

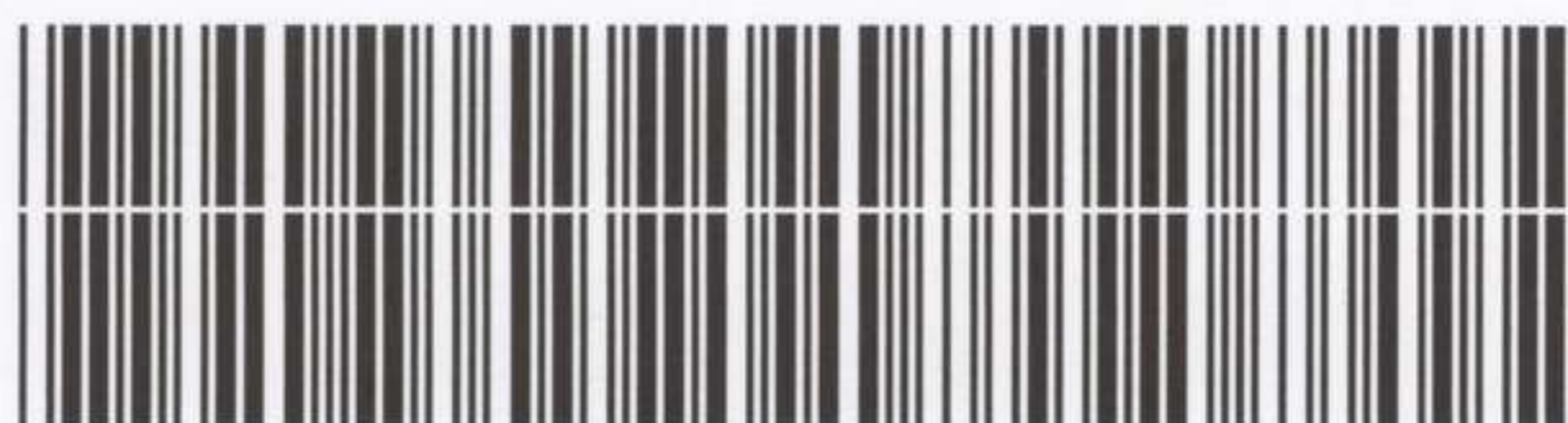
AWM4
Australian Imperial Force unit war diaries,
1914-18 War

Medical, Dental & Nursing

Item number: 26/83/9

Title: 8th Sanitary Section, Australian
Mounted Division

May 1918



AWM4-26/83/9

A.D.M.S

CONFIDENTIAL.

ORIGINAL.
DUPLICATE.
TRIPLICATE.



Australian Imperial Force.

WAR DIARY

OF

No 8 SANITARY SECTION

FOR

MONTH OF MAY 1918

Vol. No 9

May 18
No 11

Signature of Officer compiling *Harley Pearce*

Signature of Officer Commanding *Harley Pearce*

WAR DIARY

or

INTELLIGENCE SUMMARY.

(Erase heading not required.)

Army Form C. 2118.

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II. and the Staff Manual respectively. Title pages will be prepared in manuscript.



Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
Jericho.	May 1 st 2 3 4 10 th		<p>Section in charge of Staff Serg. Ruffsmith.</p> <p>at 5 OR^s returned from operations at Es Salt</p> <p>The Brigades of the Division having moved out to the forward area it is therefore essential this section be in close proximity to the Brigades. Good orders from DADMS to move section to Wady Aujah.</p> <p>1 OR. attached 3rd Bde. as Sanitary Inspector</p> <p>1 " " 5th " "</p>	
Wady Aujah	12 th		<p>Section moved to Wady Aujah Sq 113 Y 30d. An inspection was made of Wady Aujah, maggot breeding is occurring in large numbers, all larvae found being those of <i>Strophile</i> species. It is essential that anti-malarial work commence immediately. Orders have been issued from D.H.Q. that 36 men from each brigade report to H.C.O.s of this section for anti-malarial work, the H.C.O.s to supervise the work. This proposal to allot a definite section of the wady to each brigade. Copy of memo from D.A.D.M.S. attached.</p>	<p>M 2/2 New 1/5 * 1/101 → 1/102</p>
"	13 th		<p>Anti-malarial work commenced but working parties did not parade in numbers as instructed. 5 OR^s from this section have been detailed to supervise the work of the brigade parties. 1 OR. rejoined from detail camp</p>	

WAR DIARY

or

INTELLIGENCE SUMMARY.

(Erase heading not required.)

Army Form C. 2118.

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II. and the Staff Manual respectively. Title pages will be prepared in manuscript.



Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
W. Aujah	14 th		<p>The brigades are being inspected daily by the sanitary inspectors of this section. The sanitation at present is not receiving sufficient attention. There is a great shortage of latrine buckets and in many cases pits are in use. Buckets cannot be obtained for balance. Sufficient supplies of disinfectants and fly detergents cannot be obtained. Anti-malarial work continued but work is handicapped owing to working parties being changed and not building up to strength. The hours of work are 0600 to 0900 and 1600 to 1800. 10 R. 8 natives rejoined from West Bank Jerusalem. Effectives strength of mobile section of unit is 10 off 16 O.R. There not being sufficient men to carry out all the work required of the section at present. Requested D.H.Q. to forward details who were at Detail Camp Ludd.</p>	
	16 th		<p>Inspected two Indian regiments recently attached to this division. Good efforts are being made to improve sanitation. They are not conversant with methods adopted here.</p>	M2/13 M2/14
	18 th		<p>Inspected anti-malarial work being done by 3rd Bde. Slow progress is being made as working parties never consist of more than 12 men, a different party being detailed daily. A large swamp on E bank of River Jordan requires treatment.</p>	

D. D. & L. London, E.C. (A9-04) Wt W1771/M2031 750,000 5/11 Sch. 58 Fowms/C2118/14

WAR DIARY

Army Form C. 2118.

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II. and the Staff Manual respectively. Title pages will be prepared in manuscript.

or
INTELLIGENCE SUMMARY.

(Erase heading not required.)



Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
contd. W. Aujah	18 th		Oil will be supplied to treat other. 4 ORs rejoined for Detail Camp Leidd. Weekly report to A.D.M.S.	* App. 3
	19 th		Extra men obtained for 6th 11th regts for mosquito work, these men have been placed on the upper reaches of the wady Aujah.	
	20 th		5 ORs rejoined for Detail camp Leidd. 2 ORs proceeded to Descorp Det Camp Jerusalem to work fresh disinfection, as instructed by Aushiv.	
	21 st		Accompanied Major Leggat, D.A.D.M.S. Descorps. to Wady Mellahah, inspected mosquito breeding areas, a large marshy tract converging into a narrow flowing stream, mosquito breeding is occurring in enormous numbers.	
	25 th		Weekly report to A.D.M.S. (App. 4)	
	26 th		Accompanied Major Austin, Sanitary Inspection Committee and Major Evans, D.A.D.M.S. to Wady Mellahah a thorough examination was made of the whole length of the wady within our lines. Copy of Major Austin's report appended.	App. 4 Major's M2/4
	27 th		1 OR. marched in from A.M.C. Training Cadre, Moascar.	App. 5.
	30 th		Anti mosquito work commenced in Wady Mellahah in accordance with Major Austin's report. Capt. Brisbane, A.E.S. being in charge of the work. 5 ORs from this section are	

WAR DIARY

Army Form C. 2118.

Instructions regarding War Diaries and Intelligence Summaries are contained in F. S. Regs., Part II, and the Staff Manual respectively. Title pages will be prepared in manuscript.

or
INTELLIGENCE SUMMARY.

(Erase heading not required.)



Place	Date	Hour	Summary of Events and Information	Remarks and references to Appendices
Wady 'Aujah	30 th (cont)		<p>assisting with the supervision of the work. Work on Wady 'Aujah still continues with 4th & 5th Brigade parties, 1 N.C.O. for this section supervising 1 O.R. reported back from N.C.O.'s school, Moascar.</p> <p>1 " evacuated to Hospital. Effective strength 1 of. 28 O.R's.</p> <p>Suff. of sanitary equipment received for the division, consisting of latrine buckets seats wire phones. These will be distributed to units forthwith.</p> <p>Report on anti-malarial campaign and map showing area under treatment appended. (Att. 1/10/5)</p>	<p>Att. 6</p> <p>Stanley Parker O.C. San. Section.</p> <p>M 2/15 M 2/15</p>

ORIGINAL

A.P. & S.D., Alex. / ³⁰⁸⁷ / 3: 18/1M. W. M. & Co.
1225

M216. ADMS
May 18

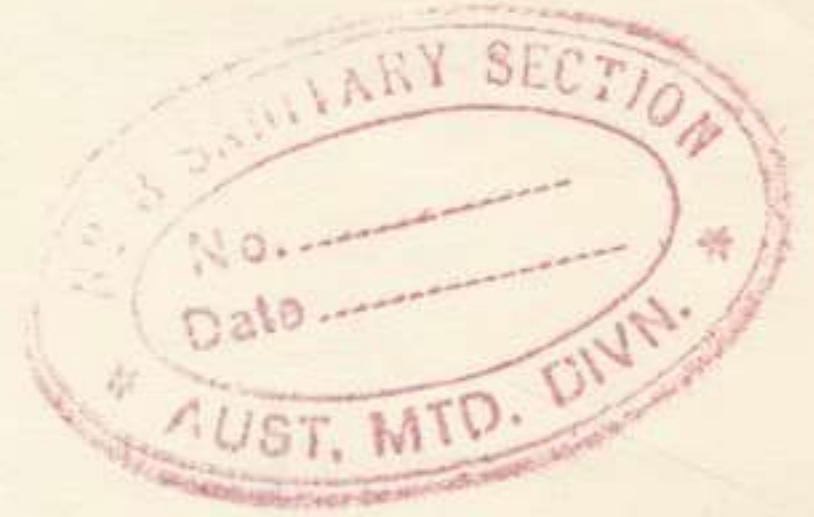
WAR DIARY

OF

No 8 SANITARY SECTION

FOR

MONTH OF MAY 1918.



LIST OF APPENDICES.

- | No. | Subject. |
|-----|--|
| 1 | Weekly report to A.D.M.S. on sanitation of the Division |
| 2 | Copy of orders by D.A.D.M.S. reference anti-malarial work. |
| 3 | Weekly report to A.D.M.S. sanitation of the Division |
| 4 | " " " " " " |
| 5 | Copy of report by Major Austin, reference anti-malarial work in Wady Mellahah. |
| 6 | Map and report on anti-malarial work for month of May. |

Handwritten signature
cc. La Seta

Copy

M2/6A

May 18

Appendix No. 1

A.I.M.S.

Musdis



I beg to submit the following report on the sanitation of the Division.

3rd Brigade: Drinking water. A guard was placed here only this morning. Horses were seen drinking out of tanks before the guard was placed on duty. Guard is being Full Troop latrines.

B.H.Q. Signals, Scouts. Manure flats not receiving sufficient attention. No attempt made to burn same until this morning. Fly breeding very prevalent. Faeces and rubbish burned. Latrine has no assistance and as the camp is well spread out, he cannot attend to the whole of the sanitation including the burning of manure.

8th Regiment. In rear of sick horse lines a small quantity of manure has been dumped in trays. Trench latrine was in use at sick horse lines but has now been replaced by buckets. Manure spread in three different areas on account of the large area camp covers. Faeces, rubbish etc burned.

9th Regiment. Everything satisfactory here. Buckets in use, faeces manure rubbish etc incinerated.

10th Regiment. Trench latrines were in use at transport lines, now replaced by buckets. otherwise satisfactory as above.

H.Q. S. Manure spread too thick, not raked up sufficiently for burning.

7. Amherst & 7. Troop Satisfactory.

An Indian infantry brigade situated in this area has been inspected, latrine buckets in use but unaccounted. flies are bad. An attempt being made to burn faeces.

Sanitary arrangements in the trenches have not been inspected. buckets are in use here.

The scrub between the 8th Regt. and the Jordan is very foul with faeces and requires attention. Indian troops are responsible for this.

Latrines are being overworked as very few men have been left back with the led horses.

5th Mts. Brigade. Throughout this brigade manure is being spread on roads. I understand this being the H.Q. S. order. It is suggested the reason being not to disclose the whereabouts of camps by smoke from the fires. Only one bucket is in use throughout the brigade.

H.Q. S. Refuse & rubbish burned. Manure spread on roads. Individual cooking and quarantines, trench latrines in use.

Gloucesters: Remarks as above.

India Regiment. Manure spread on road and too thick in places, trench latrines in use, refuse & rubbish burnt.

F. Amber Horses tied to trees around camp, manure left lying where horses are picketed. Camp site very insanitary. I understand the ambulance is moving from this site today.

Being to the brigade being spread over such a large area, the inspector has not had time to inspect all units.

Water Area: Men continually bathing on Wadi Anja below the main crossing and drinking water is being drawn by other units further down stream from where men bathe.

Manure has been dumped in and on edge of stream in many places. Drinking water reservoir of this brigade is without a guard and water much chlorinated.

Camel Brigade: An inspector was posted with this brigade but will be withdrawn as brigade are vacating the area. All units in this brigade, F. Amber excepted, use trench latines. Many of the gullies are used as general latines.

This very bad in this area, chief cause seems to be manure left by units halting in the area for a brief stay. An effort will be made to burn off this manure when natives arrive from Detato camp.

4th Brigade: Telgts. Signals. Buckets have been in use and faeces burnt successfully in manure. Stone incinerators constructed for burning refuse. Individual cooking.

H. & S. Very little attempt was made to keep camp clean and open pits were used when they first took site. They have improved a little, were using buckets & burning faeces, manure, & rubbish on ground. Sanitary lft is still changed mucky.

F. Amber. Buckets in use, faeces rubbish & manure incinerated, grease traps in use.

Tab Rec. Buckets in use contents incinerated with manure.

4th Regiment. Open pits were in use for some time but lately buckets were used, everything burnt well.

11th Regiment. Buckets in use, contents burnt with manure. Good attempts made to keep camp clean.

12th Regiment. Buckets in use, contents burnt with manure, buckets incinerated, rubbish burnt in ground incinerated.

A. Battery H.A.C. Buckets in use, faeces burnt in manure, stone incinerators burning rubbish well - camp site clean tidy.

This brigade marched out today, vacated areas left fairly tidy.

Divisional Troop. The sanitation of all these units is fair. Buckets are in use throughout, contents burnt. Rubbish & manure being burnt. Grease traps in use.

Anti Malarial Work 3rd Coy. Work commenced this morning with 10 white men & 2 Indians. No progress yet made to reports on. Ban from this section supervising work.

Return of Sanitary Equipment herewith

Sgt. J. J. [Signature]
O.C. [Signature]



M217
Abay 18.

Copy

M217 Appendix H2
Apr 18

A.A. & Q.M.G.

Inspection to-day shewed that the anopheles mosquito is breeding in enormous numbers in Wadi AUJA and vicinity, and it is desired to commence anti-mosquito work immediately in that area.

As the 3rd A.L.H.Bde. is already established, may 1 N.C.O. and 12 men from each regiment (this being the number authorised by Desert Corps Circular) report daily to an N.C.O. from Sanitary Section stationed at Amballa Field Ambulance for that work. It is desirable that the same men report daily and that they be equipped with shovels.

When the 4th L.H. Brigade take over from Camel Brigade it is desired that the same number of men should report to an N.C.O. from Sanitary Section at 4th L.H. Field Ambulance.

It is proposed at present to sub-divide areas into sections as follows:-

4th L.H. Brigade.

Wadi AUJA W. of main road.
Whole of aqueduct on Northern side of Wadi AUJA and parallel to it.

5th Mounted Brigade.

Wadi AUJA between crossing of main road in H.39.a and junction of Wadi OBEIDEH and Wadi AUJA.

3rd L.H. Brigade.

Wadi AUJA from its junction of Wadi OBEIDEH to its outlet.
Wadi el Mellahah as far as practicable along its course.



Wroans Major,
D.A.D.M.S., Australian Mounted Divn.

H.D.M.S.

Copy

M2/8

May 18

Appendix No 3

Australian Mounted Division

I beg to submit the following reports on the Sanitation

of the Division for week ending 19.5.18

3rd Brigade B.M.D. Moved camp on Friday, vacated area left in a disgraceful state. Pit latrine left open, faeces uncovered, manure left in heaps 18" thick, other plots spread out but 2" thick, none in places. The whole area being a seething mass of flies. Suburbs tent lying about the incinerator area.

8th Regiment changed camp site on Thursday, vacated area left in a sanitary condition. 6th Squadron have trench latrines for night use. Sanitation otherwise good, manure-faeces etc being burned.

9th Regiment Sanitation of this regiment is very good.

10th Regiment Transport lines have been very untidy but are now receiving attention. Sanitation otherwise good.

Insufficient buckets are available for use in both forward & back areas. It is suggested that all buckets be kept in back area and trench latrines allowed in forward areas, provided proper supervision is kept over same.

B.L.S. changed camp on Monday suburbs manure left, but attended to when pointed out by inspectors. On Tuesday faeces were buried.

7 Troops Manure area not receiving proper attention, has not been properly swept & is accumulating.

7 Ambr Native trench latrine now abolished, pit drums substituted.

Supply Section of Ambr. Revisits tin in use as latrine - sanitation attended to by Natives from 8th Regt.

A scavenging gang are at present working in this brigade and drinking water is under proper control, quads, pumping factors provided tanks are being moved to N of W. Angok.

4th Brigade B.M.D. when camping near trade, incinerator not successful & when they moved to new site a quantity of refuse was left suburbs. At new site buckets are in use & some manure has been spread.

B.L.S. Buckets in use, sacking is being put around same. A tin covered with a bag is used by Natives. Burning of horse manure, faeces & rubbish satisfactory. Camp site was left in a very insanitary condition by theicans.

7 Ambr Buckets in use covered with kerosene. Manure, faeces etc buried. covered grease trap installed.

7 Troops (Advance party) are using trench latrines, but same is covered with large piece of sacking. Refuse etc buried.

7 Troops Buckets in use, timber hand incinerator burning faeces rubbish, but not successfully. advised to burn faeces with manure.

M2/9 May 18

14th Regiment. Buckets are in possession, but not in use, under No 8's instruction pit latrines are being used. Manure & rubbish burned. Coochhouses have holes as grease traps but some are being replaced with tin traps.

Ab transport lines several days manure, so lying on heaps unspread.

11th Regiment. Sanitation good, site left foul by camels, faeces etc burned, buckets in use.

12th Regiment. Pit latrines in use for a few days, but now replaced with buckets. Incinerator good, grease traps being installed at coochhouses.

5th Brigade B.H.D. Buckets in use, faeces etc incinerated, sanitation good.

No 4. S. Refuse burned, manure spread on roads, pit latrines in use, no grease traps. Ab transport lines buckets are in use, manure etc burned.

Gloucesters. Have camped in wady bed. Refuse burned. Pit latrines in use by men, four buckets by officers. No grease traps. Manure being spread for burning. Litter & refuse lying about camp. Men bathing & washing within a few yards of the stream. Transport Section. Manure area bad. pit latrines in use. sanitation bad.

11th Lancers. Good efforts are being made with sanitation, manure & refuse burned. pit latrines in use, Incinerator area requires cleaning up. ab P.H.D. manure is spread on roads.

9th Hodson's Horse. Buckets in use throughout, contents incinerated, also manure & rubbish. Sanitation good.

7. Ambulance. Sanitation in order.

7. Troop

Somerset Battery. Manure spread on roads, pit latrines in use.

Sussex. Manure burned, pit latrines in use, men bathe within a few yards of stream.

Argentine Battery. Manure spread on roads, pit latrines in use, holes in use as grease traps & refuse burned.

Heavy Artillery. near Glouce Regiment. sanitation good, buckets in use, contents incinerated.

Heavy Artillery. near Argentine Battery - Pit latrines in use. Manure spread on roads, holes in use as grease traps.

NOTE - All these Artillery units are camped in the wady bed & in close proximity to the stream.

Advanced Dressing Station: Manure spread on roads, pit latrines in use.

Sanitary arrangements of water guards (14th & 15th Bde drinking water) are very bad, open trench latrines about 30 yards from water, receiving no attention as ^{guards} reports change daily.

Div Troop units reported satisfactory.

M2/10

May 1818.



(3)

Anti B. alani work: - good progress is being made along the Trady Anja but the work is handicapped owing to insufficient men being made available & the working parties being changed. It is suggested that all units camped along the Trady be instructed to treat the stream in the immediate vicinity of their camp. M. L. O. could be detailed from this Section to give the necessary instruction to the working parties.

If this were carried out a large area of the Trady would require immediate attention. Breeding is occurring along the whole length of the Trady & all larvae examined have been of the Anophele species.

Intermittent breeding has also been found in the Trady Mellalah. This also requires treatment.

Disinfectants - A sufficient supply of disinfectants & fly deterrents cannot be obtained, these are urgently required by all units.

To Anja
19.5.18



ppd. Harley J. Clarke
AC of La. Labor

A.D.M.S.

Australian Mounted Division,

Copy

M/2/11

May 18.

Appendix No 4

I beg to submit the following report on the sanitation of the division for week ending 25.5.14

3rd Brigade Drinking Water. The water reservoirs were removed on Monday last to a position about 200 yards N of where the pipe delivers into the paddock, everything here is satisfactory.

R.T.D. Dig Loops. One trench latrine in use at Signals in addition to buckets. No grease traps at cookhouses. Manure burning and incineration are now satisfactory.

8th Regiment. Squadron cooking adopted grease traps constructed, but two are without lids. Latrine seats are in bad state of repair and are not flyproof.

9th Regiment. Squadron cooking adopted grease traps constructed. Sanitation satisfactory.

10th Regiment. Some of the houses of this regiment are tethered to trees, these separate areas are not being cleared up properly; require attention. Individual cooking no grease traps. Some latrine seats not flyproof. Incineration good.

M.G.S. No grease traps, refuse bags placed in lines, ash pits in use with incinerator, a quantity of partly burnt refuse and faeces found in these pits, instructions given to returns same to fill in pits.

3rd 7th Troops: Camp site changed on Thursday, vacated site thoroughly cleaned up.

Canteen: Sanitation attended to by 8th Reg.

Amber. Satisfactory.

4th Brigade R.T.D. Signals. At beginning of week sanitation was being neglected, a man from 11th Reg. has been put in charge and things have improved. Majority of seats were broken, refuse was not collected from L.H. Only one cookhouse had grease traps, no manure being burnt. Seats that were beyond repair have been discarded & buckets are now flyproof with bagging, covered holes are now used at cookhouse until time one available. Manure now receiving proper attention, refuse & faeces incinerated.

M.G.S. Incineration could receive more attention, otherwise satisfactory.

7th Amber. Satisfactory.

Veh Section. Have just moved up from fence, buckets are in use, manure spread for burning. Much privaciously on this site left a quantity of unburnt manure.

11th Regiment: A number of buckets have been put into use, but some pit latrines still exist. A quantity of manure accumulating at R.T.D. No attempt to burn. At A Squadron some manure is being raked into hollow at rear of lines. Some L.H. still without grease traps. Rubbish & faeces from buckets burning well. Manure at transport lines has been attended to.

11th Regiment: Everything satisfactory here.

112th Regiment: Moved to new camp site during week found same covered with

M2/12 May 18.

heaps of manure. vacated area left clean, manure was left on patches and spread out. Sanitation progressing favourably.

4th Troop: Satisfactory

Hong Kong Singapore Battery. Pit latrines in use, but kept well covered withessian. camel manure burned.

6th Reg Transport. have not been burning manure rubbish too well, pit latrines in use.

Banten. Fly proof tin in use as latrine, attended to by Ambulance native.

Water Guard. An improvised bucket was placed here, but today the trench had again been used. A notice board will be placed directing to the latrine.

5th Brigade: B.M.O. Manure spread unsatisfactorily, but is now receiving attention. Buckets in use contents incinerated.

16th A. Transport. Manure plots very bad, attention was drawn to this but no attempt made to remedy same. fly breeding occurring.

Squadron. Manure spread on road, pit latrines still in use, all refuse burned.

Gloucester Transport. Pit latrines in use in a very bad state, apparently no supervision over same. Manure refuse burned.

Gloucester Regiment. Area in track bed vacated, some unburnt manure & dung left. At new area most of manure burned, small quantity spread on roads. Latrine pits in use for O.R.'s. holes in use as grease traps same are kept covered & disinfected.

16th V.I. Manure just arrived from Jiricho, sanitary arrangements put on order.

18th Lancers. Manure plots too thick, traces of manure being buried. Buckets not fly proof, seats in a filthy condition, Officers Mess cookhouse has no grease trap. Numerous trench latrines in use. At R.H.O. manure is now burned. Pit latrines in use.

19th Madras Horse. Buckets in use, faeces rubbish burned. Officers Mess grease trap bad, advised that same be replaced. Manure plots too thick.

A Battery H.A.C. Manure area bad, spread too thick, no definite areas marked out, no being spread on an old area which has not been properly burned off. Fly breeding extensive, Buckets in use.

Inverness Battery. Pit latrines still in use, manure area bad, spread too thickly & not properly burned off.

Agrestine Battery. Manure now burnt but no definite area marked out, spread too thickly. Pit latrines still in use.

NOTE: The manure disposal in these 18th Regt. Batteries is not receiving proper attention. fly breeding very extensive in all plots examined, certain quantity still being spread on roads. horse lines very foul in places.

7th Ld. Ambr. Satisfactory

A.D.S. Pit latrine used by Indians, otherwise satisfactory

Our Troop. Reported as Satisfactory.

M/2/13

Moany 18.

4th & 5th Bde. Water Treat: A fence is required around this area, water carts & camels drawing up alongside reservoir. A large trench in front of reservoir requires filling in & a small trench left to drain off waste water.

A Beauving gang of four natives has been placed on Trady bed, which was in a very bad state. A large area has been cleaned up. The disposal of a number of dead horses has been supervised, the same having been buried south of Relation.

Anti-Malarial work - A party of 12 men from 6th Bde. worked for two days, and in that time cleared about 200 yds of dense undergrowth & scrub from banks of Trady, working W from regimental water area.

11th Bde. party of 6 men have been working on the "Aquaduck" all this week. Half a mile of stream was cleared & several new courses made. On Wednesday the Aquaduck was diverted where it branches off from the Trady. The entire course of the "Aquaduck" is now dry. A large breeding area has thus been eliminated.

Glencaster party of 12 men changed daily, has been working to E of crossing mark very slack & made little progress.

18th Hamers & Madson's Horse. 24th Bde, 2 N.C.O's, permanent party, about 1/2 mile of new bad stream has received attention. Progress has of a necessity been rather slow, much undergrowth & bushes had to be cleared. Stream diverted & channels filled in.

3rd Bde party of 24 men have worked effectively W from the ford on the Anja having been treated to a point about 200 yds W of its junction with Meellahah.

14th Bde Party 12 men changed daily, but under some N.C.O. have made good progress up the Trady W of crossing.

Parties from various battalions have received instructions, but not being under direct supervision have not worked very satisfactorily. I estimate that in another week the entire length of the Anja will have received effective treatment but the up keep of same will still require a large number of men.

The laham has been increased somewhat by the banks of stream being broken down by horses being watered from the stream. Indian Regts being the chief offenders.

W Anja
25.5.18.



sgd.

Harley Stuber

O.C. 8. La Lec.

D.D.M.S.,
Desert Mounted Corps.



M2/1A/Enders 1/05
May 18.
No. 3386
Date 27/9/18

REPORT ON ANTI-MOSQUITO MEASURES REQUIRED IN THE WADI MELLAHAH.

In compliance with your instructions, I yesterday, in company with Major Evans, A.M.C., D.A.D.M.S., Australian Mounted Division, and Lieut. Parkes, A.M.C., O.C., Australian Mounted Division Sanitary Section, visited the Wadi MELLAHAH which I examined as carefully as possible from a point a few hundred yards beyond our wire to the confluence of the Wadi with the Wadi el AUJA.

As regards mosquito-breeding places, the portion of the Wadi visited is divisible roughly into four regions:-

A. Beyond the Wire.

- (1). A small valley on the left; ground (sloping to the Wadi) full of small water holes, and densely overgrown with high weeds.
- (2). Below the ridge bounding the Wadi on the right, a running stream, partly checked in places with weirs.

B. Within the Wire.

- (3). A marshy track several acres in extent, covered with low scrub intersected by at least three streams, and full of pools of water.
- (4). The stream flowing from (3) into the Wadi el AUJA; current good in places, but elsewhere held up by dense beds of grassy weed (small fish numerous in open spots).

The area in immediate proximity to the wire, i.e., (1) and (2) above, is a most dangerous and pestilential spot, in which a species of anopheles, in all probability anopheles turkudi (a known carrier of sub-tertian malaria), is breeding in myriads (I have found all stages from eggs in abundance, to pupae), as is also OCHLIPOTATUS DORSALIS, an extremely bloodthirsty culicine mosquito. While Anopheles Turkudi is also breeding freely in (3) and (4), wherever conditions are suitable, the area formed by (1) and (2) is by far the worst, and must be a source of danger to troops holding this portion of the line. The area in question is by far the worst that I have ever seen, either in this country or MACEDONIA.

WORK REQUIRED.

For the protection of troops holding this portion of the line, the work outlined below should, in my opinion, be carried out forthwith; and, in view of the rate at which mosquito-breeding is now proceeding, should be completed within a fortnight from the present date. For the sake of clearness and convenience of reference, the work required is stated under the 4 regions enumerated ~~below~~ above.

REGION (1). Reeds should be cleared, and a broad arrow drain cut, to drain area into stream in main Wadi. Any pools found after clearing away reeds, to be filled in with dry soil from the hill side.

NOTE:- Since this area is not under observation, the reeds, at least in the upper part of the small valley, can safely be cleared away.

REGION (2). Bushes and other vegetation should be moved from the banks and all weed raked out of the stream.

NOTE:- As a screen to the working party, it may be necessary to leave the reeds in the Wadi standing.

REGION (3). Should be drained thoroughly. Margins of drains must be made up with dry earth from the hill side, and all weed raked out of channels, isolated pools, even places no larger than hoof marks, must be filled in with dry earth.

REGION (4). All weed must be raked out of stream, and all obstructions to the flow of water cleared away. After this is done, the fish will probably keep the stream free from larvae. But, after completion of work constant supervision by a permanent working party of, say, 12 men will be necessary to keep the stream free from weeds. If the work be properly carried out, the 12 men would be able to keep the whole 4 regions in order.

The bed of the stream in Region (4) consist of deep mud; it will therefore be necessary to work from the bank.

On completion of the work it may be advisable to submerge oil-bags in places, and to renew them at weekly intervals.

M 2/15
May 18.REQUIREMENTS.

In view of the magnitude of the task, and the urgent necessity for despatch as explained above, I consider that the work cannot be carried out as it should be unless the following be supplied:-

<u>Working Party</u>	...	1000 men.
Horse Linbers	...	6
<u>Tools:-</u>		
Rakes, long handled	100	(8 foot handles).
" short "	100	
Spades	200	
Bill Hooks	100	
Baskets	100	

If possible, the entire work should be under the supervision of an officer of the R.E.

If the work outlined above be carried out as indicated, and within the time specified, it should go a long way towards protecting the troops, holding the portion of the line concerned, from Malaria. It will not protect them entirely, owing to the existence of mosquito breeding ground, which cannot be dealt with since they are well beyond our lines. In certain conditions of wind malarial mosquitoes will still be blown into our front line from the North, and, against these, mosquito nets, veils, gloves, a good mosquito repelling ointment, and prophylactic quinine are the only possible means of protection.

On the other hand, if the work be not carried out, the fighting strength of the force concerned is in imminent danger of grave reduction owing to Malaria.

4th L.H. Fld. Amb.
27/5/1918.

(Sd) E. E. AUSTEN, Major,
Sanitary Inspection Committee, EGYPT.



Appendix 1106

Report on Anti-Malarial Campaign in
the Ajlun valley (reference map attached)

The Wady el Ajlun springs from a
source somewhere within the hills at
present held by the Turks, flows over
a very rocky bed as a typical
mountain stream, with a winding course,
down a slight gradient, and receiving
the drainage of the Wadies Oberideh
and Metkahah, discharges into the
River Jordan.

At the upper part of its
course, part of the stream had been
diverted into an Aqueduct (A) which
at its higher levels is a narrow fast
flowing winding channel, the banks being
covered with dense vegetation and shrubs;
but on reaching the plain spreads out, forming
a delta of swampy ground. In its flow, the main stream
at its lower levels breaks up into
anabranches reducing the force of the
flowing stream and forming "billabongs"
containing stagnant water. Along the upper reaches
of the stream the trees overhang it,
and the branches tangling in the water

cause eddies to be formed. Bamboo
forms a barrier in the still water
at the sides, making an ideal place
for mosquito breeding. In the
lower reaches of the stream the
Japanese tree ferns form dense thickets, often
holding back the stream and diverting
its course. Clinging to the
rocky bed of the stream is a species
of *Polysiphonia* and weeds.
Culex mosquitoes were breeding in
myriads in the Aqueduct (A), in
the sluggish bends of the stream, in
amongst the vegetation at its sides and
the interstices of the rocks through
which water had seeped, and
in the holes in the sluggish anabranches.
In the dark pools, shaded by
overhanging branches, a species of *Culex*
mosquito (*Theobaldia*) were found breeding.
In the stagnant water amongst the
stones and shells a species of *Cnephia*
(*Cnephia palestiniensis*) were always plentiful,
the larvae could be seen in colonies on
the surface of the water, while in
the patty pools formed from a spring
in the W. Oberideh the larvae of the
Culex mosquito (*Culex dorsalis*) were
noticeable. These breeding grounds as

M 2/16.
May 18.

(2)

described seemed to be the favourable
habits of the above species, although in
many pools all the species were
found together.

In order to reduce
mosquito breeding to a minimum
it was necessary to make a clear,
swift flowing stream as straight as
possible with no sluggish water or
stagnant pools at the sides.

The following methods were employed:
The Aqueduct (A) was blocked at the
point where it diverged from the
main stream (B), the water left in it
drying up in a few days, thus several
miles of mosquito breeding area was
nullified.

Along the Aqueduct, all trees and shrubs
were removed from the water edge,
alga growth and other blockages removed
from the stream. It being possible a
straight channel was made to do away
with the serpentine bends.

In parts where the stream, reaching
a low level, became sluggish, banks of
stones with a binding band edge of soil
were introduced narrowing and deepening
the stream. Pools formed in the
follows by cutting off anabranches, were

oiled with a mixture of green oil,
and paraffin, $\frac{1}{2}$ oz. to square yard of
water surface, thereby destroying any
larvae or pupae present. Pools
which had not dried up were
afterwards filled in.

The above methods proved
very successful, as an inspection of the
stream no breeding was found, except
where the banks had been broken
down by troops crossing or watering
horses.

To carry out the above treatment
working parties were detailed as
under, working under the direct
supervision of 16 ORs of 8th Sanitary
Section, the working hours being
0600 to 0900 and 1600 to 1800, daily,
it being too hot for men to work
during the middle hours of the day.

3rd L.H. Brigade	24	ORs
4th " "	18	"
5th Mtd. "	30	"
6th " Regiment	12	"
Artillery Units	12	"
Total	96	"

The working parties were allotted
sections as follows:-
4

M 2/17
Nov 18.



M2/18

May 19.

3rd L.H. Brigade Wady Auja, from its junction with W. Oberideh to its outlet at River Jordan

4th L.H. Bde. 6th Reg. Artillery W. Auja, west of main road crossing at Y302, Aqueduct (A) on Northern side of W. Auja

5th Mtd. Brigade W. Auja between crossing at Y302, and junction of W. Oberideh and W. Auja.

The progress has of a necessity been slow as working parties have in most cases been changed daily each new party having then to be instructed as to method of treatment. Difficulty was experienced in obtaining suitable implements and tools.

Parties will now have to be constantly employed on the upkeep of the work done.

The Wady Mellahah was examined by Major Austin and reported on (see app. 1705)

This work commenced on May 30th as recommended by Major Austin, Captain Brisbane A.F.S. being in charge, assisted by 6 ORs from 2nd Sanitary Section.

W. Auja
30.5.18.

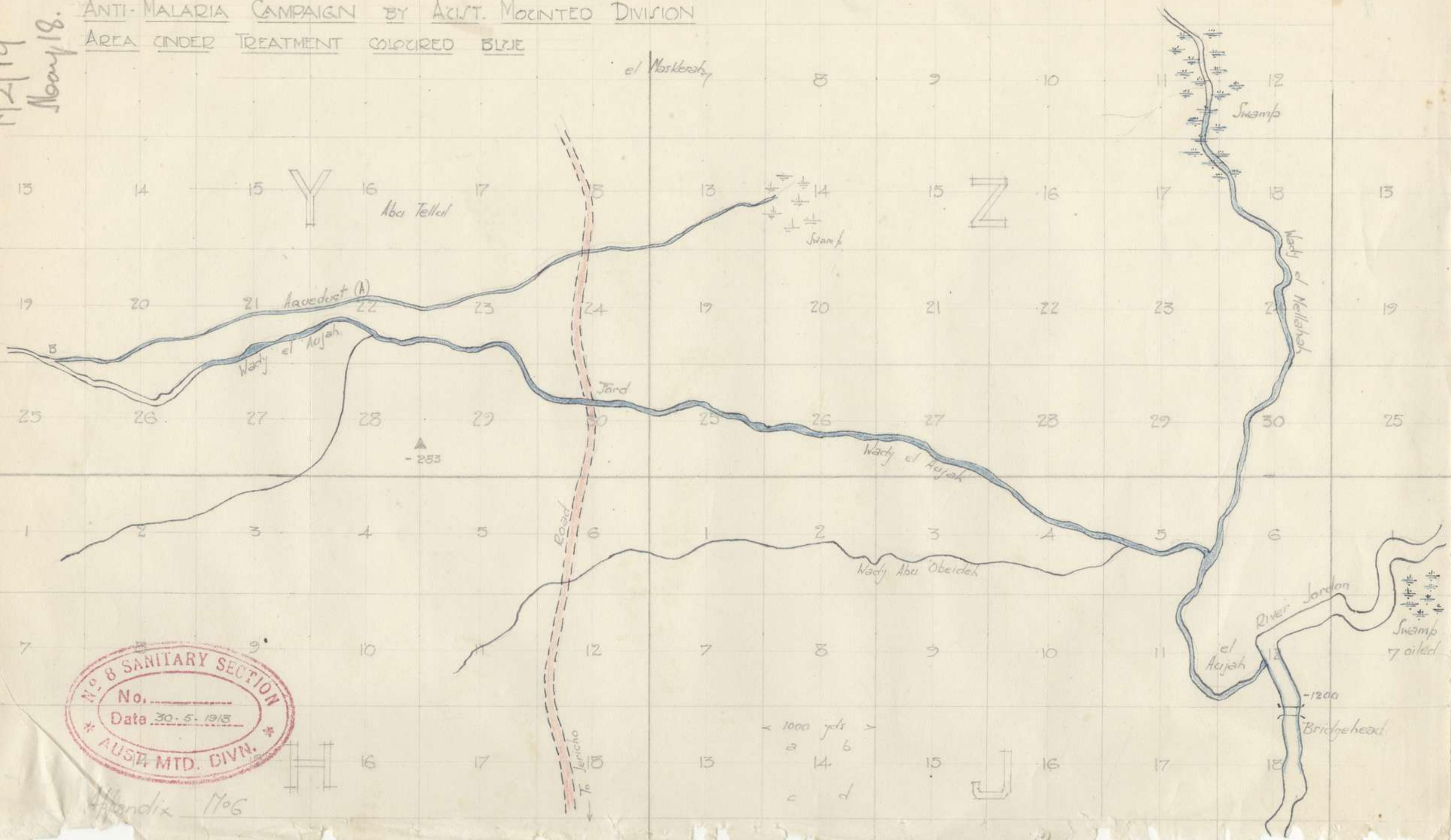


Harley Parker
oc. 2nd San Section

M2/19
May 18.

PALESTINE EXPLORATION FIELD MAP SHEET XV
ANTI-MALARIA CAMPAIGN BY AUST. MOUNTED DIVISION
AREA UNDER TREATMENT COLOURED BLUE

Scale of 1/4 1/2 3/4 0 1 2 Miles



No. 8 SANITARY SECTION
 No. _____
 Date 30.5.1918
 * AUST. MTD. DIVN. *

Handix 1706

D.D.M.S.

Copy

App. 5

Work Required



Reports on Anti-Mosquito Measures required in the
 the Comptroller's report, I accompanied, in company with Major General
 H.M.C. J.H.D.M.S., Australian Mounted Division, and Lance Parker A.M.C. of
 Australian Mounted Division, Auxiliary Section, visited the track between
 which I examined as carefully as possible from a point a few hundred
 yards beyond our mine to the confluence of the track with the track at the
 As regards mosquito breeding places, the portion of the track visited is divisible
 roughly into four regions.

A. Beyond the mine.

- (a) A small valley on the left; ground (sloping to the track) full of small water
 holes, and marshy swampy with high weeds.
- (b) Below the ridge bounding the track on the right, a running stream,
 partly choked in places with weeds.

B. Within the mine.

- (a) A marshy track several acres in extent, covered with low scrub intersected
 by at least three streams, & full of pools of water.
- (b) The stream flowing from B into the track at the junction, covers good spaces
 but elsewhere held up by dense beds of grassy weeds (small fresh mounds
 in open spots)

The area in immediate proximity to the mine, viz. A and B above, is a most
 dangerous and pestiferous spot, in which a species of Anopheles, in all
 probability *Anopheles traludis* (a known carrier of sub-tropical malaria) is breeding
 in numbers (I have found all stages from eggs in abundance, to pupae). It is
 also *oculopictus bancalis* an extremely bloodthirsty vicious mosquito. Both
Anopheles traludis is also breeding freely in B and, whenever conditions are
 suitable, the area found by B and C is by far the worst, and must be a
 source of danger to troops holding this portion of the line. The area in
 question is by far the worst that I have ever seen, either in this country
 or Macedonia.

Work Required.

For the protection of troops holding this portion of the line,
 the work outlined below should, in my opinion, be carried out forthwith,
 and on view of the rate at which mosquito breeding is now proceeding,
 should be completed within a fortnight from the present date. For the
 sake of clearness and conciseness of reference, the work required is stated under
 the regions enumerated above.

Region 1 - Reeds should be cleared, and a broad arrow channel cut to drain
 area into stream in main track. Long banks found after clearing away
 reeds, to be filled in with top soil from the hill side.

NOTE: Since this area is not under observation, the reeds at head in
 the upper part of the small valley, can safely be cleared away.

Region 2. Bushes and other vegetation should be removed from the banks and all mud raked out of the stream.

NOTE. As a cover to the working party, it may be necessary to have the nets in the boats standing.

Region 3. Should be drained thoroughly. Obstacles of drain must be made up with dry earth from the hill side, and all mud raked out of channels. isolated pools. even places no larger than leaf marks, must be filled in with dry earth.

Region 4. All silt must be raked out of stream, and all obstructions to the flow of water cleared away. After this is done, the work will probably keep the stream free from larvae. But, after completion of work constant supervision by a permanent working party of say 12 men will be necessary to keep the stream free from silt. If the work be properly carried out, the 12 men would be able to keep the whole 4 regions in order.

The bed of the stream in Region 4 consist of deep mud; it will therefore be necessary to work from the bank.

On completion of the work, it may be advisable to submerge oil-bags in places, and to renew them at regular intervals.

Requirements. In view of the magnitude of the task, and the urgent necessity for despatch as explained above, I consider that the work cannot be carried out as it should be unless the following be supplied.

Working Party	1000 Men
Board Ladders	6
Tools:	
Rakes long handled	100 (8 fork handles)
" short "	100
Spades	200
Bill Hooks	100
Baskets	100

If possible the entire work should be under the supervision of an officer of the R.E.

If the work outlined above be carried out as indicated, and within the time specified, it should go a long way towards protecting the troops, holding the position of the line concerned, from Malaria. It will not protect them entirely, owing to the existence of mosquito breeding grounds, which cannot be dealt with since they are well beyond our lines. In certain situations of wind Malaria Mosquitoes will still be blown into our front line from the North, and against these Mosquito nets, nets, gauze, a good mosquito repellent or insecticidal vapours are the only possible means of protection.

On the other hand, if the work be not carried out, the fighting strength of the force concerned is in immediate danger of gross reduction due to Malaria.

D.D.M.S.,
Desert Mounted Corps.

REPORT ON ANTI-MOSQUITO MEASURES REQUIRED IN THE WADI MELLAHAH.

In compliance with your instructions, I yesterday, in company with Major Evans, A.M.C., D.A.D.M.S., Australian Mounted Division, and Lieut. Parkes, A.M.C., O.C., Australian Mounted Division Sanitary Section, visited the Wadi MELLAHAH which I examined as carefully as possible from a point a few hundred yards beyond our wire to the confluence of the Wadi with the Wadi el AUJA.

As regards mosquito-breeding places, the portion of the Wadi visited is divisible roughly into four regions:-

A. Beyond the Wire.

- (1). A small valley on the left; ground (sloping to the Wadi) full of small water holes, and densely overgrown with high ^{weeds} weeds.
- (2). Below the ridge bounding the Wadi on the right, a running stream, partly choked in places with weeds.

B. Within the Wire.

- (3). A marshy track several acres in extent, covered with low scrub intersected by at least three streams, and full of pools of water.
- (4). The stream flowing from (B) into the Wadi el AUJA; current good in places, but elsewhere held up by dense beds of grassy weed (small fish numerous in open spots).

The area in immediate proximity to the wire, i.e., (1) and (3) above, is a most dangerous and pestilential spot, in which a species of Anopheles, in all probability Anopheles turkudi (a known carrier of sub-terrestrial malaria), is breeding in myriads (I have found all stages from eggs in abundance, to pupae), as is also OCHLEPOTATUS DORSALIS, an extremely bloodthirsty culicine mosquito. While Anopheles Turkudi is also breeding freely in (3) and (4), wherever conditions are suitable, the area formed by (1) and (3) is by far the worst, and must be a source of danger to troops holding this portion of the line. The area in question is by far the worst that I have ever seen, either in this country or MACEDONIA.

WORK REQUIRED.

For the protection of troops holding this portion of the line, the work outlined below should, in my opinion, be carried out forthwith; and, in view of the rate at which mosquito-breeding is now proceeding, should be completed within a fortnight from the present date. For the sake of clearness and convenience of reference, the work required is stated under the 4 regions enumerated above.

Region (1). Reeds should be cleared, and a broad arrow drain cut, to drain area into stream in main Wadi. Any pools found after clearing away reeds, to be filled in with dry soil from the hill side.

NOTE:- Since this area is not under observation, the reeds, at least in the upper part of the small valley, can safely be cleared away.

Region (2). Bushes and other vegetation should be moved from the banks and all weed raked out of the stream.

NOTE:- As a screen to the working party, it may be necessary to leave the reeds in the Wadi standing.

Region (3). Should be drained thoroughly. Margins of drains must be made up with dry earth from the hill side, and all weed raked out of channels, isolated pools, even places no larger than hoof marks, must be filled in with dry earth.

Region (4). All weed must be raked out of stream, and all obstructions to the flow of water cleared away. After this is done, the fish will probably keep the stream free from larvae. But, after completion of work constant supervision by a permanent working party of, say, 12 men would be able to keep the whole 4 regions in order.

will be necessary to keep the stream free from weeds. If the work be properly carried out the bed of the stream in Region (4) consists of deep mud; it will therefore be necessary to work from the bank.

On completion of the work it may be advisable to submerge oil-bags

REPORT ON ANTI-MOSQUITO MEASURES REQUIRED IN THE WADI MELLAHAH.

In compliance with your instructions, I yesterday, in company with Major Evans, A.M.C., D.A.D.M.S., Australian Mounted Division, and Lieut. Parkes, A.M.C., O.C., Australian Mounted Division Sanitary Section, visited the Wadi MELLAHAH which I examined as carefully as possible from a point a few hundred yards beyond our wire to the confluence of the Wadi with the Wadi el AUJA.

As regards mosquito-breeding places, the portion of the Wadi visited is divisible roughly into four regions:-

A. Beyond the Wire.

- (1). A small valley on the left; ground (sloping to the Wadi) full of small water holes, and densely overgrown with high weeds.
- (2). Below the ridge bounding the Wadi on the right, a running stream, partly choked in places with weeds.

B. Within the Wire.

- (3). A marshy track several acres in extent, covered with low scrub intersected by at least three streams, and full of pools of water.
- (4). The stream flowing from (B) into the Wadi el AUJA; current good in places, but elsewhere held up by dense beds of grassy weed (small fish numerous in open spots).

The area in immediate proximity to the wire, i.e., (1) and (3) above, is a most dangerous and pestilential spot, in which a species of Anopheles, in all probability Anopheles turkudi (a known carrier of sub-tertian malaria), is breeding in myriads (I have found all stages from eggs in abundance, to pupae), as is also OCHLEPOTATUS DORSALIS, an extremely bloodthirsty culicine mosquito. While Anopheles Turkudi is also breeding freely in (3) and (4), wherever conditions are suitable, the area formed by (1) and (3) is by far the worst, and must be a source of danger to troops holding this portion of the line. The area in question is by far the worst that I have ever seen, either in this country or MACEDONIA.

WORK REQUIRED.

For the protection of troops holding this portion of the line, the work outlined below should, in my opinion, be carried out forthwith; and, in view of the rate at which mosquito-breeding is now proceeding, should be completed within a fortnight from the present date. For the sake of clearness and convenience of reference, the work required is stated under the 4 regions enumerated above.

Region (1). Reeds should be cleared, and a broad arrow drain cut, to drain area into stream in main Wadi. Any pools found after clearing away reeds, to be filled in with dry soil from the hill side.

NOTE:- Since this area is not under observation, the reeds, at least in the upper part of the small valley, can safely be cleared away.

Region (2). Bushes and other vegetation should be moved from the banks and all weed raked out of the stream.

NOTE:- As a screen to the working party, it may be necessary to leave the reeds in the Wadi standing.

Region (3). Should be drained thoroughly. Margins of drains must be made up with dry earth from the hill side, and all weed raked out of channels, isolated pools, even places no larger than hoof marks, must be filled in with dry earth.

Region (4). All weed must be raked out of stream, and all obstructions to the flow of water cleared away. After this is done, the fish will probably keep the stream free from larvae. But, after completion of work constant supervision by a permanent working party of, say, 12 men would be able to keep the whole 4 regions in order.

* will be necessary
to keep the stream
free from weeds. If
the work be properly
carried out the 12
MEN

The bed of the stream in Region (4) consists of deep mud; it will therefore be necessary to work from the bank.

On completion of the work it may be advisable to submerge oil-bags

REPORT ON ANTI-MOSQUITO MEASURES REQUIRED IN THE WADI MELLAHAH.

In compliance with your instructions, I yesterday, in company with Major Evans, A.M.C., D.A.D.M.S., Australian Mounted Division, and Lieut. Parkes, A.M.C., O.C., Australian Mounted Division Sanitary Section, visited the Wadi MELLAHAH which I examined as carefully as possible from a point a few hundred yards beyond our wire to the confluence of the Wadi with the Wadi el AUJA.

As regards mosquito-breeding places, the portion of the Wadi visited is divisible roughly into four regions:-

A. Beyond the Wire.

- (1). A small valley on the left; ground (sloping to the Wadi) full of small water holes, and densely overgrown with high weeds.
- (2). Below the ridge bounding the Wadi on the right, a running stream, partly choked in places with weeds.

B. Within the Wire.

- (3). A marshy track several acres in extent, covered with low scrub intersected by at least three streams, and full of pools of water.
- (4). The stream flowing from (B) into the Wadi el AUJA; current good in places, but elsewhere held up by dense beds of grassy weed (small fish numerous in open spots).

The area in immediate proximity to the wire, i.e., (1) and (3) above, is a most dangerous and pestilential spot, in which a species of Anopheles, in all probability Anopheles turkudi (a known carrier of sub-tertian malaria), is breeding in myriads (I have found all stages from eggs in abundance, to pupae), as is also OCHLEPOTATUS DORSALIS, an extremely bloodthirsty culicine mosquito. While Anopheles Turkudi is also breeding freely in (3) and (4), wherever conditions are suitable, the area formed by (1) and (3) is by far the worst, and must be a source of danger to troops holding this portion of the line. The area in question is by far the worst that I have ever seen, either in this country or MACEDONIA.

WORK REQUIRED.

For the protection of troops holding this portion of the line, the work outlined below should, in my opinion, be carried out forthwith; and, in view of the rate at which mosquito-breeding is now proceeding, should be completed within a fortnight from the present date. For the sake of clearness and convenience of reference, the work required is stated under the 4 regions enumerated above.

Region (1). Reeds should be cleared, and a broad arrow drain cut, to drain area into stream in main Wadi. Any pools found after clearing away reeds, to be filled in with dry soil from the hill side.

NOTE:- Since this area is not under observation, the reeds, at least in the upper part of the small valley, can safely be cleared away.

Region (2). Bushes and other vegetation should be moved from the banks and all weed raked out of the stream.

NOTE:- As a screen to the working party, it may be necessary to leave the reeds in the Wadi standing.

Region (3). Should be drained thoroughly. Margins of drains must be made up with dry earth from the hill side, and all weed raked out of channels, isolated pools, even places no larger than hoof marks, must be filled in with dry earth.

Region (4). All weed must be raked out of stream, and all obstructions to the flow of water cleared away. After this is done, the fish will probably keep the stream free from larvae. But, after completion of work constant supervision by a permanent working party of, say, 12 men⁺ would be able to keep the whole 4 regions in order.

* Will be necessary to keep the stream free from weeds. If the work be properly carried out the 12 men

The bed of the stream in Region (4) consists of deep mud; it will therefore be necessary to work from the bank.

On completion of the work it may be advisable to submerge oil-bags

in places, and to renew them at weekly intervals.

REQUIREMENTS.

In view of the magnitude of the task, and the urgent necessity for despatch as explained above, I consider that the work cannot be carried out as it should be unless the following be supplied:-

<u>Working Party</u>	...	1000 men.
<u>Morsel Limbers</u>	...	6
<u>Tools:-</u>		
Rakes long handled	100	(8 foot handles).
" short "	100	
Spades	200	
Bill Hooks	100	
Baskets	100	

If possible, the entire work should be under the supervision of an officer of the R.E.

If the work outlined above be carried out as indicated, and within the time specified, it should go a long way towards protecting the troops, holding the portion of the line concerned, from Malaria. It will not protect them entirely, owing to the existence of mosquito breeding ground, which cannot be dealt with since they are well beyond our lines. In certain conditions of wind malarial mosquitoes will still be blown into our front line from the north, and, against these, mosquito nets, veils, gloves, a good mosquito repelling ointment, and prophylactic quinine are the only possible means of protection.

On the other hand, if the work be not carried out, the fighting strength of the force concerned is in imminent danger of grave reduction owing to Malaria.

4th L.H.Fld.Amb.
27/5/1918.

(Sd) E. E. AUSTEN, Major,
Sanitary Inspection Committee,
EGYPT.

in places, and to renew them at weekly intervals.

REQUIREMENTS.

In view of the magnitude of the task, and the urgent necessity for despatch as explained above, I consider that the work cannot be carried out as it should be unless the following be supplied:-

<u>Working Party</u>	...	1000 men.
<u>Morsel Limbers</u>	...	6
<u>Tools:-</u>		
Rakes long handled		100 (8 foot handles).
" short "		100
Spades		200
Bill Hooks		100
Baskets		100

If possible, the entire work should be under the supervision of an officer of the R.E.

If the work outlined above be carried out as indicated, and within the time specified, it should go a long way towards protecting the troops, holding the portion of the line concerned, from Malaria. It will not protect them entirely, owing to the existence of mosquito breeding ground, which cannot be dealt with since they are well beyond our lines. In certain conditions of wind malarial mosquitoes will still be blown into our front line from the north, and, against these, mosquito nets, veils, gloves, a good mosquito repelling ointment, and prophylactic quinine are the only possible means of protection.

On the other hand, if the work be not carried out, the fighting strength of the force concerned is in imminent danger of grave reduction owing to Malaria.

4th L.H.Fld.Amb.
27/5/1918.

(Sd) E. E. AUSTEN, Major,
Sanitary Inspection Committee,
EGYPT.

in places, and to renew them at weekly intervals.

REQUIREMENTS.

In view of the magnitude of the task, and the urgent necessity for despatch as explained above, I consider that the work cannot be carried out as it should be unless the following be supplied:-

Working Party ... 1000 men.

Morsel Limbers ... 6

Tools:-

Rakes long handled	100	(8 foot handles).
" short "	100	
Spades	200	
Bill Hooks	100	
Baskets	100	

If possible, the entire work should be under the supervision of an officer of the R.E.

If the work outlined above be carried out as indicated, and within the time specified, it should go a long way towards protecting the troops, holding the portion of the line concerned, from Malaria. It will not protect them entirely, owing to the existence of mosquito breeding ground, which cannot be dealt with since they are well beyond our lines. In certain conditions of wind malarial mosquitoes will still be blown into our front line from the north, and, against these, mosquito nets, veils, gloves, a good mosquito repelling ointment, and prophylactic quinine are the only possible means of protection.

On the other hand, if the work be not carried out, the fighting strength of the force concerned is in imminent danger of grave reduction owing to Malaria.

4th L.H.Fld.Amb.
27/5/1918.

(Sd) E. S. AUSTEN, Major,
Sanitary Inspection Committee,
EGYPT.