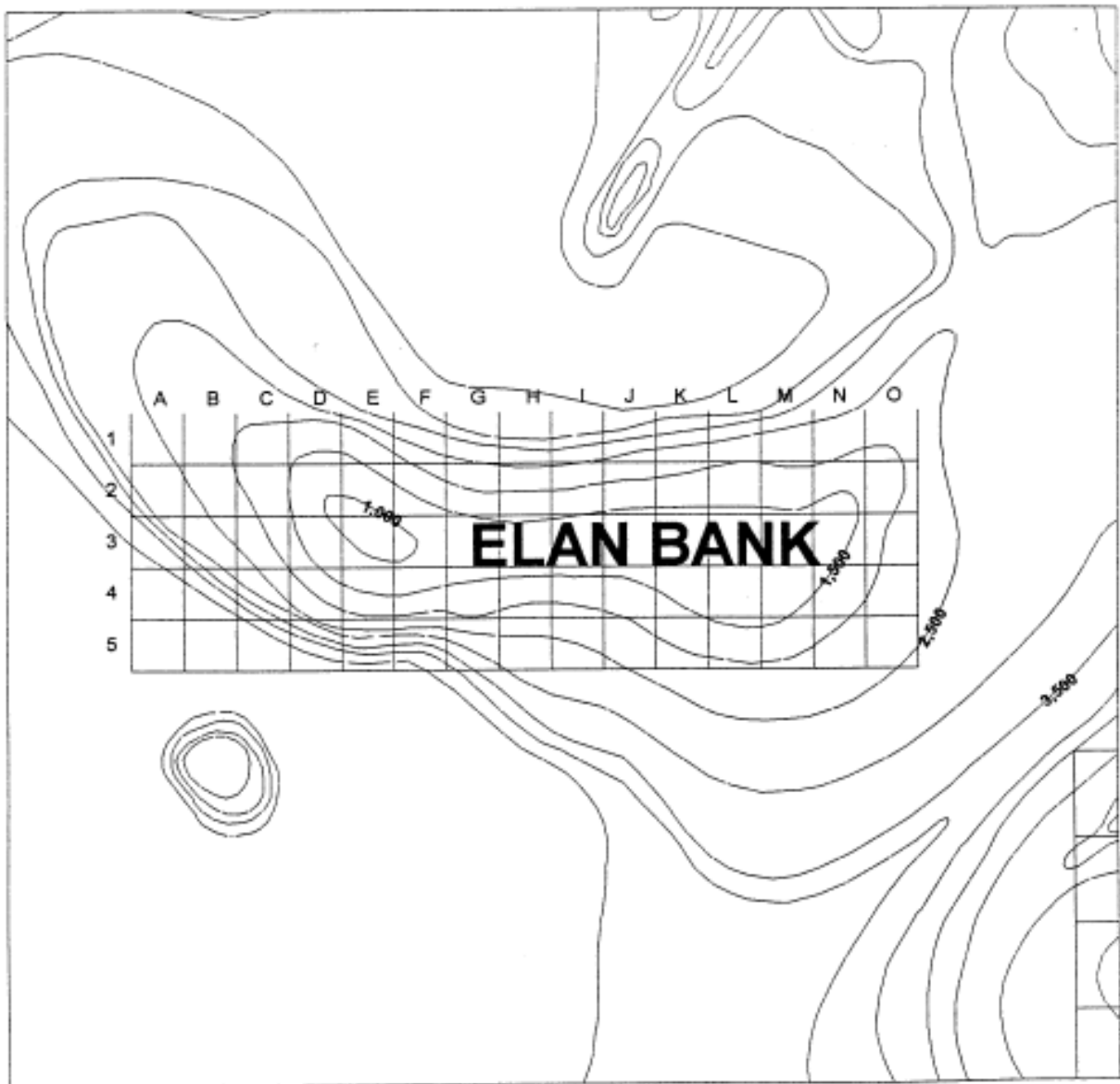


Figure 1: Chart of the Elan Bank area, showing the location and numbering system of the 15 n mile sampling squares.

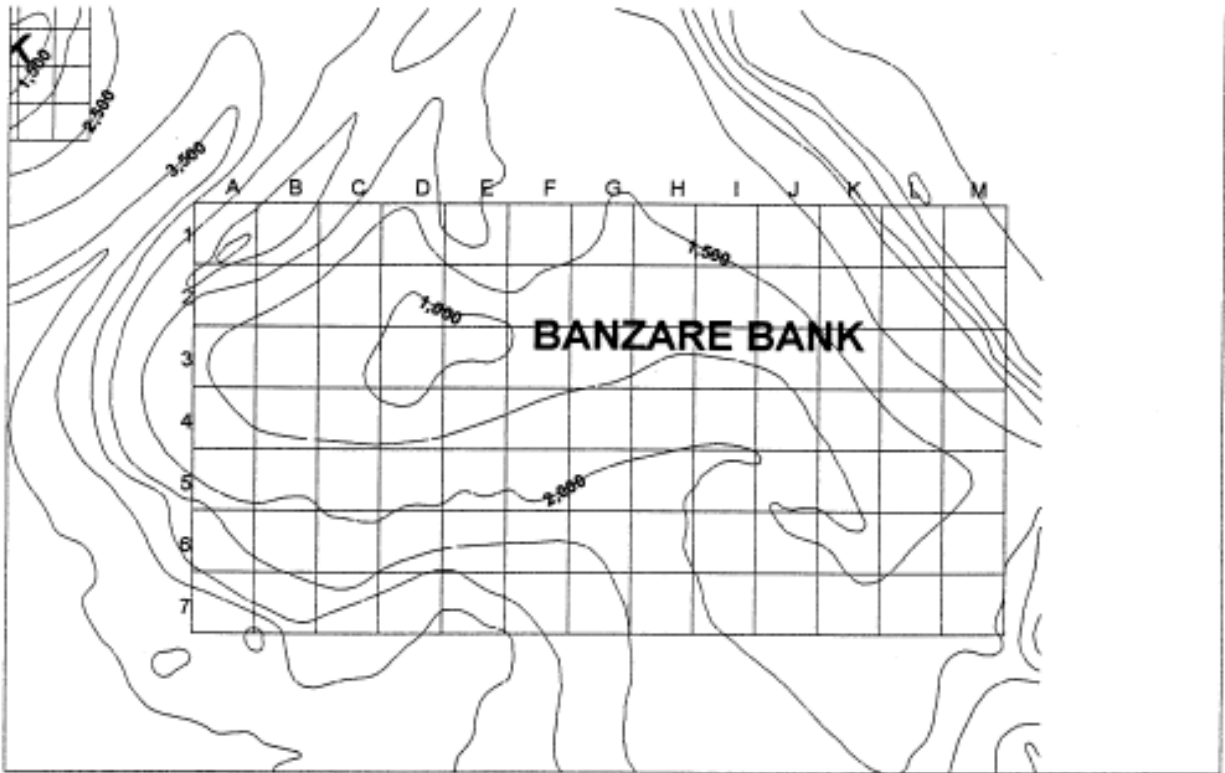


Figure 2: Chart of the BANZARE Bank area, showing the location and numbering system of the 25 n mile sampling squares.

Table 1: List of random trawl stations for Elan Bank. Square grid locations are shown on Figure 1.

Square Grid Locations	First Station	Second Station	Third Station	Fourth Station	Fifth Station
A1	S56 24.55:E065 55.28	S56 21.12:E066 3.82	S56 17.66:E065 50.32	S56 14.65:E066 4.36	S56 26.73:E066 5.89
A2	S56 30.88:E065 50.84	S56 38.82:E066 1.89	S56 41.46:E065 44.57	S56 31.88:E066 4.77	S56 41.86:E066 9.47
A3	S56 43.80:E065 59.38	S56 47.81:E066 10.68	S56 55.20:E066 9.21	S56 56.51:E065 56.59	S56 43.96:E065 47.81
A4	S57 1.86:E065 50.20	S57 11.73:E066 10.04	S57 4.77:E066 2.05	S57 8.51:E065 55.01	S56 57.71:E066 3.60
B1	S56 19.77:E066 24.88	S56 24.48:E066 23.68	S56 27.58:E066 11.59	S56 15.71:E066 14.24	S56 15.57:E066 32.45
B2	S56 32.59:E066 26.48	S56 41.04:E066 33.01	S56 41.31:E066 15.90	S56 36.50:E066 12.88	S56 31.14:E066 16.33
B3	S56 57.24:E066 30.36	S56 56.25:E066 15.73	S56 51.16:E066 25.84	S56 48.05:E066 15.76	S56 43.91:E066 26.87
B4	S57 8.66:E066 31.75	S57 10.15:E066 18.07	S56 57.75:E066 36.28	S56 58.71:E066 11.59	S57 3.86:E066 22.46
C1	S56 13.43:E066 43.93	S56 14.03:E066 51.00	S56 20.12:E066 47.04	S56 20.73:E067 2.48	S56 25.59:E066 56.10
C2	S56 28.07:E066 46.62	S56 33.00:E067 5.98	S56 37.80:E066 55.92	S56 40.03:E067 4.47	S56 38.39:E066 41.83
C3	S56 42.86:E066 59.98	S56 48.13:E066 39.05	S56 53.97:E066 45.39	S56 48.01:E066 56.59	S56 57.31:E067 2.60
C4	S56 59.31:E067 3.75	S57 9.51:E066 59.68	S57 7.15:E066 41.78	S57 12.46:E066 38.81	S57 1.67:E066 49.23
D1	S56 17.42:E067 25.10	S56 22.14:E067 12.51	S56 12.84:E067 21.12	S56 23.03:E067 22.84	S56 13.68:E067 10.66
D2	S56 32.16:E067 7.69	S56 33.54:E067 26.84	S56 37.29:E067 11.22	S56 27.87:E067 28.71	S56 38.10:E067 20.66
D3	S56 50.27:E067 28.99	S56 46.18:E067 12.53	S56 42.89:E067 26.35	S56 56.10:E067 7.64	S56 57.46:E067 31.84
D4	S57 11.71:E067 31.52	S57 11.31:E067 10.26	S57 11.92:E067 20.28	S57 1.14:E067 29.01	S57 1.82:E067 15.79
E1	S56 17.94:E067 47.43	S56 21.58:E067 35.71	S56 22.18:E067 53.91	S56 26.71:E067 43.50	S56 14.81:E067 36.87
E2	S56 34.13:E067 33.41	S56 39.36:E067 43.38	S56 27.69:E067 52.77	S56 27.87:E067 42.28	S56 33.46:E067 44.98
E3	S56 52.19:E067 51.62	S56 48.28:E067 42.73	S56 56.95:E067 57.64	S56 45.39:E067 55.36	S56 55.34:E067 42.67
E4	S57 10.30:E067 45.79	S57 0.91:E067 55.70	S57 6.08:E067 39.83	S57 8.91:E067 59.13	S57 4.51:E067 48.72
F2	S56 31.79:E068 19.54	S56 29.77:E068 7.02	S56 42.14:E068 19.35	S56 39.69:E068 27.72	S56 42.53:E068 2.68
F3	S56 49.85:E068 10.15	S56 53.68:E068 6.36	S56 50.13:E068 26.41	S56 42.67:E068 27.43	S56 44.87:E068 18.07
F4	S57 1.32:E068 15.10	S57 11.30:E068 22.33	S57 5.48:E068 21.23	S56 58.09:E068 24.18	S57 9.65:E068 7.07

Table 1 (continued)

Square Grid Locations	First Station	Second Station	Third Station	Fourth Station	Fifth Station
G3	S56 52.75:E068 44.92	S56 51.43:E068 47.19	S56 43.84:E068 55.14	S56 43.63:E068 40.01	S56 49.36:E068 34.34
G4	S57 9.15:E068 45.12	S57 9.09:E068 54.03	S57 10.80:E068 34.27	S57 0.20:E068 46.70	S57 5.54:E068 38.71
H3	S56 55.61:E069 16.27	S56 45.47:E069 14.63	S56 51.20:E068 57.49	S56 50.62:E069 17.28	S56 43.85:E068 57.67
H4	S57 3.55:E068 58.58	S57 5.71:E069 18.97	S56 59.69:E069 9.34	S57 10.24:E069 7.86	S57 11.67:E069 18.29
I3	S56 54.98:E069 28.76	S56 45.85:E069 44.25	S56 52.47:E069 40.74	S56 47.59:E069 33.11	S56 49.09:E069 23.90
I4	S56 58.09:E069 22.93	S56 58.48:E069 29.63	S57 5.01:E069 28.52	S57 2.20:E069 40.34	S57 6.80:E069 44.71
J2	S56 41.22:E070 12.99	S56 37.35:E070 5.22	S56 28.16:E070 6.82	S56 37.77:E069 50.54	S56 42.32:E069 57.38
J3	S56 44.29:E070 3.81	S56 46.26:E070 4.58	S56 48.97:E070 16.73	S56 53.70:E069 59.62	S56 49.47:E069 50.61
J4	S57 7.43:E070 0.43	S57 6.37:E070 8.17	S56 57.71:E070 14.28	S57 0.09:E069 55.88	S57 11.12:E070 13.28
K2	S56 35.56:E070 23.01	S56 30.25:E070 43.89	S56 38.08:E070 32.86	S56 28.40:E070 21.44	S56 42.07:E070 23.07
K3	S56 48.69:E070 18.37	S56 54.12:E070 24.61	S56 44.02:E070 36.35	S56 54.77:E070 38.90	S56 49.46:E070 39.43
K4	S57 3.49:E070 31.74	S57 9.24:E070 25.28	S56 57.79:E070 28.55	S57 11.43:E070 44.95	S57 0.18:E070 18.83
L2	S56 41.58:E070 52.32	S56 40.63:E071 10.52	S56 28.96:E071 11.74	S56 37.49:E070 46.66	S56 37.42:E071 2.33
L3	S56 43.03:E070 56.09	S56 47.01:E071 3.54	S56 51.73:E070 55.05	S56 56.84:E070 47.53	S56 55.15:E071 4.23
L4	S56 59.49:E070 59.86	S57 8.39:E070 56.57	S57 1.20:E070 48.39	S57 5.07:E071 8.73	S57 9.40:E070 45.68
L5	S57 25.96:E071 4.82	S57 26.01:E071 12.54	S57 16.56:E071 10.81	S57 16.14:E070 58.26	S57 19.40:E070 50.56
M2	S56 30.47:E071 26.49	S56 41.30:E071 32.08	S56 36.42:E071 24.09	S56 38.61:E071 14.23	S56 28.57:E071 16.97
M3	S56 51.90:E071 29.02	S56 51.44:E071 29.81	S56 43.59:E071 21.03	S56 57.22:E071 38.90	S56 55.56:E071 19.31
M4	S57 8.41:E071 36.19	S57 1.54:E071 36.32	S57 8.12:E071 18.90	S56 58.48:E071 14.11	S57 11.74:E071 28.07
M5	S57 24.86:E071 12.87	S57 22.91:E071 29.50	S57 15.88:E071 29.57	S57 18.36:E071 18.60	S57 17.03:E071 38.76
N2	S56 36.28:E071 41.27	S56 36.81:E071 59.21	S56 41.04:E071 44.72	S56 29.13:E071 48.45	S56 28.46:E072 0.76
N3	S56 54.39:E072 3.05	S56 49.45:E071 44.59	S56 45.04:E072 4.42	S56 56.14:E071 42.39	S56 56.67:E071 53.95
N4	S57 10.90:E071 42.78	S56 59.54:E071 51.25	S57 9.56:E072 2.23	S56 59.08:E072 0.75	S57 5.76:E071 52.41

Table 2: List of random trawl stations for BANZARE Bank. Square grid locations are shown on Figure 2.

Square Grid Locations	First Station	Second Station	Third Station	Fourth Station	Fifth Station
A3	S59 6.68:E074 8.29	S58 57.00:E074 8.20	S58 52.09:E073 58.17	S59 1.81:E074 22.81	S58 51.15:E074 7.73
A4	S59 19.98:E074 44.54	S59 24.14:E074 39.25	S59 28.51:E074 16.83	S59 10.38:E074 43.06	S59 16.09:E074 34.18
B2	S58 29.53:E075 8.08	S58 34.35:E075 29.03	S58 25.12:E075 13.44	S58 24.11:E074 49.18	S58 40.60:E074 51.30
B3	S58 43.13:E074 55.73	S59 1.89:E075 11.48	S59 6.61:E074 56.73	S58 47.70:E075 17.89	S59 0.79:E074 48.47
B4	S59 27.04:E074 58.19	S59 24.82:E075 15.60	S59 14.62:E074 48.93	S59 15.43:E075 19.41	S59 31.66:E074 49.16
C1	S58 17.16:E075 36.55	S58 6.50:E075 38.50	S58 12.30:E076 21.48	S57 57.65:E075 40.85	S58 1.11:E075 51.03
C2	S58 36.14:E076 15.55	S58 41.71:E075 43.27	S58 35.57:E075 57.08	S58 18.14:E076 9.18	S58 39.07:E076 4.40
C3	S59 0.99:E075 50.17	S59 7.12:E075 44.47	S58 55.64:E075 43.37	S59 2.32:E076 0.84	S58 53.08:E076 6.38
C4	S59 22.69:E075 41.90	S59 21.69:E075 59.30	S59 9.30:E076 3.10	S59 29.82:E076 11.60	S59 17.08:E075 41.12
D1	S57 54.15:E076 33.90	S58 0.02:E076 46.21	S58 8.06:E076 36.40	S58 14.02:E076 35.91	S58 2.87:E077 5.60
D2	S58 20.00:E076 40.46	S58 34.60:E076 34.08	S58 20.38:E076 55.38	S58 32.81:E076 54.16	S58 27.78:E076 47.82
D3	S58 53.31:E077 7.82	S58 47.37:E077 7.06	S59 0.93:E076 51.30	S59 0.73:E076 34.51	S58 52.71:E076 43.69
D4	S59 31.62:E077 1.82	S59 20.84:E076 25.43	S59 15.43:E076 46.96	S59 24.03:E076 46.41	S59 18.48:E076 58.35
E2	S58 38.66:E077 42.49	S58 20.46:E077 28.30	S58 38.91:E077 55.26	S58 18.90:E077 40.11	S58 31.56:E077 27.30
E3	S58 57.84:E077 44.98	S58 43.81:E077 32.47	S58 49.99:E077 24.67	S58 57.63:E077 19.60	S58 45.47:E077 14.52
E4	S59 24.97:E077 45.35	S59 13.35:E077 44.94	S59 24.86:E077 18.27	S59 9.74:E077 55.79	S59 30.39:E077 58.36
F2	S58 31.85:E078 25.98	S58 37.98:E078 48.39	S58 23.37:E078 26.88	S58 37.55:E078 4.15	S58 35.15:E078 37.45
F3	S59 5.07:E078 47.42	S58 44.51:E078 9.18	S58 49.35:E078 45.16	S58 56.32:E078 21.30	S58 50.65:E078 32.24
F4	S59 32.20:E078 11.72	S59 26.32:E078 20.90	S59 16.74:E078 41.97	S59 8.90:E078 5.97	S59 31.68:E078 1.58
G1	S58 14.30:E078 52.18	S58 1.97:E079 24.58	S58 15.23:E079 1.60	S58 14.37:E079 14.31	S58 9.69:E079 36.73
G2	S58 36.12:E079 33.11	S58 40.88:E078 50.21	S58 28.76:E079 21.33	S58 42.18:E079 25.07	S58 24.86:E079 29.63
G3	S58 55.39:E078 52.74	S58 45.28:E079 18.68	S58 56.05:E079 22.50	S58 52.58:E079 7.93	S59 3.29:E079 36.09

Table 2 (continued)

Square Grid Locations	First Station	Second Station	Third Station	Fourth Station	Fifth Station
H1	S57 55.18:E080 24.42	S58 4.46:E080 13.98	S58 7.82:E080 1.07	S58 13.95:E080 4.73	S58 10.54:E080 24.86
H2	S58 18.32:E079 59.36	S58 28.88:E080 15.16	S58 18.77:E079 46.51	S58 24.00:E079 39.85	S58 39.60:E080 5.92
H3	S58 57.21:E079 53.27	S59 2.66:E080 21.62	S59 5.28:E079 46.51	S59 7.21:E080 3.99	S58 51.29:E079 41.58
I2	S58 23.29:E081 7.50	S58 31.36:E081 3.21	S58 38.44:E080 54.85	S58 37.98:E081 11.40	S58 25.91:E080 45.40
I3	S58 45.18:E080 46.79	S58 58.96:E080 29.85	S59 2.52:E080 50.64	S59 0.10:E080 42.13	S58 50.30:E080 36.72
J2	S58 42.04:E081 27.22	S58 23.47:E081 33.11	S58 34.05:E081 31.30	S58 38.94:E081 49.52	S58 36.20:E082 0.92
J3	S59 1.04:E081 17.15	S58 59.52:E081 37.81	S58 50.94:E081 52.49	S58 44.76:E081 20.67	S58 48.38:E082 3.04
J4	S 59 28.18:E081 23.78	S59 10.18:E081 25.53	S59 17.05:E081 22.19	S59 19.17:E081 51.46	S59 23.43:E081 39.41
J6	S60 12.55:E081 32.51	S60 4.44:E081 53.65	S60 7.81:E081 18.43	S60 7.67:E082 1.68	S60 17.36:E081 22.43
K3	S58 51.44:E082 17.45	S59 6.54:E082 22.58	S59 0.93:E082 49.02	S58 43.21:E082 7.79	S58 56.98:E082 38.52
K4	S59 9.53:E082 42.21	S59 29.98:E082 30.35	S59 26.46:E082 52.60	S59 18.94:E082 24.71	S59 17.94:E082 9.29
K5	S59 50.21:E082 36.43	S59 42.98:E082 49.35	S59 42.22:E082 9.33	S59 34.72:E082 25.80	S59 36.26:E082 46.60
K6	S60 12.27:E082 28.16	S59 57.88:E082 14.99	S60 4.79:E082 12.27	S60 15.68:E082 18.70	S60 4.65:E082 33.94
L4	S59 13.61:E082 54.09	S59 26.71:E082 57.05	S59 28.84:E083 21.14	S59 18.55:E083 28.86	S59 9.85:E083 35.25
L5	S59 49.16:E082 58.64	S59 43.61:E083 41.57	S59 40.81:E083 15.64	S59 57.45:E083 41.01	S59 54.56:E083 11.15
L6	S60 5.64:E083 24.26	S60 2.70:E083 34.56	S60 20.36:E083 35.41	S60 21.01:E083 12.15	S60 0.21:E083 3.92
M5	S59 45.76:E084 8.87	S59 39.77:E084 21.41	S59 45.64:E083 55.72	S59 46.12:E083 44.18	S59 34.33:E084 11.57