

DDAS Accident Report

Accident details

Report date: 05/03/2011	Accident number: 644
Accident time: 08:20	Accident Date: 11/07/2010
Where it occurred:	Country: Jordan
Primary cause: Field control inadequacy (?)	Secondary cause: Unavoidable (?)
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: dry/dusty hard rocks/stones
Date record created:	Date last modified: 05/03/2011
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by:
Map east: 36. 15353 E	Map north: 32. 52307 N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

non injurious accident (?)
no independent investigation available (?)
use of rake (?)
standing to excavate (?)
long handtool may have reduced injury (?)

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 [Demining group] – MINE ACTION TEAM - JORDAN

GRID REF: 32. 52307 N: 36. 15353 E

MINEFIELD NO – 365, minefield TASK ID- swailmeh 3

Investigation conducted by – [Demining group], [Name removed]

Deminer: [The Victim]: NIC NO: [Removed]

TEAM LEADER: [Name removed], Team: Uniform

TIME OF INCIDENT: 08:20 hrs. DATE OF INCIDENT: 11 July 2010

NATURE OF INJURY: Nil

TYPE OF MINE: M14 AP MINE

IMSMA DETAILED REPORT FOR MINE INCIDENT, Sunday, 11 July 2010

Part 1 – Description of the incident

1. Organisation name: [Demining group], JORDAN. Team No: Uniform
2. Incident date: 11 July 2010. Time: 08:20 hrs
3. Location of incident: NE SECTOR, Province: Mafraq, Village: Swailmeh, Project or task No: Swailmeh 3 (365)
4. Name of site manager or team leader: [Name removed]
5. Type of incident: uncontrolled detonation of a mine.
6. Device was detonated by: Deminer
7. Device detonated while: Raking
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 located the signal on one cluster in SML10 and he followed the procedure by approaching the signal from right side, and left side and accidentally he hit the M14 mine by the heavy rake from the top which caused the blast.

Part 2 – Injuries

10. Did the incident result in any injuries? No



[The report included a photograph of a small scratch on the Victim's arm (he appears to have been working with his sleeves rolled up).]

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? Yes

13. List any mine action equipment or property damage:

Heavy Rake, Damaged (not reusable)

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. Heavy Rake, Damaged (not reusable)

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

16. State specific device (if known): Anti-Personal Mine M14

17. Comments (include measurements of any crater resulting from the explosion): Crater
Depth: approx. 20 cm / Width: approx. 40 cm

Part 5 - Site conditions

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

Ground/Terrain: Medium hard, Flat

Weather: Clear, Mild

Vegetation: Burnt, none



[The accident site.]

Part 6 – Team and task details

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

[The Victim], Deminer

21. How long had this team been?

- a. At this site? 45 days
- b. working on this task? 45 days
- c. working on the day? 1 Hours & 50 minutes

22. Detector type: F3. Serial Number: 75 N17 407. Detector status: Functional. Passed to , [Name removed] for technical inspection at Swailmeh 3 Site on 11 of July 201. 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, 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: (1) minutes
- b. Time spent at site administering treatment: N/A)
- c. Time from evacuation FROM to arrival King Abdullah Hospital: N/A

Part 8 – Reporting procedures

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

Investigation conducted by: [Name removed]

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

Verified by: [Name removed]

FINDINGS

Marking system was not applied on the ground during approaching to the mine. Triangle marker drill was not applied on the ground during excavation. Guessing and scratching were noted on the ground around the incident area. Approaching to the mine was done from both sides, left and right

Signed: Tech. & Ver. Coord

Operation Manager Recommendation

The incident happened due an individual mistake while the deminer investigating an indicated signal by the metal detector in the predicted site of the AP mine within the cluster.

The deminer mis approach the mine and hit it from the top which caused the heavy RAKE to press the pressure plate and activated the mine about 2m from the deminer (the length of the RAKE handle). This the second incident with the same deminer and the same scenario.

The photos and investigating the incident site shows that the deminer make some changes to the incident site (which is against the [Demining group]/NBP SOP) and a lack of supervision and control from the team leader.

Signed: Operations Manager

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Incident Site

Copy of Incident Report

Victim Report

Victim number: 827	Name: [Name removed]
Age:	Gender: Male
Status: deminer	Fit for work: yes
Compensation: N/A	Time to hospital: N/A
Protection issued: blast boots	Protection used: Frontal apron, Mask visor, blast boots
Frontal apron	
Mask Visor	

Summary of injuries:

INJURIES: minor Arm

COMMENT: No Medical report was made available.

Statements**Statement 1: the Victim**

That was my first day on this area as I finished my previous site on Thursday and then I was sent to this new area to finish what the deminer [Name removed] started.

While am using the detector I heard a signal, checked it according to the SOPs using the light and heavy rakes, while am using the heavy rake the explosion happened, nothing happened to me and I walked out of the field.

Q, A:

Q: Did you make the right procedures in detecting and progressing to the signal?

A: Yes, I did. (Note: the deminer explained exactly what he did following the SOPs)

Q: Was the detector working well before the accident?

A: Yes, it was.

Q: what was the depth of the exploded mine as a suggestion?

A: around 16cm.

Q: were the mines near superficial or deep?

A: they were on 5-7cm.

Q: Were you having any problems that day?

A: No, and I asked them not to take me to the hospital.

Note: , [Name removed] checked the detector and he said nothing wrong with it.

Statement 2: Team Leader

I was checking on the deminer, [Name removed] then went to, [Name removed] site when I heard a sound of AP mine explosion, I knew it was from the site of the de-miner [the Victim]. I informed the sector coordinator and medic about it and saw the deminer getting out of the field walking.

Q, A:

Q: Did you check on the injured site that day?

A: Yes, I did.

Q: Did you notice anything wrong with the injured that day?

A: No.

Q: What was his productivity when the accident happened?

A: around 12 m².

Q: Did you give your team the safety brief before they started working?

A: Yes.

Note: the nearest deminer to the accident was , [Name removed] but he was busy and didn't notice what happened exactly.

Analysis

The primary cause of this accident is listed as a *Field Control Inadequacy* because the investigators found that there was a "lack of supervision and control from the Team Leader" that including altering evidence at the accident site. The secondary cause is listed as *Unavoidable* because it seems likely that the Victim was working as directed when the accidental initiation occurred.

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 tolerably safe (reducing risk of severe injury to tolerable levels).