

# DDAS Accident Report

## Accident details

<b>Report date:</b> 07/03/2011	<b>Accident number:</b> 699
<b>Accident time:</b> 07:40	<b>Accident Date:</b> 27 <sup>th</sup> May 2009
<b>Where it occurred:</b> MF 387, Al Shajarah Village, Alramtha Province	<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> 27 <sup>th</sup> May 2009
<b>ID original source:</b> None	<b>Name of source:</b> Demining group
<b>Organisation:</b> [Name removed]	
<b>Mine/device:</b> M14 AP blast	<b>Ground condition:</b> Grassland, soft
<b>Date record created:</b>	<b>Date last modified:</b> 07/03/2011
<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> Not recorded	<b>Coordinates fixed by:</b>
<b>Map east:</b>	<b>Map north:</b>
<b>Map scale:</b>	<b>Map series:</b>
<b>Map edition:</b>	<b>Map sheet:</b>
<b>Map name:</b>	

## Accident Notes

No independent investigation available (?)

Standing to excavate (?)

Use of rakes (?)

Detector pinpointing problem (?)

Non injurious accident(?)

## Accident report

An internal demining group accident report was made available. The conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [ ] is editorial.

The internal report is reproduced below, edited for anonymity.

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

TASK NAME AL SHAJARAH 1 (387), NORTH BORDER PROJECT. EAST SECTOR

GRID REF: [None], AL SHAJARAH 1

MINEFIELD NO:- 387, MINEFIELD TASK ID:- E 387 AL SHAJARAH 1, SECTOR:- EAST

INVESTIGATION CONDUCTED BY – [Name removed]

DEMINER: [the Victim]: DATE OF BIRTH: 02/09/1970.

SECTION COMMANDER : [Name removed]. TEAM LEADER: [Name removed].

TIME OF INCIDENT: 07:40 AM. DATE OF INCIDENT: 27 MAY 2009

NATURE OF INJURY: No Injury. TYPE OF MINE: Anti Personnel M 14

**IMSMA DETAILED REPORT FOR MINE INCIDENT Wednesday, 27 May 2009**

**Part 1 – Description of the incident**

1. Organisation name [Demining group], JORDAN Team No: Metal Detector 10.
2. Incident date: 27/05/2009: Time: 07:40 AM
3. Location of incident: EAST SECTOR, Province: ALRAMTHA, Village: AL SHAJARAH: Project or task No: E 387 ALSHAJARAH 1
4. Name of site manager or team leader: [Name removed].
5. Type of incident: M14 AP MINE uncontrolled detonation of a mine
6. Device was detonated by: deminer
7. Device detonated while: Raking with Heavy Rake, Investigating
8. Device was found in an area classified as: a known hazardous area
9. Narrative (Describe how the incident happened. Attach additional pages and photographs or diagrams to assist in clarifying the circumstances surrounding the incident):

While the deminer try to investigate a signal using the heave RAKE after pinpointing it and finished with the light RAKE the deminer hit the non visible AP mine (M14) on the pressure plate which initiated the mine 2.2 metres away from the deminer .

**Part 2 – Injuries**

10. Did the incident result in any injuries? No
11. List people injured and nature of injury: [None]

**Part 3 – Equipment damages**

12. Did the incident result in any damage to equipment or property? No
13. List any mine action equipment or property damage: [None listed but the photograph below shows that the head of the Heavy Rake is damaged.]
14. List damage to equipment or property owned by a member of the public or the government. [None]

**Part 4 – Explosive hazard**

15. Provide details of mines/UXO/ other devices that were involved in the incident.

Device Type:      Method:      Determined by:

AP (Blast) Mine      Buried      RAKING

17. Comments (include measurements of any crater resulting from the explosion):

Crater Depth: approx. 15 cm / Width: approx. 40 cm

**Part 5 - Site conditions**

18. Describe the conditions at the site at time of the incident

Ground/Terrain: Soft, flat

Weather: Clear, hot

Vegetation: Heavy, bush [grassland]



[The accident site]

**Part 6 – Team and task details**

20. Qualifications of Member(s) involved in the incident:

Name	Position in Location	Occupation
[The Victim]	Deminer	Metal Detector 10

21. How long had this team been?

- a. At this site? 3 weeks
- b. working on this task? 1 month
- c. working on the day? 1:40 minutes

22. Detector type: N/A: Tripwire feeler used? No

23. Hand tool: HEAVY RAKE

24. PPE: Vest, Visor, [Blast boots]

25. Comments: [None]

**Part 7 - Medical & First Aid**

Medical treatment required: no

26. Medical Support at Incident Site: Medic, 1st Aid Kit, Stretcher, Ambulance, Safety Vehicle, Radio to call forward medic

27. Was a Mine Incident Drill carried out? Yes

28. Time and distance data

a. Time from incident to SECTION MEDICAL POINT: (01) minute

b. Time spent at site administering treatment: nil minutes

c. Time from evacuation FROM to arrival King Abdullah Hospital: nil minutes

### **Part 8 – Reporting procedures**

Reported by: [Name removed], [Demining group] Amman Office to: [Demining group] Offices & NCDR

Investigation conducted by: [Name removed], [Name removed]

Report compiled/translated by: [Name removed], [Name removed]

Verified by: [Name removed], [Name removed]

### **Observations and Recommendations**

According to the preliminary investigation the deminer approached to the mine using the proper procedure (15 cm from the side and front), but the depth was less than 15 cm, and the mine was deeply buried (about 18 cm).

Like incident can be avoided within the similar area where we expect the mines to be more than 15 cm depth by increasing the approach depth to 20 cm.

Signed: Operations Coordinator, 27 May 2009

### **Attachments:**

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries

Photographs of Incident Site

Copy of Incident Report

## **Victim Report**

<b>Victim number:</b>	<b>Name:</b> [Name removed]
<b>Age:</b> 38	<b>Gender:</b> Male
<b>Status:</b> Deminer	<b>Fit for work:</b> Yes
<b>Compensation:</b> Not appropriate	<b>Time to hospital:</b> Not appropriate
<b>Protection issued:</b> Frontal apron, Visor, blast boots	<b>Protection used:</b> Frontal apron, Visor, blast boots

### **Summary of injuries:**

COMMENT: No injuries. No Medical report was made available.

## **Statements**

### **Statement 1: the Victim**

At 7:40 am I put a base stick and brought the iron bucket to remove the bushes then I started using the metal detector twice and I heard a signal in the two times then I marked the signal place and started removing the soil using the light rake and checking the area with the metal detector but I still hear the signal then I made the same step but I still hear the signal then I used the heavy rake 15 cm far from the signal place and I dig 15 cm depth I started to reach the signal place but there were lots of bushes and heavy grass then the accident happened, I left the place and got out of the lane walking to the medic team but I was fine.

### **Statement 2: Section Commander**

At 7:40 am Wednesday 27th of May 2009 and while the deminer [the Victim] was working on lane 20 in Al-Shajarah mine field, he used the light rake but he didn't see the mine then he took a space 15 cm to the right and dig with the heavy rake but because of the heavy bushes there the accident happened then I informed the team leader and the medic team they came and checked on the deminer but he was fine.

### **Statement 3: Team leader**

At 7:40 am exactly in the 27th of May 2009 while I was checking on lane 19 I heard a sound of explosion from section 2 then I informed the section commander [Name removed] about it, I headed to the accident place and saw the de-miner whom the accident happened with [the Victim], he was in a good condition, the ambulance came In less than 10 minutes and they did their procedures and we stopped the work.

### **Statement 4: Witness Deminer**

While I was working on lane 21 at the 2nd round I heard a sound of explosion from the lane on my lift with the deminer [the Victim] at 7:40 am.

### **Statement 5: Medic**

An accident happened in al-Shajarah 1 area Lane 20 with the deminer [the Victim], he said he used the heavy rake after he heard the mine tone using the metal detector, after I heard about the accident I headed there and checked on the deminer he was in a good condition with no injuries and didn't need to be hospitalized.

## **Analysis**

The primary and secondary causes of this accident are listed as *Unavoidable* because the investigators found no problem with the way that the deminer was working. The demining group's use of PPE and long tools meant that no injury resulted.

The Medic mentions that the deminer told him he had first used his metal detector to pinpoint the mine, then used the heavy rake. Because he applied the heavy rake directly on top of the mine, there may have been a detector pinpointing problem.

The demining group who made this report available is thanked for its transparency and its professional concern to share lessons that can be learned from accidents. This record, along with several other records where rakes were used, provide compelling evidence that the controlled use of rakes can be both effective and safe.