

1. Introduction

In accordance with the environmental policy of BP (the operator of AlOC, the Azerbaijan International Operating Company), a survey of the marine environment in the vicinity of the Chirag Oil Production Platform (see figure 1.1) was conducted in July and August 2010. Figure 1.2 gives the position of the Chirag platform in relation to other operation platforms within the ACG contract area.

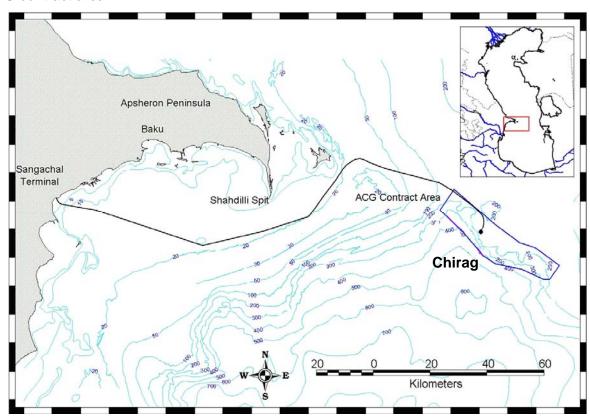


Figure 1.1 Location of Survey Area, Chirag Benthic Survey 2010

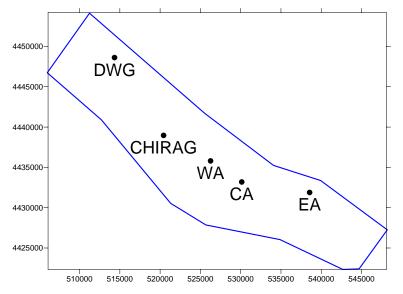


Figure 1.2 ACG Platform Positions

- DWG- Deep Water Gunashli
- CHIRAG- Chirag
- WA- West Azeri
- CA- Central Azeri
- EA- East Azeri



1.1. Existing information

Environmental surveys have been carried out at the Chirag platform position in 1998, 2000, 2004, 2006 and 2008. The seabed of the survey area was investigated as part of AIOC's environmental monitoring programme. Data have also been collected on the hydrography in the area (AIOC, 2002) and the chemical and physiological responses of caged mussels (*Mytilaster lineatus*) deployed in the water column (AmC, 2004).

1.2. Scope of work

The objective of the survey is to provide data on the current status of the benthic environment in the vicinity of the Chirag platform:

- To provide information on the sediment chemistry, macrobenthic fauna and physical characteristics in the vicinity of Chirag platform.
- Where relevant compare the data collected with previous data sets from similar surveys completed since 1995 (Baseline survey in 1995, environmental surveys in 1998; 2000; 2004; 2006 and 2008 environmental surveys, 2004 biomonitoring and 2002 hydrography data)
- If the changes to the sediment chemistry, macrobenthic fauna and physical characteristics in the vicinity of the platform are identified, assess if they can be attributed to natural or anthropogenic stresses
- If changes observed are considered to be associated with anthropogenic stresses, this
 should be highlighted and the potential role of BP's construction and production activities
 should be assessed. Specific references should be made to drilling or other operational
 impacts.
- After contamination levels have been ascertained, eight stations will be selected for assessment of the toxicity of the sediment by exposing animals to the sediment in laboratory conditions (bioassay). These stations will be selected to give a full range of contamination, and maximum possible spatial coverage.

1.3. Survey design

The 2010 survey planned to revisit the 33 locations sampled on the 2008 survey. The station layout is given in figure 1.3 below. Due to numerous failed sample attempts the position of station 54 was moved 20m SW.

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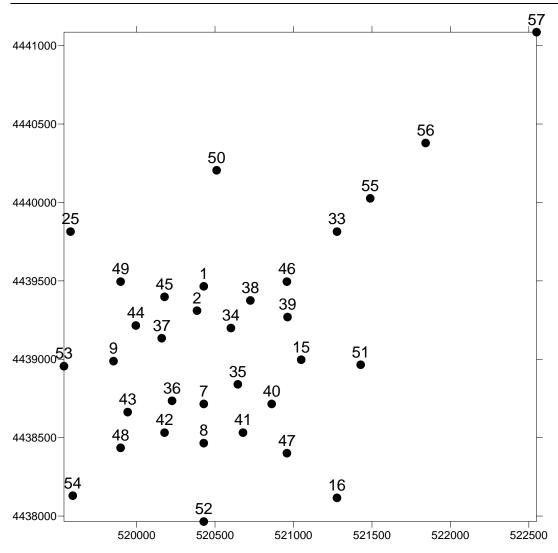


Figure 1.3 Location of survey sample stations

1.4. Discharge & Spill Data

Drilling discharge data is given in table 1.1. A total of 890 metric tonnes of drill cuttings and associated fluids was discharged between 2008 and 2009, and total of 995 metric tonnes of synthetic base fluid was discharged between 2008 and 2010.

Information on spills and accidental releases from the platform between 2006 and 2010 are given in table 1.2. In total 30 litres of hydraulic oil was accidentally released to the sea from the platform between 2008 and 2010.



Table 1.1 Drilling Discharged Data Chirag 2006-2010

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|-------|-------|------|------|---------|
| Drilling Metrics | | | | | |
| Drill Cuttings and Associated Fluids Discharged to Water (te) | 1,563 | 6,811 | 808 | 890 | No Data |
| Drill Cuttings Assoc.Fluids Disch to Water (Surface Hole) (te) | 0 | 0 | 0 | 0 | No Data |
| Drill Cuttings & Assoc.Fluids Recycled (te) | 31 | 54 | 93 | 101 | No Data |
| Discharges to Water | | | | | |
| Oil Discharged in Muds & Cuttings (te) | 0 | 0 | 0 | 0 | 0 |
| Oil Discharged in Produced Water & Effluent (te) | 0 | 0 | 0 | 0 | 0 |
| Total Hydrocarbon Discharges to Water (te) | 0 | 0 | 0 | 0 | 0 |
| Synthetic Base Fluid Discharged in Drilling Muds & Cuttings (te) | 354 | 1,400 | 458 | 508 | 487 |

Table 1.2 Spill Data Chirag 2006- 2010

| Date | Material Type | Total Volume (liters) | Volume Recovered | |
|------------|------------------|-----------------------------|---------------------|-----|
| 06/05/2007 | Lube Oil | 0.25 | 0 | Sea |
| 14/05/2007 | Brine | 25000 | 0 | Sea |
| 07/11/2007 | Chemical | 7 | 0 | Sea |
| 16/06/2008 | Lube Oil | 12.96 | 0 | Sea |
| 18/12/2008 | Brine | 300 | 0 | Sea |
| 19/02/2009 | Oily water | 0.5 | 0 | Sea |
| 09/04/2010 | Hydraulic Oil | 404 | 374 | Sea |

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