

**Aviation Safety Investigation Report  
199800313**

**Bell Helicopter Co  
412**

**17 January 1998**

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**NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at [www.atsb.gov.au](http://www.atsb.gov.au).**

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**Occurrence Number:** 199800313                      **Occurrence Type:** Incident  
**Location:** 209km NE Truscott, (ALA)  
**State:** Other                      **Inv Category:** 4  
**Date:** Saturday 17 January 1998  
**Time:** 1800 hours                      **Time Zone** CST  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Bell Helicopter Co  
**Aircraft Model:** 412  
**Aircraft Registration:** VH-BZH                      **Serial Number:** 33044  
**Type of Operation:** Charter                      Passenger  
**Damage to Aircraft:** Nil  
**Departure Point:** Truscott NT  
**Departure Time:** 1657 CST  
**Destination:** Southern Cross Oil Rig

**Approved for Release:** Saturday, July 11, 1998

## FACTUAL INFORMATION

The helicopter was being refuelled on an oil rig. The fuel sample taken from the oil rig fuel tank before fuelling commenced was clear of contaminant. However, the sample taken after fuelling was completed had a different colour and displayed obvious contamination with fine metallic and other particles. The helicopter was de-fuelled and its fuel system cleaned before it was released to service.

The oil rig operator reported that the contaminant had been inadvertently left in the oil rig fuel tanks after the rig had undergone refit in Singapore. The operator also reported that the fuel was regularly tested, although the testing carried out had not discovered the contaminant. The contaminant was only discovered when the rig's fuel pumps had been run for sufficient time to refuel the helicopter. The time was probably sufficient to stir the contents of the tank and bring the contaminant into suspension where it was delivered to the helicopter. The refuelling procedures used appeared to have been appropriate to ensure the helicopter did not take off with contaminated fuel. However, the procedures were not adequate to ensure good quality fuel was delivered to the helicopter.

## SAFETY ACTION

As a result of this occurrence, the Bureau of Air Safety Investigation (BASI) is reviewing the adequacy of aviation fuel quality control procedures on oil rigs. Any safety action arising from this review will be forwarded to the relevant action agencies and will be published in the BASI Quarterly Safety Deficiency Report.

