FERL 105026
94007

94007 H_2O

USGS - BAMG

SEISMIC/GEOPHYSICS LOG

SHIP: R/V Ferrell

CRUISE: Ferrel 94-~~4~~3 94007

AREA: Stellwagen Banks

DATES: 10-17 / 10-24

CHIEF SCIENTIST: Rendigs

SHIP: _____

CRUISE: _____

DATES: _____

AREA: _____

CHIEF SCIENTIST: _____

PERSONNEL/AFFILIATION/FUNCTION

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

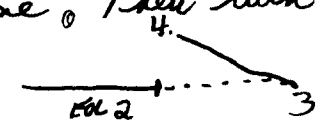
_____

_____

_____

_____

Line#	YrMoDy +JulDy	Time +Zone (ZULU)	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	10/18/94	16:10								LEAVE P-TOWN FOR WP1
	291	16:15								equipment in water - in Cape Cod Bay
		16:43								turning to start of WP1
SOL 1	10/18/94	17:11			15in³	WATER GUN - 3" FIRE, -.25SEC SWP				Ship on 1 screw
		17:25			Filters	- 100-200 KHz				over Fishing ledge
1		17:30								Back into fine seds
		1800								Good stuff - 100 Ft. of seds
		1830								slight oil leak at stage 4 on compressor - otherwise - seismic would be happy.
		19:10								
		19:30								lower reflectors good.
EOL 1 SOL 2		19:56								
		20:00								Mascomp glitch - reboot, colorful metaphors, etc.
		21:20				steamer lengthened behind boat.				
		23:00								still no clock on Mescomp
		23:30								a surface ghost appeared after steamer lengthened, back at 21:35. Water depth abt 37m
	294	2400								will extend ln 2 a bit to allow for passage of outbound ship in seperation zone. Then turn to ln 3.



Line#	YrMoDy +JulDy	Time (ZULU) +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
EOL 2	292	0040								
SOL 3		0054								Delay of 1/32" on gun record
		0116								105m water depth
		0130								Twig attempting to enhance record
		0145								turns to avoid fishing vessel
EOL 3		0159								Fishing vessel hell
SOL 4		0210				0.5s sweep/3sec/100-2KHz				change to 0.5s swp 150 Hz - 2KHz filter
		0230								0 delay. Looks pretty good - coming up on the bank - digital record v. good.
		0255								slight turn to avoid fish vessel.
		0300								
		0453								lowered TVG adjust gain on EPC (down)
		05:32								(was 32db) gain adjust => 29db
		06:33								up TVG a little
EOL 4		0708								turn to stbd to get onto ln 5
SOL 5		0711				0.5s swp/3" FIRE/				
		0712				100Hz - 2KHz filter				LOST NAV
		0716								NAV BACK

	Line#	YrMoDy +JulDy	Time +Zone (ZULU)	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
	5	292	0805						1		EOL 5
	6		808								SOL 6
			9:02								gain up 3db to 32db
			9:55								paper problem - crooked tried to fix
			10:29								reduced gain by 3db to 29 db
			12:00								all ok
EOL	6		12:07:42								dog leg right
SOL	7	292	12:07:42								
	7		12:32								all ok
	7		13:01								" +3db gain 12:55
EOL	7		13:20:00								+3db gain 12:09
SOL	8	292	13:20:00								
SOL	9		14:08								lost NAV ~ 14:09
			14:15								NAV Back, course adjust
			14:18								on course
	9		14:30								not recording 14:18 - 14:28 14:28 - recording
	9		15:03								working on clock
			15:32								" " "

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
9	292	15:56						1		EOL 9
10	292	15:56								SOL 10
10		16:40								all ok
10		17:02								all ok
		17:11:15								lost recorder tape; changed tape
		17:20:00 to		17:20:30						interrupt paper in recorder
		17:21						continued paper adjust		~~changed~~ recorder; changed to 2" gun fire rate
		17:25							changed to	2.5" gun fire rate
										changed filters on digital recorder
11		18:05								Changed to 1.0 swp
11		18:14								scale changes
12	292	19:31								all ok
12		19:59								all ok
12 13		20:55:00								EOL 12 SOL 13
		22:04								+ 3db gain
13		23:27								EOL 13
14		23:28								SOL 14
		23:45								~~glacial marine~~ mud evident - 75m thick.

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
14		2400				2.5" FIRE DUAL SWP 1" + 1/2"		1		water depth 86m
	293	0016								EOL 14
15		0019								SOL 15 - 84m
										water depth - wide turn to avoid fish guy.
		0210								some signal loss? vertical lines/transparent in record
		[illegible]								
		0429								KN 27 core site
		0444								KN 10 " "
15		0501								EOL 15
16		0503								SOL 16
16/17		0614								EOL 16 SOL 17
		~725								slowed ship a bit to ~4 knots
		0750								abt 75m of glacio-marine mud
		0800								Infilling of GMM btw topo highs
		0835								till/coastal plain/ - highs debris slide - pinch out feature?
		0910								internal hor. reflectors in coastal plain seds.
18		1110								wide channel within coastplain seds. 5.7 km wide x 45 m deep
19	293	1325								deep reflectors in sed pile

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
19	293	14:43						1		rock reflectors @ base of sed. pile?
		15:57								rocky bottom reflectors
19		16:22								EOL 19
20		18:22:40			16:25 →	SOL 20				Ship sped up to 7.0 for ~30"
						EOL 20 (17:30)				
		17:59				SOL 21 (17:32)				Jeffries Ledge, boulders?
21										
										EOL
22		21:05								EOL 21
		21:06								SOL 22
23		22:00								EOL 22
		22:01								SOL 23
		23:42								EOL 23
24		23:54								SOL 24 gains set @ 38 dB
		~00:41								lost signal
		03:10:30								Twig rebuilding H_2O gun w. a little help from his friends! $ award.
		↓								gun fixed & back continuing line 24
		4:18								Big ol' drumlin or?
24		4:19								EOL
25										SOL
		4:57								Shut gun off

Around 4:45 noticed diminished signal. Determined compressor was off - breaker tripped. Shutting of gun so it can build pressure.

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
25		5:02				.25" FIRE 1 SEC / ½ SEC DUAL CHANNEL		1		started gun again
		5:32				GAIN -38 db				noticed reduced signal
										compressor tripped breaker again
		5:39								started firing again
		6:18								breaker tripped again
		6:40								got things going again
		7:04								compressor down again
		8:58								Restart part of line 25
		10:30								into laminated mud
26	294	10:51								EOL 25
		10:51								SOL 26
		12:01								ok ll
		12:44								approaching N side Stellwagen Bank, rock reflectors below 150 m seds
		13:02								rock reflectors continue
		13:28								170 m seds. over rock
		14:48			14:45	adjust speed ~ 5				NAV hung up - adjusted EOL 26 SOL 27
		14:50								adjust paper gun misfiring
		15:00								reduced speed to 4.5
		15:05								increase in oil leakage in compressor

Line#	YrMoDy +JulDy	Time +Zone	Crs	Spd	Navigation	Seismic System Sweep/Fire/Filters	Tape# Disk#	Roll#	Magnets Gravity	Comments
28		16:59								gun four misfires — building swells
		18:46:00								EOL 28 good basement reflectors
		19:51								SOL 29
		19:59							EOL 29 SOL 30	seds/rock reflection — coastal plain or glac. fan?
		2058								EOL 30/SOL 31
		2253								EOL 31./SOL 32
	295	0120								EOL 32