DDAS Accident Report

Accident details

Report date:	04/03/2011	**Accident number:**	610
Accident time:	09:39	**Accident Date:**	03/06/2009
Where it occurred:	MF 399, 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 rocks/stones
Date record created:		**Date last modified:**	04/03/2011
No of victims:	1	**No of documents:**	2

Map details

Longitude:		**Latitude:**	
Alt. coord. system:	Not recorded	**Coordinates fixed by:**	
Map east:		**Map north:**	
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 [DEMINING GROUP] – MINE ACTION TEAM - JORDAN

TASK NAME SABHA 8 (399): GRID REF: [None]

MINEFIELD NO – 399, MINEFIELD TASK ID - E 399 SABHA 8

INVESTIGATION CONDUCTED BY – [DEMINING GROUP], [Name removed].

DEMINER: [The Victim]. DATE OF BIRTH: 17/01/1970.

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

TEAM: MANUAL TEAM 3.

TIME OF INCIDENT: 09:39 AM, DATE OF INCIDENT: 03 JUNE 2009

NATURE OF INJURY: No Injury

TYPE OF MINE: Anti Personnel M 14

IMSMA DETAILED REPORT FOR MINE INCIDENT Wednesday, 03 June 2009

Part 1 – Description of the incident

1. Organisation name: [DEMINING GROUP], JORDAN. Team No: Metal Detector 1

2. Incident date: 03/06/2009. Time: 09:39 AM

3. Location of incident: EAST SECTOR, Province: ALMAFRAQ, Village: UM AL QUTTAIN. Project or task No: E 399 SABHA 8

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 team

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 trying to recover the non visible AP mine (M14) in cluster 10 sec 3 assigned for him by the team leader after recovering the central AT .

The deminer recovered 3 and 12 clock mines with approximately 15 cm depth and the 9 clock mine from the same cluster blasted 2.2 metres away from the deminer while searching the area with the heavy RAKE.

Part 2 – Injuries

10. Did the incident result in any injuries? No

11. List people injured and nature of injury [None]

[The Victim's injury. The Section Commander stated that "tiny pieces of stones scattered in the accident place and they hit the deminer's knee and were on the PPE & visor".]

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

Weather: Clear

Vegetation: Bush, Heavy

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 3

21. How long had this team been?

a. At this site? 1 months

b. working on this task? 4 months

c. working on the day? 3:09 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) minute

b. Time spent at site administering treatment: (01) 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].

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

Verified by: [Name removed]

Observations and Recommendations

According to the preliminary investigation the incident is caused due to the area difficulty and the un-expected depth for the none visible mine.

Signed: Operations Coordinator, 03 June 2009

Attachments:

Statements by Injured Members

Statements by Witnesses

Photographs of Injuries [photograph showed light leg injuries]

Copy of Incident Report

Victim Report

Victim number:	793	**Name:**	[Name removed]
Age:	39	**Gender:**	Male
Status:	deminer	**Fit for work:**	yes
Compensation:	N/A	**Time to hospital:**	N/A
Protection issued:	Frontal apron Mask Visor blast boots	**Protection used:**	Frontl apron, MAsk visor, Blast boots

Summary of injuries:

INJURIES: minor Leg

COMMENT: The demining risk considered this "no injury".

No Medical report was made available.

Statements

Statement 1: the Victim

In the morning before we start working the team leader gave us the safety brief and work instructions then I started searching for missing mines in section 3 Sabha 8, I removed a 12 and 3 o'clock mines then started working on a 9 o'clock mine I found a squirrel house near the mine I'm working on and found 2 stones on the right and left of the squirrel house, I used the light rake to expose the stones and then used the heavy rake to move the soil and remove the stones I went more than 15 cm depth then suddenly an explosion happened while using the heavy rake.

Answers to Investigator Questions:

Yes, I was working as how we were trained, following all the instructions.

Yes, I concentrated on using the light rake.

Yes, the ground in that area is very hard, stony with lots of bushes.

Yes, I can estimate the number of stone buckets they were 12 buckets from the whole group (group10).

Yes, the team leader and section commander made a QC on my work before the accident.

Statement 3: Team leader

I made a safety brief to all the team and distributed them to their working sites and then the section commanders did the same, and as usual I made my morning round on the team from section 1 to 4, after 9:30 am I heard and saw an explosion, I went there and we evacuated the injured according to the instructions we have, the

medic team made their procedures and he was transferred to the hospital.

Answers to Investigator Questions:

Yes, as I know section 3 has a hard stony area and has lots of grass and squirrel houses.

Yes, the deminer was following all the work procedures; notice that the clearance of mines 12 and 3 o'clock is the same.

Yes, while giving them the morning brief I explained the way of reaching missing mines.

Yes, I made a QC for the injured before the accident and the sector coordinator came while doing that.

Yes, I can tell that the accident happened because of the stony hard grassy area with lots of squirrel houses and the use of the heavy rake as the last instrument found at the incident site.

Statement 3: Section Commander

That day before work starts the team leader gave us all the safety brief and work instructions and we were distributed to our areas of responsibility, I gave my group the safety brief and made a QC and distributed them to their sites and checked their working equipments then they started working, about 9:30 am I was delivering an AT mine when I heard a sound of explosion, I informed the team leader and medic team then headed to the accident place and we evacuated the injured to a safe place and the medic team made him a first aid then were transferred to the hospital.

Answers to Investigator Questions:

Yes, after we evacuated the injured I went back to the accident place to check what happened there.

Yes, the deminer was using the right instruments in clearing.

Yes, the deminer used the right marking system according to the instructions.

Yes, the last instrument was in the accident place is the heavy rake.

Yes, I saw the mine depth measurement with [Name removed] from the NCDR and it was 20 cm.

Yes, it's a hard grassy stony area there which was a reason for the blast.

Yes, the accident happened when a stone was pulled and dropped on the mine, the evidence is that there were tiny pieces of stones scattered in the accident place and they hit the deminer's knee and were on the PPE &visor.

Analysis

The primary and secondary cause of this accident are listed as Unavoidable because the investigators found that the rocky ground conditions made the accidental detonation unavoidable.

The Victim's leg injury was very minor, but not the "no injury" recorded by the investigator.

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).