

**S.I.O. Sample Index
(Issued May 1981)**

VULCAN EXPEDITION

LEG 1

**San Diego, California (3 September 1980)
to
Callao, Peru (30 September 1980)**

R/V Melville

**Co-Chief Scientists - M. W. Lyle (OSU)
R. A. Rosson (SIO)**

Resident Marine Tech - J. L. Coatsworth

**Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center**

**Index Encoding Funded by NSF
Grant Number OCE80-22996
Index Processing and Report Preparation
Funded in part by SIA**

The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.

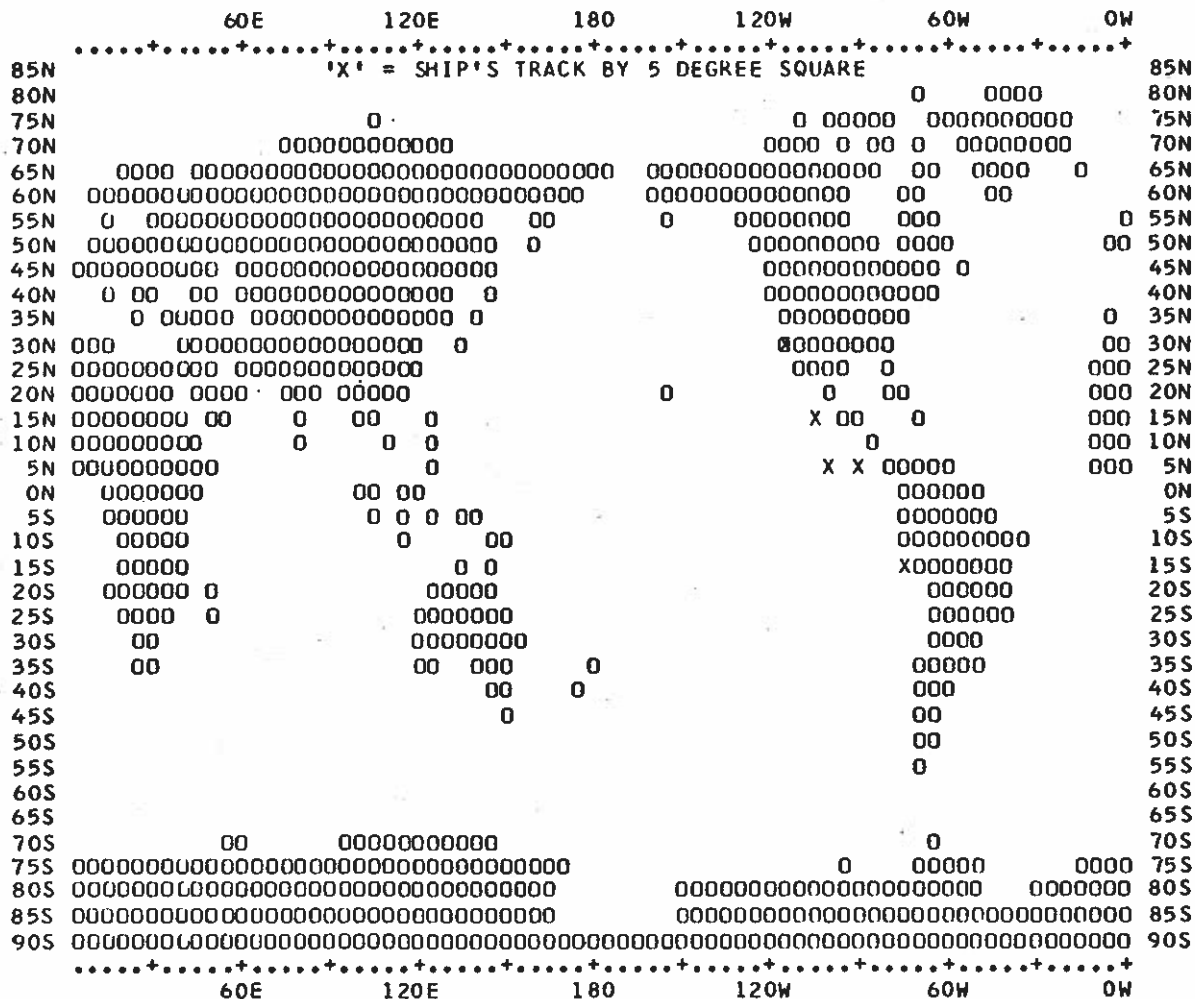
Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive cards. Disposition and sample type are represented by three and four character codes to permit future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

S.I.O. SAMPLE INDEX

GENERATED 03MAR81

*** VULCAN 01 SAMPLE INDEX

(VLCN01MV) ***



03SEP80 - SAN DIEGO, CA., USA
TO
30SEP80 - CALLAO, PERU

CHIEF SCIENTISTS - LYLE, M.W. OSU
ROSSON, R.A. MBD

SHIP - R/V MELVILLE (SIO)

PRODUCED BY GEOLOGICAL DATA CENTER, SCRIPPS INSTITUTION
OF OCEANOGRAPHY, LA JOLLA, CALIFORNIA 92093

NUMBER OF SAMPLES OF CLASS 'TYPE' GOING TO DESTINATION 'DISP'

DISP	TYPE						TOTAL
	CA	CO	LB	PC	PE	SD	
ANS	1		3				4
LDO	1	2			1		4
MBD	1				1		2
MLR	1				2		3
MPL	1				1		2
MTG	1				3		4
OSU	1	56	1		8	8	74
SIO	1				1		2
SIX	1			8	7		15
UWA	1				2		3
TOTAL	1	2	59	1	8	26	104

SAMPLE 'TYPE' CODES USED ABOVE

CA = CAMERA
 CO = CORE
 LB = LOG BOOKS
 PC = PHYSICAL CHEMISTRY
 PE = PERSONNEL IN SCIENTIFIC PARTY
 SD = SEDIMENT TRAP

SAMPLE 'DISP' CODES USED ABOVE

ANS = ANDREW SOUTAR (PALEOECOLOGY EXT. 2171)
 LDO = LAMONT-DOHERTY GEOPHYSICAL OBSERVATORY, COLUMBIA UNIVERSITY
 MBD = MARINE BIOLOGY RESEARCH DIVISION (EXT. 4245)
 MLR = MARINE LIFE RESEARCH GROUP (EXT. 2866)
 MPL = MARINE PHYSICAL LAB. (EXT 2305)
 MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
 OSU = OREGON STATE UNIVERSITY
 SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093
 SIX = SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
 UWA = UNIV. OF WASHINGTON, SEATTLE

GMT TIME	D / M / Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
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VULCAN LEG 01 SAMPLE INDEX

VLCN01MV

*** PORTS ***

2218	3/ 9/80			LGPT B	SAN DIEGO, CA., USA		32 43. N	117 11. W	F VLCN01MV
1232	30/ 9/80			LGPT E	CALLAO, PERU		12 03. S	77 10. W	F VLCN01MV
1440	6/ 9/80			LGUS B	CABO SAN LUCAS, MEX.		22 52. N	109 53. W	F VLCN01MV
1554	6/ 9/80			LGUS E	CABO SAN LUCAS, MEX.		22 52. N	109 53. W	F VLCN01MV

PERSONNEL

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
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1	LYLE, M.W.	CO-CHIEF SCIENT.	OREGON STATE UNIVERSITY
2	ROSSON, R.A.	CO-CHIEF SCIENT.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3	SOUTAR, A.	SPECIALIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4	COATSWORTH, J.L.	RES. MARINE TECH.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
5	WITHEROW, S.L.	MARINE TECHNICIAN	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
6	CHARTERS, J.S.	COMPUTER TECH.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
7	GLEASON, D.E.	ELECTRONICS TECH.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
8	ARDAI, J.L.	MARINE TECHNICIAN	LAMONT-DOHERTY GEOPHYSICAL OBSERVATORY, COLUMBIA UNIVERSITY
9	CARDJNAL, S.Y.	VOLUNTEER	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
10	CLAUSON, M.L.	MARINE TECHNICIAN	OREGON STATE UNIVERSITY
11	GOLOWAY, F. (URI)	GRAD. STUDENT	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
12	HEGGIE, D.T. (URI)	MARINE TECHNICIAN	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
13	HESS, J. (URI)	GRAD. STUDENT	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
14	JACOBS, L.A.	LAB TECHNICIAN	UNIV. OF WASHINGTON, SEATTLE
15	JOHNSON, S.R.	RESEARCH ASST.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
16	KAHN, D.S. (URI)	MARINE TECHNICIAN	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
17	MCCORKLE, D.C.	LAB. TECHNICIAN	UNIV. OF WASHINGTON, SEATTLE
18	MCELWEE, K. R.	GRAD. STUDENT	OREGON STATE UNIVERSITY
19	MUERDTER, D.R. (URI)	MARINE TECHNICIAN	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
20	MOSBY, D.E.	COMPUTER TECH.	OREGON STATE UNIVERSITY
21	MOSER, J.C.	MARINE TECHNICIAN	OREGON STATE UNIVERSITY
22	PENROSE, N.L. (URI)	LAB TECHNICIAN	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
23	POWELL, H.S.	RESEARCH ASST.	OREGON STATE UNIVERSITY
24	ROMAN, M.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
25	SEIFERT, E.A.	MARINE TECHNICIAN	OREGON STATE UNIVERSITY
26	WELIKY, K.	GRAD. STUDENT	OREGON STATE UNIVERSITY

NOTES AN 'X' IN THE (B)EGIN/(E)ND COLUMN FOLLOWING THE SAMPLE CODE INDICATES NO SAMPLE OR DATA RECOVERED .
 A 'C' INDICATES CONTINUATION OF DATA COLLECTION FROM BEFORE THE BEGINNING OR AFTER THE END OF THIS LEG. (MODRED BOTTOM INSTRUMENTS, FOR EXAMPLE).
 THE NUMBER APPEARING IN THE COLUMNS BETWEEN THE SAMPLE IDENTIFIER AND THE DISPOSITION CODE, FOR MANY SAMPLE ENTRIES, IS THE WATER DEPTH IN CORRECTED METERS.

GMT D / M / Y TIME DATE	LOC LOC TIME TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
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*** LOG BOOKS ***

2218 3/ 9/80		LBSC B	SCIENTIFIC LOG	OSU 31	58.9N	117 02.2W	S VLCN01MV
1232 30/ 9/80		LBSC E	SCIENTIFIC LOG	OSU 12	02.0S	77 10.7W	S VLCN01MV

*** CORES ***

1503 10/ 9/80	COGV	VLCN03	GR.CORE 3145M	OSU 08	47.6N	103 59.6W	S VLCN01MV
1744 10/ 9/80	COGV	VLCN04	GRVCORE	OSU 08	47.6N	103 59.7W	S VLCN01MV
0305 10/ 9/80	COBX	VLCN06	BOXCORE 3198M	OSU 09	18.0N	104 14.6W	S VLCN01MV
0752 11/ 9/80	COBX	VLCN07	BOXCORE 3107M	OSU 08	48.9N	103 59.7W	S VLCN01MV
1100 11/ 9/80	COGV	VLCN08	GRVCORE 3098M	OSU 08	48.1N	103 59.5W	S VLCN01MV
1348 11/ 9/80	COBX	VLCN09	BOXCORE 3087M	OSU 08	47.9N	103 59.5W	S VLCN01MV
1710 11/ 9/80	COGV	VLCN10	GRVCORE 3109M	OSU 08	47.9N	103 59.9W	S VLCN01MV
0612 12/ 9/80	COBX	VLCN11	BOXCORE 3168M	OSU 08	48.2N	103 59.6W	S VLCN01MV
0904 12/ 9/80	COGV	VLCN12	GRVCORE 3110M	OSU 08	48.0N	103 59.4W	S VLCN01MV
1218 12/ 9/80	COGV	VLCN13	GRVCORE 3094M	OSU 08	48.1N	103 59.5W	S VLCN01MV
1503 12/ 9/80	COGV	VLCN14	GRVCORE 3111M	OSU 08	48.3N	103 59.5W	S VLCN01MV
2306 12/ 9/80	COBX	VLCN16	BOXCORE 3182M	OSU 08	47.4N	103 59.2W	S VLCN01MV
0552 13/ 9/80	COGV	VLCN17	GRVCORE 3210M	OSU 08	47.3N	103 59.8W	S VLCN01MV
0858 13/ 9/80	COGV	VLCN18	GRVCORE	OSU 08	47.5N	103 59.7W	S VLCN01MV
1144 13/ 9/80	COGV	VLCN19	GRVCORE 3080M	OSU 08	47.7N	103 59.6W	S VLCN01MV
1430 13/ 9/80	COBX	VLCN20	BOXCORE	OSU 08	48.2N	104 00.1W	S VLCN01MV
1653 13/ 9/80	COGV	VLCN21	GRVCORE 3099M	OSU 08	48.2N	104 00.0W	S VLCN01MV
1949 13/ 9/80	COGV	VLCN22	GRVCORE	OSU 08	48.1N	103 59.7W	S VLCN01MV
0012 14/ 9/80	COBX	VLCN23	BOXCORE	OSU 08	47.8N	103 59.8W	S VLCN01MV
0347 14/ 9/80	COGV	VLCN24	GRVCORE	OSU 08	48.1N	103 59.4W	S VLCN01MV
1200 14/ 9/80	COGV	VLCN26	GRVCORE	OSU 08	47.7N	103 59.8W	S VLCN01MV
1414 14/ 9/80	COBX	VLCN27	BOXCORE	OSU 08	47.6N	103 59.8W	S VLCN01MV
0455 15/ 9/80	COBX	VLCN28	BOXCORE 3111M	ANS 08	47.9N	103 59.8W	S VLCN01MV
1017 15/ 9/80	COBX	VLCN29	BOXCORE 3111M	ANS 08	48.0N	103 59.9W	S VLCN01MV
1922 18/ 9/80	COBX	VLCN31	BOXCORE	OSU 06	33.7N	92 47.4W	S VLCN01MV
2305 18/ 9/80	COBX	VLCN32	BOXCORE 3090M	OSU 06	33.6N	92 47.3W	S VLCN01MV
0240 19/ 9/80	COGV	VLCN33	GRVCORE	OSU 06	34.0N	92 47.2W	S VLCN01MV
0552 19/ 9/80	COGV	VLCN34	GRVCORE	OSU 06	34.1N	92 47.1W	S VLCN01MV
0900 19/ 9/80	COBX	VLCN35	BOXCORE	OSU 06	33.9N	92 47.4W	S VLCN01MV
1216 19/ 9/80	COGV	VLCN36	GRVCORE	OSU 06	33.8N	92 47.0W	S VLCN01MV
1501 19/ 9/80	COBX	VLCN37	BOXCORE	OSU 06	33.9N	92 47.4W	S VLCN01MV
1744 19/ 9/80	COGV	VLCN38	GRVCORE 3141M	OSU 06	34.1N	92 47.6W	S VLCN01MV
0159 20/ 9/80	COBX	VLCN40	BOXCORE	OSU 06	33.7N	92 46.7W	S VLCN01MV
0453 20/ 9/80	COGV	VLCN41	GRVCORE	OSU 06	33.1N	92 47.0W	S VLCN01MV
0759 20/ 9/80	COGV	VLCN42	BOXCORE	OSU 06	33.7N	92 46.6W	S VLCN01MV
1046 20/ 9/80	COGV	VLCN43	GRVCORE	OSU 06	33.7N	92 47.4W	S VLCN01MV
1325 20/ 9/80	COGV	VLCN44	GRVCORE	OSU 06	33.7N	92 47.1W	S VLCN01MV
0026 21/ 9/80	COBX	VLCN47	BOXCORE 3559M	OSU 06	33.6N	92 47.0W	S VLCN01MV
0421 21/ 9/80	COBX	VLCN48	BOXCORE	ANS 06	33.6N	92 47.0W	S VLCN01MV
0941 21/ 9/80	COGV	VLCN49	GRVCORE	OSU 06	32.1N	92 46.1W	S VLCN01MV
1249 21/ 9/80	COBX	VLCN50	BOXCORE	OSU 06	31.8N	92 45.8W	S VLCN01MV
1648 21/ 9/80	COGV	VLCN51	GRVCORE	OSU 06	33.1N	92 47.3W	S VLCN01MV
2007 21/ 9/80	COBX	VLCN52	BOXCORE	OSU 06	32.4N	92 46.6W	S VLCN01MV

GMT TIME	D / M / Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	3 LEG-SHIP CRUISE
0207	22/ 9/80			COGV	VLCN53 GRVCORE	OSU 06	32.8N	92 48.6W	S VLCN01MV
0554	22/ 9/80			COGV	VLCN54 GRVCORE	OSU 06	32.7N	92 49.6W	S VLCN01MV
0854	22/ 9/80			COBX	VLCN55 BOXCORE	OSU 06	32.9N	92 48.9W	S VLCN01MV
1155	22/ 9/80			COGV	VLCN56 GRVCORE	OSU 06	32.9N	92 49.1W	S VLCN01MV
1422	22/ 9/80			COGV	VLCN57 GRVCORE	OSU 06	32.7N	92 49.1W	S VLCN01MV
2233	22/ 9/80			COBX	VLCN59 BOXCORE	OSU 06	32.7N	92 48.6W	S VLCN01MV
0138	23/ 9/80			COGV	VLCN60 GRVCORE	OSU 06	32.4N	92 48.9W	S VLCN01MV
0030	23/ 9/80			COGV	VLCN61 GRVCORE	OSU 06	32.6N	92 48.4W	S VLCN01MV
0743	23/ 9/80			COBX	VLCN62 BOXCORE	OSU 06	32.6N	92 48.6W	S VLCN01MV
1029	23/ 9/80			COGV	VLCN63 GRVCORE	OSU 06	32.9N	92 48.7W	S VLCN01MV
1321	23/ 9/80			COGV	VLCN64 GRVCORE	OSU 06	33.0N	92 48.9W	S VLCN01MV
2034	23/ 9/80			COBX	VLCN66 BOXCORE	OSU 06	33.0N	92 48.7W	S VLCN01MV
0014	24/ 9/80			COGV	VLCN67 GRVCORE	OSU 06	33.5N	92 47.4W	S VLCN01MV
0431	24/ 9/80			COBX	VLCN68 BOXCORE	OSU 06	32.4N	92 47.5W	S VLCN01MV
0852	24/ 9/80			COBX	VLCN69 BOXCORE	OSU 06	31.9N	92 48.2W	S VLCN01MV
1148	24/ 9/80			COBX	VLCN70 BOXCORE	OSU 06	32.2N	92 47.3W	S VLCN01MV

*** CAMERA ***

1249	18/ 9/80			CAAB B	DROP VLCN01 BOM	LDO 06	31.9N	92 45.2W	S VLCN01MV
1232	30/ 9/80			CAAB C	VLCN01 BOM	LDO 12	02.0S	77 10.7W	S VLCN01MV

PHYSICAL CHEMISTRY

2037	7/ 9/80			PCXX	VLCN01 POREH2O 3510M	SIX 18	08.6N	108 03.8W	S VLCN01MV
1135	10/ 9/80			PCXX	VLCN02 POREH2O(HRPN)	SIX 08	47.8N	103 59.9W	S VLCN01MV
1755	12/ 9/80			PCXX	VLCN15 POREH2O(HRPN)	SIX 08	47.8N	103 59.3W	S VLCN01MV
0815	14/ 9/80			PCXX	VLCN25 POREH2O(HRPN)	SIX 08	47.5N	103 59.5W	S VLCN01MV
1531	18/ 9/80			PCXX	VLCN30 POREH2O(HRPN)	SIX 06	33.7N	92 47.3W	S VLCN01MV
1705	20/ 9/80			PCXX	VLCN45 POREH2O 3605M	SIX 06	33.7N	92 47.3W	S VLCN01MV
1725	22/ 9/80			PCXX	VLCN58 POREH2O(HRPN)	SIX 06	32.7N	92 48.6W	S VLCN01MV
1620	23/ 9/80			PCXX	VLCN65 POREH2O(HRPN)	SIX 06	32.7N	92 48.7W	S VLCN01MV

SEDIMENT TRAP

2302	10/ 9/80			SDTR B	DROP VLCN01 MOOR. 01	OSU 08	47.0N	104 00.1W	S VLCN01MV
1232	30/ 9/80			SDTR C	VLCN01 MOOR. 01	OSU 12	02.0S	77 10.7W	S VLCN01MV
0249	12/ 9/80			SDTR B	DROP VLCN01 MOOR. 02	OSU 08	48.7N	103 59.3W	S VLCN01MV
1232	30/ 9/80			SDTR C	VLCN01 MOOR. 02	OSU 12	02.0S	77 10.7W	S VLCN01MV
2312	19/ 9/80			SDTR B	DROP VLCN01 MOOR. 03	OSU 06	34.4N	92 46.6W	S VLCN01MV
1232	30/ 9/80			SDTR C	VLCN01 MOOR. 03	OSU 12	02.0S	77 10.7W	S VLCN01MV
2130	20/ 9/80			SDTR B	DROP VLCN01 MOOR. 04	OSU 06	33.7N	92 45.7W	S VLCN01MV
1232	30/ 9/80			SDTR C	VLCN01 MOOR. 04	OSU 12	02.0S	77 10.7W	S VLCN01MV

9900

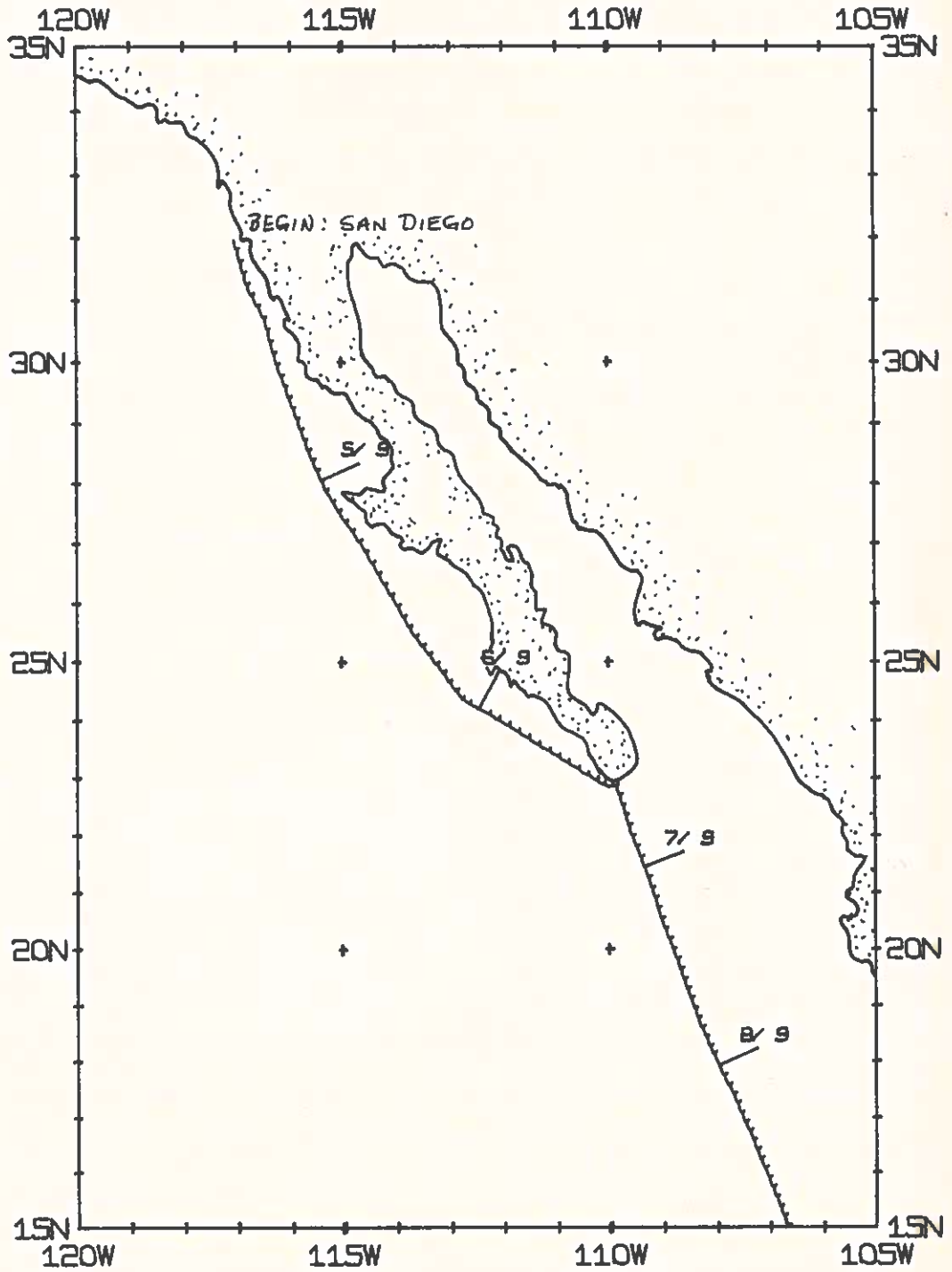
END SAMPLE INDEX

VLCN01MV

10

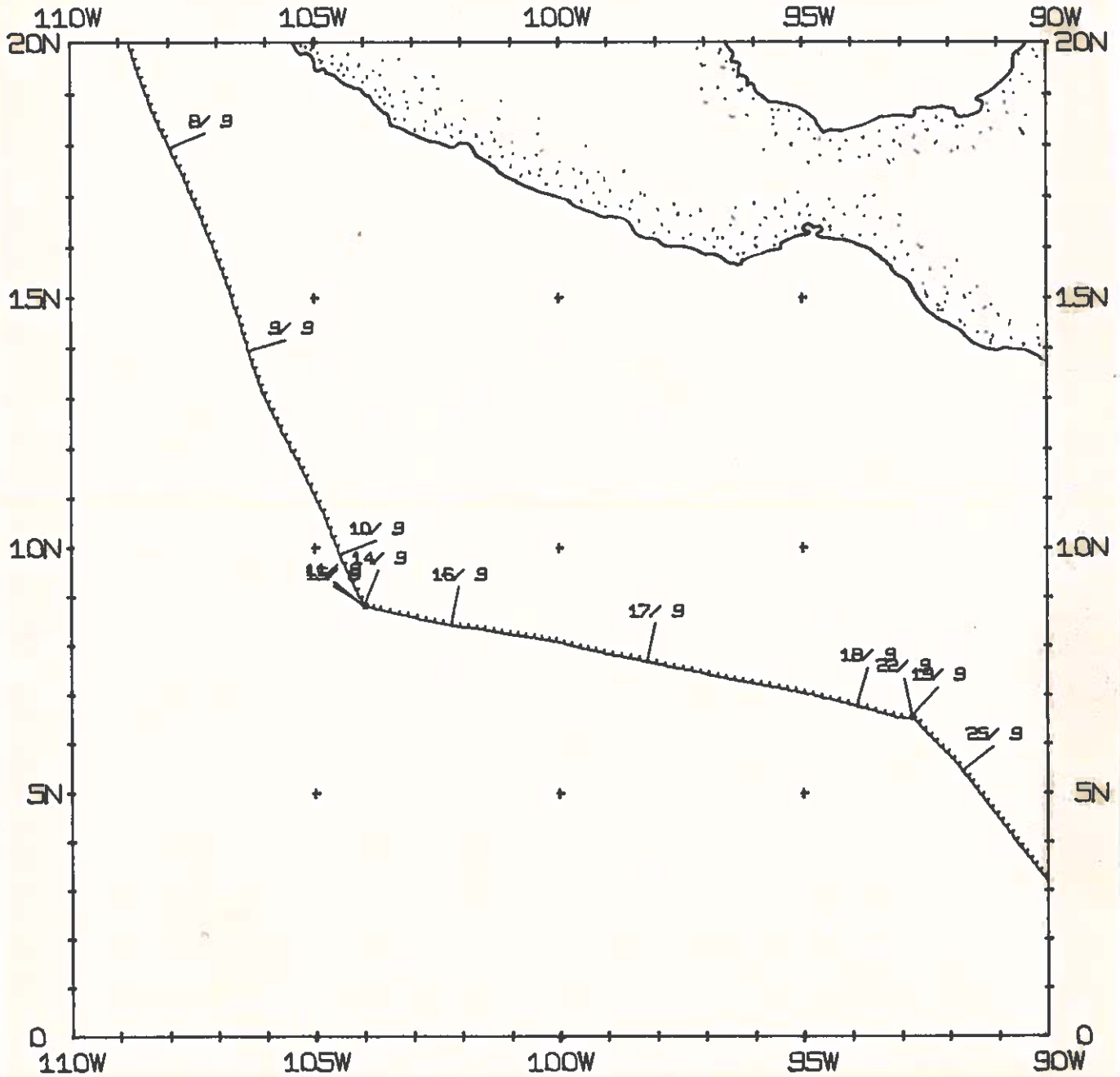
VULCAN LEG 1 TRACK PLOT (1 OF 3)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



VULCAN LEG 1 TRACK PLOT (2 OF 3)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



VULCAN LEG 1 TRACK PLOT (3 OF 3)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE

