

Analyzing the safety of removal sequences for piles of an offshore jacket platform(PDF)

《船舶与海洋工程学报》[ISSN:1002-2848/CN:61-1400/f] 期数: 2009年04 页码: 311--315 栏目: 出版日期: 2009-12-25

Title: Analyzing the safety of removal sequences for piles of an offshore jacket platform

作者: 潘新颖; 张兆德

Author(s): PAN Xin-ying^{1*} and ZHANG Zhao-de²

1. College of Engineering, Ocean University of China, Qingdao 266100, China 2. School of Naval Architecture and Civil Engineering, Zhejiang Ocean University, Zhoushan 316100, China

关键词: [jacket platform](#); [removal](#); [safety analysis](#); [stress](#)

分类号: -

DOI: -

文献标识码: A

摘要: An inevitable consequence of the development of the offshore petroleum industry is the eventual obsolescence of large offshore structures. Proper methods for removal of decommissioned offshore platforms are becoming an important topic that the oil and gas industry must pay increasing attention to. While removing sections from a decommissioned jacket platform, the stability of the remaining parts is critical. The jacket danger indices $D\sigma$ and D_s defined in this paper are very useful for analyzing the safety of any procedure planned for disassembling a jacket platform. The safest piles cutting sequence can be determined easily by comparing every column of $D\sigma$ and D_s or simply analyzing the figures of every row of $D\sigma$ and D_s .

参考文献/REFERENCES

- [1] SCHROEDER D M, LOVE M S. Ecological and political issues surrounding decommissioning of offshore oil facilities in the Southern California Bight[J]. *Ocean & Coastal Management*, 2004, 47: 21-48.
- [2] YANG Hongsheng, GAO Haitao, HAN Chengzhang. The project decision-making research of the decommissioning offshore platform removing[J]. *Ocean Technology*, 2004, 23: 81-84.
- [3] EICHER J A, GUAN H, JENG D S. Stress and deformation of offshore piles under structural and wave loading[J]. *Ocean Engineering*, 2003, 30: 1791-1806.
- [4] GJERDE P, PARSONS S J, IGBENABOR S C. Assessment of jack-up boat impact analysis methodology[J]. *Marine Structures*, 1999, 12: 371-401.
- [5] ZHOU Sucheng, ZHANG Taiji. A study on the decommissioning and abandonment technology and engineering of offshore oil platform[J]. *China Offshore Platform*, 2002, 16: 1-6.
- [6] PARENTE Virginia, FERREIRA. Doneivan, dos Santos E M, et al. Offshore decommissioning issues: Deductibility and transferability[J]. *Energy Policy*, 2006, 34: 1992-2001.
- [7] JIN Weiliang, SONG Jian, GONG Shunfeng, et al. Evaluation of damage to offshore platform structures due to collision of large barge[J]. *Engineering Structures*, 2005, 27: 1317-1326.

备注/Memo: -

更新日期/Last Update: 2010-05-20

导航/NAVIGATE

[本期目录/Table of Contents](#)

[下一篇/Next Article](#)

[上一篇/Previous Article](#)

工具/TOOLS

[引用本文的文章/References](#)

[下载 PDF/Download PDF\(383KB\)](#)

[立即打印本文/Print Now](#)

[推荐给朋友/Recommend](#)

统计/STATISTICS

摘要浏览/Viewed 469

全文下载/Downloads 381

评论/Comments

