1-4-90

GEOCHEMICAL AND ENVIRONMENTAL RESEARCH GROUP
DEPARTMENT OF OCEANOGRAPHY
TEXAS A&M UNIVERSITY
COLLEGE STATION, TEXAS 77843

MAHLON C. KENNICUTT, II (409) 845-3872

3/23/87

Bob,

Enclosed is the ships log for Cruise 87-6-2. You should be able to obtain all sample locations from this log. If you have questions please call.

I would also like to request a 25g subsample of all push cores retrieved from the NR-1, especially P.C-7, P.C-9, P.C-8, P.C-6, as soon as possible for hydrocarbon analysis (frozen sample preferred but not necessary)

Chuck K.

RECORD OF PO ONS AND STATIONS

Page No. #1

Cruise No. 87-G-2

Vessel GYRE

Date	Time ~~GMT~~ LMT	Station Number	Position		Type of Fix	Drift on Station		*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
			Latitude	Longitude		Distance (miles)	Direction (degrees)		
2/27	0719	#1	27-32.3	97-10.4	C	11085.3	23774.2	1 HIT AT 16m	
✓	0736	✓	27-32.5	97-10.5	✓	11085.3	23775.4	2 HIT AT 17 m	✓
	0826	✓	27-32.34	97-10.20	✓	11085.3	23776.2	3 @ 17 M	
	0952	✓	27-32.47	97-10.28	✓	11085.5	23777.1	GRAVITY CORE @ 16 m	✓
	1012	✓	27-32.49	97-10.24	✓	11085.6	23777.6	PISTON CORE @ 11 M	✓
	1020	✓	27-32.50	97-10.31	✓	11086.7	23777.1	GRAVITY CORE @ 16 M	✓
	~~1040~~	~~#02~~	~~27-32.48~~	~~97-09.84~~		~~11085.7~~	~~23782.5~~		~~16 m~~ ✓
	1040	✓	27-32.62	97-09.73	✓	11085.6	23783.4	PISTON CORE	11 M ✓
	1103	✓	27-32.70	97-09.68	✓	11085.4	23783.3	GRAVITY "	15M ✓
	1114	✓	27-32.70	97-09.53	✓	11085.6	23784.5	PISTON "	13M ✓
	1134	✓	27-32.51	97-09.53	✓	11085.6	23783.2	CORE	16 m ✓
	1145	✓	27-32.62	97-09.66	✓	11085.6	23783.1	P/C	13 m ✓
	1228	#03	27-32.90	97-08.85	✓	11085.5	23791.2	1 core	12 m
	1236	✓	27-32.91	97-08.9	✓	11085.2	23791.2	P/C #1	12 m ✓
	1320	✓	27-33.0	97-09.0	✓	11085.0	23790.3	2 core	17 m ✓
	1333	✓	27-32.86	97-08.95	✓	11085.4	23790.1	P/C #2	14m ✓

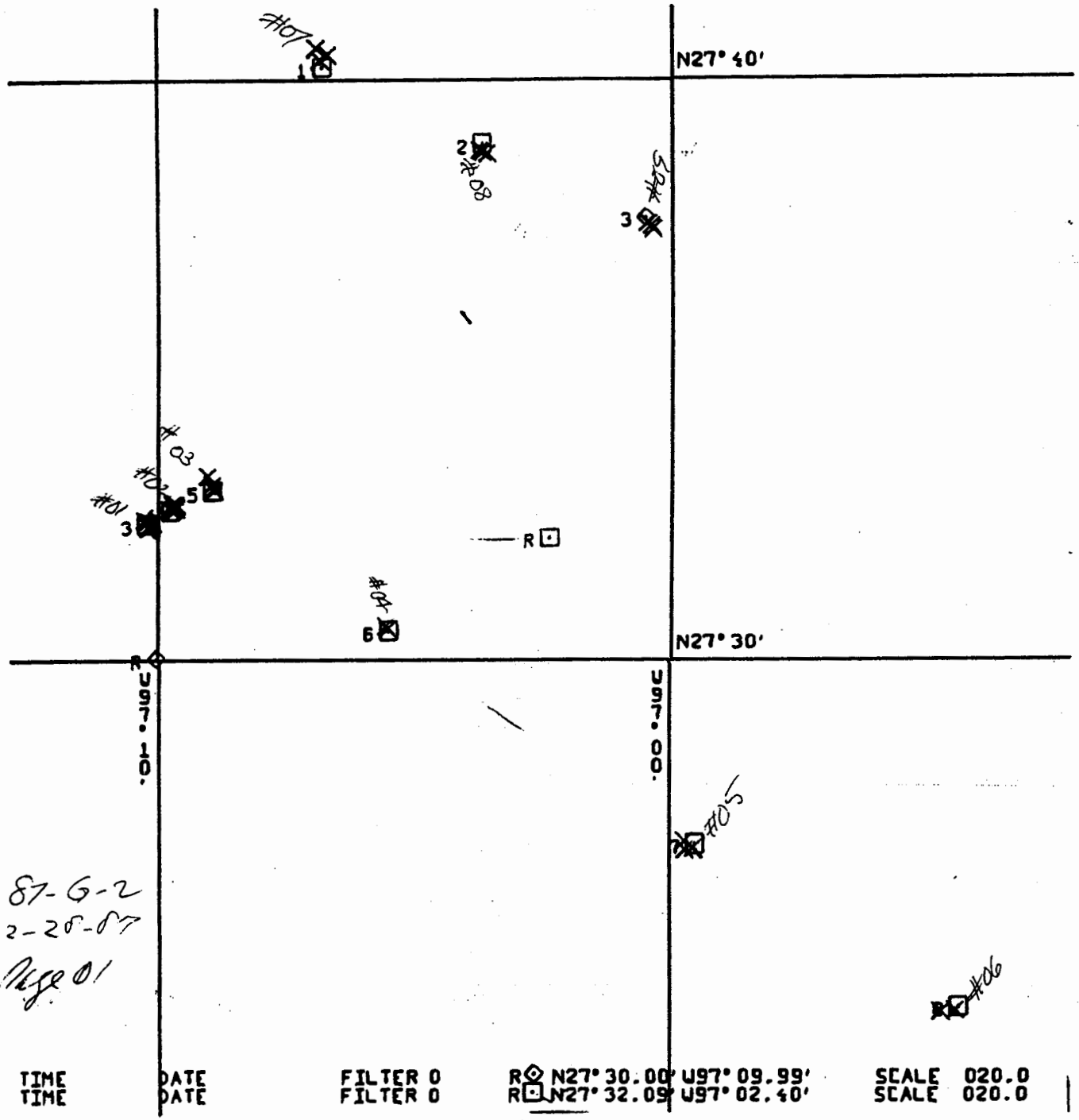
RECORD OF PO[illegible]ONS AND STATIONS

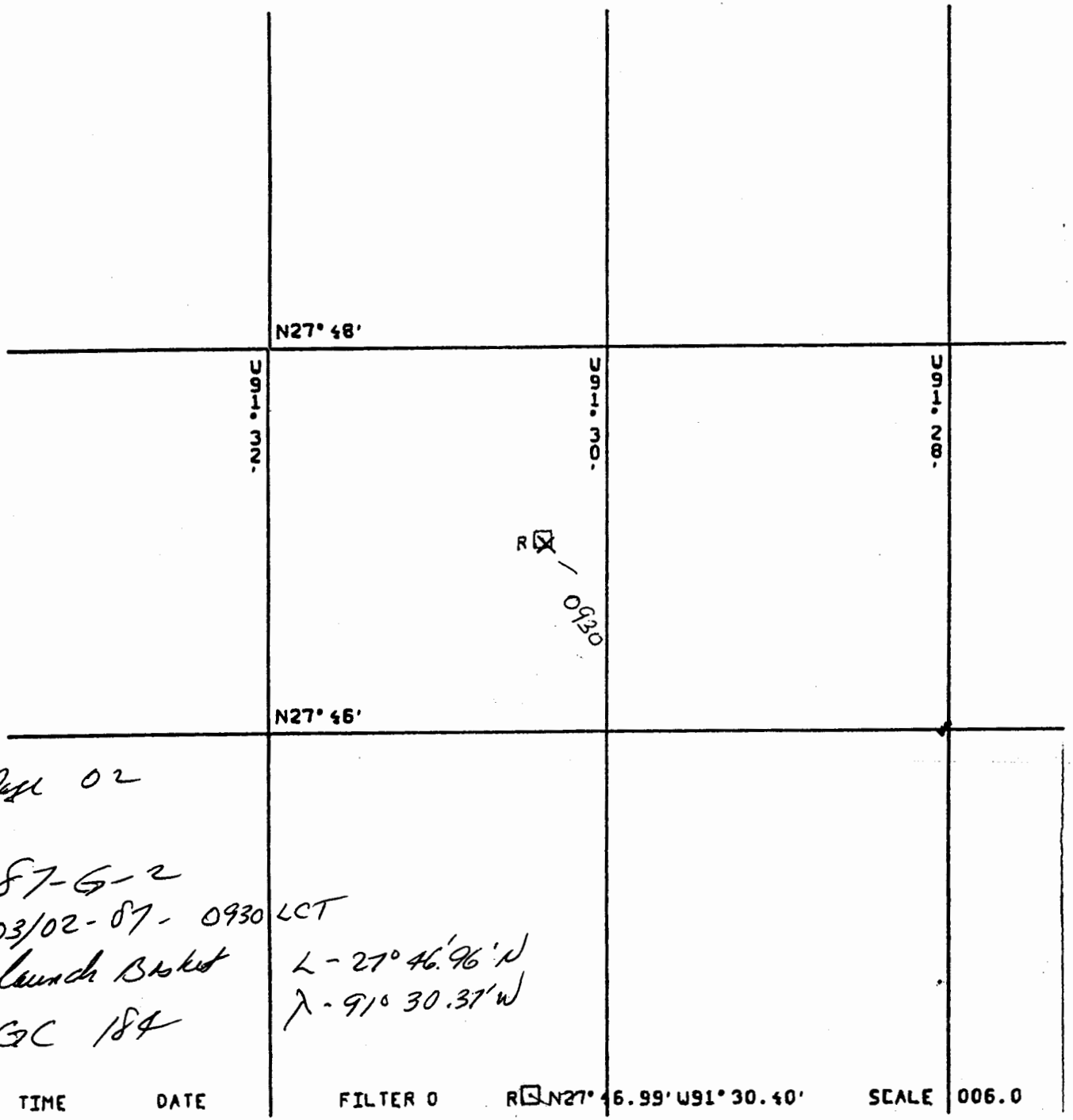
Page No. #2

Cruise No. 87-G-2

Vessel GYRE +6

Date 1987	Time ~~GMT~~ LMT	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles)	Drift on Station Direction (degrees)	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
2/28	1411	#03	27-33.10	97-08.86	C	11085.4	23792.4	P/C #3 @ 12M	
✓	1440	✓	27-33.10	97-09.2	✓	11085.3	23789.8	P/C #4 @ 12M	✓
✓	1520	#04	27-30.57	97-05.57	✓	11089.3	23800.9	P/C #1 @ 19M	✓
✓	1524	✓	27-30.62	97-05.55	✓	11089.4	23800.8	[I] @ 24	✓
✓	1535	✓	27-30.61	97-05.69	✓	11089.0	23800.2	P/C #2 @ 17	✓
✓	1636	#5	27-26.8	96-59.7	✓	11095.9	23823.3	P/C #1 HIT AT 29M	
✓	1640	—	27-26.7	96-59.7	—	11096.0	23822.6	[I] HIT AT 38M	—
✓	1655	✓	27-26.7	96-59.5	✓	11096.2	23824.1	P/C #2 @ 27M	✓
✓	1754	#6	27-23.9	96-54.5	—	11101.6	23848.2	P/C #1 HIT AT 37M	
—	1803	—	27-24.0	96-54.8	—	11101.4	23845.9	[I] HIT AT 40M	✓
✓	1818	—	27-24.1	96-54.5	—	11101.5	23849.9	P/C #2 HIT AT 35M	—
—	2023	#07	27-40.27	97-06.77	—	11079.5	23863.3	P/C #I @ 11 M	—
—	2041	—	27-40.40	97-06.77	—	11079.3	23864.6	[II] @ 15M	—
	2052	—	27-40.34	97-06.65	—	11079.5	23865.0	P/C #II @ 10 M	—
—	2123	#08	27-38.84	97-03.74	—	11082.2	23876.9	P/C #1 @ 16 M	—
—	2127	—	27-38.63	97-03.56	—	11082.2	23876.5	[I] @ 20M	—


#07
N27° 40'
2
#08
3
#03
#02
#01
5
3
R
#04
6
N27° 30'
W97° 10'
W97° 00'
#05
#06
87-G-2
2-20-87
Neg 01
TIME DATE FILTER 0 R N27° 30.00' W97° 09.99' SCALE 020.0
TIME DATE FILTER 0 R N27° 32.09' W97° 02.40' SCALE 020.0



Page 02

87-G-2
03/02-87-0930 LCT
Launch Basket
GC 184

L - 27° 46.96' N
λ - 91° 30.37' W

TIME DATE FILTER 0 R N27° 46.99' W91° 30.40' SCALE 006.0

RECORD OF POSITIONS AND STATIONS

Page No. #03

Cruise No. 81-G-2

Vessel GYRE +6

Date	LCT Time ~~GMT~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
2/28	2144	#08	27-38.83	97-03.82	"C"	11082.1	23876.2	P/C II @ 13M	
2/28	2220	#09	27-37.48	97-00.40	"	11084.9	23894.0	P/C I @ 19M	"
"	2223	"	27-37.43	97-00.42	"	11084.9	23893.9	1 cm @ 24M	"
"	2235	"	27-37.54	97-00.51	"	11085.0	23893.7	P/C II @ 19M	"
3/02	0930	GREEN CANYON	27-46.96	91-30.37	"	11548.1	27214.-	Launch Basket for Sat. ops.	"
"	1127	#10	27-40.52	91-31.58	"	11561.8	27174.1	P/C-1 @ 698M	"
✓	1201	✓	27-40.39	91-31.80	✓	11561.8	27171.3	1 @ 685	✓
✓	1236	✓	27-40.65	91-31.68	✓	11561.0	27173.7	2 @ 677	✓
✓	1348	#11	27-39.91	91-29.99	✓	11569.0	27187.3	P/C 1 @ 709	✓
✓	1343	✓	27-40.34	91-29.93	✓	11568.1	27190.0	1 @ 696	✓
✓	1412	#12	27-39.84	91-30.36	✓	11567.9	27183.2	Net is in water	✓
✓	1459	✓	27-40.54	91-32.69	✓	11557.7	27163.0	on bottom 2100	✓
✓	1558	✓	27-42.2	91-34.0	✓	11548.4	27157.1	TRAWL OFF BOTTOM	✓
✓	1619	✓	27-42.8	91-34.4	✓	11545.4	27155.5	ON SURFACE	✓
✓	1716	#13	27-41.29	91-32.78	✓	11555.3	27165.4	1 @ 770	✓

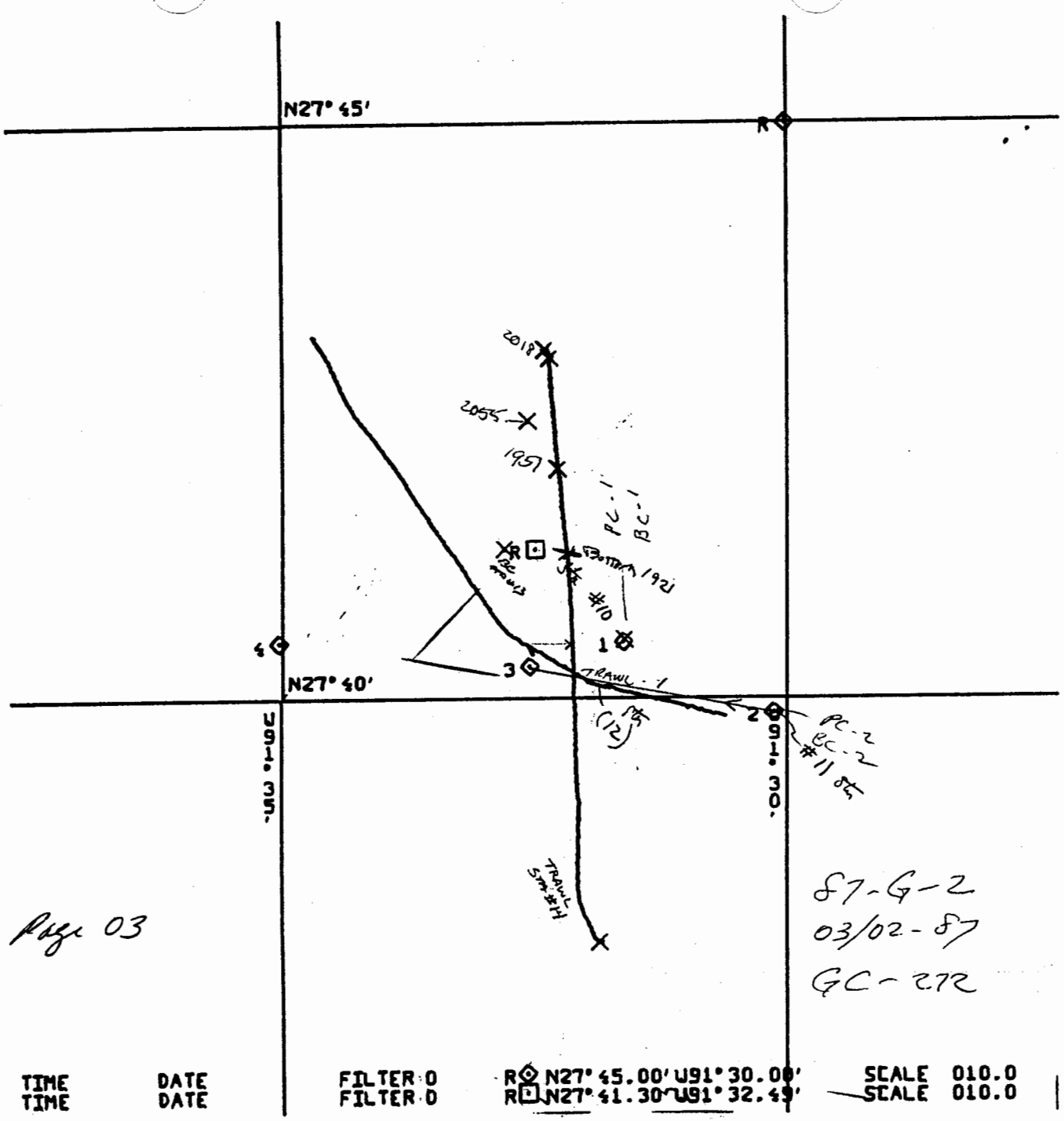
RECORD OF POSITIONS AND STATIONS

Page No. #4

Cruise No. 87-G-2

Vessel GYRE ZD +6

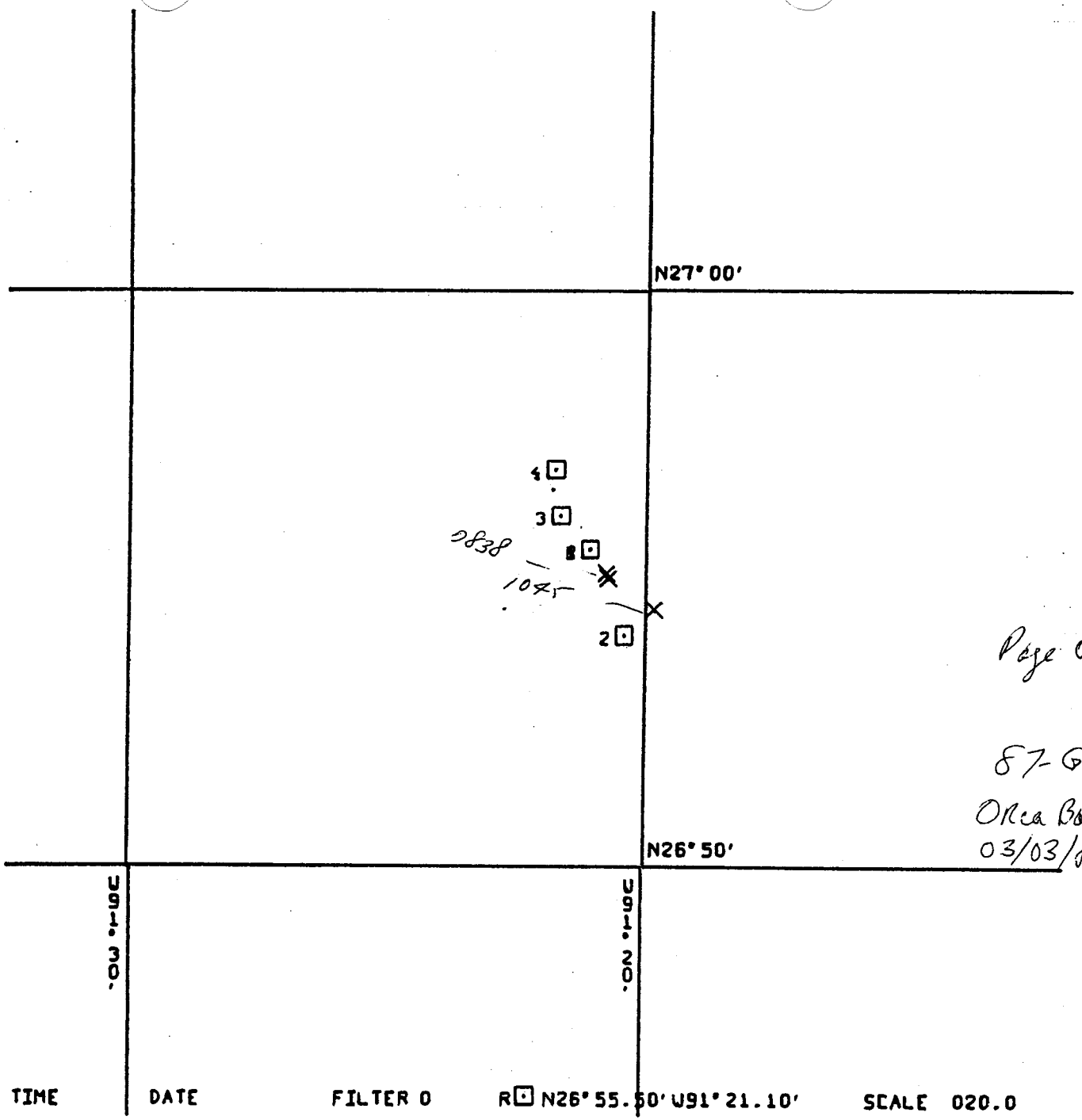
Date	LMT Time ~~GMT*~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
3/2	1821	#14	27-38.0	91-31.9	C	11567.4	27159.7	NOT IN WATER	BP
✓	1921	✓	27-40.8	91-32.1	—	11559.0	27169.9	ON BOTTOM 1855	—
	1951	—	27-42.0	91-32.2	C	11555.2	27173.9	trawling - 2.3 kn - 349°	
	2018	—	27-43.0	91-32.3	—	11552.1	27177.3	hauling in	—
	2030	—	27-46.5	91-30.5	from Sentinel			NR-1 POSIT-Stationery	—
	2055	—	27 42.4	91-32.6	—	115530	271726	lost 95% tension	—
3/03	0838	#15	26-55.1	91-20.8	C	11716.0	27089.7	1 one @ ? (3000 mtrs	
—	1045	—	26-54.5	91-19.8	—	11720.7	27096.5	GC @ 2,500 m	—
3/03	1240	#16	26-47.8	91-17.42	✓	11708.3	26994.8	Net in water	
✓	1445	✓	26-51.92	91-22.24	✓	11717.6	27062.4	Trawling 035° 2.8 kts	✓
✓	1530	✓	26-53.38	91-20.93	✓	11719.6	27082.3	Trawling 042 2.0 kts	✓
—	1548	—	26-53.9	91-20.2	—	11720.6	27090.9	ON BOTTOM 6901 m	BP
—	1640	—	26-55.1	91-19.2	—	11721.6	27105.2	NET HUNG UP C 015 50.6	—
—	1720	—	26-55.3	91-19.0	—	11721.9	27107.6	C014 S 0.7	—
—	1738	—	26-55.4	91-19.0	—	11721.6	27108.2	off Bottom	—
—	1810	—	26-56.0	91-18.9	—	11720.8	27111.9	AT SURFACE	—



Page 03

87-G-2
03/02-87
GC-272

TIME DATE FILTER 0 R N27° 45.00' W91° 30.00' SCALE 010.0
TIME DATE FILTER 0 R N27° 41.30' W91° 32.45' SCALE 010.0



Page 04

87-G-2

Orca Basin

03/03/87

TIME DATE FILTER 0 R N26° 55.50' W91° 21.10' SCALE 020.0

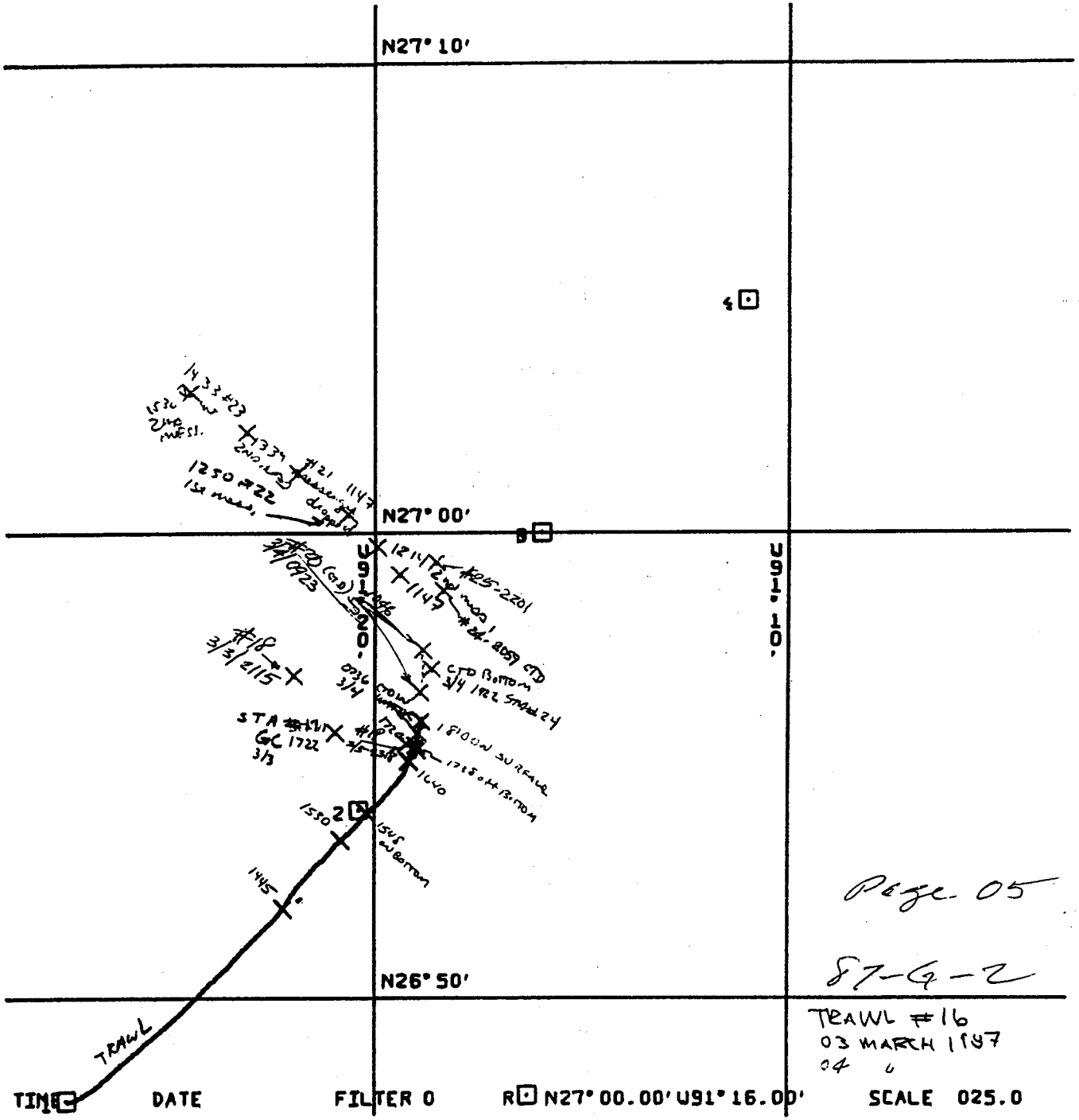
RECORD OF POSITIONS AND STATIONS

Page No. #5

Cruise No. 87-G-2

Vessel GYRE +6

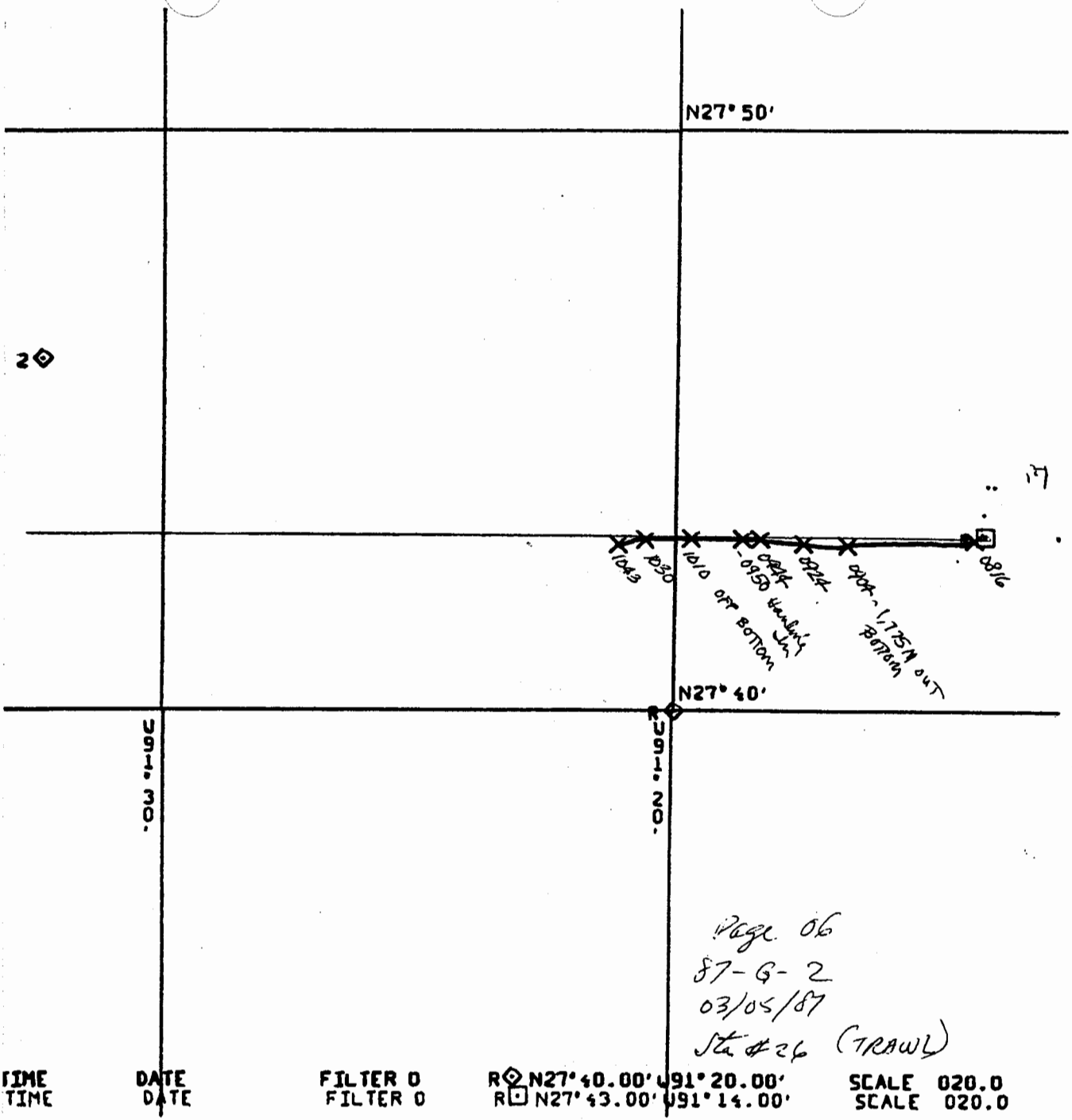
Date	GMT Time ~~GMT~~	Station Number	Position		Type of Fix	Drift on Station		*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
			Latitude N	Longitude W		Distance (miles)	Direction (degrees)		
3/3	1722	#17	26-55.7	91-21.0	C	11713.6	27090.3	GC HIT AT 2450	BP
3/03	2115	#18	26-56.9	91-22.0	C	11707.0	27085.1	GC @ 2,400 m	
/	2318	#19	26-55.5	91-19.2	C	11720.8	27106.4	GC @ 2,600 m	
03/04	0736	#20	26-55.7	91-19.0	C	11721.1	27109.9	CTD IN WATER	BP
✓	0755	/			/			CTD UP Replace Pinger	
✓	0802	/	26-55.9	91-18.9	/	11720.9	27111.6	CTD Starts down once again	/
✓	0923	/	26-56.5	91-18.9	/	11719.2	27113.6	CTD @ 2,300 m	/
✓	1046	/	26-57.5	91-18.9	/	11717.4	27118.4	CTD @ Surface	/
✓	1147	#21	26-59.69	91-19.42	/	11711.5	27119.4	"BONGO" NET 1ST WEIGHT	/
✓	1214	✓	26-59.69	91-19.97	✓	11708.1	27116.4	net closed	
✓	1250	#22	27-00.41	91-20.67	✓	11703.8	27112.5	BONGO NET 1ST WEIGHT 130m	✓
✓	1339	✓	27-01.32	91-21.71	✓	11697.2	27104.0	NET CLOSED 2ND WT.	✓
✓	1433	#23	27-02.17	91-23.13	✓	11693.5	27095.4	BONGO NET 1ST WEIGHT 750.	✓
✓	1530	✓	27-03.04	91-24.48	✓	11683.5	27085.5	net closed 2nd wt.	✓
✓	1716	#24	26-55.3	91-19.1	✓	11721.7	27107.2	CTD IN WATER	BP
✓	1922	✓	26-57.0	91-18.7	✓	11719.3	27118.5	CTD ON BOTTOM 2300m	✓



Page 05

87-9-2

TRAWL #16
03 MARCH 1987
04 "



Page 06
87-G-2
03/05/87
Sta #26 (TRAWL)

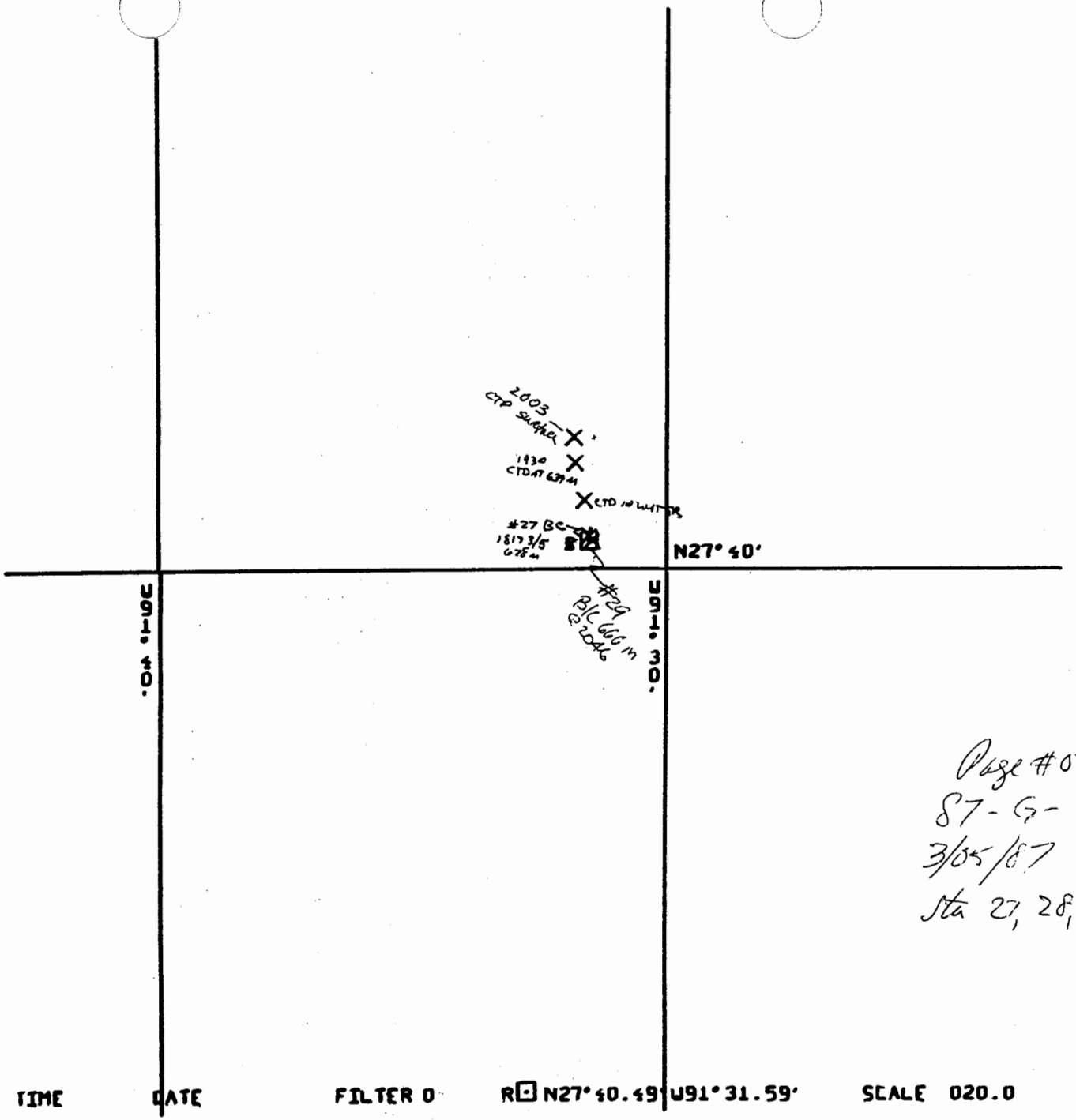
TIME
TIME

DATE
DATE

FILTER 0
FILTER 0

R N27° 40.00' W91° 20.00'
R N27° 43.00' W91° 14.00'

SCALE 020.0
SCALE 020.0



Page #07
87-G-2
3/05/87
Sta 27, 28, +29

TIME DATE FILTER 0 R N27° 40.49' W91° 31.59' SCALE 020.0

RECORD OF POSITIONS AND STATIONS

Page No. #6

Cruise No. 87-G-2

Vessel GYRE

Z0 + 06

Date	LMT Time GMT	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
03/04	2059	#24	26-58.7	91-18.4	"C"	11716.3	27128.3	CTD @ surface	
/	2201	#25	26-59.4	91-18.5	/	11714.6	27129.7	G.C. @ 2,200 m	/
03/05	0816	#26	27-42.9	91-14.1	C	11620.8	27359.7	TRAWL OVER - C 270°	/
/	0904	/	27-42.9	91-16.6	/	11611.4	27335.0	TRAWL - BOTTOM 1,775 m	/
/	0924	/	27-42.9	91-17.4	/	11608.1	27326.8	/ /	/
/	0944	/	27-42.9	91-18.2	/	11604.7	27318.7	/ /	/
/	0950	/	27-42.9	91-18.6	/	11603.3	27315.1	Hauling in	/
/	1010	/	27-43.0	91-19.6	/	11599.5	27305.5	OFF BOTTOM	/
/	1030	/	27-42.9	91-20.5	/	11596.1	27296.2	/ 400 m out hauling in	/
/	1043	/			/			trawl on Board	/
/	1817	#27	27-40.6	91-31.6	C	11561.4	27174.1	☐ HIT AT 678m	BP
/	1851	#28	27-41.2	91-31.7	/	11559.3	27175.7	CTD IN WATER	/
/	1930	/	27-41.9	91-31.9	/	11556.9	27176.9	CTD AT 639m	/
/	2003	/	27-42.3	91-31.9	/	11555.7	27178.6	CTD @ surface	/
/	2046	#29	27-41.5	91-31.5	/	11562.0	27174.7	☐ CTD @ 666 m	/

RECORD OF POSITIONS AND STATIONS

Page No. #7

Cruise No. 87-G-2

Vessel GYRES ZD +06

Date	LMT Time ~~GMT~~	Station Number	Position		Type of Fix	Drift on Station		*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
			Latitude N	Longitude W		Distance (miles)	Direction (degrees)		
3/8	1422	U/W STA	28-27.8	90-54.6	C	11569.9	27758.2	ON LINE C&C 090 "A" START SNIFFING	RP
✓	1430	✓	28-27.7	90-53.7	—	11574.5	27767.4	C 092 S 5.6	—
✓	1500	—	28-27.7	90-50.6	—	11588.9	27798.0	C 088 S 5.4	✓
✓	1530	✓	28-27.7	90-47.5	✓	11604.1	27829.7	C 086 S 6.1	✓
✓	1600	✓	28-27.8	90-44.0	C	11621.2	27865.4	C 087 S 6.0	✓
✓	1630	✓	28-27.8	90-40.5	✓	11638.8	27900.2	C 089 S 5.8	✓
✓	1700	✓	28-27.7	90-37.2	✓	11655.8	27933.4	C 090 S 5.8	✓
✓	1726	✓	28-27.7	90-34.4	✓	11670.5	27964.4	C/C 000	✓
✓	1743	✓	28-29.0	90-34.3	✓	11666.6	27961.6	C/C to 090° LINE A	✓
✓	1800	✓	28-29.0	90-32.5	✓	11676.8	27986.1	C-090° LINE A	✓
✓	1830	✓	28-29.0	90-29.0	✓	11695.9	28022.0	C-090 5.9 "	✓
✓	1900	✓	28-29.0	90-25.4	✓	11715.2	28057.3	C 090 6.1 "	✓
✓	1930	✓	28-29.0	90-21.8	✓	11735.2	28092.9	C 088 6.2 "	✓
✓	1943	✓	28-29.1	90-20.3	✓	11743.7	28108.2	E.O.L. A C/C 180°	✓
✓	2000	✓	28-27.6	90-20.1	✓	11749.5	28102.0	6.1 C 180	✓
✓	2011	✓	28-26.5	90 20.3	✓	11750.9	28095.7	S.O.L. "B" 280 4.0	

RECORD OF POSITIONS AND STATIONS

Page No. 08

Cruise No. 87-G-2

Vessel CURE

Date	LCT Time ~~GMT*~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
03/08	2030	SNIFFER PROFILE I	28-26.6	90-22.5	"C	11738.4	28073.7	LINE "B" C 270° S-6.6	
/	2100	/	28-26.5	90-26.0	/	11718.8	28038.3	/ C 272° S-6.4	/
/	2130	/	28-26.5	90-29.6	/	11699.3	28002.3	/ C 265 S-6.4	/
/	2150	/	28-26.5	90-32.1	/	11686.3	27976.6	C/C 180	/
/	2159	/	28-25.5	90-32.2	/	11688.6	27971.1	LINE B C 270° S5.7	/
/	2230	/	28-25.4	90-36.1	/	11668.5	27932.9	/ / C 271° S-6.7	/
/	2308	/	28-25.4	90-39.9	/	11648.9	27894.5	/ / C 270° S7.0	/
/	2330	/	28-25.4	90-43.8	/	11629.1	27855.0	/ / C 269° S6.9	/
3/9	2400	/	28-25.4	90-47.9	/	11609.2	27814.2	CSE 270 SPD 7.0	RP
/	0030	/	28-25.1	90-51.9	/	11591.3	27772.7	CSE 270 SPD 6.6	/
/	0052	/	28-25.1	90-54.1	/	11578.4	27748.4	C/C 180	/
/	0119	/	28-22.8	90-51.5	/	11586.5	27737.0	C/C 090 LINE C	/
/	0130	/	28-22.7	90-53.7	/	11590.6	27744.7	C 091 S 4.6	/
/	0200	/	28-22.7	90-50.7	/	11605.2	27776.1	C 089 S 5.6	/
/	0230	/	28-22.8	90-47.0	/	11622.1	27812.0	C 089 S 6.2	/
/	0300	/	28-22.8	90-43.4	/	11639.6	27847.9	C 090 S 6.2	/

RECORD OF POSITIONS AND STATIONS

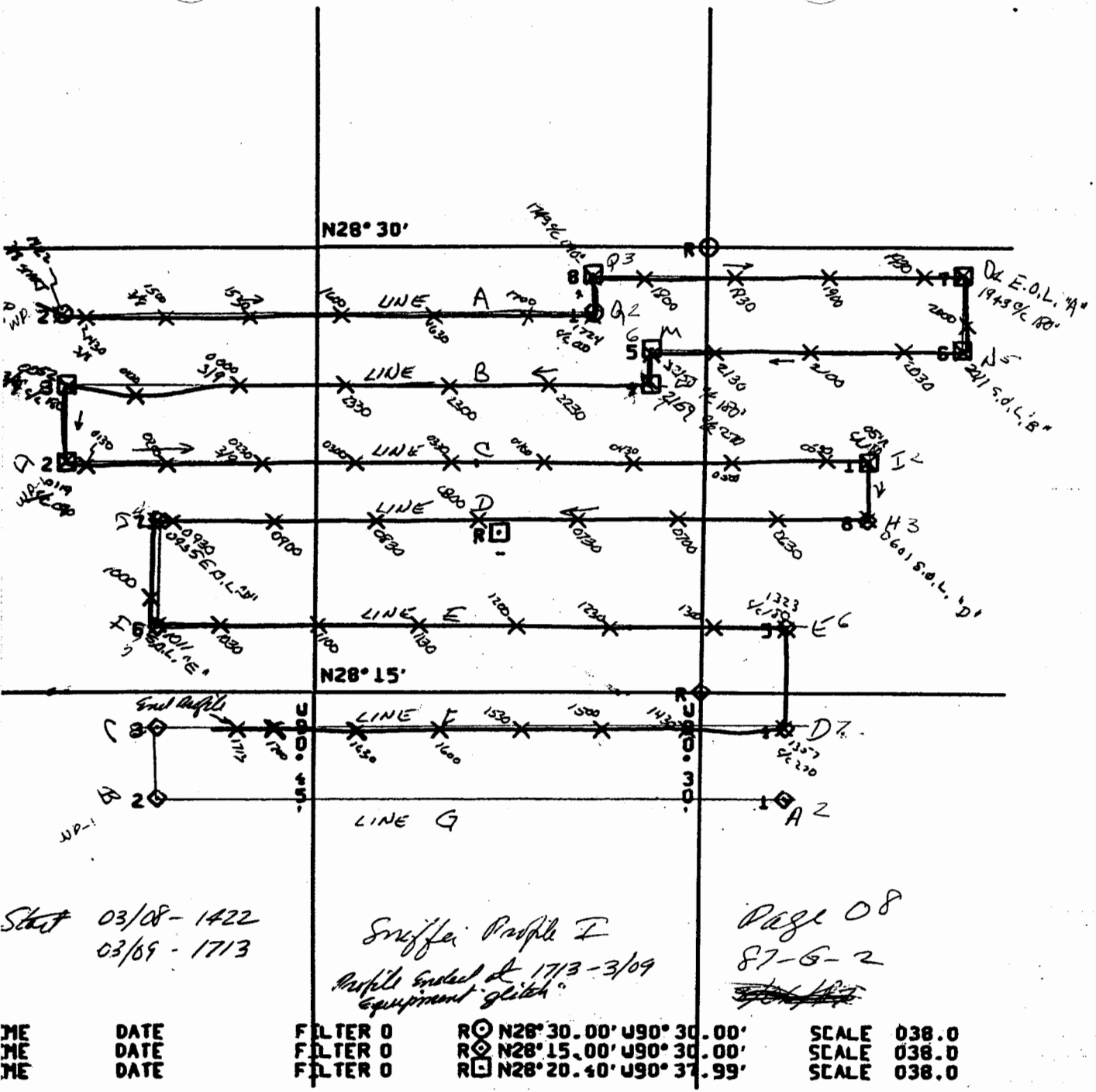
Page No. #09

Cruise No. 87-G-2

Vessel GYRE

ZD-106

Date	GMT Time ~~GMT~~	Station Number	Position		Type of Fix	Drift on Station		*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
			Latitude N	Longitude W		Distance (miles)	Direction (degrees)		
3/9	0330 ~~375~~	SWIFFER U/W PROFILE I	28-22.8	90-39.8	C	11657.6	27884.1	C 090 S 6.1	BP
✓	0400	✓	28-22.8	90-36.2	✓	11677.4	27927.5	C 090 S 6.2	✓
✓	0430	✓	28-22.8	90-32.7	✓	11694.9	27955.6	C 090 S 6.3	—
✓	0500	✓	28-22.8	90-28.9	✓	11714.5	27993.4	C 090 S 6.6	—
✓	0530	✓	28-22.9	90-25.3	✓	11734.0	28029.4	C 088 S 6.1	✓
✓	0542	✓	28-22.8	90-23.8	✓	11742.5	28043.7	C/C 180	✓
✓	0601	✓	28-20.9	90-23.8	✓	11747.7	28034.5	C/C 270° S.O.L. "D"	✓
✓	0630	✓	28-20.9	90-27.2	✓	11729.2	28000.8	270° 5.6.5 KN "	✓
✓	0700	✓	28-20.9	90-31.0	✓	11708.9	27963.1	270° 6.9 ✓ ✓	✓
✓	0730	✓	28-20.9	90-34.8	✓	11688.8	27924.2	270° 6.9	✓
✓	0800	✓	28-20.9	90-38.8	✓	11668.7	27885.2	269° 7.0	✓
✓	0830	✓	28-20.8	90-42.6	✓	11649.3	27846.3	270° 6.9	✓
✓	0900	✓	28-20.8	90-46.5	✓	11630.3	27807.2	270° 7.0	✓
✓	0930	✓	28-20.8	90-50.4	✓	11612.0	27768.7	269 6.6	✓
✓	0935	✓	28-20.8	90-51.0	✓	11608.8	27761.9	C/C 180° E.O.L. "D"	✓
✓	1000	✓	28-18.2	90-51.2		11616.3	27748.1	183 6.4	



Start 03/08 - 1422
03/09 - 1713

Swiffer Profile I

Profile ended @ 1713 - 3/09
Equipment glitch

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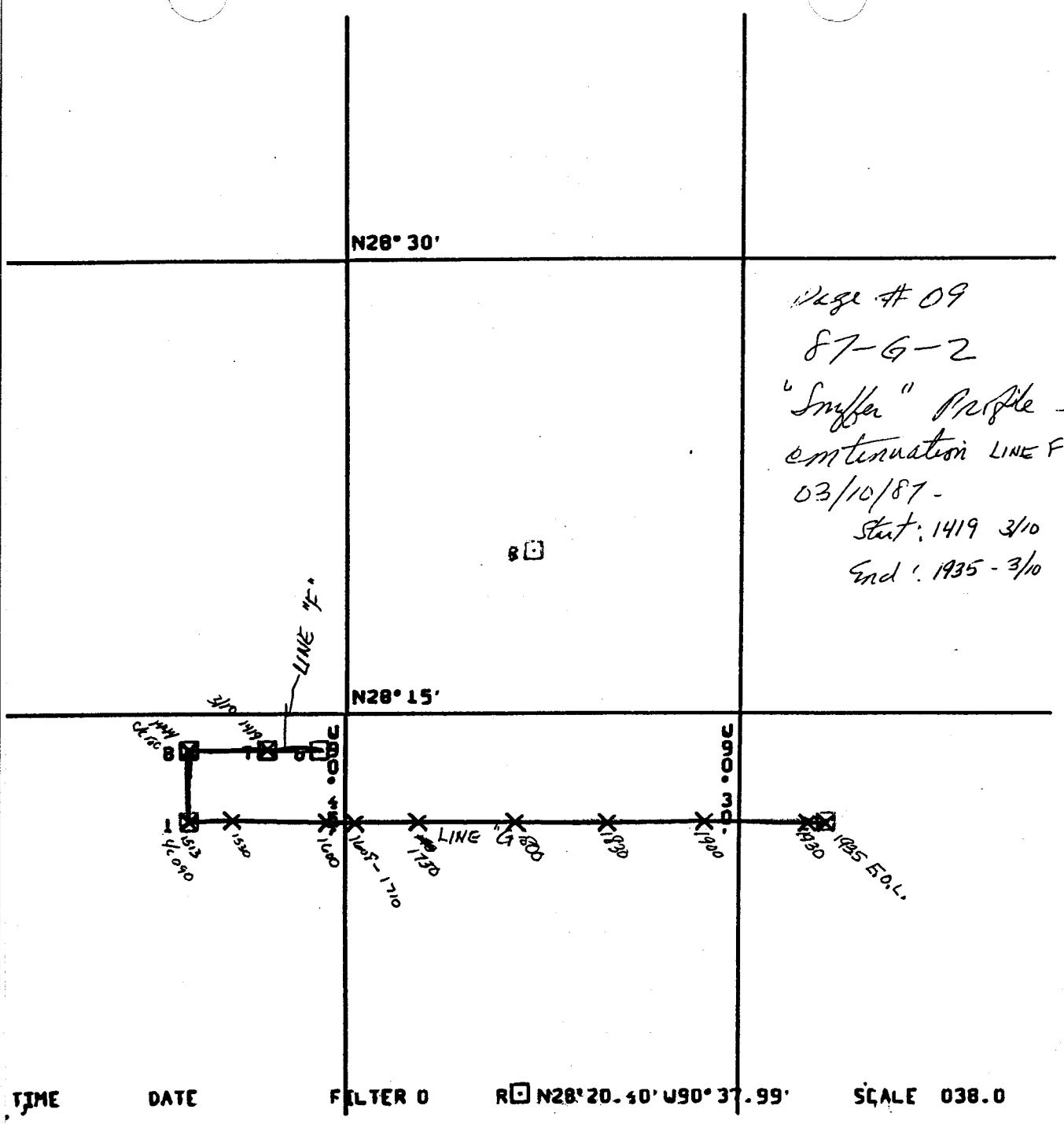
ME	DATE	FILTER 0	R N28° 30.00' U90° 30.00'	SCALE 038.0
ME	DATE	FILTER 0	R N28° 15.00' U90° 30.00'	SCALE 038.0
ME	DATE	FILTER 0	R N28° 20.40' U90° 37.99'	SCALE 038.0



Page #09
87-G-2
"Snyder" Profile I
continuation LINE F + G
03/10/87 -
Start: 1419 3/10
End: 1935 - 3/10

TIME DATE FILTER 0 R N28° 20.40' W90° 37.99' SCALE 038.0

RECORD OF POSITIONS AND STATIONS

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Cruise No. 87-6-2

Vessel GYRE

16

Date	Time LOT ~~GMT~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles)	Drift on Station Direction (degrees)	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
03/09	1011	SNIFFER PROFILE I	28-17.3	90-50.9	'C'	11620.5	27747.9	S.O.L "E" C 090° S 6.0	
/	1030	/	28-17.3	90-48.6	/	11631.3	27770.8	/ 090° 6.3	/
/	1100	/	28-17.3	90-44.8	/	11649.7	27808.7	/ 088° 6.6	/
/	1130	/	28-17.3	90-41.0	/	11668.4	27846.6	/ 089° 6.5	/
✓	1200	✓	28-17.3	90-37.3	✓	11687.3	27881.0	C 090 S 6.5	BP
—	1230	—	28-17.2	90-33.5	—	11706.8	27921.2	C 091 S 6.4	—
✓	1300	—	28-17.2	90-29.5	—	11727.6	27961.0	C 090 S 6.5	—
✓	1323	✓	28-17.2	90-26.8	✓	11742.2	27987.6	S/C 180	✓
✓	1357	—	28-13.8	90-26.8	✓	11751.4	27971.6	S/C @270 LINE F	✓
✓	1430	✓	28-13.8	90-30.6	C	11731.8	27934.1	C 271 S 5.9	✓
—	1500	—	28-13.8	90-33.8	—	11715.0	27901.8	C 270 S 5.7	—
✓	1530	✓	28-13.8	90-37.1	✓	11698.4	27869.1	C 270 S 5.6	✓
—	1600	—	28-13.8	90-40.2	✓	11682.5	27837.8	C 270 S 5.8	—
✓	1630	✓	28-13.7	90-43.3	✓	11667.5	27806.8	C 269 S 5.7	✓
✓	1700	✓	28-13.8	90-46.4	✓	11652.1	27775.6	C 270 S 6.2	—

RECORD OF POS ONS AND STATIONS

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Cruise No. 87-G-2

Vessel GYRE ZD +06

Date	LMT Time ~~GMT*~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles)	Drift on Station Direction (degrees)	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
3/10	1402	PROFILE #1	28-13.9	90-46.4	C	11652.3	27776.7	SNIFFLER DEPLOYED 6 KTS	BP
✓	1419	✓	28-13.8	90-48.0	✓	11644.6	27760.1	RESUME LINE F CSE 270	✓
✓	1444	✓	28-13.8	90-50.9	✓	11631.2	27731.1	C/C 180	✓
✓	1513	✓	28-11.4	90-50.9	✓	11638.5	27720.7	C/C 090 LINE G	✓
✓	1530	✓	28-11.45	90-49.2	✓	11646.5	27738.1	C 089 S 5.4	✓
✓	1600	✓	28-11.4	90-45.6	✓	11663.5	27773.1	C 090 S 6.1	✓
✓	1608	✓	28-11.4	90-44.5	✓	11668.9	27784.2	MARK POSIT TO RETURN	✓
✓	1710	✓	28-11.4	90-44.5	✓	11668.9	27784.2	AT MARK POSITION RESUME LINE G	✓
✓	1730	✓	28-11.4	90-42.2	✓	11679.9	27807.2	C 088° S 5.9	✓
✓	1800	✓	28-11.4	90-38.6	✓	11698.0	27843.7	090° 6.3	✓
✓	1830	✓	28-11.4	90-35.0	✓	11716.3	27879.8	087° 6.2	✓
✓	1901	✓	28-11.4	90-31.3	✓	11735.1	27916.7	089° 6.5	✓
✓	1930	✓	28-11.4	90-27.4	✓	11755.6	27954.9	089° 6.7	✓
✓	1935	✓	28-11.4	90-26.8	✓	11759.0	27961.7	E.O.L. 089° 6.7	✓
			End Sniffle			Profile I			

RECORD OF POSITIONS AND STATIONS

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Cruise No. 87-G-2

Vessel GYRE

+6h

Date	LCT Time ~~GMT~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
3/11	0109	PROFILE #2	27-46.4	91-12.5	"C"	11617.6	27391.4	SNIFFER DEPLOYED BEGIN LINE A	BP
✓	0130	✓	27-46.5	91-11.4	C	11609.7	27372.1	C 271 S 5.8	✓
✓	0157	✓	27-46.5	91-17.5	—	11597.5	27340.6	C/C 180	✓
✓	0204	✓	27-46.0	91-17.5	—			C/C 090 LINE B	✓
✓	0230	✓	27-46.0	91-14.5	✓	11610.9	27369.9	C 090 S 6.6	✓
✓	0254	✓	27-46.0	91-11.5	✓	11622.8	27399.7	C/C 180	✓
✓	0258	✓	27-45.5	91-11.5	✓	11624.5	27397.7	C/C 270 START LINE C	—
✓	0330	✓	27-45.5	91-15.6	✓	11607.7	27355.7	C 270 S 7.2	✓
✓	0344	✓	27-45.5	91-17.5	—	11600.1	27337.0	C/C 180	✓
✓	0350	✓	27-45.0	91-17.6	✓	11601.5	27334.1	C/C 090 START LINE D	—
✓	0430	✓	27-45.0	91-12.2	—	11622.9	27388.4	C 090 S 7.1	—
✓	0436	✓	27-45.0	91-11.5	—	11625.7	27395.1	C/C 180	✓
✓	0441	✓	27-44.5	91-11.5	✓	11626.9	27392.3	C/C 270 START LINE E	✓
✓	0500	✓	27-44.45	91-13.9	✓	11617.3	27368.1	C 271 S 7.1	—
✓	0527	✓	27-44.5	91-17.5	—	11603.3	27332.6	C/C 180	✓
—	0533	✓	27-44.0	91-17.5	—	11604.5	27330.5	C/C 090 START LINE F	—

RECORD OF POSITIONS AND STATIONS

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Cruise No. 87-G-2

Vessel GYRE

ZD +06

Date	RMT Time ~~GMT*~~	Station Number	Position		Type of Fix	Drift on Station		*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
			Latitude N	Longitude W		Distance (miles) W	Direction (degrees) X		
3/11	0600	SNIFFER PROFILE II	27-44.0	91-14.1	"C"	11618.0	27364.8	LINE "F" C 089° S 6.6	
/	0621	/	27-44.	91-11.5	/	11628.6	27391.0	E.O.L. / C/C 180°	/
/	0626	/	27-43.5	91-11.4	/	11630.1	27388.7	S.O.L. "G" C/C 270°	/
/	0630	/	27-43.4	91-12.2	/	11627.1	27381.1	/ C 269° S 7.0	/
/	0700	/	27-43.1	91-16.0	/	11611.7	27343.0	/ C 269° S 7.5	/
/	0711	/	27-43.5	91-17.5	/	11606.0	27328.3	E.O.L. "G" C/C 180	/
/	0719	/	27-43.0	91-17.5	/	11607.5	27326.2	S.O.L. "H" C 270° S	/
/	0730	/	27-43.0	91-16.1	/	11612.8	27340.1	L "H" C 089° S 6.9	—
/	0800	/	27-43.0	91-12.1	/	11629.0	27380.6	"H" C 088° S 6.9	/
/	0804	/	27-43.0	91-11.5	/	11631.4	27386.7	E.O.L. C/C 180°	/
/	0810	/	27-42.5	91-11.5	/	11632.3	27383.1	S.O.L. "I" C 270°	/
/	0830	—	27-42.4	91-14.8	/	11619.4	27350.8	/ C 272 S 6.9	/
/	0848	/	27-42.5	91-17.5	/	11608.8	27323.6	E.O.L. "I" C/C + 180°	/
/	0855	/	27-42.0	91-17.5	/	11610.4	27320	S.O.L. "J" C090°	/
/	0900	/	27-42.0	91-16.9	/	11612.6	27327.8	"J" 090° 6.7	/
/	0903	—	27-42.0	91-16.3	/	11614.9	27333.7	/ 088 6.9	/

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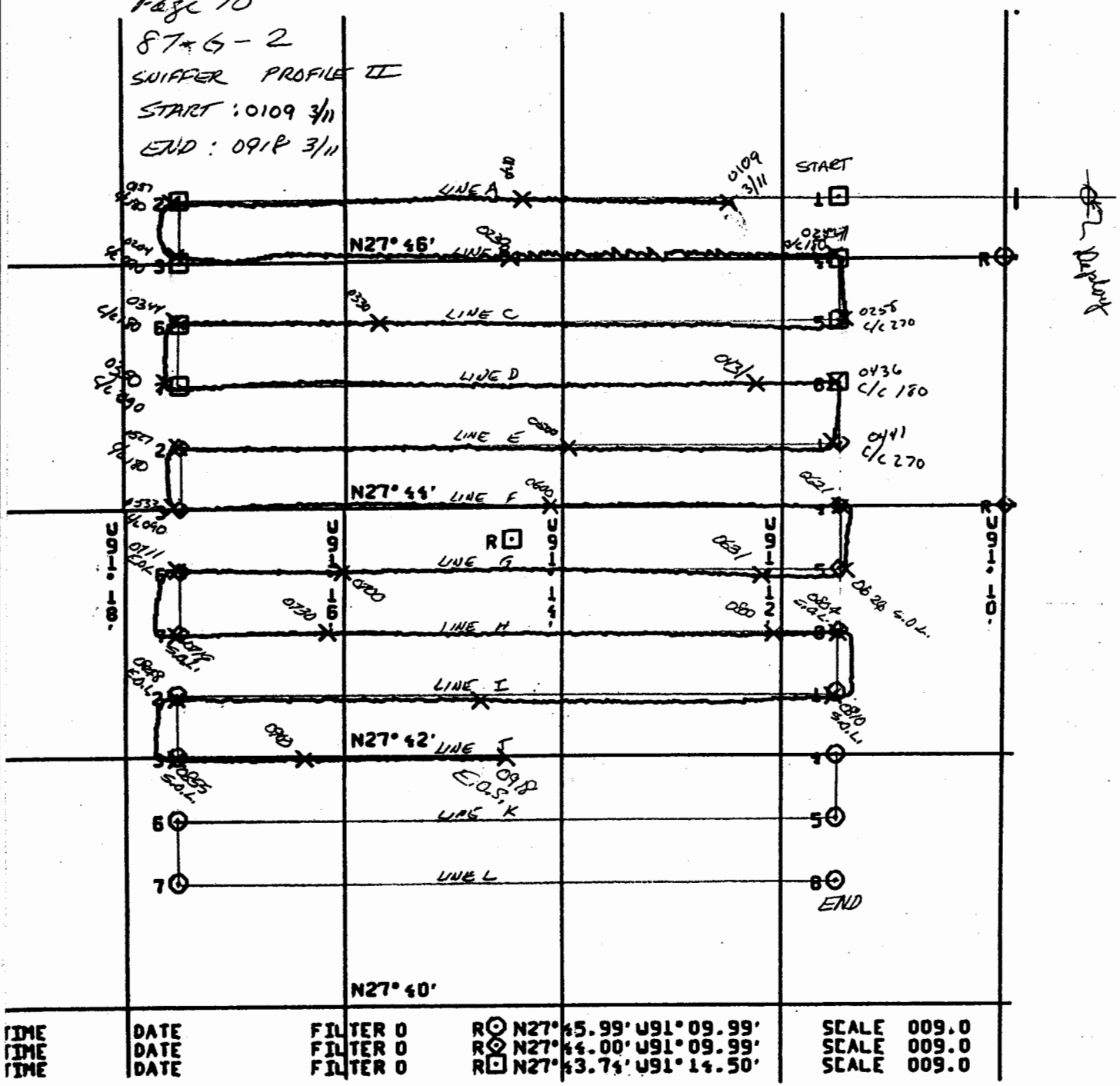
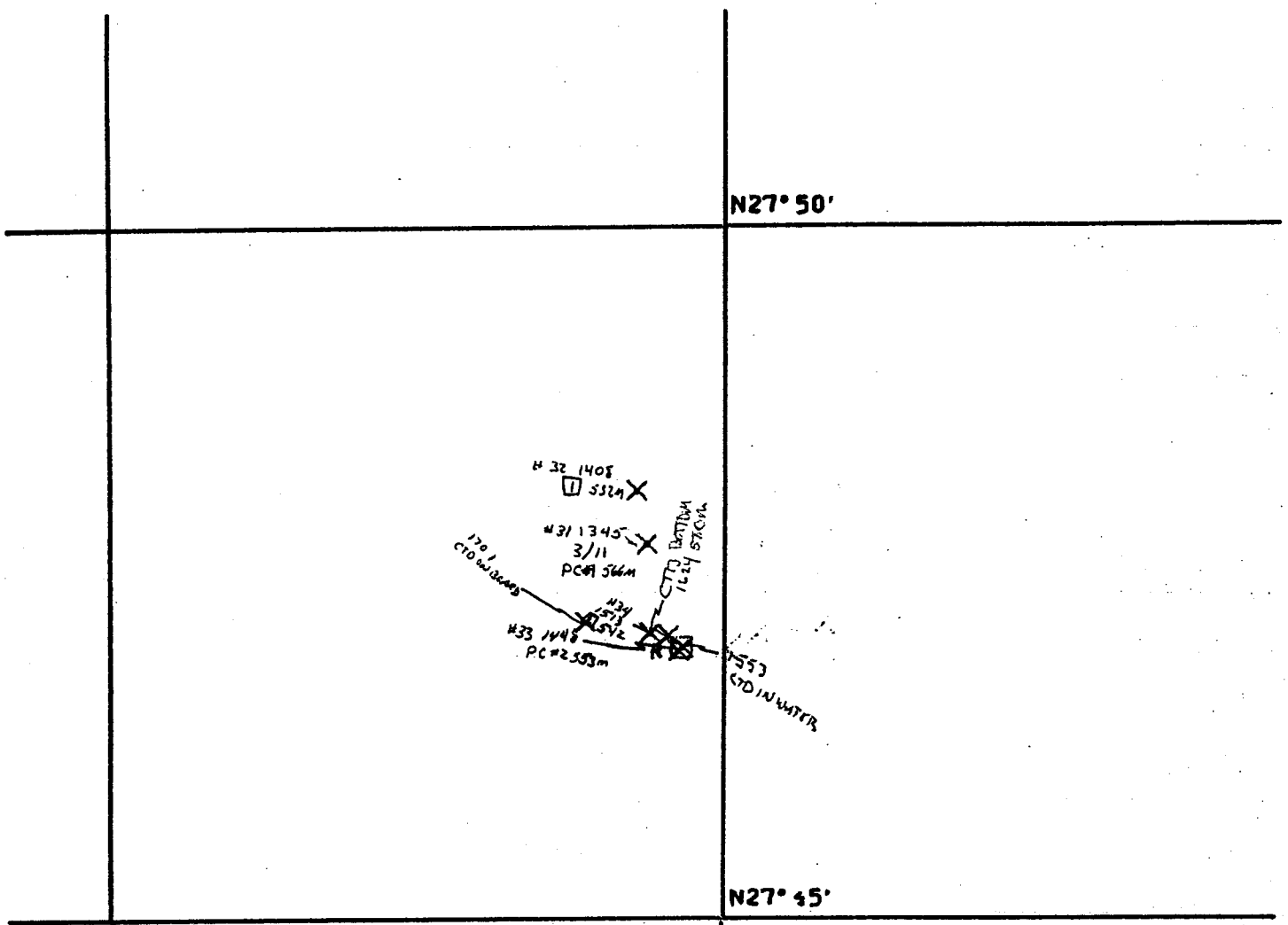
SNIFFER PROFILE II
START : 0109 3/11
END : 0918 3/11





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3/11/87

RECORD OF POSITIONS AND STATIONS

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Cruise No. 81-G-2

Vessel GYRE

+6h

Date	LCT Time GMT*	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
3/11	0918	SNIFFER PROFILE II	27-42.0	91-14.5	"C"	11622.0	27352.1	E.O. Survey Move to retrieve Sniffer	[illegible]
				Basket 800 yds dead ahead				Sunbird Ø323.3@2.14m	—
								End Sniffer Profile II	—
3/11	1118	Sta #30	27-44.1	91-15.2	"C"	11613.4	27354	[1] cm @ 604 m	—
✓	1345	#31	27-47.7	91-30.65	C	11545.0	27215.0	PC 1 HIT AT 566m	BP
✓	1408	#32	27-48.1	91-30.7	✓	11543.6	27216.0	[1] HIT AT 532m	—
✓	1448	#33	27-46.93	91-30.39	✓	11548.1	27214.2	PC 2 HIT AT 553M	✓
✓	1513	#34	27-47.05	91-30.5	✓	11547.5	27213.8	[2] HIT AT 542M	✓
✓	1553	#35	27-46.96	91-30.35	✓	11548.2	27214.8	CTD IN WATER	✓
✓	1624	✓	27-47.06	91-30.6	✓	11546.9	27212.5	CTD AT 580m	✓
✓	1701	—	27-47.15	91-31.1	✓	11544.7	27207.5	CTD ON BOARD	✓

RECORD OF POSITIONS AND STATIONS

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Cruise No. 87-G-2

Vessel GYRE +6 "Sniffer" Profile III

Date	LCT Time ~~GMT~~	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles) W	Drift on Station Direction (degrees) X	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
3/11	2312	SNIFFER PROFILE III	27-47.2	91-25.6	"C"	11564.9	27263.1	S.O.L. 'A' C-214° S 6.0	
/	2339	/	27-44.95	91-27.3	/	11565.0	27236.1	C 216 S 6.1	/
3/12	0009	/	27-42.65	91-29.03	/	11565.1	27208.4	C/C 300	TOP
/	0014	/	27-42.9	91-29.5	/	11562.4	27204.9	C/C 034 START LINE B	/
/	0048	/	27-45.2	91-27.7	/	11562.5	27233.6	C 031 S 5.2	/
/	0120	/	27-47.5	91-26.1	/	11562.4	27260.2	C/C 300	/
/	0125	/	27-47.7	91-26.6	/	11559.6	27255.4	C/C 215 START LINE C	/
/	0159	/	27-45.0	91-28.7	/	11559.8	27222.4	C 215 S 5.8	/
/	0220	/	27-43.2	91-30.0	/	11559.9	27201.6	C/C 300	/
/	0227	/	27-43.5	91-30.45	/	11557.4	27198.0	C/C 034 START LINE D	/
/	0258	/	27-45.8	91-28.8	/	11557.3	27225.8	C 033 S 5.4	/
/	0326	/	27-48.1	91-27.0	/	11557.2	27253.2	END LINE D	/
/	~~0333~~ 0332	/	27-48.4	91-27.5	/	11554.5	27249.4	C/C 215 START LINE E	/
/	0402	/	27-46.0	91-29.3	/	11554.9	27221.2	C 213 S 5.8	/
/	0431	/	27-43.8	91-30.9	/	11555.1	27194.5	END LINE	/
/	0438	/	27-44.1	91-31.4	/	11552.4	27191.1	START LINE 1= C ~~215~~ 034	/

RECORD OF PO[illegible]ONS AND STATIONS

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Vessel GYRE

ZD +06 "SNIFFER" PROFILE III

Date	LMT Time GMT*	Station Number	Position Latitude N	Position Longitude W	Type of Fix	Drift on Station Distance (miles)	Drift on Station Direction (degrees)	*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
3/12	0513	PROFILE III	27-46.45	91-29.6	C	11552.3	27220.6	C 033 S 5.2	DP
✓	0542	✓	27-48.6	91-28.0	✓	11552.2	27246.0	END LINE F	✓
✓	0550	✓	27-48.9	91-28.1	✓	11549.5	27241.2	S.OL. "G"	✓
✓	0616	✓	27-46.6	91-30.2	✓	11549.9	27214.6	C 215° S 6.1	✓
✓	0643	✓	27-44.3	91-31.9	✓	11550.0	27181.5	E.O.L. "G"	✓
✓	0653	✓	27-44.6	91-32.3	✓	11547.7	27185.0	S.O.L. "H"	✓
✓	0723	✓	27-46.9	91-30.6	✓	11547.3	27111.7	"H" C-034° S 5.6	✓
✓	0751	✓	27-49.2	91-28.9	✓	11547.1	27239.4	E.O.L. "H"	✓
✓	0801	✓	27-49.4	91-29.4	✓	11544.8	27235.2	S.O.L. "I"	✓
✓	0829	✓	27-47.2	91-31.1	✓	11545.1	27208.3	"I" C-217° S 5.7	✓
✓	0858	✓	27-44.9	91-32.8	✓	11545.2	27180.6	E.O.L. "I"	✓
✓	0907	✓	27-45.2	91-33.3	✓	11542.5	27177.6	S.O.L. "J"	✓
✓	0935	✓	27-47.5	91-31.6	✓	11542.5	27205.0	"J" C-032° S 5.9	✓
✓	1003	✓	27-49.7	91-29.8	✓	11542.2	27232.5	E.O.L. "J"	✓
✓	1011	✓	27-50.0	91-30.3	✓	11539.7	27228.3	S.O.L. "K"	✓
✓	1038	✓	27-47.7	91-32.0	✓	11540.1	27200.9	"K" C-214° S-6.1	✓

RECORD OF POSITIONS AND STATIONS

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Cruise No. 87-G-2

Vessel GYRE +6" 2D SNIFFER PROFILE III

Date	Time GMT* (LCT)	Station Number	Position		Type of Fix	Drift on Station		*Show position & time of course & speed shanges, & beginning & end of all stations	O.O.W
			Latitude N	Longitude W		Distance (miles) W	Direction (degrees) X		
3/12	1104	SNIFFER PROFILE III	27-45.5	91-33.8	"C"	11540.3	27173.5	E.O.L. "K"	
/	1113	/	27-45.7	91-34.2	/	11538.0	27172.0	S.O.L. "L"	/
/	1140	/	27-48.0	91-32.5	/	11537.6	27198.0	"L" C.032°5-5.8	/
✓	1208	✓	27-50.3	91-30.8	✓	11537.3	27225.9	END LINE L END SURVEY	BP

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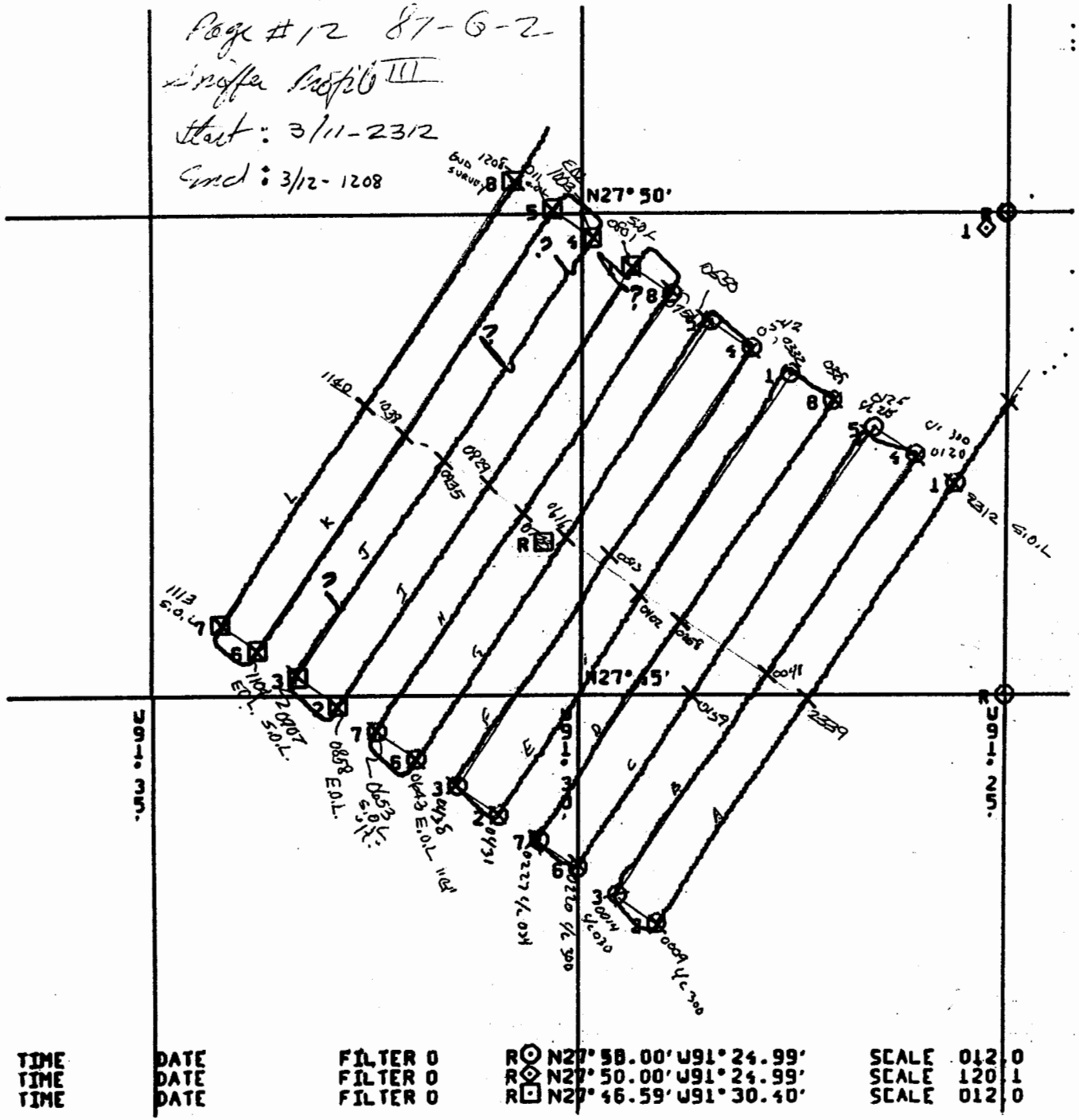
Sniffer Profile III
Start: 3/11-2312
End: 3/12-1208



TIME	DATE	FILTER 0	R⊙ N27°58.00' W91°24.99'	SCALE 012.0
TIME	DATE	FILTER 0	R◇ N27°50.00' W91°24.99'	SCALE 120.1
TIME	DATE	FILTER 0	R⊡ N27°46.59' W91°30.40'	SCALE 012.0