

DDAS Accident Report

Accident details

Report date: 06/03/2011	Accident number: 678
Accident time: 08:55	Accident Date: 21/02/2010
Where it occurred: Jabir 3 MF369b, Jabir, Almafraq Province	Country: Jordan
Primary cause: Unavoidable (?)	Secondary cause: Victim inattention (?)
Class: Excavation accident	Date of main report: Not recorded
ID original source: None	Name of source: Demining group
Organisation: [Name removed]	
Mine/device: M14 AP blast	Ground condition: grass/grazing area hidden root mat rocks/stones
Date record created:	Date last modified: 06/03/2011
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by:
Map east: 36.20588 E	Map north: 32.50419 N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

no independent investigation available (?)
standing to excavate (?)
use of rake (?)
long handtool may have reduced injury (?)
disciplinary action against victim (?)

Accident report

A report of this accident was made available by the demining group involved in late 2010. Its conversion into a DDAS file has led to some of the original formatting being lost. Text in square brackets [] is editorial.

The internal investigation report is reproduced below, edited for anonymity.

Incident investigation for [Demining group] – MINE ACTION TEAM - JORDAN

Task Name Jabir 3 (369), north border project, east SECTOR

GRID REF: 32.50419 N: 36.20588 E

MINEFIELD NO: - 369 b, minefield TASK ID: - e 369 jabir 3

Investigation conducted by – [Demining group]

Officiated team LEADER: [the Victim]. DATE OF BIRTH: 18/07/1969

NIC NO (id NUMBER): [Removed]

TEAM LEADER: [Name removed]. Team: ALFA.

TIME OF INCIDENT: 08:55 AM: DATE OF INCIDENT: 21 February 2010

NATURE OF INJURY: Lesions in his Rt. Hand and Lf. Shoulder

TYPE OF MINE: Anti Personnel M 14

IMSMA DETAILED REPORT FOR MINE INCIDENT Sunday, 21 FEBRUARY 2010

Part 1 – Description of the incident

1. Organisation name: [Demining group], JORDAN, Team No: Alfa.
2. Incident date: 21/02/2010, Time: 08:55 AM
3. Location of incident: EAST SECTOR, Province: ALMAFRAQ, Village: Jabir, Project or task No: E 369 B Jabir 3
4. Name of site manager or team leader: [None]
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
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):

The Deminer was trying to check signal using the heavy rake, the M14 mine was laid in a grassy solid ground full of grass root and stones, the deminer tried to draw the grass by the heavy rake, the roots of the grass push the pressure plate of the mine, that cause the mine to blast.

Part 2 – Injuries

10. Did the incident result in any injuries? Yes
11. List people injured and nature of injury
[The Victim], Deminer, Lesions in his Rt. Hand and Lf. Shoulder

Part 3 – Equipment damages

12. Did the incident result in any damage to equipment or property? Yes

13. List any mine action equipment or property damage: Heavy Rake



[A photograph shows multiple fragment strikes on the Mask Visor lens and a chunk removed from the top of the lens.]



[A photograph showed the bent tine of the Heavy rake.]

14. List damage to equipment or property owned by a member of the public or the government. Include contact details of the owner or responsible person. NIL

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	Surface	using heavy

16. State specific device (if known): M14 AP MINE

17. Comments (include measurements of any crater resulting from the explosion): Crater Depth: approx. 15 cm / Width: approx. 30 cm.

Part 5 - Site conditions

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

Ground/Terrain: medium, flat

Weather: cloudy

Vegetation: heavy, grass

Part 6 – Team and task details

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

[The Victim], Deminer, Alfa Team

21. How long had this team been?

a. At this site? 2 months

b. working on this task? 2 months

c. working on the day? 2:30 hours

22. Detector type: F3: Serial Number: 14674, Detector status: Functional. Passed to [Name removed] for technical inspection at Jabir 3 site on 14 Feb 2010. Tripwire feeler used? No

23. Hand tool: GRASS CUTTER [sic]

24. PPE: Vest, Mask Visor

25. Comments: [None]

Part 7 - Medical & First Aid

Medical treatment required: yes

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: (06) minutes

c. Time from evacuation FROM to arrival King Abdullah Hospital: 28 minutes

Part 8 – Reporting procedures

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

Investigation conducted by: [Name removed].

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

Verified by: [Name removed]

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries

Photographs of Incident Site

Copy of Incident Report

Copy of Medical Report

Findings

The deminer did not reach the required depth for excavation. (pic. NO. 2)

The deminer did not conduct the visual check drill as per as SOP (grass still in the clearing box). pic. NO. 1



The deminer approach for the signal is not as per as SOP.

The deminer did not remove the stone which was partially appeared in the clearing box.

Signed: Investigation Officer [Name removed]

Observations and Recommendations

The mine blast incident occurred due to the ground condition (Hard roots and underneath stones) it is recommended to issue a verbal warning order to the deminer.

Signed: Operations Manager, 21 February 2010

Victim Report

Victim number: 861	Name: [Name removed]
Age: 40	Gender: Male
Status: supervisory	Fit for work: presumed
Compensation: Not made available	Time to hospital: 35 minutes
Protection issued: Frontal apron Mask Visor blast boots	Protection used: Frontal apron, Mask visor, blast boots

Summary of injuries:

INJURIES: minor Arms, minor Hand

COMMENT: A Medical report in Arabic is held on file. Photographs on file show multiple superficial fragmentation injuries on the Victim's forearms and left upper-arm (not shoulder).

Statements

Statement 1: the Victim

I was clearing the box (cluster) in front of me when the team leader came and checked the box to tell me that there are 3 signals inside of it then he went to another deminer and I continued working and I really heard 3 signals, after checking the first signal I went to check the second one and there were a stone I couldn't remove with my hand so I used the heavy rake to remove it and while am pulling it the mine exploded and team leader came with the whole team and they evacuated me to the medic point.

Answers to Investigator Questions:

Yes, the area has lots of stones and grass.

Yes, I tried to remove the stone but I couldn't.

No, I wasn't upset that day and my spirit was very high.

Yes, I used the light rake but the nature of the ground was very hard so it didn't work at all.

Yes, I used the signing triangles.

Yes, the team leader gave us the safety brief and all the instructions before we started working.

No, there was no problem with the detector.

Statement 2: Team Leader

Before the accident in 5 minutes I was at the deminer's site and supervised the checking of the box he was working at which the accident happened in, there were 3 warning signals from the detector at the same box, I gave him some instructions how to deal with this signal and then left him to another deminer, while am walking I heard a sound of explosion I looked to find it with the deminer I was with before moments, I informed the medic and sector coordinator and went to the accident site with the other deminers to evacuate the injured outside the mine field.

Answers to Investigator Questions:

Yes, I gave the team the safety brief and instructions.

No, the deminer wasn't suffering from anything.

No, the deminer wasn't lying on the ground when I arrived to him.

Yes, there were a stone in front of him in the box he was working at.

Yes, the area is very hard and stony.

Yes, this deminer always works according to the procedures and instructions.

Analysis

The primary cause of this accident is listed as *Unavoidable* because, despite the investigator's observation that the deminer was not working to SOP, it seems that he was working as directed because his Team Leader had visited him recently and not corrected any errors. When using rakes, if the Light rake would not move a rock, it is normal to use the Heavy rake. The length of the rake meant that the Victim's injuries were light because he was

more than a metre from the seat of the initiation. The secondary cause of this accident is listed as *Victim inattention* out of deference to the investigators who recommended that the Victim be disciplined.

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.