LC QoN 3436 HOLT

(2)(a) Water testing not undertaken in the following communities (abandoned communities not included):

Month	Community	Reason
July 2014	Kandiwal	Community did not collect sampler from airport
August 2014	Kadjina	Community did not collect sampler from airport
September 2014	Noonkanbah	Community did not collect sampler from airport
October 2014	All sampled	
November 2014	Burringurrah	Community did not collect sampler from airport
	Kunawaritji	Community did not collect sampler from airport
	Kadjina	Community did not collect sampler from airport
	Bobieding	No access to community - flooding
December 2014	Kandiwal	Community did not collect sampler from airport
	Kadjina	Community did not collect sampler from airport
	Muludja	No access to community - flooding
January 2015	Kadjina	Community did not collect sampler from airport
	Bow River	No access to community - flooding
	Budjarjook	No access to community - flooding
	Dodnun	No access to community - flooding
	Jarlmadangah	No access to community - flooding
	Koorabye	No access to community - flooding
	La Djarjarr Bay	No access to community - flooding
	Mandangala	No access to community - flooding
	Ngallagunda	No access to community - flooding
February 2015	Dodnun	No access to community - flooding
	Ngallagunda	No access to community - flooding
	Kadjina	Community did not collect sampler from airport
	Kandiwal	Community did not collect sampler from airport
March 2015	Kandiwal	Community did not collect sampler from airport
April 2015	Blackstone	Logistical error
	Djugerari	Community did not collect sampler from airport
May 2015	All sampled	
June 2015	Koorabye	Community did not collect sampler from airport
July 2015	Djugerari	Community did not collect sampler from airport
	Kandiwal	Community did not collect sampler from airport
	Kadjina	Community did not collect sampler from airport
August 2015	Noonkanbah	Community did not collect sampler from airport

All waste water pond samples were collected in accordance with contractual requirements.

(2)(b)

Chemical

Community	Number of fails	Reason	Reading mg/L	Health Value mg/L
Bow River	13	Fluoride	2.1	1.5
	2	Uranium	0.019	0.017
Pandanus Park	13	Nitrate	87	50
Kadjina	3	Manganese	0.53	0.5
Kiwirrkurra	7	Fluoride	1.9	1.5
Burringurrah	9	Nitrate	65	50
	3	Uranium	0.019	0.017
Kunawaritji	9	Nitrate	60	50
Kutkabubba	12	Nitrate	69	50
Parngurr	9	Uranium	0.027	0.017
Jigalong	2	Nitrate	68	50
Yandeyarra	5	Uranium	0.018	0.017
Blackstone	10	Nitrate	110	50
Cosmo Newberry	6	Nitrate	120	50
Jameson	10	Nitrate	100	50
Mt Margaret	10	Nitrate	140	50
Mulga Queen	7	Nitrate	55	50
Patjarr	9	Nitrate	99	50
Tjuntjuntjarra	9	Nitrate	71	50
	6	Uranium	0.023	0.017
Wannan	10	Nitrate	71	50
Warburton	11	Nitrate	94	50
Wingellena	10	Nitrate	90	50

Notes:

- 13 months of records. Reading levels can naturally vary seasonally, exceedance readings are the *maximum* recorded in the period.
- In the communities that have elevated nitrate levels, Housing has followed the recommendation of the Department of Health and adopted the practices of the Water Corporation, whereby an alternative supply of bottled water is provided for "bottle fed" infants less than three months of age.
    - The Nitrate 50mg/L is for bottle fed infants under 3 months old only.
    - Up to 100mg/L can be safely consumed by adults and infants over 3 months of age.
- Chemical testing is usually done every 6 months, however, to monitor those communities with Australian Drinking Water Guidelines concerns testing is done either monthly or 3 monthly.
- The reasons for the listed chemical failures of the water quality are all due to naturally occurring elements, rather than external contamination. The presence of heavy metals,

such as uranium does often fluctuate and can be influenced by the natural recharge of underground water supplies through seasonal weather events.

- Water treatment systems rely on a suitable supply of water for treatment, due to the level of waste produced in the treatment process. The Remote Area Essential Services Program has installed systems that have resulted in favourable outcomes; however, other infrastructure upgrades may be required, such as additional bores to increase the supply of water or engine upgrades to produce a suitable and reliable power supply to support the treatment system. While the Remote Area Essential Services Program has successfully installed water treatment systems for all of the identified "problems", it incurs additional expenses to run and maintain the systems, with no additional funding.
- Of the listed communities, the following have all had treatment systems installed that have resulted in improvements to the quality of water that has been supplied:
  - Yandeyarra April 2012
  - Kiwirrkurra October 2012
  - Parngurr October 2012
  - Jigalong September 2014
  - Cosmo Newberry March 2015

Microbiological

- All Naegleria fails were of a non-pathogenic species.
- No Naegleria fowleri (pathogenic species) detected.

Community	Number of Naegleria fails	Number of E.coli fails
Jarlmadangah Burr	4	2
Bow River	2	
Mandangala	3	
Woolah	1	
Kalunburu	1	
Budgarjook	1	4
Tjirrkarli	2	
Bayulu	1	
La Djarjarr Bay	3	1
Wangkatjunka	2	
Ngurawaana	3	
Moongardie	2	1
Blackstone	2	
Dodnun	1	
Djugerari	1	1
Kupartiya	1	
Pia Wadjari	1	
Punju Ngamal	3	
Ngurtuwarta	2	1
Kutkabubba	1	
Youngaleena	1	
Kupungarri		1
Jameson	1	

Community	Number of Naegleria fails	Number of E.coli fails
Wingellina	1	
Koorabye	1	
Jigalong	1	
Warralong	1	
Patjarr	1	
Kadjina	1	1
Ngumpan	1	
Jinparinya	2	
Pandanus Park	1	
Warakurna	1	
Kandiwal	1	1
Joy Springs	1	2
Wandanooka	1	
Warmun	1	
Wurrenranginy	1	
Bobieding		1
Jimbalakudunj		1
Junjuwa	1	1
Mulga Queen	1	