File No. 1869 Board Order No. 1869-1

May 12, 2017

#### SURFACE RIGHTS BOARD

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

#### AND IN THE MATTER OF

THE SOUTH ½ OF DISTRICT LOT 3426 RANGE 5 COAST DISTRICT BLOCK A DISTRICT LOT 3425 RANGE 5 COAST DISTRICT THE SOUTHEAST ¼ OF DISTRICT LOT 3427 RANGE 5 COAST DISTRICT THE WEST ½ OF THE EAST ½ OF DISTRICT LOT 3424 RANGE 5 COAST DISTRICT (The "Lands")

	BOARD ORDER	
	Donald Christmann	(RESPONDENT)
AND:		
	New Nadina Exploration Limited	(APPLICANT)
BETWEEN:		

Heard: March 6-8, 2017 at Kelowna, B.C.

Appearances: Salim Hirji, Barrister and Solicitor, for the Applicant

Jeff Frame, Barrister and Solicitor, for the Respondent

\_\_\_\_\_\_

# **INTRODUCTION**

[1] New Nadina Explorations Limited ("New Nadina") seeks right of entry to property owned by Donald Christmann to conduct an exploratory drilling program. New Nadina wishes to conduct this drill program in the fall.

- [2] The property owned by Mr. Christmann is part of the Mission Outpost Ranch located approximately 45 kms south of Houston, B.C. Mr. Christmann does not object to New Nadina entering his property to conduct their drilling operations during the winter months, but submits a non-winter program will interfere with his ranching operation.
- [3] New Nadina does not want to be restricted to a winter drilling program. It says weather conditions for an optimal winter drilling program cannot be guaranteed with the result that a winter drilling program will likely take longer, cause more damage to the land, require a longer period for reclamation, create more safety issues, and cost more. It submits a fall program can be conducted with minimal interference to the ranching operation and result in less damage to the land. Mr. Christmann disagrees that a fall drilling program will likely result in less damage to the land.

## **LEGISLATIVE FRAMEWORK**

#### The Mineral Tenure Act

[4] The *Mineral Tenure Act* governs the respective rights of recorded holders of mineral tenures and landowners with respect to surface access for mining activities and provides a process for the resolution of disputes respecting surface access to privately

owned land. Section 14 provides a right of entry to the surface of land subject to mineral tenure as follows:

- (1) Subject to this Act, a recorded holder may use, enter and occupy the surface of a claim or lease for the exploration and development or production of minerals or placer minerals, including the treatment of ore concentrates, and all operations related to the exploration and development or production of minerals or placer minerals and the business of mining.
  - (2) Despite subsection (1), no mining activity may be done by a recorded holder until the recorded holder receives the permit, if any, required under section 10 of the *Mines Act*.
- [5] Section 19(1) requires notice in a prescribed form be served on private landowners prior to beginning any mining activity on private land and section 19(2) makes a recorded holder liable to compensate the owner of the surface area for loss or damage caused by the entry, occupation or use of the area by the recorded holder for mining activities.
- [6] A person with a material interest in the surface may apply to the Chief Gold Commissioner under section 19(3) and the Chief Gold Commissioner must use his or her best efforts to settle issue in dispute arising from rights acquired under the Act. If the Chief Gold Commissioner is unable to settle the dispute, section 19(4) gives the Surface Rights Board ("Board") the authority to do so and makes Part 17 of the Petroleum and Natural Gas Act establishing the Board and setting out its powers and jurisdiction applicable to the resolution of disputes under the Mineral Tenure Act.
- [7] Subsections 19(5), (7), (8) and (9) then set out specific provisions relevant to the resolution of disputes under the *Mineral Tenure Act* and the considerations the Board must take into account in the resolution of disputes as follows:
  - 19 (5) In an arbitration under subsection (4) involving a conflict between rights acquired under this Act and rights acquired under the *Land Act*, the Surface Rights Board must take into account which of the rights was applied for

first and, unless injustice would result, must give the holder of those rights due priority in its consideration of the dispute between the parties.

- (7) If an owner of private land opposes entry on the land by a recorded holder on the grounds that the intended activity would obstruct or interfere with an existing operation or activity on the land or with the construction or maintenance of a building, structure, improvement or work on the land, the Surface Rights Board must determine the impact of the intended entry and must determine which parts of the land would be affected by that entry.
- (8) If, under subsection (7), the Surface Rights Board determines that it is not possible to enter the land or a part of it without obstruction or interference, in addition to any other order it makes, the board must make an order
  - (a) specifying conditions of entry that will minimize the obstruction to or interference with the existing circumstances of the land, and
  - (b) specifying compensation for obstruction to or interference with enjoyment of the land.
- (9) Without limiting the factors that the board may consider in making a decision under this section, in making a determination under subsections (7) and (8) the board must take into account the extent of the obstruction or interference with respect to the following:
  - (a) land occupied by a building;
  - (b) the curtilage of a dwelling house;
  - (c) orchard land;
  - (d) land under cultivation.
- [8] Summarizing the above as it relates to this case, where a landowner opposes entry on the ground that it will interfere with an existing activity or operation on the land, the Board must determine the impact of the intended entry and must determine which parts of the land will be affected by the entry. If entry is not possible without interference, the Board must make an order specifying conditions that will minimize interference and in so doing, may consider the extent of interference with respect to land under cultivation. The Board must also consider which rights, as between rights acquired under the *Mineral Tenure Act* and rights acquired under the *Land Act*, were applied for first and, unless injustice will result, give the holder of those rights due priority in the resolution of the dispute.

### **ISSUE**

- [9] The issue, therefore, is to determine whether it is possible to enter the Lands without interference to an existing operation and, if not, to determine the conditions for a right of entry order to permit New Nadina's access to the land owned by Mr. Christmann that will minimize interference with existing circumstances. In particular, the issue is whether the right of entry should be restricted to the winter months, in all of the circumstances of this case. In resolving this issue, I must determine:
  - a) Which rights as between those acquired under the Land Act and those acquired under the Mineral Tenure Act were acquired first, and whether any injustice will result in giving priority to the first acquired rights in resolution of this dispute;
  - b) The impact of the intended entry and which parts of the land will be affected by the entry.
- [10] The compensation payable arising from the right of entry is not in issue in these proceedings but may be the subject of future proceedings if the parties are unable to agree.

#### **EVIDENCE AND FINDINGS OF FACT**

#### Background

- [11] Since 1915, the predecessors to New Nadina have engaged in mining activity on some of the land now comprising the Mission Outpost Ranch and surrounding land. New Nadina has subsurface mineral rights on both Crown and privately owned land in the area.
- [12] The President and CEO of New Nadina is Ellen Clements. Ms. Clements became the President and CEO in 2006. Before that, the company was run by her husband, George Stewart, now deceased. Ms. Clements first started coming to the area for mining related activities in the 1970's.

[13] New Nadina proposes to conduct a diamond drilling program on land owned by Donald Christmann, legally described as: The South ½ of District Lot 3426 Range 5 Coast District ("DL 3426"). Access to the proposed drill sites on DL 3426 will be through other parcels owned by Mr. Christmann legally described as:

Block A District Lot 3425 Range 5 Coast District ("DL 3425")
The Southeast ¼ of District Lot 3427 Range 5 Coast District ("DL 3427")
The West ½ of the East ½ of District Lot 3424 Range 5 Coast District ("DL 3424")
(all four parcels are collectively described as "the Lands").

[14] In 2001, Mr. Christmann and a numbered company owned by him, purchased DL 3424, DL 3426, DL 3427 and other parcels of land known as the Mission Outpost Ranch Nadina Unit, as well as property near Smithers known as the Hudson Bay Unit, to operate an integrated cattle ranch. Mr. Christmann is an experienced rancher having been involved in ranching operations since he was a child. Before purchasing the Mission Outpost Ranch, Mr. Christmann owned ranch property and engaged in ranching activities in Wyoming.

[15] In 2009, Mr. Christmann purchased DL 3425 from the Crown subject to New Nadina's Mineral Title. The relative priorities as between Mr. Christmann and New Nadina with respect to DL 3424, DL 3426 and DL 3427 is in dispute.

[16] Mr. Christmann initially consented to New Nadina's exploration work on his property. In February 2003, he wrote to Mr. Stewart giving him permission to enter his property and drill a test hole in the meadow area on the understanding such activity would occur when the frost is still in the ground and any damage would be cleaned up. In 2009, he and Ms. Clements had a "handshake agreement" allowing exploration for three years. In February 2011, Mr. Christmann wrote to Ms. Clements granting permission to access his property for mining activities. His only request was that disturbance be kept to a bare minimum and the property be left to as close to original condition as possible.

- [17] New Nadina conducted drilling programs in 2010 and 2011. The 2011 fall program experienced problems as a result of wet weather and encountering flowing drill holes. A larger than anticipated area had to be excavated for a sump. The 2011 drilling operation resulted in damage to the land requiring remediation. In December 2011, Mr. Christmann wrote to Ms. Clements indicating his opposition to further exploration activities unless conducted in the winter on snow pack.
- [18] The results from the 2011 drill program indicated a significant discovery. Ms. Clements attributes Mr. Chritmann's change in attitude to New Nadina continuing exploration to the discovery. Mr. Christmann says his change in tone was because of the extent of damage that occurred in the 2011 fall program.
- [19] In May 2012, Ms. Clements asked permission to enter the Lands for a fall drilling program. Mr. Christmann did not grant permission. Mr. Christmann appointed Gary Thompson, an individual with experience in the mining industry, to come up with recommendations for continued mining exploration on the property. In June 2012, Mr. Thompson provided a report recommending a winter drilling program and use of a "polydrill" system for cuttings which would avoid the use of sumps. In July 2012, New Nadina provided a Notice of Work for a five year drilling program.
- [20] In November 2012, New Nadina commenced drilling and Mr. Christmann applied to the Supreme Court of British Columbia seeking an injunction to stop the operation. Mr. Christmann's opposition to the drilling at the time alleged New Nadina's permit was invalid because it failed to provide a plan to deal with Metal Leaching and Acid Rock Drainage; it did not raise concerns about interference with the ranch, the impact on cattle, or land under cultivation. The parties agreed to terms under which the exploration work could continue and New Nadina recommenced drilling in January 2013. The winter drilling program experienced problems because of warm weather causing damage to the land. In the spring of 2013 when Ms. Clements went back to do reclamation work, she discovered a drill hole was an artesian well and later discovered

another drill hole was oozing water. The first artesian well was plugged in May of 2013, but the second was not successfully plugged until September of 2015.

[21] In June 2013, following an application from Mr. Christmann, the Board conducted a hearing on the issue of whether an area of the ranch known as the Hay Meadows was "land under cultivation" within the meaning of the Mineral Tenure Act. The Board issued its decision in September 2013 concluding that "land under cultivation" within the meaning of the *Mineral Tenure Act* is land that is presently and actively subject to activities for the purpose of raising a crop with the intent to harvest or pasture the crop within the current season, and that once the seasonal opportunity to harvest or pasture the crop has passed, the land is no longer "land under cultivation" until such time as cultivation activities for the purpose of raising and harvesting or pasturing a crop begin again the following season (Christmann v. New Nadina Explorations Limited, SRB Order 1806-1, September 4, 2013). Mr. Christmann sought judicial review of the Board's decision. The Supreme Court rendered its decision in November 2014 upholding the Board's decision (2014 BCSC 2165). Mr. Christmann appealed the Supreme Court's decision, and the Court of Appeal rendered its decision in June 2015, also upholding the Board's decision (2015 BCCA 243). While the court proceedings were ongoing, New Nadina did not enter the Mr. Christmann's property for exploration purposes but only to conduct reclamation work.

[22] In August 2015, New Nadina provided a Landowner Notification for a fall drilling program. Mr. Christmann opposed entry, the office of the Chief Gold Commissioner did a site investigation and made recommendations but could not resolve the dispute, and New Nadina applied to the Board for a right of entry order. The Board was unable to resolve the terms of entry and the dispute was referred to arbitration.

[23] As the time frame for the proposed work in the August 2015 Landowner Notification had passed, the Board required New Nadina to issue a new Landowner Notification which it did in June 2016, proposing a fall drilling program. The Chief Gold Commissioner investigated and recommended a winter drilling program.

[24] Mr. Christmann agrees to a winter program, but New Nadina does not want to be restricted to a winter program. New Nadina seeks to conduct its drilling program commencing September 1, 2017. As New Nadina's Landowner Notification will have once again expired prior to September 2017, the parties have agreed that once the Board has issued its decision respecting terms of a right of entry order, New Nadina may provide an updated Landowner Notification and further process before the Chief Gold Commissioner and the Board will not be required with respect to this proposed work. New Nadina's permit to conduct mining activities does not expire until March 31, 2019.

## **Priority of Rights**

[25] There is no dispute that Mr. Christmann purchased DL 3425 in 2009 subject to New Nadina's mineral claim. New Nadina's mineral title on DL 3425 can be traced back to grants under the then *Mineral Act* to Canadian Exploration Limited in 1951 (Ex. 3, Tab 21). For DL 3425 New Nadina clearly acquired its rights under the *Mineral Tenure Act* prior to Mr. Christmann acquiring the Crown Grant to DL 3425 under the *Land Act*.

[26] The relative priority with respect to acquisition of rights for the other three parcels is not as easy to determine. Mr. Christmann produced copies of the original Crown Grant for DL 3426 dated November 18, 1924 and for DL 3427 dated October 13, 1925 (Exhibit 2, Tabs 31 and 32). The Crown Grants are not subject to any mineral claims. No Crown Grant is provided for DL 3424.

[27] Land Title records in evidence before me commence in 1966. For DL 3427, the July 1966 Certificate of Indefeasible Title in the name of Robert Merle Cannon and Agnes Gracie Cannon for several parcels including DL 3427 notes a Certificate of Title (Minerals) 734 in favour of Canadian Exploration Limited on DL 3427. There is no evidence of what transpired between the original Crown Grant of DL 3427 in 1925, which does not show a charge for mineral rights, and the Certificate if Indefeasible Title from 1966 which does show a charge for mineral title. A possible inference is that title

reverted to the Crown, mineral rights were then acquired by Canadian Exploration Ltd. with a subsequent disposition under the *Land Act* being made subject to those mineral rights. The notation of mineral rights on DL 3427 continues on subsequent Certificates of Indefeasible Title up to Title L15564 dated December 7, 1982 in the name of West Fraser Mills Ltd. Title L15564 is converted to Title N10405 in August 1984. The Title Search print for N10405 does not show any notations for mineral titles.

- [28] The historical titles covering DL 3424 and DL 3426 do not show any notations or charges respecting mineral titles.
- [29] Mr. Christmann has also produced an email dated July 11, 2014 from the Titles Technician at the Ministry of Energy and Mines indicating that New Nadina's Mineral Tenures 516670 and 516671 over the area at issue in these proceedings were converted from staked mineral claims 337613, 337614, 337615 and 337616 issued in 1995. The Titles Technician describes these four claims as the "original mineral claims" and advises that nothing can be traced back further (Ex. 2 Tab 38).
- [30] Ms. Clements has produced excerpts from historical reports and a chronological summary of mining activities with respect to what were historically known as the Silver Queen and Cole Lake Properties (Ex 3 Tabs 14-21). The evidence indicates that mineralization was first discovered in Wrinch Creek Canyon in 1912 and staked as the Silver Queen Group. Soon after, claims were staked over the Chisholm vein system, and the Diamond Belle group was staked in 1915. The precise location of the tenures associated with any of these claims is difficult to ascertain from the evidence before me. It appears from the various maps in evidence that Wrinch Creek is to the north west of DL 3427, the Chisholm vein is located on DL 3425, and Diamond Belle was to the north of DL 3426 and DL 3427.
- [31] The documents provided by Ms. Clements indicate further that Canadian Exploration Limited purchased the Silver Queen Claims in 1941. Work continued on the Silver Queen veins until 1947. In 1963, Nadina Explorations optioned the Silver Queen

claims and commenced a program of diamond drilling, trenching and underground development that traced the Wrinch vein system south to the Ruby Extension Zone. Again it is difficult to pinpoint precisely where this work was in relation to the currently proposed program but it appears the Ruby Extension Zone extends into DL 3427. It is likely that the notation on DL 3427 in favour of Canadian Explorations Limited relates to mineral rights associated with the work into the Ruby Extension Zone.

- [32] The historical documents show that the names of mineral claims and the manner in which claims were identified changed over the years. Clearly, the predecessors to New Nadina held mineral rights to DL 3427 for a period of time and historically held other mineral rights in the area. On the evidence before me, however, I am not able to match mineral tenures with legal descriptions of land or to accurately trace continued mineral tenures over DL 3424 or DL 3425 at all, or over DL 3427 after 1984. I find the historical evidence does not satisfactorily rebut the evidence from the Titles Technician that the two particular tenures engaged in this dispute cannot be traced back beyond 1995.
- [33] With respect to DL 3426 there is no evidence before me to suggest that mineral rights were acquired prior to 1924 which is the date of the original Crown Grant, or that any subsequent titles to DL 3426 were encumbered by mineral rights. On the evidence before me, I find rights under the *Land Act* to DL 3426 were acquired prior to rights under the *Mineral Tenure Act*.
- [34] With respect to DL 3427, the original Crown Grant was made in 1925 with no charge as to mineral rights. The evidence suggests, that sometime before 1966 until 1984, the fee simple rights to the land became subject to mineral rights. The evidence does not disclose what happened to that tenure after 1984. As there is evidence before me of fee simple ownership of DL 3427 unencumbered by mineral title prior to 1995, I find that rights under the *Land Act* were acquired prior to rights under the *Mineral Tenure Act*.

[35] With respect to DL 3424, there is no evidence of when the Crown Grant was initially made. However, there is evidence of fee simple ownership of DL 3424 unencumbered by mineral title prior to 1995. I find on the evidence before me, that rights under the *Land Act* to DL 3424 were acquired before any rights under the *Mineral Tenure Act*.

[36] My conclusions respecting the relative priority of rights for DL 3424, DL 3426 and DL 3427 is based on the evidence before me in this hearing for the purpose of resolving this particular dispute, and is not intended to be a definitive finding in the event a future panel of the Board is presented with different evidence in any future dispute between these parties respecting access to the Lands for mining activities.

### Parts of the Land Affected

[37] The proposed drilling program involves two diamond drill sites on DL 3426. Access to the sites and to proposed water sources is via DL 3425, DL 3424 and DL 3427. Access routes include parts of the main driveway through the ranch and some existing trails.

[38] Site 1 is located in the Main Meadow approximately 50 metres from the fence on the west side of the field. Site 2 is located in the Yearling Pasture, on the other side of the fence from Site 1 also approximately 50 metres from the fence. The straight line distance between the two drill sites is approximately 100 metres. The access route between the two drill sites through a gate in the fence is approximately 200 metres.

[39] The Main Meadow is used to cultivate hay and for pasturing cattle, and is therefore "land under cultivation" within the meaning of the *Mineral Tenure Act* during the growing and pasturing season. The Yearling Pasture is used to pasture cattle, but is not "land under cultivation".

[40] The maximum surface area required for each drill site is 40 metres by 40 metres square. For the drill sites themselves, I find that a maximum surface area of 1,600

square metres will be required in each of the Main Meadow and the Yearling Pasture in DL 3426. The parts of the Lands that will be used for access or water supply will also be affected. The parts of the Land that will be affected by access routes, water sources and drill sites are shown on the map at the last page of Exhibit 2, Tab 44.

## Impact of the Intended Entry

### **The Ranching Operation**

[41] The Mission Outpost Ranch, Nadina Unit, is comprised of 3,000 acres of fee simple land with access to another 40,000 acres in grazing leases on Crown land. It operates in conjunction with the Hudson Bay Unit, located near Smithers, comprised of approximately 2,700 fee simple acres with access to about 300 acres of grazing leases on Crown land. The Nadina Unit is used for grazing cow calf pairs and yearlings between April and October, for breeding cows in the spring, and for some hay production. The Hudson Bay Unit is used to overwinter cattle and for hay production.

[42] At present, Mr. Christmann does not own any cattle. In 2009, when Mr. Christmann agreed New Nadina could enter his property to conduct its exploration activities for three years, he agreed to keep cattle off the property during that time. Mr. Christmann did not bring cattle to the property in 2010 or 2011. In 2012, 2013 and 2014 cattle were brought onto the property for the summer but they were not cattle belonging to Mr. Christmann. Mr. Christmann allows other cattle owners to use his ranch lands, although the terms by which he does so are not clear from the evidence.

[43] In 2015, no cattle were brought to the property. In 2016 cattle were brought to the property for the summer but they were not cattle owned by Mr. Christmann. Mr. Christmann's evidence is that he has not brought his own cattle onto the property for the past several years because of the uncertainty about New Nadina's mining operations. His evidence is that if there is cattle on the property in the coming season, it will still probably be someone else's cattle.

[44] Mr. Christmann has his personal residence at the Nadina Unit where he lives from the end of April until the end of October each year. For the rest of the year, Mr.

Christmann lives in the United States. Mr. Christmann's residence is not located on the

Lands in issue in this application.

[45] Typically, cow calf pairs are brought to the Nadina Unit by the beginning of June,

where they are turned out onto the Main Meadow to "mother up". The Main Meadow

covers parts of DL 3426 and DL 3424 as well as portions of two other parcels not in

issue in these proceedings. The Main Meadow comprises approximately 400 acres.

[46] When the cow calf pairs have "mothered up" and settled down, they are turned out

into a neighboring pasture on land not affected by the proposed drilling operation where

the cows are bred. Once exposed to the bulls, the cow calf pairs are dispersed onto the

range lands for the summer.

[47] Once the cow calf pairs are turned out of the Main Meadow, yearlings are brought

from the Hudson Bay Unit and turned into the Yearling Pasture to the west of the Main

Meadow. The Yearling Pasture covers portions of DL 3426, DL 3424 and DL 3425 and

the whole of DL 3427 as well as Crown Land. The Yearling Pasture is considerably

larger than the Main Meadow, although its actual area is not in evidence.

[48] The cow calf pairs are retrieved from the range in the latter part of September and

brought back into the Main Meadow. It takes about two weeks to gather all the cow calf

pairs off of the range and into the Main Meadow. Once the cow calf pairs have been

shipped back to the Hudson Bay Unit, the yearlings are brought into the Main Meadow

from the Yearling Pastures and shipped to the Hudson Bay Unit. The yearlings are kept

out as long as possible into October, while still giving Mr. Christmann enough time to

return to the U.S. by the end of October.

[49] When he arrives in April, Mr. Christmann's first task is to repair and construct

fencing as required. From July through October he tends to the Hay Meadows and

deals with weeds by spraying and pulling mechanically. The hay is typically cut in July. The hay is baled and removed off site by the end of September.

- [50] The spread of noxious weeds is a big concern for the ranch and Mr. Christmann follows a very aggressive weed abatement program. Mr. Christmann uses off road vehicles that are never taken off the ranch for travelling around the ranch for weed control, to put minerals out, or to check on and repair fencing. If these vehicles travel through areas with weeds, they are washed upon return to headquarters. Likewise, Mr. Christmann's truck, which he uses when travelling off the ranch, is never taken off the main driveway and is washed on its return to the house.
- [51] Mr. Christmann is also concerned about surface damage to the Lands. If areas of pasture are damaged requiring reseeding, they have to be fenced off to keep cattle off while pasture regenerates sufficiently for cattle to use it.
- [52] Mr. Christmann's evidence is that if cattle are stressed or distracted by human presence so that they are not eating, then their weight gain will be affected. As weight gain in cattle is what translates into income, poor weight gain will affect the ranch's bottom line. Mr. Christmann's evidence is that he sold his Wyoming operation because there got to be too many problems with subdivisions encroaching on the ranch lands and problems with trespassers interfering with the cattle. Mr. Christmann's evidence is that he kept annual records and saw a decline in the weight gain of his cattle. Those records are not in evidence.
- [53] Mr. Christmann provides some articles about the impact of stress on cattle. I am not able to place any evidentiary weight on the opinions expressed in the articles, in the absence of their authors. Mr. Christmann does not provide any empirical evidence to demonstrate the likely impact on cattle from the proposed drill operation.

# **The Proposed Drilling Program**

[54] Ms. Clements proposes to commence September 1, 2017 and anticipates being able to vacate the property by the middle of November. She expects the drilling program to take about four weeks at each site, with additional time required for preparation and reclamation. Site 1 would be drilled first with the intention that work could be completed and returned to the landowner by the end of September or soon thereafter.

[55] A polydrill or like system will be used and cuttings will be taken off site. In ground sumps will not be used. The drill platform will be created with blocks or cribbing and not by scraping and levelling the ground. Between one and five holes will be drilled at each drill site.

[56] The drill holes will be plugged. Reclamation and reseeding will take place before leaving and the sites will be monitored into the spring of 2018 to ensure proper reclamation and seed growth and for weed control purposes.

[57] Ms. Clements proposes washing any vehicles at the New Nadina camp prior to entry onto the Lands.

# Relative Impacts of Fall vs. Winter Drilling Programs

[58] Mr. Christmann wants the drilling to be conducted in the winter months when the ground is frozen. His evidence is that there was less damage to the land from the 2013 winter program than the 2011 fall program. Winter drilling will not interfere with the cattle or the hay meadows.

[59] Ms. Clements disagrees that a winter program is likely to cause less damage or that the 2013 winter program caused less damage than the 2011 fall program. Her evidence is that the greater than normal damage created by the 2011 fall program was caused by encountering flowing water, and not primarily as a result of poor weather.

New Nadina was not using a "poly drill" system for the cuttings in the 2011 fall program, requiring the use of in ground sumps. As for the cattle, her evidence is they "got used to hanging around us" and they are a nuisance when they hang around the camp. Her experience with cattle is that they are naturally a bit curious and do not seem particularly disturbed when hanging around.

[60] The Report prepared by Inspector Chris Newell on August 16, 2016 says the following about winter drilling:

In researching winter drilling Inspector Chris Newell spoke to diamond drilling companies and other Mines inspectors experienced in winter drill programs. There was a general consensus that winter diamond drilling on a snow pack and on frozen ground is usually less damaging to the surface than summer or fall drilling. Typical costs for winter drilling ranged from less than summer/fall to slightly more expensive. ...It is conceivable that a winter drill program would result in less movement of weed seeds onto the drill site as the ground is covered in snow and equipment is less likely to pick them up. Disturbance to the cattle would be mitigated by a winter drill program as the cattle leave the site by the end of October.

[61] Mr. Newall goes on to recommend that a winter drill program be conducted on frozen ground with a snow pack by a drilling company experienced in winter drilling.

[62] Mark Mesmer, the Chief Gold Commissioner reviewed Mr. Newell's report and agreed with his recommendation that the drilling program be conducted in the winter. Mr. Mesmer's letter of October 4, 2016 says the following respecting winter drilling and the report's recommendations:

The inspection report recommends the proposed drilling of two diamond drill holes occur during the winter season when the ground is usually frozen. Although seasonal variations in temperature are not readily predictable with sufficient accuracy, it is reasonable to assert that the surface of the proposed disturbance area is likely to be frozen from about November 20 to about February 10 each year. This approximate time period should allow adequate time to complete the proposed drilling of two diamond drill holes.

Based on the probable impacts to the surface and to agricultural activities on the surface, it seems reasonable to conclude that drilling during the winter has a significantly higher probability of resulting in the least disturbance to the surface and to existing surface activities.

[63] Ms. Clements takes issue with the Chief Gold Commissioner's conclusion that there will likely be less surface damage to the land with a winter drilling program. Her concern is that if the temperature does not stay cold and the ground does not stay frozen, that there is a greater probability of doing more damage to the land. In her view, that is what happened in January 2013. In about the third week of January, 2013 the weather got warm and the proposed drill location could not be accessed because there was no frost in the ground and the snow was not packing. The drill sank into the soil. The location of the drill site had to be changed. Ms. Clements' evidence is that it became very challenging to remove cuttings and there was a safety issue with the crew working in the mud. At subsequent drill sites they experienced issues with fluctuating temperatures and variable weather conditions. Parts of the field became very soft limiting vehicle access. At one point, a truck got stuck in the mud. Attempts at reclamation were made, but then freezing conditions caused ruts to freeze preventing proper reclamation until spring. Ms. Clements provided printouts from the Burns Lake weather station supporting her evidence of variable weather conditions in January and February 2013.

[64] Ms. Clements' evidence is that variable weather conditions over the last several winters means that one cannot count on having frozen ground for a sufficiently long period to complete a drilling program without causing extra damage, taking more time, or having to cut the program short. She provided printouts of weather conditions in the area for the 2015-16 winter period showing fluctuating conditions. In her view the weather during the 2016-17 winter would also not have permitted a successful drill program, although she did not produce weather records for the 2016-2017 winter to substantiate this view.

[65] Ms. Clements' evidence is that winter drilling poses other challenges and hazards not present in non-winter programs. Drilling requires water, so in the winter, the water needs to be heated. More ice is created creating hazardous conditions around the drilling sites. The cuttings freeze making them difficult to handle and remove. Having crews stand by to wait for favourable weather conditions is costly. Workers cannot stay on site at the mine camp in the winter but have to travel from Houston on winter roads. Crews need to be kept warm. Reclamation and reseeding typically cannot be completed until the following spring with the result that it takes much longer for regrowth to occur.

[66] A winter drilling program typically shuts down prior to Christmas and does not resume until early January, making two to three weeks unavailable for activity.

#### The Expert Evidence

[67] Both parties tendered witnesses to provide opinion evidence about various aspects of drilling. Each of the three witnesses has an historical relationship with one or both of the parties to this dispute and each was challenged as to their expertise and independence. I accepted each witness as qualified to provide opinions as tendered despite challenges to their expertise and independence, indicating I would consider these factors in assessing the weight to be attributed to each witness's evidence.

[68] Jim Hutter, called by New Nadina, is a professional geologist. I accepted he was qualified to provide an opinion with respect to the layout, design and implementation of drilling programs. Mr. Hutter also had direct involvement with New Nadina's 2013 winter drill program and gave both factual and opinion evidence with respect to that program.

[69] Mr. Hutter has a longstanding business relationship with New Nadina. While not currently working for New Nadina and not dependent on New Nadina for his livelihood, he has worked for New Nadina on several drill programs over the last 30 years. His evidence strayed at times into advocating New Nadina's position in favour of a non-

winter drilling program. Mr. Hutter attached his seal as a professional geologist to his Statement, but the Statement does not comply with the Association of Professional Engineers and Geoscientists of British Columbia Practice Guidelines for Expert Witnesses both as to form and as to content to the extent he provides opinions and conclusions about the impact of human presence on cattle that are beyond his expertise. I approach Mr. Hutter's evidence with some caution.

[70] With respect to winter drilling, in his statement included at Tab 48 of Exhibit 1, Mr. Hutter writes:

My involvement with winter drilling programs, especially the 2012-2013 Silver Queen program, leads me to believe that, from a standpoint of causing the least damage possible, winter is not the best time for a drill program. All possible efforts were made to minimize damage during that program, but the end result was that more damage was created than would have been done in a fall program. Reasons for this are several, but boil down to two things, the first being that winter weather cannot be relied on to stay cold, and the other being that the drilling process inescapably requires the use of water.

[71] Mr. Hutter's evidence is that he has lived in the Smithers-Houston area since 1976 and has not seen a January when there has not been a period of thaw sometime during the month. As to the result of extended periods of warm weather during the winter, Mr. Hutter writes:

The result of extended periods of warm weather during the winter is that access roads to the drill sites will melt and damage will be caused to the ground beneath them. This damage will be significantly greater than that which would be created if the program was done during a period when there was no snow on the ground. The same effect will occur in the immediate area of the drill, where it will be exacerbated by the presence of water used in the drilling process.

[72] In Mr. Hutter's opinion, reclamation of frozen ground is not practical. It becomes necessary to wait for snow to melt and the ground to thaw, then wait some more for the ground to dry out sufficiently to enter without causing more damage. If work is done before winter, damage will be less and reclamation completed before snow fall so seeds can germinate in the following spring. He concludes that "a fall drilling program will

cause much less damage than a winter program and any damage caused will be repaired much more quickly and efficiently."

[73] Mr. Hutter's testimony is that he has done winter drilling programs where conditions have stayed frozen and there were no problems. He acknowledged winter programs tend to be more expensive. He related his experience with one program where conditions were so cold machinery could not be started. He said winter programs were "inconvenient but doable". His evidence is that there can be problems with disposing of cuttings in the winter if they freeze and problems hauling vehicles over roads that are thawing or become rutted and frozen.

[74] Cliff Boychuk, called by New Nadina, testified and provided a Statement at Tab 49 of Exhibit 1. He is a drilling contractor and was qualified to give an opinion relating to the conduct of winter drilling program and techniques used in winter drilling programs. Mr. Boychuk worked for New Nadina on the 2010 and 2011 drilling programs. He was the unsuccessful bidder on new Nadina's 2012-2013 winter program.

[75] Mr. Boychuk's evidence is that the biggest problem with working on frozen ground is getting traction with vehicles and having to use heat to keep water from freezing. Mr. Boychuk writes as follows with respect to his experience with winter drilling:

We have found working on frozen ground and below freezing temperatures poses increased hazards and difficulties. We have not seen proof that winter drilling, especially where necessary weather conditions are not reliable, causes less ground damage. In winter, tracked vehicles need to have grouser bars added for traction which digs into frozen ground. On ice pack, sun can quickly destroy the ice pack foundation, making the road unusable. Winter road preparation to assure functional use can take 4-6 weeks preparation and involves daily sub zero weather to build ice and snow pack.

[76] Mr. Boychuk discusses problems associated with the use of water in the winter including that water must be heated, water connections and hoses have to insulated and frequently monitored for freezing and leakage, winter discharge is less easily

channeled, frozen ground does not readily allow water to dissipate creating the likelihood of mud and soil disturbance.

- [77] With respect to concerns relating to the spread of weeds, Mr. Boychuk indicates weed seed spreading is less likely in winter. In a non-winter program, he suggests preliminary inspection and removal of weeds and avoiding contact with weeds. His evidence is clean equipment and less ground disturbance reduces the risk of unwanted seeding and it is easier to maintain clean equipment in non-freezing weather.
- [78] As for reclamation, Mr. Boychuk writes "A program designed for reclamation to be conducted close to and before snowfall has been proven to produce the highest and quickest rate for green up and ground recovery."
- [79] As to the cost of a winter program, Mr. Boychuk says winter drilling is considerably more costly and can expect to take double the time. Freezing conditions require increased fuel consumption and increased travel time. There are extra labour costs to setting up in the winter.
- [80] As to safety concerns, Mr. Boychuk's evidence is winter drilling has a history of more crew injuries. Increased travel on dark winter roads exposes crew to increased risk.
- [81] Mr. Boychuk recommends techniques to minimize surface disturbance including use of a poly-drill system, levelling and anchoring the drill skid using cribbing, recycling water using settling tanks, and where possible, reducing unnecessary vehicle traffic. He expresses confidence that "non winter drilling utilizing specialty equipment eliminates otherwise necessary ground disturbance."
- [82] As for the presence of cattle, Mr. Boychuk's evidence is that most drilling contractors are used to conducting drill programs in the presence of cattle and that drill

programs occur in the presence of cattle on a regular basis. In his experience, the best way to keep the cattle away is to keep their feed away.

[83] Gary Thompson, called by Mr. Christmann, has worked for several mining companies over the years in various capacities including his own companies diamond drilling his own claims. He was qualified to provide an opinion on diamond drilling programs and techniques and drilling program logistics.

[84] Mr. Thompson was hired by New Nadina in 2009 to do reclamation work around the mine site. In 2010, he bought some cabins from Mr. Christmann to move to one of his own projects. Mr. Christmann started to ask him questions about mining practices and he started to provide Mr. Christmann with advice on a casual basis. In 2012, Mr. Christmann asked him to come up with a plan to minimize disturbance to the ranch while still giving New Nadina the opportunity to drill. He met with Mr. Christmann and Ms. Clements as well as with representatives from two diamond drilling companies in the area, did a site visit and prepared a letter dated June 4, 2012 with his recommendations to conduct exploration activity in the off-season.

[85] Mr. Thompson's June 2012 letter suggests winter drilling on snow pack with freezing conditions on a 24 hour basis would result in zero impact on grazing land. He indicates crew and equipment are more readily available in the off season resulting in more competitive rates. In Mr. Thompson's opinion, a winter exploration program reduces or eliminates the impact on grazing land allowing cattle to be released for grazing throughout the summer months while still allowing New Nadina the opportunity to explore.

[86] Mr. Thompson disagrees with Ms. Clements that weather conditions this past winter would not have permitted a successful drilling program. His evidence is that he could have conducted a winter drill project this past winter. His evidence is that bad luck can happen at any time and you just have to deal with it. As I have no evidence of what the actual weather conditions were this past winter to support either Ms. Clements'

assertion that they would not have been conducive to a successful program or Mr.

Thompson's assertion that he could have successfully completed a winter program this past winter, I make no finding in this regard.

[87] In Mr. Thompson's opinion, winter drilling is all about managing built up road beds and adapting to various conditions. Some examples of adaptations include having shift changes in the dark to avoid driving on roads in sunlight, using snowmobiles to travel across snow instead of roads, covering pumphouse structures with a parachute to hold in warm air, and using a T structure on the drill casing to manage and reuse water and contain the cuttings. Mr. Thompson's evidence is that if it rains, the operation should shut down to avoid situations where vehicles get stuck, causing more than zero disturbance.

[88] In 2015, Mr. Thompson became a director of Mr. Christmann's numbered company. His evidence is that his directorship is solely as a "figure head" to comply with requirements for Canadian citizenship, but it does point to a relationship between Mr. Thompson and Mr. Christmann giving rise to concerns about Mr. Thompson's independence to provide opinion evidence.

[89] To a large extent, the evidence respecting winter vs. non-winter drilling programs is not inconsistent. To the extent there are inconsistencies in the evidence, I give most weight to the evidence of Mr. Boychuk who I find to be the most independent of the three witnesses. I accept that, generally speaking, there are more challenges, to a winter drilling program than a non-winter drilling program, although weather can be a concern at any time of the year. Winter drilling poses greater hazards to workers. Winter drilling programs generally speaking take more time than non-winter drilling programs. If the temperature stays below freezing, it is probable there will be less damage to the land. However, if the weather does not stay below freezing, the probability of more damage to the land increases particularly if operations are not suspended to wait for weather conditions to improve. Waiting with crews on standby takes time and costs money.

[90] I accept that winter drilling likely costs more than non-winter drilling because of the extra challenges and increased time that may be required. However, I have no evidence

estimating what a winter drill program will actually cost compared to a fall drill program.

[91] I am not able to determine on the evidence which of the fall 2011 and winter 2013

drill programs caused the most damage to the Lands, although I accept that the fall

2011 program incurred more damage than typical because of encountering flowing

water and because a polydrill system was not being used to manage cuttings and water

return. It is evident, however, that regardless of the time of year, if conditions are wet,

the likelihood of damage to the land increases. If there is damage to the land because

of wet conditions, reclamation following a winter program will likely take longer than

following a fall program, but in either event follow up is required to ensure regrowth.

[92] There is less likelihood that a winter program will contribute to the spread of weeds

than a non-winter program.

#### **ANALYSIS**

**Should New Nadina's Right of Entry for the Proposed Drill Program be Restricted** to the Winter Months?

[93] Regardless of when the drill program is conducted, there will be some interference

with the ranch.

[94] If the drilling program is conducted in the fall, and if cattle are brought to the ranch

this season, I find that there may be some overlap with the return of cow calf pairs from

the range into the Main Meadow. The evidence is the cattle are brought back from the

range into the Main Meadow in the latter part of September over a two week period.

Ms. Clements anticipates being at Site 1 for about 4 weeks, starting at the beginning of

September, so it is likely that there will be a period of overlap, perhaps as long as two

weeks, where drilling operations may be ongoing at Site 1 and cattle will be being

brought into the Main Meadow.

[95] The Main Meadow is "land under cultivation" within the meaning of the *Mineral Tenure Act* until the cattle have finished grazing. Approximately 1,600 square metres and the area required for trails actually located in the Main Meadow will be affected "land under cultivation" in a fall drilling program, of the total "land under cultivation" at the ranch of about 400 acres.

[96] Site 2 is in the Yearling Pasture and the evidence is that the yearlings are brought from the Yearling Pasture to the Main Meadow sometime in October. If drilling at Site 2 commences around the beginning of October, then it is likely there will be a period of overlap of up to two weeks while drilling operations are commencing at Site 2 and cattle are still grazing in the Yearling Pasture.

[97] If the drill program takes place in the winter, there will be no overlap with cattle being present on the Lands and there is no interference with "land under cultivation" other than as may be required for reclamation the following spring. If pasture areas have to be fenced off while being reclaimed or if roads are rutted requiring later reclamation, there will be some interference with the ranching operation.

[98] Whether drilling is conducted in the fall or the winter, it will involve vehicular access over the Lands that, depending on weather conditions, may cause damage. If temperatures stay below freezing during a winter program, there is little probability of damage to the land. If there are thawing conditions in the winter, or if the weather is wet in the fall, the probability of damage to the land increases. If there is damage to the land from a winter drilling program reclamation and "green up" will take longer than from a fall drilling program.

[99] If the drill program is conducted in the winter, there is less probability for spreading noxious weeds than by a fall drill program although the potential spread of weeds can be mitigated by washing vehicles.

[100] The Chief Gold Commissioner concluded "it is reasonable to assert that the surface of the proposed disturbance area is likely to be frozen from about November 20 to about February 10 each year". The evidence before me, however, suggests it is reasonable to expect that conditions will not consistently stay below freezing, and there likely will be periods of thawing. That being the case, I find the probability of there being more damage to the land from a winter program increases, than from a fall program where efforts are made in the fall program to minimize impact.

[101] I accept Mr. Boychuck's evidence that it is not uncommon to conduct drilling operations in the presence of cattle. It is evident from Ms. Clements' evidence that she has previously conducted drilling operations on the Lands in the presence of cattle. While Mr. Christmann expresses concerns about the potential impact on cattle from the drill operation, he does not own any cattle at present and does not anticipate bringing his own cattle to the ranch this season. Other cattle owners continue to use the ranch for their cattle despite Mr. Christmann's concerns. Mr. Christmann has not substantiated his concerns about the potential for diminished weight gain from human interaction with cattle with empirical evidence although he indicated he had such evidence relevant to his Wyoming operation.

[102] New Nadina has a right to enter the Lands to conduct exploration activity on its mineral tenure. Exercising that right will interfere with Mr. Christmann's use of the Lands and the Board is required to specify terms of entry that will minimize interference with the existing circumstances of the Lands. While it is possible there may be less interference with the ranch from a winter program than a fall program, I am not convinced, in the circumstances of this case, that it is necessary to limit New Nadina's right of entry for the proposed drill program to the winter months in order to minimize interference. It is also possible that a winter program will result in greater damage to the land and require a longer reclamation period that may interfere with the ranch.

[103] I accept Ms. Clements' submission that the impact of a fall drilling program will not be substantial. She consents to various conditions to a right of entry order that will

minimize impact to the land including use of a polydrill system and cribbing for the drill platform. While there likely will be some time when cattle may be present in the pastures around both drill sites, the area of occupation for each drill site is miniscule compared to the size of each pasture, and the time during which cattle may be present in the pasture around each drill site is likely not more than two weeks. I am not convinced, given the size of the two pastures, that if there is a concern about the cattle being close to the drill sites there are not ways to manage that exposure.

[104] Given all of the additional challenges, risks to workers, and additional costs associated with winter drilling, and given that Mr. Christmann does not actually own any cattle at present and does not plan to use the Nadina Unit this season for his own cattle operation, it makes sense that, at least for this proposed drill program, New Nadina be permitted to conduct the drill program in the fall.

[105] Further, while I have found on the evidence before me that the relative priority of rights with respect to DL 3424, DL 2436 and DL 3427 lies with Mr. Christmann, I find giving priority to Mr. Christmann's wishes with respect to this proposed drill program results in injustice to New Nadina in all of the circumstances. New Nadina has not been able to exercise its rights with respect to its mineral tenure since 2013 because of Mr. Christmann's continued opposition and ongoing legal proceedings. Yet in the meantime, while Mr. Christmann has been engaged in maintaining and improving the ranch lands and allowing others to use the ranch lands, he has not actually owned his own cattle or used the Mission Outpost Ranch for his own cattle ranching operation. Imposing the additional challenges, risks and costs of a winter program on New Nadina does not seem justified in the circumstances where interference with the ranch operation from a fall program will not be significant and can be minimized even further by the conditions agreed by Ms. Clements.

[106] I find, for this proposed drill program, New Nadina should not be restricted to conducting the proposed drill program in the winter. The terms of the entry order below will minimize interference with the existing circumstances on the land.

## **ORDER**

[107] The Surface Rights Board Orders:

New Nadina shall have the right of entry to and access across the Lands legally known and described as:

The South ½ of District Lot 3426 Range 5 Coast District

Block A District Lot 3425 Range 5 Coast District

The Southeast ¼ of District Lot 3427 Range 5 Coast District

The West ½ of the East ½ of District Lot 3424 Range 5 Coast District

to conduct the exploration and drilling program set out in the Landowner Notice of June 14, 2016 as supplemented July 5, 2016 commencing September 1, 2017 or on an earlier date agreed by the landowner, subject to the following terms and conditions:

- a) A poly-drill or like vibrating filter unit shall be used to extract cuttings from water return and cuttings shall be removed from the site;
- Water shall be recycled using settling tanks reducing need for excessive water disposal;
- c) Sumps shall not be used;
- d) The drill sites shall be levelled and anchored using cribbing and without the use of bladed equipment;
- e) Reasonable efforts shall be made to avoid interactions with cattle;
- f) All gates shall be left in the position in which they are found;

NEW NADINA EXPLORATIONS LIMITED v. CHRISTMANN

ORDER 1869-1

Page 30

g) Every vehicle shall be cleaned at New Nadina's property prior to entry to the

Lands on each occasion that the vehicle enters the Lands

h) Where and when possible, consideration should be given to reduce

unnecessary vehicle traffic;

i) To the extent possible, all disturbance to the surface of the Lands shall be

reclaimed on exit of the work area;

j) New Nadina will be required to re-attend on the Lands in 2018 to monitor the

success of reclamation activities, the growth of grass and the possible spread

of weeds; and shall conduct further reclamation as necessary and be

responsible for the removal of weeds in a manner agreeable to the

landowner.

DATED: May 12, 2017

Chulen

FOR THE BOARD

Cheryl Vickers, Chair