

DDAS Accident Report

Accident details

Report date: 15/01/2008	Accident number: 476
Accident time: 11:40	Accident Date: 16/07/2006
Where it occurred: MF No.006, Beyr Mathkour Village, North South Sector, Wadi Araba Province	Country: Jordan
Primary cause: Field control inadequacy (?)	Secondary cause: Inadequate training (?)
Class: Excavation accident	Date of main report: 25/07/2006
ID original source: MF No.00616/07/06	Name of source: JES
Organisation: [Name removed]	
Mine/device: No 10 AP blast	Ground condition: dry/dusty hard sandy
Date record created: 15/01/2008	Date last modified: 15/01/2008
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by: GPS
Map east: E 035.19843	Map north: N 30.50564
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

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

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.

INITIAL INCIDENT REPORT

Mine Accident Report

(Preliminary details only, completed report to follow once all investigations completed).

A. Organization Name and Team Number:

[Demining group], Mine Action Team, Jordan. Team Number 2

B. Location of team: Wadi Araba Region, Beyr Mathkour Village, Mine Field Number – 006

C. Date and Time of Accident: 16/07/2006, 11:40hrs

D. Details of the accident:

While performing demining inside the mine field one No-10 Israeli anti personnel mine blasted and deminer sustained minor injury in his right arm.

E. Casualty Name: [Name removed]

Injuries: MINOR INJURY IN RIGHT ARM.

F. Casualty classification: IN GOOD CONDITION

G. Current location of injured: At South sector minefield at Beyr Mathkour

H. Evacuation Plan:

Casualty was treated by section medic on site and evacuated to Risha health centre and further transferred to Princess Haya Hospital, Aqaba for further treatment.

I. Accident occurred inside the minefield

J. Activity being carried out when accident occurred: Manual Demining activity

K. Type of mine/UXO: No-10 Israeli Anti-Personnel Blast Mine

L. Description of immediate future actions in regards to the accident: Work was stopped immediately for further investigation.

Accident lane closed for further investigation.

M. Casualty Classification: Injured deminer in Priority Four (Superficial wounds).

INDEPENDENT INVESTIGATION REPORT

OF MINE INCIDENT AT BEYR MATHKOUR

INVESTIGATION DATE: 16.07.2006

[This was not an “independent” investigation: it was carried out by demining group staff members.]

INCIDENT INVESTIGATION FOR [Demining group] – MINE ACTION TEAM - JORDAN

ISRAELI MINEFIELD NO-006

NORTH SOUTH SECTOR, BEYR MATHKOUR, WADI ARABA

GRID REF: N 30.50564: E 035.19843

16 JULY 2006

INTRODUCTION:

A [Demining group] manual mine clearing team is presently working in the Israeli minefields at sector north sector in Beyr Mathkour. On 16 July 2006, 33 local deminers were engaged in clearance operations.

At 11:40 Hrs one of the deminers of No-4 section [the Victim] while working in lane No-6, hit a mine on the top and resulted in a mine blast and he sustained minor injury in his right arm and eyes were filled with loose sand.

The [Demining group] Operational Manager was asked formerly by the Base Manager to conduct the investigation. This investigation was conducted the same day after the accident.

LOCATION OF ACCIDENT: Wadi Araba province, North sector near village Beyr Mathkour.
Grid References: N 30.50564 E 035.19843

PERSONS/PERSONNEL PRESENT ON OPERATIONAL SITE:

[Name removed], Team Leader of No-1 manual team

[Name removed], Team Leader of No-2 manual team

[Name removed], Sector Administrator

[Name removed], National Medical Co-ordinator

PERSONNEL INVOLVED IN THE INVESTIGATION:

[Name removed], [Demining group], Operations Manager

[Name removed], Sector Administrator

[Name removed], Translator

GENERAL OVERVIEW:

A mine blast incident occurred at approximately 11:40hrs on Sunday 16/07/2006 in the lane No- 7. Deminer [the Victim] detonated a No-10 Israeli anti personnel blast mine. At the time of the incident the deminer was wearing the PPE but the goggles were on his forehead. The deminer turned his head towards back side and asking [the] time from the other deminer who his working behind him. The deminer was not focussing on his work and hit the mine on the top by heavy rake resulted in a mine blast. The deminer sustained minor injury in his right arm and eyes fill with mud [actually, dry sand/earth].

Immediately after the mine blast the section commander rushed to the lane and brought the injured deminer from the minefield. The deminer was then given initial first aid treatment by the section medic and the national medical coordinator. After the first aid the casualty was sent to primary health centre at Risha. After the advance treatment by doctor of Risha hospital he was sent to Aqaba Princess Haya Hospital for further treatment.

At 15:00hrs in the evening the deminer discharged from the hospital after the necessary treatment. The deminer is in a stable and good condition.

OBSERVATIONS:

This accident should not have happened, there were some main factors that should have been more than enough for an accident.

- (a) During the work hours the deminer are not concentrating on his work.
- (b) The deminers are used to speak with each other (verbal communication) while working.
- (c) The PPE (goggles) are not worn during the work hours as instructed.
- (d) The deminers are hacking with the heavy rake.
- (e) The safety rules were not followed as per SOP.
- (f) The section commander failed to supervise his section deminers.

RECOMMENDATIONS:

It is recommended that this kind of violation of the safety rules and drills should stop immediately. Those who are failing to adhere to the rules should be given severe punishments. The section commanders should be warned to pay more attention towards the safety of his section deminers.

Signed: Operations Manager, [Demining group] Mine Action Team, Jordan.

INCIDENT REPORT

ISRAELI MINEFIELD NO - 70370006

MINEFIELD TASK ID-NS-10-16

SECTOR- NORTH SOUTH, PLACE- BEYR MATHKOUR, REGION- WADI ARABA

INVESTIGATION CONDUCTED BY – [Demining group], OPERATIONS MANAGER

SECTION COMMANDER and TEAM LEADER: [Names removed]

TEAM: MANUAL TEAM NO-2

TIME OF ACCIDENT: 11:40 AM

DATE OF ACCIDENT: 16 JULY 2006 SUNDAY

NATURE OF INJURY: MINOR INJURY IN RIGHT ARM

TYPE OF MINE: NO-10 ISRAELI ANTI PERS MINE

IMSMA DETAILED REPORT

SUNDAY, 16 JULY 2006, 11:40AM

Beyr Mathkour Village, North South Sector, Wadi Araba Province

[Demining group] MANUAL TEAM NO-2, SECTION 4, deminer hit a buried No.10 anti pers mine from the top and resulted in a mine blast. [The Victim] – deminer – minor injury in right arm – raking.

[The accident site is shown below. The blue sticks mark the positions of recovered mines.]



The crater depth was approx 15cm and its width approx. 30cm.

The weather on the day was clear and hot. The ground was medium, flat. There was no vegetation.

The deminer had been working that day for four hours before the accident. He was wearing a protective Vest and Goggles [goggles worn on forehead].

[The undamaged goggles are shown below.]



Medical

It took two minutes for the Victim to reach the Section Medical Point. He was treated there for 28 minutes before being taken to Risha hospital, which took twenty minutes. He was in the hospital for one hour. [He was then moved to Princess Haya Hospital in Aqaba. It took 59 minutes for the Victim to reach a hospital.

Reporting

Investigation conducted by: [Demining group], Operations Manager

Report compiled/translated by: [Name removed] Sector Administrator

Printed: Date: 25/07/2006

Attachments:

Statements by Injured Members

Statements by Witnesses

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

Date: 16/07/2006, Sunday

Location: Beyr Mathkour

Team No: No-2 Manual Team and Section 4

1) Background Information:

A mine blast incident occurred at approximately 11:40hrs on Sunday 16/07/2006 in the lane No-6. Deminer [the Victim] detonated a No-10 Israeli anti personnel blast mine. At the time of the incident the deminer was wearing the PPE but the goggles were on his forehead. The deminer turned his head towards back side and asking time from the other deminer who his working behind him. The deminer was not focussing on his work and hit the mine on the top by heavy rake resulted in a mine blast. The deminer sustained minor injury in his right arm and eyes fill with mud [dust/earth].

[The crater and the rake in use are shown below.]



2) Actions taken following incident:

Immediately following the incident the following action have been taken.

- (a) Immediately work stopped and all deminers assembled at the control point.
- (b) Accident lane Closed and nobody entered the lane.
- (c) Information given to Aqaba Base Manager and Programme Manager for further informing to NCDR Manager.

3) Follow up action / Investigation:

- (a) After the incident [Demining group] Operations Manager conducted the incident investigation.
- (b) Work was suspended for the next 24 hours.
- (c) On 18 July 2006 all deminers have been explained the cause of accident and 2 hours refresher training has been conducted.

4) Recommendations:

The Team leaders and section commanders have to ensure that all deminers should wear the goggles while working inside the minefield. Anybody violating the rule should be suspended immediately without delay.

Victim Report

Victim number: 636	Name: [Name removed]
Age: 23	Gender: Male
Status: deminer	Fit for work: yes
Compensation: Not made available	Time to hospital: 50 minutes
Protection issued: Frontal apron Goggles	Protection used: Frontal apron

Summary of injuries:

minor Arm

minor Eyes

COMMENT: See Medical report.

Medical report

[Photographs taken later that day showed the Victim with a bandaged forearm and bright, clear eyes.]

Internal medic's report

10:50 – BP 110/65, pulse 64, Breathing:18pm

12:30 – BP 114/80, pulse 62, Breathing 16pm

01:30 – BP 120/80, pulse 64, breathing 16pm

Eyes – “minor injury due to hot sand”

Arm – wound due to fragmentation Lt hand small wound.

Normal dressing, eye wash and medication.

Hospital report

PT 23 years old DoB: 19/05/1983

Wound in the right arm

Foreign body in eyes both

Shrapnel in the Rt forearm in direct contact with the ulna.

Treatment: Wound care ad dressing and to be seen in the orthopaedic clinic after 2 days.

Bilat, Multiple superficial abrasions over the cornea.

Recommendations: Follow up n the orthopaedic and ophthalmology Clinic.

Patient signed off work for seven days.

Signed: orthopaedic surgeon.

Operations Manager: "At 15:00hrs in the evening the deminer discharged from the hospital after the necessary treatment. The deminer is in a stable and good condition."

STATEMENTS

All Statements were taken by [Name removed] Sector Administrator

Statement No.1: Victim

I am [Name removed], Deminer of 4 section in team No-2. I have been Working for last 14 days in this position. On Sunday 16/07/2006 while performing my regular duties with Team No. 4, wearing all my PPE and the goggles on my forehead. At the time of the accident I was talking to my colleague who was working behind me. By mistake I hit on the top of mine and it suddenly exploded and sustained minor injury in my right arm and the dust spread all over my face. I realized what exactly happened and it surprised me and I ran backwards. Immediately the team leader came in side the lane evacuated me to the section medic point where I received the first emergency aid and then I was transferred to Risha Medical Center for advance first aid treatment. After that I was transferred to Princess Haya Hospital in Aqaba where I received good medical treatment and by evening discharged from the hospital. I realized my mistake thank God.

Signed and dated 18/07/2006

Statement No.2: Section Commander

I am [Name removed], Section commander of No-4 section in Team No-2. state that on 16 July 2006 and around 11:40 hours I noticed that Deminer [the Victim] was working in the lane and not wearing goggles and was talking to his colleague [Name removed] who was working behind him. While performing his duties. [His colleague] asked him about the time and both were not paying keen attention to their work. As a result of this a Mine exploded in the [Victim's] lane and injured the deminer [the Victim]. I immediately went inside the lane and assisted him to come out of minefield to where the Medics are located. In section medical point he was given the necessary first aid and immediately transferred to Risha Hospital.

Signed and dated 18.07.06

Statement No.3: deminer

I am [Name removed], deminer of No-4 section working in the minefield behind of [the Victim]. At the time of accident the deminer who was injured turned behind towards me asked me about the time and he did like this several times. During the time of accident he turned towards me and I heard an explosion and when I looked towards my colleague I realized this was caused by an Anti Personal Mine explosion. When the explosion occurred I did not rush to my colleague immediately. I saw he is covering his face by his hands and the section commander assisted him to go out of minefield Medics carried him near a tree and given first aid. When Investigator asked him was [the Victim] was wearing special protecting eye goggles when the explosion occurred; he answered no the injured deminer did not wear the goggles at the time of accident.

Signed.

Statement No.4: Section Medic

I am [Name removed], Section medic of No-4 section. While I was sitting at the section medical point near a tree suddenly I heard an explosion occurred. Immediately I rushed to the incident location with my medical equipment bag. When I reached the location saw that Section commander put the injured Deminer on a special blanket where the injured Deminer was laying. The National Medical Coordinator [Name removed] arrived to assist in treating the injured Deminer. The deminer sustained minor injury in his right arm and sand entered into his eyes. We offered him first aid by washing his eyes and put bandage around his injured hand. After that we transferred the injured Deminer to Risha Medical Center by our Ambulance where he was given further necessary treatment by the Doctor on duty and he was transferred to Princess Haya Hospital, Aqaba in order to check his eye sight by a specialist. Risha Medical Centre Doctor informed the Police Department of the accident to take necessary action and investigation. It took approx 40 minutes from the time first aid was provided at location till injured deminer was transported and reached Risha Medical Center.

Signed.

Analysis

The primary cause of this accident is listed as a "Field control inadequacy" because the Victim was working with his eye-protection raised and not looking at what he was doing. The fact that he had turned away to talk to a colleague when he struck the mine was probably lucky. His very obvious breaches of SOP should have been corrected. The secondary cause is listed as "Inadequate training" because several SOP breaches were identified and this implies that the deminer (and/or his supervisors) did not understand how important the SOPs were to safety.

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 serious injury, but he was still lucky to have turned his head and so moved his eyes from the most vulnerable position. His light arm injury may have been caused by the rough wooden handle of the rake. Of course, if he had been watching what he was doing he might not have initiated the mine. The raking process that this demining group has pioneered is only safe if systematically conducted in a disciplined manner. As with any tool, rakes can be misused. The most common misuse is "Hacking" at hard ground with the Heavy rakes, which this man did. The distance still provided some protection and probably prevented a more severe facial injury.