

July 20, 2023

SURFACE RIGHTS BOARD

IN THE MATTER OF
THE GEOTHERMAL RESOURCES ACT, R.S.B.C., C. 171
AND THE PETROLEUM AND NATURAL GAS ACT
R.S.B.C., C. 361, AS AMENDED

AND IN THE MATTER OF

BLOCK B DISTRICT LOT 2665 RANGE 5 COAST DISTRICT
EXCEPT PLAN 4416 (PID 017-494-664),
LOT 1 DISTRICT LOTS 684 2285 2664 2665 3983 5127 RANGE 5 COAST DISTRICT
PLAN PRP14339 EXCEPT PLAN PRP14340 (PID 019-208-006), and
LOT 2 DISTRICT LOT 3983 RANGE 5 COAST DISTRICT PLAN 7300
(PID 009-428-780)
(The "Lands")

BETWEEN:

Kitselas Geothermal Inc.

(APPLICANT)

AND:

Mount Layton Hotsprings Resort Ltd. and
H. Orleans Holding Inc.

(RESPONDENTS)

BOARD ORDER

Mediation conducted: July 10 and 14, 2023
Mediation attended by: Cheryl Vickers, Mediator; Peter Judd, Board Member; Tim Thompson, Alison Thompson and Dr. David Try, on behalf of the Applicant; Marlene Orleans and Carol Egan, on behalf of the Respondents; Sabrina Spencer and Kinji Bouchier, Barristers and Solicitors, also on behalf of the Respondents

[1] Kitselas Geothermal Inc. (“KGI”) holds a permit issued under the *Geothermal Resources Act* (“GRA”) bearing Permit Agreement No. GP67428, approved by Order in Council on February 17, 2023, granting KGI the right to geothermal resources in specified zones and locations by Lakelse Lake (“the Permit”).

[2] Mount Layton Hotsprings Resort Ltd. is the owner of land legally described as: BLOCK B DISTRICT LOT 2665 RANGE 5 COAST DISTRICT EXCEPT PLAN 4416 (PID 017-494-664) and LOT 1 DISTRICT LOTS 684 2285 2664 2665 3983 5127 RANGE 5 COAST DISTRICT PLAN PRP14339 EXCEPT PLAN PRP14340 (PID 019-208-006).

[3] H. Orleans Holdings Inc. is the owner of land legally described as LOT 2 DISTRICT LOT 3983 RANGE 5 COAST DISTRICT PLAN 7300 (PID 009-428-780).

[4] The above described land is collectively referred to in this Order as “the Lands”. The two above named landowners are collectively referred to as “MLHR”.

[5] The Lands are within the area covered by the Permit. They comprise approximately 795 acres and are occupied and used by MLHR for business and agricultural purposes. Some individuals employed in MLHR’s business and agricultural activities also live on the Lands.

[6] By Order 2201/02-1 dated July 2, 2023 as amended July 17, 2023 by Order 2201/02-1amd (the First ROE) the Board authorized entry to the Lands by KGI to conduct various activities in advance of applying to the BC Energy Regulator (BCER) for a well authorization to drill exploratory geothermal wells. The First ROE did not allow entry to the Lands for the purpose of exploratory drilling but only for required preparatory activities and studies.

[7] KGI intends to seek a well authorization permit from the BCER allowing drilling of up to 10 thermal gradient (TG) wells and up to 4 exploration wells. Of the potential TG well sites, 26 are on the Lands and one is partially on the Lands. Of the potential exploration well sites, 41 are on the Lands and one is partially on the Lands. While KGI knows, subject to BCER approval, where it wants to drill the first 4 TG wells, the location of subsequent wells will depend on the results of the initial wells. Likewise, the results

from the TG wells will inform KGI which of the proposed exploration wells should be drilled. KGI also intends, if the results of the exploratory wells indicate that the geothermal resource can be sustainably and economically developed, to develop a direct heat project that will provide heat to industrial processes a distance away from the Lands as a substitute to natural gas combustion. KGI indicates that this intended project will require applying to the Ministry to convert the Permit to a geothermal lease, and subsequently will involve an application to the BCER for a heat distribution pipeline permit. We understand that the work necessary to prepare and submit a development plan and to apply to convert the Permit to a lease will include surveying and may include other non-invasive surface activities similar to those covered by the First ROE.

[8] Section 3 of the Geothermal Operations Regulation, BC Reg 79/2017, requires a person applying for a well authorization to provide “proof of tenure or right to use private land”. KGI seeks a right of entry order granting access for proposed drilling activities so that it may apply to the BCER for a well authorization, conduct a drilling program authorized by the BCER, and to conduct any surface work that may be necessary for the purpose of converting the Permit to a lease. KGI is not seeking right of entry for the production of geothermal resources.

The Board’s authority

[9] The *GRA* provides that the *Petroleum and Natural Gas Act (PNGA)* applies “in respect of entry onto and use of land for the purpose of exploring for and producing geothermal resources” (*GRA*, section 1(2)).

[10] The *PNGA* requires the Board to mediate disputes respecting access to private land and allows a mediator to make an order authorizing right of entry if the mediator is satisfied a right of entry order is required. (*PNGA*, section 159(1)). In the oil and gas context, the order authorizing entry to land must be required for an oil and gas purpose as defined in the legislation. In the oil and gas context, the Board can be satisfied an order authorizing entry to land is required for an oil and gas purpose if the BCER has issued a well authorization or pipeline permit for the construction and operation of a well or pipeline, and the holder of the well authorization or pipeline permit has not been able to agree to a surface lease or right of way agreement with the landowner on whose land the well or pipeline is to be constructed. All the *GRA* says, however, is that the *PNGA* applies “in respect of entry onto and use of land for the purpose of exploring for and producing geothermal resources”.

[11] Reading the *GRA* and the *PNGA* together, I find that a mediator may make an order authorizing entry to private land if satisfied the order authorizing the right of entry is required for the purpose of exercising exploration or production rights granted under the *GRA*. In the context of this application, I must be satisfied an order authorizing right of entry is required for KGI to exercise its rights under the Permit.

[12] Giving a mediator the authority to grant a right of entry order and determine terms and conditions of entry turns a mediation into a process akin to a med-arb. It enables a subsurface rights holder to gain access to the surface of land which, as a subsurface rights holder they have the right to do, while reserving for future mediation or arbitration other issues between the parties, in particular the compensation ultimately payable to a landowner.

[13] This mediation resolved little between the parties. The parties disagreed on the extent and scope of any right of entry, the language to be used in granting right of entry, the terms and conditions of entry, and the amounts to be paid for partial compensation and security deposit. I will address these various issues below, but will start with a brief overview of the legislative scheme relating to the grant of geothermal resources to assist in my analysis of the extent and scope of an order authorizing entry in the geothermal context.

Geothermal Resources, Permits and Leases

[14] Geothermal resources in British Columbia are vested in the government (*GRA*, section 2). Persons may not produce geothermal resources except for testing purposes other than in accordance with an approved production plan underlying the location of a geothermal lease granted in accordance with the *GRA*.

[15] Part 3 of the *GRA* provides for the granting of permits and leases. The holder of a permit, or a person who has made an agreement with a permittee for the drilling or operation of a well, has the exclusive right, subject to the regulations, to apply for well authorizations for wells to be drilled within the boundaries of the permittee's location (*GRA*, section 5(4)). A permit expires on its first anniversary but may be renewed up to seven times or as authorized in writing by the minister (*GRA*, subsections 5(7), (8), (9), (10)). Each year, a permittee must carry out geothermal exploration work of a prescribed value or make payments in lieu (*GRA*, section 7(1)). As production of a geothermal resource is not permitted without a lease, a permittee's right to apply for well authorizations necessarily extends to wells for exploration purposes only. A person may not drill or operate a well without a well authorization issued by the BCER (*GRA*, section 4(4)).

[16] Once a geothermal well has been drilled, and a permittee submits a development plan with respect to a location, the minister may issue a lease (*GRA*, section 8(1)). A permit expires when a lease is issued (*GRA*, section 8(3)). Once a lease has been granted for a location, the lessee may produce geothermal resources subject to the regulations and necessary authorizations issued by the BCER. The *GRA* sets out the term of a lease and provisions for its renewal.

Extent of Right of Entry

[17] MLHR submitted that a right of entry order should not extend to surface use of the Lands for activities beyond those directly relevant to any well authorization provided by BCER with respect to the proposed exploratory drilling program, and that it should not include use of the surface of the Lands for the purpose of preparing and submitting a development plan under the *GRA* for purposes of applying to convert the Permit to a lease.

[18] A permit issued under the *GRA* includes the right to apply for a well authorization that is expressly set out in section 5(4). A *GRA* permit must necessarily, however, include other rights not expressly set out in the *GRA*. As applying for a well authorization involves preparatory work in the nature of that conducted under the First ROE, a permit necessarily includes the right to conduct that work. The rights granted by a permit must also necessarily include, subject to the BCER issuing a well authorization and subject to all applicable regulations, the right to conduct an exploratory drilling program. A permit also includes the right, once a well is drilled, to submit a development plan in order to apply to convert the permit to a lease. Where access to private land is required to exercise these rights, a permittee, like any other subsurface rights holder, has the right to access private land to explore for the subsurface resource subject to either an agreement with the landowner or an order of the board authorizing entry to the land.

[19] The scheme of the *GRA* is to grant rights via permit to explore for geothermal resources, and rights via lease to produce geothermal resources, all subject to applicable regulations and necessary authorizations. Essentially, a permit under the *GRA* is a right to explore for geothermal resources, subject to all applicable regulations, inclusive of all activities necessary to the exploration of geothermal resources and authorized by the BCER for that purpose, up to the point the permit is converted to a lease or otherwise expires. The rights to explore for geothermal resources include the right to apply to convert a permit to a lease.

[20] Requiring separate orders authorizing entry to land for different work to be conducted in pursuance of the right to explore for geothermal resources draws artificial lines in a singular exploration project. I see no value in requiring a proponent of a geothermal exploration project to seek a separate right of entry for various sets of activities along the continuum of a project. In future, unless the particular circumstances of a case warrant otherwise, I would not expect the Board to engage in a two-step mediation, as it did in this case, to consider the need for a right of entry order for the purposes of conducting work necessary to advancing an application for a proposed exploratory drilling program, and a second process to consider the need for a right of entry order to submit the application for a well authorization. Nor do I see the need for a third process to consider the need for a right of entry order to conduct any work that may be necessary following the drilling of wells for the conversion of a permit

to a lease. All of the work is part of a singular exploration project to which access to private land is required.

[21] MLHR submitted that as any decision to file a development plan and apply to convert the Permit to a lease will not be made until the results of the exploratory drilling program are known, a right of entry order for that purpose is not required. While the decision to proceed cannot be made until the drilling is complete, the right to make that decision and apply for a lease is necessarily included in the Permit and part of the proposed project. If the Board must be certain that proposed activities will actually occur prior to authorizing entry to land, it could never be satisfied in the geothermal context that an order authorizing entry to land is required for the actual drilling of wells. The legislative and regulatory scheme requires a permittee to submit proof of tenure or the right to use private land with its application for a well authorization. The application for a well authorization may not be approved at all or it may not be approved in the form it is submitted. The legislative scheme seems to require the Board to authorize entry to private land to conduct drilling activities not yet permitted where a GRA permit holder will require access to and use of private land once a well authorization is granted, although the Board cannot be certain an application for well authorization will be approved.

[22] Similarly, the Board does not know what work the holder of a geothermal well authorization may be required to carry out by other governmental authorities such as the Agricultural Land Commission or the Ministry of the Environment as a result of its drilling activities. It makes no sense to require a *GRA* permit holder to seek either the landowner's agreement or an order authorizing entry to land from the Board every time the permit holder requires access to private land in furtherance of the exercise of its exploratory rights under a *GRA* permit associated with a singular exploration project.

[23] If KGI is successful in converting the Permit to a lease and decides to proceed with a geothermal production project on the Lands requiring authorization from the BCER, it will need either an agreement with MLHR for the use of the Lands for the production project or an order of the Board. The conversion of a permit to a lease is a clear legislative boundary between the right to explore for geothermal resources and the right to produce geothermal resources. There is no legislative reason to divide the various activities necessary to a singular exploration project on private land into phases requiring separate agreements with a landowner for access or separate orders from the board authorizing entry to land.

Is an order authorizing entry to the Lands required?

[24] The parties have been unable to agree on an access agreement that would allow KGI access to the Lands to conduct its proposed drilling program or as may be required following completion of the drilling program in order to convert the Permit to a lease. I am satisfied that KGI requires access to the Lands in order to exercise the rights

granted to it in the Permit, inclusive of applying for a well authorization, conducting any drilling program approved by the BCER, performing any work necessary or ancillary to a well authorization, and as may be required following completion of any drilling program in order to apply to convert the Permit to a lease. Subject to approval by the BCER of a well authorization, all of the work proposed by KGI falls within the rights granted by the Permit to explore for geothermal resources. I am satisfied an order authorizing right of entry to the Lands is necessary so that KGI may exercise its rights under the Permit.

The language authorizing entry

[25] The parties disagreed as to how I should word the right of entry order so as to effectively balance the conflicting rights of the parties to use of the surface of the Lands. Unlike in the oil and gas context, the Board cannot define the scope of entry by an authorization already granted by the BCER. The Board is placed in the uncomfortable position of determining the scope of entry and trying to balance conflicting rights without knowing what the regulator will ultimately permit.

[26] KGI provided the Board and MLHR with an overview of its proposed drilling program detailing the work to be performed with respect to well site preparation and drilling, mitigation measures, abandonment, and timelines. MLHR asks that I include a summary of this proposed work as a schedule to this Order so as to inform the scope of activity that KGI may conduct on the Lands. I have considered this request but conclude for the reasons that follow that any attempt by this Board to specify with any particularity how the proposed work is to be conducted is inappropriate.

[27] KGI's right to access and use the surface of the Lands only extends to use that is necessary and incidental to the exercise of the rights granted in the Permit. Other than to exercise those rights, KGI has no reason to be on the Lands. How KGI exercises those rights to conduct its drilling program, however, is for the BCER, not this Board, to determine. In granting a well authorization, it is the BCER's role to ensure that all applicable regulations are adhered to and to ensure that any authorized activity is conducted in compliance with regulatory requirements. It is simply not within this Board's jurisdiction to specify how a drilling program is to proceed. Additionally, KGI in conducting their geothermal exploration program may need to meet requirements of other government bodies such as the Agricultural Land Commission. To the extent KGI needs access to the Lands to exercise the rights granted in the Permit, whether its activities are regulated by the BCER or another government body, it has the right to do so as long as those activities are necessary and incidental to the well authorization granted by the BCER for KGI's exploratory drilling program. KGI has no rights to access the surface of the Lands for purposes not necessary or incidental to its geothermal exploration program. My intent in drafting the right of entry order below is to permit access to the Lands to conduct all activities necessary and incidental to a singular exploration program authorized by the BCER while respecting the jurisdiction of

the BCER and other government authorities to regulate the activity connected with KGI's rights.

Terms and Conditions

[28] Many of the other terms and conditions to be imposed in this right of entry were disputed by the parties. In setting out the terms and conditions at Schedule "A" I have tried to balance the conflicting rights of the parties. I anticipate the terms and conditions are not as restrictive as MLHR would have liked and that they impose terms on KGI it would rather not have to comply with. Subject to a well authorization being issued by BCER, and subject to all applicable legislation and regulations, KGI has the right to access the surface of the Lands to conduct work necessary and ancillary to its proposed drilling program without interference from MLHR. While I expect both parties to take all reasonable efforts to avoid conflict with the use of the Lands, there may be occasions where conflict cannot be avoided. MLHR has the right to be compensated for loss or damage that may occur as a result of KGI's activities on the Lands.

Compensation

[29] Until the proposed drilling program is complete, it is impossible to estimate the compensation payable to MLHR. The parties take differing views as to how compensation for the various factors set out in section 154 of the *PNGA* should be determined in the geothermal context. If the parties are not able to agree on the compensation ultimately owed to MLHR arising from the First ROE and this Order, the Board may mediate and ultimately arbitrate final compensation. In the meantime, section 159(4) of the *PNGA* requires that a right of entry order must require the person seeking a right of entry to pay to the landowner an amount on account of rent or compensation ultimately owing. The amount ordered below is simply that and does not preclude either party from advancing their respective positions on compensation as may be necessary in future proceedings.

Security Deposit

[30] MLHR asked that I require a security deposit of \$10,000. The *PNGA* provides that a right of entry order may require the person seeking the order to pay a security deposit for the purpose of ensuring the landowner will be paid any amount that is subsequently ordered by the board to be paid to the landowner. As I said above, it is not possible to estimate what the landowner may ultimately be owed in compensation at this stage of these proceedings and any amount for a security deposit is somewhat arbitrary. The First ROE required a security deposit of \$2,500. I will require a further deposit of \$7,500 to bring the total security deposit to \$10,000.

ORDER

The Surface Rights Board orders:

1. Upon payment of the amounts set out in paragraphs 2 and 3 below, KGI shall have the right of entry to and access across the Lands on the Terms and Conditions set out at Schedule "A" for the purpose of exercising its rights under Permit Agreement No. GP67428 issued under the *Geothermal Resources Act* including the right to:
 - a. Drill up to ten (10) thermal gradient wells and up to four (4) exploration wells as may be authorized in a well authorization issued by the BC Energy Regulator and as any well authorization may be amended by the BC Energy Regulator (the Well Authorization);
 - b. Conduct any work or activity required by the BCER in relation to the Well Authorization;
 - c. Conduct any work necessary or ancillary to the Well Authorization that may be required by any government authority other than the BCER;
 - d. Conduct continued testing; monitoring and maintenance of any wells drilled in accordance with the Well Authorization and to conduct continued testing and monitoring of the hot springs;
 - e. Conduct any work after wells have been drilled necessary to prepare and submit a development plan and apply for conversion of the Permit to a lease.
2. KGI shall pay to MLHR as partial compensation the amount of \$5,000.00.
3. KGI shall deliver to the Surface Rights Board security in the amount of \$7,500.00 by cheque made payable to the Minister of Finance. All or part of the security deposit may be returned to KGI, or paid to MLHR, upon agreement of the parties or as ordered by the Board.
4. Nothing in this order operates as a consent, permission, approval, or authorization of matters within the jurisdiction of the BCER.

DATED: July 20, 2023

FOR THE BOARD



Cheryl Vickers, Mediator

SCHEDULE "A"

Terms and Conditions of Entry to the Lands

1. Upon receipt, KGI must provide MLHR and the Board with a copy of the Well Authorization and if not included as part of the Well Authorization, must provide MLHR with a map of the Lands indicating the locations of the TG and exploratory wells authorized to be drilled, access routes, and intended placement of water lines.
2. KGI shall access only those areas of the Lands and only as much of the Lands as reasonably necessary for the purposes set out in paragraph 1 under the heading ORDER.
3. When accessing the Lands, KGI Crews must minimize the area of non-road machine or equipment (including temporary water lines) access to the Lands as much as reasonably possible and as is reasonably safe to do so. Such efforts will include:
 - a. Using existing roads to the greatest extent possible, including when moving between drilling sites; and
 - b. Using the same route for ingress and egress to a drilling site for the duration of activity at that site.
4. Where water lines will be temporarily placed on the Lands outside of a drilling site, KGI will advise MLHR as soon as reasonably possible, of the location of the water lines on the Lands and will utilize safety markers, signage or similar notification to mark the location of the water lines on the Lands.
5. Prior to entering the Lands for the purpose of drilling the first four TG wells, KGI will give notice at least 48 hours prior to entry, and no later than noon on the Friday before in respect of Monday access. With respect to all subsequent TG wells, KGI will give notice to MLHR as early as reasonably possible. Notice shall include: approximate location on the Lands where drilling will occur, a copy of the traffic management plan (TMP) for the well to be drilled, the number of people expected to be on the Lands, and an estimate of the time required to drill the well. Notice shall be given in writing by email to MLHR and MLHR's counsel unless otherwise agreed by the parties that notice may be provided by alternate means.
6. For the purposes of drilling, KGI will access the Lands in accordance with the TMP required for each well site and causing the least disturbance to the Lands and to MLHR as possible. For purposes other than drilling but otherwise ancillary or necessary to complete the drilling program, KGI crew will access the Lands via either McKenzie Road or Hansen Road, whichever is closest to the location of the required work and causing the least disturbance to the Lands and to MLHR. If

Hansen Road is used to access the Lands, KGI will post a notice, viewable from an automobile, at the intersection of Hansen Road and Highway 37 advising of the upcoming usage.

7. While accessing the Lands KGI will make reasonable efforts not to block (i) employee or guest access to business premises on the Lands and (ii) resident or guest access to any residences located on the Lands or accessible only via the Lands.
8. Any damage caused by KGI to private roads or associated infrastructure (eg: culverts) owned or maintained by MLHR on the Lands will be repaired as soon as reasonably possible and at the sole expense of KGI.
9. In the event KGI crews may require entrance through any gates on the Lands, KGI shall provide at its expense double locks for those gates and will advise MLHR which gates have double locks. MLHR will facilitate as necessary KGI's application of double locks. KGI must ensure that the double locks also allow access through gates by MLHR personnel. KGI crews are responsible to ensure any gates opened by them for ingress or egress are closed and that they remain closed when ingress or egress is not required. When access to the Lands for purposes in this Order is no longer required, KGI will remove the double locks and ensure the gates remain locked as before.
10. Following the drilling of each TG well and exploration well on the Lands, KGI will provide MLHR with the exact location of that well as surveyed in compliance with the requirements of the BCER.
11. For as long as KGI requires access to the Lands pursuant to this Order, KGI shall acquire and maintain, at its own expense, applicable comprehensive general liability insurance with inclusive limit of not less than Five Million Dollars for personal injury and property damage. Before entering the Lands for the first time, KGI shall provide MLHR with a copy of the applicable certificate of insurance.
12. Both parties shall use their best efforts to avoid conflict between MLHR use of the Lands which may include the presence of livestock, and KGI's use of the Lands. MLHR will, as soon as reasonably possible, advise KGI of farm or business operations (eg presence of livestock, infrastructure maintenance) that cannot reasonably be relocated or delayed and that may conflict with KGI's use of the Lands. In the event KGI cannot conduct work to avoid conflict with MLHR use of the Lands, KGI will make reasonable efforts to minimize interference and will advise MLHR of any steps taken to mitigate interference.

13. KGI crews shall conduct themselves in a professional manner, be cognizant of concerns respecting privacy when working around residences, and make their best efforts to avoid unnecessary invasions of privacy.
14. The payments ordered in paragraphs 2 and 3 of this Order shall be deemed to be received upon mailing of a cheque to the address provided by the recipient, and by providing the recipient by email with a photograph of the cheque.
15. If either party has concerns respecting the other party's compliance with these terms, they shall notify the other party in writing of those concerns. The parties will use their best efforts to rectify any concerns, failing which, the Board retains jurisdiction to resolve concerns respecting the implementation of or compliance with this Order and to amend this Order, on the written application of a party copied to the other party, as the Board may find appropriate.