

Acoustic Impacts on Marine Mammals from Subsea Oil & Gas Processing



DOE Strategy to Address Noise from Subsea Petroleum Processing Technologies



**MMS Workshop
Nov. 17-19, 2009
Boston, MA**

Marine Mammals and Noise
Marine Mammal Commission
March 2007

Advisory Committee on Acoustic Impacts on Marine Mammals
Marine Mammal Commission
February 2006

Effects of Subsea Processing on Deepwater Environments in the Gulf of Mexico
Minerals Management Service
May 2008

Addressing the Effects of Human-Generated Sound on Marine Life
Joint Subcommittee on Ocean Science & Technology (JSOST)
January 2009



Noise Types & Thresholds
High Level, Intermittent
Low Level, Continuous

Facilities Utilizing Subsea Petroleum Processing Technologies



Facility	Ceiba	Chinook	Draugen	Lufeng	Lyell	Marimba	Marlim	Mutineer/Exeter	Perdido	Topacio	Troll C	Tordis
Operator	Hess	Petrobras	Shell	Statoil	CNRL	Petrobras	Petrobras	Santos	Shell/Chevron	ExxonMobil	Statoil	StatoilHydro
Location	West Africa	Gulf of Mexico	North Sea	South China Sea	North Sea	Brazil	Brazil	Australia	Gulf of Mexico	West Africa	North Sea	North Sea
Depth (feet)	2,460	8,877	920	1,080	475	1,295	2,130	460	7,500	1,600	1,115	660

● Type 1 Facility ● Type 2 Facility