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ASX / Media Release

28 August 2009

APPENDIX 5B – FOURTH QUARTER ACTIVITIES AND CASH FLOW REPORT

HIGHLIGHTS

- **\$902,000 raised by a well supported shareholder share purchase plan.**
- **An Inferred Resource of 84,000 PJ of thermal energy in place is estimated for a portion of the Frome Project area.**
- **Geothermal Drilling Program (GDP) grant application for Frome Project assessed as eligible.**

REVIEW OF OPERATIONS

FROME PROJECT

Resource Estimate

During the quarter Geothermal Resources Limited (Geothermal Resources – ASX : GHT) released an estimate of the thermal energy contained within granite rocks lying between 3-5 km depth over a 500 km² portion of the Frome Project area (see map). **An Inferred Resource of 84,000 PJ of thermal energy in place is estimated for this geothermal reservoir volume.** This equates to an electrical generating capacity of 460,000 GWh, assuming a heat recovery factor of 20% and electrical conversion efficiency of 10%. To put this in perspective, this would supply all of South Australia's electricity needs for more than 30 years at the current rate of consumption of 12,500GWh (www.escosa.sa.gov.au).

The thermal energy resource is estimated in strict adherence to the reporting guidelines defined in Edition 1 (2008) of the “Geothermal Reporting Code, 2008”, which specifies the supporting scientific evidence required and the relevant expertise of the person compiling the resource estimate. The Inferred Resource status reflects the uncertainty concerning how much of the thermal energy in place will ultimately prove to be recoverable.

The factual scientific basis for this thermal energy resource is the temperature data measured from 8 exploration wells drilled by Geothermal Resources over the past two years, with the assistance of a Commonwealth Government REDI grant and a State Government PACE grant. These wells have been drilled to varying depths; the deepest wells to date being Frome 12 and Frome 13 (to 1761 and 1809 metres depth, respectively). Systematic down-hole temperature logging has allowed an accurate determination of the geothermal gradient in each well, as summarized in the following table.

Well	Total depth of well	Well temperature [@ depth (m)]	Overall well temperature gradient	Temperature at top of granite	Projected temperature at 4,000 m
	(m)	(°C)	(°C/km)	(°C)	(°C)
Frome 2	500	42.5 [@ 496 m]	38.6	Not intersected	
Frome 3	500	44.9 [@ 443 m]	46.8	Not intersected	
Frome 9	505	42.5 [@ 492 m]	37.2	Not intersected	
Frome 10	261	35.5 [@ 244 m]	44.3	Not intersected	
Frome 11	255	35.9 [@ 255 m]	44.0	Not intersected	
Frome 12	1,761	93.5 [@ 1761 m]	41.1	84.5 [@ 1471 m]	190
Frome 13	1,809	96.0 [@ 1809 m]	40.5	92.9 [@ 1703 m]	187

This data indicates an abnormally high average temperature gradient above the granite body of greater than 40°C/km within the area encompassing drillholes Frome 2, 3, 9,10,11,12 and 13 (see map). Modelling indicates a temperature of around 150°C at 3 km depth.

The next phase of the project will involve drilling two deep wells (>3km). Fracturing the granite between the two wells will follow. This will subsequently allow closed loop testing of water flow and heat energy extraction rates. Based on observations of drillcore from Frome 12, it is evident that the granite has abundant, natural, sub-horizontal fractures. It is therefore likely that hydrofracture stimulation will enhance the flow rate through the granite heat exchanger, significantly improving the economics of the project.

GDP Application

Considerable research and time was spent during the quarter in preparation of an application for a Geothermal Drilling Program (GDP) grant. These grants, each for \$7 million (on a dollar for dollar expenditure basis), are provided by the Commonwealth Government to assist with the drilling of deep holes, hydro-fracture stimulation and testing of water flows. These activities coincide with those planned for the Frome Project in order to determine the water flow rate and heat recovery factor, which are critical in establishing the commercial viability of the project.

The application documentation is extremely comprehensive, and must include detailed work programs and budgets based on quotes for all stages of the planned activities. **Geothermal Resources is pleased to report that its application has been assessed as eligible and will now undergo full merit assessment.** This will involve assessment of the technical merit of the project by Geoscience Australia and financial assessment by KPMG.

The key strengths that Geothermal Resources believes differentiate the Frome Project from its peers are as follows :

- Exploration is based on a well established geothermal model – an Engineered Geothermal System in Hot Fractured Rock (granite).
- Drilling work to date has confirmed the key tenets of the model, namely:
 - A. Buried hot granite beneath thick insulating sediments, with the granite showing abundant natural subhorizontal fracturing.
 - B. Abnormally high temperature gradients of > 40°C.
 - C. A conservative Inferred Resource estimate for *in situ* thermal energy of the granite at greater than 3km depth.

- The current proposal to conduct flow tests between adjacent wells and determine the heat recovery factor is the next logical step from the work conducted to date.
- The gently sloping surface of the granite, presents the unique ability to drill into granite at different depths, permitting a range of temperatures and economic scenarios to be tested within the project area.
- Potential markets for electricity at proposed mining operations in the region, including Kalkaroo copper-gold mine 75 km to the east, and the proposed Crocker Well uranium mine 50 km to the south (see map).
- Geothermal Resources principals and management are experienced geoscientists and have a successful track record of raising finance and managing exploration and development projects in this region and elsewhere. Geothermal Resources has competently managed the REDI grant funds to produce a technically successful result.
- The location permits future heat energy enhancement options :
 - Ability to integrate with solar by utilising the abundant sunlight in the semi-desert region.
 - Ability to boost energy output by using gas from the nearby Moomba – Adelaide gas pipeline.
- Several important intellectual property innovations include:
 - Selection of the most appropriate drilling rig for the job - rather than being locked into a consortium.
 - Sequential drilling of Frome 15 and 16 – halving mobilisation costs.
 - Working at depths that equate with ~150°C – enabling the use of technology that has been proven in oil wells.
 - Multi-zone fracturing - improving water flow rate and hence economics.

CROWER PROJECT

Current work continues to be focused on computer enhancing the extensive historic seismic data for the region to develop a 3D geological model for the project area. This will assist in pin-pointing optimum target areas for hot sedimentary aquifer and hot fractured rock geothermal resources.

SHAREHOLDER SHARE PURCHASE PLAN

The Company completed a successful Share Purchase Plan during quarter, which raised \$902,320. Proceeds from the Share Purchase Plan will allow the Company to continue matching funding provided under the Commonwealth Government's Renewable Energy Development Initiative (REDI) grant in further advancing the Frome project.

This was the first capital raising by the Company since its IPO more than three years ago. A high proportion of shareholders participated in the Offer, which was gratifying given the subdued market conditions at the time.

This resulted in the issue of an additional 2,819,750 ordinary shares at a price of 32 cents, bringing the total number of shares on issue to 35,869,753, which is small by comparison to its peers.

FINANCE

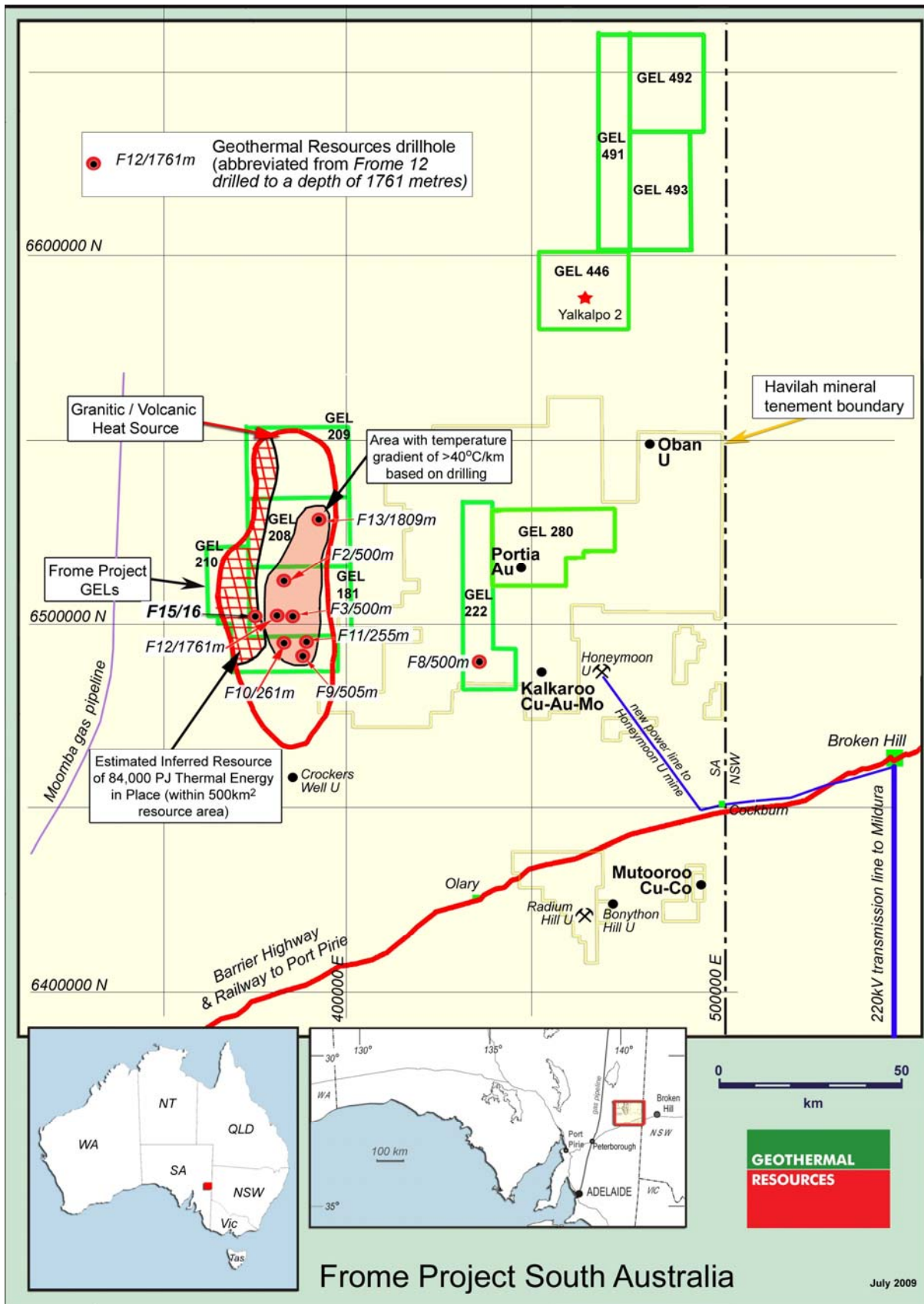
As at 31 July 2009 the Company had available funds of \$1,181,000. Increased exploration expenditure of \$631,000 during the quarter reflected the drilling costs for Frome 13. Expenditure during the next quarter is expected to be significantly lower.

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 style of mineralization and type of deposit under consideration to qualify as Competent Persons as defined in the JORC Code 2004. Drs Johnson and Giles consent to the release of the information compiled in this report in the form and context in which it appears

The geothermal resource estimate cited has been compiled by Dr Chris Giles in accordance with the guidelines defined in Edition 1 (2008) of the "Geothermal Reporting Code, 2008". He has the experience, relevant to the style of geothermal play under consideration, to qualify as a Competent Person as defined in Edition 1 (2008) of the "Geothermal Reporting Code, 2008".

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



Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

GEOHERMAL RESOURCES LIMITED

ACN

115 281 144

Quarter ended ('current quarter')

31/07/2009

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (12 months) \$A'000
1.1 Receipts from product sales and related debtors		
1.2 Payments for (a)exploration and evaluation (b) development (c) production (d) administration	-631	-2015
Dividends received		
1.4 Interest and other items of a similar nature received	8	57
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other		
	-743	-2300
Net Operating Cash Flows		
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects (b)equity investments (c) other fixed assets	-	-4
1.9 Proceeds from sale of:(a)prospects (b)equity investments (c)other fixed assets		
1.10 Loans to other entities		
1.11 Loans repaid by other entities		
1.12 Other (REDI grant reimbursement)	-	830
	-	826
Net investing cash flows		
1.13 Total operating and investing cash flows (brought forward)	-743	-1474

Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	902	902
1.15	Proceeds from sale of forfeited shares		
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings	-6	-23
1.18	Dividends paid		
1.19	Other - share issue costs	-37	-37
	Net financing cash flows	859	842
Net increase (decrease) in cash held		116	-632
1.20	Cash at beginning of quarter/year to date	1065	1813
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	1181	1181

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	154
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

The payments relate to management and consulting fees payable to entities associated with the directors pursuant to contracts entered into with the Company, and also reimbursement of expenses incurred by directors on behalf of the Company. In addition during this quarter Talager Drilling Pty Ltd, a company associated with one of the directors carried out drilling services. Drilling charges are at standard commercial rates as determined by public quotes for comparable equipment, and approved by non-associated directors.

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

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2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

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Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities		
3.2 Credit standby arrangements		

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	250
4.2 Development	
Total	250

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	113	97
5.2 Deposits at call	1068	968
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	1181	1065

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed			
6.2	Interests in mining tenements acquired or increased	GEL 491,492, 493	0%	100%

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference +securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	33,050,003	33,050,003		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	2,819,750	2,819,750		
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i>	1,600,000 200,000 25,000 200,000	Directors Employee Employee Employee	<i>Exercise price</i> 60 cents 31 cents 36 cents 86 cents	<i>Expiry date</i> 21/03/2011 19/10/2011 12/02/2012 30/07/2013

7.8	Issued during quarter				
7.9	Exercised during quarter			<i>Exercise price</i>	<i>Expiry date</i>
7.10	Expired during quarter				
7.11	Debentures <i>(totals only)</i>				
7.12	Unsecured notes <i>(totals only)</i>				

Compliance statement

1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).

2 This statement does ~~does not~~* (*delete one*) give a true and fair view of the matters disclosed.

Sign here:
(Director/Company secretary)

Date: 28 August 2009

Print name: Dr KR Johnson...Chairman / Director.....

Notes

1 The quarterly report provides a basis for informing the market how the entity’s activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

2 The “Nature of interest” (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.

3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.

4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.

5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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