104925

USGS - BAMG

SEISMIC/GEOPHYSICS LOG

SHIP: CAPE HATTERAS CHAT 95025

CRUISE: CH 18-95 Leg 2

AREA: BLAKE OUTER RIDGE

DATES: Nov 26 - Dec 21, 1995

CHIEF SCIENTIST: Lizárralde - WHOI

CH-18-95-2

(1)

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
OBS1a	27Nov95 ~~242~~ 331	GMT	18:10	:00	30° 56' 33.14"	75° 41' 29.89"		Deploy OBS A3		
	18:24:50 ~~18:24:50~~				30° 56' 18.19"	75° 43' 13.32		Deploy OBS A2		
	20331				for navigation during deployments: ref. \nav\obs depl \ ~~obs1.nav~~ obsdepl1.nav					
		~19:15			Start navigation ; ~~shot logger already running~~					
		19:43			equipment in the water					
		19:48			Start shot log					
		~19.50			acquisition ~~start~~ SCS started					
		19:51			30°54'07.10"	-75°53' 45.55"				
		20:02			30°54'30.98"	-75° 52' 17.73"		OBSs should have started		
SOL		20:18.45			54.487 30°54' 29.22"	52.0505 -75°52' 03.03		recording at 20:00		
		problems with SCS recording ; gun?						passing way point SOL		
	shooting: GI 105/105, 45 msec, 2700 psi, ~15 sec randomizer				2 channel streamer dt = 2 msec, delay 4 sec ~~10 sec~~ (!) (as CH-18-95-a) 4 sec rec.					
		~~2~~ 20:30			54.6698' 30° 54' 40.19	51.2188 75° 51' 13.13"				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
OBS 1a	27 Nov 95 331	20:45			54.8857' 30°54'53.14"	50.1057' 75°50' 06.34"				
		21:00			55.0778 30°55'4.67	48.9805 75°48' 58.83				
		21:15			.377 30°55'22.60	.89 75°47° 53.42				
		21:30			.53 30°55'31.80	.783 75°46° 46.95				
		21:45			.769 30°55'46.15	.685 75°45° 41.11				
		22:00			.027 30°56' 01.61	.603 75°44° 36.18				
		22:15			.207 30°56' 12.40	.496 75°43° 29.74				
		22:18:30			30.56'16.09	75°43' 14.34		Passed	over Pt	2
		22:30			.456 30°56' 27.38	.387 75° 42' 23.22				
		22:40			30°56' 36.57	75°41' 38.41		Passed	over Pt	3
		22:45			30°56' 40.76	.262 75°41' 15.69				
		23:00			30°56' 54.82	.123 75°40' 07.36				
		23:15			30.9523° 30°57'08.35"	75.64980 75°38'54.23"				
		23:30			30.9564° 30°57'23.00"	75.6308° 75°37' 50.77"				
		23:45			30.9603° 30°57'37.02"	75.6112° 75°36' 40.23"				
	28 Nov 95 332	0:00			30.9644 30°57'51.80"	75.59190 75°35' 30.73"				
		0:15			30.9685° 30°58'06.56"	75.57270 75°34' 21.81"				
		0:30			30.9725° 30°58'20.83"	75.5531 75°33' 11.30"				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
EOL OB31A cont.	232 28Nov.95	00:34			30.9726° 30°58'24.80"	75.5478° 75°32' 52.12"				calm,
" SOL OB31B										almost no
		00:45			30.9815° 30°58'53.27"	75.5570° 75°33'25.24"				wind
		01:00	299	4.0	30.9905° 30°59'25.65"	75.5735° 75°34'24.59"				
		01:15			30.99930 30°59'57.67"	75.5900° 75°35'24.09"				
		01:30			31.00750 31°00'26.85"	75.6072° 75°36'25.82"				
		01:45			31.0151° 19" 31°00'54.19"	75.6242° 75°37'27.42"				
		02:00			31.0235° 31°01'24.67"	75.6411° 75°38'27.85"				
		02:15			31 01 52.95 31.03575	75 39 30.95 75.658597				
		02:30	291	4.0	31.039217 31 02 21.18	75.675375 75.4051.35				
		02:45			31.0473889 31°02 50.60	76.8 926139 75°41'33.41				
		03:00			31.0551444 31°03'18.52"	75.7097972 75°42'35.21				
		03:15			31.0628639 31°03'46.31	75.726503 75°43 3541				
		03:16			31.0328056 31°03 48 17	75.728392 75 42.21				EOL B
		03:30			31.050739 31 03' 2.66"	75.72625 75 43 34.50				SOL C
		03:45			31.0343078 31 02 03.49	75.721231 75 43 16.43				.000751 time diff. GPS, Shot logger
		04:00	162	4.5	31.018547 31 01 16.77	75.716633 75°42 59.88				
		04:16			31.0006917 31 00 2.49	75.711928 75 42 42.94				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System (8ch streamer, GI Gun) Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
OBS1C	332	04:30			30.985553 30°59' 07.99"	75.70733333 75° 42' 26.40"				time diff, 000748
		04:46			30.9688222 30° 58' 7.76	75.702397Z 75° 42' 8.63"				
		05:00	170	4.0	30.953897 30° 57' 14.03"	75.69185 75° 41' 54.60"				
		05:15			30° .9[illegible] 56' 17.44	75° .6936 41' 37.08				
		05:30			30° .9222 55' 20.18	75° .6890 41' 20.46				
		05:45			30° .9[illegible]62 54' 22.32	75° .6849 41' 05.78				
		06:00	166	4.1	30° .89[illegible] 53' 25.20	75° .6806 40' 50.26				
		06:15			30° .8744 52' 27.88	75° .6758 40' 32.90				
		06:30			30 .8591 51' 32.73	75 .6712 40' 16.52				
		06:45			30° .8429 50' 34.37	75° .6672 40' 01.91		GPS/Sail offset		.000757
		07:00			30° .8258 49' 32.90	75° .6615 39' 41.28				
EOL OBS1C		07:07								
		08:24			communicated w/ obsA2 @ 3660 m, released					
	~	09:15			obsA2 surfaces/sighted					
		09:29			30° .9374 56' 14.81	75° .7326 43' 57.47		OBSA2 along side, hooked		
		9:33						recovered OBSA2		
		09:54			communicated w/ obsA3 @ 3633, possible released					
		10:56			OBSA3 surfaced					

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	11:05				30° 56 28.39	75° 42' 25.08	OBSA3		along side	
	11:09						OBSA3		on deck	

~~2.2~~ 14:20 bridge regarding picking up person with teeth abscess from JOIDES R

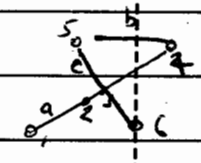
~~rendezvous with other~~ > pick up person from JR : ~1100 (local t.)

> rendezvous with other ship ~ 3:30 am,

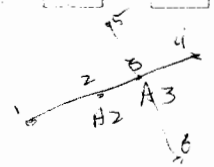
70 nm north → ~ 9 hrs left for experiment

15:15 : new plan.

16:30 Z pick up person from JR



Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
Coord. :						17:00 start deploying OBSes				
1	31°43.992	-75°70.818				19:00 SOL a (1→4)	15.1 nm 4.2 hr	23:35 ~~23:00~~	EOL a	, haul equipm
2	31°46.680	-75°33.882				00:00 leaving for other ship, rendezvous at 07:00 (02:00 local t.)				
3	31°47.130	-75°32.724				08:00 returning from other ship, 15:00 back at site				
4	31°50.400	-75°24.636				16:00 start ~~recording~~ shooting dip line c (5→6), depending on JR				
5	31°54.006	-75°36.420				20:00 EOL c (15:00 local time)				
6	31°40.254	-75°29.018				0:00 approx. hauled in OBSes (19:00 local time)				



Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
OBS 2 deployment	28 Nov 95 332									
		17:14:45			31°47'09.32"	75°32' 41:34"				OBS A3
		17:30:40			31°46'40.67"	75°33' 51:81"				OBS A2
						ref ~~obsde~~ \nav\obs\dpl\ obsdepl2. nav				
		18:27						GPS offset		.000754
								start navigation		
SOL OBS 2a		18:43			31.73460 31°44'04.70"	75.6770° 75°40' 37.25"	Passing Pt 1, gross			not yet firing
		18:46:23		first shot			shot log started			
		TWT 280 2.8 sec								
	A:00				31°44' .51 30.52	75° 39' .35 21.13				
	A:15				31°44' .97 58.36	75° 38' .24 14.27				
	A:30				31°45' .45 26.88	75° 37' .21 12.72				
	19:45				31°45' .87 52.37	75° 36' .13 07.57				
	20:00				31°46' .27 16.18	75° 35' .06 03.85				
	20.15				31°46' .606 36.34	75°34' .038 02.26	Crossing		Pt 2	
	20:30				31°46' .977 58.59	75' 33' .024 01.44				
	20:30:45				31°47' 4.43	75' 32' 46.57	Crossing		Pt 3	
	20:45				31°47' .386 23.15	75°32' 0.028 01.67				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	21:00				31°47' 46.24 .771	75° 31' 00.96 .616				
	21:15				31°48' 11.84 .197	75° 30' 01.00 0.017				
	21:30				31°48' 37.12 .617	75' 29' 2.10 .035				
	21:45				31°48' 57.94 .166	75° 28' 03.24 .054				
	22:00				31°49' 22.56 .376	75° 27' 03.27 .055				
	22:15				31° 49' 50.25 .838	75° 26' 04.42 .074				
	22:30				31° 50' 13.26 .221	75° 25' 03.75 .0625				
EOL OB=24	22:36:45				31° 50' 23.26	75° 24' 36.28				
	~23:00				equipment hauled in					
	~23:30				change of plan again, "Susan..." can't make it due					
					to bad weather → going to WP5 to continue shooting					
					of OBs					
OB=2B	~01:05				Start navigation, ~~shot log~~					
	01:19				equipment in water					
	~01:20				start shot log, acquisition	First Shot ~ #5				
	01:22:00				31°54' 09.83"	75° 36' 29.23"				
SOL OB=2B	01:24:00				31°54' 54.060' 03.62"	75° 36' 36.49x' 26.67"	Shot # 18			

(D)

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
(OBS 2 B Cont.)	29 Nov '95 333	01:30	152°		53.733' 31°53'43.96"	36.221' 75°36' 13.28"	seas, wind	relatively calm, ca.	15-20	swell knob
		01:45			52.897' 31°52'53.83'	35.726' ~~35.897'~~ 75°35' 43.55"	2700 psi, 15 sec,		~~4ms~~ 45 msec delay	
		02:00			52.012' 31°52' 00.71'	35.306' 75°35' 18.34"	GI 105/105		recording 3-8 sec (?)	
		02:15			31°51.117' 31 51 07 02	75 34.86' 75 34 51.60				
		02:30			31 50.2203' 31 50 13.22	75 34.35231 75 34 21.14				.000767 time diff GPS, Shot logger
		02:45			31 49.2822' 31 49 16.93	75 33.8682' 75 33 52.09				
		03:00	153	4.1	48.3777' 31 48 22.66	33.3952 75 33 23.71	swells	increasing	slightly	max pressure ~2800
		03:15			31 47.4657 31 47 27.84	75 32.8548 75 32 51.29				
		03:30			31 46.5548 31 46 33.29	75 32.3945 75 32 23.67				
		03:45			45.6483 31 45 38.90	31.9298 75 31 55.79				
		04:00	158	4.9	44.792 31 44 47.51	31.444 75 31 26.65	max	press. =	2900 psi	.000767
		04:16			43.9015 31 43 54.09	30.968 75 30 58.08				
		04:30			43.0735 31 43 04.41	30.5647 75 30 33.88				
		04:45			42.277 31 42 16.62	30.1007 75 30 06.04				
		05:00	157	4.1	41.387 31 41 23.22	29.6197 75 29 37.18				.000770
		05:15			31° 40' 31.51 (.52)	75° 29' 12.10 (.20)				
	EOL	05:20								

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	06:49				OBS A3 released	@ 2794m range	31° 47.114		75°	32.654
	07:33				OBS A3 sighted					
	7:58				OBS A3 snagged		31°	.7900 47.388	75°	.5424 32'.547
	8:11				Transducer	In Water	31°	46.708	75°	33'.833
	8:13				OBS A2 released	2794	31°	46'.788	75°	33.764
	09:03				OBS A2	31° 46' .7826 57.28	75° 33'	.5620 43.25	along side / not snagged	
	9:15:15				OBS A2	snagged	31°	47' 141	75° 33'	584
SOL Line 25	9:38:37				31°46' .014 00.85	75°32' .901 54.065		Navigation started		
	9:50				31°45' .935 26.08	75°32' .761 45.68				
	10:00				31°44' .890 53.42	75°32' .771 46.28				
	10:15				31°43' .868 59.30	75°32' .346 20.77				
	10:33				31°42 .873 52.38	75°31 .865 57.89	~ 10:40 turn			
	10:45				31°42' .562 32.71	75°31' .365 21.90	~~~10:50 turn~~~ WP 7			
	11:00				31°43 .363 21.80	75°30' .546 32.75	~ 11:00:40		PLONE 1 * NAV NOT CONVERGED *	
	11:15				44.035' 31°44' 02.08"	29.693' 75°29' 41.59"				
	11:30				44.693" 31°44' 41.55"	28.793' 75°28' 47.60"				
	11:45				45.247' 31°45' 14.81"	27.979' 75°27' 58.73"				
EOL 25	11:57				45.895' 31°45' 53.68"	27.150' 75°27' 0900				
SOL 26										

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
(26 cont.)	29 Nov 95 332	12:00			31°45'03.85"	75°27'03.57"				
		12:15	296°	3.5	46.899' 31°46'53.91"	27.485' 75°27'29.10"				winds 25-30 knots sea moderate
		12:20								Main compressor defect pressure line ~~burted~~
EOL26 SOL27		12:21:38			46.791' 31°46'47.45"	27.786' 75°27'47.16"				still shooting, at 2700 psi
		12:30:30	220	4.5	46.770' 31°46'46.22"	28.268' 75°28'16.05"				some rough lowrides with some times "FOM" ...
		12:45			45.851' 31°45'51.05"	29.089' 75°29'05.32"				SLOPE NAV. missing
		13:00	226	4.4	45.247' 31°45'14.81"	29.898' 75°29'53.85"				
		13:15			44.648' 31°44'38.85"	30.753' 75°30'45.18"				
		13:30			44.059' 31°44'02.56"	31.500' 75°31'30.01"				
EOL27 SOL28		13:32			43 44.932' 31°43'56.99"	31.607' 75°31'36.47"				
		13:45	008	4.4	44.914' 31°44'48.81"	31.407' 75°21'24.39"				
		14:00			45.809' 31°45'48.55"	31.228 75°31'13.70"				seas sporadic white caps → rougher
		14:15			31 46.1548 31°46'45.29	75 31.154 75°31 09.24				
		14:30			47.708 31 47 42.50	31.01317 75 31 00.79				
		14:45	003	4.6	48.654 31 48 39.25	30.849 75 30 50.91				seas getting heavier
		15:00			49.5537 31 49 33.32	30.7388 75 30 44.33				
EOL28		15:10			50.1625 31 50.09.75	30.6113 75 30 36.68				EOL28
		15:					heading to		East end	of USD line BRH-6

JD 338

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
Begin VSP2,1	18:48				31° 50' 23.14 (.40)	75° 25' 04.65 (.08)	begin at		depth 680m	
	19:00				31° 50' 05.66 (.09)	75° 25' 53.68 (.89)				
	19:14:30				~~31° 49' 43.36~~	~~75° 26' 53.76~~	crossing		start point	
	19:15				31° 49' 45.34 (.72)	75° 26' 53.76 (.90)				
	19:30				31° 49' 22.09 (.34)	75° 27' 55.11 (.92)				
	19:45				31° 49' 03.93 (.06)	75° 29' 08.10 (.14)				
	20:00				31° 48' 43.76 (.729)	75° 30' 08.45 (.14)				
	20:12				31° 48' 20.87	75° 31' 13.77	Passing drill ship to our port side			
	20:15				31° 48' 12.63 (.2105)	75° 31' 29.53 (.4805)				
	20:30				31° 47' 48.92 (.815)	75° 32' 21.84 (.764)				
	20:45				31° 47' 29.81 (.497)	75° 33' 20.47 (.341)	lotsa	white	caps	
	21:00				31° 47' 12.39 (0.207)	75° 34' 19.76 (.329)				
	21:15				31° 46' 50.68 (.845)	75° 35' 17.28 (.288)				
END VSP2,1	21:24				31° 46' 36.16 (.595)	75° 35' 53.53 (.409)	End of VSP2, line 1995B01			
Start VSP2,2	21:56				31° 46' 14.75 (.246)	75° 36' 24.80 (.363)	Depth = 608			
	22:00				31° 46' 28.21 (.47)	75° 36' 02.57 (.043)				
	22:02:20				31° 46' 34.67 (.578)	75° 35' 52.49 (.875)	Over 1st Pt			
	22:15				31° 46' 51.61 (.86)	75° 35' 01.81 (.03)				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
VSP2,2	22:30				31°47' .159 09.54	75°34' .126 07.57				
	22:45				31°47' .52 31.18	75°33' .182 10.93				
	23:00				31°47' .953 57.20	75°32' .086 05.15				
	23:15				31°48' 48.295' 17.67	75°30' 30.972' 58.29"				
	23:30				31°48' 48.642' 38.50"	75°30' 30.026' 01.56"				
	23:45		61	4.4	31°49' 49.019' 01.16"	75°28' 28.972' 58.33"				
30 Nov. JD334	00:00				31°49' 49.392' 23.49"	75°27' 27.858' 51.49"				
=EOL	00:15				31°49' 49.789' ~~46.13~~ 47.33"	75°26' 26.743' 44.58"			stop shooting, nav., shot log	
	00:40		GPS delay 0.000703							
					Files on floppy:	\v995b01a\	GPS-Files			
						\v995b02a\	V995b02a, nav, sh			comprise v995b01a
							GPS-Files			
VSP V995B03A	JD334 00:46:27				31°49' 49.909' 54.52"	75°26' 26.3[illegible]0' 20.39"	receiver depth: 536 m			
	01:00				31°49' 49.596' 35.74"	75°27' 27.347' 20.82"				
	01:15		250	4.6	31°49' 49.160' 09.57"	75°28' 28.532' 31.93"			Shot logger from 01:07 not working!	
	01:30				31°48' 48.770' 46.18"	75°29' 29.620' 37.19"				
	01:45				31°48' 48.412' 24.69"	75°30' 30.716' 42.94"				
	01:~~45~~ 54								shot logger works again (PC crashed...)	

(13)

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
V995B03A Cont.	324 30Nov95	0200			47.986 31 47 59.12"	31.829' 75°31'49.75"				
		0215			47.669 31 47 40.14	32.937 75 32 56.25				
		0230	244	4.3	47.2565 31 47 15.39	34.051 75 34 03.06				
		0245			46.893 31 46 53.59	35.161 75 35 9.57				
EOL V995B03A		0300			46.5815 31 46 34 89	35.927 75 35 55.63				
		Files on floppy: \v995b03a\ v995b03a.nav								
						1hr				
						GPS - files, comprise obviously v995b02a				
					GPS - delay	0.000707				
SOL V995B04A		0320	091	4.2	46.042 31°46 29.51	36.1725 75° 36 10 35				rcvr depth = 464 m
		0323			46.605 31°46 36 31	35.7835 75° 35 47 07				
		0330			46.804 31°46 48.22	35.4775 75° 35 28.65				
		0345	067	4.5	47.153 31°47 09.18	34.297 75° 34 17.84				
		0400			47.532 31°47' 31.91	33.2215 75° 33' 13.29				
		0415			47.893 31°47' 53.60"	32.207 75° 32' 12.41"				
		0430			48.186' 31° 48' 11.18"	31.202' 75°31' 12.11"				
		0445			48.550 31° 48 33.46	30.104 75° 30 06 26				
		0500	059	4.3	48.9725 31° 48' 58.35	29.228 75° 29' 1.37				
		05:16			.44 31° 49 26.18	.85 75° 27 50.84				

	Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	05:30					31° 49' 45.19	75° 26' 48.66				
EOL	05:31	EOL U995B04									
	05:53								GPS offset		.000707
SOL	06:03	SOL U995B05 at 342m					(31° 49' 45.21	75° 26' 50.83	, 06:06)		
	06:15					31° 49' 30.84	75° 27' 30.96				
	06:30					31° 49' 08.19	75° 28' 34.06				
	06:45					31° 48' 43.10	75° 29' 37.62				
	07:00					31° 48' 20.54	75° 30' 40.63				
	07:09	closest approach									
	07:15					31° 47' 53.24	75° 31' 34.19				
	07:30					31° 47' 41.12	75° 32' 39.18				
	07:45					31° 47' 22.84	75° 33' 41.60				
	08:00					31° 47' 01.41	75° 34' 38.09				
	08:15					31° 46' 39.00	75° 35' 33.15				
EOL	8:20:20					31° 46' 32.79	75° 35' 52.70				
SOL	U995B06 8:45					31° 46' 4.84	75° 37' 05.10		320 m		
	8:59					31° 46 39.30	75 35 57.20		Over	starting	pt
	9:00					31° 46' 41.30	75° 35' 52.40				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
V995B06	9:15				31°47' .069 04.06	75°34' .685 41.08				
	9:30				31°47 .373 22.35	75° 33' .672 40.32				
	9:45				31°47' .276 42.98	75° 32' .277 49.02				
	10:00				31°48' .005 00.30	75° 31' .957 57.54		Roughen Seas!		Wind ~20kts
	10:21				31°48' 13.57	75°31' 35.42		Noticed that		shot logger
	10:31				31°48' .467 28.04	75°29' .005 00.29		had been stuck.		Was blinking,
								but not advancing.		50 minutes last.
								Was stuck at 9:29.		
	10:40							Randomizer turned off,		
	10:45				31°48' .834 49.41	75°29' .189 11.32		don't think that is the		
								problem. Seas are very rough		
								Shot logger occaisionally triggers		
								every second instead of every 15 secs.		
	11:00				31 49 .157 09.41	75 28 .1943 11.66		Going to switch from PC to		
								laptop at EOL		
	11:15				31°49' .596 35.77	75°27' .202 12.14				
EOL	11 23:30				31°49' 82.90?	75° 26' 63.98		Getting hardware error on laptop		
	12:05		GPS delay: 0.000707					Going back to PC. Winds ~25 kts		

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	JD 334 30 NOV 95		Cable / air supply			untangled				
V 0ft 5 1074		12:20			Start shooting					
		12:29			31°49'50.67"	75°26'33.904				
					49.792'	26.718'				
SOL		12:24:30			31°49'47.50"	75°26' 43.05"				
					49.627'	27.209'				
		12:32			31°49' 37.61"	75°27' 12.53"	Shot logger crashed again 12:25 - 12:42			
					49.326	28.784				
		12:45			31°49' 19.56"	75°28' 47.02"				
					48.971'	29.180' 10.78'				
		13:00			31°48'58.25"	75°29' ~~58.25~~ ?				
					48.556	30.328'				
		13:15:30			31°48' 33.36	75°30' 19.70"	shot logs	301 - 1306		
					48.149	31.636'				
		13:30			31°48' 08.91"	75°31' 21.65"	passing Resolution			
							problems with ~~trigger~~ firing lines			
							→ only 1 chamber going			
		~~13:45~~ 13:48			~~no firing~~					
		~~13:45~~			continue firing	1 chamber				
					47.789'	32.453'				
		1345			31°47' 47.31"	75°32' 27.15"				
		1353			both chambers shooting	connection on deck was wet				
					47.432'	33.573'				
		1400			31°47' 25.89"	75°33' 32.00"				
					47.039	34.6255				
		1415			31°47' 02.33"	75°34' 39.53"				
					46.6505	35.742				
		1430			31° 46' 39.03"	75° 35' 44.52"				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
EOL V995B07a		1430			46.563 31 46 33.80	35.931 75 35 55.88				
		1504			31° 46 33.34	75° 36 05.05		Started firing		
SOL V995B08a		1506			46.602 31 46 36.11	35.8066 75 35 48.36		clear skies, rough seas		
		1515	70	4.4	46.807 31°46' 48.44"	35.146 75° 35' 08.75"				
		1530			47.254 31° 47' 15.27	34.055 75° 34 3.32				
		15:45			47.637 31° 47' 38.23	32.9515 75° 32' 57.09				
		16:00			48.042 31° 48' 2.51"	31.8105 75° 31' 48.63"				
		16:15			48.408 31° 48' 24.50	30.742 75° 30 44.50				
		16:30	73	4.2	48.773 31 48' 46.39	29.6445 75° 29' 38.67				
		16:45			49.161 31° 49' 9.66	28.514 75° 28' 30.86				0.000692 time diff
		17:00			49.557 31° 49' 33.43	27.347 75° 27' 20.80				shot logger failed
EOL		17:08			31°49' 46.17"	75°26' 37.38"				
		1902			Deploy			Airgun back in water		
(S-T) SOL	29	A05			Recording					
JD 334		19:18			31° 47' 48.73 .81	75° 35' 19.71 .33		1st good shot		
		19:33			31° 48' 22.05 .57	75° 34' 35.82 .59				
		19:45			31° 48' 52.53 .87	75° 34' 02.53 .04				
		20:00			31° 49' 30.43 .51	75° 33' 16.88 .28				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	20:15				31°50' 03.54 .059	75°32' 29.91 .499				
	20:30				31°50' 58.89 .648	75°31' 45.17 .753				
EOL 29	20:42				31°51' 05.89 .098	75°31' 12.68 .21	Had lost pressure in gun. Some anomolous			
	20:45				31°51' 01.59 .026	75°31' 04.70 .079	readings from a2d. Fixing the pressure			
	21:00				31°50' 08.10 .135	75°30' 37.81 .63	seemed to take care of it.			
	21:15				31°49' 22.03 .367	75°29' 57.86 .964				
	21:30				31°48' 28.20 .47	75°29' 28.58 .476	More Problems with a2d. Thick			
	21:45				31°47' 37.87 .631	75°28' 50.39 .84	Squiggly lines showing up every 4th trigger.			
EOL 30	21:48				31°47' 27.66 .461	75°28' 42.49 .708	Turns out the noise is from the other ship shooting.			
	22:00				31°47' 53.15 .886	75°28' 12.97 .216				
	22:15				31°48' 32.11 .535	75°27' 26.94 .449				
	22:25						Turned guns off.			Problem with Resolution?
	22:30				31°49 06.33	75°26' 39.51				
EOL 31	22:35				31°49' 15.76 .263	75°26' 26.24 .437	Guns turned back on. No Problem.			
	22:38						Dropping the M-P line, because of			
							Proximity to Resolution. Going to head			
							for P			
	22:45				31°49' 18.23 .304	75°26' 42.41 .707				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
MO line ~~32~~	30304 ~~2303~~ 30.1925	2300			50.178' 31°50' 10.67"	27.308' 75°27' 18.48"		Winds	~17 Kts	
JOL 32 ~~[illegible]~~	~~2~~	2304			50.~~[illegible]~~47' 31°50' 25.03"	27.507' 75°27' 30.39"				
		2315	295	4.5	50.713' 31°50' 42.75"	28.266' 75°28' 15.97"				
		2330			51.154' 31°51' 09.22"	29.374' 75°29' 22.46"				
		2345			51.613' 31°51' 36.75"	30.490" 75°30' 29.24"				
	30335 31 Nov 96	0000			52.013' 31°52' 00.75"	31.573' 75°31' 34.38"				
		0015			52.421' 31°52' 25.25"	32.642' 75°32' 38.54"				
		0030			52.895' 31°52' 53.68"	33.741' 75°33' 44.43"				
	~~[illegible]~~	0045			53.290' 31°53' 17.39"	34.887' 75°34' 53.20"				
		0100			53.727' 31°53' 43.61"	35.969' 75°35' 58.16"				
		0115			31°54.197' 31°54' 11.78"	75°37.063' 75°37' 03.78"				
EOL 32		01:19:30			54.324' 31°54' 19.46"	37.402' 75°37' 24.13"				
		155			Gas delay:	0.000698				

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments