

DDAS Accident Report

Accident details

Report date: 06/03/2011	Accident number: 662
Accident time: 07:28	Accident Date: 15 th June 2009
Where it occurred: MF 299, Um Al Quttain Village, Almafraq Province, East Sector	Country: Jordan
Primary cause: Field Control Inadequacy	Secondary cause: Field Control Inadequacy
Class: Excavation accident	Date of main report:
ID original source:	Name of source: Demining group
Organisation: [Name removed]	
Mine/device: M14	Ground condition: Hard, grassland
Date record created:	Date last modified: 06/03/2011
No of victims: 1	No of documents: 3

Map details

Longitude:	Latitude:
Alt. coord. system:	Coordinates fixed by:
Map east: 36.522627 E	Map north: 32.357085 N
Map scale:	Map series:
Map edition:	Map sheet:
Map name:	

Accident Notes

No independent investigation available (?)
Visor not worn or worn raised (?)
Long handtool may have reduced injury (?)
Standing to excavate (?)
Use of rakes (?)

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), NORTH BORDER PROJECT, EAST SECTOR

GRID REF: 32.357085 N: 36.522627 E

MINEFIELD NO: - 399, MINEFIELD TASK ID: - E 399 SABHA 8, SECTOR: - EAST

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

SECTION COMMANDE: [the Victim]: DATE OF BIRTH: 10/01/1977: NIC NO: [removed]

TEAM LEADER: [Name removed]: TEAM: MANUAL TEAM 3.

TIME OF INCIDENT: 07:28 AM, DATE OF INCIDENT: 15 JUNE 2009

NATURE OF INJURY: Eyes & Scratches.

TYPE OF MINE: Anti Personnel M 14

IMSMA DETAILED REPORT FOR MINE INCIDENT Monday, 15 JUNE 2009

Part 1 – Description of the incident

1. Organisation name [Demining group], JORDAN Team No: Manual Team 3
2. Incident date: 15/06/2009. Time: 07:28 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: Section Commander
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 section Commander was working outside his Area of responsibility (AOR) And he tried to recover a mine for one of the deminers (against his TOR) then he hit a mine with the heavy RAKE which initiate the mine and caused the incident.

Part 2 – Injuries

10. Did the incident result in any injuries? Yes

11. List people injured and nature of injury

Name	Occupation	Injury
[The Victim]	Section Commander	Multiple scratches at the face, Rt. Big finger super facial wound, dust in face, dust in eyes, and foreign body in both eyes.

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: Light, Grass

Part 6 – Team and task details

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

Name	Position in Location	Occupation
[The Victim]	Section Commander	Manual Team 3

21. How long had this team been?

- a. At this site? 1 month
- b. working on this task? 4 months
- c. working on the day? 58 Minutes

22. Detector type: N/A. Tripwire feeler used? No

23. Hand tool: HEAVY RAKE

24. PPE: Vest, Visor, [Goggles, Blast boots]

25. Comments: [None]

Part 7 - Medical & First Aid

Medical treatment required? No [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

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: 50 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]

Observations and Recommendations

Regarding to the initial investigation the incident caused by an individual mistake that the section Commander violate the Standard operating procedures(SOP) by leaving his AOR and interfere another team AOR and was working as a deminer while his TOR is supervise and enforce the quality and the safety for the deminers.

Signed: Operations Coordinator, 15 JUNE 2009

Victim Report

Victim number: 845	Name: [Name removed]
Age: 32	Gender: Male
Status: Supervisory	Fit for work: Yes
Compensation: Not made available	Time to hospital: 57
Protection issued: Vest, Mask Visor, Blast boots, goggles	Protection used: Vest, Blast boots

Summary of injuries:

Multiple scratches at the face, Rt. Big finger superficial wound, dust in face, dust in eyes, and foreign body in both eyes.

INJURIES: Severe eyes, Minor face, Minor hand

COMMENT: See Medical report.

Medical report

[The eye injury is classed as severe because it required surgical intervention. A medical report from the Demining group medic was included in the file.]

[The Victim] recovered from general anesthesia after receiving operation to remove foreign bodies from both eyes at 17:10hrs, he is completely fine and fully oriented. The doctor at KAUH report that they remove many stones from both eyes that intact to his eye body and cornea. The good news is both eyes didn't injured from the stones, he discharged from the hospital after they examined his eyes and confirm the pressure of both eyes is normal, and the center of the vision not effected at all.

[A photograph showed the Victim with very light injuries including around the eyes and over the bridge of the nose – where goggles would have been if worn.]

Statements

Statement 1: the Victim, Section Commander

While I was checking on deminers I saw the deminer [Name removed] working on his group on 12 o'clock mine I asked him what's the problem? He said he was looking for a missing mine and he can't find it, I went to help him and when I dig twice using the heavy rake a mine was blasted in my face, I sat on the ground and the deminer, team leader and the team section came and took me to the medic team on the ambulance stretcher out of the field.

Answers to Investigator Questions:

No, the deminer [Name removed] is not in my section he is in the section of [Name removed].

No, the deminer didn't call me to help him.

No, the deminer wasn't near me when the blast happened he was 20 m far.

No, this is the first time I leave my section and go to another while working.

No, team leader and team section didn't see me while I was searching for the mine.

Yes, I know it's forbidden to work out of my section but I just wanted to help the deminer.

Yes, I was wearing the PPE jacket and the goggles while working.

No, I didn't take off the goggles while working only when the accident happened at the medic area someone took it off of me.

No, I didn't get any order from anyone to go and help this deminer.

Yes, I used the heavy rake because the deminer used the light rake before to clear the area.

No, there were no tense between me and anyone in the team.

Yes, I saw the mine near the stone but the rake slipped from the stone and hit the mine which made the blast.

Statement 2: Witness Team leader

On Monday the 15th of June 2009 while I was checking on the team within my responsibility from section 5 to 8, as my group work in sections 5&7 on clearing the missing mines, I was in section 5 and heading to sections 6&7, when I reached the beginning of section 7 I heard a sound of explosion at around 7:28 am, I went to the accident place and found the injured section commander [the Victim] sitting on the ground I made a first aid to him but I wondered what brought him to my area of responsibility as he works in MT3.

Statement 3: Witness Deminer

I was working on section 5, and I was the nearest deminer to the accident place, I heard a sound of explosion from the eastern area, when I looked I found two deminers near each other, immediately I headed there and found the section commander [the Victim] setting on the ground with his hands on his eyes and the deminers [Name removed] and [Name removed] near him, we took him out of the field to the medic area.

Answers to Investigator Questions:

Yes, when I reached to the accident place I found the injured putting his hands on his eyes and the goggles on his front head.

Yes, the deminer [Name removed] was 3 m far from him.

No, I wasn't the 1st to arrive to the accident place the deminer [Name removed] arrived before me.

No, I have nothing to say more.

Statement 4: Witness deminer

While I was searching for a 12 o'clock missing mine in section 5 group 3 Sabha 8, and after I progressed 180 cm from the central mine the section commander [the Victim] came to my site from the other team and asked me what I was doing I told him I was looking for a missing mine, then he asked me to give him the rake to show me the mine place and started digging using the heavy rake, suddenly we heard a sound of explosion from 3-4 times.

Answers to Investigator Questions:

No, he is not in my team; my section commander is [Name removed] whom was at a deminer in the far west.

Yes, he was wearing his goggles.

Yes, I was 15 m far from him.

Yes, I have instructions to only take orders from my section commander not from any other one and I knew that [the Victim] is not my section commander.

No, I wasn't hurt at all.

No, I have no other statements.

Analysis

The primary and secondary cause of this accident are listed as a *Field Control Inadequacy* because the Victim was a field supervisor and was working in breach of SOPs. He was raking with goggles on his forehead, so taking unnecessary risk and setting a bad example. The investigator did not refer to the goggles in his conclusions, but it is known that the Demining group's management recognised the error and sought to correct it.

Goggles can be worn raised (on the forehead) whereas the Mask Visor (which the Victim should have worn to rake) cannot be raised. This is one reason why the Mask visor should be preferred.

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).