

[REDACTED]

From: [REDACTED]
Sent: 29 January 2015 15:49
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Well Layout and Pumping Test Proposal

Hi Stephen, tried phoning there but no luck. Thanks for the email below regarding the pump testing. Would the proposal be to discharge the pump test water through the consent discharge point? If so do you have an idea how this is likely to affect operation of the treatment system/process/compliance with consent? With regard to volume, the original application for consent referred to a maximum daily discharge volume of 842 m³/day, and our assessment of the application was based on this assumption- modelling undertaken by ourselves has shown that at this maximum discharge volume there is unlikely to be an impact on the Owenkillew, provided consent conditions are adhered to. This proposal would indicate a maximum daily discharge volume of 1296 m³/day (based on the constant pump test operating on a 24 hr basis)- do you know how this is likely to affect consent compliance? Has any analysis of the groundwater been undertaken to assess the concentrations of the parameters listed in condition 1 of the consent?

Happy to discuss whenever suits- if you can't get me on the land line you can try my mobile 07775 671106.
Thanks

[REDACTED]

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From: [REDACTED]@dalradian.com]
Sent: 29 January 2015 13:06
To: [REDACTED]
Subject: Well Layout and Pumping Test Proposal

Hi [REDACTED]

I called early today but suspect you may have been out for lunch.

In order to better understand aquifer properties and surface water/groundwater interaction at our mineral exploration site near Gortin, we are proposing a shallow groundwater pumping test. I have attached a draft borehole layout that we are considering, together with the borehole locations and depths etc. below. GW07 is a pre-existing groundwater monitoring point.

Borehole	Grid Reference	Target Formation	Hole Depth (m)
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	Easting	Northing		
Pumping well	257040	387158	River Alluvium	9.5m
OB1	257050	387157	Schist Bedrock	30m
OB2	257041	387168	Schist Bedrock	30m
GW07	257024	387149	Pre-existing well	

The proposed groundwater pumping test will consist of a number of tests over a 7-day period. These include a calibration test (up to 8 hours pumping), step test (8-10 hours pumping) and a constant rate test (4-5 days pumping). We estimate that the pumping rate will be between 10-15L/s (for about 6 days in total) – although there is some uncertainty regarding this until the initial testing is completed. For the constant rate test, we will also understand exactly what length of time is appropriate once we determine what the key natural tracers are in terms of water quality. However, we don't anticipate it extending beyond 5 days. We are currently discussing abstraction licensing implications with [REDACTED] (possibly modifying our existing temporary abstraction licenses to incorporate this), and I am wondering if you would be available for an initial chat regarding our proposals, discharging the abstracted water and how this can best work and be regulation at the outset (as applicable)?

I'd be grateful if you could give me a call when you get an opportunity.

Thank you

[REDACTED]

[REDACTED] B.Sc. M.Sc. Ph.D. C.Geol.

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