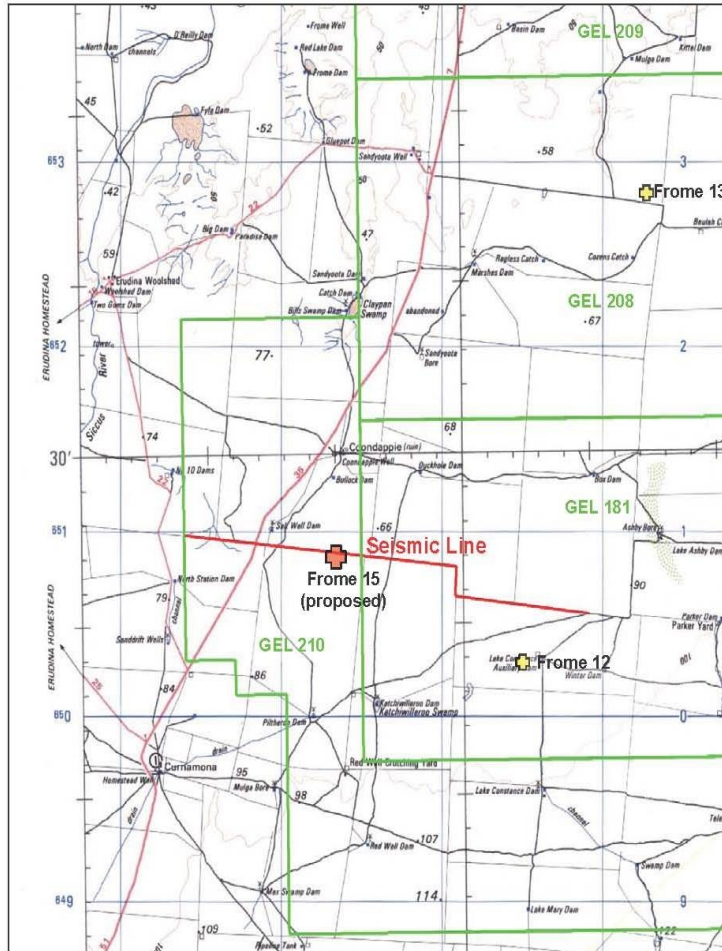


Exploration Update and Planning for 2010

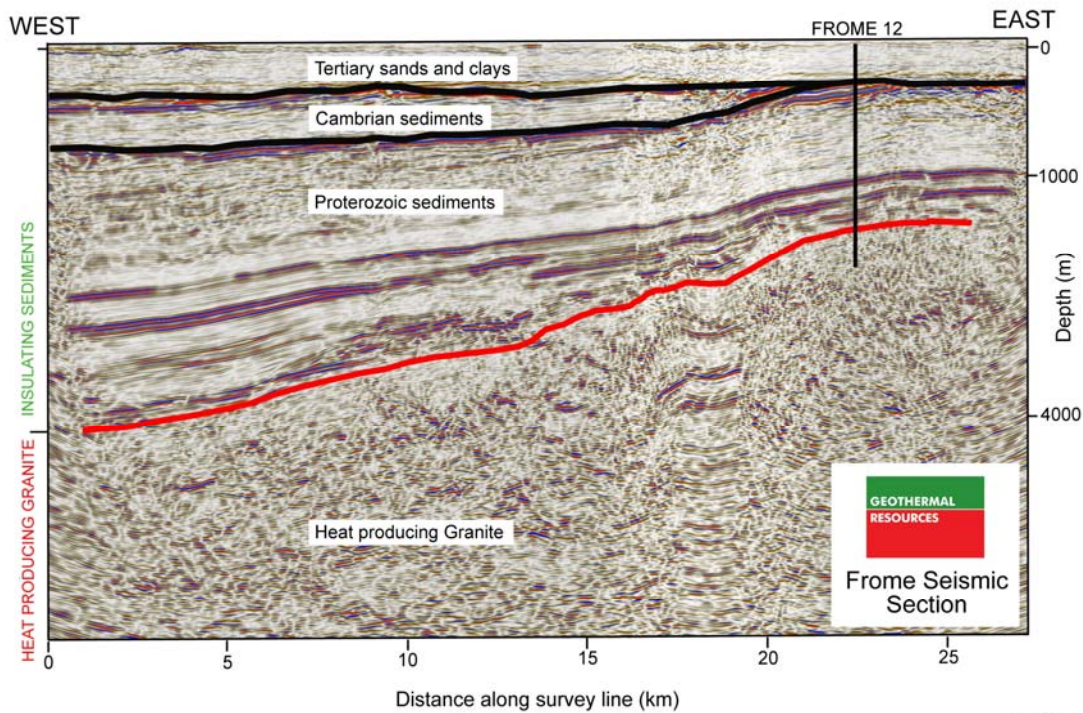
Frome Seismic Survey

Geothermal Resources Limited (ASX : GHT, 58% owned by Havilah Resources NL ASX : HAV) advises that it has received final versions of the seismic data for the Frome seismic survey. This 27 km long seismic line was designed to pass near the existing deep well, Frome 12, with the object of refining the location of the two proposed proof of concept wells, Frome 15 and 16. The proof of concept wells are designed to establish that the rate of flow of hot water would support a commercial operation, similar to that presently being tested by Geodynamics in the Cooper Basin.



Geothermal Resources has now completed its internal interpretation of the processed seismic data using Eureka 3D software. **The survey has confirmed a thick sequence of insulating Cambrian and Proterozoic sediments overlying the basement rock heat source.** As expected, the top of basement dips to the west, reaching depths of at least 4 km within the project area, based on stacked seismic velocities. Previous Geothermal Resources drilling (eg Frome 12 & 13) has proven that the insulating sediments have a geothermal gradient in the order of 40°C/km. This drilling has also shown the basement in this area to be well fractured, heat-producing granite. Thus, key geological components are in place for a potentially viable hot fractured rock, engineered geothermal system at depths of more than 3,000 metres within the Frome project area.

The location of the proposed proof of concept holes will be guided by the depths to granite indicated by the seismic data.



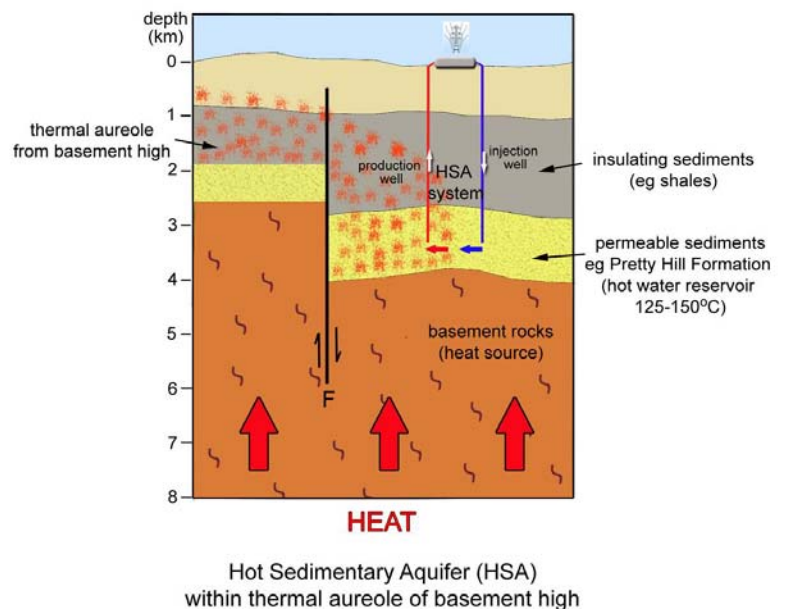
January 2010

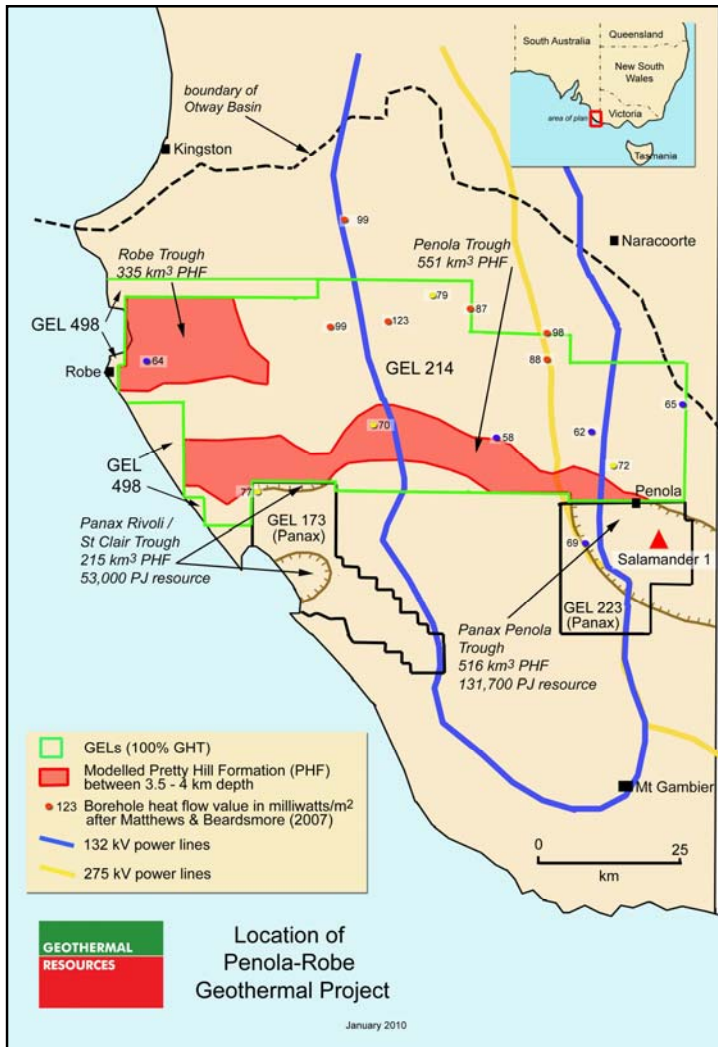
Over the past few months Geothermal Resources has formulated a detailed project plan for the Frome proof of concept drilling, including a detailed implementation strategy and budget for all phases of the work. This anticipates use of the well proven Ensign Rig # 30, currently operating in similar drilling conditions in the Cooper Basin immediately to the north. Ensign Rig #30 is of sling shot design meaning that it is comparatively quick to mobilize and set up, thereby reducing costs significantly. Well design and casing design for the two proof of concept wells has been completed.

With the hot fractured rock model and target confirmed, and planning advanced for the proof of concept wells, it is Geothermal Resources intention to seek an external partner to assist with funding of the next stage of work.

Penola –Robe Project

Testing of the Hot Sedimentary Aquifer (HSA) geothermal model in the Otway Basin is reaching an exciting stage, with Panax’s deep well, Salamander 1, about to commence on their adjoining GEL.





At least two other Companies plan to commence drilling this year in order to test this model within the Victorian portion of the Otway Basin. This focus on the HSA geothermal model will provide a wealth of new information, which will be directly applicable to Geothermal Resources Penola-Robe project area.

The HSA model is dependent on both water temperature and water flow rates in the hot sedimentary aquifer. The latter is in turn dependent on the permeability of the aquifer. In order to ascertain the areas of highest permeability Geothermal Resources is presently carrying out detailed interpretation of the available seismic data within its project area, using Eureka 3D seismic software. The objective is to identify the best area to target drilling, where the geothermal gradient is highest, the geological formations are favorable and the permeability is optimal.

Neo Oil (100%)

Neo Oil was acquired because one of its Petroleum Exploration Licences (PELs) coincided with Geothermal Resources Penola-Robe project area. This means that if Geothermal Resources deep geothermal drilling happened to encounter hydrocarbons, it would derive the benefit, rather than a third party. Conversely, if a petroleum well on the PEL encountered a good geothermal prospect, but no hydrocarbons, Geothermal Resources would be in a position to gain direct benefit.

A specialist seismic interpreter, with successful experience in the Otway Basin, has been contracted to undertake a detailed assessment of the petroleum potential of the two PELs, with the objective of identifying favourable petroleum plays that could attract a farm-in partner to meet expenditure commitments. As a geothermal explorer, it is not Geothermal Resources present intention to divert its focus towards petroleum exploration, other than in a way that could directly benefit the search for a viable HSA geothermal system.

2010 Strategy

Geothermal Resources plans to maintain an active program of work on its projects through 2010, subject to funding. It is the Company's intention wherever possible to seek competent partners to share the substantial financial commitments required for drill testing, rather than raise all the capital required itself. The merits of Geothermal Resources projects have been demonstrated by its past sole-funded work and the Company is therefore optimistic that its projects will attract the additional funding required to advance them to a successful outcome.

Dr K R Johnson
CHAIRMAN

The information in this report has been prepared by Dr Bob Johnson who is a member of the Australasian Institute of Mining and Metallurgy and Dr Chris Giles who is a member of The Australian Institute of Geoscientists. Drs Johnson and Giles are employed by the Company on consulting contracts. They have sufficient experience which is relevant to the reporting of geothermal exploration results and resources to qualify as Competent Persons as defined in Edition 1 (2008) of the "Geothermal Reporting Code, 2008". Drs Johnson and Giles consent to the release of the information compiled in this report in the form and context in which it appears

Enquiries should be directed to Dr Bob Johnson, Chairman, on (08) 8338 9292