DDAS Accident Report

Accident details

Report date: 06/03/2011
Accident number: 666
Accident time: 09:10
Accident Date: 17/02/2010
Country: Jordan

Where it occurred: Task Jabir2, Jabir Village, Mafraq Province

Primary cause: Field control inadequacy (?)
Secondary cause: Field control inadequacy (?)

Class: Excavation accident

ID original source: None
Name of source: Demining group

Organisation: [Name removed]

Mine/device: M14 AP blast
Ground condition: grass/grazing area

Date record created: Date last modified: 06/03/2011

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 (?)
visor not worn or worn raised (?)
long handtool may have reduced injury (?)
disciplinary action against victim (?)
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

Task Name: Jabir 2 (370). GRID REF: 32. 51081 N: 36. 18855 E
MINEFIELD NO – 370, minefield TASK ID - Jabir 2
Investigation conducted by – [Demining group], [Name removed]
Deminer (Team leader): [The Victim]; DATE OF BIRTH: 11/6/1969, NIC NO: [Removed]
TEAM LEADER: (Same as Above) [The Victim], Team: Delta
TIME OF INCIDENT: 09:10 hrs, DATE OF INCIDENT: 17 Feb 2010
NATURE OF INJURY: wounds and lesions in lt. femur, wounds in forehead, fragmentation in lt. hand
TYPE OF MINE: M14 AP mine

IMSMA DETAILED REPORT FOR MINE INCIDENT Wednesday, 17 Feb 2010

Part 1 – Description of the incident
1. Organisation name: [Demining group], JORDAN, Team No: Delta
2. Incident date: 17 Feb 2010, Time: 09:10 hrs
3. Location of incident: East SECTOR, Province: Mafraq, Village: Jabir, Project or task No: Jabir2
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: team leader
7. Device detonated while: Clearing an AP mine
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 was trying to clear the AP mine in a cluster, there was no signal due to the depth of the mines, she asked the team leader to help her in finding the signal, he tried and started to excavate until he found signal, he located and excavated over the signal until he reached 20 cm depth at that time he hit the M14 mine and caused the detonation

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]           Team Leader              Wounds and Lesions in Lt.Femur, wounds in forehead, fragmentation in Lt. hand

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. NIL

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. 18 cm / Width: approx. 40 cm

Part 5 - Site conditions
18. Describe the conditions at the site at time of the incident
Ground/Terrain: Medium, Flat
Weather: Clear, Mild
Vegetation: Heavy, Grass

[The victim. The crater is unusually deep.]

Part 6 – Team and task details
20. Qualifications of Member(s) involved in the incident:
Name               Position in Location                  Occupation
21. How long had this team been?
   a. At this site? 3 Months
   b. working on this task? 3 Months
   c. working on the day? 1 Hours & 40 minutes


23. Hand tool: HEAVY RAKE

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

25. Comments: [None]

**Part 7 - Medical & First Aid**

Medical treatment required? yes

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: (2) minutes
   b. Time spent at site administering treatment: (5) minutes
   c. Time from evacuation FROM to arrival King Abdullah Hospital: 31 minutes

**Part 8 – Reporting procedures**

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

Investigation conducted by: [Name removed]

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

Verified by: [Name removed]

**Findings of investigation officer**

Team leader checked on the signal instead of the de-miner and according to his statements he was wearing the face mask and protection uniform.

Team leader worked instead of the de-miner because the area was full of grass and mines were deep.

Cleared anti tank mines should be put in a certain place not in the area of cleared clusters.

Signed: Investigation Officer

**Observation and Recommendation of Operations Manager**

The Team Leader in his statement he mentioned that while investigating the signal he was wearing face mask and it is not acceptable. The question is if he is wearing the face mask how he had an injury in is forehead? Moreover in clearance coordinator preliminary incident
report it was clearly mentioned that the time of incident the team leader is wearing goggles. We have to accept and rely on the statement of clearance coordinator This kind of violations is not acceptable from a team leader hence, is it recommended to terminate his contract on the basis of gross violation of safety rules which resulted in injury.
Signed: Operations Manager, Date: 05 Apr 2010

Attachments:
Statements by Injured Members
Statements by Witnesses
Photographs of Injuries
Injury data sheet(s)
Photographs of Incident Site
Copy of Incident Report
Copy of Medical Report

Victim Report

Victim number: 849
Name: [Name removed]
Age: 40
Gender: Male
Status: supervisory
Fit for work: yes
Compensation: Not made available
Time to hospital: 38 minutes
Protection issued: Frontal apron
Protection used: Frontal apron, goggles, blast boots

Summary of injuries:
INJURIES: minor Face, minor Hand, minor Leg
COMMENT: A Medical report in Arabic is held on file. Photographs showed the victim with abrasive injuries in the centre of the forehead, the fingers of the left hand and the left leg. Two large (3cm) injuries on left thigh, front and side.

Statements

Statement 1: the Victim
The area I am working at is the hardest and most dangerous in all fields, and I was informed about that from the officials to work there carefully because the mines there are on 30 cm depth and more, [Name removed] made the necessary adjustments on the metal detector sensitivity, because we have mines and lots of metals on this area and it has lots of bushes and water channels.
That day the de-miner [Name removed] informed me that there was a problem in the cluster she entered, when she checked it, she found a very weak signal, I asked her to give me her face protector and asked her to leave the location and take the grass which was near, when she left I put the face protector and started dealing with the signal and while am checking on the exemplary manner the accident happened, I called the ambulance by myself and informed the officials about it and walked to the ambulance site.

Q, A:

Were you wearing the goggles or the face protector when the accident happen?
Face protector.

Why did you check on that signal on that specific location?
Because I felt that this area is dangerous and has lots of signals.

What instrument you where using when the accident happen?
Heavy rake.

Did the de-miner ask you for help checking the signal?
Yes she did.

**Statement 2: Witness deminer**

That day my mission was to clear on AT mines, I made the necessary measures to clear the AT tank from that cluster I started progressing to it, when I reached the area I should clear it from, no signal appeared so I called the team leader to come to my site then I removed a thin layer of the soil a light signal appeared when the team leader arrived and he started checking with the detector and asked me to give him the face mask and to remove the grass and leave the site, as I walked 15 meters from there I heard a sound of explosion went back to find the team leader standing, he throw the face mask and we went to the ambulance site together.

Q, A:

Q: why did you call the team leader to location A?
A: because I felt there were something wrong in the area as I didn’t find the AT mine.

Q: was the team leader wearing the face mask when the accident happened?
A: I saw him wearing it then I left the site, when the accident happened and I returned to the site I saw him taking it off.

Q: did you take the default measure for the AT mine in the cluster?
A: Yes I took the measures.

Q: did you clear AT mines before from previous clusters?
Yes I did.

**Analysis**

The primary and secondary cause of this accident are listed as a *Field Control Inadequacy* because the field supervisor who was the Victim was not working as directed and lied in his statement after the accident. The investigators recognised this and recommended his dismissal, so showing responsible management. The Victim claims to have been wearing the
full-face Rofi visor at the time (a mask-visor) but had a forehead injury that could not have occurred with the mask-visor in place. Supervisors routinely wear goggles at the site and it seems that he continued to do so after taking over the deminer’s work with a heavy rake. It is worth noting that the goggles appear to have prevented eye injury, and so served their purpose, but the field supervisor was in breach of demining group SOPs and was dishonest when things went wrong.

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).