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USA

31 August 2009

Lamont-Doherty Earth Observatory  
61 Route 9W, P.O. Box 1000  
Palisades, NY, 10964-8000

**Re: Toomey Week 1 Monitoring Report for 22-30 August 2009**

Dear Meagan,

The *Marcus G. Langseth* left port on 22 August and visual observations commenced on 23 August 2009. During the period 22-30 August, the marine mammal observers (MMOs) on the *Langseth* conducted ~100.5 h of observations; most observations (~61 h) took place during seismic acquisition (Table 1). One marine mammal sighting was made during this period (Table 2). No sightings occurred during seismic periods; thus, no shut downs or power downs of the airgun array were required. Beaufort wind force (sea state; Bf) during observations aboard the *Langseth* ranged from 2 to 6 within the study area, with 17.3% of the total effort (in h) occurring during conditions of  $Bf \leq 3$  and visibility  $\geq 6$  km.

Passive Acoustic Monitoring (PAM) took place for a total of ~89.8 h; most PAM effort (~88 h) occurred during seismic operations (Table 1). There were no acoustic detections made during this period.

**Table 1: Monitoring Effort during L-DEO's Toomey survey, Week 1, 22-30 August 2009**

Date 2009	Visual effort (h)		PAM* effort (h)	
	Seismic	No Seismic	Seismic	No Seismic
22 August	Transit to study area- no effort		Transit to study area – no PAM	
23 August	0	3.43	0	0
24 August	0	14.22	0	0
25 August	0	14.05	0	0
26 August	6.53	7.42	9.42	1.7
27 August	13.57	0	16.12	0
28 August	13.78	0	14.57	0
29 August	13.90	0	24	0
30 August	13.58	0	24	0
Totals	61.4	39.1	88.1	1.7

\* PAM summary by G. Caltavuturo, Right Waves.

**Table 2: Sightings during L-DEO's Toomey Survey, Week 1, 22-30 August 2009**

Date 2008	Time (Local)	Species	Number of Animals	During Seismic?
25 Aug.	13:18	Pacific White-Sided dolphins	10	No

Sincerely yours,

Joseph Beland

LGL LIMITED, environmental research associates

MMOs: Joseph Beland, Giovanni Caltavuturo, Brad Dawe, Kyla Graham, Megan Meyer, John Nicolas