

A DATABASE ON MULTICHANNEL SEISMIC SHOTPOINTS IN THE SEA AREA OF TONGA

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SUMMARY

This report presents a database set up on SOPAC's MicroVAX computer to describe the positioning and shotpoint numbering of most of the petroleum prospecting multichannel seismic (MCS) lines in the sea area of Tonga both by commercial and non-commercial organisations. The data come mostly from digitisation of paper trackplots for the commercial surveys, and from publicly available navigation computer files for the other surveys.

The final computer files are formatted in the standard MGD77 format, from which shotpoint files at evenly spaced shotpoint intervals are prepared for the purpose of putting out displays at a given scale.

Examples of graphic displays are presented, illustrating various possibilities of the system. General information on each survey is included, and lists are provided of MCS lines with the position of first and last shotpoints, of documents physically archived in a vertical hanging storage, and of documents stored in the archive box system.

ACKNOWLEDGEMENTS

Funding for this report was provided by the Government of France. The World Data Bank, Center for underway marine geophysical data of NOAA in Boulder, Colorado, USA, copied some of the data presented here to SOPAC free of charge. BMR (Canberra) provided some data as well. IFREMER provided the basic plotting tools used to design the graphic software.

OBJECTIVES

The multichannel seismic shotpoint database has been developed to meet the objectives of the petroleum experts at SOPAC with regards to the Tonga work programme.

This report is intended to illustrate the capabilities of the offshore cruise database at SOPAC the SOPAC Secretariat, in particular its application to the management of multichannel seismic tracklines and processing of specific requests for shotpoint maps.

METHODS

MAGEON is a documentary cruise database that runs on ISIS software and contains such information as:

- identifier of the cruise
- name of the vessel and chief scientist
- dates of beginning and end of the cruise
- instrumentation used during the cruise

It is used to obtain a short list of cruises which have collected multichannel seismic data.

For non-commercial surveys, navigation and shotpoint files were obtained, merged and formatted to MGD77, checked and reduced.

For commercial cruises, the only data available were trackplots of seismic lines of various quality, showing the shotpoints along the lines; these plots were originally obtained from member countries by the SOPAC Secretariat. These trackplots have been digitised, to the best possible quality. The resulting files then have been processed to the MGD77 format.

All MGD77 files in this work have been stripped of the portions without multichannel seismic data acquisition.

Then shotpoint files were prepared containing evenly spaced shotpoint records for better presentation at the desired scale,

The graphic software had to be further improved in order to plot directly from these shotpoint

files; this software does not allow presently the preparation of maps in UTM projection. The maps are prepared in the Mercator projection, using the WGS72 ellipsoid,

These databases are set up on the SOPAC Secretariat's MicroVAX computer, which is connected to a large format pen plotter.

Area Covered

As the SOPAC Secretariat petroleum experts have been and are working particularly for Tonga, Vanuatu and Solomon Islands, the cruises and surveys included in the database favor these countries; later on and if required, cruises and surveys conducted in the waters of Papua New Guinea and Fiji, which also have petroleum potential, may be included as well.

All available multichannel seismic tracklines known to have been shot in Papua New Guinea, Solomon Islands, Vanuatu, Fiji and Tonga waters should ultimately be compiled. As Fiji have developed their own system, most of the multichannel seismic lines in Fiji waters are not included here. Not all lines from Papua New Guinea are included either, as the SOPAC Secretariat has so far had no hydrocarbon potential evaluation work programme in this country. More tracklines still need to be included from additional sources as they become available particularly for PNG waters.

List of Cruises in the sea area of Tonga

More details on cruises can be found in Annex 1.

Commercial Cruises, quality of the data

- | | |
|----------|---|
| MOBIL72: | in Fiji, Tonga, Vanuatu, and Solomon Islands; digitised from a poorly preserved set of paper hand drafted trackplots at the scale of 1:2,500,000. Raw satellite navigation. |
| SHELL70: | in Tonga; digitised from a good UTM paper computer trackplot at 1 :250,000. Radio navigation. |
| SHELL73: | in Tonga; the digital file was provided by BMR. |

WEBB77: in Tonga; digitised from a good plastic copy of UTM hand drafted trackplot at the scale of 1:50,000. Radio navigation.

WEBB79: in Tonga; same as above.

Non-commercial Cruises, quality of the data

L582SP: Tripartite I cruise in Tonga

L384SP: Tripartite II cruise in Fiji and Tonga

NAT84: in Tonga (and Fiji) by Geological Survey of Japan

The positioning of these cruises is fairly good, as they have been navigated using satellite positioning. The digital files for the Tripartite cruise have been provided by USGS, and their shotpoint files by BMR. The digital file for NAT84 has been provided by BMR, and the shotpoints picked up from the cruise log books.

RESULTS

Results are presented as sample trackplots, printouts, archives and Annexes.

Figure 1: a map has been prepared in A4 format showing the general coverage of the multichannel seismic database and the available lines.

Figure 2-9: a map in A4 format has been prepared for each of the 8 cruises to show the outline of the MCS lines.

Figure 10: shows an example of shotpoint map in Tonga at the approximate scale of 1:50,000 in the Mercator projection.

Annex 1 is a listing of the general information in MAGEON documentary database on all MCS cruises in the sea area of Tonga.

Annex 2 is a catalogue of all MCS lines in the sea area of Tonga for which a MGD77 formatted file is available at SOPAC.

Annex 3 is a catalogue of all MCS cruises documents in the sea area of Tonga stored in a vertical hanging storage in the archive room at SOPAC: most are film copies or originals of processed MCS sections. Some of these seismic sections are too long for vertical hanging: they are identified by a hanging photocopy of their legend at the relevant position, with the rolls stored in appropriate boxes. Where the MCS section is flagged as absent, it is not represented in the vertical hanging system. The next step with regard to this database is an ongoing work to log in the paper copies of MCS sections held in the Hydrocarbon section's drawer cabinet, as many of these MCS sections do not have corresponding film originals in the hanging storage.

Annex 4 briefly describes all material stored in archive boxes, related to MCS cruises in the sea area of Tonga.

DISCUSSION

As this work is an on-going task, the database is neither complete nor of homogeneous quality at present. For the quality control, please refer to the List of cruises in Annex 1.

The original documents and data used in this work are highly heterogeneous in nature and quality (line and shotpoint numbering systems, projection systems, stretched and distorted copies of original trackplots. All documents digitised are stored in the vertical hanging archive system). This means that an appropriate degree of flexibility had to be built into the software, in order to gain homogeneity.

It is desirable that all seismic lines not yet included in this work be made available to the SOPAC Secretariat, so that the database is complete.

It would also be desirable to obtain computer files from the originators of the commercial cruises, in order to improve the precision of the database.

Digitising very poor documents where nothing else is available may need to be repeated when better information is eventually made available. This is preferable, however, to carrying out hydrocarbon assessment without these data.

RECOMMENDATIONS

That all cruises and particularly commercial surveys poorly, or not yet, or only in part, included in this work be notified to the Data Management section at the SOPAC Secretariat, and that every effort be made by countries concerned to locate and provide any relevant or improved documentation in this respect.

Note: Magnetic tapes were recently obtained from BMR for cruises MOBIL72, SHELL70 and WEBB79. No attempt has been made to use these tapes for this work, although these data would probably provide more precise shotpoint maps.

CONCLUSIONS

This work allows member countries as well as the SOPAC Secretariat hydrocarbon experts to request specific plots in the future and to further cooperate with the SOPAC Secretariat's Data Management section for the preparation of more specific products.

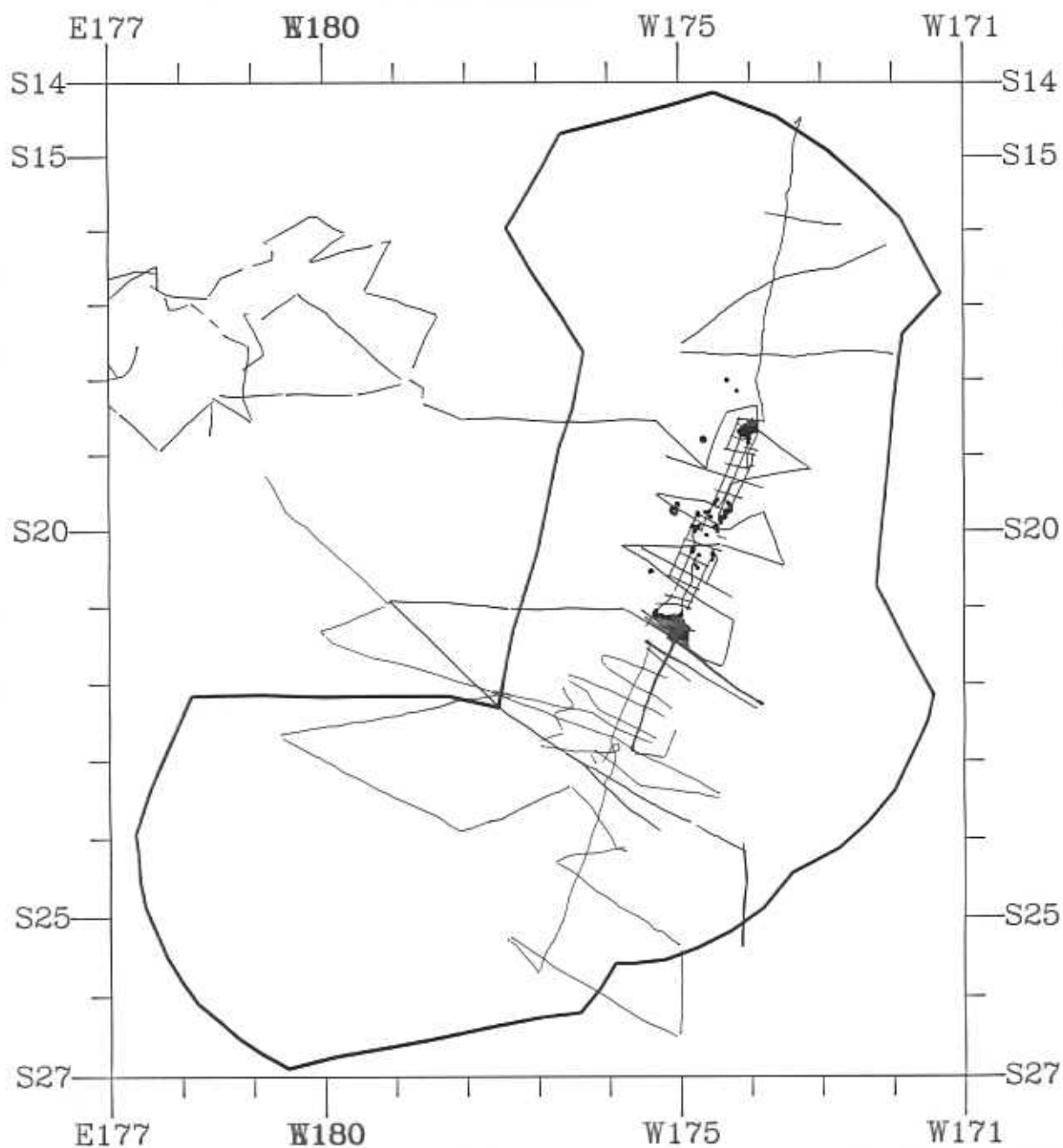


Figure 1. General trackplot of all MCS lines in the sea area of Tonga, with the coastlines and the EEZ contours. These EEZ contours are from the "US Tuna Treaty Map".

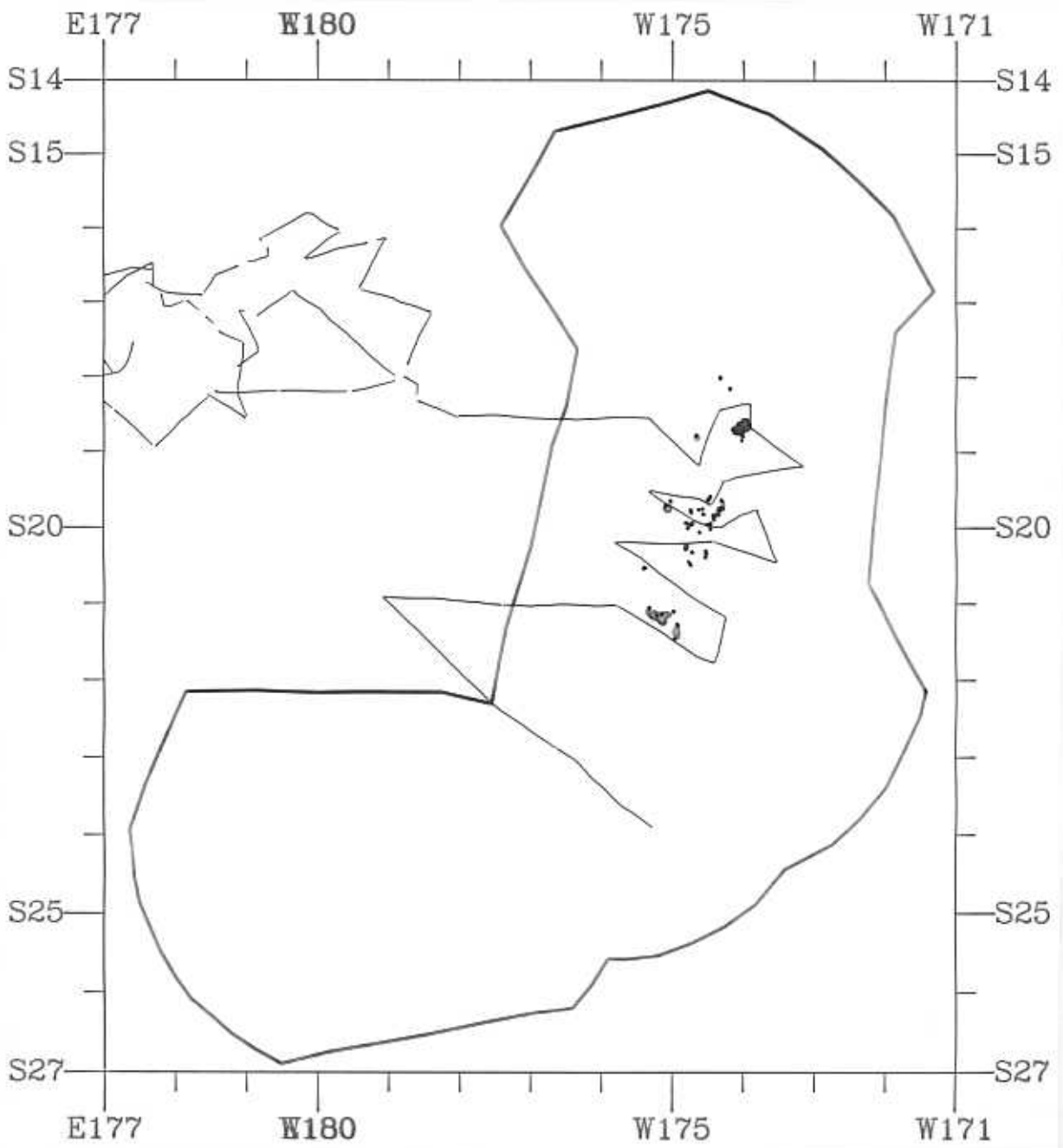


Figure 2. Trackplot of MOBIL72 MCS lines.

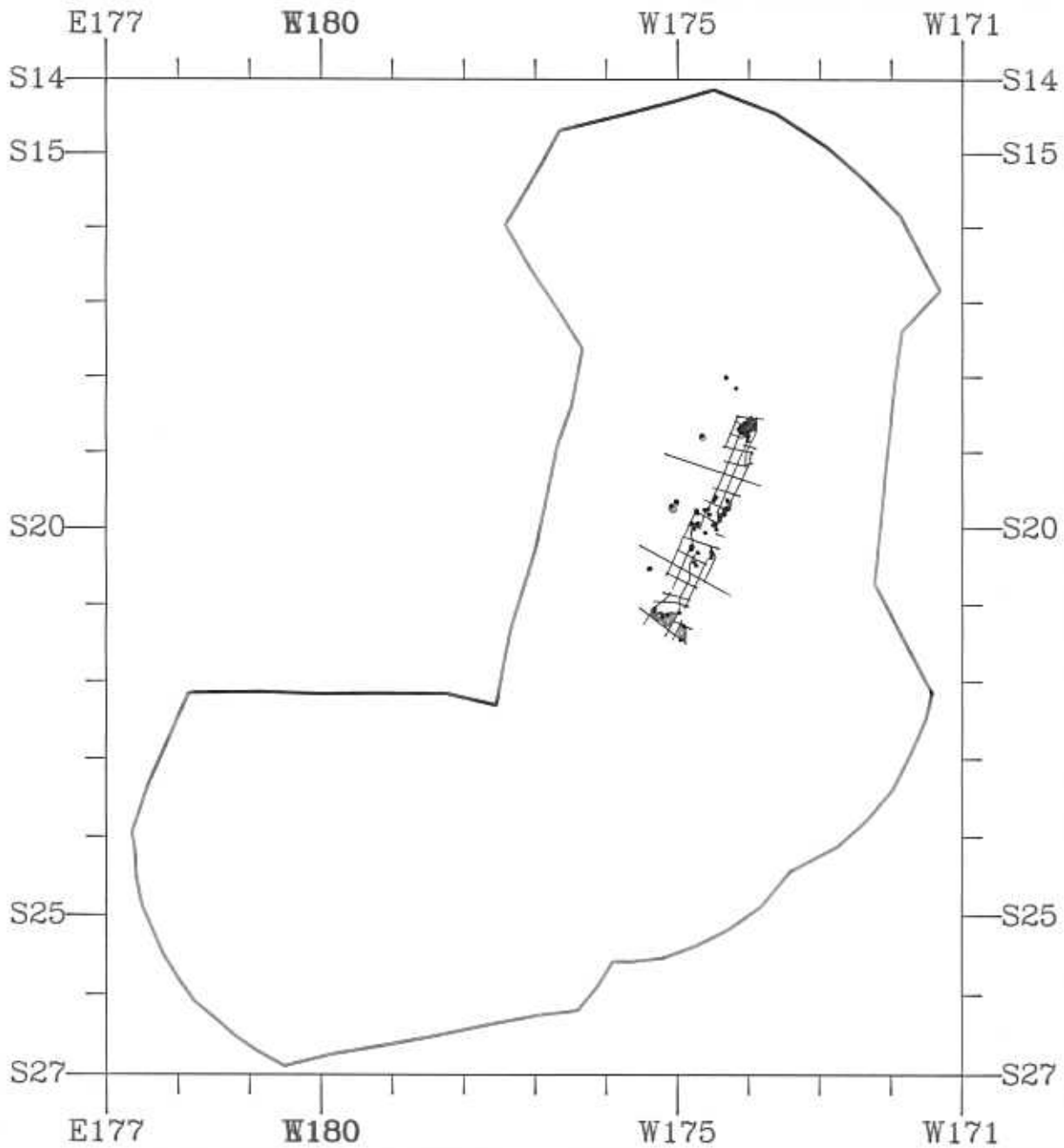


Figure 3. Trackplot of SHELL70 MCS lines.

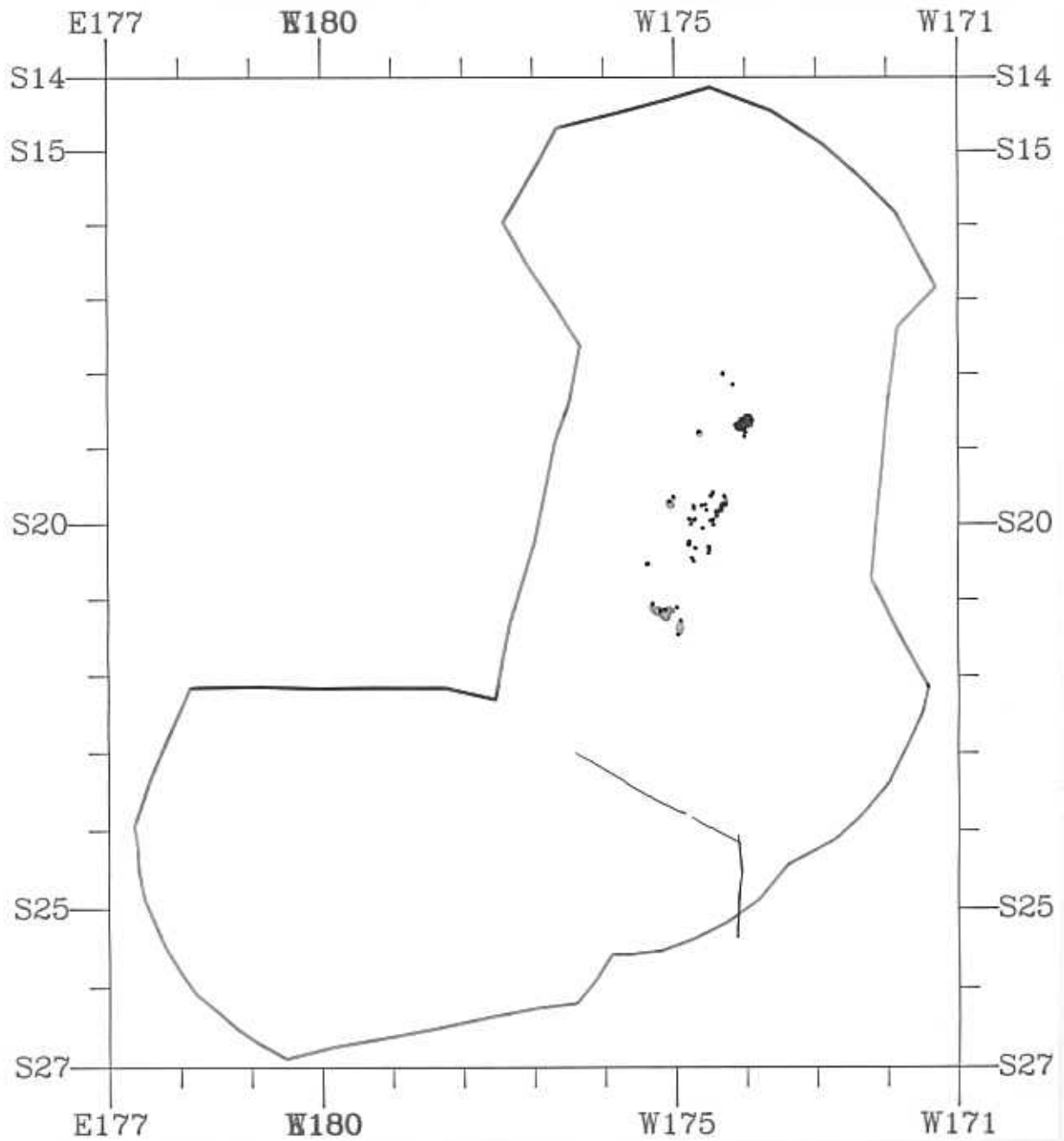


Figure 4. Trackplot of SHELL73 MCS lines.

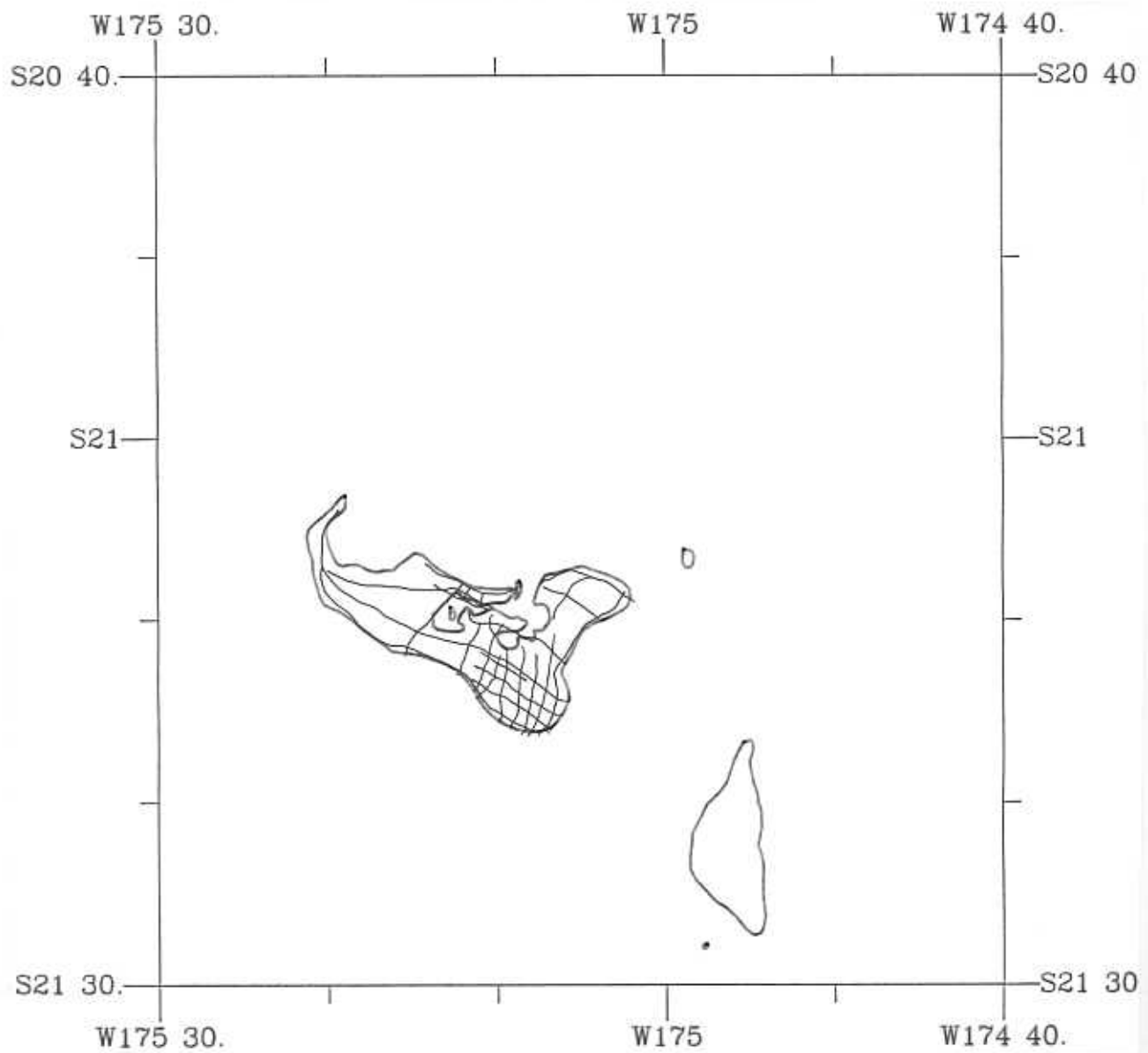


Figure 5. Trackplot of WEBB77 MCS lines.

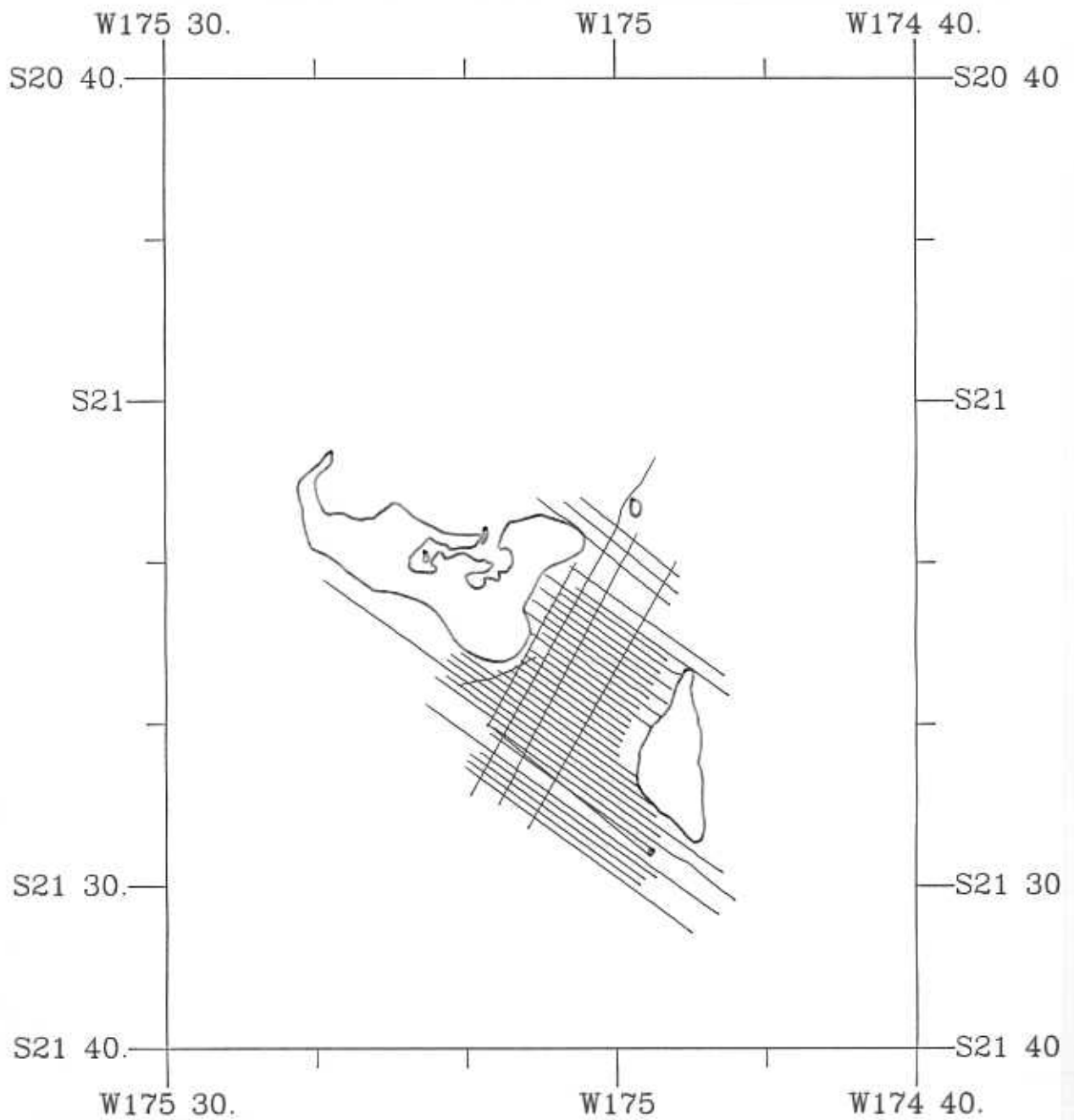


Figure 6. Trackplot of WEBB79 MCS lines.

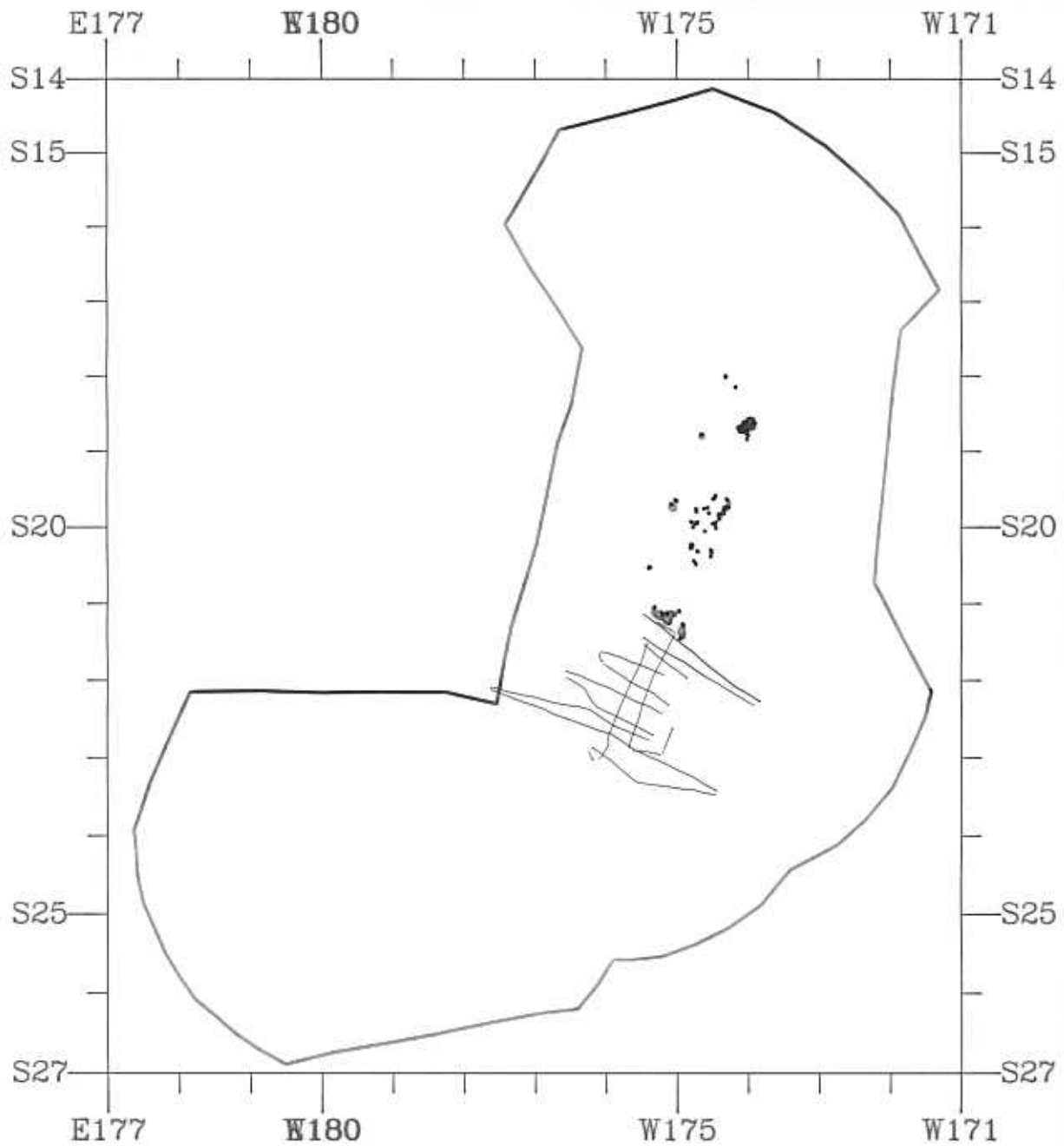


Figure 7. Trackplot of L582SP MCS lines.

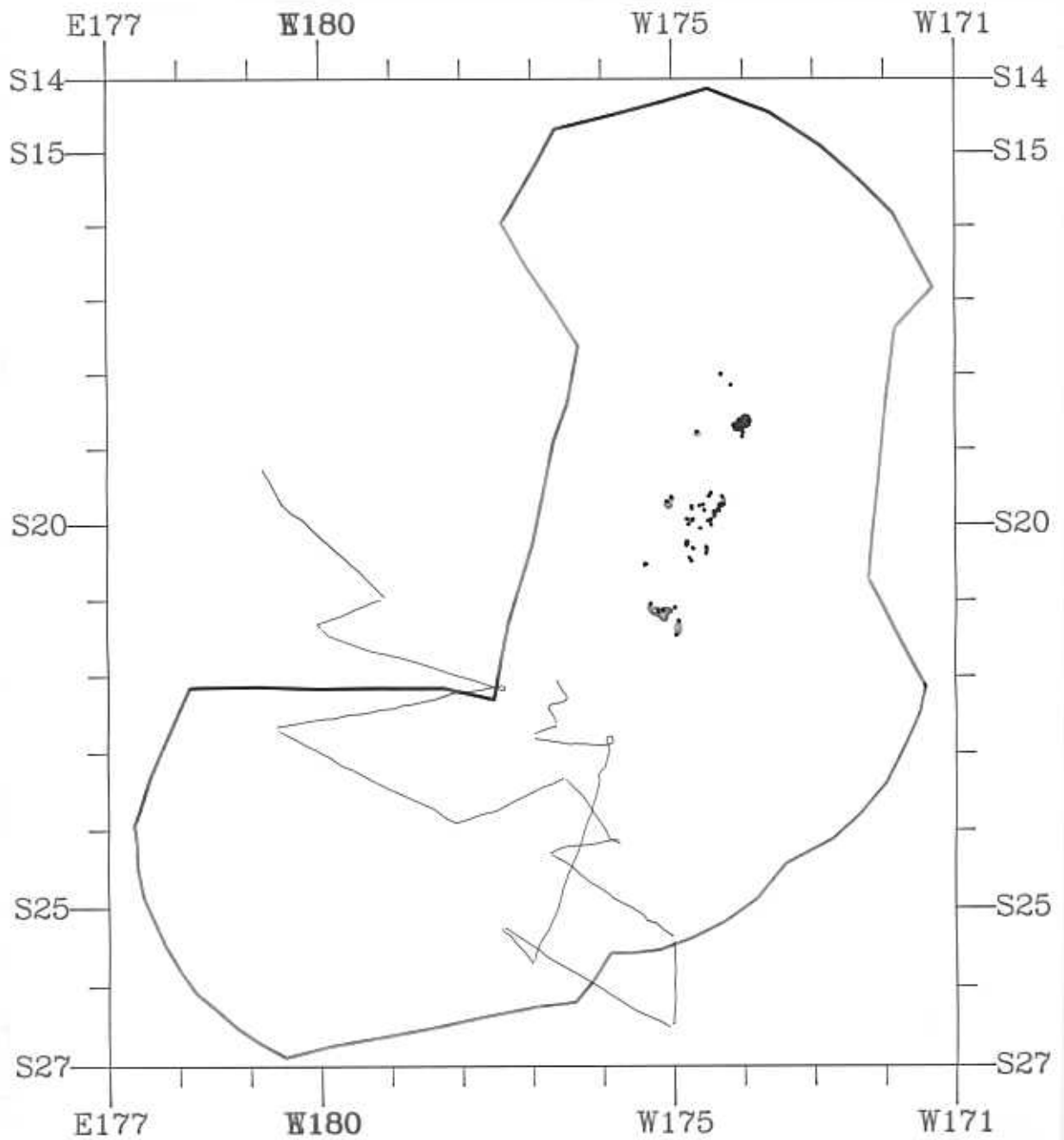


Figure 8. Trackplot of L384SP MCS lines.

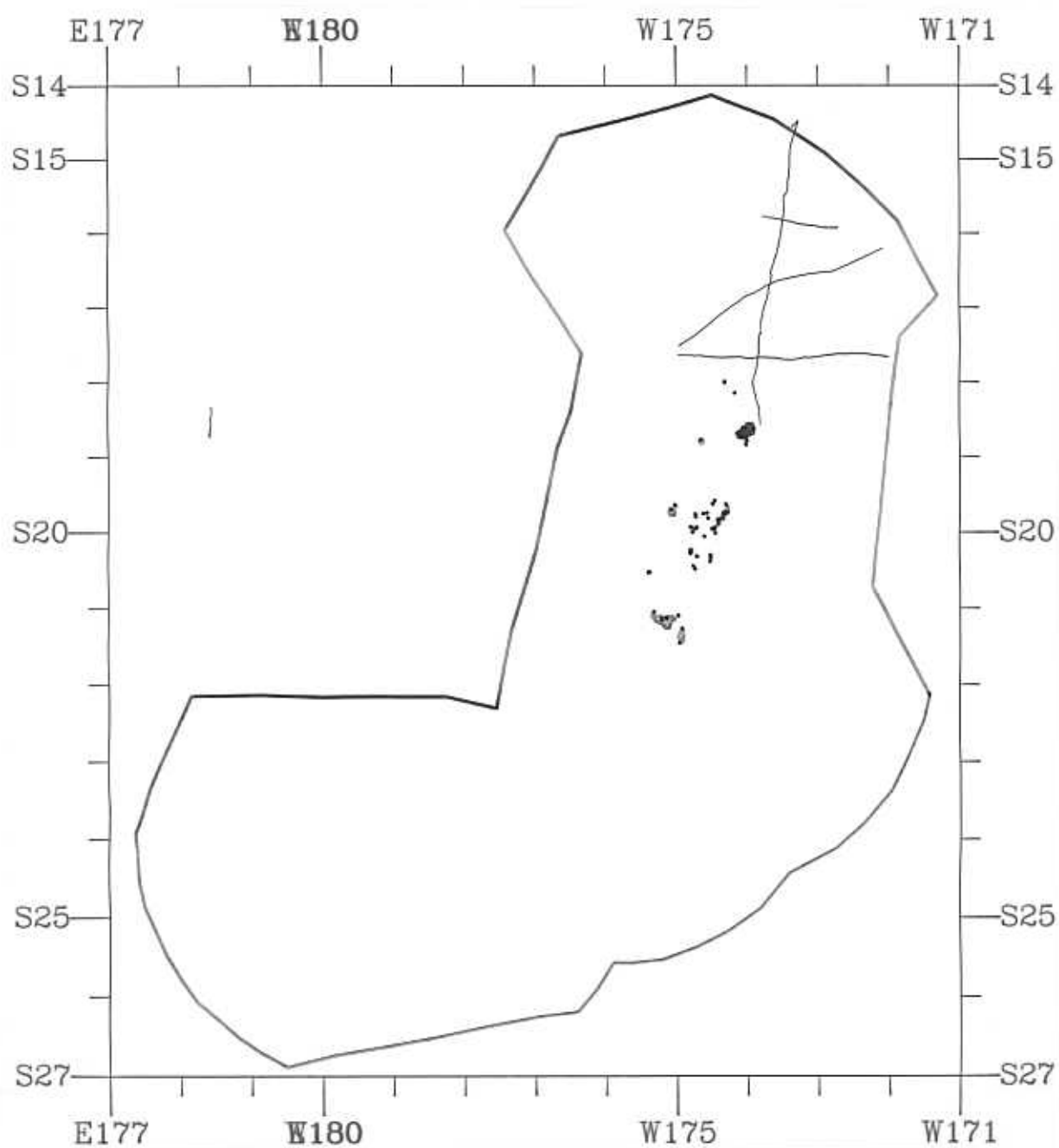


Figure 9. Trackplot of NAT84 MCS lines.

ANNEX 1

MCS Cruises in MAGEON Documentary Database

ANNEX 1: MCS CRUISES IN TONGA IN MAGEON DOCUMENTARY DATABASE

Following are some clues to read this catalogue:

First line provides a short title for the survey.

Second line provides other informations, such as:

- cruise identifier in use at SOPAC
- in brackets, the other cruise identifiers used for the same cruise, if any;
- RE143, NGDC; RE126, USGS would show that Data Management at Techsec holds digital data for this cruise in magnetic reels #143 and 126 provided respectively by NGDC and USGS;
- I043/M144; M988 would show that this cruise is described in record #43 of the ISIS database, in file #144 of the MAGEONC cruise database, and moreover that a new dataset for this cruise has been received and should supersede file #144 when processed some time in the future. M999 in place of M988 would show that Data Management at Techsec hold no digital data for this cruise and are seeking to obtain it from the originator institution.

Cruise by: lists the chief scientist, the vessel, the port and date of beginning of the cruise, the port and date of end of cruise.

Institution: provide informations on the institutions which have conducted the cruise; in brackets is the name of the project and cruise leg number where applicable.

Instrument: lists the instrumentation used on board.

PDR: precision depth recorder (12 kHz)
SBP: sub-bottom penetrator (3.5 kHz)
SLS: side looking sonar
MBES: multi beam echo sounder (Seabeam...)
NBES: narrow beam echo sounder
mag: magnetometer
grav: gravimeter
SCS: single channel seismics
MCS: multichannel seismics

EEZ: indexes the SOPAC EEZ sailed by that cruise (EEZ countours are taken from the US Tuna Treaty map).

Comments: provides some additional information, when available. For some recent cruises, these comments contain more extensive information provided by Don Tiffin (Techsec).

Report: indicates wether a cruise report has been catalogued at SOPAC for that survey.

Lines: indicates whether the available cruise reports contain description of date and time of start and end of lines. This indexing is still in progress.

8 CRUISES WITH MCS DATA AQUISITION IN TONGA

COMMERCIAL SURVEYS*****

COMMERCIAL HYDROCARBON EXPLORATION IN SW PACIFIC.

Cruise id.....MOBIL72 (OFC) Reels RE177, BMR ***** (0) 1452 M524
 Institution..MOBIL MARINE RECON. (Project: Midmar)
 Cruise by.....? on R/V FRED MOORE (?00572-?/000672)
 Instrument...satnav; PDR; mag; gravi; MCS;
 EEZ.....TG, FJ, VA, SI, PNG
 Comments.....BMR survey 805; digital data. and map tracklines at BMR.
 Lines.....full.

COMMERCIAL HYDROCARBON EXPLORATION IN TONGA SHELF.

Cruise id...SHELL70 (OFC) Reels RE021, GSI; RE180, BMR; RE181, BMR ***** (0) 1438 M469; M998
 Institution...GSI; SHELL (Project: Shell Tonga survey; GSI seismic party 948)
 Cruise by.....? on R/V POLARIS (?/001170-?/001170)
 Instrument...PDR; mag; gravi; MCS;
 EEZ.....TG
 Comments...BMR survey 211. 1971: seismic data processed by GSI in Dallas.
 1976: Southern part reprocessed by Seiscon-Delta in Calgary
 for the Samuel Gary Oil Producer Company. 1987: Northern part
 reprocessed by T.R. Robson (Ocean Science Inst., dept of
 Geology, Sydney), as a contribution to Tripartite programme
 funded by AIDAB, see OSI technical report # 11, april 1987 MCS
 sections (reprocessed), digital data and map tracklines at BMR
 Reports....norep.
 Lines.....full.

COMMERCIAL HYDROCARBON EXPLORATION IN TG.

Cruise id.....SHELL73 (SH73BMR) (OFC) Reels RE021, USGS; RE179, BMR ***** (9) 1646 M525
 Institution...SHELL (Project: Shell South Pacific 1)
 Cruise by.....? on R/V PETREL (?/000873-?/000873)
 Instrument...satnav; MCS;
 EEZ.....TG
 Comments...BMR survey 804 ; SCS and MCS sections, digital data and map
 tracklines at BMR.
 Reports....norep.
 Lines.....full.

COMMERCIAL HYDROCARBON EXPLORATION IN TONGATAPU.

Cruise id...WEBB77 (OFC) ***** (0) I483 M470
 Institution..DELTA EXPLORATION CO; WEBB (Project: Webb Tonga Inc)
 Cruise by....? on R/V ? (?000377-?/000677)
 Instrument..MCS;
 Survey area.....Tongatapu Island
 EEZ.....TG
 Comments....BMR survey 802; land survey. Digital data and map tracklines at
 BMR
 Reports.....norep.
 Lines.....full.

COMMERCIAL HYDROCARBON EXPLORATION IN EUA CHANNEL.

Cruise id...WEBB79 (OFC) Reels RE178, BMR ***** (0) 1484 M471; M998
 Institution..WESTERN GEOPHYSICAL CO.; WEBB (Project: Webb Minerals Tonga)
 Cruise by....? on R/V ? (?/000979-?/000979)
 Instrument..mag; gravi; MCS;
 Survey area..Eua channel
 EEZ.....TG
 Comments....BMR survey 801: digital data and map tracklines at BMR
 Reports.....norep.
 Lines.....full.

NON COMMERCIAL HYDROCARBON*****

TRIPARTITE 1 SURVEY IN TONGA PLATFORM.

Cruise id.....L582SP (L5TG82) (OFC) Reels 143, NGDC;001, USGS;015, USGS
 ***** (7) I002 M059
 Institution...USGS; CCOP/SOPAC (Project: Trip 1 Cruise L1 leg 5)
 Cruise by...Scholl, Maug on R/V LEE (Pagopago/280382-Port Vila/250482)
 Instrument....satnav; PDR; SBP; mag; gravi; SCS; MCS; dredge; corer;
 EEZ.....VA, FJ, TG, AS, WS
 Comments.....BMR SURVEY 201
 Reports.....CR072.
 Lines.....not. not in CR072.

TRIPARTITE 2 MCS IN TONGA.

Cruise id....L384SP (L3TG84) (OFC) Reels RE143, NGDC;RE001, USGS;RE015,
 USGS ***** (7) I017 M168;M998
 Institution...USGS (Project: Trip 2 Cruise L1 leg 3)
 Cruise by...Scholl, Herzer on R/V LEE (Suva/020484-Suva/010584)
 Instrument...satnav; PDR; SBP; mag; SCS; MCS;
 EEZ.....FJ, TG
 Comments.....BMR SURVEY 207
 Reports.....CR093.
 Lines.....part.

GEODYNAMICS IN LAW BASIN/RIDGE; KORO SEA.

Cruise id....NAT84 (OFC) Reels RE175, GSJ'RE185, GSJ
 ***** (9) I406 M998
 Institution..GSJ; NZOI; CCOP/SOPAC (Project: Nat84 leg 1-2)
 Cruise by....Honza, Lewis on R/V NATSUSHIMA (SUVA/141184-?/131484)
 Instrument..satnav; PDR; SBP; SLS; mag; SCS; MCS; dredge; corer; TV;
 EEZ.....TG, FJ
 Comments....BMR survey 806; depth uncorrected at 1500 m/s. digital data
 and map tracklines at BMR
 Reports.....CR105.
 report by Honza at Sopac library.
 Lines.....full.

ANNEX 2

Catalogue of all MCS Lines in MGD77 Formatted Files

ANNEX 2: CATALOGUE OF ALL MCS LINES IN THE SEA AREA OF TONGA
IN MGD77 FORMATTED FILES

This catalogue is a resume of start-of-line and end-of-line for each MCS line for which a shot point file has been prepared (ALL CRUISES.SHP) from MGD77 files.

CRUISE-LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
SHELL70-0005	TG	-174.8861	-21.4972	2236	-175.5269	-21.0383	2655
SHELL70-0025	TG	-175.0430	-21.2194	1959	-174.7977	-21.3202	2100
SHELL70-0050	TG	-174.9472	-21.1066	1537	-175.0908	-21.1088	1613
SHELL70-0075	TG	-175.3300	-20.9569	1267	-174.8413	-21.0227	1536
SHELL70-0100	TG	-174.8225	-20.9361	1062	-175.1994	-20.8391	1266
SHELL70-0125	TG	-175.1536	-20.5877	816	-174.7305	-20.7791	1061
SHELL70-0150	TG	-174.2650	-20.8711	13	-174.4625	-20.7700	130
SHELL70-0150A	TG	-174.4625	-20.7700	170	-174.7155	-20.6411	320
SHELL70-0150B	TG	-174.7155	-20.6408	346	-175.5269	-20.2216	815
SHELL70-0175	TG	-175.0069	-20.2827	3753	-174.5991	-20.4741	3991
SHELL70-0200	TG	-174.9197	-20.1125	3353	-174.4113	-20.2686	3632
SHELL70-0225	TG	-174.3466	-20.1052	5601	-174.4588	-20.0700	5663
SHELL70-0225A	TG	-174.8513	-19.9561	6153	-174.6850	-19.9977	6242
SHELL70-0250	TG	-174.7650	-19.7691	5977	-174.4725	-19.9211	6162
SHELL70-0275	TG	-174.6150	-19.6280	7465	-174.3450	-19.7463	7622
SHELL70-0300	TG	-174.5061	-19.4633	7623	-174.1244	-19.5758	7833
SHELL70-0325	TG	-173.8413	-19.4350	8458	-175.1797	-19.0186	9200
SHELL70-0350	TG	-174.3502	-19.1136	9202	-173.9558	-19.1383	9428
SHELL70-0375	TG	-173.9380	-19.0063	9429	-174.3616	-18.9191	9670
SHELL70-0385	TG	-174.0738	-18.9044	10669	-173.9025	-18.9480	10763
SHELL70-0400	TG	-174.2669	-18.7505	10857	-174.0155	-18.7819	10997
SHELL70-0425	TG	-174.1902	-18.5775	9944	-174.0788	-18.6638	10020
SHELL70-0450	TG	-173.7994	-18.5588	10998	-174.1786	-18.5227	11199
SHELL70-1001	TG	-174.9194	-20.1113	3640	-174.9797	-20.2541	3730
SHELL70-1001B	TG	-174.9819	-20.2591	4930	-175.1525	-20.6219	5149
SHELL70-1001A	TG	-174.9225	-20.1241	5744	-174.7388	-19.7416	5976
SHELL70-1006	TG	-174.3419	-18.9388	9671	-174.1525	-18.5080	9943
SHELL70-1020	TG	-174.1327	-18.6430	10021	-173.9586	-18.5116	10138
SHELL70-1025	TG	-175.4716	-21.2505	2656	-175.1041	-20.8347	2962
SHELL70-1025A	TG	-175.0736	-20.7838	2963	-174.7777	-20.1402	3352
SHELL70-1025B	TG	-174.6827	-20.0002	6243	-174.1455	-18.7863	6980
SHELL70-1025C	TG	-174.1455	-18.7863	10800	-174.1119	-18.6938	10856
SHELL70-1025D	TG	-174.7833	-20.1541	5664	-174.8075	-20.0308	5743
SHELL70-1050	TG	-174.9847	-21.1013	1614	-175.1741	-21.4100	1811
SHELL70-1050A	TG	-174.9858	-21.0972	4410	-174.8316	-20.6641	4690
SHELL70-1050B	TG	-174.8316	-20.6641	4725	-174.8286	-20.4611	4840
SHELL70-1050C	TG	-174.8286	-20.4611	4850	-174.7655	-20.3455	4922
SHELL70-1050D	TG	-174.1030	-19.0272	7005	-174.4438	-19.8058	7464
SHELL70-1050E	TG	-174.1025	-19.0272	10550	-174.0358	-18.8241	10668
SHELL70-1070A	TG	-173.9091	-18.7583	10290	-174.0500	-19.1927	10546
SHELL70-1070	TG	-173.8855	-18.5322	10139	-173.8997	-18.7400	10278
SHELL70-1075	TG	-175.0641	-21.4494	1812	-174.9494	-21.2088	1958
SHELL70-1075A	TG	-174.5808	-20.4077	3992	-174.8969	-21.0441	4379
SHELL70-1075B	TG	-174.2583	-19.7500	8000	-173.9627	-18.9808	8457
SHELL70-1100	TG	-174.6327	-20.6961	5150	-174.5375	-20.2383	5438
SHELL70-11001	TG	-174.8880	-21.2672	2101	-174.8880	-21.5105	2235

CRUISE - LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
NAT84-20A	TG	-174.9718	-17.6400	15	-173.5249	-17.6933	3330
NAT84-20B	TG	-173.5053	-17.6951	3500	-172.0129	-17.6634	7041
NAT84-23A	TG	-173.8173	-18.5816	03	-173.9183	-18.0058	1452
NAT84-23B	TG	-173.9166	-17.9866	15	-173.8049	-17.3108	1670
NAT84-23C	TG	-173.8100	-17.2933	10	-173.2769	-14.4793	6978
NAT84-24	TG	-173.2833	-14.4874	7019	-173.3542	-14.5634	7292
NAT84-28	TG	-173.7783	-15.7725	10	-172.7118	-15.9265	2220
NAT84-30A	TG	-172.0900	-16.2099	29	-172.7466	-16.5008	1690
NAT84-30B	TG	-172.7516	-16.5021	4001	-174.9516	-17.5199	9373

CRUISE - LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
SHELL73-1200	TG	-176.4107	-23.0040	10	-174.0831	-24.1733	5400
SHELL73-1200A	TG	-174.1165	-24.0630	10	-174.1266	-25.3685	2868
SHELL73-12001	TG	-174.1232	-24.0747	10	-174.1379	-25.3743	2868

CRUISE - LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
WEBB77-01	TG	-175.1269	-21.2725	1	-175.0405	-21.1405	308
WEBB77-02	TG	-175.0725	-21.1277	5	-175.1108	-21.1658	110
WEBB77-03	TG	-175.0986	-21.2405	1	-175.3227	-21.0650	592
WEBB77-04A	TG	-175.1005	-21.2063	93	-175.1944	-21.1583	294
WEBB77-04B	TG	-175.2008	-21.1472	317	-175.1938	-21.1372	340
WEBB77-05A	TG	-175.0313	-21.1494	1	-175.1215	-21.1305	175
WEBB77-05B	TG	-175.1447	-21.1352	214	-175.2369	-21.1147	391
WEBB77-06	TG	-175.1708	-21.1547	93	-175.3330	-21.1205	390
WEBB77-07A	TG	-175.2063	-21.2161	100	-175.1844	-21.1683	199
WEBB77-07B	TG	-175.1833	-21.1552	223	-175.1805	-21.1411	250
WEBB77-08	TG	-175.1166	-21.2697	81	-175.3386	-21.1180	600
WEBB77-09	TG	-175.1436	-21.2708	100	-175.1283	-21.1975	240
WEBB77-10	TG	-175.1747	-21.1572	84	-175.2286	-21.1333	189
WEBB77-11	TG	-175.1608	-21.1702	110	-175.1900	-21.2311	238
WEBB77-12	TG	-175.2580	-21.1991	100	-175.2000	-21.1322	262
WEBB77-13	TG	-175.1144	-21.2669	101	-175.1911	-21.2211	261
WEBB77-14	TG	-175.1638	-21.1991	117	-175.1877	-21.2377	200
WEBB77-15	TG	-175.1036	-21.2538	100	-175.1891	-21.2077	276
WEBB77-16	TG	-175.1419	-21.1908	100	-175.1550	-21.2655	245
WEBB77-17	TG	-175.1102	-21.1800	101	-175.1366	-21.2727	286
WEBB77-18	TG	-175.0644	-21.1680	182	-175.1205	-21.1361	300
WEBB77-19	TG	-175.1827	-21.1955	104	-175.1377	-21.2222	196
WEBB77-202A	TG	-175.1713	-21.1616	136	-175.1680	-21.1819	180
WEBB77-202B	TG	-175.1569	-21.1933	207	-175.1566	-21.2600	334

CRUISE-LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
WEBB79-01	TG	-175.1690	-21.3774	-30	-174.9171	-21.5480	939
WEBB79-02	TG	-175.1654	-21.3708	-30	-174.9739	-21.4994	705
WEBB79-03	TG	-175.1620	-21.3643	-30	-174.9688	-21.4931	709
WEBB79-04	TG	-175.1512	-21.3625	1	-174.9564	-21.4916	753
WEBB79-05	TG	-175.2110	-21.3135	1	-174.8877	-21.5288	1234
WEBB79-06	TG	-175.1437	-21.3331	1	-174.9630	-21.4695	723
WEBB79-07	TG	-175.1398	-21.3431	1	-174.9585	-21.4638	693
WEBB79-08	TG	-175.1366	-21.3367	1	-174.8655	-21.5154	1025
WEBB79-09	TG	-175.2007	-21.2852	-30	-174.9519	-21.4500	919
WEBB79-10	TG	-175.1885	-21.2839	1	-174.8822	-21.4865	1167
WEBB79-11	TG	-175.3247	-21.1851	-30	-174.9562	-21.4292	1376
WEBB79-12	TG	-175.1876	-21.2670	-30	-174.9621	-21.4156	828
WEBB79-13	TG	-175.1835	-21.2615	-30	-174.9766	-21.3978	759
WEBB79-14	TG	-175.1720	-21.2601	6	-174.9797	-21.3868	738
WEBB79-15	TG	-175.1312	-21.2784	24	-174.9970	-21.3667	534
WEBB79-16	TG	-175.1183	-21.2777	16	-174.9970	-21.3578	477
WEBB79-17	TG	-175.1120	-21.2735	12	-174.9934	-21.3515	462
WEBB79-18	TG	-175.1060	-21.2677	12	-174.9911	-21.3440	450
WEBB79-19	TG	-175.1010	-21.2621	12	-174.9873	-21.3370	444
WEBB79-20	TG	-175.0967	-21.2560	12	-174.9844	-21.3303	440
WEBB79-21	TG	-175.0759	-21.2608	84	-174.9616	-21.3364	519
WEBB79-22	TG	-175.0934	-21.2403	12	-174.9710	-21.3182	462
WEBB79-23	TG	-175.0811	-21.2395	75	-174.9502	-21.3258	573
WEBB79-24	TG	-175.1007	-21.2176	12	-174.9642	-21.3075	531
WEBB79-25	TG	-175.0796	-21.2224	80	-174.9433	-21.3130	600
WEBB79-26	TG	-175.0927	-21.2053	9	-174.9595	-21.2932	516
WEBB79-27	TG	-175.0717	-21.2103	75	-174.9386	-21.2982	582
WEBB79-28	TG	-175.0847	-21.1927	8	-174.9516	-21.2812	516
WEBB79-29	TG	-175.0620	-21.1985	81	174.9275,	-21.2825	591
WEBB79-30	TG	-175.0780	-21.1795	8	-174.9437	-21.2680	519
WEBB79-31	TG	-175.0442	-21.1928	3.08	-174.8753	-21.3042	752
WEBB79-32	TG	-175.0507	-21.1707	12	-174.8783	-21.2846	670
WEBB79-33	TG	-175.0871	-21.1007	24	-174.9411	-21.2105	610
WEBB79-34	TG	-175.0575	-21.1046	51	-174.9316	-21.1991	555
WEBB79-35	TG	-175.0386	-21.1006	36	-174.9303	-21.1817	469
WEBB79-50	TG	-174.9339	-21.1663	1	-175.0987	-21.4410	1048
WEBB79-51	TG	-174.9567	-21.0591	-30	-175.1623	-21.4069	1294
WEBB79-52	TG	-175.0446	-21.1673	-3	-175.1433	-21.3357	637
WEBB79-53	TG	-175.1758	-21.2930	-30	-175.0895	-21.2645	257
WEBB79-54	TG	-174.9775	-21.1380	18	-175.1311	-21.4167	1061

CRUISE-LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
L582SP-3	TG	-175.4793	-21.1378	260	-173.8417	-22.2727	4427
L582SP-4	TG	-173.9219	-22.3191	50	-175.4668	-21.4416	3530
L582SP-5	TG	-175.4638	-21.5420	530	-174.8556	-21.9699	2130
L582SP-6	TG	-175.1794	-21.9304	670	-176.0555	-21.7593	2840
L582SP-7	TG	-176.0318	-21.7857	50	-175.1233.	-22.3253	2220
L582SP-8	TG	-175.2090	-22.4306	50	-176.5609	-21.8772	2880
L582SP-9	TG	-176.5593	-21.9622	50	-175.3449	-22.7097	3080
L582SP-10	TG	-175.3987	-22.7635	50	-177.5537	-22.0905	4410
L582SP-11	TG	-177.6095	-22.0858	50	-174.4551	-23.4230	6590
L582SP-12	TG	-174.4589	-23.4723	50	-176.1969	-22.8617	4050
L582SP-13	TG	-176.2505	-22.9126	50	-176.1897	-23.0230	310
L582SP-14	TG	-176.0965	-23.0133	50	-175.4244	-21.5206	3610
L582SP-15	TG	-175.2897	-21.2390	50	-175.0793	-21.3491	590
L582SP-16	TG	-175.0598	-21.3579	50	-175.6687	-22.8699	3640
L582SP-17	TG	-175.6312	-22.9061	50	-175.2467	-22.9552	840
L582SP-18	TG	-175.2087	-22.9363	50	-175.0690	-22.6151	930

CRUISE-LINE	EEZ	LONGITUDE	LATITUDE	SHOTPO	LONGITUDE	LATITUDE	SHOTPO
L384SP-3	TG	179.4767	-19.7507	41	-179.1038	-20.9512	4116
L384SP-6	TG	-177.4276	-22.1826	50	179.3931	-22.6556	6554
L384SP-7	TG	179.4121	-22.7125	49	-176.5780	-23.3302	9076
L384SP-8	TG	-176.5298	-23.3451	44	-175.7711	-24.1570	2494
L384SP-9	TG	-175.7985	-24.1144	47	-176.7530	-24.2951	2177
L384SP-10	TG	-176.7340	-24.3217	47	-175.0318	-25.3552	4000
L384SP-11	TG	-175.0053	-25.4262	45	-175.0172	-26.4718	1963
L384SP-12	TG	-175.0703	-26.5015	43	-177.3854'	-25.2513	5400
L384SP-13	TG	-177.4395	-25.2613	41	-177.0191	-25.6973	1341
L384SP-14	TG	-176.9900	-25.6682	49	-175.9400	-22.7955	6969
L384SP-15	TG	-175.9352	-22.7890	50	-176.9595	-22.8058	2651
L384SP-16	TG	-176.9617	-22.7346	48	-176.6712	-22.6443	718
L384SP-17	TG	-176.6669	-22.5967	45	-176.7743	-22.4156	485
L384SP-18	TG	-176.7763	-22.4084	47	-176.5226	-22.2991	637
L384SP-19	TG	-176.5180	-22.2963	48	-176.6505	-22.0594	683

ANNEX 3

**SOPAC MCS Database;
Vertical Hanging Documents**

MCS DOCUMENTS IN TONGA WATERS

(Sopac's INLIN database; print worksheet EYPCN)

april 1992

The following catalogue lists all documents relative to multichannel seismic lines shot in the waters of Tonga and stored in SOPAC's archive system.

Documents are sorted by cruise; cruises are sorted as follows: first come cruises by commercial companies, then those by french vessels, and last cruises by the R/ SP Lee of the USGS (Tripartite cruises).

1- DATASETS: For each cruise, first comes a brief description of the various datasets held in the system where F/H stands for Folded/Hanged document and P/V/S/F stands for Paper/Vellum/Sepia/Film. Then two digits provide the year of creation/processing of the dataset, followed by a reminder in uppercase of the company that conducted the processing and by the title of the dataset.

In the second line, one finds between stars the code of data represented on the document, and the horizontal/vertical scales of the document.

2- GENERAL DOCUMENTS: Then follows one line per category of documents providing general information for the cruise, such as trackplots, sounding sheets...

3- SEISMIC LINES: Last comes one line per seismic line, with line number; first and last shotpoint (or date and time of the same, which may be followed by an "S" in case the shotpoints for that line are also available in the database) shot at sea for that line; dataset code for reference to the dataset descriptions above; P/V/S/F to remind of the medium; reminder of the company which did the procesing; year processed; title of seismic section. Any given lines may be absent, or be represented in several datasets.

***** COMMERCIAL: MOBIL72 *****

287		Trackplot (4 copies, Midmar line)	
288	194	(140/0930-140/2220)s	---
289	195	(140/2236-141/1130)	---
293	199	(142/1600-143/0420)s	---
294	200	(143/0436-143/1612)s	---
295	201	(143/1628-143/2128)s	---
296	202	(143/2148-144/1300)s	---
297	203	(144/1318-144/2348)s	---
298	204	(145/0000-145/0700)s	---
299	205	(145/0718-145/1318)s	---
300	206	(145/1334-145/2118)s	---
301	207	(145/2134-146/0302)s	---
302	208	(146/0318-146/0958)s	---
303	209	(146/1012-146/1244)s	---
304	210	(146/1300-146/2135)s	---
305	211	(146/2200-147/0404)s	---
306	212	(147/0418-147/0619)s	---
307	213	(147/0630-147/0926)s	---
308	214	(147/0942-147/1558)s	---
309	215	(147/1612-147/2238	---
311	216	(147/2248-148/0836)	---
310	216	(147/1612-147/2238)s	---

***** COMMERCIAL: SHELL70 *****

022 dataset F1-P 70-GSI?: Data profiles
 ** BATH; MAG; GRA ** H/V scales:

023 dataset F2-P 71-GSI: Processed MCS
 ** MCS ** H/V scales:

024 dataset F3-P 76-SEISCAN: Processed MCS
 ** MCS ** H/V scales:

025 dataset F4-P 87-OSI: Processed MCS
 ** MCS ** H/V scales:

392 Shotpoint map (3film and 2 paper copies)

393 Shotpoint map 1/2 (poor copy)

394 Shotpoint map 2/2 (poor copy)

395	0005	(2237 - 2655)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS

396	0025	(1960 - 2098)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS

397	0050	(1540 - 1613)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS

398	0075	(1269 - 1533)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS

399	0100	(1063 - 1263)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS

400	0125	(816 - 1057)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	processed MCS

401	0150	(13 - 130)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS

402	0150A	(170 - 320)	F1-P GSI?	70	Data profiles
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS

403	0150B (346 – 815)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F3-P SEISC	76	Processed MCS
		F4-POSI	87	Processed MCS
404	0175 (3754 – 3991)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
405	0200 (3354 – 3630)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F3-P SEISC	76	Processed MCS
406	0225 (5602 – 5663)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
407	0225A (6153 – 6242)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
408	0250 (5977 – 6162)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
409	0275 (7466 – 7620)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
410	0300 (7624 – 7830)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
411	0325 (8458-9201)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
412	0350 (9203 – 9426)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
413	0375 (9430 – 9668)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
414	0385 (10669 – 10763)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS
415	0400 (10859 – 10996)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F4-P OSI	87	Processed MCS

416	0425	(9944 – 10020)	F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
417	0450	(10998 – 11199)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
418	1001	(3640 – 3730)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
419	1001A	(5744 – 5976)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
420	1001B	(4930 – 5149)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
421	1006	(9670 – 9943)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
422	1020	(10022 – 10138)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
423	1025	(2656 – 2962)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
424	1025A	(2963 – 3352)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
425	1025B	(6243 – 6980)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
426	1025C	(10800 – 10856)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
427	1025D	(5664 – 5743)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS

428	1050	(1616 – 1811)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
429	1050A	(4410 – 4690)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
430	1050B	(4727 – 4840)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
431	1050C	(4850 – 4922)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
432	1050D	(7005 – 7464)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
433	1050E	(10550 – 10668)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	processed MCS
			F4-P OSI	87	Processed MCS
434	1070	(10139 – 10278)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
435	1070A	(10290 – 10546)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F4-P OSI	87	Processed MCS
436	1075	(1813-1956)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS
437	1075A	(3994 – 4376)	F1-P GSI?	70	Data profiles
			F2-P GSI	71	Processed MCS
			F3-P SEISC	76	Processed MCS
			F4-P OSI	87	Processed MCS

438	1075B (8000 – 8457)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F3-P SEISC	76	Processed MCS
		F4-P OSI	87	Processed MCS
439	1075C (5438 – 5600)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
		F3-P SEISC	76	Processed MCS
		F4-P OSI	87	Processed MCS
440	1075D (7834 – 7990)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	processed MCS
		F3-P SEISC	76	Processed MCS
		F4-P OSI	87	Processed MCS
441	1100 (5151 – 5436)	F1-P GSI?	70	Data profiles
		F2-P GSI	71	Processed MCS
442	11001(2102 – 2231)	-----		

*****COMMERCIAL: SHELL73*****

027 dataset F1-P SEISMOGRAPH: Processed MCS
 ** MCS ** H/V scales:

503 Shotpoint map (film, only a few lines in Tonga)

504 1200 (10 – 5400)

505 12001 (10 – 2868)

506 1200A (10 – 2868)

***** COMMERCIAL: WEBB77 *****

028	dataset F1-P	77-SEISCAN: Processed MCS ** MCS ** H/V scales:
029	dataset H1-F	88-DIGICON: Processed MCS, migrated ** MCS ** H/V scales: 24 tr/"; 2.5 "/sec
030	dataset H2-F	88-DIGICON: Processed MCS, migrated, dual density display ** MCS ** H/V scales: 24 tr/"; 2.5 "/sec
507	Shotpoint map (film, several copies, in two sheets)	
508	01 (14 - 307)	F1-P SEISC 77 Processed MCS
509	02 (0-220)	F1-P SEISC 77 Processed MCS
510	03 (3 - 354)	F1-P SEISC 77 Processed MCS H1-F DIGIC 88 Processed MCS, migrated H2-F DIGIC 88 Processed MCS, migrated, dual density display
511	04 (100-341)	F1-P SEISC 77 Processed MCS
512	05 (3 - 364)	F1-P SEISC 17 Processed MCS
513	06 (94 - 426)	F1-P SEISC 77 Processed MCS H1-F DIGIC 88 Processed MCS, migrated H2-F DIGIC 88 Processed MCS, migrated, dual density display
514	07 (103-248)	F1-P SEISC 77 Processed MCS
515	08 (99 - 600)	F1-P SEISC 77 Processed MCS H1-F DIGIC 88 Processed MCS, migrated H2-F DIGIC 88 Processed MCS, migrated, dual density display
516	09 (108 - 248)	F1-P SEISC 77 Processed MCS H1-F DIGIC 88 Processed MCS, migrated H2-F DIGIC 88 Processed MCS, migrated, dual density display
517	10 (86 - 187)	F1-P SEISC 77 Processed MCS
518	11 (108-236)	F1-P SEISC 77 Processed MCS
519	12 (102 - 260)	F1-P SEISC 77 Processed MCS H1-F DIGIC 88 Processed MCS, migrated H2-F DIGIC 88 Processed MCS, migrated, dual density display

520	13	(102 – 261)	F1-P SEISC 77	Processed MCS
			H1-F DIGIC 88	Processed MCS, migrated
			H2-F DIGIC 88	Processed MCS, migrated, dual density display
521	14	(120 – 198)	F1-P SEISC 77	Processed MCS
522	15	(101 – 276)	F1-P SEISC 77	Processed MCS
			H1-F DIGIC 88	Processed MCS, migrated
			H2-F DIGIC 88	Processed MCS, migrated, dual density display
523	16	(103 – 245)	F1-P SEISC 77	Processed MCS
			H1-F DIGIC 88	Processed MCS, migrated
			H2-F DIGIC 88	Processed MCS, migrated, dual density display
524	17	(119 – 284)	F1-P SEISC 77	Processed MCS
525	18	(186 – 297)	F1-P SEISC 77	Processed MCS
526	19	(116-161)	F1-P SEISC 77	Processed MCS
			H1-F DIGIC 88	Processed MCS, migrated
			H2-F DIGIC 88	Processed MCS, migrated, dual density display
527	202	(209-334)	F1-P SEISC 77	Processed MCS
			H1-F DIGIC 88	Processed MCS, migrated
			H2-F DIGIC 88	Processed MCS, migrated, dual density display

COMMERCIAL:

WEBB79

```

031  dataset F1-P    BERRONG: Processed MCS
      ** MCS **    H/V scales:

032  dataset F2-P    GSI: Processed MCS
      ** MCS **    H/V scales:

033  dataset H1-F    88-DIGICON: Processed MCS (filtered/scaled stacked)
      ** MCS **    H/V scales: 35 tr/"; 2.5 "/sec

034  dataset H2-F    88-DIGICON: Processed MCS (Wave eq. migration)
      ** MCS **    H/V scales: 35 tr/"; 2.5 "/sec

035  dataset H3-F    88-DIGICON: Processed MCS (DMO stack/migration)
      ** MCS **    H/V scales: 35 tr/"; 2.5 "/sec

528          Shotpoint map    (see WEBB77)

529  01    (-30-939)          F1-P BERR0    Processed MCS

530  02    (-24-320)          F1-P BERR0    Processed MCS
                                H1-F DIGIC 88  Processed MCS
                                H2-F DIGIC 88  (filtered/scaled stacked)
                                Processed MCS (Wave eq.
                                migration)

531  03    (-30-709)          F1-P BERR0    Processed MCS

532  04    (1-743)            F1-P BERR0    Processed MCS

533  05    (1-1234)           F1-P BERR0    Processed MCS

534  06    (1-723)            F1-P BERR0    Processed MCS

535  07    (1-693)            F1-P BERR0    Processed MCS
                                H1-F DIGIC 88  Processed MCS
                                H2-F DIGIC 88  (filtered/scaled stacked)
                                Processed MCS (Wave eq.
                                migration)

536  08    (1-710)            F1-P BERR0    Processed MCS
                                F2-P GSI       Processed MCS
                                H1-F DIGIC 88  Processed MCS
                                H2-F DIGIC 88  (filtered/scaled stacked)
                                Processed MCS (Wave eq.
                                migration)

```

537	09	(- 30 - 919)	F1-P BERRO H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
538	10	(1-974)	F1-P BERRO H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
539	11	(- 30 - 1379)	F1-P BERRO H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
540	12	(- 30 - 828)	F1-P BERRO F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
541	13	(- 30 - 759)	F1-P BERRO F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
542	14	(6-738)	F1-P BERRO F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
544	15	(24-534)	F1-P BERRO F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
543	15	(24-534)	F1-P BERRO F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)

545	16	(15 – 477)	F1-P BERR0 F2-P GSI H1-F GIDIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
546	17	(12 – 462)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
547	18	(450 – 12)	F1-P BERR0 F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
548	19	(444 – 12)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
549	20	(441 – 12)	F1-P BERR0 F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
550	21	(84 – 519)	F1-P BERR0 F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
551	22	(462 – 12)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
552	23	(75 – 573)	F1-P BERR0 F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)

553	24	(534-12)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
554	25	(78-600)	F1-P BERR0 F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
555	26	(516-9)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88 H3-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration) Processed MCS (DMO stack/migration)
556	27	(75-582)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
557	28	(516-6)	F1-P BERR0 F2-P GSI H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
558	29	(81-591)	F1-P BERR0	Processed MCS
559	30	(400-7)	F1-P BERR0 H1-F DIGIC 88 H2-F DIGIC 88	Processed MCS Processed MCS (filtered/scaled stacked) Processed MCS (Wave eq. migration)
560	31	(108-752)	F1-P BERR0 F2-P GSI	Processed MCS Processed MCS
561	32	(12-670)	F1-P BERR0	Processed MCS
562	33	(24-610)	F1-P BERR0	Processed MCS
563	34	(51-555)	F1-P BERR0	Processed MCS

564	35	(36-469)	F1-P BERR0	Processed MCS
565	50	(240-1048)	F1-P BERR0	Processed MCS
			F2-P GSI	Processed MCS
			H1-F DIGIC 88	Processed MCS
				filtered/scaled stacked)
			H2-F DIGIC 88	Processed MCS (Wave eq. migration)
566	51	(376-1264)	F1-P BERR0	Processed MCS
			F2-P GSI	Processed MCS
			H1-F DIGIC 88	Processed MCS
				(filtered/scaled stacked)
			H2-F DIGIC 88	Processed MCS (Wave eq. migration)
567	52	(637-16)	F1-P BERR0	Processed MCS
			F2-P GSI	Processed MCS
			H1-F DIGIC 88	Processed MCS
				(filtered/scaled stacked)
			H2-F DIGIC 88	Processed MCS (Wave eq. migration)
568	53	(-30-257)	F1-P BERR0	Processed MCS
			F2-P GSI	Processed MCS
			H1-F DIGIC 88	Processed MCS
				(filtered/scaled stacked)
			H2-F DIGIC 88	Processed MCS (wave eq. migration)
569	54	(1061-256)	F1-P BERR0	Processed MCS
			F2-P GSI	Processed MCS
			H1-F DIGIC 88	Processed MCS
				(filtered/scaled stacked)
			H2-F DIGIC 88	Processed MCS (Wave eq. migration)

***** FRANCE-CORIOLIS: EVA300 *****

043 dataset F1-P : unprocessed shipboard SCS
 ** SCS ** H/V scales:

***** FRANCE-NOROIT: AUS200 *****

044 dataset F1-P : Unprocessed shipboard SCS
** SCS ** H/V scales:

619 201 (43 – 17230) F1-P----- Unprocessed shipboard SCS

***** FRANCE-NOROIT: AUS400 *****

045 dataset F1-P : Unprocessed shipboard SCS
** SCS ** H/V scales:

***** FRANCE-NOROIT: GEO300E *****

046 dataset F1-P : Unprocessed shipboard SCS
** SCS ** H/V scales:

***** JAPAN-NATSUSHIMA: NAT84 *****

```

050  dataset F1-P      : Unprocessed shipboard SCS
      ** SCS **      H/V scales:

052  dataset H1-P      88-GSJ: Processed MCS
      ** MCS **      H/V scales: variable; 1 "/sec

702  02      841115/0345-841115/0548  F1-P ---      Unprocessed shipboard SCS
703  03      (841115/0548-841115/1115) F1-P ---      Unprocessed shipboard SCS
704  19      (841122/0130-841122/0940) F1-P ---      Unprocessed shipboard SCS
705  20A     (15-3330)                F1-P ---      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
706  20B     (3500-7041)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
707  22      (841125/2300-841126/0600) F1-P ----      Unprocessed shipboard SCS
708  23A     (3-1452)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
709  23B     (15-1670)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
710  23C     (10-6978)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
711  24      (7019-7292)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
712  25      (841130/2220-841201/0234) F1-P ----      Unprocessed shipboard SCS
713  26      (841201/0234-841201/1800) F1-P ----      Unprocessed shipboard SCS
714  27      (841201/1930-841202/0139) F1-P ----      Unprocessed shipboard SCS
715  28      (10-2220)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS
716  29      (841202/1100-841202/1500) F1-P ----      Unprocessed shipboard SCS
717  29X     (841202/1630-841203/0700) F1-P ----      Unprocessed shipboard SCS
718  30A     (29-1690)                F1-P ----      Unprocessed shipboard SCS
      H1-P GSJ      88      Processed MCS

```

719	30B	(4001 – 9373)	F1-P - - - - - H1-P GSJ	88	Unprocessed shipboard SCS Processed MCS
720	31	(841204/0930-841206/0800)	F1-P - - - -		Unprocessed shipboard SCS
721	32	(841206/1915-841207/0400)	F1-P - - - -		Unprocessed shipboard SCS
722	33	(841207/1910-841208/0015)	F1-P - - - -		Unprocessed shipboard SCS
723	34	(841208/1715-841208/2100)	F1-P - - - -		Unprocessed shipboard SCS
724	35	(841209/2035-841210/2300)	F1-P - - - -		Unprocessed shipboard SCS
725	36	(841210/2315-841211/2230)	F1-P - - - -		Unprocessed shipboard SCS
726	37	(841211/2242-841212/0900)	F1-P - - - -		Unprocessed shipboard SCS
727	38	(841212/0907-841212/1145)	F1-P - - - -		Unprocessed shipboard SCS
728	39	(841212/1150-841212/2105)	F1-P - - - -		Unprocessed shipboard SCS

***** SOPAC/MACHIAS: TG794 *****

053 dataset F1-P : Unprocessed shipboard SCS
 ** SCS ** H/V scales:

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*****      US-USGS-SP   LEE/820328:      L582SP      *****
054  dataset F1-P      : Line drawings of 24 fold MCS
      ** MCS **      H/V scales:
055  dataset F2-P      : Reduced data sections
      ** SCS; GRA; MAG **      H/V scales:
056  dataset F3-P      USGS: Processed 24 fold MCS
      ** MCS **      H/V scales: 20 tr/"; 1.5 "/sec
057  dataset F4-P      USGS: Data plots (in box TS042)
      ** NAV; BATH; MAG; GRA **      H/V scales:
058  dataset H1-S      83-USGS: Processed MCS
      ** MCS **      H/V scales: 20 tr/" 1.5 "/sec
059  dataset H2-F      82-USGS: Processed MCS
      ** MCS **      H/V scales: 20 tr/"; 1.5 "/sec
060  dataset H3-F      88-DIGICON: Processed MCS: Filtered/scaled stack
      ** MCS **      H/V scales: 20 tr/"; 2.5 "/sec
061  dataset H4-F      88-DIGICON: Processed MCS: Wave eq. migration
      ** MCS **      H/V scales: 20 tr/"; 2.5 "/sec
062  dataset H5-F      88-DIGICON: Processed MCS: DMO stack/migration
      ** MCS **      H/V scales: 20 tr/"; 2.5 "/sec

735      12 khz PDR profiles 1/1  (2 copies)
736      12 kHz PDR profiles  (2 sheets)
737      12 kHz PDR sounding sheets  (3 sheets)
738      Grav. and mag. profiles  (2 sheets)
739      MCS sections 1/2  (Lines 03-10; South Tonga Platform)
740      MCS sections 2/2  (Lines 11-18; South Tonga Platform)
741      SCS sections  (3 sheets)
742      Sonobuoy sections
743      Trackplots  (24 sheets)

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744	03	(227-4323)	F3-P USGS F4-P USGS H1-S USGS 83 H2-F USGS 82 H3-F DIGIC 88 H4-F DIGIC 88	Processed 24 fold MCS Data plots (in box TS042) Processed MCS Processed MCS Processed MCS: Filtered/scaled stack Processed MCS: Wave eq. migration
745	04	(15-3561)	F3-P USGS F4-P USGS H1-S USGS 83 H2-F USGS 82 H3-F DIGIC 88 H4-F DIGIC 88	Processed 24 fold MCS Data plots (in box TS042) Processed MCS Processed MCS Processed MCS: filtered/scaled stack Processed MCS Wave eq. migration
746	05	(502-2158)	F4-P USGS H1-S USGS 83 H2-F USGS 82 H3-F DIGIC 88 H4-F DIGIC 88	Data plots (in box TS042) Processed MCS Processed MCS Processed MCS: Filtered/scaled stack Processed MCS: Wave eq. migration
747	06	(638-2872)	F3-P USGS F4-P USGS H1-S USGS 83 H2-F USGS 82 H3-F DIGIC 88 H4-F DIGIC 88	Processed 24 fold MCS Data plots (In box TS042) Processed MCS Processed MCS Processed MCS: Filtered/scaled stack Processed MCS: Wave eq. migration
748	07	(15-2242)	F3-P USGS F4-P USGS H1-S USGS 83 H2-F USGS 82 H3-F DIGIC 88 H4-F DIGIC 88	Processed 24 fold MCS Data plots (in box TS042) Processed MCS Processed MCS Processed MCS: Filtered/scaled stack Processed MCS: Wave eq. migration
749	08	(15-2907)	F3-P USGS F4-P USGS H1-S USGS 83 H2-F USGS 82 H3-F DIGIC 88 H4-F DIGIC 88	Processed 24 fold MCS Data plots (in box TS042) Processed MCS Processed MCS Processed MCS: Filtered/scaled stack Processed MCS: Wave eq. migration

750	09	(15-3105)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H3-F DIGIC	88	Processed MCS:
					Filtered/scaled stack
			H4-F DIGIC	88	processed MCS: Wave eq. migration
751	10	(15-4442)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H3-F DIGIC	88	Processed MCS:
					Filtered/scaled stack
			H4-F DIGIC	88	Processed MCS: Wave eq. migration
752	11	(15-6621)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H3-F DIGIC	88	Processed MCS:
					Filtered/scaled stack
			H4-F DIGIC	88	Processed MCS: Wave eq. migration
753	12	(15-4078)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H3-F DIGIC	88	processed MCS:
					Filterd/scaled stack
			H4-F DIGIC	88	Processed MCS: Wave eq. migration
754	13	(15-337)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H4-F DIGIC	88	Processed MCS: Wave eq. migration
755	14	(15-3635)	H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H3-F DIGIC	88	Processed MCS:
					Filtered/scaled stack
			H4-F DIGIC	88	Processed MCS: Wave eq. migration
			H5-F DIGIC	88	Processed MCS: DMO stack/migration

756	15	(1515 – 945)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H4-F DIGIC	88	Processed MCS: Wave eq. migration
757	16	(15 – 3670)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
			H3-F DIGIC	88	Processed MCS: Filtered/scaled stack
758	17	(15 – 871)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS
759	18	(15 – 955)	F3-P USGS		Processed 24 fold MCS
			F4-P USGS		Data plots (in box TS042)
			H1-S USGS	83	Processed MCS
			H2-F USGS	82	Processed MCS

***** US-USGS-SP LEE/840402: L384SP *****

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071  dataset F1-P      : Data plots in box TS042
      ** NAV; BATH; MAG; GRA **   H/V scales :

072  dataset H1-F      84-USGS: Processed MCS
      ** MCS **      H/V scales: 20 tr/"; 1.5 "/sec

871      Trackplot

872      Trackplot      (2 copies)

874  03      (15 - 4119)      F1-P ----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

877  06      (15 - 6550)      F1-P ----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

878  07      (15 - 9079)      F1-P ----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

879  08      (15 - 2494)      F1-P ----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

880  09      (15 - 2177)      F1-P ----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

881  10      (15 - 2050)      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

882  10      (2000 - 4013)      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

883  11      (15 - 1967)      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

885  12      (2450-5406 )      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

884  12      ( 15-2500 )      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

886  13      (15 - 1339)      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

887  14      (15 - 6967)      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

888  15      (15 - 2650)      F1-P -----      Data plots in box TS042
      H1-F USGS      84      Processed MCS

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889	16	(15-720)	F1-P ----- H1-F USGS	84	Data plots in box TS042 Processed MCS
890	17	(15-485)	F1-P ----- H1-F USGS	84	Data plots in box TS042 Processed MCS
891	18	(15-636)	F1-P ---- H1-F USGS	84	Data plots in box TS042 Processed MCS
892	19	(15-683)	F1-P ---- H1-F USGS	84	Data plots in box TS042 Processed MCS

ANNEX 4

**SOPAC MCS Database;
All Material in Archive Boxes**

ANNEX 4: SOPAC MCS DATABASE; ALL MATERIAL IN ARCHIVE BOXES
FROM CRUISES IN TONGA

(archive room)

===== 060 survey L582SP(OFC)..TRIPARTITE PROGRAM, LEE CRUISE

-BOX TS038.....full	YEAR 1982.....in TG
	INSTIT...CCOP/SOPAC; USGS
-INVESTIGATION..Scholl,Vallier	VESSEL.Lee
-KEYWORDS.... SCS; MCS; dredge; Tripartite; Tongatapu	
-ANALOG DOC..-photocopy of seismic records, computer print, cruise	
	data index, station log
-MISCELLAN...-Microfilm;post cruise information	

===== 255 survey L582SP(OFC)...L582SP-F3 DATAPLOTS

-BOX TS042...full	YEAR 1982 in TG
	INSTIT...CCOP/SOPAC; USGS
	VESSEL...Lee
-KEYWORDS....MCS; hydrocarbon; navigationbathy; mag; grav;	
-ANALOG DOC..-data plots by USGS, complete series	

===== 256 survey L582SP(OFC)...L582SP-F4 PROCESSED MCS SECTIONS

-BOX TS042 ... full	YEAR 1982 in TG
	INSTIT...CCOP/SOPAC; USGS
	VESSEL...Lee
-KEYWORDS...MCS; processing;	
-ANALOG DOC..-MCS sections processed by USGS (complete series)	

===== 108 survey ()...VARIOUS HYDROCARBON SEISMIC LINES

- BOX TS071...full in TG
- INVESTIGAT..Pflueger, Barclay
- KEYWORDS....MCS; Processing; Hydrocarbon;
- ANALOG DOC..-Folder 1: Tonga 1979 Webb seis;Eua channel orig.
proc. lines 1-36.
- Folder 2:Tonga 1979 Webb; set3 Eua lines 1-35.
- Folder 3: Tonga 1979 Webb seismic;Eua Channel
original processed lines 50-54.
- Folder 4:Tonga 1970 Shell;Uni of Sydney
1987;reproduced lines G-1001-G1075.
- Folder 5:Tonga 1970 Shell;Uni. of Sydney
1987;reproduced lines G-150- G450.
- Folder 6:Tonga 1982 Lee;USGS multichannel seismic
lines 3-10 set 1.
- Folder 7:Tonga 1982 Lee;USGS multichannel seismic
lines 11-18 set 1.
- Folder 8:'Eua Channel 1980;berrong reprocessing.
- Folder 9:Tonga 1982;Tripartite set 2.
- Folder 10:Tonga 1982 Tripartite set 2

===== 116 survey ()...INVENTORY OF SPARE PRINTS OF 1988;REPROCESSED TONGA
SEIS DATA (TONGATAPU VIBRATOR, TRIPARTITE 1982
& EUA CHANNEL

- BOX TS072...full in TG
- INVESTIGAT..Pflueger, Barclay
- KEYWORDS....MCS; Processing; Hydrocarbon.;
- ANALOG DOC..-Folder 1:Eua Channel Seismic Data;Stacked, filtered
sections (3 sets);lines T79-09 to T79-14;T79-16 to
T79-20;T79-22;T79-24 to T79-28;Also include part
T79-26 Dip Move-out section.
- Folder 2:Eua Channel seismic data;Migrated sections
(4 sets-2 with Dip move-out section;Lines T79-07
to T79-14;T79-16 to T79-20;T79-22;T79-24 to T79-28.
- Folder 3:Tongatapu Vibrator Seismic data (Shot
1977);Final stack sections 5"/sec;Part
3,6,8,9,12,13,15,16,part19,202.
- Folder 4: Dual density migrated 5.0"/sec;Part
3,6,8,9,12,13,15,16,part19,202.
- Folder 5:Migrated sections 2.5"/sec (2 sets) ;prt
3,6,8,9,12,13,15,16,part19,202.
- Folder 6:Dual density migrated sections 2.5"/sec (2
sets);Part3,6,8,9,12,13,15,16,part19,202.
- Folder 7:Tripartite 1982 Tonga: Migrated sections (2
sets);lines 3 to 12,14,16; Also included line 14,
SP 820-1160 Dip move-out section.
- Folder 8: Filtered stack sections (2 sets-SOPAC
sets)Lines 3 to 12,14,16;Also include line 14,SP
820-1160;Dip move-out section

===== 031 survey (OFC) ...1989 TONGA SEISMIC INTERPRETATION BY K HAVARD & J
PFLUEGER

- BOXTS073...full
- SOPAC TASK...88TG05
- INVESTIGAT...Havard,Pflueger
- KEYWORDS...MCS; well; hydrocarbon; processing;
- ANALOG DOC...-Folder 1: Tonga final interpreted seissections by J
Pflueger 1989, Tripartite 1982 lines
3,4,5,6,7,8,9,10,11,12,14,16Migrated.
- Folder 2: Final interpreted seissections by J
Pflueger 1989, "Eua Channe; lines
T-79-02,02,08,09,10,11,12,13,14,15,16,17,18,19,20,2
1,22,23,24,25,26,27,28,30,50,51,52: TRIP82-16
SP's 30-300.
- Folder 3A: Final interpreted seissections nny
Pflueger 1989; Tongatapu Lines
3,6,8,9,12,13,15,16,19,2025"/sec.
- Folder 3B: work seissections 2 1/2"/sec by Pflueger
1989; TongatapuLines 3,6,8,9,12,13,15,16,19,202;
(Interpretation shown may not be the final one.
Refer to 5"/sec sections for definite
interpretations).
- Folder 4: Tonga synthetic seismograms: Wells
KumifonuaNo1, No21; KumimonuNo1, No2, No3.
- Folder 5: Set Seismic Time, Depth, Isopach Values
for Tonga 1989 interpretation of Shell data, "Eua
Channel, Tongatapu, Tripartite 1982.
- Folder 6: "Eua Channel 1988 reprocessing clean sety
"Filters & Scaled Stack"; lines
07,08,09,10,11,12,13,14,15,16,17,18,19,20,22,24,25,
26,27,28.
- Folder 7: Almost clean set; Tongatapu reprocessing 2
1/2"/sec DUAL DENSITY; Lines
3,6,8,9,12,13,15,16,19,202.
- Folder 8: Tripartite 1982 Tonga; Assorted reversed
Polarity set sections.
- Folder 9: 1988 tonga reprocessing: Invoices.
- Folder 10: Correspondence with petronus.
- Folder 11: 1988 Tonga reprocessing; Tape and other
data correspondence.
- Folder 12:1988 Tonga reprocessing: Contracts &
contact correspondence.
- Folder 13: 1988 Tonga reprocessing: Tape and other
data inventory.
- Folder 14: 1988 Tonga reprocessing: General
correspondenc.
- Folder 15: 1988 Tonga reprocessing: Transmittals
- MISCELLAN...-L582SP; WEBB77; WEBB79

117 survey (OFC)...VARIOUS HYDROCARBON SEISMIC LINES

- BOX TS074...fullin TG
- INVESTIGAT..Pflueger, Barclay
- KEYWORDS....MCS; Processing; Hydrocarbon;
- ANALOG DOC..-Folder 1:Tonga 1970 Shell;Seiscan reproc. lines 1025
- 1075.
- Folder 2:Tonga 1973;Shell line P-1200.
- Folder 3:Tonga 1979;Machias cruise TG-19-1;Single
cover seis.
- Folder 4:Tonga 1984;Natsushima-84;Single trace
sections.
- Folder 5;Tonga 1984;Natsushima-84;Multifold lines
2129, 31.
- Folder 6:Tonga Orstom track;Plots
Austride, Eva, Geova(?) .
- Folder 7::Tonga Orstom 1973;Austradec II;Line AUS
201.
- Folder 8:tonga;Orstom Austradec 400;Lines 401, 403.
- Folder 9:Tonga;Orstom Lines G.O.-320/321.
- Folder 10:Tonga; Orstom Lines Eva 302-EVA 315.
- Folder 11:Tonga:1982 Tripartite II track plots.
- Folder 12:Tonga 1971 Shell;Gravity & Magnetic
profiles transit lines

===== 033 survey ()...VARIOUS HYDROCARBON DATA OF TONGA

- BOX TS075...full YEAR 1988.....in TG
- SOPAC TASK..88TG05 INSTIT...CCOP/SOPAC
- INVESTIGAT..Pflueger
- KEYWORDS...MCS; reprocessing; velocity; hydrocarbon;
- ANALOG DOC..-Data from 1988 reprocessing of Tonga seismic
(performed by Digicon, Singapore; reprocessing
supervised by John Pflueger.
- Folder 1: Detailed velocity analyses line TRIP82-14,
over 11/14.
- Folder 2: Velocity analyses line TRIP82-14,
SP2040-3600, no ZMult.
- Folder 3: Velocity analyses line TRIP82-14, SP
30-2000, No ZMult.
- Folder 4: Velocity Analyses line TRIP82-14,
SP2040-3600, original Zmult.
- Folder 5: Velocity analyses line TRIP82-14,
SP800-2000, original ZMult.
- Folder 6: TRIP82-14 Frequency study.
- Folder 7: Tongatapu line 12 reprocessing tests..
- Package 8: Spare copies TRIP821-15 (migrated) and
"Eua - 26, DMO.
- Folder 9: containing Map : 1:50000: Station
locations reprocessed Tongatapu data, Map :
1:50000 CDP locations reprocessed Tongatapu data,
Digicon Processing Sequence Printout.
- Folder 10: containing: Line TRIP82-8 tape scissors
and tape reconstruction, Line "Eua - 9 SP110
VELFANS after ZMult, TRIP82-14 SP860 VELFANS
before ZMult, TRIP82-14 SP880 VELFANS before
ZMult, Interval velocity profile: Tongatapu wells.
- Folder 11: Tongatapu reprocessing dual density, 2
1/2"sec Lines 3, 9, 12, 13, 15, 16, 19, 202.
- Folder 12: Petronus reprocessing of, "Eua Channel
Migrated lines T79-09, 11, 13, 17, 19, 25, 27.
- Folder 13: Petronus reprocessing of "Eua Channel,
Filtered & Scaled Stack lines
T-79-02, 09, 11, 13, 15, 17, 19, 21, 23, 25, 27, 30, 50, 51, 52, 53
- Checked by W. Barclay (1/4/92)

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===== 081 survey L582SP(0FC)...PROCESSED MCS ROLLED FILMS L582SP; L782SP
          L782SP
          -BOX TS077...half
                                     YEAR 1982 ..... in TG
                                     INSTIT...CCOP/SOPAC; USGS
                                     VESSEL...Lee
          -KEYWORDS....MCS; processing; rolled; film;
          -ANALOG DOC..-films too long for hanging.
                                     -photo-examples of geologic features for L782SP
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