

MARINE MAMMAL RECORDING FORM - LOCATION AND EFFORT DATA

Ship R/V Gaura Ship type (seismic/guard etc.) Research Survey type (site, 2D, 3D, 4C etc.) ..... Record no. .....

Please record the following information every day (as many lines per day as you wish), even if no marine mammals are seen.

Date	Observer	Time you started looking for marine mammals (GMT)	Time you stopped looking for marine mammals (GMT)	Duration of watch for marine mammals (hrs & mins)	Length of time airguns were shooting while you were looking for marine mammals (hrs & mins)	Blocks transited while looking for marine mammals (or start and end position if blocks not known)	Wind force and direction (use Beaufort scale)	Sea state Choose from: G = glassy (like mirror) S = slight (no or few white horses) C = choppy (many white horses) R = rough (large waves, foam crests, spray)	Swell Choose from: O = low (< 2 m) M = medium (2-4 m) L = large (> 4 m)	Visibility Choose from: P = poor (< 1 km) M = moderate (1-5 km) G = good (> 5 km)
21 May 03	MJB	0630	1230	4 hrs	0	Galveston Harb	1/2 SE	S	O	G
21 May 03	RH	1215	215	2 hrs	0	27° 43.7 N 93° 41.3 W	1/2 NE	S	O	G
21 May 03	RH					27° 06.06 N 93° 19.14 W				
21 May 03	RH/MJB	0630	2050	1330	Continuous	26° 49.1045 N 93° 57.2064 W	1 W	S	O	G
					Some down					
					Line for					
					any one					
					subdiving					
					guard					
					but not					
					more than					
					30 min					
4 May 03	RH/MJB	0615	2000	1330	Continuous	26° 50.84 N 92° 56.50 W	2	S-C	M	G

\* 3 may went back & forth over same area throughout day

26° 44.98  
92° 58.85

Depth 300m  
Depth 1350m

MARINE MAMMAL RECORDING FORM - LOCATION AND EFFORT DATA

Ship: CGSE Ship type (seismic/guard etc.): R/V Sigsbee Survey type (site, 2D, 3D, 4C etc.): ..... Record no.: 2

Please record the following information every day (as many lines per day as you wish), even if no marine mammals are seen.

Date	Observer	Time you started looking for marine mammals (GMT)	Time you stopped looking for marine mammals (GMT)	Duration of watch for marine mammals (hrs & mins)	Length of time airguns were shooting while you were looking for marine mammals (hrs & mins)	Blocks transferred while looking for marine mammals (or start and end position if blocks not known)	Wind force and direction (use Beaufort scale)	Sea state Choose from: G = glassy (like mirror) S = slight (no or few white horses) C = choppy (many white horses) R = rough (large waves, foam crests, spray)	Swell Choose from: O = low (< 2 m) M = medium (2-4 m) L = large (> 4 m)	Visibility Choose from: P = poor (< 1 km) M = moderate (1-5 km) G = good (> 5 km)
5/MAY/03	MTB/RCH	615	1930	1315	1315	26°43.80 92°01.15 26°47.14 92°59.32	2-4 SE	C	M	G-M
6/MAY/03	MTB/RCH	615	1930	1315	1315	26°47.70 92°59.71 26°49.07 92°59.53	2 SE	C	M	G-M
7/MAY/03	MTB/RCH	615	1930	1315	1315	26°45.50 92°50.79 26°46.44 92°52.98	2 S	C	M	G-M
8/MAY/03	MTB/RCH	615	1930	1315	1315	27°13.87 93°04.58 27°03.08 92°47.27	2 S	C	M	G-M
9/MAY/03	MTB/RCH	615	1930	1315	1315	27°03.61 91°53.20 27°46.44 98°26.14	2 SE	C	M	G-M
10/MAY/03	MTB/RCH	630	1930	1300	1300	25°55.57 89°17.47 25°57.60 89°17.28	AM 3 PM 2	AM R PM S-C	M	G
11/MAY/03	MTB/RCH	630	1930	1300	1300	27°58.44 89°19.20	2	S	O	G

90°N 20°E  
30 min  
01 sec 00



GMT = 5 hrs

MARINE MAMMAL RECORDING FORM - RECORD OF OPERATIONS

Ship: CYRE Client: USGS Seismic Contractor: Record no.:

Complete this form every time the airguns are used, including overnight, whether for shooting a line or for testing or for any other purpose. Times should be in GMT.

Date	Airgun activity			Pre-shooting search					Action necessary		
	Time when soft start began	Time when airguns reached full power	Time when airguns stopped	Who carried out a search for marine mammals? (Job title)	Time when pre-shooting search for marine mammals began	Time when search for marine mammals ended	Was there any reason why marine mammals may not have been seen? (e.g. dark fog, swell, etc.)	Were hydro-phones used?	Were marine mammals present in the 30 minutes before the airguns began firing?	If yes, give time when marine mammals were last seen	If marine mammals were present, what action was taken? (e.g. delay shooting)
5/2/03	1500	1600	Continuous	OBSERVERS	0630	2022	No	No	No	NA	NA
5/2/03	2250		0255	3 No OBSERVATIONS - DARKNESS - HOURS - 1500							
5/3/03	0315		0557								
5/3/03	Continuous	100 dB	Continuous	OBSERVERS	0630	2000	No	No	No	NA	NA
MARTIN	0645	0645	1150	OBSERVERS	0630	1600	No	No	No	NA	NA
MARTIN	1230	1310	NA	OBSERVERS	0630	1000	No	No	No	NA	NA
5/4/03				OBSERVERS	0630	2000	No	No	No	NA	NA
CHUR	Continuous	160 dB	Continuous	OBSERVERS	0630	2000	No	No	No	NA	NA
ALLEN	Continuous		NA	OBSERVERS	0630	2000	No	No	No	NA	NA

Please return to MMS, Environmental Sciences Section, 1201 Elmwood Park Blvd, New Orleans, LA 70123-2394 (fax: 504-736-2901)

MARINE MAMMAL RECORDING FORM - RECORD OF OPERATIONS

Ship SEA GUARD Client USFWS Seismic Contractor USFWS/TERRA AER Record no. 2

Complete this form every time the airguns are used, including overnight, whether for shooting a line or for testing or for any other purpose. Times should be in GMT.

Date	Airgun activity			Pre-shooting search				Action necessary			
	Time when soft start began	Time when airguns reached full power	Time when airguns stopped	Who carried out a search for marine mammals? (job title)	Time when pre-shooting search for marine mammals began	Time when search for marine mammals ended	Was there any reason why marine mammals may not have been seen? (e.g. dark fog, swell, etc.)	Were hydro-phones used?	Were marine mammals present in the 30 minutes before the airguns began firing?	If yes, give time when marine mammals were last seen	If marine mammals were present, what action was taken? (e.g. delay shooting)
7 May 03											
CHIRP	CONTIN.	NA	CONTIN.	OBSERVERS	0615	1930	NO	NO	NO	NA	NA
AIRGUN	CONTIN.	NA	CONTIN.	OBSERVERS	0615	1930	NO	NO	NO	NA	NA
7 May 03											
CHIRP	CONT	NA	CONTIN.	OBSERVERS	0630	1930	NO	NO	NO	NA	NA
AIRGUN	CONT	N/A	CONTIN.	OBSERVERS	0630	1930	NO	NO	NO	NA	NA
8 May 03											
CHIRP	CONT	NA	CONT	OBSERVERS	0630	1930	NO	NO	NO	NA	NA
AIRGUN	CONT	NA	CONT	OBSERVERS	0630	1930	NO	NO	NO	NA	NA
9 May 03											
CHIRP	CONT	NA	CONT	OBSERVERS	0615	1930	NO	NO	NO	NA	NA
AIRGUN	CONT	NA	900	OBSERVERS	0615	1930	NO	NO	NO	NA	NA

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Airguns to source - no change from Airgun activity as per the use logs

MARINE MAMMAL RECORDING FORM - RECORD OF OPERATIONS

Ship: R/V Gulf Client: USGS Seismic Contractor: VSS/Texas A&M Record no.: 3

Complete this form every time the airguns are used, including overnight, whether for shooting a line or for testing or for any other purpose. Times should be in GMT. William, central time

Date	Airgun activity			Pre-shooting search				Action necessary			
	Time when soft start began	Time when airguns reached full power	Time when airguns stopped	Who carried out a search for marine mammals? (job title)	Time when pre-shooting search for marine mammals began	Time when search for marine mammals ended	Was there any reason why marine mammals may not have been seen? (e.g. dark, fog, swell, etc.)	Were hydro-phones used?	Were marine mammals present in the 30 minutes before the airguns began firing?	If yes, give time when marine mammals were last seen	If marine mammals were present, what action was taken? (e.g. delay shooting)
10 May 03	N/A	1650	CONTINUES	IND. DOS	630	1930	Early in day, lots of swell, etc.	NO	NO	N/A	N/A
11 May	N/A	CONTINUES	CONTINUES	IND. DOS	630	1930	NO	NO	NO	N/A	N/A
12/MAR											
CHIEF	CONT	CONT	CONT	IND. DOS	630	1930	NO	NO	NO	N/A	N/A
AIRCUN	0430	0430	CONT	IND. DOS	630	1930	NO	NO	NO	N/A	N/A