

REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA
WESTWARD EXPEDITION

LEG 3

(WEST03MV)

R/V MELVILLE

(Issued August 1994)

Ports:

Wellington, New Zealand (14 February 1994)
to
Iquique, Chile (21 March 1994)

Co-Chief Scientists:

Sherm Bloomer (Boston University)
James Natland (University of Miami)
Paterno Castillo (Scripps Institution)

Resident Marine Technician - Ron Comer
Computer Technician - Jim Charters

Post-Cruise Processing and Report Preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, California 92093-0223

Data Collection and Processing Funded by:
NSF OCE94-00707

NOTE: *This is an index of underway geophysical data edited and processed after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223*

GDC Cruise I.D.# 266

**REPORT AND INDEX OF NAVIGATION
AND UNDERWAY GEOPHYSICAL DATA**

Processed by the Geological Data Center
Scripps Institution of Oceanography

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates and hour ticks.

Profiles - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

Sample Index - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines if collected on the cruise leg.

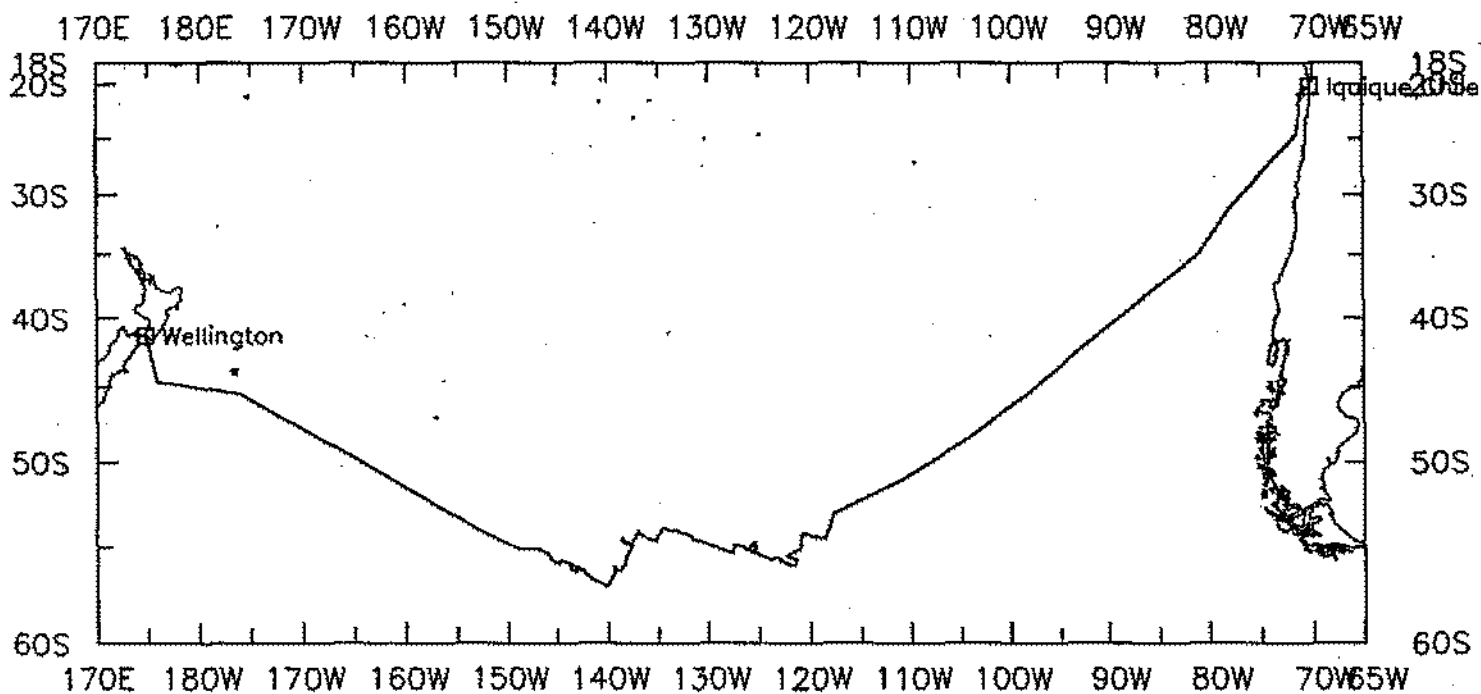
NOTE: One or more of the underway data types may not be collected on a given cruise leg. For information on the availability and reproduction costs of data in the following forms, contact S.M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223.

Phone: (619)534-2752, FAX: (619)534-5306, Internet email: ssmith@ucsd.edu

1. Files on Exabyte, DAT or 1/2 inch magnetic tape:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) These same data in a merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry Format (not available on 1/2" tape).
 - d) SeaBeam Sidescan data (not available on 1/2" tape).
2. Microfilm (35 mm flowfilm) or hard copies of:
 - a) Underway watch log book
 - b) SeaBeam vertical beam profile/Sidescan records.
 - c) Echosounder records - 3.5 kHz frequency.
 - d) Magnetometer records.
 - e) Seismic reflection profiler records.
3. Navigation listing with times and positions of fixes and course and speed changes.
4. Plots:
 - a) Copies of archived track plots.
 - b) Copies of archived SeaBeam contour plots.
 - c) Custom plots in Mercator projection:
 - 1) Track plots.
 - 2) SeaBeam depth contour plots.
 - 3) Depth, magnetic or gravity values printed or profiled along track.

SeaBeam 2000 Data Collected in Ancillary Mode

SeaBeam data were collected in "ancillary mode" on this leg. In this mode of operation, no Hardware Technician or SB/Underway Processor were on board and the types of realtime records and post-processed data products are reduced from those available under the fully funded mode.



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WESTWARD EXPEDITION LEG 3
 =====

CO-CHIEF SCIENTISTS: Sherm Bloomer, Boston University

James Natland, University of Miami

Paterno Castillo, Scripps Institution

PORTS: Wellington, New Zealand - Iquique, Chile

DATES: 14 February - 21 March 1994

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 7029 miles

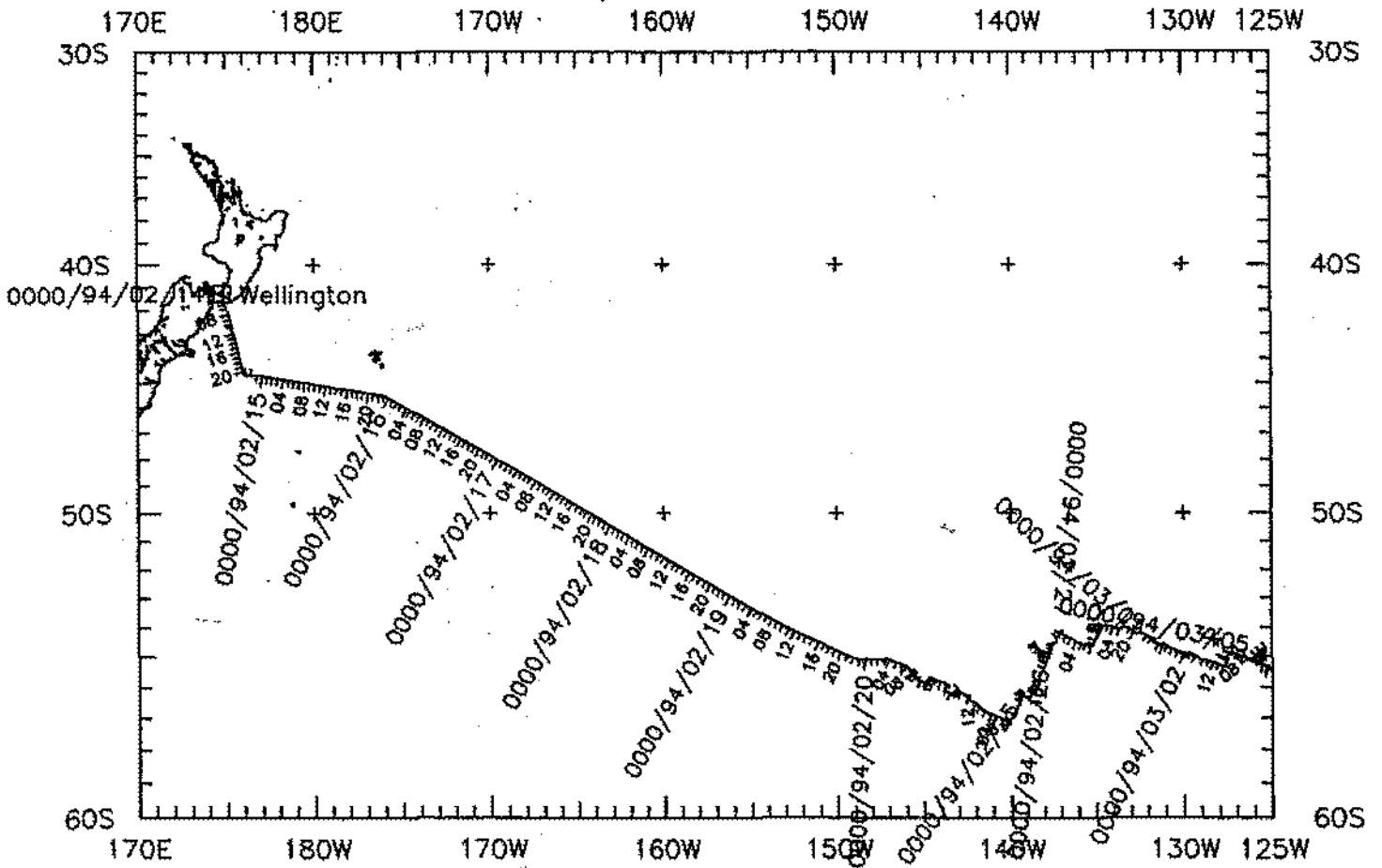
Magnetics - 5160 miles

Bathymetry - 6979 miles

Seismic Reflection - none collected

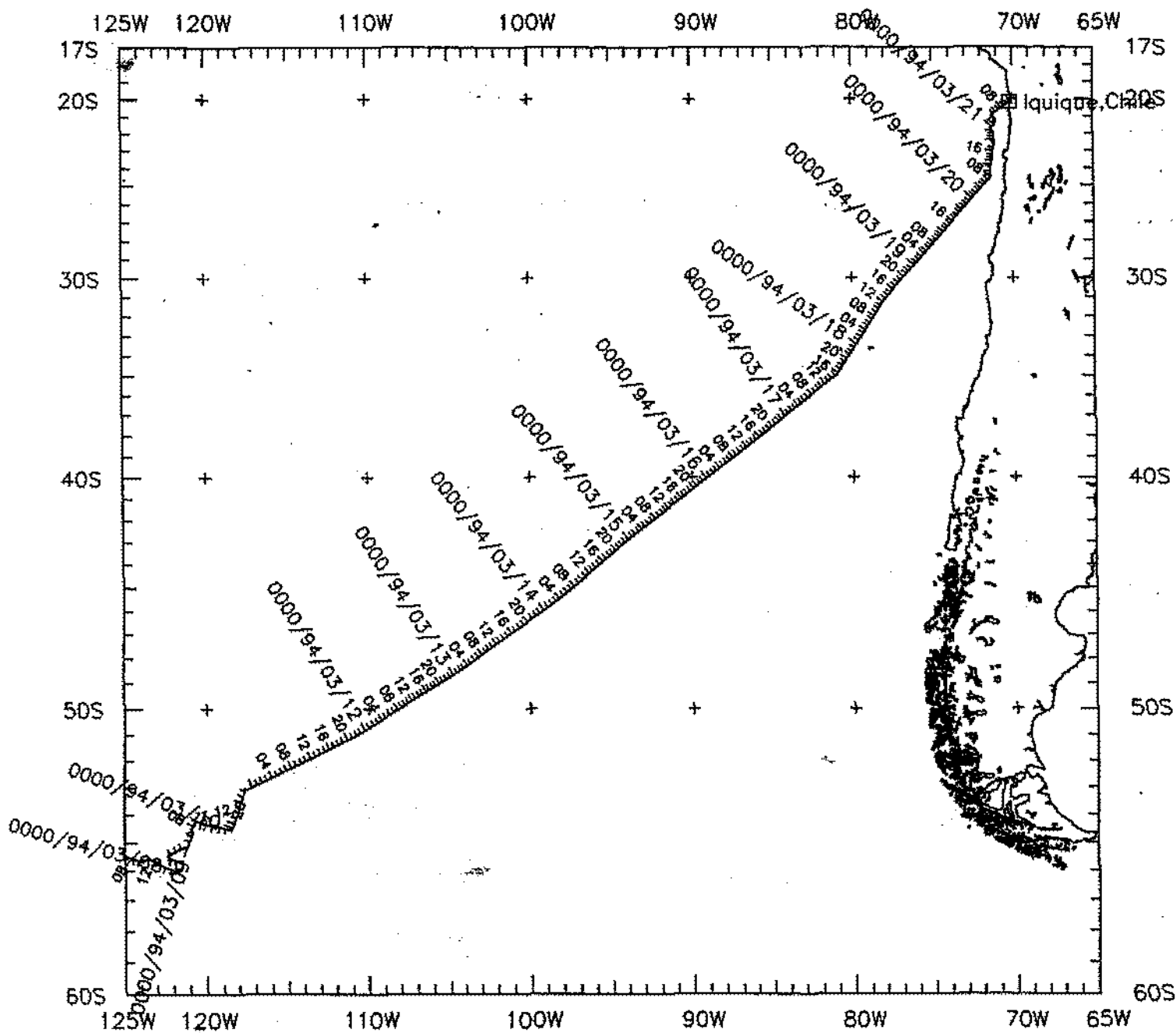
Sea Beam - 6979 miles

Gravity - collected but not processed



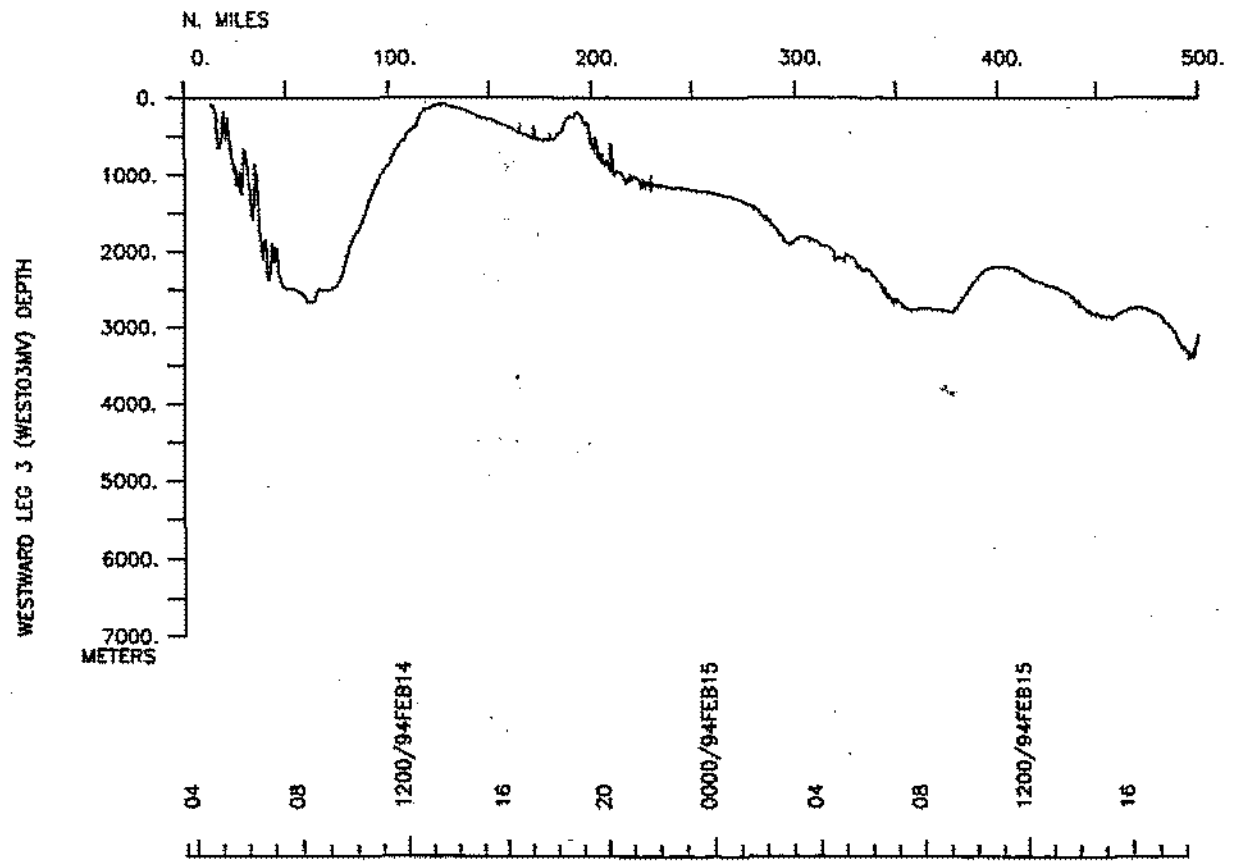
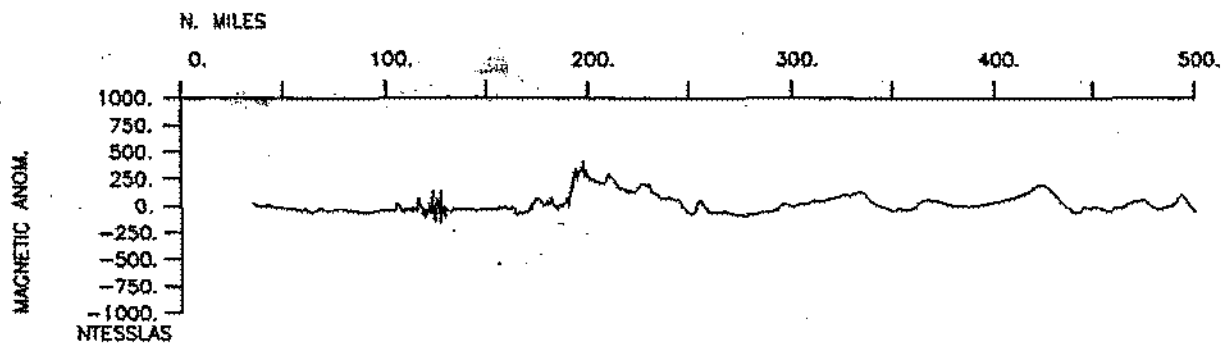
WESTWARD Leg 3 (WEST03MV)
Track 1 of 2

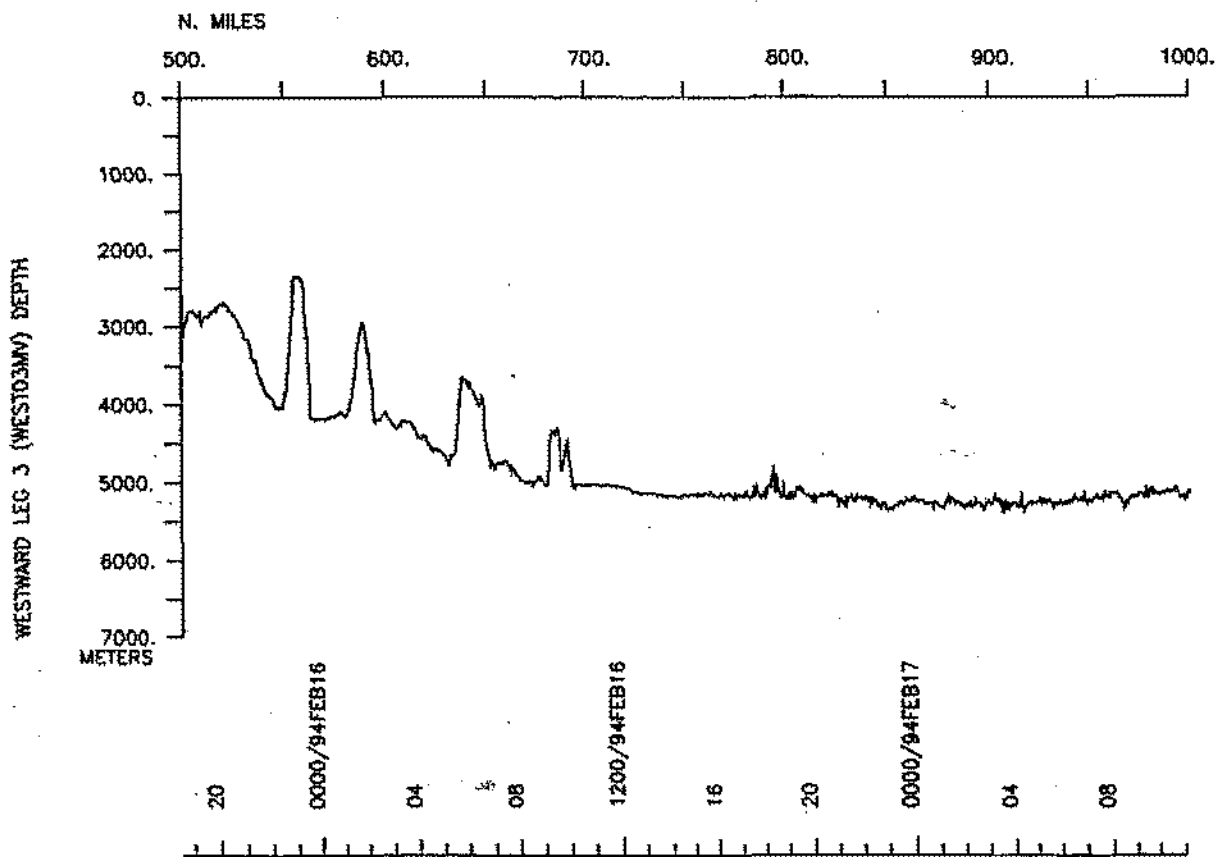
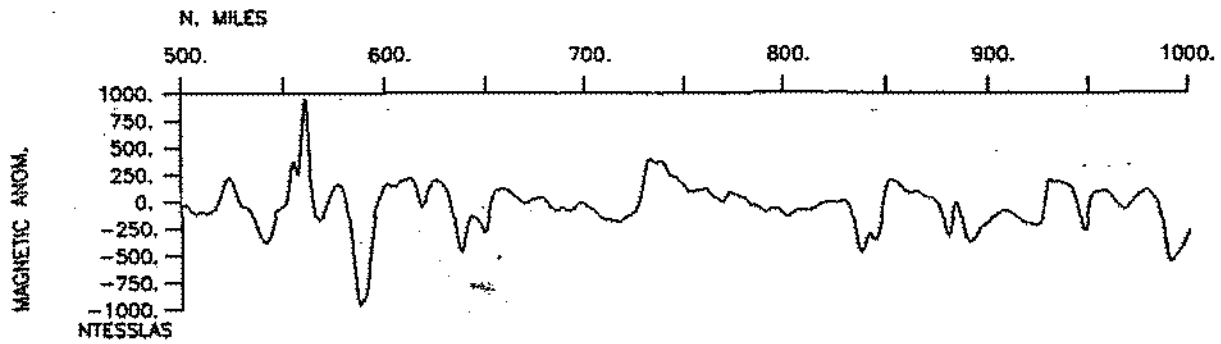
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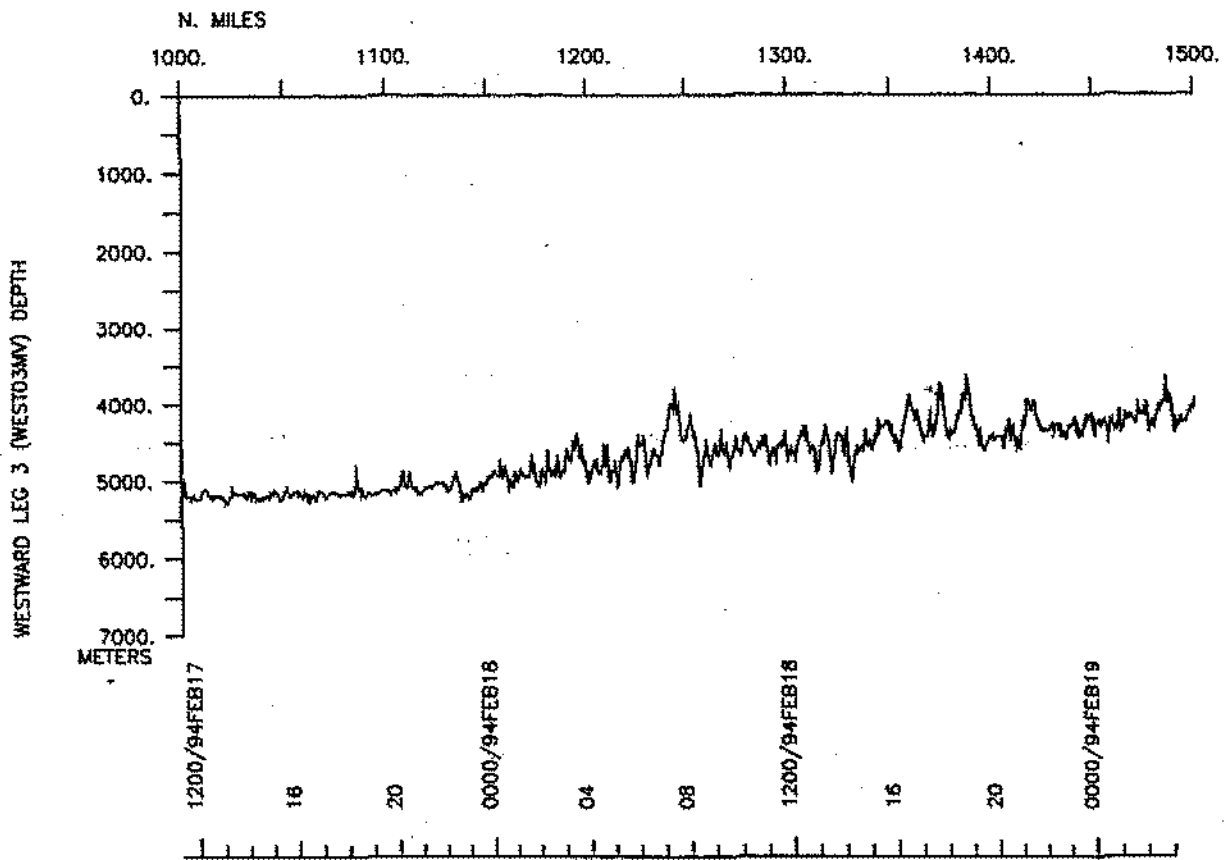
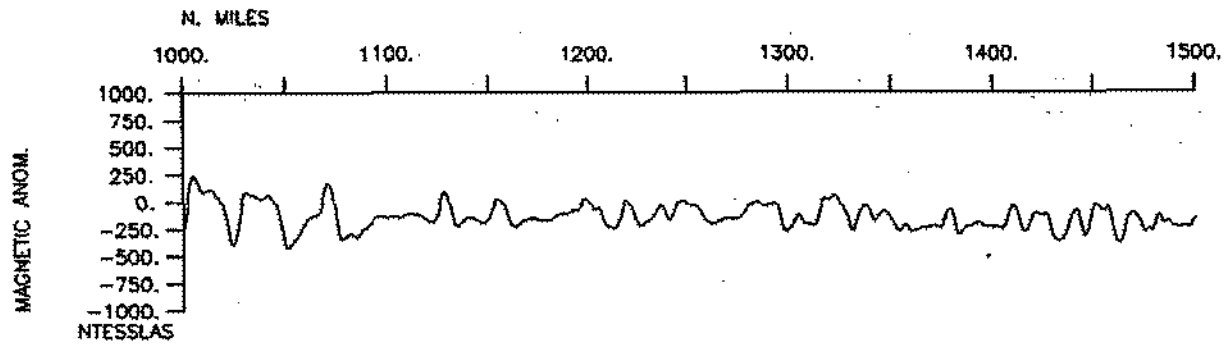


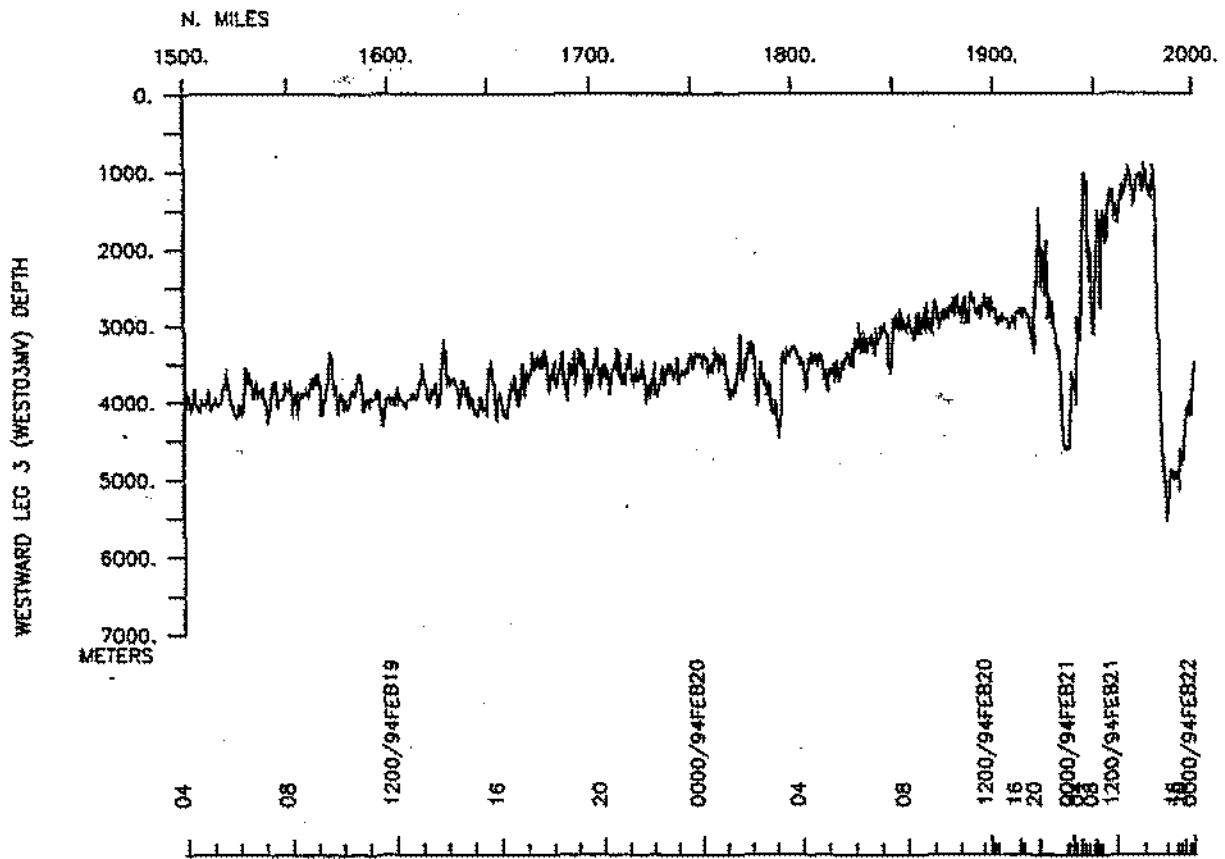
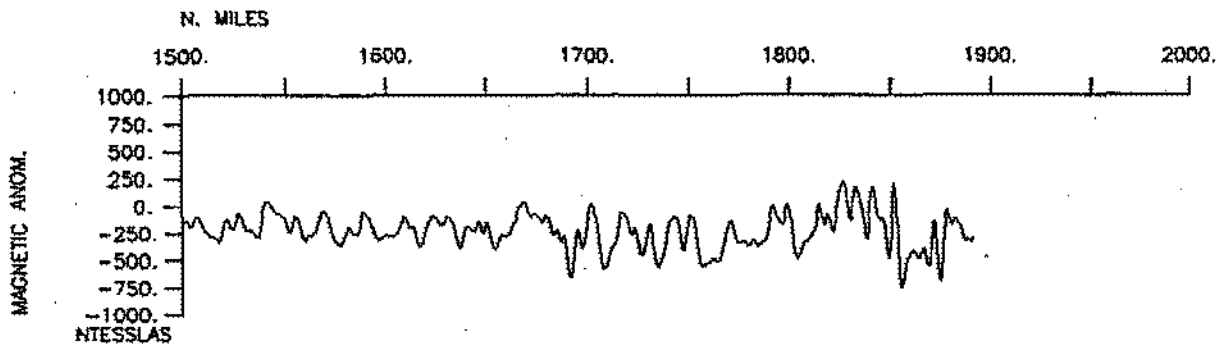
WESTWARD Leg 3 (WEST03MV)
Track 2 of 2

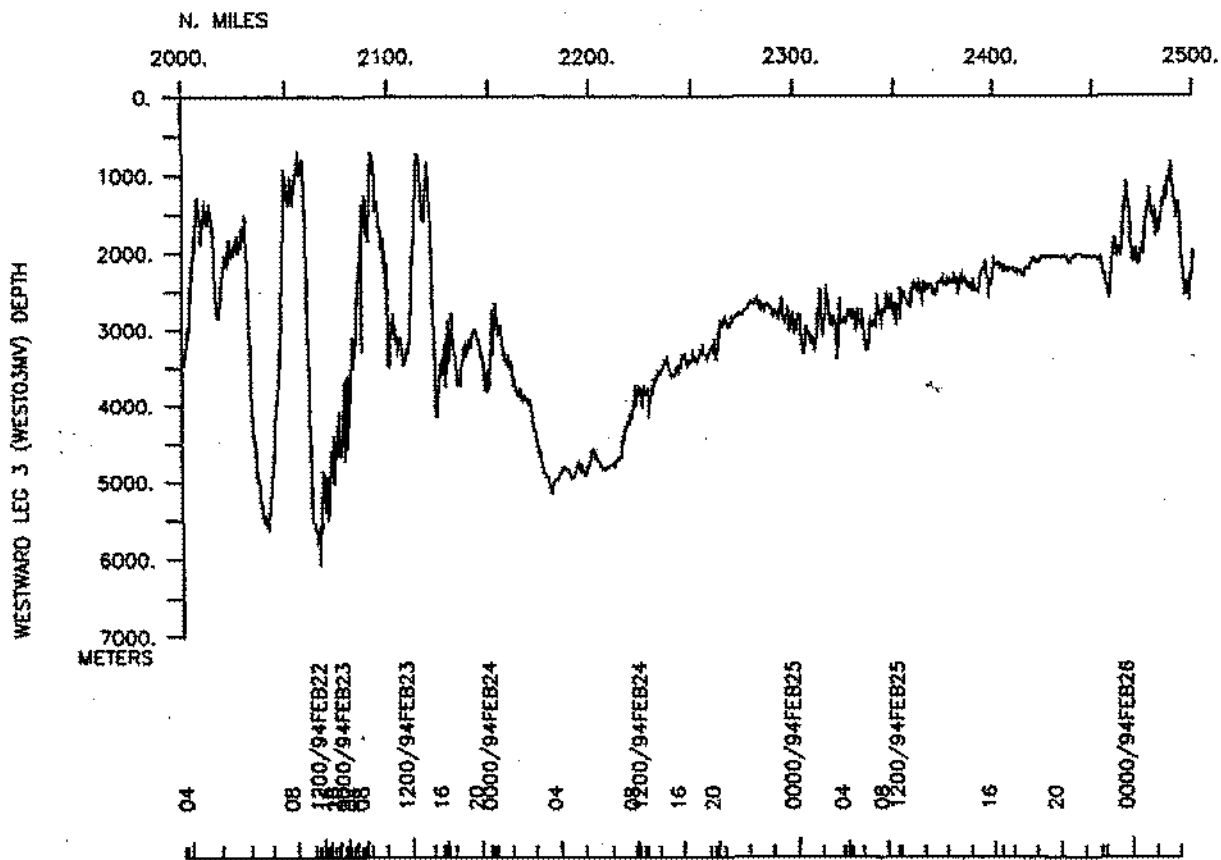
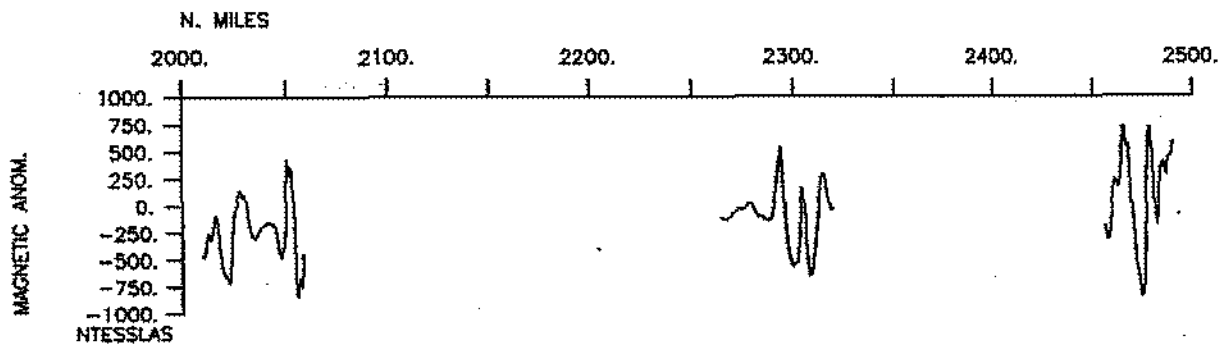
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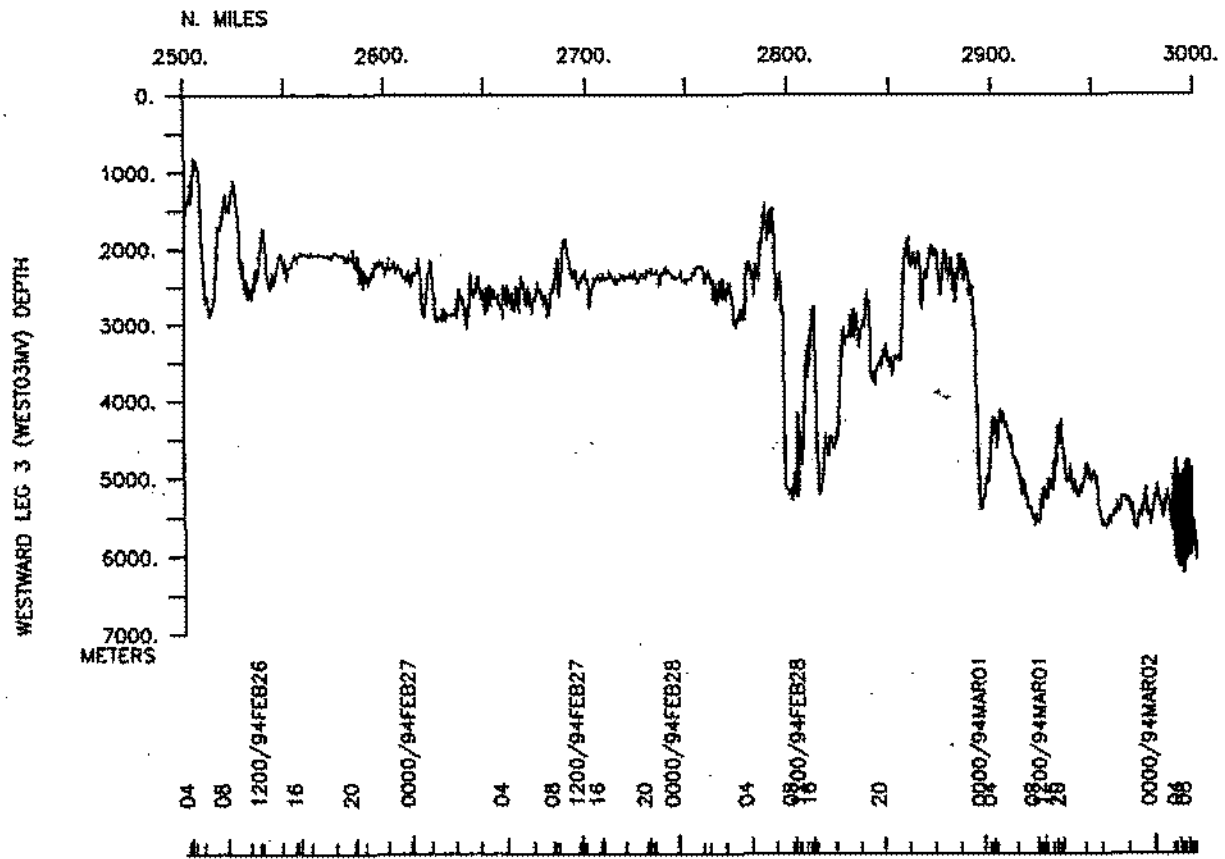
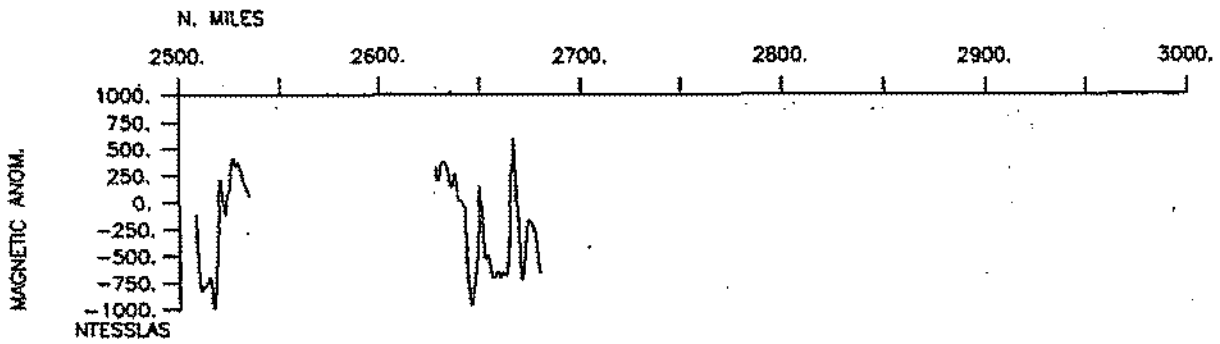


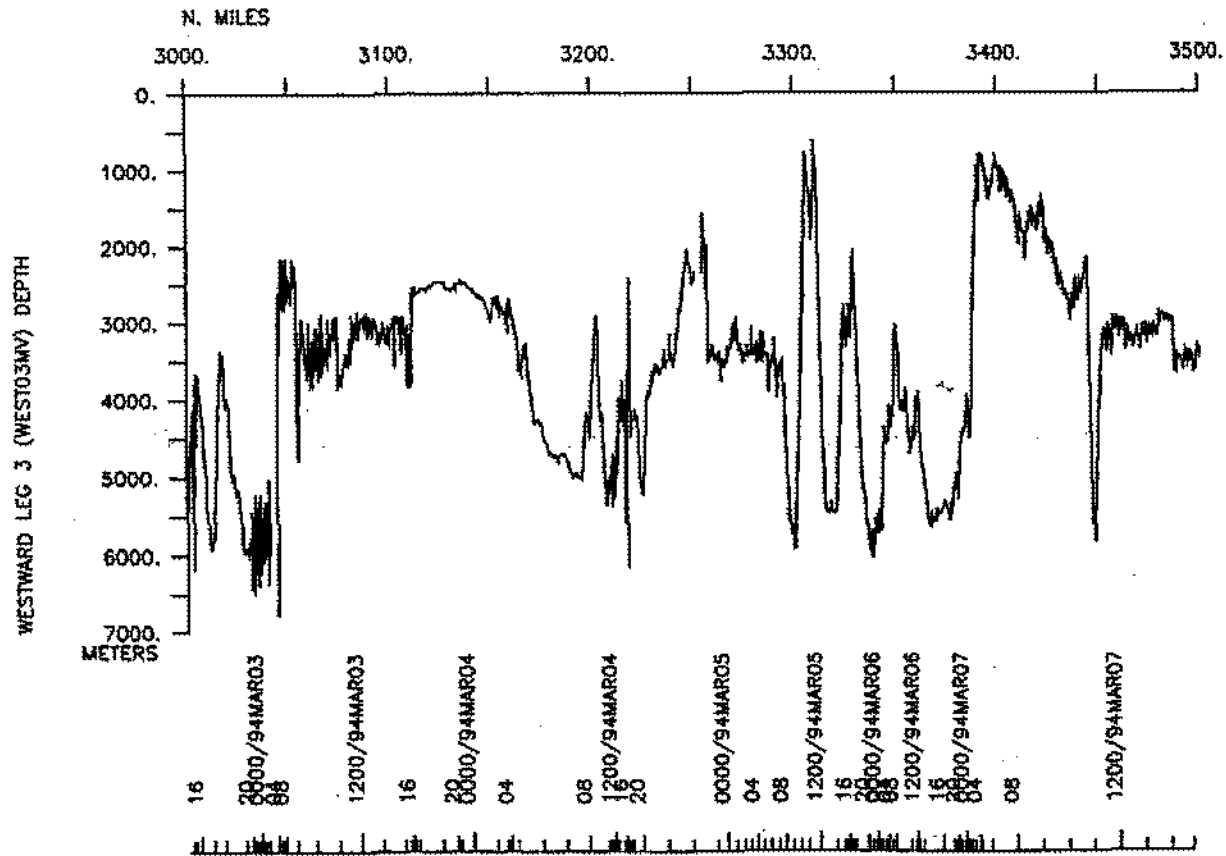
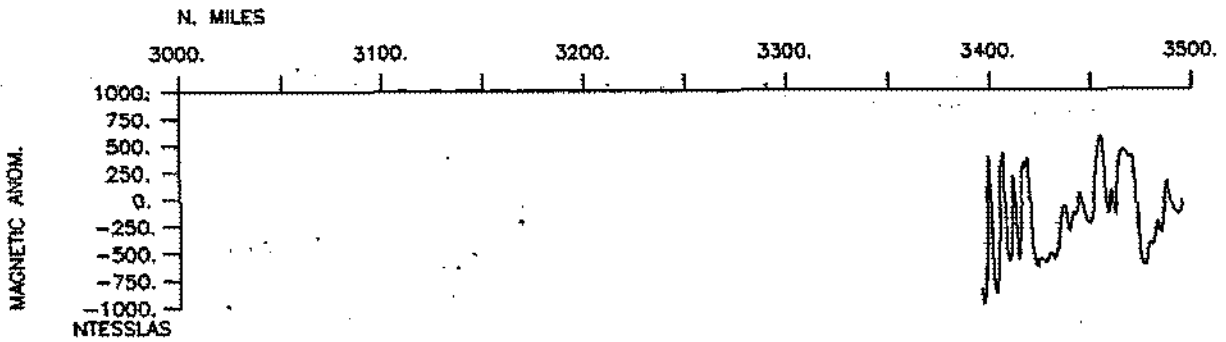


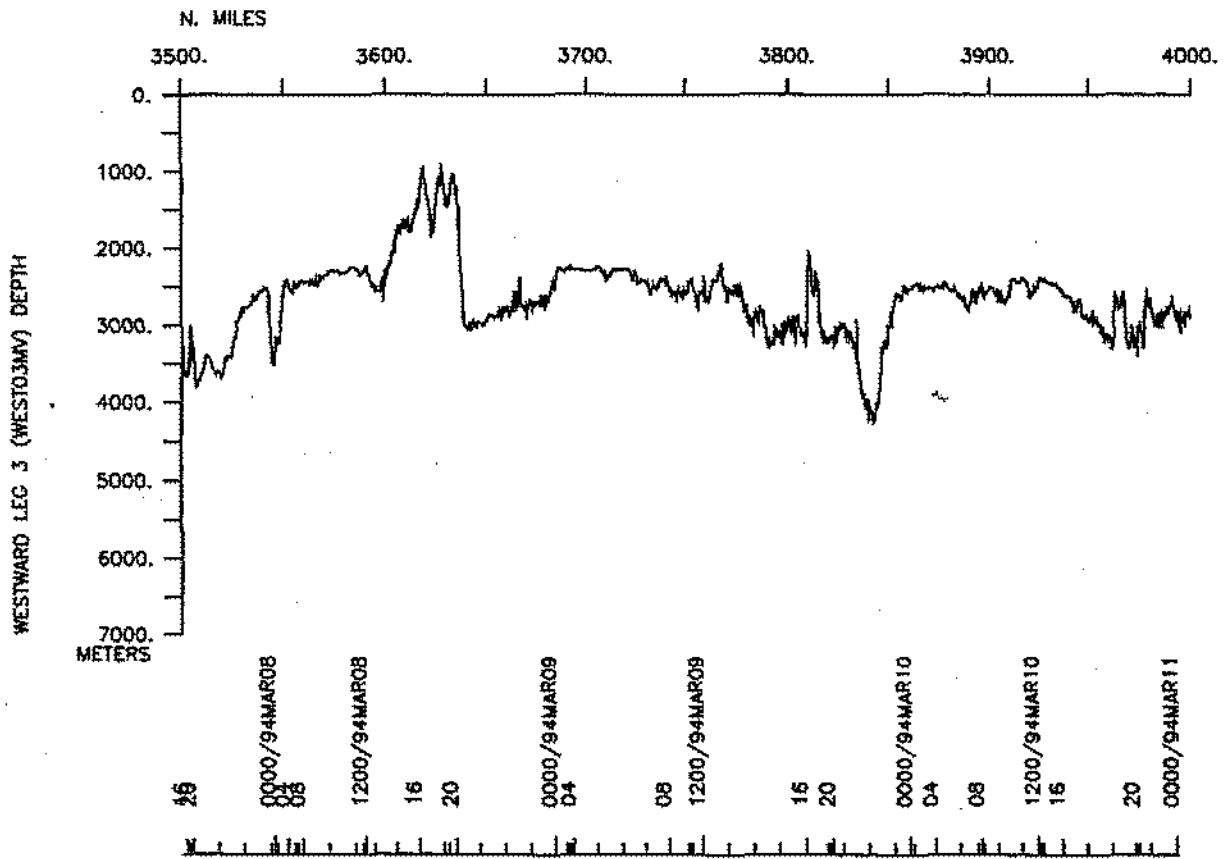
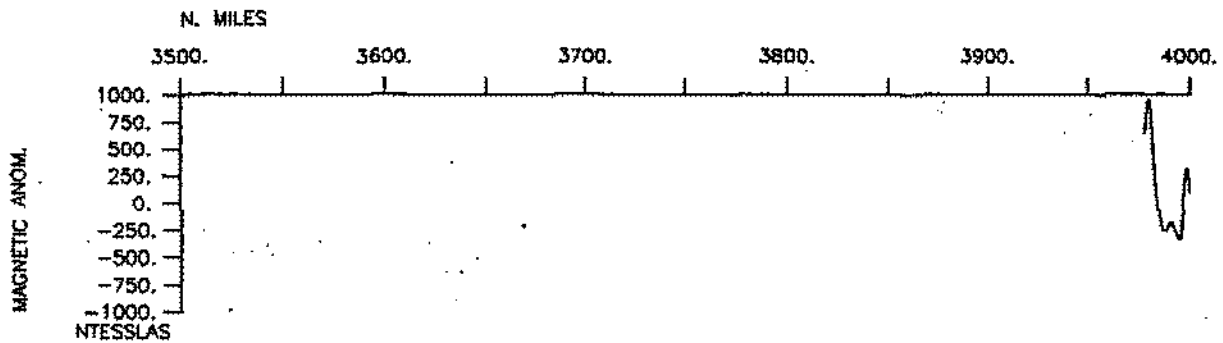


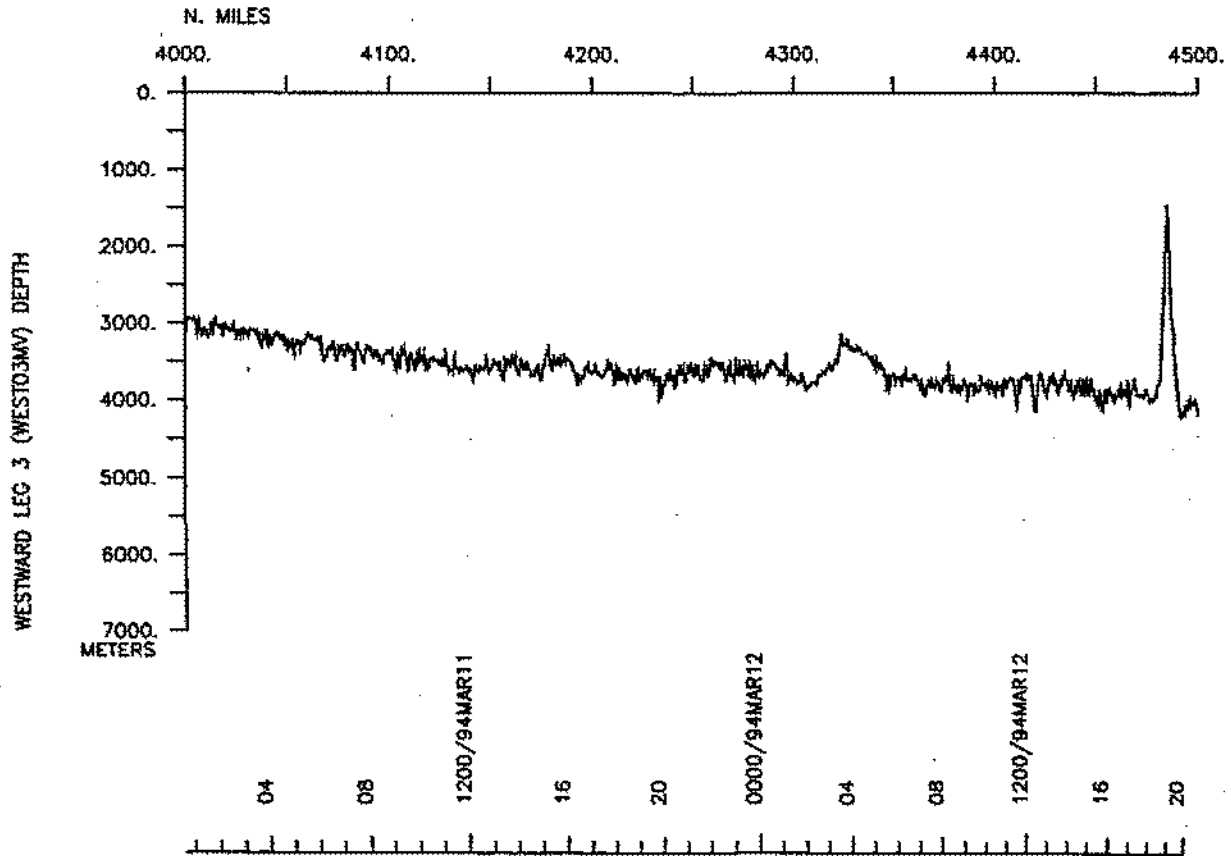
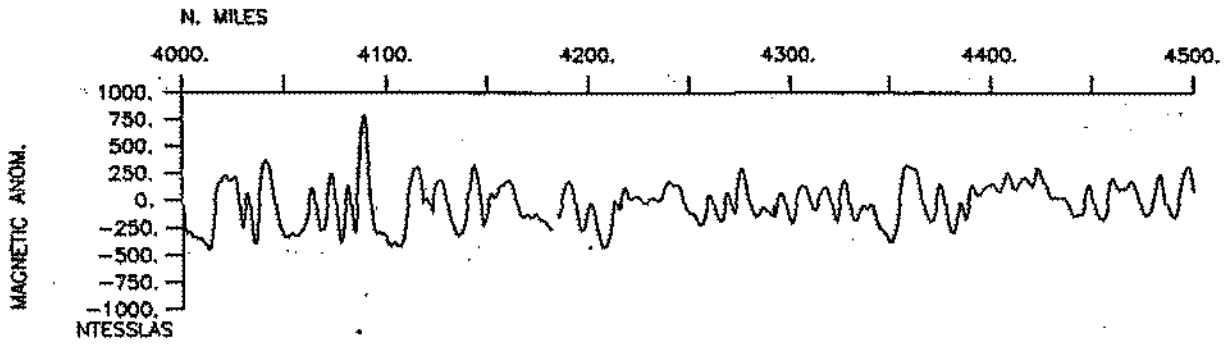


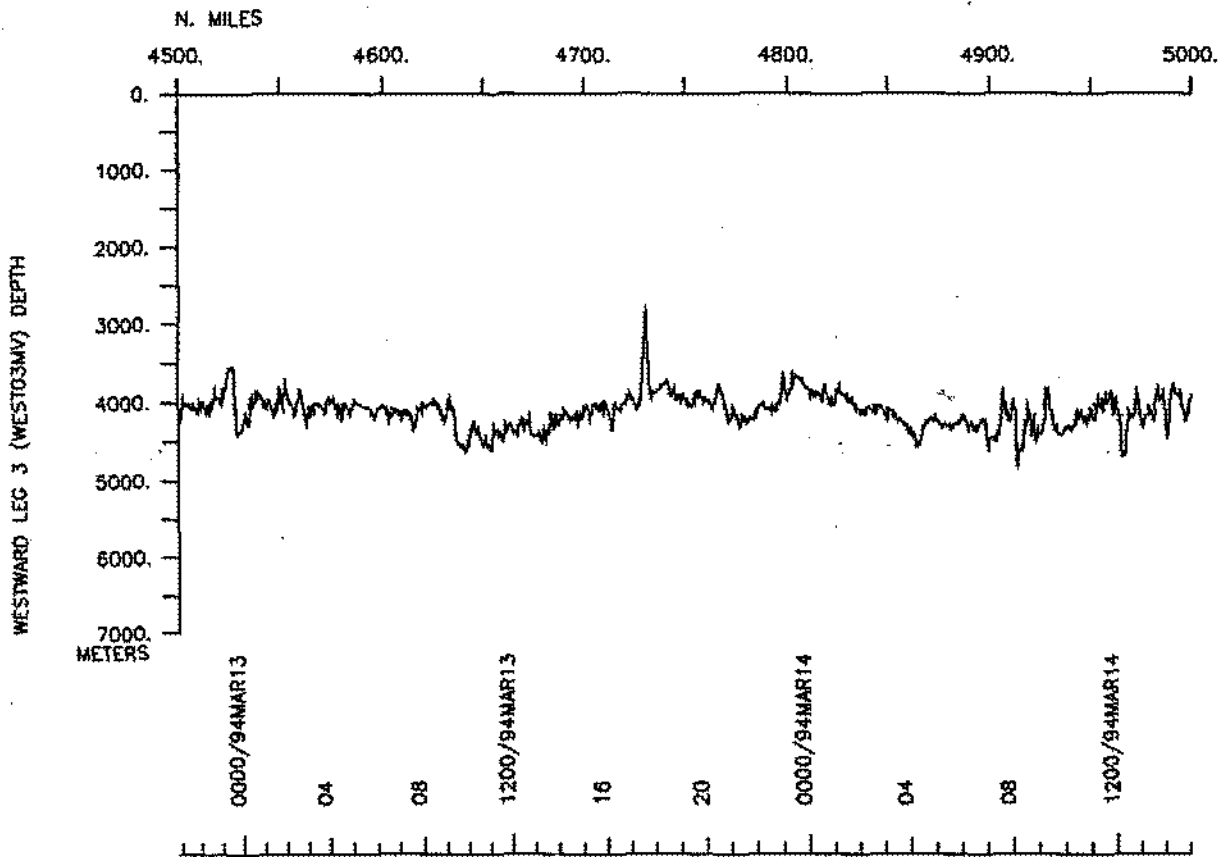
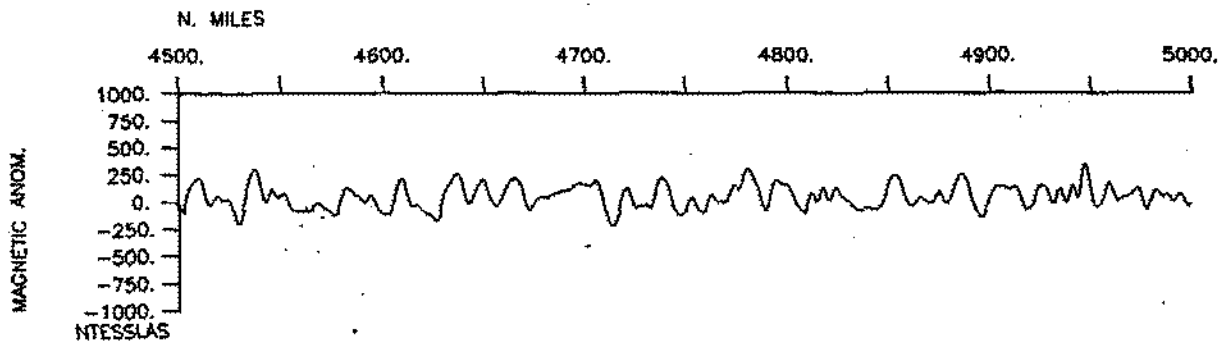


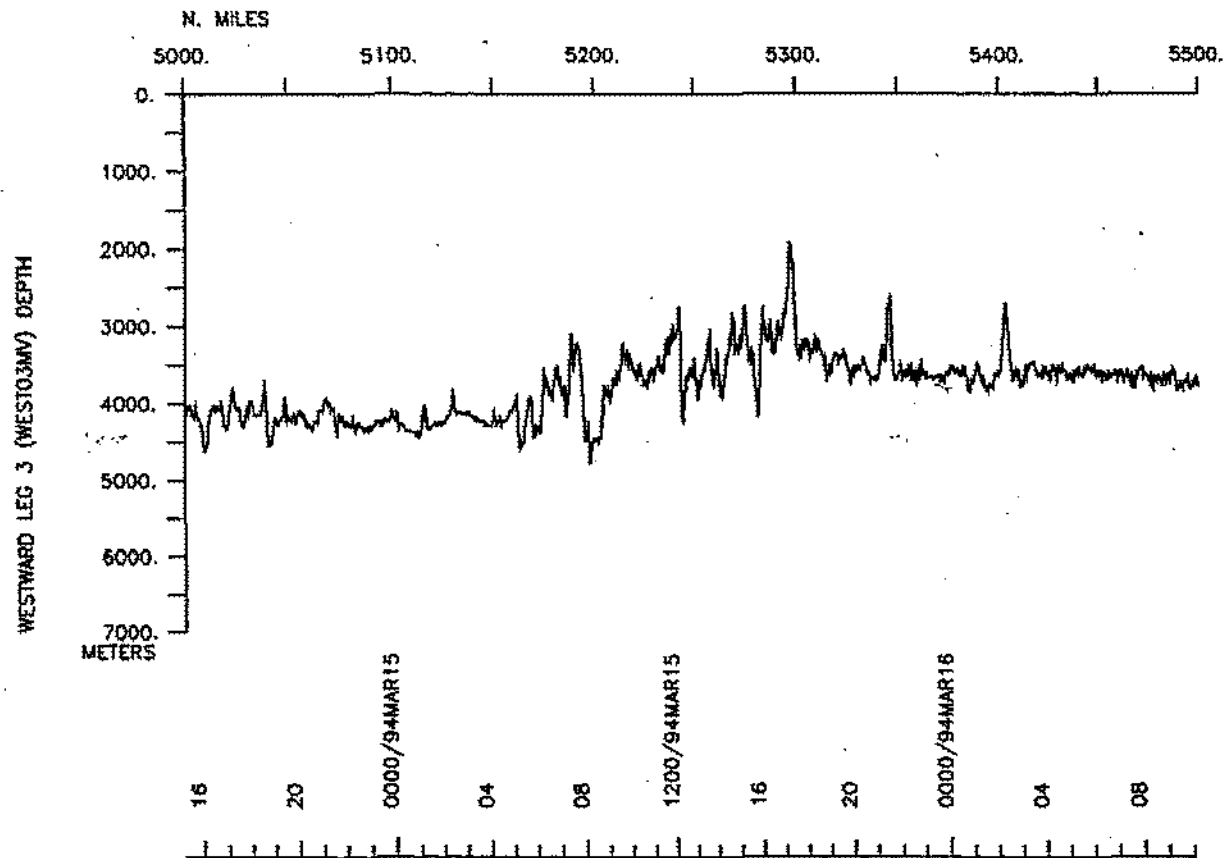
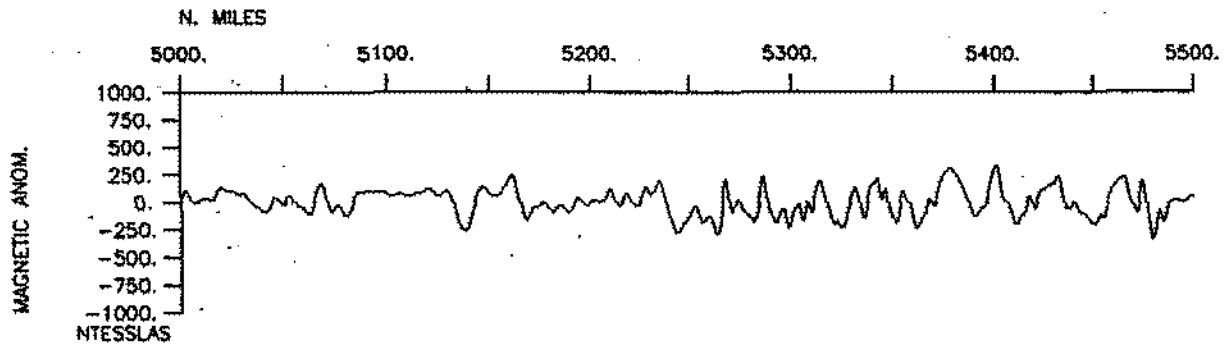


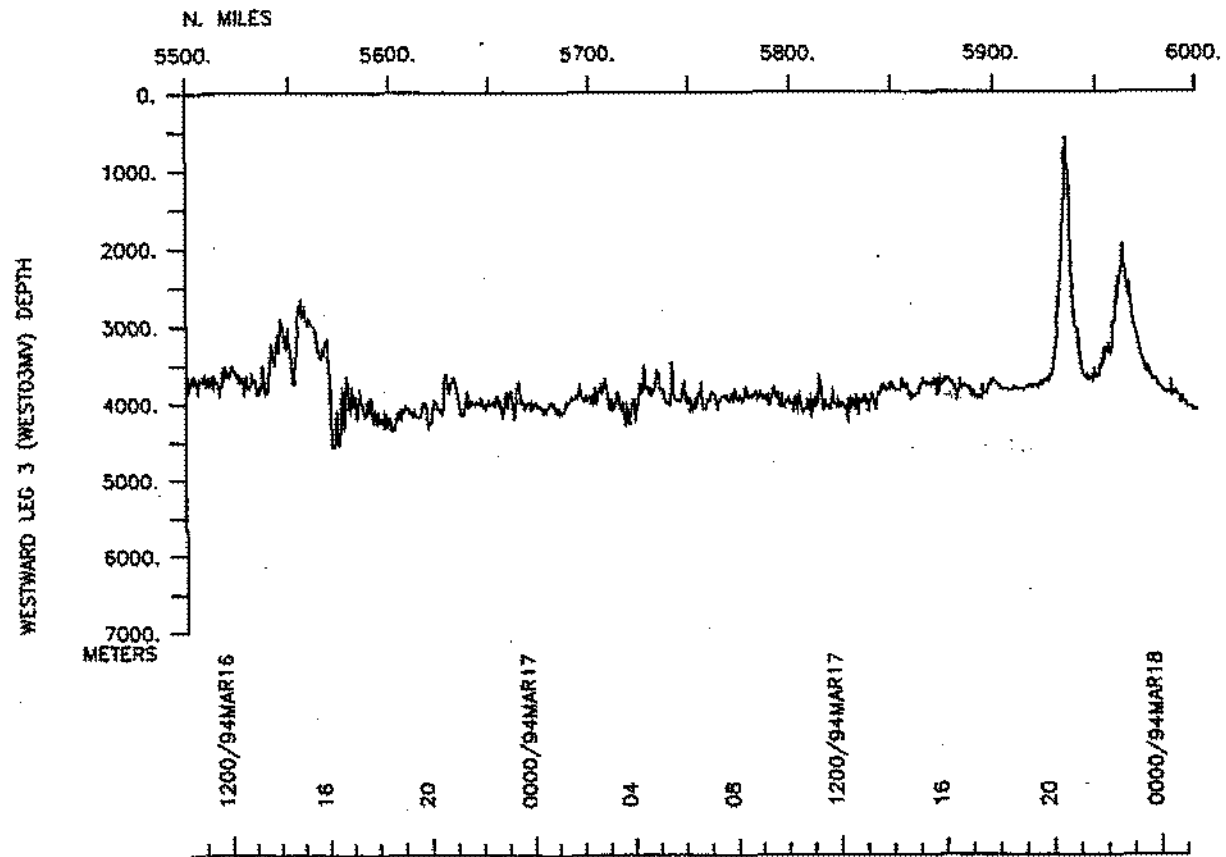
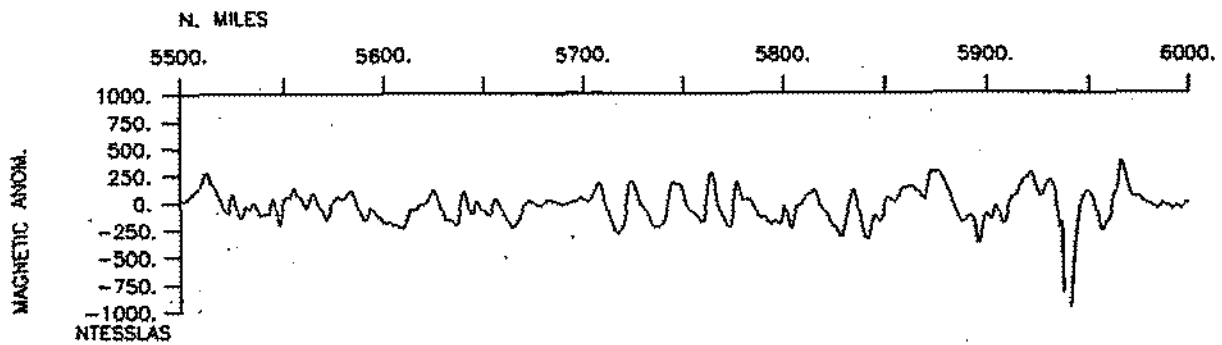


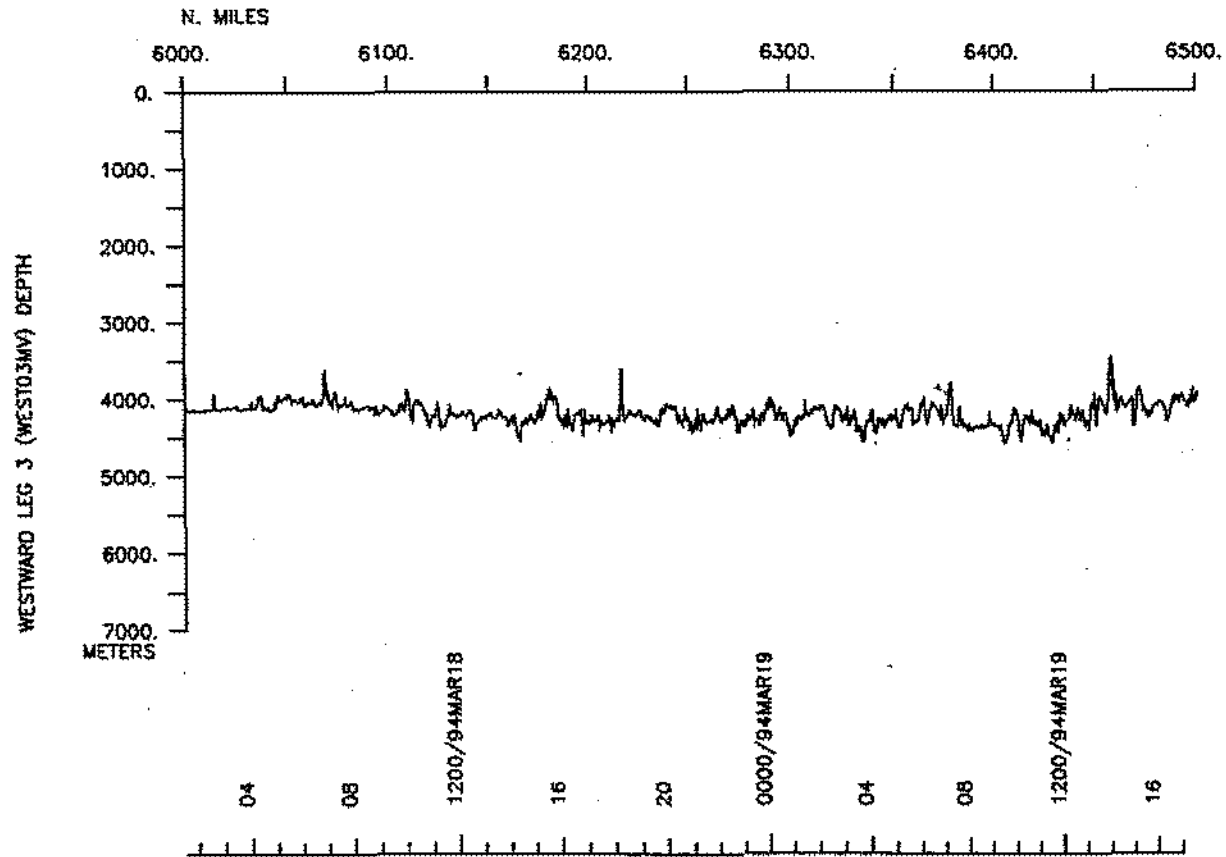
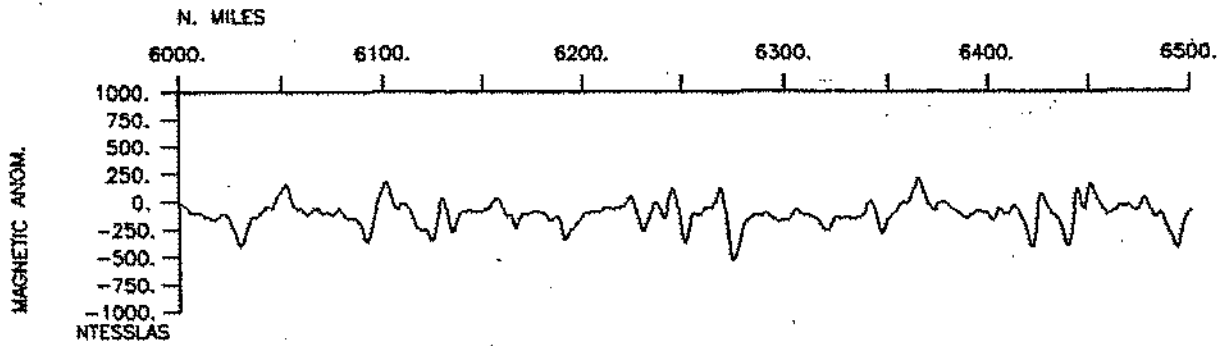


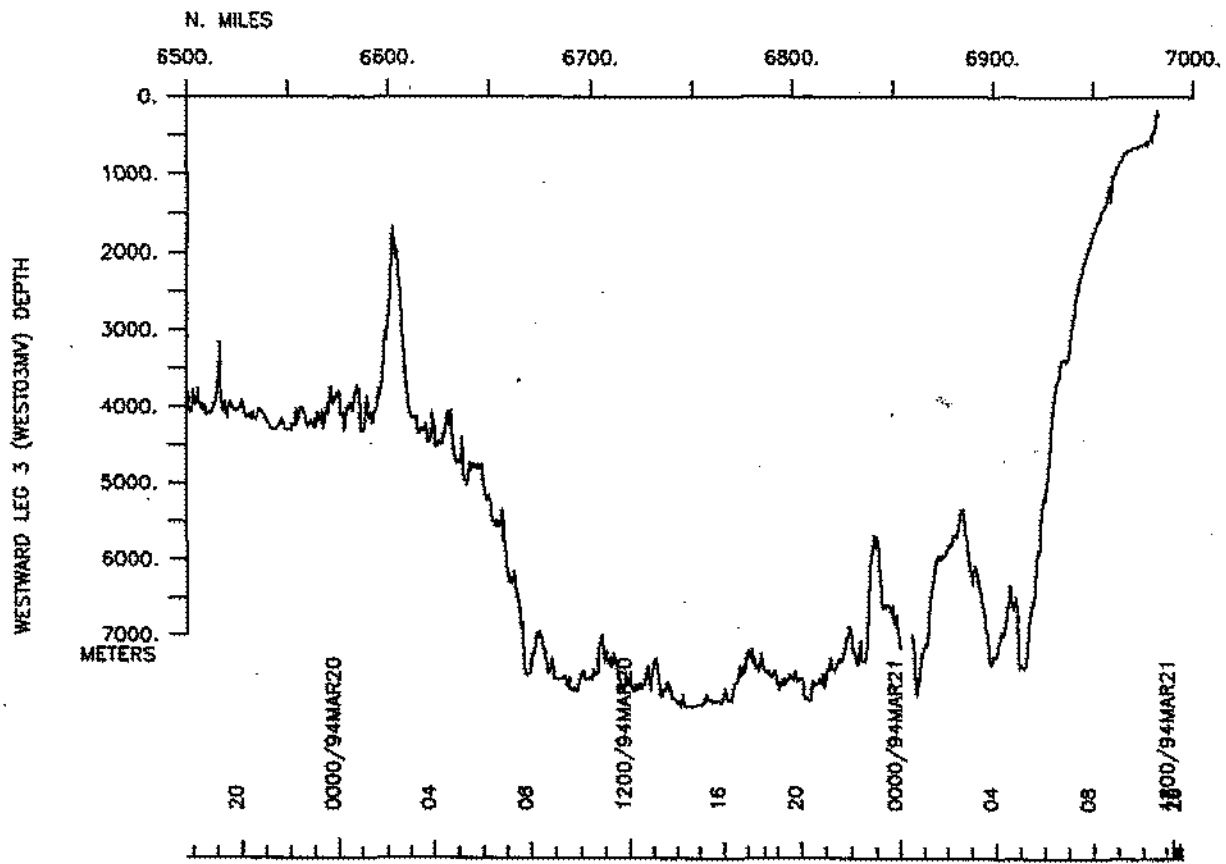
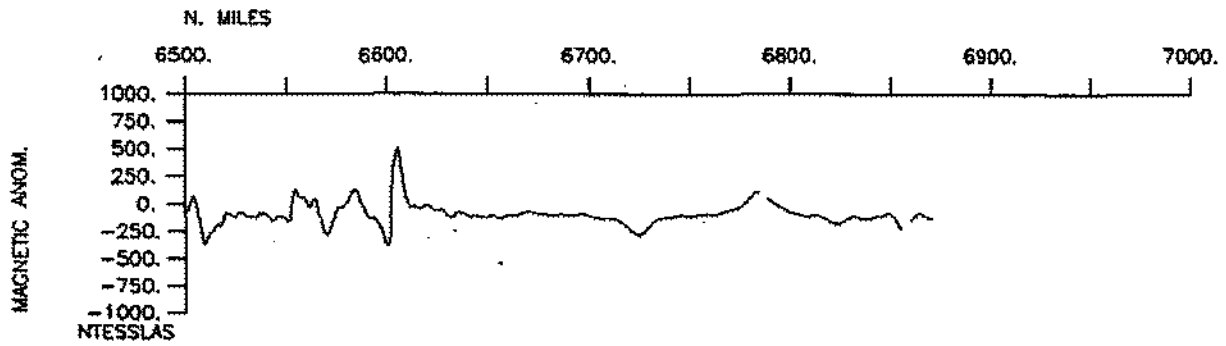












S.I.O. SAMPLE INDEX

(Issued August 1994)

WESTWARD EXPEDITION

Leg 3

(WEST03MV)

R/V Melville

Wellington, New Zealand (14 February 1994)

to

Iquique, Chile (21 March 1994)

Co-Chief Scientists:

Sherm Bloomer (Boston University)

James Natland (University of Miami)

Paterno Castillo (Scripps Institution)

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 marine 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 lines. 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.)

GDC Cruise I.D.# 266

**** Ports ***

0324	140294	LGPT B Wellington, N.Z.	41-17.00S	174-47.00E	f	WEST03MV
1530	210394	LGPT E Iquique, Chile	20-12.00S	70-10.00W	f	WEST03MV

**** Personnel ***

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS SIX	Bloomer, Dr. S.	Chief Scientist	Boston University	WEST03MV
PECS GRD	Castillo, Dr. P.	Co-Chief Scient.	Scripps Institution	WEST03MV
PECS SIX	Natland, Dr. J.	Co-Chief Scient.	University of Miami	WEST03MV
PESP SIX	Niu, Dr. Y.	Asst. Professor	Australia	WEST03MV
PESP SIX	Solidum, R.	Volunteer	Scripps Institution	WEST03MV
PESP SIX	Goodwillie, Dr. A.	Visiting Scholar	Scripps Institution	WEST03MV
PERT STS	Comer, R. L.	Resident Tech.	Scripps Institution	WEST03MV
PECT STS	Charters, J.	Computer Tech.	Scripps Institution	WEST03MV
PECT STS	Porteous, T.	Programmer	Scripps Institution	WEST03MV
PESP WHOI	Sapp, K.	Research Tech.	Woods Hole Ocean. Ins	WEST03MV
PEST SIX	Hoaster, J. J.	Grad. Student	University of Miami	WEST03MV
PEST SIX	Pletsch, B.	Grad. Student	Boston University	WEST03MV
PEVL SIX	Root, E.	Bird Observer	Scripps Institution	WEST03MV

**** 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 a particular leg. (Moored
#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.

*** Ports ***

0324	140294	LGPT B	Wellington, N.Z.	41-17.00S	174-47.00E	f	WEST03MV
1530	210394	LGPT E	Iquique, Chile	20-12.00S	70-10.00W	f	WEST03MV

*** Personnel ***

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PECS SIX	Bloomer, Dr. S.	Chief Scientist	Boston University	WEST03MV
PECS GRD	Castillo, Dr. P.	Co-Chief Scient.	Scripps Institution	WEST03MV
PECS SIX	Natland, Dr. J.	Co-Chief Scient.	University of Miami	WEST03MV
PESP SIX	Niu, Dr. Y.	Asst. Professor	Australia	WEST03MV
PESP SIX	Solidum, R.	Volunteer	Scripps Institution	WEST03MV
PESP SIX	Goodwillie, Dr. A.	Visiting Scholar	Scripps Institution	WEST03MV
PERT STS	Comer, R. L.	Resident Tech.	Scripps Institution	WEST03MV
PECT STS	Charters, J.	Computer Tech.	Scripps Institution	WEST03MV
PECT STS	Porteous, T.	Programmer	Scripps Institution	WEST03MV
PESP WHOI	Sapp, K.	Research Tech.	Woods Hole Ocean. Ins	WEST03MV
PEST SIX	Hoaster, J. J.	Grad. Student	University of Miami	WEST03MV
PEST SIX	Pletsch, B.	Grad. Student	Boston University	WEST03MV
PEVL SIX	Root, E.	Bird Observer	Scripps Institution	WEST03MV

*** NOTES ***

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#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP

**** Underway Data Curator - S. M. Smith ext. 42752 ****

**** Log Books ****

0330	140294	0	LEBW	B Underway watch log	GDC	41-16.18S	174-47.47E	g	WEST03MV
1045	210394	0	LEBW	E Underway watch log	GDC	20-14.12S	70-14.56W	g	WEST03MV
1232	200294	0	LBSC	B Geologic samples log	GCR	55-54.26S	144-54.68W	g	WEST03MV
2024	100394	0	LBSC	E Geologic samples log	GCR	53-07.60S	117-41.89W	g	WEST03MV

**** Sea Beam Records (vertical beam and side scan) ****

0427	140294	0	MBSR	B v.beam&sidescan r-01	GDC	41-24.50S	174-49.57E	g	WEST03MV
1045	210394	0	MBSR	E v.beam&sidescan r-01	GDC	20-14.12S	70-14.56W	g	WEST03MV

**** Magnetism (Earth Total Field) Records ****

0620	140294	0	MGRA	B Magnetism r-01	GDC	41-48.00S	174-57.67E	g	WEST03MV
0846	190294	0	MGRA	E Magnetism r-01	GDC	53-49.24S	153-31.91W	g	WEST03MV
0853	190294	0	MGRA	B Magnetism r-02	GDC	53-50.00S	153-29.77W	g	WEST03MV
1759	130394	0	MGRA	E Magnetism r-02	GDC	46-42.57S	100-41.51W	g	WEST03MV
1803	130394	0	MGRA	B Magnetism r-03	GDC	46-42.06S	100-40.56W	g	WEST03MV
1206	200394	0	MGRA	E Magnetism r-03	GDC	23-49.08S	71-21.60W	g	WEST03MV
1213	200394	0	MGRA	B Magnetism r-04	GDC	23-47.69S	71-21.68W	g	WEST03MV
0126	210394	0	MGRA	E Magnetism r-04	GDC	21-27.60S	71-04.34W	g	WEST03MV

#GMT	DDMMYY	SAME	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP

#*** Glass Cores ***

1652	250294	0	CORG	Glass corer	19	2131M GRD	55-37.50S	138-18.89W	g	WEST03MV
2219	250294	0	CORG	Glass corer	20	2067M GRD	54-53.51S	137-41.38W	g	WEST03MV
1916	260294	0	CORG	Glass corer	24	2175M GRD	54-29.86S	137-22.51W	g	WEST03MV
2010	260294	0	CORG	Glass corer	25	2226M GRD	54-30.02S	137-23.18W	g	WEST03MV
2338	260294	0	CORG	Glass corer	26	2441M GRD	54-10.00S	137-01.44W	g	WEST03MV
1521	270294	0	CORG	Glass corer	29	2400M GRD	54-35.41S	135-07.14W	g	WEST03MV
1615	270294	0	CORG	Glass corer	30	2420M GRD	54-35.95S	135-06.89W	g	WEST03MV
0149	280294	0	CORG	Glass corer	32	2364M GRD	53-55.00S	134-34.22W	g	WEST03MV

#*** Rock Dredges ***

1232	200294	0	DRRO	Rock dredge	1	2845M GCR	55-54.26S	144-54.68W	g	WEST03MV
1701	200294	0	DRRO	Rock dredge	2	2864M GCR	55-43.27S	144-46.40W	g	WEST03MV
2244	200294	0	DRRO	Rock dredge	3	4618M GCR	55-48.83S	144-18.09W	g	WEST03MV
0356	210294	0	DRRO X	Rock dredge	4	3225M GCR	55-47.53S	144-16.98W	g	WEST03MV
0800	210294	0	DRRO	Rock dredge	5	3151M GCR	55-47.47S	144-16.94W	g	WEST03MV
1649	210294	0	DRRO	Rock dredge	6	4939M GCR	56-01.22S	143-49.50W	g	WEST03MV
2307	210294	0	DRRO	Rock dredge	7	4167M GCR	56-01.48S	143-51.89W	g	WEST03MV
1114	220294	0	DRRO	Rock dredge	8	5631M GCR	56-12.00S	143-03.02W	g	WEST03MV
1811	220294	0	DRRO	Rock dredge	9	4665M GCR	56-09.93S	143-03.78W	g	WEST03MV
2330	220294	0	DRRO	Rock dredge	10	4102M GCR	56-08.93S	143-04.10W	g	WEST03MV
0603	230294	0	DRRO	Rock dredge	11	1618M GCR	56-06.16S	143-05.98W	g	WEST03MV
1522	230294	0	DRRO	Rock dredge	12	3407M GCR	56-23.28S	142-25.89W	g	WEST03MV
2141	230294	0	DRRO	Rock dredge	13	3547M GCR	56-32.48S	141-57.99W	g	WEST03MV
0817	240294	0	DRRO	Rock dredge	14	3972M GCR	57-06.50S	140-10.01W	g	WEST03MV
1153	240294	0	DRRO	Rock dredge	15	3880M GCR	57-06.49S	140-09.99W	g	WEST03MV
1819	240294	0	DRRO	Rock dredge	16	3252M GCR	56-40.99S	139-40.01W	g	WEST03MV
0339	250294	0	DRRO	Rock dredge	17	2883M GCR	56-16.21S	139-18.46W	g	WEST03MV
0936	250294	0	DRRO	Rock dredge	18	2761M GCR	56-15.00S	138-52.94W	g	WEST03MV
0407	260294	0	DRRO	Rock dredge	21	1300M GCR	54-35.58S	138-31.54W	g	WEST03MV
1015	260294	0	DRRO	Rock dredge	22	2003M GCR	54-50.55S	137-53.01W	g	WEST03MV
1429	260294	0	DRRO	Rock dredge	23	2121M GCR	54-53.04S	137-39.93W	g	WEST03MV
0657	270294	0	DRRO	Rock dredge	27	2491M GCR	54-34.72S	135-31.49W	g	WEST03MV
1152	270294	0	DRRO	Rock dredge	28	2467M GCR	54-39.00S	135-15.92W	g	WEST03MV
1958	270294	0	DRRO	Rock dredge	31	2296M GCR	54-16.09S	134-53.57W	g	WEST03MV
0734	280294	0	DRRO	Rock dredge	33	5159M GCR	54-03.02S	133-34.99W	g	WEST03MV
1428	280294	0	DRRO	Rock dredge	34	3239M GCR	54-04.06S	133-37.25W	g	WEST03MV
0148	010394	0	DRRO	Rock dredge	35	4952M GCR	54-29.90S	131-41.04W	g	WEST03MV
0935	010394	0	DRRO	Rock dredge	36	5536M GCR	54-37.79S	131-09.00W	g	WEST03MV
1522	010394	0	DRRO	Rock dredge	37	5100M GCR	54-34.15S	131-08.96W	g	WEST03MV
0253	020394	0	DRRO	Rock dredge	38	5523M GCR	54-55.47S	129-42.80W	g	WEST03MV
2200	020394	0	DRRO	Rock dredge	39	6000M GCR	55-02.00S	129-20.94W	g	WEST03MV
0515	030394	0	DRRO	Rock dredge	40	2659M GCR	54-57.99S	129-16.51W	g	WEST03MV
1528	030394	0	DRRO	Rock dredge	41	2625M GCR	55-20.02S	127-45.67W	g	WEST03MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
2040	030394	0	DRRO	Rock dredge 42	2500M GCR	55-06.22S	127-36.77W	g		WEST03MV
0235	040394	0	DRRO	Rock dredge 43	2893M GCR	54-54.81S	127-27.18W	g		WEST03MV
1031	040394	0	DRRO	Rock dredge 44	5250M GCR	55-05.63S	126-14.01W	g		WEST03MV
1632	040394	0	DRRO	Rock dredge 45	4166M GCR	55-07.81S	126-16.85W	g		WEST03MV
1603	050394	0	DRRO	Rock dredge 46	3191M GCR	55-13.70S	125-53.72W	g		WEST03MV
2218	050394	0	DRRO	Rock dredge 47	6003M GCR	55-13.01S	125-43.98W	g		WEST03MV
0502	060394	0	DRRO	Rock dredge 48	4539M GCR	55-14.40S	125-47.28W	g		WEST03MV
1138	060394	0	DRRO	Rock dredge 49	4401M GCR	55-16.33S	125-38.49W	g		WEST03MV
1810	060394	0	DRRO	Rock dredge 50	5380M GCR	55-19.30S	125-12.60W	g		WEST03MV
0008	070394	0	DRRO	Rock dredge 51	4415M GCR	55-20.91S	125-14.45W	g		WEST03MV
0443	070394	0	DRRO	Rock dredge 52	1150M GCR	55-23.73S	125-15.01W	g		WEST03MV
1652	070394	0	DRRO	Rock dredge 53	3646M GCR	55-45.63S	122-53.49W	g		WEST03MV
0023	080394	0	DRRO	Rock dredge 54	3498M GCR	55-57.20S	121-54.98W	g		WEST03MV
0514	080394	0	DRRO	Rock dredge 55	2585M GCR	56-00.50S	121-50.52W	g		WEST03MV
1112	080394	0	DRRO	Rock dredge 56	2364M GCR	55-40.01S	121-26.47W	g		WEST03MV
1755	080394	0	DRRO	Rock dredge 57	1460M GCR	55-33.82S	122-09.97W	g		WEST03MV
0123	090394	0	DRRO	Rock dredge 58	2302M GCR	55-08.99S	121-08.49W	g		WEST03MV
0944	090394	0	DRRO	Rock dredge 59	2595M GCR	54-18.52S	120-46.50W	g		WEST03MV
1805	090394	0	DRRO	Rock dredge 60	3250M GCR	54-25.70S	119-20.82W	g		WEST03MV
0053	100394	0	DRRO	Rock dredge 61	2556M GCR	54-27.00S	118-25.46W	g		WEST03MV
0654	100394	0	DRRO	Rock dredge 62	2590M GCR	54-00.48S	118-08.47W	g		WEST03MV
1244	100394	0	DRRO	Rock dredge 63	2510M GCR	53-40.04S	117-57.90W	g		WEST03MV
2024	100394	0	DRRO	Rock dredge 64	3240M GCR	53-07.60S	117-41.89W	g		WEST03MV

				End Sample Index						WEST03MV