

DDAS Accident Report

Accident details

Report date: 05/03/2011	Accident number: 623
Accident time: 16:50	Accident Date: 06/07/2009
Where it occurred: MF E 360, Al Akaider Village, Almafraq Province	Country: Jordan
Primary cause: Victim inattention (?)	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: grass/grazing area 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: 36.076490 E	Map north: 32.531190 N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

no independent investigation available (?)
standing to excavate (?)
use of rake (?)
Inadequate detector pinpointing
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 [Demining group] – MINE ACTION TEAM - JORDAN

GRID REF: 32.531190 N: 36.076490 E

MINEFIELD NO – 360, MINEFIELD TASK ID - E 360 AL AKAIDER 4

INVESTIGATION CONDUCTED BY – [Demining group], [Name removed].

DEMINER: [the Victim]. NIC NO (ID NUMBER): [Removed]

SECTION COMMANDER: [Name removed]. TEAM LEADER: [Name removed]. TEAM :
METAL DETECTOR 5.

TIME OF INCIDENT: 04:50 PM, DATE OF INCIDENT: 6 JULY 2009

NATURE OF INJURY: No Injury.

TYPE OF MINE: Anti Personnel M 14

IMSMA DETAILED REPORT FOR MINE INCIDENT Monday, 6 July 2009

Part 1 – Description of the incident

1. Organisation name: [Demining group], JORDAN Team No: Metal Detector 5.
2. Incident date:06/07/2009. Time: 04:50 PM
3. Location of incident: NORTH EAST SECTOR, Province: ALMAFRAQ, Village: AL AKAIDER. Project or task No: E 360 AL-AKAIDER 4
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
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 was trying to investigate a signal indicated by the metal detector and after the usage of the light RAKE and when she started with the heavy RAKE, the deminer hit the mine from the top on the pressure plate which initiated the mine.

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]
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. [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

16. State specific device (if known): M 14 AP MINE

17. Comments (include measurements of any crater resulting from the explosion): Crater
Depth: approx. 15 cm / Width: approx. 40 cm

Part 5 - Site conditions

Describe the conditions at the site at time of the incident

Ground/Terrain: Hard, flat

Weather: Clear, Hot

Vegetation: Bush, Medium

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 5

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? 4:50 hours

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? Yes [sic]

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 No

28. Time and distance data

- a. Time from incident to SECTION MEDICAL POINT (03) minutes
- 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]

Observations and Recommendations

the incident caused by individual mistake while the deminer using the heavy RAKE in a hacking motion not as the proper procedure the Raking motion, and most of the mines in the area are surfaces mines that they can be recovered just with the usage of the light RAKE even if that will cost the deminer more sweat but it will still safer.

The usage of the light RAKE will be enforced in the area.

Signed: Operations Coordinator: 6 JULY 2009

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Incident Site

Copy of Incident Report

Victim Report

Victim number: 806	Name: [Name removed]
Age:	Gender: Female
Status: deminer	Fit for work: yes
Compensation: N/A	Time to hospital: N/A
Protection issued: Frontal apron Mask Visor blast boots	Protection used: Frontal apron, Mask visor, blast boots

Summary of injuries:

COMMENT: No injuries recorded.

No Medical report was made available.

Statements

Statement 1: the Victim

I started working in the third run at lane 6 and I removed 3 AP mines and then progressed in my work and removed one AP mine from the front row from the enemy side, at that time around 15:30 pm the team leader and sector coordinator came to my site to check on my work, they told me that am working on the IOE C from lane 6, I entered in the fourth run to my

site and I was looking for a signal inside the mines box but the signal was deep, so I used the light rake at the beginning, after that I used the heavy rake when a blast happened to the center mine.

Answers to Investigator Questions:

Yes, we took the safety brief before starting to work.

Yes, I was convinced according to what I was trained on that the signal in front of me is for an AP mine.

Yes, I used the light rake at the beginning.

Yes, the area I'm working on is hard and stony.

No, I didn't progress in work the right way to the right depth.

Statement 2: Team Leader

I gave my team the safety brief then I distributed them all to their sites I made QC for the injured deminer, she has 3 AP mines removed from the interior row then she progressed to the front to reach an angle in her way then in the fourth run the same day she got a signal for a 9 o'clock AP mine from the external row so I was confused and asked the sector coordinator who was available at the site to come and see the case cause we didn't reach the front angle, he came and we found out that she was working on the IOE C from the same lane, the same day at 16:50 pm while the deminer was looking for the center mine and working around the target the blast happened and I informed everybody about the accident.

Answers to Investigator Questions:

Yes, I informed the team that when they see a signal of a mine they should let me know about it.

Yes, I assured everybody to use the light rake at the beginning.

Yes, I informed the team to follow all the instructions in their progress in work.

Statement 3: Section Commander

In the 3rd run I checked on the deminer and explained to her how she should work, she was heading to a cluster of mines she removed 3 of them from the interior row, then a signal shown to her on her way it was a 9 o'clock AP mine from the external row, then I asked the team leader to show us where she is working cause there were a short angle in front of her which is far from the mines box, he came with the sector coordinator and they told us she was working on IOE C from this mine field, around 16:50 pm from the fourth run the deminer was progressing to reach the signal place she was working on the right of the mine she removed and there where the center mine, a blast happened and I informed about the accident.

Answers to Investigator Questions:

Yes, I explained to every deminer the nature of her work.

Yes, I assured everyone to use the light rake at the beginning.

Yes, I trained them on the right way how to progress in their work.

Analysis

The primary cause of this accident is listed as *Victim Inattention* because the Victim recognised that she had not been using the rakes in the correct way when the accident occurred. The secondary cause is listed as *Unavoidable* because there is always a risk of initiating a mine with the heavy rake so it is possible that the accident could not have been avoided with the procedure. When searching for small mines, there is compelling evidence that the procedure can be safe even when a mine is initiated (because of the distance from the blast and the correct use of PPE).

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).