

			ROV VIDEO LOG											
2003 NOAA OE Cruise- HBOI Biomedical Mission- Sept. 8-19, 2003														
NOAA Vessel R/V <i>Ronald Brown</i>														
SONSUB ROV- <i>Innovator</i>														
PI- Amy Wright, Shirley Pomponi, John Reed														
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes
9/9/2003	Gulf of Mexico, SW Florida Shelf, Forcepia Site 2	Forcepia Site		0	1						26 15.993'N	83 42.203'W		
									0.6		26 16.000'N	83 42.209'W		
									1550					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/9/2003	Gulf of Mexico, SW Florida Shelf, Forcepia Site 2	Forcepia Site	9-IX-03-1	1	1	A. Wright, S. Pomponi, J. Reed			1820	depth finder not working on ROV	26 15.9975	83 42.2010		
									1830					
									1834					
									1844	240	26 15.9976	83 42.1976		
									1849		26 15.9952	83 42.2005		

Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Test dive, 30 min soak test, Prep start at 1400								
	Launch								
	Hang in cage at 100', test all systems, fly out of cage; leak in camera cable; need to move camera position; need								
	Recover								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo		
	Launch; video overlay has incorrect time at 1720, real time is 1828; overlay has date, but no latitude or longitude.							Video overlay incorrect part of dive, no depth; digital camera broke, 3 chip color video broke; grab and suction work well, but grab falls off hook on front easily. Need collection bucket to hold water for suction.	
						good shot of TMS			
	Edward Scissorshand; nice video of arm and trash cans.								
	on bottom	flat sand bottom; some green algae possibly Caulerpa sp.; some bioturbation, 3-4cm mounds and depressions							
	overlay now shows correct time, coordinants are ship's position not ROV	Halimeda sp.	flounder	numerous small shrimp; pencil urchin-Eucidaris					

									1853		26 15.9961	83 42.2008		
									1856		26 15.9963	83 42.1980		
									1858					
							1	POR; OR	1900		26 15.9989	83 42.1981		
									1903				3,4	sample 1
									1912					
									1920					
									1922		26 15.9980	83 42.1991		
									1929					
					2				1930					
									1946		26 15.9965	83 42.2011		
							2	POR; OR	1948		26 16.0004	83 42.1991	5	sample 2
									2002		26 16.0002	83 42.1972		
									2005		26 15.9987	83 42.1995		
									2008		26 15.9984	83 42.1996		
									2020		26 15.9983	83 42.2006		
									2026					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes

				Luidia starfish					
			flounder						
			pair of lizardfish						
	closeup of Halimeda and encrusters								
	sample 1 in bucket #8					clam shell collection of Forcepia into bucket			
	10cm sponge w/ Galatheid crab								
				squid					
			puffer fish						
		sand bottom	flounder						
	sample 2 in sucker basket	20% Halimeda, coarse sand	eel			close up for video			
	large clumps of Halimeda		anenome						
	Caulerpa prolifera?								
	blurry video (TMS scraping bottom?)					bad bad			
	off bottom, end of dive; visibility 0, current; dropped clam shell and need to repair hydraulic line.								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	

9/10/2003	Gulf of Mexico, SW Florida Shelf, Forcepia Site 2	Forcepia Site	10-IX-03-1	2	1	A. Wright, S. Pomponi, J. Reed			826		26 15.6652°N	083 42.2112°W		
									845					
									849		26 15.6677°N	083 42.2140°W		
									859					
									902		26 15.6672°N	083 42.2169°W		
									909					
									912	235	26 15.6658°N	083 42.2160°W		
									921		26 15.6674°N	083 42.2173°W		
							1(not collected)	Forcepia?, 6-8" sphere	928		26 15.6652°N	083 42.2156°W	1,2	
									937	237				
									944					
								6" orange sponge, 1 Axinellida	946	236	26 15.6640°N	083 42.2115°W	3,4	sample 1
									953					

	video overlay turned off because causes interference; will plug in overlay just for sample documentation; time code on video is not working. No depth code on video. Software difficulty on depth overlay. Date on video shows 10/9/2003 = day/ month/year.							Overlay incorrect, no depth display; very poor tracking	
	placing basket on TMS; 100' + vis.								
	date corrected; time corrected for a little while								
	bottom in sight								
	date corrected; time corrected								
		flat sand bottom; halimeda 20% coverage		numerous shrimp; Rhomenia red algae; Halimeda, Caulerpa prolifera?					
				8" orange sponge Forcepia?					
	collect with clam shell grab, time code is working					collection with clam shell grab			
	no sample collected								
	orange 6" spherical sponge; 20 -40 % cover Halimeda patches,								
	sample collected with clam shell grab								

									1001					
					2				1000 approx					
									1007		26 15.6660'N	083 42.2147'W		
									1020		26 15.6678'N	083 42.2159'W	5	
								orange sponge 2 Axinellida?	1025	236	26 15.6652'N	083 42.2156'W	6,7	
									1029					
									1037					
									1038		26 15.6663'N	083 42.2134'W		
					3				1043					
									1044					
								orange sponge Forcepia? 3 Sample lost	1049	235	26 15.6614'N	083 42.2147'W		
									1051				7, 8	sample 3
									1054				9,10	sample 3
									1055					
									1100					
									1106					
								orange sponge Forcepia?	1111					
								orange sponge Desmapsa 4 mma	1112		26 15.6668'N	083 42.2138'W	11	sample 4
									1117					

	sample #1 collected with clam shell grab into bucket #5					collection with clam shell grab into bucket #5			
	closed bucket lid								
	orange sponge Forcepia? Very small not collected.								
			yes, a fish next to sponge	crab					
	sample #2 collected								
			spotted wahoo, near to TMS						
	sample in bucket # 6.								
	sample bucket lid closed								
				crab by sponge					
	sample collected with clam shell grab								
	sample put into bucket # 8								
	sample bucket lid bent (semi closed)								
	sample collected with clam shell grab								



									1122					
									1124					
									1134					
					4				1140		26 15.6659'N	083 42.2129'W		
								orange sponge irregular, 5 Axinellida?	1142	236	26 15.6651'N	083 42.2167'W		
									1145				12,13	sample 5
									1152					
									1155					
									1156					
									1157					
									1159	235	26 15.6650'N	83 42.2147'W		
									1203		26 15.6650'N	83 42.2148'W		
									1205					
								30+ cm yellow sponge, 6 Verongida?	1206	235	26 15.6658'N	83 42.2192'W		
									1207				14,15	sample 6
									1211					
									1213					
									1221					
									1223					
								orange sponge Forcepia? 7 Sample lost	1233	234	26 15.6654'N	83 42.2155'W		
									1234				16,17	sample 7
									1239					

	sample collected and put in bucket #2								
	bucket lid closed								
				pencil urchin					
	collection using clamshell grab		small fish in sponge			orange sponge irregular, collection using clam shell			
	sample collected and put in bucket #1- bucket bent								
	bucket lid closed								
	back on bottom								
	heading to south								
				fleshy red algae, Rhodomenia, Codium					
						25 cm brown sponge			
	heading to west								
	30+ cm yellow irregular sponge; lobes								
	collection using clamshell grab								
	sponge in clamshell-enroute to TMS								
	sample in bucket #10								
	heading back to bottom-S/SE transect								
	collection using clamshell grab								

					5				1241		26 15.6644°N	83 42.2161°W		
									1244					
									1248					
									1255					
									1256					
									1259					
							3 (take 2)		1304		26 15.6631°N	83 42.2149°W		
									1305					
							3 (lost forever)		1310					
									1316					
							Not collected	<i>Teichaxinella</i>	1321					
							Not collected		1323					
							NC	poss. <i>Ircinia</i>	1325					
							NC		1329		26 15.6643°N	83 42.2145°W		
									1331					
									1338		26 15.6643°N	83 42.2158°W		
							8; 9?	10 cm thick encrusting bright orange sponge; may have piece of second yellow-orange sponge	1339	235	26 15.6643°N	83 42.2158°W		
									1340				18,19	sample 8

[illegible]

									1342					
					end tape 5				1349					
									1351					
									1351					
									1357					
									1404		26 15.6641'N	83 42.2161'W		
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/11/2003	Gulf of Mexico, SW Florida Shelf, Forcepia Site 2	Forcepia Site; 26 15.4995'N, 83 42.3128'W	11-IX-03-1	3	1	A. Wright, S. Pomponi, J. Reed			804		26 15.4995'N	83 42.3101'W		
									809	230	26 15.5191'N	83 42.3505'W		
									813					
									820	233	26 15.5300'N	83 42.3258'W		
									823	235				
									829	235	26 15.4652'N	83 42.3331'W		
									830	234	26 15.4737'N	83 42.3400'W		
									832					
									842					

	collected using clamshell grab								
	sample 8 placed in bucket #3								
	bucket #3 lid mostly closed								
	bucket #11 lid closed								
	ROV docked on TMS								
	ROV/TMS on surface								
	<b>Notes</b>	<b>Habitat Description</b>	<b>Fish</b>	<b>Invertebrates, Algae</b>	<b>Human impacts</b>	<b>Good Video</b>	<b>Good Photo</b>	<b>Repairs</b>	
	Launch; overlay working w/ time date depth and coordinants.							Tracking incorrect, overlay incorrect for lat/long; 2) problem with video recorder; interference problem with lab monitor, had to disconnect	
	on bottom; coordinants are okay now;	sandy bottom, 20% Halimeda							
	6" dia lumpy brown sponge Plakortis?; interference on video in van caused by monitor in the lab								
	starting transect still having some video problems			Halimeda dominant 10-30% coverage; 4" orange sponges imbedded w/in Halimeda, brown Halichondrida? sponges					
		flat sand considerable bioturbation, 2-3" conical mounds and depressions	6" flounder	3" orange sponge Spirastrella sponge?					
				Petrosid?					
				Verongida?					
	had to unplug monitor in lab because of interference in van so no further notes; Some problem w/ the video recorder								
	small sponge; continue south transect								

									851					
									854					
									900					
								1 bryozoan	902	236	26 15.3388°N	83 42.2386°W		
									910				1,2	sample 1
								Forcepia!?	915	236			no	have video
							2 Sample lost							
									917		26 15.4328°N	83 42.2783°W		
									922		26 15.3648°N	83 42.2367°W		
									931					
									936		26 15.4592°N(26 15.3733°N-actual)	83 42.2991°W(83 42.2322°W-actual)		
									938					
									939					
									944					
									951		26 15.4736°N	83 42.2953°W		
9/11/2003	Gulf of Mexico, SW Florida Shelf, Forcepia Site 2	Forcepia Site; 26 15.4995°N, 83 42.3128°W	11-IX-03-1	3	2				0.418055556		26 15.4382°N	83 42.2277°W		
								3 Forcepia	0.422916667	235	26 15.3999°N(26 15.4091°N-actual)	83 42.1495°W(83 42.1629°W-actual)	3,4	
									0.426388889					
									0.432638889					

	orange lumpy sponge Axinellida? Or Poecilosclerida?								
			flounder						
	orange sponge among the Halimeda								
	2-3" rock, thin encrusting bryozoan					collection of bryozoan w/ suction and grab			
	1-2" dia spherical orange sponge								
	sample 2 collected by suction hopefully in suction bucket								
	sample 1 collected by clam shell								
			baracuda at TMS						
	sample 1 in bucket #5								
	bucket #5 lid is down								
	video turned off while moving from TMS back to Forcepia fix								
	heading back to Forcepia fix; ?problem with actual ROV fix								
	untangling from tether								
	END OF TAPE#1/start #2,								
	Amorphous mass, 3" diam, little chimneys					Y			
				Octopus		Y			
	Video back on								



									0.434027778					
									0.440972222					
								4 Forcepia	0.45	235	26 15.3912'N(26 15.4256'N- actual)	83 42.1600'W(83 42.2477'W- actual)	5,6	
									0.453472222					
									0.457638889					
									0.459722222		26 15.	83 42.		
									0.463194444					
									0.466666667					
9/11/2003	Gulf of Mexico, SW Florida Shelf, Forcepia Site 2	Forcepia Site; 26 15.4995'N, 83 42.3128'W	11-IX-03-1	3	3				0.468055556					
									0.475		26 15. 4454'N	83 42. 2827'W		
								5 Forcepia	0.480555556	235	26 15.4454'N (26 15.4287'N actual)	83 42.2827'W (83 42.2564'W actual)	7,8	
								6 sample lost	0.480555556	235	26 15.4454'N (26 15.4287'N actual)	83 42.2827'W (83 42.2564'W actual)		
									1140					
									1144					
									1145					
									1146					
									1159					

	Sample #3 in bucket #4								
	Heading east/southeast to last sample collection site								
	Spherical, w/chimneys- definitely Forcepia					Y			
	Sample collected								
	Turning off video; the sites 1 & 2 noted on the navigation screen appear to be incorrect. They appear to be 1000' from the ship but we calculate actual distance to be 400' based on tether length.								
	Video back on								
	Sample #4 in bucket #7								
	End of tape #2								
	Starting tape #3								
	Video of sponge Spirastrella?								
	Amorphous, spherical, lobous, red-orange					Y			
	Cushion spherical, brownish-orange								
	video off; back to TMS to drop samples								
	video back on; samples 5 & 6 in bucket #10								
	collection site of samples 5 & 6 is estimated to be 26 15.4287°N, 83 42.2564°W								
	bucket #10 lid closed								
	changed ROV pilots, started transect on 120'								

									1200	235	26 15.3435'N	83 42.1146'W		
									1203	235	26 15.1194'N	83 42.7883'W		
									1205		26 15.3761'N	83 42.1565'W		
									1214					
								3" spherical orange sponge, 7 Forcepia	1215	236				
									1216				9, 10	
									1220					
									1221					
									1223					
						4			1224					
									1235					

	4" dia orange sponge, spherical, 4 lumps on top; good video					4" dia orange sponge, spherical, 4 lumps on top			
	4" spherical, lobate, orange sponge, <i>Axinella</i> ?			4" spherical, lobate, orange sponge, <i>Axinella</i> ?					
	orange sponge associated with Halimeda, 3" dia, shaggy, thickly encrusting sponge					orange sponge associated with Halimeda, 3" dia, shaggy, thickly encrusting sponge			
	changing course direction; heading west and then to north		lizardfish						
	3" spherical orange sponge	sandy bottom, surrounded by Halimeda							
	no tracking for ROV- so no coordinates								
	Lat/Lon from here on will be ship's position- approx. 400' SE of ship's location								
	video in main lab restored								
	switched tapes, new tape #4								
			school of 3 barracuda around TMS			school of 3 barracuda			

									1236					
									1237					
									1243					
									1249					
									1250					
									1252		26 15.3703'N	83 42.1643'W		
									1253					
									1258					
									1258					
									1302					
									1303		26 15.4141'N	83 42.2798'W		
									1304					
									1307					
									1319	235	26 15.3676'N	83 42.1575'W		
					5				1322					
									1325					

	video of Forcepia and clamshell grab placing in bucket					video of Forcepia and clamshell grab placing in bucket			
	sample #7 in bucket #1								
	bucket #1 lid closed								
	back on bottom having finished sample #7								
	heading 120' off ship	sandy bottom, 20-30% Halimeda, Caulerpa, occasional clump of Codium							
	3" diameter yellow sponge, Verongidia?								
				sea biscuit					
	head west then north								
	back on bottom	sandy bottom with Halimeda and Rhodomeda algae		octopus, Halimeda and Rhodomeda algae		octopus			
			unidentified fish swam past						
	dead rotting Ircinia sponge with bicolor damsels inside		dead rotting Ircinia sponge with bicolor damsels inside	dead rotting Ircinia sponge with bicolor damsels inside					
	heading north								
	string of color across the bottom, Caulerpa prolifera			string of color across the bottom, Caulerpa prolifera					
	red belly rosefish		red belly rosefish						
	starting tape #5; 200-300' SE of TMS								
	changing course to 030'								

									1330					
									1333					
									1334					
									1336					
								conical orange 8 Forcepia			26 15.4822'N (26 15 4604'N ship)	83 42.2141'W (83 42.3142'W ship)		
									1337	238				
									1338				11, 12	sample 8
									1341					
									1350					
									1353					
									1353					
									1409					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/11/2003	Gulf of Mexico, SW Florida Shelf, Site 3	1988 Trawl Site 5- 26 15.669'N, 83 42.7232'W	11-IX-03-2	4	1	J. Reed,								
					1				1709		26 15.6592'N	83 42.7528'W		
									1718		26 15.6535'N	83 42.8024'W		
									1726	236	26 15.6623'N	83 42.7312'W		
									1733		26 15.5732'N	83 42.8202'W		
									1736		26 15.6618'N	83 42.7564'W		

	starting transect NE; 360' of tether								
	10" spotted eel		10" spotted eel						
	orange sponge (Callyspongia, Aplysina?) in cluster of Halimeda					cluster of 3 sponges; Callyspongia, Aplysina?			
				Rhodomeda algae					
	3" conical shaped sponge, orange Forcepia; 300 feet 44 degrees from ship (coordinates in ( ) are the ship's coordinates)								
	collection of sample #8 using clamshell grab								
	sample #8 in bucket #6								
	bucket #6 lid closed								
	video off- dive ending								
	ROV/TMS on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Seamap shows ridge or plateau 2600' wide e-w at 75m, steep escarpment to west side, deepest 85 m.							Tracking not working	
	Launch; tracking not working								
	clear of TMS								
	bottom in sight; 60+ visibility; slight current; heading to target site 5	featureless, slight bioturbation		numerous shrimp; Halimeda					
				octopus					
		flat, no slope							



									1737				1,2	eel
									1744		6128	8936		
									1745					
								1 Mycalidae	1747	239	6028	8678	3,4	sample 1
									1752					
									1756					
									1800					
									1802	239	6799	8768		
									1803		6574	8831		
									1805		6724	8998		
									1808	240	6919	8340		
								pumpkin sponge Choristida?, 2 Stelletida?	1809	240	6713	9083	5,6	sample 2
									1812					
									1816					
									1822					
									1823	240	26 15. 6451'N	83 42. 7945'W		
									1824	240	26 15. 6451'N	83 42. 7945'W		
									1826	240	26 15. 6451'N	83 42. 8293'W		

				spotted moray; crab Gymnothorax		moray			
				sea urchin Eucidaris					
		mostly sandy	4-6" flounder						
	4" orange lobate sponge encrusted w/ Zoanthids; Mycalidae								
	sample 1 colleted with clam shell grab; 86' out from TMS								
	sample 1 in bucket #3; bucket at 175'								
	finished sample 1								
	starting transect to west								
	4" lobate sponge Axinellida?								
	spherical sponge Geodia? And another lobate sponge								
	4" yellow eroded dead bath sponge w/ small crab on top								
	6" spherical sponge w/ shrimp Periclimedes and covered w/ sediment	flat sand							
	sample 2 collected w/ grab								
	sample 2 in bucket #4								
	On bottom heading 270	Flat, sandy							
	3-4" shaggy, irregular orange sponge, encrusting w/Halimeda & shrimp	Flat, sandy							
	Lg sponge 6-7"diam, cake-like w/numerous raised oscules, Verongida?								
	6" spherical Or sponge w/sediment covering, Verongida?								

9/11/2003	3	1988 Trawl Site 5- 26 15.669'N, 83 42.7232'W; Site selected from Seabeam map made 9/11/03	11-IX-03-2	4	2				1831					
									1833		26 15. 6242'N	83 42.8957'W		
									1837	240			7,8	
								3 Forcepia	1840	240	26 15. 6194'N	83 42.8951'W	9,10	
									1843					
									1844					
									1847					
									1850					
									1852					
									1858		26 15.6508'N	83 42.8791'W		
									1901	240				
									1903	240				
									1907	240	26 15.6611'N	83 42.9264'W	11,12	
									1909	240	26 15.6661'N	83 42.9212'W		
							4, 6	4=Axinellida , 6=Choristid a	1914	244	26 15.6650'N	83 42.9731'W	(13,14 = sample 6), 15,16 = sample 4	
									1922					
									1926					
									1932	242				
									1933	242	26 15.6638'N	83 42.9538'W		

	End of tape #1, start #2								
	Close-up of 3" spherical Or sponges w/sediment								
	Bat-fish		Bat-fish						
	2" spherical sponge, Or #3 collected w/clam shell scoop	Flat sandy bottom, Halimeda-less than 3%		Less than 3% Halimeda		Y	Y		
	Heading back to TMS w/sample								
	Sample#3 lost overbucket								
	Sample #3 recovered								
	Sample#3 in bucket #5								
	At bottom								
	Spotted moray eel		Spottead moray						
				Helmet shell w/octopus in it					
	Petrosid sponge, white w/apical oscules, hydroids	Flat, sandy							
		Sponge & algae cover more abundant							
	Erect, branching, Ye w/sediment, 13/14 photo pictures of sponge beside #4, 15/16 actual photos of #4	Pitted sandy				Y	Y		
	Sample #4 collected w/clam shell scoop								
	Sample #4 in bucket #1								
	Back on bottom								
	More of sample #4					Y	N		

									1939					
					3				1945					
									1952					
									1956					
									1958	255	26 15.6615'N	83 42.2100'W		
									2002	254	26 15.6615'N	83 42.2313'W		
									2009					
									2018	250	26 15.7061'N	83 42.0744'W		
									2027		26 15.7208'N	83 42.0253'W		
									2029					
									2032					
								10-12" planar orange/ brown polyps exposed (gorgonian) 5 Swiftia?						
									2036	244	26 15.7546'	83 42.9002'W	none	
									2040	244				
									2043					

	2nd half of sample #4 collected by suction		Bent fish		Left big hole				
	change video tape								
	western edge of plateau	fine to medium sand; out of Halimeda zone; few flounder and sponges	2 lizard fish						
				squid					
	halfway down western slope of ridge	mostly sediment; virtually no life.							
	base of slope	sediment							
	changing directions heading 070;	reach rocky wall heading up slope to rock wall at green part of map.							
	heading 070 up western slope	Halimeda, sponges	jackknife fish, sea robin			sea robin			
		8" Ircinia sp. Hard rock bottom, Ellisidae(gorgonian), Antipathes, Cirrapathes (black coral), sea whip,	big eye, 2 butterfly fish, Chea todon ioata						
	appears on sea map at top edge of slope, western edge; sample 5 collectede with clam shell grab.		big eye,						
	change heading to western edge of hole			Antipathes, 2 Octopi in hole.					
			8" Red grouper, big eye						

									2044	244				
									2045		26 15.7664	83 42.9490		
									2047					
									2100					
									2112					
									2115					
									2118					
									2123					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/12/2003	Gulf of Mexico, SW Florida Shelf, Newton and Mullin's Lithoherms, Site 1	Newton and Mullin's Lithoherm Site	12-IX-03-1	5	1	J. Reed, S. Pomponi			550	1825	26 19.9346'N	84 45.8686'W		
											26 19.9346'N	84 45.8686'W	1	Coral, <i>Lophelia</i>
									711		26 19.9346'N	84 45.8686'W	2	Coral, <i>Lophelia</i>
									714		26 19.9346'N	84 45.8686'W	3,4	Hexactinellid plate
									716		26 19.9346'N	84 45.8686'W	5,6	Anthomastus
									717		26 19.9346'N	84 45.8686'W	7	Habitat
									718		26 19.9346'N	84 45.8686'W	8	Habitat

	1' diam yellow amprphous sponge possibly dead Verongida?								
	dead Ircinia campana								
	off bottom end of sampling								
	sample 5 in bucket #11					sample 5 being placed into TMS bucket w/ overlay turned off			
	kink in cable, working on it								
	lid closed in sample bucket								
	moored toTMS								
	ROV on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Calibration test for tracking roV, drop hydrophone w/ roV; 3 kn sfc. Current, unsure if can dive. Decided to try video log and a few suction samples.								
	Lophelia coral								
	Lophelia coral								
	Hexactinellid plate								
	Anthomastus								
	Overall shot of habitat								
	Habitat of boulder								



									718		26 19.9346°N	84 45.8686°W	9,10	2 sp- Lophelia, Stylaster
									720		26 19.9346°N	84 45.8686°W	11,12	Stylaster
									721		26 19.9346°N	84 45.8686°W	13	8" Hexactinelli d plate
									722		26 19.9346°N	84 45.8686°W	14	8" Hexactinelli d plate
									722		26 19.9346°N	84 45.8686°W	15,16	Habitat & crab
									724		26 19.9346°N	84 45.8686°W	17,18	gorgonian
									725		26 19.9346°N	84 45.8686°W	19,20	gorgonian close-up
									726		26 19.9346°N	84 45.8686°W	21,22	Hexactinelli d vase, anemone
									727		26 19.9346°N	84 45.8686°W	23	hexactinellid
					2- time of change not recorded				728		26 19.9346°N	84 45.8686°W	24	Top of habitat
									729		26 19.9346°N	84 45.8686°W	25,26	shrimp
									730		26 19.9346°N	84 45.8686°W		
									731		26 19.9346°N	84 45.8686°W		
								1 Gorgonacea	737		26 19.9346°N	84 45.8686°W	(17,18,19,20)	sample 1
								Lophelia & 2 Stylaster	755		26 19.9346°N	84 45.8686°W	9,10?	sample 2

	2 species of Lophelia, Stylaster								
	Stylaster photo								
	Photo of 8" Hexactinellid plate								
	Photo of 8" Hexactinellid plate								
	Habitat and crabs								
	12-15" yellow planar gorgonian								
	close-up shot of gorgonian in photos 17,18								
	small vase Hexactinellid with an anemone								
	small Hexactinellid- same as in photos 21,22								
	Top of habitat								
	2 red & white striped shrimp								
		Surface of rock is 100% encrusted with serpulids, polychaetes, etc							
	Base of boulder is 1830'; sub is facing SE								
	video at 725, collected using arm to grab and suction; erect branching, planar fan	Boulder on sand bottom							
	erect branching,hard & brittle, collected via suction	on sand bottom of 20' Lithoherm							



	3" diameter red-orange octocoral; spherical with arms' polyps at end of arms	20' high lithoherm							
	white, brittle Lophelia coral; erect branching								
	heading 160'; On sonar 200 feet out they see more lithoherms								
	90' heading; Escarpment, 200 ft out and 300' relative to them; a large lithoherm 120 feet out and 45' relative to the heading								
	recording of sonar showing the escarpment					Y, sonar of escarpment			
	ROV/TMS on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	ROV LAUNCHED; Target 1- top edge of escarpment								
	ROV ON BOTTOM; approx 100m north of top of escarpment heading transect heading to 180 degrees								

									1134	1350	26 20.3938°N	084 44.8626°W		
									1139	1358	26 20.3915°N	084 44.8733°W		
									1139-1202	1373			1 Antipathes	
									1202	1373	26 20.3930°N	84 44.8710°W	(2-4 no photos)	Antipathes
									1208		26 20.3963°N	84 44.8830°W		
									1216	1361	26 20.3953°N	84 44.8756°W		
									1220		26 20.3933°N	84 44.8798°W		
								1 Anthomastis	1223	1379	26 20.3974°N	84 44.8736°W	5,6,7	sample 1
									1228					
						2			1232				8	
								yellow solitary soft coral	1234				9,10	habitat
									1241	1374	26 20.3984°N	84 44.8747°W		
									1255	1359				

		bamboo coral, flat sandy bottom 10-30% rock cobble . 6-12" cobble		6" white fan sponges common; Isidae 12-15"; bamboo coral common					
	top edge of escarpment and rock wall heading down of face of escarpment	90 degree rock wall boulders, crevices, very rugged topography	Gadidae? , numerous benthic fish, chin barbels						
	sandy terrace			2' Antipathes		y	y		
				2' Antipathes					
	field of bamboo coral								
	returned to basket		yes						
	moving west along escarpment; fan sponges, crinoids								
	red soft coral, same as what was collected on dive 1, collected by suction	very rugged vertical wall w/ 2-3' outcrops and crevices	orange fish w/ large yellow strip on side and long extensions on his tail fin	crab					
	end of tape 1								
				crinoids, solitary cup corals, fan Hexacnelliida sponges, Galatheid crabs, 6" Gorgonacea; Lophelia; 12" cluster of Lophelia		yes	yes		
	wide array of corals being collected by suction								
	sucked up fish		fish						
	transecting 350; flat silty sand bottom, rock cobble, 6" Gorgonians, 15" Isididae Bamboo corals								

									1259	1353	26 20.4094°N	84 44.8712°W		
									1301					
									1302	1570				
								3 Heterotella?	1305	1374	26 20.3969°N	84 44.8683°W		
									1308				11,12	sample 3
									1339					
9/12/2003	Gulf of Mexico, SW Florida Shelf, Mullin's Lithoherms, Site 2, base of escarpment and lithoherms	Mullin's Lithoherm Site	12-IX-03-2		3				1344					
									1349					
								4 Phakellia	1356	1375	26 20. 3714°N	84 44. 8884°W	13,14,15,16	
									1359	1375	26 20. 3714°N	84 44. 8884°W	17	Habitat shot
									1402					
									1407					
									1411					

			4-5" school of fish						
	transect heading 150 on top of the plateau; sand waves perpendicular to line of travel								
			8" silver fish w/ black tail, 2" blue and yellow fish	6" Galatheid grab, thick encrusting sponges, 12" Antipathes					
	back at edge of ledge pair of tubular 12" glass sponge Heterotella?, fragile, but not brittle								
	collected w/ clam shell grab								
	End of tape 2, start tape #3								
						Yes, of samples being placed in basket			
	Heading back to ridge								
	Just over escarpment, boulder w/2 6" diam stalked fans, Phakellia?			Comatulid crinoid		Y-good show of clamshell grab	Y		
							Habitat shot		
	Sample #4 collected w/clamshell			Escaping crinoid					
	Sample put in left bucket of cage								
	Lid closed on cage								



									1414	1357				
									1417	1400	26 20. 3653'N	84 44. 8772'W		
									1421	1468	26 20. 3632'N	84 44. 8673'W		
									1427	1450	26 20.3556'N	84 44.8721'W		
									1431	1439	26 20. 3671'N	84 44. 8668'W		
									1433					
									1435					
									1438	1405	26 20. 3693'N	84 44. 8739'w	18,19	Crab-10cm (18,19)
									1442	1403	26 20. 3700'N	84 44. 874'W	20,21	
					4		5		1445	1400	26 20. 3693'N	84 44. 8743'W	22,23	
									1448					
									1455					
									1505					
									1523		26 20.3642'N	84 44.8701'W		
									1539	1485	26 20.3505'N	84 44.8919'W		

	Starting a transit heading south over the escarpment, w/cage	Series of terraces, drops of about 5-6', boulders and outcroppings w/sediment in between.		Sponges, gorgonians, black coral					
	Heading to base of wall								
	base of wall; Smooth, sandy bottom, no bioturbation, 60'+ vis, no current, dropped off cage								
	Face of walls covered w/small (2-3") encrusing sponges, small gorgonians								
				Anthomastis-2-3", Corallistes					
	Working up the wall								
	Zooming in on yellow, encrusting sponge	Series of ledges, walls in between							
	3" thick encrusting, possibly Hexactinellid			Blue tunicates, cup corals, bryozoans, crab-Gatheidae			Y		
	4"diam porous plate sponge, creamy yellow, right above it are two Nephiadae soft corals								
	6-8" plate sponge, creamy yellow, 1/2" thickness, porous, possibly Corallistes or Hexactinellid								
	End of tape #3, start tape #4, collected sample #5 w/clam shell scoop								
	remnants of sample #5 sucked up								
	trying to untangle the tether; tether wrapped around boulder								
	recovering the basket								
	transecting to L4 heading 200'	flat sand bottom							

									1542	1491				
									1547	1493	26 20.3109°N	84 44.9054°W		
									1551		26 20.2875°N	84 44.9147°W		
									1609					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/12/2003	Gulf of Mexico, SW Florida Shelf, Nedwton and Mullin's Lithoherms, Site #4	Mullin's Lithoherm Site; target Lithoherm from Seabeam map made 9/12/03	12-IX-03-3	7		J. Reed, A. Wright	1							
									1729		26 20.1150°N	84 45.0096°W		
									1738	1391				
									1741	1509	26 20.0133°N	84 45.0030°W		
									1744		26 20.0115°N	84 45.0045°W		
									1750					
									1753	1498	26 20.0139°N	84 45.0031°W		
								gorgonian, Bebryce?; collected using suction	1757	1498	26 20.0139°N	84 45.0031°W	1,2	

	(3) 6" fish in hole- dark top, light bottom		(3) 6" fish in hole- dark top, light bottom	squid					
		lithoherm- irregular, smooth surfaced black rock base depth (1505)		15" plate sponge, Hexactinellid; Chaceson? Decapod				end of dive-leak in tether- hydraulic fluid pressure dropping rapidly	
	end of dive-leak in tether- hydraulic fluid pressure dropping rapidly								
	ROV on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	ROV in water, quick descent due to fast current								
	ROV stopped, separation from TMS								
		silty sand substrate							
	reached pinnacle, dropped off basket at base of pinnacle	pinnacle base with 0-10% dead/alive coral cover, reef terraces, 1 m crevices		3" orange crab					
				brittle star, sea fan					
				tube worm, big crab					
	tan/light brown gorgonian, Bebryce?	edge of reef very fragile							

									1758	1500				
								yellow 2 starfish	1800	1495	26 20.0148'N	84 45.0032'W	3,4	
									1807	1495				
								yellow thick 3 encrusting sponge on large rock	1811	1495	26 20.0247'N	84 45.0010'W	5,6	
							201	large rock w/#3					5,6	
						2		Antipathes bipinnata? (2 4 specimens)	1837	1529	26 20.0096	84 44.9913	7,8	
								Pachastrelli dae- 15" vase, apical oscula, warty sfc, white sponge; looks like 5 cauliflower	1847	1525	26 20.0096	84 44.9913	9,10	
									1901					
									1917					
									1918	1490	26 20.0213'N	84 45.0073'W		

	high coral cover, with crabs and few sponges, many dead coral								
	2" bright yellow flat starfish?					good photage of large crab			
				crinoid		suction sample			
	yellow thick encrusting sponge, plus rock					grab sample			
	base of lithoherm	rock, sediment dusting		Antipathes pinnate 12"; Cirrhipathes? 2' spiral black coral; Heterotella vase sponge; various white sponge species		y	y		
	on rock boulder	3' piles of boulders w/ smooth surfaces; thickets of coral-Lophelia?, brown 2' tall x 3'				grab sample			
	sonar shows this Lithoherm to be over 200' wide and appears to be linear oriented north south; collected sample 5 with the other arm,			2 nice squids		squids			
	sonar shows 8 Lithoherms within a 300' scale								
	recovering basket and putting on TMS then going back to the bottom								

									1921	1406				
									1927		26 20.0196°N	84 45.0040°W		
									1928-1930				11, 12,13,14	
									1932				15	
									1933	1509				
									1934				16,17	
									1936	1502			18,19	
									1937	1500			20,21,22	
							202	3' thick dead Lophelia coral, brown	1940	1500			27	
									1943	1500			24	
									1945	1509				
									1948	1503	26 20.0197°N	84 45.0033°W	25	
									1949	1489			26	

	video of hanging basket on TMS					hanging basket on TMS			
	video photo transect of ridge from bottom to top								
	1' thick of live Lophelia and 2-3' dead Lophelia								
	3' black coral	1-2' boulders and 3-5' boulders, heading NE							
	Hexachinella vase sponge not Heterotella, black coral, plate sponges	45-55 degree slope some places 70, some rock have black veins,							
	2-3' coral thicket, dead Lophelia			crab					
	18=dead Lophelia, 19= two crabs			Galatheids, 2 crabs Chaceon feneri					
	20 and 21 = dead Lophelia; 22 = massive polychaete tube worms	close to the top, numerous thickets of dead Lophelia							
	most of coral on top appears to be dead, collecting clean dead coral								
	general photo of top of ridge, Stylaster			crab					
	going NW SE	50% coral cover on top, 20% live rest dead							
	heading NNE on top of ridge, Stylaster coral, pillowy boulders	some places 50% corals other 5-10%, NE slope has more coral than the NW slope							
	general photo of top of ridge								



							6- lost	4" dia stalked octocoral, polyps extended 2", dk rd, uncommon, Anthomastids	1950	1488	26 20.0268°N	84 45.0007°W	none	
									1955	1476				
									1956	1480				
									1957	1480				cluster of coral on top, Antipathes
					3				1959					
									2000	1476			28	Holothuridia
								2' bushy Antipathes w/ crab on it	2001	1476	26 20.0339°N	84 44.9967°W	29,30	sample 7
									2014	1475	26 20.0343°N	84 44.9984°W		
									2116	1475			31	
									2020	1482			32	
							8- lost	10" dia thick encrusting white sponge on top of rock	2021	1482	26 20.0364°N	84 44.9971°W	none	
									2025	1456				
									2035					
									2038					
									2039					
									2049					

	sample 6 collected w/ suction	top of ridge				nice video of squid			
	sample 6 in suction bucket								
			red bellied rose fish						
	continueing NNE heading at top of ridge, more sponges, thicket of coral								
	changing tapes								
				Holothuridian					
	collecting sample 7 w/ claw and then sucked it up								
	back to heading NNE								
	6" Hexachinellida w/ crinoids on top, Farea?								
	large white sponge, plate sponge and Stylaster								
	sample 8 collected w/ claw								
	coming off bottom								
	sample 8 in bucket #5								
	lid closed								
	looking for Shirley's bucket								
	end mission								

									2109					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/13/2003	Gulf of Mexico, NW Florida shelf, Twin Ridges, Site 1	Twin Ridges, Site 1; Site selected from Seabeam site made 9/17/03	13-IX-03-1	8	1	S. Pomponi, J. Reed, A, Wright								
									1117		28 58.6946	85 21 .6732		
									1125	207	28 58.7014	85 21.6443		
									1126	203				
							1	Bryozoan-bushy and overall spherical, erect branching, anastomosing branches	1130	203	28 58.6935'N	85 21.6324'W		
									1132	203			1,2	sample 1
									1137	203	28 58.6938'N	85 21.6303'W		
									1150	203	28 58.6938'N	85 21.6303'W		
									1155					
									1156					
									1206					
					2				1228					

	ROV on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Launch								
	on bottom								
			blue angelfish, porgies, ocean triggerfish,						
	sample 1	small patch reef/isolated rocks; 3' tall by 10' dia patches of rock on flat sand bottom, about 20% cover		80% cover of orange, red, yellow encrusting sponges, bushy bryozoan, some gorgonians					
	working with the basket getting rake out								
	collection of sample #1								
	crew change								
				yellow and orange (Spirostrella?) encrusting sponges					
			red snapper						
	changing to tape #2								

									1231				3,4,5	8" Oculina varicosa photo- purple var
									1238					
								yellow gorgonian; 2 Plexauridae	1241				6	
									1256		28 58. 6613'N	85 21. 6296'W		
									1302					
							3		1307		28 58. 6706'N	85 21. 6380'N	7,8,9	
									1309				10	
									1319					

			Chaetodon sedentaris, butterfly fish, blue angelfish, yellow-edge grouper? (had black edge on caudal fin)	purple coral, Oculina varicosa					
	start transect SW	50% cover of low relief rock boulders and outcrops		numerous 12" gorgonians					
	collection of sample #2 using suction, claw grab		blue angelfish	12" Yellow Plexauridae, Ircinia Campana, white 8" Plexauridae					
	collection of another piece of sample #2 using claw grab & suction								
	collecting more of sample #2, using claw grab & suction								
	Collecting sample #3. Red-orange thin, encrusting coralline algae? Sponge? Has purplish/pink patch on top. Used clam shell grab. Sample in basket right bucket					Yes, of pair of Angel fish	Y, also of general habitat		
							Y, general habitat		
	Clam shell grab leaking hydraulic fluid, will remove								

									1322					
									1325					
							3		1326	213	28 58. 6695'N	85 21. 6371'W		
9/13/2003	Gulf of Mexico, NW Florida shelf, Twin Ridges, Site 1	Twin Ridges, Site 1	13-IX-03-1				3		1329					
									1330					
									1337	243	28 58. 6599'N	85 21. 6745'W		
									1339					
									1341	214	28 58. 6849'N	85 21. 6945'W		
									1344	216				
								Teichaxinell a? Sample 4 #4	1348	217	28 58. 6708'N	85 21. 6963'W	11,12,13	
									1351					

			Several blue angelfish, Chaetodon sedentarius butterfly fish						
	Will no longer be using clam shell grab due to hydraulic line								
	Collecting more of sample #3, Bryozoa, Sample crumbled in claw grab								
	End of tape #2, begin tape #3. Transect started 270 degrees								
	Second piece of sample #3 put in right bucket of cage								
		Sandy bottom, low relief, scattered 6-12" boulders	Grouper						
	Change heading to NE, following western face of outer ridge			Starfish Narcissia triginaria					
		100% rock cover boulders,		Large 20" Ircinia campana, Cirrhopathes	Several long lines				
				Large 12" diam Topsentia, hollow tubes on surface; yellow rugous sponge; Plexauridae gorgonias					
	Will collect several specimens	Low relief rock, dense gorgonian bed	Blue angelfish			suction sample	Y		
	Collection of sample #4 using suction		Scamp grouper?	Narcissia triginaria? Starfish					



									1358					
									1359					
									1406					
									1426					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/13/2003	Gulf of Mexico, NW Florida shelf, Twin Ridges, Site 1	Twin Ridges, Site 1	13-IX-03-2	9	1	J. Reed, A, Wright			1530		28 58.7005'N	85 21.6492'W		
									1534					
									1540		28 58.7266'N	85 21.6627'W		
									1541	204				
					1				1547	210	28 58.7240'N	85 21.6755'W		
										208				
								branching hydroid, Bryozoans? with encrusting Ascidians	1553	208	28 58.7160'N	85 21.6759'W	1,2	sample 1

	Still collecting pieces of sample #4 with suction								
	Clam shell grab wrapped with fishing line								
	Coming up to fix the clam shell grab; will go back down when it gets fixed								
	ROV on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	launch, hanging in interface							To do: 1) repair spring on collection box lid; 2) add pinger to collection box, 3) add holster for grab so doesn't drag or fall off hook on front of ROV	
	going down								
	bottom in sight; 100' visibility, no current,								
	on bottom, heading 310	low relief, 1-2' rocky reef, 10-15 % cover boulders, sand and some evidence of fishing activity							
	left basket on bottom, Plexaura gorgonian and sponges, sea whips	80% coverage on the top pf the rocky knoll,	school of Amber jack						
	4" orange gorgonian		blue angel fish, another fish						
	a mishmash collected with clam shell grab	series of knolls 10-15' surrounded by sand	grouper, snapper						

									1604	221				
									1610					
									1617	211	28 58.7075'N	85 21.6657'W		
								thick encrusting orange sponge 2	1621	210			3,4	sample 2
								6" thick encrusting bumpy orangey brown, Bryozoan? 3	1628	210			5,6	sample 3
								4" irregular spherical yellow sponge, slightly conulose 4	1632	209			7,8	sample 4
									1643	217	28 58.7381	85 21.7442		
									1648	215	28 58.7977	85 21.7601		

	transecting on a heading of 90 degrees looking for the basket; 6 X 6' plate unnatural		Several scamp grouper 2-3lbs, 3 blue angel fish, porgie; scamp 5lbs,		fishing line				
	found basket	sonar shows 80% hard bottom 200' out east	big eye in hole						
	sample 1 in right bucket								
	orange sponge, collected with clam shell grab, sample 2 in left bucket	on 2' high rock relief	2 amber jack			nice video of collection and placement in bucket			
	collected with clam shell grab in left bucket		angel fish eating, porgie						
	not sure if color on sceen is correct, sample 4 in left bucket								
	transecting on ridge at 310 degrees	50% hard bottom covered with gorgonians and sponges,	amber jacks	Ircinia campana, lots of Teichaxinella, bushy yellow sponge	duct tape on bottom				
	transecting on ridge at 310 degrees	rounded mounds of rock, no b oulders or ledges. Just found a ledge							

									1650	215	28 58.7977	85 21.7601		
								four inch spherical lacey polychaete 5 in basket	1655		28 58.7574	85 21.6959	9,10	sample 5
									1658		28 58.7574	85 21.6959		
									1706					
					2			6 to 8" purple sea 6 fan	1715	210	28 58.7879 'N	85 21.7509'W	11 & 12	
									1717					
									1721					
									1722					
								6	1724	212	7990	7664	13& 14 &15	samples 6 & 7
								7	1724	212	7990	7664	13&14 &15	samples 6 & 7
									1728					
							6 recollect	same yellow frily sponge	1732	210	7879	7455		
									1735					
									1737					

			large school of amberjack			yes			
	collected with bucket								
	end of video tape 1, start tape 2, sample 5 in left bucket								
	huge pile of long line		schools of fish red grouper and blue angels						
		Sandy area on huge rock knoll							
	Sample 6 lost								
	A lot of junk on this reef bottles, long line								
	v-ring rusting away								
	6=yellow sponge yellow frilly and spherical in shape								
	7= orange sponge spherical in shape								
	collect using clam shell grab and placed in right hand bucket in basket								
	collect using clam shell grab								
	sample 6 place in right hand bucket								
	heading 310 degrees	sandy bottom with some rock rubble gorgonian sea fans sponges							

									1755					
									1800					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/13/2003	Gulf of Mexico, NW Florida shelf, Twin Ridges, Site 1	Twin Ridges, Site 1	13-IX-03-3	10	1				1845		28 58.7367°N	85 21.6795°W		
									1853		28 58.7235°N	85 21.7086°W		
									1929					
							1	6" conical white sponge	1935	209	28 58.7568°N	85 21.6912°W	1,2	sample 1
									1945		28 58.7787°N	85 21.7501°W		
					2				1948					
									1957	209	7689	7160		
									2000					
									2003					
									2008		7887	7119		
							2	6 inch yellow sponge	2018	200	8064	7413	3 4 &5	
									2022					

	blew o-ring on ROV hydraulic pack, rapid loss of pressure, abort dive							blew o-ring on ROV hydraulic pack, rapid loss of pressure, abort dive	
	ROV on surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	launch ;depth guage on overlay not working								
	bottom in sight, looking for basket with buckets and samples, depth gauge is not working, coordinants jump around a lot		amber jack						
	still looking, Alan saw a big (great white?) shark, Ha! Ha!								
	collecting with the clam shell grab	rocky knoll	snapper						
	found basket, YEAH!; sample 1 in right bucket								
	end of tape 1, picking up basket and moving to another part of the reef								
	black corals fairly common		butterfly fish						
		mostly sand a few boulders,							
	plethora of gorgonians and Ircinia campana, polycheate worm tubes	solid reef, plethora of gorgonians							
	placing down basket								
	yellow concentric parallell plates form tubes then oscules								
	Amy leaving van Shirley arrives in van								



									2023					
							3	grayish gorgonian	2025	207	7941	7337	6, 7. &8	
									2029					
									2036		same	same		
							4	3" lobate orange sponge	2039	208	28 58. 8127'N	85 21. 7505'W	9,10	sample #4
									2045					
					3				2048					
							5	6" sparesly branched gorgonacea, 4 specimens	2049	207	28 58.7717'N	85 21.6991'W	11, 12	
							301	water sample	2118	208	28 58.7678'N	85 21.7124'W		
							6	red thickly encrusting sponge, Psuedoaxin ella lunacharta	2118	208			13,14	
									2130					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes

	sample fell in cage not into bucket								
		diverse rich							
	collected another piece of sample no 2								
	collected another piece of sample no 2								
			Chaetodon sedentarius butterfly fish						
	Also collecting another specimen of sample #3 using clam scoop			many polychaete tube worms	Fishing line	y	y		
	sample placed in right bucket		pair of spotfin butterfly fish						
	depth overlay now working								
	collected using claw, 1 and 2 in right bucket, 3 and 4 sucked	sediment covered rock, with many gorgonians and few sponges				no video			
	samples 6 and 301 collected same time, same place.					no video			
	sample in bucket 10					no video			
	leaves bottom								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	

9/14/2003	Gulf of Mexico, NW Florida shelf, Madison Swanson Calibration Dive	Madison Swanson Calibration Dive	NO BMR dive								29 07.9776	085 46.140		
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes
9/14/2003	Gulf of Mexico, NW Florida shelf, Madison Swanson, target site MS3	Madison Swanson, target site MS3- linear ridge 1.3 miles long, minimum depth 230 ft, width 300-400 ft, depth at base 275 ft; target selected from Seabeam map made 9/14/03	14-IX-03-1	11	1	S. Pomponi, J. Reed			1009		29 11.2004'N	85 40.7685'W		
									1016	234	2407	7605		
							1	large frilly plate brown lithistid	1020	236	2102	7818	1,2	

	Test dive to calibrate ROV tracking system, no collection; TMS system problem - can not reel in TMS							prior to dive, TMS system problem - can not reel in TMS, 2 ) dive delayed 2 hours	
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	ROV launching; new 3 chip video camera, excellent quality; overlay working well with depth, lat/long and date								
	on bottom on MS3, top of ridge	100% rock, rugged pavement, dense cover gorgonacea, sponges, bryozoa; 1 ft ledges	school amberjack, blue anglefish, 6+ scamp grouper (3-5lb)	6-12" Plexauridae gorgonacea, numerous common species, very dense; Cirrhipathes black whip coral; black coral Peripathes?, 12-15" bushy; Antipathes black coral, 12" fine lace fan; numerous red and orange sponges; encrusting pink coralline algae					
	in basket								

									1048					
							reddish gorgonian, Leptogorgia 2hebes	1052	230	2273	7317	3,4		
							white bushy 3gorgonian	1057	230	2273	7137	5,6		
								1109						
					2			1113						
								1121						
								1122					7	
								1126						

	8-10 ft encrusted metal structure, shipwreck?		school amberjack (greater amberjack, Almaco); grouper; spanish wrasse	Diadema; purple and white, 2 sp Leptogorgia?		video of shipwreck ? With amberjack			
	8-10 ft encrusted metal structure, shipwreck? Sample sucked					good video of sample sucking			
	8-10 ft encrusted metal structure, shipwreck? Sample sucked		school of 10-20 scamp, 3-5lb; Chaetodon sedentarius, reef butterfly fish; numerous unidentified reef fish; Creolefish	solitary white cup corals, 1/2"		good video of sample sucking			
	schooling of several dozen scamp? Grouper in watercolumn, possible spawning aggregation?					yes			
				Tubastrea, pink cluster coral		wreck w/grouper school			
	collected second specimen of sample #2					XXX!			
	3-5' ledge								

									1129		29 11.	85 40.		
								6" cluster of 4 cup coral, purple	1131	223	29 11. 2078'N	85 40. 8304'W	8,9,10	Sample #4
									1134				11	Habitat
									1137					
									1147	223	29 11. 2078'N	85 40. 8304'W		
									1152	223				
									1159				12,13	
									1201					
								thin encrusting yellow sponge 5 Verongida?	1203	241	29 11. 2008'N	85 40. 7743'W	14,15	Sample 5
									1215					
									1223					
									1244					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo #	Photo Notes

				banded starfish-Narcissia triginaria?					
	Common on top of rock dome,	Smooth rock dome, 4'6 relief, appears to be hollow underneath	Antheidae fish Holanthiu?, Spanish hogfish-Bodianus rufus					Pin fell off grab arm, grab broken	
			Nice, large, fat scamp grouper						
	another sample of Sample 4 into bucket								
	transecting to next rock NE heading		many amber jack						
	large thin encrusting yellow sponge Poecilosclerida?								
	beautiful yellow sponge Verongida?, taking fix		scamp						
	collected by , NOT but lots of good video, We'll be back!		blue angel fish						
	end of collections								
	off bottom								
	surface								
	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	



9/14/2003	Gulf of Mexico, NW Florida shelf, Madison Swanson, target site MS3	Madison Swanson, target site MS3- linear ridge 1.3 miles long, minimum depth 230 ft, width 300-400 ft, depth at base 275 ft; target selected from Seabeam map made 9/14/03	14-IX-03-2	12	1	J. Reed, A. Wright, S. Pomponi								
									1328		29 11.202'N	085 40.7729'W		
									1331					
									1339	218	29 11.1908'N	085 40.7623'W		
									1347	222	29 11.2018'N	085 40.7701'W		
									1402					
									1410	227	29 11.2238'N	085 40.8366'W		
									1415					
								large brown gorgonian, fan	1422	235	29 11.2110'N	085 40.7722'W	1,2	
									1433	235				
									1441	235	29 11.1979'N	085 40.7970'W		
									1447	235				
								Callyspongi ae? Insuction box	1448	235	29 11.1811	085 40.9015	3,4	
									1455		29 11.1964	085 40.8271	5,6	

								prior to dive, TMS system problem - can not reel in TMS, 2 ) dive delayed 2 hours	
	ROV in water								
	school of amber jack								
	ROV on bottom								
	dropping basket								
	fire alarm/ all staff muster/ return to TMS								
	back on bottom								
	recovered basket								
	heading east								
	large 1-2 foot gorgonian fan planar mesh				fishing line				
	Depths are reading 20 feet less than actual on overlay								
	depth may be off; adjusted all depths to 235 per John.	top of outcrop 100% coverage encrusting organisms antipathes dominant species	moray eel						
			big eye; scamp						
	thin walled tubes coalescent at face cream colored; 3"	top of ridge							
	thin to thick encrusting some apical oscules about 14" diameter	back to bucket	anthiidae, holantithi os						

								cream tannish 4 color	1510	237	29 11.2163	085 40.7825	7,8	
									1518					
									1524					
									1526	235	29 11.2009'N	085 40.7726'W		
					1 ended start tape 2				1527					
									1528					
									1531					big reef 11 photo
								cream colored 5 Corallistes	1539		29 11.2442'N	085 40.8156'W	12,13 (close up) 14 (wide angle)	
									1556					

	heading southeast from the basket	100% coverage black coral, sponges,							
	amorphis multiple tubes shaggy channeled surface, (sample put in left bucket)	100% coverage black coral, sponges, (leaving basket going southeast from basket)							
			spanish hog fish, holanthius, amper jacks	antipathes, sea whips, gorgonians are dominant species					
			sand tattler, blue angel, holanthius			transecting southeast			
	thin encrusting, inflated membrane pores on surface, 2' across not collected					thin encrusting sponge	great video		
	came into rock, cobble, shell hash, bottom 235' ending tape #1								
	close up of thin encrusting yellow sponge, not collected; close up of orange sponge also					good close up see notes			
			squirrelfish		plastic bag or other debris				
	very large, fluted plate 1cm thick wall; sediment on surface, Corallistes								
	pick up basket and transect ridge to southeast								

									1600					
								cream colored amorphous	1603	243	29 11.2125'N	085 40.7783'W	15,16	
									1610					
							6	Madrepora	1614	240	29 11.1962'N	085 40.7731'W	17,18, 19 (habitat photo)	
									1626	260	29 11. 1856'N	085 40.7559'W		
									1632					
									1635	130				
					end of tape 2				1643					
					tape 3				1643					
									1655					
									1705	265	29 11.1999'N	085 40.7478'W		

		bushy black coral, fanshaped black coral; 2' tall gorgonians	Chaetodo n sedentari us, Anthiidae						
	not collected; thin encrusting on rock	scattered rocks on cobbled sand bottom							
			Chaetodo n aya	Holatherian					
	12" diameter finely branching coral	vertical face;							
	half dozen colonies; in sand shell hash	sandy terrace; cobble bottom		Madracora oculata					
	heading back to TMS to return basket and then will be heading down other side								
	school of amber jacks by TMS					good video of amber jacks and TMS			
	starting tape three								
	Madrepora in bucket # 1					good video of amber jacks and tms			
	100+ft off eastern edge, heading back on 290 transect	flat med fine sand, small rock, black whip and white coral, human impact	scamp grouper, Anthiidae , Chaetado n aya, Ceransph ebe, Madracor a oculata		fishing line, metal debris ship wreck?				

									1716	250	29 11.1968'N	085 40.7601'W		
									1723	248	29 11.2036'N	085 40.7588'W		
									1725	248				20 moray eel
									1735	217				
								yellow planar, 7 gorgonian	1739	220	29 11.1815'N	085 40.7867'W	21,22	sample 7
									1751					
									1756					
									1805					
									1819					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes

	hit reef again	rock reef	a lot of grouper around	triton per Alan	rope on reef, more rope				
	more of the Lithistid sponge on video, orange encrusting sponge	rock reef, many overhangs							
	black coral Antipathes		spotted moray, big school of grouper, angel fish, red snapper, squirrel fish,	urchin	fishing line	spotted moray			
		top of rock platform							
	sample collected by clam shell grab,	top of ridge							
	sample 7 almost in bucket #5, Oops! Take 3								
	sample 7 back in bucket #5, Yeah!								
	coming up to drop off samples and then go down again								
	ROV on surface								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	



9/15/2003	Gulf of Mexico, Viosca Knoll Block 826, Lithoherm Site, Reed #118	Schroeder Site 1- 29 09.48'N, 88 01.02'W, 1440-1705'; Reed #118- 29 09.25, 88 01.22'; #48 an #9 nearby; multibeam map indicates reef is 12000 feet wide east west, 10000 feet north south, and peak at 29 09. 6348, 88 01.0214	15-IX-03-1	13	1	A. Wright,J. Reed, S. Pomponi								
									951		29 09.4933'N	088 01.0523'W		
									1001	1334	29 09.4915'N	088 00.9556'W		
									1003	1516	29 09.4941'N	088 01.0612'W		
									1013	1520	29 09.4978'N	088 01.0455'W	1,2	
									1016	1521	29 09.4797'N	088 01.0471'W		
							darker orange 1	Octocoral	1034	1527	29 09.4799'N	088 01.0464'W	3(both) 4,5	
							lighter yellow 2	Octocoral	1041	1527	29 09.4799'N	088 01.0346'W	6,7	
									1039					
									1044					
									1048	1524	29 09.4771'N	088 01.0726'W		

								Dive planned for 0600, but new digital still camera still not installed as of 0500 after 12 hr of work. Sonsub told JR that they might get it fixed by 0800; JR postponed the dive to get the high resolution still camera fixed. JR asked the bridge to plot or make a WP, 3 targets around the main target site. Was told they were not allowed to use the equipment to take a fix or WP- only Jennifer the navigator allowed to use that. JR asked to make a fathometer run over the reef. Was told they can't do that. Would need to wake up Jonathon to run the fathometer. digital camera finally ready at 0945.	
	launch							1 ) need to add hipack transducer to TMS for better tracking; 2) software for digital camera and manual needs to be studied prior to operation.	
	ROV released from cage								
	ROV on bottom	slope; sand coral rubble slope		patches of 1' live Lophelia; patches of orange octocoral; white flake sponges;					
	overall habitat photo								
	heading north; north-west								
	feathery branching octicorals; collected by clam shell grab	growing on coral rubble		fine tubed Hexaxinella in background					
	feathery branching octicorals;collected by clam shell grab (samples were side by side)	growing on coral rubble		fine branching non planar; Cniderian					
	sample #1 placed in basket on right side								
	sample #2 placed in basket on right side								
	30 degree heading to top hill (from sonar)								

								2' bushy Antipatharia 3n?	1104	1545	29 09.4845'N	088 01.0464'W	8,9	
					end tape 1				1112					
									1115	1549				
									1118					
					tape 2 start now				1120	1546	29 09.4887'N	088 01.0198'W		Lophelia thicket
									1132	1545				
									1135	1535	29 09.5000'N	088 01.0835'W		
									1140					
									1143	1523	29 09.5247'N	088 01.0680'W	10, 11	Antipatharia , tube worms, habitat, and close up
								12" diam plate sponge, Hexactinelli 4d?	1148	1522	29 09.5211'N	088 01.0578'W	12,13	sample #4, Lophelia, crinoid, close-up of S4
									1206					
									1208					
					3				1218					
									1219		29 09. 5286'N	088 01.0706'W		

	bushy, non planar, very fine branches; collected by clam shell grab	shell, coral rubble; rocky ledger; fine sediment; layer of 4" dead bivalve shells		sample #3 common		interesting crab			
	sample #3 placed in bucket on left side								
			strange fish in video						
	heading north northeast	fine silty sand, 1-2' rocky outcrops	fish in burrow; Tunnel fish?						
6,7,8		dense layer of 3-4" dead bivalve shells, clusters of live and dead Lophelia;				good video of habitat and Lophelia			
	transect NNW toward peak, silty sand bottom		tilefish? In hole						
	large coral thicket on silt sand slope 10-20 dg?, sediment w/ coral debris	Lophelia							
				Asteroidea					
9, 10	2-3' rock boulders, Lophelia	Lophelia, 3' Antipatharia w/ galatheids, dead bivalve shells, 1' tube worms sparse				xx	xx		
11,12		2-3' rock boulders, 2-3" diam thickets of Lophelia;		Lophelia; Comatulid crinoid; sponge; Galatheididae; Venus flytrap anemone					
	Collecting sample #4 with clam shell scoop, located on rock top					XX Of collection			
	Put in left bucket								
	heading N								

									1221					
									1226		29 09.5365'N	088 01.0494'W		
									1231		29 09.5499'N	088 01 .0465'W		
									1233		29 09.5667'N	088 01.0814'W	14	Habit-both sets of photos
									1240				15,16	Photos of yellow, thin encrusting sponge
									1243				17,18	Of Lophelia
									1247					
									1248	1459	29 09.5855'N	088 01.0532'W		
								Orange and white 5 sponge	1256		29 09.5877'N	088 01.0585'W	19,20	S5
									1259					
									1303	1447			21,22,23-cu	Of Vestimi tiferi tube worms; shrimp
									1309					Of basket & Lophelia
					4				1315	1455				
									1320					

		Large boulder w/Lophelia; sponges; red-orange crab; much coral debris at base of boulder							
		Large white crab w/black striped legs; more Venus flytraps; sea urchin; long-- spined white urchin							
				Thin encrusting blue sponge; more Lohelia					
13				Crabs; yellow encrusting sponge; crinoid					
14,15		Broken, irregular reef; 1-2" height							
16,17,18,19				Lophelia-3-6' thickets; crabs; urchins					
	Numerous red 2-3" crabs w/long arms, white pincers, raised for catching food	Rocky reef separated by 30' wide medium sand substrate (relatively barren)							
20	Come up to 45 degree rock slope on a rock outcrop w/50% cover of Lophelia-all alive		Vestimi tiferi worm						
21,22		Boulders; Lophelia; thin blue encrusting sponge							
	Sample collected with clam shell scoop								
23,24									
25,26	Sample #5 put in left bucket		Very few fish						
	end of tape 3								
	Mapping Viosca Knoll								

								Vestimi tiferi 6 tube worm	1322	1448	29 09.5880'N	088 01.0617'W	24,25,26- closeup of tail of tube worm	Photo of sample #6 w/arm
									1331					
									1337	1448	29 09.5825'N	088 01.0451'W	27	
									1344	1455	29 09.5849'N	088 01.0474'W	28	Close up of tube worm- both sets
									1346		29 09.5849'N	088 01.0474'W		
									1351					
									1354					
									1355		29 09.5886'N	088 01.0578'W		
									1408		29 09.5769'N	088 01.0741'W		

27,28-during collection	Sample collected with claw grab	Plateau, 2-3' boulders, fine sediment; thickets of Lophelia-2'high, 3-6' diam; of scattered individual tube worms in crevices of rocks			Synthetic seepage	XXX of tube worm sticking out			
29	Sample #6 in left bucket						Of manipulator putting sample #6 in bucket		
					Pickle bucket with 2 PVC pipes embedded in concrete				
30	Virtually on top of the mound, slightly south, approximately .04 Mi S of the multi-beam map, appears to be on a flat plateau, so may be on peak at this point			Vestimi tiferi worms					
	Collecting more of sample# 6								
	2nd piece of S6 in left bucket			Red & white crab; Asteroid starfish					
31				Pencil sea urchin					
32	Collecting more of S6 w/claw grab, broke the tube								
				Lots of blue, thin encrusting sponges					



									1423					
									1433		29 09.5846'N	088 01.0473'W		
									1437		29 09.5877'N	088 01.0599'W		red Gallethied crab
									1440		29 09.5882'N	088 01.0600'W		
									1442					
									1443					Lophelia
									1445				29	habitat
									1447				30	urchin
									1452				31	tubeworms
									1453		29 09.5831'N	088 01.0730'W		red Galletheid crab
									1457				32	
					5				1459					
									1500	1455			33,34	habitat of tube worms

								basket lost a couple of times, nearly 5 hours of total time to search. Due to poor tracking and navigation. Did not move more than 30' from basket when collecting, but pilots got disoriented during pilot switch out, stirred up sediment and came off bottom losing orientation. Must have pinger on basket and good tracking	
	trying to find the basket								
	Found basket, more of sample 6 in basket								
33				red Gallethied crab					
	collecting more of sample 6; untangled tether, back on track to collect sample 6	50% Lophelia cover							
	circumnavigating the thicket of Lophelia, pile of bivalve shells			pile of bivalve shells, urchin					
				urchin					
				shrimp					
	sample 6 in left bucket								
				red Galletheid crab					
	picking up basket to move to another site								
	end of tape 4								
	starting transect due north, Lophelia thicket 2-3'; not a lot of diversity of sponges	coarse sediment gravely bottom, depressions and burrows with bivalve shells, very little benthos, up very gentle slope 10 degrees, 1/100 of a nautical mile S of pt picked out of multibeam earlier	Brotudlie fish	Caliptogena chemosynthetic clam, urchin, Stylocidaris pencil urchin, Venus fly trap anemone, bunch of tube worms					

									1506	1451				
									1509	1454			35	
								6" dia plate sponge 7 Corallistes?	1510	1450	29 09.6479'N	088 01.0461'W	37,38	sample 7
									1519					
									1533					
									1550	1450	29 09.6511'N	088 01.0728'W	39,40	Vegeatowa film
									1551	1465			41	
									1554					
									1559					
									1601					
									1609	1554				
									1627	1448	29 09.6480'N	88 01.0462'W		
						6			1629	1446				

			black bellied rosefish						
			3' black eel, continuous dorsal and anal fin, barble on chin			X			
	associated with Galatheid crab and eel	1' rocky ledges							
	sample 7 in left bucket, piece of sample 7 went into the basket								
	readjusting tether so had to come up off bottom then will go look for basket								
	checking out orange stuff in the groove, looks like chemosythetic bacteria	3-4" groove	fish in video	star fish					
	6" gray file like fish with black stripe	near peak of lithoherm	shape of a file fish	sea anomone					
			black eel (maybe the same one)						
			fish under rock						
			white tip shark						
	still looking for basket should be around here soon		white tip shark						
	clump weighrs used for surveying								
	Video tape 5 ends; 6 begins								

									1634		29 09.6480'N	88 01.0894'W		
									1716					
									1806					
									1820					
									1835					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes
9/15/2003	Gulf of Mexico, Viosca Knoll Block 826, Lithoherm Site, Reed #118	Schroeder Site 1- 29 09.48'N, 88 01.02'W, 1440-1705'; Reed #118- 29 09.25, 88 01.22'; #48 an #9 nearby; multibeam map indicates reef is 12000 feet wide east west, 10000 feet north south, and peak at 29 09. 6348, 88 01.0214	15-IX-03-2	14	1	J. Reed, A. Wright, S. Pomponi								
									1953					
									2008	1448	29 09.6410'N	088 01.0447'W		
									2011		29 09.6322'N	088 01.0614'W		
									2013					
									2014					
									2015	1456	29 09.6376'N	088 01.0415'W	1,2	15" Antipathes bushy black coral



								15"						
								1 Antipathes	2017	1456	29 09.6399'N	088. 01.0473'W		arm with sample
									2022		29 09.6289'N	088 01.0688'W		
									2030					
									2031	1470				
								white amorphous 2 sponge	2032	1470	29 09.6430'N	088 01.0436'W	3,4	Sample 2- white amorphous sponge with white footed Galletheid crab
									2036	1471	6424	586		White footed Gallethied crab
									2048					
									2054					
									2057					
									2059					
									2100					
									2103	1474				
									2104					
									2105					
									2106					
									2109					
									2110					
					2				2110					
									2111	1471				

2 [qual set to normal- setting is manual 10', shutter 1/60, F 2.6] (exposure set to S)	collected using arm to grab								
	placed in right bucket								
			fish	venus flytrap anenome					
			Cusk eel?	calyptogena, bivalve; starfish, Asteriodea					
3		4' rock boulder with dead Lophelia coral thicket surrounding		white footed Galletheid crabs					
4	put bucket down to collect sample 2								
	sample 2 with sediment in left bucket								
	slight leak in hydraulics of clam shell								
	leak in clam shell								
	need laser pointer for ROV van								
	second piece of sample 2 in bottom of basket								
	heading NE			pencil urchin; numerous tube worms					
			fish						
		irregular rocky bottom	fish						
	methane gas bubbles coming out of sediment			starfish					
			fish						
		2-3' high jumbled irregular boulders		venus flytrap anenome; black coral 2' high, clams					
	End tape 1- start tape 2								
			crab		XX				



									2112		6524	381		
									2113					
									2114					
									2116					
									2117	1482				
									2121	1471	6542	653		
									2130	1460				
								3 clams	2131	1460	6440	606	video of clam sucking	clams and suction hose
									2137	1460				
									2140	1462				
									2141	1462	6023	974		
									2144	1482	5920	1011		
									2148	1500	5630	1182		snapping as cruiseing through
									2154	1543	5400	1458	6	thicket
									2157	1585				Venus fly trap
									2158	1629	5102	1972		



									2200	1650				
							4	Primnoid	2201	1675	4725	2088	7,8	sample 4
					3				2215	1676	4796	2272		
									2221	1677	4935	1894		
									2225	1679				
									2228	1679				
									2235					
									2237					
									2301					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes
9/16/2003	Gulf of Mexico, ~25 nm se of Mississippi Delta, Viosca Knoll Block 989, British Petroleum A (Pompano) oil rig	BP Pompano Oil Rig, depth 1290', 28 58.3818'N, 88 37.5588'W; installed 1994	16-IX-03-1	15	1	S. Pomponi, J. Reed, A. Wright			850		28 58.3820'N	88 37.5590'W		
									912	1280				
					1				913	1285				

	heading still SW	at this depth out of clam and tube worm habitat, mostly barren							
8,9	sea fans new species, 2 Primnoids	low relief rock, tube worms are common	eel per Alan, NOT, OOPS tile fish	starfish on sea fan		X			
	end of tape 2 starting tape 3								
	sample 4 collected with the claw, in bucket on the right			starfish					
			black bellied rose fish		aluminium can				
			2' skate						
	basket lost							lost baskey again, poor tracking	
	found basket, calling the dive								
	on surface								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	ROV launch; Lat and Lon are from the oil rig only- the beacon that is on the ROV will not turn on acoustically so must be turned on manually before the ROV goes back down. Overlay on video latitude/longitude are incorrect.							ROV launch; Lat and Lon are from the oil rig only- the beacon that is on the ROV will not turn on acoustically so must be turned on manually before the ROV goes back down. Overlay on video latitude/longitude are incorrect.	
	bottom in sight								
	on bottom, video footage of buoy marker, lophelia	fine to medium sand, a few cobbles	2' numerous small carpet sharks	Venus fly trap, crabs	rope				

									919	1282				base of the jacket and anemones
									921	1286			1	close up of anemone
									925	1250				polychaete
								anemones Actiniaria, white tentacle 1 species	927	1236				
								anemones Actiniaria, orange tentacle 2 species	933	1242				anemone
									940	1249				anemone sample 2
									947	1218				
									949	1215				sun star
									953	1222				Lophelia petusa
									957	1200				brown mat
									1001	1147				
									1004	1132				
									1006	1144				sun star and Venus fly trap
									1008	1143				8" dia Lophelia

1	at the oil rig			anemones					
2									
3	on the jacket mostly anemones and polychaete worms Sabellidae?	oil rig jacket							
	collected sample 1 by suction	oil rig jacket	fish or fusch in Kiwi land	crab					
4	collection of the anemones by suction, trying to collect 5 of each kind	oil rig jacket				X			
5	white anemones are more common								
	under overhang/crossbar is coral growing								
6,7	looking underneath the structure (horizontal conduit); corals 4-8" dia			many Siphonophores going by in the water column, sun star					
8,9									
10,11	12" dia brown mat probably Zooanthids?, polychaete								
	brownish red anemones, little anemones (patches)								
	small anemones and zooanthids are becoming more common								
12	video of conduit underside, 4" dia Lophelia								
13,14			tuna			XX			

					2				1010	1140				
									1013					Lophelia petusa
									1016					barnacle, Lepes
									1018	1137			2(congressional hearing)	Manifold
								Octocoral, orange , bushy, branching, 12" diam, 3 Antipathes?	1020	1140			3,4	
									1024					
								White amorphous cake-like sponge with small anenomes growing on 4 it	1027	1137			5,6	
								5 White sponge	1035	1133			7	
									1040					
									1046					
								Taking water sample in association w/sample#4	1049	1136				
									1052					
									1054	1132				

	end of tape 1 starting tape 2								
15,16	overlay turned off for video		small fish	stalked barnacle					
17	moving SW			Lots of sea anenomes, Lophelia		XX			
18			1' silver fish						
19									
	#3 collected using claw grab & suction					XX			
20		Growing on top horizontal member of oil rig							
	Overlay back on, picking up clam tool								
	Dropped the clam shell								
	Collecting sample#4 by clam shell grab, broke up, will collect again								
	Rest of sample #4 collected by suction								
	Sample #5 collected by suction, two separate specimens								



									1058	1139				
									1107					
					3				1113					
									1122	1137				
									1125	1137				
									1125	1134				
									1156					
									1203					
									1213					
									1218	1052				
									1223	1007				
									1225	1000				
					4				1231	1012				
									1234	957				
									1238	950				Stonolifera
									1242	905				
									1246	892				sea anemone

	Sample #4 put in bucket number #4, piece still in suction		Shark?						
	bucket #4 closed								
	More of sample #5 collected by suction								
			Small white fish						
	More of sample #4 collected by clam shell grab								
	anodes covered with white								
	stop transect to head back to cage for crew change								
	sample #4 placed into bucket #3								
	starting transit on SE vertical leg, heading 360								
	1' large patches of zoanthids								
	3" diam. Yellow sponge?								
	end of tape #3								
	6 - 12" long Lophelia; 12" long Sabellidae; large patches of zoanthids; Stonolifera;								
21									
	similar habitat/ community to 1000'; transceting crossbeam; 80% cover of sea anemone;small cluster Lophelia less abundant at this depth.								
22	sea anemone								

									1248	892				Octocoral 4" stalk, spherical head with 1" long polyps;
									1250	892				filimentous possible hydroid inhibiting growth around it
										890				
								1' patches of filamentous material	1256	890				
									1301	882				
									1310	850				
									1313	832			8,9,10	
									1326	907,				
									1328	842				
									1331	670				
									1334	670				

23,24									
25, 26									
	appears to be a different zonation; small sea anomnes and stonolifera;								
	on diagonal struts; sample collected by suction								
	small Lophelia								
	facing north working from southeast to southwest leg on diagonal strut. Now heading to southeast leg on horizontal strut.								
27,28	thin encrusting white material (Beggiotoa								
	heading to southeast leg on diagonal beam								
	reached southleg; transit up; almost 100% cover of Stonlifera, sea anemone and the filamentous material		1' silver fish						
	transceting hortizontal beam to west; Beggiotoa; out of Lophelia zone								
	heading back to southeast leg; vertical transit; barren								

									1338	525				1/4-1/2" sea anemone or zoanthid dominant organism at this depth
									1340	520				
								4" amorphous white sponge associated with Veggiotella	1342	519			11	
					5				1347	518				
									1348	518			12,13	silhouette of inside jacket
									1350	517				
									1352	450				
								Gorgonacea orange 4-5" sparsely branched yellow base, possibly due to something encrusting	1353	424				
								3" yellow gorgonian	1358	424			14,15	

29	1/4-1/2" sea anemone or zoanthid dominant organism at this depth								
	transecting horizontal beam; barren more Beggiotoa cyanophyta on top only.								
30	found horizontal beam; sample collected by clam shell grab.								
	end of tape #4								
	lights off , inside video footage of jacket;								
	back on southeast leg heading up; ascending.								
	very barren; few zoanthids,				fishing lines				
31, 32,33	Gorgonacea orange 4-5" sparsely branched, yellow base possibly due to something encrusting; different species 3" yellow								
31,32,33	3" whitish yellow sparsley branched gorgonian								

									1417	412				
									1419	412				
									1422	404				
								2-3" black encrusting coral; approx 20 polyps on surface	1426	398			16,17	
									1431	383				
									1434	392				
									1437	350				
							10	purple gorgonian	1439	363				digital camera reloaded
								12" across white/ yellow gorgonian	1442	355				
								Cirrahypath es	1444	357				
									1446	343				

	collecting more of sample 8, second specimen;		amber jack in background; pelagic fish						
	attachment of gorgonian is unusual; 4" thin encrusting base which is unusual with 6" gorgonian; no more corals; moving up								
	collecting more of sample 8, black blobs to be inspected shortly;		Almaco amber jack						
	no sample collected;								
	white gorgonian, possibly same as sample #8								
	finished collecting sample #8; heading up								
	black coral								
1,2	more gorgonians collected to be sorted on deck; purple and white ones	on vertical leg;							
3									
4	sea whips 2' long								
5	Antipathes frilly pine type; on horizontal beam with white cyanobacteria growing on top		amber jack						



							11	yellow amorphous sponge, Spongosorit es sp?	1448	343				
									1503	335			18, 19	sample 11
					6				1508	337				
									1521	361				
									1522	339				
									1525	339				
									1527	340				
									1528	340				
							12	yellow amorphous sponge	1532	340			none	
							13	sea whip	1536	342				
							14	Neptheidae; 4" stalked; erect branching; light brown	1536	342				
									1541	340				
									1541	324				
									1542	320				
									1543	315			20	
									1544	315				
									1545	305				

	yellow amorphous sponge, collected by								
	back on site, looking for sample 11, eureka found it! Collected by clam shell		amberjac k school						
6	grab end of tape 5, staring tape 6; heading to TMS, sample 11 in bucket 11								
	heading to 340 ft crossbar								
	small cake sponge on top of crossbar		amberjac k						
	sample 11, 2nd specimen								
	Cluster of Barnacles								
	black coral sea whip								
	collection of yellow spopnge. This sponge was not attached.								
	Cirripathes or Stickipathes								
7	Neptheidae								
	taking the diagonal route to SW leg								
	crumbly 4" diameter white plate possibly from the								
8	anode, crumbly								
	Many more black corals								
9	Sea fan								
10,11,12	Oculina coral; no zooanthellae on the Oculina								
	thick encrusting coral								

									1551	255				
									1551	254			21	
									1554	254			22,23	
									1556	255				
									1557	235				
									1558	226				
									1600	207				
									1600	167				
									1601	167				
									1602	167			24	
									1607	167				
									1608	167			25,26	
									1608	168				
									1622					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes
9/16/2003	Gulf of Mexico, ~25 nm se of Mississippi Delta, South Pass Block 62, Apache B oil rig	Apache B Oil Rig, depth 322', 29 05.5424'N, 88 43.2839'W, installed 1/1/68	16-IX-03-2	16	1	A. Wright, J. Reed, S. Pomponi					29 05.5424'N	88 43.2839'W		
									1852					
									1903	308				

	Encrusting yellow tunicate								
	Encrusting orange sponge 3' diameter. Very very nice					XXX			
	Several species of black coral								
	Arrive SW vertical leg; going up								
			amberjack						
	getting "reefish"								
			school of gray trigger; a scamp grouper						
			barracuda						
	Going across a crossbar								
13,14,15,16	Tubastrea								
	Going across to a main leg to continue up								
17,18,19,20,21	pictures of fish, trigger, amberjack, grouper								
	End of collections								
	On deck								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Launch								
	dive, dive, dive! Lat & long coordinates of overlay agree with expected coordinates		school of amberjack (~15 fish)						
	Hit bottom and pipeline, heavily fouled; 10-15' vis		Red snapper;	Lophelia;					

									1905	263				oysters
								12" bushy, finely branched white organism; Octocoral or coralline algae	1908	254				1 sample #1
									1921					
									1926					
									1930					
									1940	258				
									1943	258				
									1945	258				
									1947					
								Sclerotinia, black cup coral	2 1950	258				S#2; digital photo #4 includes both individuals of sample #1 & 2

1,2	South face oyster shells		Scamp grouper, amberjack						
	organism on side of cross beam								
3	dropped sample #1, but re-caught it after ROV chase-NICE save								
	dropped sample #1, chasing it again								
	Sample #1 in bucket #3; smashed bucket somewhat								
	Back at rig								
			Black grouper						
				Coral, Oculinata; 2-3" hydroids; 1-2" oysters					
			school of large snapper						
4	collected using suction		Soapfish-Rypticfus saponaceus	solitary whip coral					

								whip coral, 3 Cirrhipathes	1954	264				
									1957	264				
									2000	257				
								orange/red , bushy, erect branching octocoral, patches 2-3 4 ft across	2004	240			3, 4	photos of sample 4 and an individual of sample 1
								Bull sac sponge; 8" lobate 5 sponge	2014	234				5 sample 5
									2017					
									2025					
					2				2030					
									2038					
									2039					
									2041					

	collected whip coral , cirrhipathes		Deepwater Bank butterfly fish, Chaetodon aya, Chaetodon sedentaris						
	collecting more of sample #1 (growing on fishing line) with suction								
	On leg on SE corner, continuing vertical transect			Oysters; diadema urchin; zoanthids; stolonifera; white clusters					
5, 6, 7	sample sucked, attached to fishing line								
			Chaetodon sedentaris;						
	collected using clam shell grap, tore off top half								
	sample #5 put in bucket #10								
			school of unidentified fish						
	back on rig leg								
				pencil urchin, yellow-orange and red-orange encrusting spone					



								purplish bushy 6 gorgonian	2042	221				
									2045					
									2048	223				
									2051	224				
									2054					
									2107					
									2116	211				of 15" diam massive sponge, possibly Geodia
								thin encrusting, salmon color, possibly Holopsamm 7 a	2117	211				close-up of thin encrusting 6 sponge
								stalked, finely branched 8 planar	2127				7,8	
					3				2130					
									2136					
									2143	217				
									2145					
									2149	200				
							9-NOT collected	12" diam, thick encrusting, white sponge	2151	184				8

8,9									
	sample #6 collected by suction								
	more of sample #4 collected								
10,11	collecting more of sample #5								
	second piece of sample #5 collected with claw								
	2nd piece of #5 in bucket #10								
12									
13	collected by suction								
14,15	collected by claw grab								
	Sample #8 in bucket #2								
	Siphonophore								
	turned on video for tape #3								
	zonation change			gorgonians, coral				one of the lasers is out; crew shift change	
16	one of the lasers is out; crew shift change							broke hydraulic hose during sample grab-unable to complete sample grab	

									2154					
									2156					
									2207					
									2210					
									2245					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes
9/17/2003	Gulf of Mexico, ~25 nm se of Mississippi Delta, South Pass Block 62, Apache C/D oil rig	Apache D Oil Rig, depth 325', 29 05.256'N, 88 44.0299'W, installed 1/1/87	17-IX-03-1	17	1	S. Pomponi, J. Reed, A. Wright					29 05.256'N	88 44.0299'W		
									851					
									903					
									909					
									910					
									911					
									917	319				
									924	292				
									927					Of black, stony coral, and urchins
							1	sea-whips, plan to collect 6-12	929	295			2	
									936					

	trouble w/a thruster- possibly fishing line wrapped around it								
			several large fish, silver						
	S#9 collected with clam shell grab								
	hydraulic line broke, ROV coming up								
	On deck								
<b>Photo # (from digital still)</b>	<b>Notes</b>	<b>Habitat Description</b>	<b>Fish</b>	<b>Invertebrates, Algae</b>	<b>Human impacts</b>	<b>Good Video</b>	<b>Good Photo</b>	<b>Repairs</b>	
	digital camera broke							Digital camera not working	
	ROV in water								
	ROV returned to surface to fix camera cable- loose connection??								
	continue with same dive number- ROV never hit deck								
	ROV in water- TAKE 2								
	lost camera again							Digital camera not working	
	on bottom								
	on SE piling								
	collecting sea whips			Urchins; blue-black coral		close-up of urchins, and blue- black coral			
	S#1 collected by suction								

									941					
									950					
									955	254				
									1000					
									1001					3 Barnacles
							2	Tubastria, orange, polyps out	1004					4 Tubastria
							3	White, branching, Gorgonian, 14+" diam, many arrow crabs living on it	1011	214				5
					2				1023					
									1024					
									1025					
									1032					
									1035					
									1040					

	more of S#1								
			Grouper						
	heading NW along horizontal member of rig-sea whips are abundant								
			Grouper-yellowmouth or red?-curious & following ROV						
			2 Gobies/Blennies?						
	collected by suction		arrow crab			of Tubastria			
			School of small fish in background; amberjack	Arrow crab on sample					
	sample #3 collected using claw grab								
	heading back to TMS								
	sample #3 put in bucket #7					XXX of sample being put in bucket-Ray's Discovery shot			
	heading back to rig								
			school of amberjack						

									1041					
								Gorgonian, irregular white branches, large field/clump- 4 2M diam	1043	195				of fish on 8 gorgonian
									1046	198				
									1108					
								purplish brown 5 gorgonian	1111	179			9,10	arrow crabs and sample #5
								tufty white 6 gorgonian	1114	176			11 (12:04 photo taken)	sample #6
								brown fuzzy 7 gorgonian	1115	176			12,13	sample #7
									1115				14	samples 5,6,7
									1120					
									1129					
									1204	180				
					3				1218	180				

	back at rig, continue up member								
			Damsels ?; Gobies/Blennies	bristle worm					
	sample #4 collected with claw grab and suction, working their way down the sample clump, possibly stuck in suction hose-very little in basket		small Coney grouper						
	nice video shot of inner structure					XX			
	with arrow crabs								
	sample lost; more video footage at 1228 and more sample collected by clam shell grab and placed into bucket # 6 at 1249		amber jack						
			barracuda			XXX			
	sample #5 in suction								
	sample #6 collected by clam shell grab- placed in bucket # 4 (12:18)								
	end of tape 2; working on the horizontal beam								



									1234					
							2' orange gorgonian; 8 planar		1255	180			15,16(close ups) 17 ,18 total	
									1305					
									1307					
									1315	180			19	zoanthid
									1319	180			20, 21	firewrom orgy, Heraodice carunculata
									1321	170				
									1323	169			20, 22	Antipathes
									1325	160			24, 25, 26, 27, 28	6" Tubastea cup coral, plus arrow crabs Stenorhync hus seticeotes
							large bushy dark grey black coral, wide encrusting base plus dense 9 branches		1328	150			29, 30, 31, 32, 33, 34	large bushy dark grey black coral, wide encrusting base plus dense branches

	this zone mostly gorgonian and Antipatharian habitat; heading 315 looking at southeast side of structure.					nice video of crabs			
	2' gorgonian; planar; 6" south side of base of horizontal beam								
	sample #8 collected by five function grab and placed in bucket # 11		2 amberjack						
	video of pick-up of clam grab ontop of TMS					X			
	horizontal beam SW to SE, continuing transect			Stolonifera; zoanthids; Telesto; black coral; fire worms					
				black whip coral and fan coral; encrusting red sponge					
	moving up vertical SE leg			oysters; zoanthids; red encrusting sponge; black octocoral					
	cu video of black coral								
	Tubastea cup coral								
	problems with the manipulator, not able to collect sample 9		2 scamp groupers, amberjack					fifth and seveth function not working	

									1335	150				
									1349					
<b>Date</b>	<b>Location</b>	<b>Target Site Description</b>	<b>Site Number</b>	<b>ROV Dive #</b>	<b>Video Tape #</b>	<b>Collectors</b>	<b>Sample #</b>	<b>Sample Notes</b>	<b>Time (hr:min)</b>	<b>Depth (Ft)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Photo # (from video)</b>	<b>Photo Notes</b>
9/17/2003	Gulf of Mexico, ~25 nm se of Mississippi Delta, South Pass Block 62, Apache A oil rig	Apache A Oil Rig, depth 325', 29 05.256'N, 88 44.0299'W, installed ?	17-IX-03-2	Scuba		J.Reed, A. Wright, K.Janda, A.Duckworth, T. Pitts		8 samples	0940- 1020	90	29 05.256'N	88 44.0299'W		
<b>Date</b>	<b>Location</b>	<b>Target Site Description</b>	<b>Site Number</b>	<b>ROV Dive #</b>	<b>Video Tape #</b>	<b>Collectors</b>	<b>Sample #</b>	<b>Sample Notes</b>	<b>Time (hr:min)</b>	<b>Depth (Ft)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Photo # (from video)</b>	<b>Photo Notes</b>
9/17/2003	Gulf of Mexico, SW of Mississippi Delta, Mississippi Canyon Block 118, Reed Site #120	Reed GOM Site #120, Schroeder Site #3; 28 51.12'N, 88 29.52'W, 2886-2952'	17-IX-03-3- dive aborted	18		J. Reed			1815		28 51.12'N	88 29.52'W		
<b>Date</b>	<b>Location</b>	<b>Target Site Description</b>	<b>Site Number</b>	<b>ROV Dive #</b>	<b>Video Tape #</b>	<b>Collectors</b>	<b>Sample #</b>	<b>Sample Notes</b>	<b>Time (hr:min)</b>	<b>Depth (Ft)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Photo # (from video)</b>	<b>Photo Notes</b>
9/17/2003	Gulf of Mexico, SW of Mississippi Delta, Mississippi Canyon Block 118, Reed Site #120	Reed GOM Site #120, Schroeder Site #3; 28 51.12'N, 88 29.52'W, 2886-2952'; Schroeder noted possible coral site-- WRONG!!!!; Seabeam map of site 9/17/03	17-IX-03-3	18		A. Wright, J. Reed			1910		28 51.1268'N	88 29.5728'W		
									1941	2895				

	ROV dive over, coming to the surface								
	On deck								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Video camera- J. Reed	Legs of oil platform	Jack, reef fish, barracuda, snapper, bermuda chub	Dominant sp Telesto and Tubastrea		Yes xxxx			
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Launch							TMS to 1000' then had data pack failure, possible ground fault; 2) Digital camera and strobe worked ok on surface but failed at depth.	
	Dive aborted								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	Launch								
	Launch							Replaced cable, plan to go to 1000' to soak and test	
	ROV on bottom	fine silty bottom; bioturbation; 30% visibility; slight current		crab					

									1945	2908				
								8" 1 gorgonian	1954	2907	28 51.1655'N	88 29.6872'W	1	
									2000	2905				
									2004	2903	28 51.1647'N	88 29.6775'W		
									2007	2913				mud with clams and cyanobacter ia; 2 veggioitoia
									2012	2917	28 51.1474'N	88 29.6814'W		cyanobacter ia
								2 3' gorgonian	2013	2917	28 51.1398'N	88 29.6859'W	3,4	gorgonian
									2030					TMS
						2			2042					
									2048					
									2051					
									2051	2908				
									20??					
									2101					
									2103					
									2106	2925	28 51.1343'N	88 29 6247'W		

		bottom littered empty bivalve shells; rock outcrop; starting to get hard bottom							
1 (sample in jaws)	8" gorgonian; (waiting for sediment to settle prior to collection) collected by 5 function then by suction	3' rock boulder on mud sediment with dense layer of bivalve shells;							
	heading east southeast 110 degrees	20 degree slope rock boulders 6" -3' diam;		white sea urchin					
	heading more easterly								
	slight 10-15 degree incline; heading 180 2 degrees		rattail fish						
3									
4,5,6	3' gorgonian with spag. Brittle stars								
7, 8	heading to the TMS							digital camera kaput	
	end of tape 1								
	sample 2 in bucket #2								
	digital camera back on								
	reached bottom, heading to previous site, first dive of entire trip the tracking is working								
	Time on overlay is not working	Muddy bottom, 6" depressions	Eel, white fish	Coral red shrimp; gorgonian, jelly fish					
			Rat tail fish, several small fish						
	Time on overlay working		Starfish-4"					Laser pointer is kaput	
			Rat tail fish	scallop, bacterial film,starfish					
	Heading to target site	Much bioturbation, 6" mounds, and animal tracks (possibly bear)	Rat tail fish						

									2110					
									2115				5 Crab	
									2121	2920	28 51.1115'N	88 29 5146'W		Holothurian
									2126	2913				
									2130	2906				
									2133	2901			6,7,8	of Chimera
					3				2137	2896	28 51.2250'N	88 29.3785'W		
									2140	2891				
									2145	2894	28 51.2578'N	88 29.3319'W		
							3	small 1-2" clam	2149	2891	28 51.2768	88 29.3003	9,10,11	Gastropods
							201	mud	2200	2890	28 51.2768	88 29.3003		
									2204	2889				
									2205	2894				
									2208	2896	28 51.2884	88 29.2852		
									2212	2888	28 51.3242	88 29.3118		
									2215	2884				
									2216	2885	28 51.3520	88 29.3366		
							4	Holothurian		2880				
									2310					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes

			Several rat tail fish	Red shrimp					
9			Eel	8" Orange crab, possibly Chaceon fenneri					
10	On target heading NE up wall, traveling 1 knot		Many eels and rat tails	white sea cucumber					
				Venus fly trap	big piece of garbage				
						of rat tail			
11			Chimera			of Chimera			
	End of tape 2								
	Approaching danger zone of target 2								
			Orange fish	Large bacterial mats-30' wide; clusters of clam shells					
12	2 species of Gastropods, 20/square meter, 1-2" dia		fish	crab					
	collecting ooey mud 6" down as well as the Gastropods and clam shell by suction		black fish						
	maybe eating on a carcass	30-5' wide mound of snails		starfish					
				pair of crabs Chaceon fenneri	human debris, bottle				
	heading NW			sea spider, sea cucumber					
			white eel	shrimp, Chaceon fenneri	drink can				
			rat tail fish	sea cucumber, red shrimp, Tethia grandis star fish					
	off bottom, ending dive								
	on deck								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	



9/18/2003	Gulf of Mexico, S. of Mobile Bay, Viosca Knoll Block, The Pinnacles	The Pinnacles, Target site from Gardner's Seabeam map, 29 19.654'N, 87 46.061'W	18-IX-03-1	19	1	S. Pomponi, J. Reed			816		29 19.6552'N	87 46.0728'W		
									819	94				
									822	245	29 19.6566'N	87 46.0852'W		
									826	322	6553	954		
									827	319				
									833	323	6568	763	1	rock outcrop
									839	325				habitat with cup coral
									842	327	6568	763		habitat, rock ledge
									844	327				white coral, Madropora?

	Launch of the Submersible Innovator to explore the sultry depths for drugs, oh... those wonderful drugs								
			school of small fish						
	bottom in sight								
	on bottom, Gorgonians	95% sand large cobbles, few gorgonians, some large 15' wide rock outcrop							
			shark on other video screen, greater amber jack						
	heading towards target 1 site 1		big eye fish, red fish	Gorgonians; several species of Antipathodea, crinoids					
	numerous whip 2 Cirrahypathes		4' shark possibly lemon shark, big eye, bank buterfly fish						
	now on target site 1, Sclerotinnian coral + numerous species of cup 3 coral		scamp grouper						
4				crinoids					

									847	329				rock outcrop with crinoids
									851	327	6568	763		
									904	328	6411	448		
								yellow 1 Gorgonian	907	327	6423	455	3,4	6" yellow Gorgonian
									910	329				
									923	329				
								2" brownish cylindrical object 201	929	330				brownish cylindrical object 5
									934	329				
									940	328				
									947					
								12" tall tan gorgonian 2	949	327	6260	625		of 6 gorgonian
									952					
								18" tall gorgonian, lacy, light tan, with basket stars 3 living on it	956	327	6260	625		7 of sample
									1000					
									1014		6173	459		

		30% cover hard bottom, 1-2' relief relatively low biodiversity, no large sponges		beaucoup crinoids, black cup coral in video					
5	transecting from P1 to P3 heading 100 degrees, dropped clam shell grab			Anthomatis					
	video of 5' high rock outcrop		Antheiidae						
6,7	collecting sample 1, lat and long may not be accurate								
	collecting sample 1 by claw, dropped clam shell grab		amber jack, grouper		good video of collection				
	collecting more of sample 1 with claw and suction				good video of collection				
8	sample 1 collection completed, looking at orange								
	picking up basket								
	heading to site 3								
			school of amber jack; butterfly fish	coral, gorgonians, sea whip; black cup coral					
9,10									
	#2 collected by claw grab & suction								
11	#3 collected by claw grab								
	#3 put in right bucket								
				crinoid; sponges; coral; gorgonians; black cup coral					

								spherical sponge with apical osculum, lower edge of rock ridge, possibly Theonella?						
								4	1015	327	6178	463	8,9	
					3				1058					
									1059					
									1108					
									1125					
<b>Date</b>	<b>Location</b>	<b>Target Site Description</b>	<b>Site Number</b>	<b>ROV Dive #</b>	<b>Video Tape #</b>	<b>Collectors</b>	<b>Sample #</b>	<b>Sample Notes</b>	<b>Time (hr:min)</b>	<b>Depth (Ft)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Photo # (from video)</b>	<b>Photo Notes</b>
9/18/2003	Gulf of Mexico, S. of Mobile Bay, Viosca Knoll Block, The Pinnacles	The Pinnacles, Target site from Gardner's Seabeam map, 29 19.654'N, 87 46.061'W	18-IX-03-2	20	3 tapes	A. Wright, J. Reed								
									1325					
									1332	323				
									1336	322	29 19.6403'N	087 46.0682'W		
									1340	318			1,2(gorgonian #2)	basket starfish and crinoid
									1349	330	29 19.6174'N	87 46.0078'W	3	
									1353	333	29 19.6233'N	087 46.9846'W	4	rock ledge w/ Anthied fish

	#4 collected by five function grab; placed in 12 basket in bucket on right								
	started tape #3							technical difficulty with basket; bottom of collection basket is missing	
	suctioned up samples in basket. ( bottom of basket needs repairs)								
	heading back to TMS								
	ROV out of water								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	
	ROV in water								
	ROV on bottom								
		flat sediment bottom; thin sand layer over hard bottom	big eye and band butterfly	6-12" crinoids; sea whips;					
1		3-6' rock ledges and outcrops mostly gorgonians and black corals	flounder	numerous gorgonians, black coral, basket stars, sea lilly					
	transecting 104dg; 6' cross bar anchor ~1800s				anchor	6' cross bar anchor ~1800s			
		rock with 1-3' relief mostly sediment							

									1358	361	29 19.6166°N	087 46.9318°W		
											29 19.	087 46.		
									1405	379				
							1	Australian pine " black coral"	1406	372	29 19.5954°N	087 46.8645°W	5	wide angle of sample
							2	2' bushy flat coral	1416	367	29 19.5917°	087 46.8541°W	6	
									~1640					
Date	Location	Target Site Description	Site Number	ROV Dive #	Video Tape #	Collectors	Sample #	Sample Notes	Time (hr:min)	Depth (Ft)	Latitude	Longitude	Photo # (from video)	Photo Notes

	sediment shoot between two rock outcrops; few black corals	abundant black corals; sand sediment							
	upslope to target #3 200m wide plateau.		amber jack						
	10" Australian pine "black coral"								
		flat 10 degree slope, sediment layer, rock pavement, 4" cobble							
yes- but data lost	Rest of data base lost-total 8 samples, mostly gorgonians, 1 sponge. Transected from plateau of Target P1 to Target P3, top of reefs about 320', sand gulley between about 360', mostly silty sand. Edge of P3 plateau rimmed with moderate relief rock outcrops, ledges, and caves. South slope of P3 plateau on Seabeam shows steep wall- in fact was only 5-10 dg slope with 6-12" boulders on silty sand, mostly antipatharia habitat. Fix on 8' cross bar style anchor.	West and south edge of P3 plateau, very rugged rock, moderate relief, 3-8', lots of caverns, good fish habitat, about 340'.	Abundant grouper on rim of P3 plateau. Numerous snowy grouper 3- lb, scamp, black, yellow edge; blue angel fish; greater amberjack; Chaetodon aya; anthiids; bigweye; snappers; shark	Dominants: gorgonacea, numerous spp 6-12"; black whip coral Cirrhipathes, various bushy and planar black coral antipathidae; black cup coral; virtually no massive sponges, only 2 seen. Dense comatulid crinoids everywhere.		xxxx-excellentg video of reef habitat and schools of grouper.	xx		
	ROV on deck								
Photo # (from digital still)	Notes	Habitat Description	Fish	Invertebrates, Algae	Human impacts	Good Video	Good Photo	Repairs	



9/18/2003	Gulf of Mexico, S. of Mobile Bay, Viosca Knoll Block, The Pinnacles, Target 3	The Pinnacles, Target site from Gardner's Seabeam map, 29 19.654'N, 87 46.061'W	18-IX-03-3	21	1	S. Pomponi, J. Reed			1812		29 19.5833'N	87 45.7470'W		
									1816	333				
									1819					
									1819					
									1822					
									1825					
							1	Choristid with crinoid	1828	334	5642	7129	1,2	sample 1
									1851					
									1856					
							2	yellow sponge with crinoid; cup-like; possibly Lithistid	1900	338	5663	6959	3,4	sample 2
									1922					
							3	yellow sponge, smooth surface	1925	338	5754	6975	5,6	sample 3
							1-recollect		1933				7	sample 1-recollect
							2-recollect		1945	339			8	

	on bottom; lat/lon on header incorrect								
		50% rock cover with sand, 1-2' relief	Bigeyes, Anthias, snapper	gorgonians, sea whips, black coral cups					
	header on tape corrected								
	South of the pinnacle 1		school of amberjack						
				black coral and black cup coral					
	Tape 1 may not have been on until this time								
1									
	sample 1 in bucket 11								
	heading back to pinnacle 1 to continue transect								
	collected via suction								
			school of amberjack						
	2 collected via suction								
3,4									
5	collected via suction								

[illegible]

