

# DDAS Accident Report

## Accident details

<b>Report date:</b> 14/01/2008	<b>Accident number:</b> 471
<b>Accident time:</b> 07:27	<b>Accident Date:</b> 05/02/2007
<b>Where it occurred:</b> MF ID - NN 28, North North Sector, Beir Mathkour, Wadi Arabia Region	<b>Country:</b> Jordan
<b>Primary cause:</b> Unavoidable (?)	<b>Secondary cause:</b> Unavoidable (?)
<b>Class:</b> Excavation accident	<b>Date of main report:</b> 12/02/2007
<b>ID original source:</b> ID - NN 28 05/02/07	<b>Name of source:</b> [Name removed]
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> No 10 AP blast	<b>Ground condition:</b> dry/dusty hard sandy
<b>Date record created:</b> 14/01/2008	<b>Date last modified:</b> 14/01/2008
<b>No of victims:</b> 1	<b>No of documents:</b> 2

## Map details

<b>Longitude:</b>	<b>Latitude:</b>
<b>Alt. coord. system:</b>	<b>Coordinates fixed by:</b> GPS
<b>Map east:</b> E 30.6418	<b>Map north:</b> N 35.2448
<b>Map scale:</b>	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

long handtool may have reduced injury (?)  
metal-detector not used (?)  
no independent investigation available (?)  
standing to excavate (?)  
use of rake (?)

## **Accident report**

The report of this accident was made available in August 2007 as a PDF file. Its conversion to a text file for editing means that some of the formatting has been lost. The substance of the report is reproduced below, edited for anonymity. The original PDF file is held on record.

### **INCIDENT REPORT**

ISRAELI MINEFIELD NO - 71390013

MINEFIELD TASK ID - NN 28, SECTOR- NORTH NORTH, PLACE- BEIR MATHKOUR,  
REGION- WADI ARABA

INVESTIGATION CONDUCTED BY – [Demining group Operations Manager]

DEMINER: [the Victim]: DATE OF BIRTH: 21/03/1972

SECTION COMMANDER and TEAM LEADER: [Names removed]

TEAM: MANUAL TEAM ONE

TIME OF ACCIDENT: 07:27 AM

DATE OF ACCIDENT: 05 FEBRUARY 2007

NATURE OF INJURY: Three minor injuries in cheek and chin

TYPE OF MINE: No-10 Israeli Anti Personnel Mine

### **Description of the incident**

Organisation name: [Demining group], JORDAN Team No: MANUAL TEAM ONE

Incident date: 05/02/2007: Time: 07:27 AM

Type of incident: uncontrolled detonation of a No.10 AP blast mine. Device was detonated while raking with Heavy Rake.

### **Narrative**

A mine blast incident occurred at approximately 07:27hrs on Monday 05/02/2007 in the lane No-2 in the minefield 71390013. The deminer detonated a No-10 Israeli anti personnel blast mine due to hacking. At the time of the incident the deminer was wearing the PPE (Body vest and Goggles). The deminer clearing the mine belt hit the mine on the top by heavy rake resulted in a mine blast. The deminer sustained THREE MINOR INJURIES IN UPPER LIP AND LEFT CHEEK/CHIN.

The metal head of the Heavy rake was slightly damaged.

### **Site conditions**

The ground at the time of the accident was described as "medium flat". The weather was clear and cold. The vegetation in the area was light bush.

Below: Mine Blast Location



Below: Heavy Rake Damage, tines slightly bent and splayed.



### **Team and task details**

The demining team was established 210 days before. It had been at this site for three months and working on the Task where the accident happened for three weeks. The team had been working for less than an hour on the day that the accident happened.

The hand-tool in use was the Heavy rake. The PPE in use was the Vest and Goggles.

### **Medical & First Aid**

It took five minutes for the Victim to be taken to the site Medical Point where he was treated for 12 minutes before being taken to the Aqaba hospital by ambulance. The journey took 48 minutes. The total time between accident and hospital was 65 minutes. The Victim was kept in the hospital for three hours.

### **Reporting procedures**

The investigation was conducted by [the Operations Manager]. This report was compiled/translated by [Name removed]. The report was printed on 12/02/2007.

### **Attachments:**

Statements by Injured Members

Statements by Witnesses

## Victim Report

**Victim number:** 631

**Age:** 34

**Status:** deminer

**Compensation:** Not made available

**Protection issued:** Frontal apron  
Goggles

**Name:** [Name removed]

**Gender:** Male

**Fit for work:** yes

**Time to hospital:** 65 minutes

**Protection used:** Frontal apron, Goggles

### Summary of injuries:

INJURIES: minor Face

COMMENT: See Medical report.

### Medical report

No formal medical report from a hospital was made available.

Three very minor facial injuries are shown in the picture below.



### Medic's Data Sheet

Age: 34 years

Blood Group: B+

07:34: - BP 140/94, Pulse 76, Breathing 18

07:42: - BP 130/90, Pulse 72, Breathing 16

"Little worried and depressed due to mine blast. General condition good."

“Small wounds on lips and cheek due to fragmentation. Wound washed with normal saline apply iodine. Check all body and other things. There is no any other problems with him. Ears also well.”

## **STATEMENTS**

### **Statement1: Team Leader**

Date: 05 Feb 2007

The injured Deminer was a mine locator until the day before the accident, and then I sent him to another section since there no mines. At the accident time I was in section number one with a deminer to check his work, I heard the blast then I called the senior medic and ambulance to the accident location. Then under my command causality evacuate to clear area, the medics gave first aid and send him to the hospital by 7:44, in between 7:30 I gave all the accident information's to Mr. Selvam by mobile. After I sent the casualty I called the deminers to control point for briefing, head counting and giving information's about the accident.

### **Statement 2: Senior medic**

Date: 05 Feb 2007

At the same time of accident I was standing with section medic Mr. Tehssir (medic) casualty evacuation to a clear area at 7:32. I attend the case with the support of Mr. Ayman (medic), and Mr. Tehssir, there is two injuries at the lips, and one at the face. His general condition was good and stable, blood pressure and pulse was normal and he was conscious. Refer the case to Risha clinic by ambulance number 6 accompanied with Mr.Ayman and the same blood group Rakan. Give all the information of accident to Mr.Samer (medical coordinator).

### **Statement 3: Section Commander**

Date: 05 Feb 2007

I was working in the lane one at 71390012 MFD, and then I heard the blast at 7:27, we did what is necessary (casualty evacuation, and calling the site medic).

### **Statement 4: deminer**

Date: 05 Feb 2007

I was working close to Mr. Saleh Albawwat (the injured deminer), I was busy working at my site, I heard the blast, I saw the deminer laid on the ground, and then I shouted to inform about the accident, then I collect my tools and went out to the safe area. I stayed out of the lane by the command of the team leader.

### **Statement 5: The Victim**

Date: 05 Feb 2007

I was working at my site, and as I heard that site was a flood plane and has missed mines. I started removing the soil to depth of 10 cm, then I [was] surprised by the mine blast. Then they moved me to the site medic and they gave me the first aid.

## **Analysis**

The primary and secondary cause of this accident are listed as “Unavoidable” because the hard crust on the ground surface could only be broken by using force. In this case, that force was enough to detonate the mine. The demining group had put in place the use of a long tool (rake) that kept the Victim far enough away from a blast to avoid injury, and his PPE was largely effective at protecting him from any risk remaining at that distance. Had he been using conventional short hand-tools, more severe injury would have been expected.

This demining group acknowledge the fact that stand-off (distance from the detonation) is the most effective PPE and their Rake Excavation system makes use of this. It is possible that the extreme length of the tool makes initiation of small AP blast mines with the Heavy rake more likely, but any increased risk of initiation is offset by the reduced chance of that initiation resulting in injury. The accident is a good example of balancing an effective demining process and PPE to result in a very low risk of injury.