

DDAS Accident Report

Accident details

Report date: 04/03/2011	Accident number: 602
Accident time: 10:05	Accident Date: 02/02/2009
Where it occurred: MF 397, Um Al Quttain Village, Almafraq Province	Country: Jordan
Primary cause: Unavoidable (?)	Secondary cause: Unavoidable (?)
Class: Excavation accident	Date of main report:
ID original source:	Name of source: Demining group
Organisation: [Name removed]	
Mine/device: M14 AP blast	Ground condition: hard
Date record created:	Date last modified: 04/03/2011
No of victims: 1	No of documents: 2

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by:
Map east: 36 54' 8399E	Map north: 32 35' 4799N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

no independent investigation available (?)
standing to excavate (?)
use of rake (?)
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

GRID REF: 32 35' 4799N: 36 54' 8399E

MINEFIELD NO – 397: MINEFIELD TASK ID - E 397 SABHA 6

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

DEMINER: [the Victim]. DATE OF BIRTH: 4/10/1960

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

TIME OF INCIDENT: 10:05 AM. DATE OF INCIDENT: 2 FEB 2009

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

IMSMA DETAILED REPORT FOR MINE INCIDENT Monday, 2 February 2009

Part 1 – Description of the incident

1. Organisation name: [Demining group], JORDAN. Team No: MANUAL TEAM SIX
2. Incident date: 2/02/2009. Time: 10:05 AM
3. Location of incident: EAST SECTOR, Province: ALMAFRAQ, Village: UM AL QUTTAIN, Project or task No: E 397 SABHA 6
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 trying to recover an AP M14 mine using the heavy RAKE he applied a pressure in the pressure plate of a non visible M14 which in turn activated that mine in a depth of about 5-7 cm

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. [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

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

Ground/Terrain: Hard, Flat, [Wet]

Weather: Clear, Cold

Vegetation: Light, Bush



[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	Manual Team 6

21. How long had this team been?

- a. At this site? 5 weeks
- b. working on this task? 5 months
- c. working on the day? Two 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? 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) minutes hours
- b. Time spent at site administering treatment: nil minute
- 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 incident is caused due to a pressure applied to the mine from the heavy RAKE (the excavation tool) used by the deminer and the deminer didn't expect to find a mine in that spot with that depth and may like accident could be avoided by using the metal detector to locate the non visible mine before using the standard RAKE drill.

Signed: Operations Coordinator, 02 February 2009

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries [A photograph showed no injuries]

Photographs of Incident Site

Copy of Incident Report

Victim Report

Victim number: 785	Name: [Name removed]
Age: 48	Gender: Male
Status: deminer	Fit for work: yes
Compensation: N/A	Time to hospital: M/A
Protection issued: Frontal apron Mask Visor blast boots	Protection used: Frontal apron, Mask Visor, Blast boots

Summary of injuries:

COMMENT: No recorded injuries. No Medical report was made available. Possible light ear damage. See Medic's statement.

Statements

Statement 1: the Victim

On Thursday the 29th of Jan 2009 while I was working on the scattered lane area (SML) I found an anti person (M14) mine on the centre lane belt, I informed the section commander [Name removed], team leader [Name removed] and the sector coordinator [Name removed] about it, they told me to continue my work carefully cause the mine was near the centre lane belt and they expected the existence of other missing mines there.

On Monday the 2nd of February 2009 while am completing my work I used the light rake to expose the area in front of me but because of the hard greasy wet ground because of rain the light rake didn't respond with me then I used the heavy rake I pulled in a proper way then a mine exploded in front of me and it was far from the mine I found on Thursday 6 cm but nothing has happened to me but because the sound I had a high pressure in my ears then I sat on the ground and I was evacuated outside the field.

Answers to Investigator Questions:

No, the mine wasn't exposed at all.

Yes, I was working very carefully as I expected to find missing mines in front of me.

No, I wasn't upset or sick that day or while am working.

Yes, I was given the safety brief and work instructions from section commander and team leader.

Yes, the section commander and team leader checked on me before the accident happened more than once.

Statement 2: Team leader

On Thursday the 29th of Jan 2009 we found an anti person (M14) mine on the centre lane belt area the same scattered lane (SML) area mentioned before from the same de-miner as it's strange to find a mine at that area, so I informed the sector coordinator [Name removed] about it, he came and checked on the mine and reported about it to [Name removed] the operations coordinator who came to the site and gave his instructions to work carefully at this area which might change the system we are working on, on Monday the 2nd of February 2009 while I was in section 11 I heard a sound of explosion from the south, immediately I knew it was from deminer [the Victim's] site, I informed the ambulance and sector coordinator and went to the accident site, I found the deminer standing on his feet I asked him to sit and relax to be evacuated after a while.

Answers to Investigator Questions:

Yes, the section commander was doing his job very well.

Yes, I assured on him to work carefully on that area because of the mine found on the centre lane belt area on Thursday 29th of Jan 2009.

Yes, the deminer was following all the work instructions before the accident.

Yes, I gave all the team a safety brief and work instructions before starting work.

Statement 3: Section commander

On Monday the 2nd of February 2009 at 10:05 am I was standing in section 11 and the team leader [Name removed] was in the near area, I heard a sound of explosion from the south, I looked and knew it was from the deminer [the Victim's] site, immediately I informed the ambulance and team leader about the accident and went to see the de-iner and found him standing on his feet, I asked him to sit on the ground, then he was evacuated outside the field without suffering anything.

Answers to Investigator Questions:

Yes, I visited him and checked on him before the accident happened because of the dangerous area he was working in as we found an anti person (M14) mine on Thursday 29th of Jan 2009 on the centre lane belt area.

Yes, the deminer was very careful while he was working and he always follows all the work instructions.

No, he wasn't complaining of anything before starting work.

Statement 4: Medic

We were informed about an anti person mine explosion happened with the deminer [the Victim] from the team leader [Name removed] on Monday the 2nd of February 2009 at 10:05 am, we reached the accident place and checked on the injured but he was in a good condition, we observed him he was fine and no complications happened, we asked him if he needs to go to the hospital he said no cause he is feeling well.

Analysis

The primary and secondary causes of this accident are listed as *Unavoidable* because it seems that the Victim was working as directed when the accidental detonation occurred. The length or the tool, the procedure for using it, and the PPE combined to prevent injury.

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 injury to tolerable levels).