Department of
MNERALSAND ENERGY
western australia

## EXPLORATION DRILL HOLE INTERSECTION

## INCIDENT

A RC drill rig carrying out surface exploration drilling intersected an old drill hole which had been plugged and was no longer visible from the surface. A build up of air pressure in the old hole resulted in the cement plug being blown out of the hole, narrowly missing the driller's offsider.

## CONTRIBUTORY FACTORS

The following factors are considered to have contributed to this incident.

- Exploration drilling was being conducted in an area where previous drilling and rehabilitation had taken place, which included plugging of holes.
- As a consequence of the rehabilitation work carried out, personnel were not able to locate the old drill hole collars.
- The new hole (called a scissor hole), while being drilled in the opposite direction to the orientation of the old hole, was drilled on the same plane, resulting in the intersection of the old hole.


## RECOMMENDATIONS

Prior to commencing exploration drilling in an area the following information and strategies should assist in the prevention of incidents associated with intersections of old drillholes.

- $\quad$ Site information containing historical data on previous drilling should be obtained prior to the commencement of an exploration drilling programme. The information should include the surveyed location of the drill holes together with the orientation and inclination of each hole. Prior to commencement of the drilling programme, this information should be recorded on a plan which can be made available to geological staff and drilling personnel.
- All new drilling programmes should be offset from any previous drilling undertaken by a minimum distance of 5 metres in both horizontal and vertical planes.
- For ease of identification of hole locations, concrete plugs should be redesigned to include tubing which will project to ground level and the insertion of a metal disc for detection by a metal detector.

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