

**ALBERTA ENERGY AND UTILITIES BOARD**

IN THE MATTER OF PART 2 OF PROCEEDING NO. 1457147,  
COALBED METHANE (CBM) REVIEW HEARING

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**CENTRICA CANADA LIMITED  
CLOSING ARGUMENT**

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## I. INTRODUCTION AND SUMMARY OF CENTRICA'S POSITION

1. The issues before the Board in Phase 2 of Proceeding No. 1457147 are whether natural gas stored in coal ("CBM") is gas and if so, whether Centrica Canada Limited ("Centrica"), ConocoPhillips Canada Resources Corp. ("ConocoPhillips"), Devon Canada Corporation ("Devon"), Fairborne Energy Ltd. ("Fairborne"), Quicksilver Resources Canada Inc., ("Quicksilver") and Canpar Holdings Inc. ("Canpar") (collectively referred to as the "Natural Gas Rights Holders") are entitled to well licenses and holdings to produce CBM based upon their entitlement to produce natural gas.

2. EnCana Corporation ("EnCana") and Carbon Development Partnership ("CDP"), (collectively the "Coal Owners") have applied for a review of the Board's previous decisions on 28 applications filed by Bearspaw, Devon and Fairborne for well licenses, special gas well spacing and compulsory pooling orders. The Board has been asked to determine if it should confirm, vary or rescind its previous decisions, the outcome of which will have industry-wide implications and affect the rights of all potential developers of gas stored in coal.

3. On May 30, 2006, the Board issued Bulletin 2006-19, which put "all applications regarding which legal entitlement to CBM is at issue" in abeyance, including Centrica's holdings applications, "pending issuance of the Board's decision in Part 2 of Proceeding No. 1457147".<sup>1</sup>

4. Centrica had planned and budgeted for a drilling program of up to 120 CBM wells in the Horseshoe Canyon Coals (in the Edmonton Group) for the 2006 drilling season. As a direct result of the Board's decision to put Centrica's Applications in abeyance, Centrica's CBM drilling plans are now on hold, pending a decision of the Board in this Proceeding.<sup>2</sup> The entire industry is now facing this same sterilization of the orderly development of gas stored in coal on freehold lands across the Province of Alberta.

5. In essence, Centrica's position is that the Board has the jurisdiction and statutory mandate to grant well licenses and holdings applications, which requires it to determine the issue

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<sup>1</sup> Bulletin 2006-19 at Exhibit 10-013-2006-07-04.

<sup>2</sup> Direct Evidence of Centrica, paras. 11-13 at Exhibit 20-21.

of legal entitlement to CBM. Such applications should be granted upon the Applicants establishing, on a balance of probabilities, a right to produce “gas”, as that term is defined under Subsection 1(1) of the *Oil and Gas Conservation Act*, R.S.A. 2000<sup>3</sup> (the “*OGC Act*”).

6. In applying the statutory definitions of “gas” and “coal”, the Board should also take into account the applicable common law authorities which bear upon the issue of legal entitlement to CBM. In this regard, it is significant that the definition of “coal” under the *Coal Conservation Act*, R.S.A. 2000, c. C-17 (“*CC Act*”), refers to “its ordinary meaning”.<sup>4</sup> This dictates an approach that is consistent with the common law rule of interpretation that the plain, ordinary meaning of the words used in the grant or reservation should be adopted in construing the intent of the parties. Specifically, the Board should apply the same analytical approach taken by the Courts in the *Borys*<sup>5</sup> *Goodwell*<sup>6</sup>, *Anderson*<sup>7</sup> and *Southern Ute*<sup>8</sup> cases, which was to construe the applicable leases and grants in accordance with their vernacular meaning at the time. The uncontested evidence in this Proceeding is that the reservation of coal in the original grants and subsequent leases, in the vernacular, was a reservation of the solid, black, combustible rock. This has been the commonly understood meaning of the term “coal” in common usage for the past century.

7. The fact that CBM is gas has also been the pronounced position of the EUB and Alberta Department of Energy since 1991.<sup>9</sup> This has led the industry to hold a settled expectation as to the manner in which CBM development would proceed under the established legislative regime and the Board’s mandate to provide for the economic, orderly and efficient development in the public interest of the oil and gas and coal resources of Alberta.<sup>10</sup>

8. It is noteworthy that this common understanding of the vernacular meaning of “coal” is consistent with the mainstream scientific and technical opinion of CBM. Both Mavor and Levine adopted the definition of “coal” set forth in the Bates and Jackson *Dictionary of*

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<sup>3</sup> *Oil and Gas Conservation Act*, R.S.A. 2000 c. O-6 (“*OGC Act*”) at Exhibit 10-018a-2006-08-25.

<sup>4</sup> Subsection 1(1) *Coal Conservation Act*, R.S.A. 2000, c. C-17 (“*CC Act*”) at Exhibit 10-018b-2006-0-25.

<sup>5</sup> *Borys v. Canadian Pacific Railway*, [1953] A.C. 217 (P.C.) (“*Borys*”) at Exhibit 10-018d-2006-08-25.

<sup>6</sup> *Alberta Energy Co. v. Goodwell Petroleum Corp. et al* (2003), 339 A.R. 201 (Alta. C.A.) (“*Goodwell*”) at Exhibit 10-025-2006-09-29.

<sup>7</sup> *Anderson v. Amoco Canada Oil and Gas*, 1998 CarswellAlta 669; additional reasons 1998 CarswellAlta 1567 (Alta. Q.B.); 2002 CarswellAlta 854 (Alta. C.A.); 2004 CarswellAlta 941 (SCC) (“*Anderson*”) [TAB 1]

<sup>8</sup> *Amoco Prod. Co. v. Southern Ute Tribe*, 144 L. Ed 2d 22 (US Supreme Court) (“*Southern Ute*”) at Exhibit 10-026-2006-09-29.

<sup>9</sup> Bulletin IL-91-11 at Exhibit 10-002-1991-08-26.

*Geological Terms* published by the American Geological Institute. The opening words of this definition are: “**coal - a readily combustible rock ...**”.

9. This Closing Argument is filed concurrently with the Joint Argument on Scientific and Technical Issues that Centrica has filed in concert with ConocoPhillips, Devon, Fairborne, Quicksilver and Canpar. The submissions contained in the Joint Argument are adopted by Centrica and incorporated herein by reference.

10. In essence, the scientific evidence led during this Proceeding clearly established that gas stored in coal is in a free or adsorbed, gaseous state at the *in situ* temperature and pressure conditions of Alberta’s coal seams. When the reservoir is disturbed by the drilling of a gas well into the coal seam, the gas remains in a gaseous state as it escapes through the wellbore to the point where it is recovered by processing, at which time its volume is measured as natural gas. CBM is stored, flows through and is produced from coal in the same manner as natural gas in conventional reservoirs. As such, gas stored in coal is natural gas. It is not coal, which is the rock that serves as its container.

11. In the final result, as a matter of statutory interpretation, by virtue of the vernacular meaning of the grants and leases, in accordance with the settled expectations of industry, and from the mainstream scientific and technical perspective, CBM is gas.

12. As such, CBM falls squarely within the terms of the leases which, generally, grant all natural gas and related hydrocarbons (except coal), and all materials and substances (except valuable stone), whether liquid, solid or gaseous and whether hydrocarbons or not, produced in association with natural gas or related hydrocarbons or found in any water contained in any reservoir. Consistent with this understanding that CBM is gas, the Board should deal with the pending well licenses and holdings applications on the basis that the Natural Gas Rights Holders are entitled to CBM upon submitting satisfactory proof of valid and subsisting natural gas leases and, where necessary, such supporting or collateral documentation as Board staff may reasonably request.

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<sup>10</sup> *OCG Act, section 4(c), supra* note 3.

## II. JURISDICTION OF THE BOARD

13. The Board has the jurisdiction and the statutory mandate to decide the issue of legal entitlement to natural gas produced from coal for the purposes of determining whether or not to grant well licences and holdings applications under the *OGC Act*.

14. The Board's determination as to legal entitlement of CBM does not constitute a legally binding determination or confirmation of the private property issues of mineral entitlement or the right to produce hydrocarbons or to conduct other activities on lands covered by the licence<sup>11</sup>.

15. Subsections 16(1) and (2) of the *OGC Act*<sup>12</sup> provide as follows:

16(1) No person shall apply for or hold a licence for a well

(a) for the recovery of oil, gas or crude bitumen, or

(b) for any other authorized purpose

unless that person is a working interest participant and is **entitled to the right to produce the oil, gas or crude bitumen from the well** or to the right to drill or operate the well for the other authorized purpose, as the case may be.

(2) If, after 30 days from the mailing of a notice by the Board to a licensee at the licensee's last known address, the licensee fails to prove entitlement under subsection (1) **to the satisfaction of the Board**, the Board may cancel the licence or suspend the licence on any terms and conditions that it may specify.

16. Pursuant to section 94 of the *OGC Act*<sup>13</sup>, "the Board has the exclusive jurisdiction to examine, inquire into, hear and determine all matters and questions arising under this Act."

Further, the purposes of the *OGC Act* are expressly stated to include:

4. (c) to provide for the economic, orderly and efficient development in the public interest of the oil and gas resources of Alberta;

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<sup>11</sup> Alberta Energy and Utilities Board Directive 056: Energy Development Applications and Schedules at Exhibit 10-004-2005-09-12.

<sup>12</sup> *OGC Act*, *supra*, note 3.

<sup>13</sup> *Ibid.*

(d) to afford each owner the opportunity of obtaining the owner's share of the production of oil or gas from any pool;

17. Pursuant to section 16 of the *Energy Resources Conservation Act*, R.S.A. 2000, c. E-10<sup>14</sup>:

The Board, in the performance of the duties and functions imposed on it by this Act and by any other Act, may do all things that are **necessary for or incidental to** the performance of any of those duties or functions. [Emphasis added]

18. Under the above-noted statutory provisions, the legislature has given the Board the authority and statutory mandate to make the determination as to whether CBM is gas for the purpose of granting well licenses and establishing holdings. If the Board fails to make a determination on this issue, it will have abdicated its role and obligation to perform the duties and functions imposed upon it by its governing statutes. Similarly, if the Board commits an error of law in deciding the dispute, it may lose jurisdiction upon the Court of Appeal reversing its findings. However, this in no way dictates that the Board should not fulfil its statute mandate by refusing to decide the matter in the first instance.

19. This point was made very clearly by EnCana and CDP's joint legal expert in this Proceeding, Dean Lucas. In response to Mr. Larder's question about the Board's jurisdiction, Dean Lucas responded:

**MR. LUCAS:** "Well, the Board has a statutory decision power under section 16, and it's a power that it has to try to exercise in a proceeding of this kind."<sup>15</sup>

20. Dean Lucas further made it clear that the Board does have jurisdiction to decide the issue at first instance under the authority of the Alberta Court of Appeal in the *Goodwell* case. However, if the Board is wrong in its legal conclusions, it may lose jurisdiction by virtue of its decision being reviewed and overturned on a correctness standard. Dean Lucas responded to Mr. Larder's question on point as follows:

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<sup>14</sup> *Energy Resources Conservation Act*, R.S.A. 2000, c. E-10 at Exhibit 10-021-2006-09-29.

<sup>15</sup> Hearing Transcripts, page 1343, lines 8-10.

**Q. But in the Goodwell decision, the Court didn't say we couldn't make the first call?**

**A. MR. LUCAS: That's correct.** But the risk is that, again, hypothetically on this issue, if you're not legally correct, and to put that another way, from a burden or standard prospective, it would mean that the standard would be -- you could put it as highly probable or virtual certainty on that issue. **So if the Board were not legally correct, there would be a high probability that, on judicial review, a court would conclude that the Board is without jurisdiction.**<sup>16</sup>

21. Having demanded and applied for this hearing, it is somewhat ironic that EnCana and CDP now claim that the Board has no jurisdiction to determine the very matter at issue. Moreover, the *bona fides* of their position in this regard is certainly open to question given the express representations of EnCana's own legal counsel at the January 31, 2006 oral hearing. Specifically, Mr. Popowich responded to questioning by Board Counsel by stating that under Section 16 of the *OGC Act* the Board not only had the jurisdiction but that, with reference to the *Goodwell* decision<sup>17</sup>, the Alberta Court of Appeal "recognized that it was incumbent upon the Board and they had to determine the relative ownership of the parties."<sup>18</sup>

22. In the *Goodwell* case, the Court of Appeal held that the Board did not have jurisdiction to shut in four bitumen leases because the Board erred in law in determining the competing legal rights of the parties. Specifically, in noting the considerable technical expertise of the Board, the Court found at paragraph 26<sup>19</sup>:

However, the Board's well licence interpretation in this case did not employ that technical expertise, but involved a legal determination of the right to extract resources. In order to delineate the scope of AEC's rights under the well licences **the Board had to interpret the oil sands leases, which would have required an examination of the relevant energy statutes and applicable case law.** [emphasis added]

23. Thus, *Goodwell* stands for the proposition that, where the Board is required to determine a dispute involving the competing legal ownership rights of parties in order to carry

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<sup>16</sup> Hearing Transcripts, page 1345, lines 2-12.

<sup>17</sup> *Goodwell*, *supra* note 6.

<sup>18</sup> January 31, 2006 Hearing Transcripts, page 46 line 3 to page 48 line 4.

<sup>19</sup> *Goodwell*, *supra* note 6.

out its statutory mandate, the Board's duty is to interpret the relevant contractual documents, statutes and applicable case law.

24. In *Goodwell*, the dispute between the oil sands and natural gas lessees was as to entitlement to the underlying mineral. This principle clearly applies to the present dispute between the Natural Gas Rights Owners and the Coal Owners, which is again a dispute as to entitlement to the underlying mineral. In these circumstances, the Alberta Court of Appeal has determined that the Board must carry out its statutory mandate by interpreting the relevant leases, statutes and case law in accordance with the law.

### III. STANDARD OF PROOF

25. Pursuant to Section 16 of the *OGC Act*<sup>20</sup>, the standard of proof for a well license is for the Applicants to establish their entitlement to the right to produce the gas "to the satisfaction of the Board". In this regard, the applicable standard is the normal civil law standard of proof on a balance of probabilities.

26. It is well understood that:

The concept of "standard of proof" refers simply to how convinced one must be that a certain fact exists. "Burden of proof" refers to who bears the burden of establishing a fact to that level of satisfaction.<sup>21</sup>

27. The standard in the within Application is tantamount to the civil burden of "balance of probabilities".

To the extent that most proceedings before the administrative agencies are civil (as opposed to criminal) in nature, the burden of proof is the civil burden of "balance of probabilities" (as opposed to the criminal standard).<sup>22</sup>

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<sup>20</sup> *OGC Act*, *supra* note 3.

<sup>21</sup> R.W. Macaulay and J.L.H. Sprague, *Hearings Before Administrative Tribunals*, 2d ed. (Toronto: Carswell, 2002) at 17-6 at Exhibit 10-022-2006-09-29.

<sup>22</sup> *Ibid* at 17-7. See also *Gannon Bros. Energy Ltd. v. Alberta (Energy & Utilities Board)* 1996 CarswellAlta 56 (Alta. C.A.) at Exhibit 10-023-2006-09-29.

28. To suggest that the burden of proof in the within Application should be the criminal standard of “beyond a reasonable doubt” or the “standard of certainty” is incorrect.<sup>23</sup> In his oral evidence, Dean Lucas addressed the high standard for judicial review. However, in doing so, he was referring to the “correctness standard” that would be applied by the Court of Appeal on reviewing questions of law.<sup>24</sup> He does not say that this is the standard that the Board should apply. There is no reason for the Board in deciding the issue under its statutory mandate to apply any standard other than the normal civil standard of a “balance of probabilities”.

29. The burden on the Applicants is to satisfy the Board on a balance of probabilities that they have the right to produce gas. It is undisputed by EnCana and CDP that the Applicants have the right to produce natural gas. Therefore, provided that the gas stored in coal is found to be natural gas then, the burden of establishing the right to well licenses and holdings has been met.

30. Centrica is asking the Board to carry out its statutory mandate on the basis that Centrica and the other Applicants have established, through submission of their leases (and any other supporting documentation reasonably requested by Board staff), that they have been granted the exclusive right and privilege to explore for, drill for, operate for, produce, win, take, remove, store, treat and dispose of natural gas and related hydrocarbons, to support the granting of the well licenses and to establish the holdings they have applied for.

#### **IV. GAS STORED IN COAL IS “GAS”**

##### **a. Statutory Definitions**

31. The statutory definitions of “gas” and “coal” crystallize the common understanding of these terms in the energy industry. These definitions make a clear distinction between these two substances.

32. The Board’s jurisdiction to make the determination that CBM is gas is derived from Section 1(2) of the *OGC Act*<sup>25</sup>, which provides as follows:

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<sup>23</sup> CDP Submission paras. 29-30 at Exhibit 03-036-2006-09-15.

<sup>24</sup> Hearing Transcripts, page 1345, lines 2-12.

<sup>25</sup> *OGC Act*, *supra* note 3.

The decision of the Board is final as to whether any product or mixture comes within a definition in subsection (1) or as to whether a definition in subsection (1) is applicable in a particular case.

33. Section 1(2) of the *CC Act*<sup>26</sup> also provides that:

A decision by the Board as to whether a definition in subsection (1) is applicable in a particular case is final.

34. Subsection 1(1) of the *OGC Act*<sup>27</sup> defines “gas”, “raw gas” and “marketable gas” as follows:

“gas” means raw gas or marketable gas or any constituent of raw gas, condensate, crude bitumen or crude oil that is recovered in processing and that is gaseous at the conditions under which its volume is measured or estimated;

“raw gas” means a mixture containing methane, other paraffinic hydrocarbons, nitrogen, carbon dioxide, hydrogen sulphide, helium and minor impurities, or some of them, that is recovered or is recoverable at a well from an underground reservoir and that is gaseous at the conditions under which its volume is measured or estimated;

“marketable gas” means a mixture mainly of methane originating from raw gas, if necessary through the processing of the raw gas for the removal or partial removal of some constituents, and that meets specification for use as a domestic, commercial or industrial fuel or as an industrial raw material;

35. Whereas, subsection 1(1) of the *CC Act*<sup>28</sup>, defines “coal” as:

“coal”, in addition to its ordinary meaning, includes manufactured chars, cokes and any manufactured solid coal product used or useful as a reductant or energy source or for conversion into a reductant or energy source;

36. It is submitted that CBM comes within the definition of “gas”, “raw gas” and/or “marketable gas” and does not come within the definition of “coal”. It is beyond any doubt that CBM fits within the statutory definition of “gas” as gas which “is recovered in processing and that is gaseous at the conditions under which its volume is measured or estimated”. It is equally

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<sup>26</sup> *CC Act*, *supra* note 4.

<sup>27</sup> *OGC Act*, *supra* note 3.

clear that CBM, whether in its free or adsorbed state, does not fall within the definition of “coal”, given the ordinary meaning of coal as a solid, black combustible rock.

37. As a creature of statute, the Board must make its decisions in accordance with the governing legislation. Accordingly, Centrica submits that the Board’s decision in this matter must accord with the above definitions of “gas” and “coal” set forth in the *OGC Act* and the *CC Act*. Under these definitions, it is clear that the intent of the Legislature was for the Natural Gas Rights Holders to have the right to exploit and develop gas stored in coal.

38. Centrica is not asking the Board to determine ownership for all purposes. The Board’s determination as to legal entitlement of CBM does not constitute a legally binding determination or confirmation of the private property issues of mineral entitlement or the right to produce hydrocarbons or to conduct other activities on lands covered by the licence.<sup>29</sup>

**b. Common Law Rule of Interpretation: Vernacular Meaning**

39. Having regard to the comments of the Court in the *Goodwell* case, it appears that the Board should also take into account the applicable common law authorities in applying the statutory definitions cited above. In this regard, it is significant that the definition of “coal” under the *CC Act*, refers to “its ordinary meaning”.<sup>30</sup> This dictates an approach that is consistent with the common law rule of interpretation that the plain, ordinary meaning of the words used in the granting documents should be adopted in construing the intent of the parties.

40. The common law rule of interpretation is that the plain, ordinary meaning of the words used is to be adopted in construing a contractual document. The law dictates that the terms “natural gas” and “coal” be given their plain and ordinary meaning, as they were used in the vernacular when the subject leases were entered into. As explained by Dean Percy, this principle of interpretation, as established in the case of *Borys*<sup>31</sup>, has become a general principle of interpretation which has been applied to achieve uniform results in cases which involve

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<sup>28</sup> *CC Act*, *supra* note 4.

<sup>29</sup> Directive 56, *supra* note 11.

<sup>30</sup> Subsection 1(1) *CC Act*, *supra* note 4.

<sup>31</sup> *Borys*, *supra* note 5.

different documents of title and different subsurface minerals. This principle has become elevated to a foundation element in Canadian oil and gas law.<sup>32</sup>

41. There has been no real difference of opinion presented in evidence over the vernacular meaning of the terms “natural gas” and “coal” in these proceedings. That is, in general terms, the parties to this hearing have all acknowledged that the plain and ordinary meaning of “coal” is that it is a solid, black or blackish, combustible rock.

42. The parties who claim ownership of natural gas rights in this Proceeding share a common root of title dating back to the title splits in the early 1900s with the transfer of land and the reservation of coal to the Canadian Pacific Railway (“CPR”). Specifically, between 1904 and 1912 the CPR went from reserving coal to a reservation of coal, petroleum and valuable stone in its land grants. In 1912, the CPR began to reserve all mines and minerals.<sup>33</sup> The CPR was in the railway business, not in the coal or the gas business. As such, there is no evidence nor reasonable basis to suggest that its reservation of coal was intended to also reserve the well-known, noxious substances then called “marsh gas”, “methane” or “fire damp”. Further, the Courts have already given judicial notice to the foregoing; for example, in *Goodwell*<sup>34</sup> at paragraph 34 the Court of Appeal stated:

The Alberta Court of Appeal and Privy Council decisions in *Borys* clarified a number of issues arising in a situation in which petroleum and natural gas rights were separately held. In the 1880s, the Canadian government gave the Canadian Pacific Railway 25 million acres of land as part of its mandate to help settle the west. **In the mistaken belief natural gas was a worthless and noxious substance, the C.P.R. originally sold land to homesteaders, reserving “coal, petroleum and valuable stone”. As a result, the railway held the rights to petroleum and the settlers held the rights to natural gas.** [emphasis added]

43. It can therefore be concluded that the railway held the rights to coal and the settlers held the rights to natural gas.

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<sup>32</sup> Joint Reply Submissions – Expert Report of David R. Percy, pages 6-10 at Exhibit 18-003a-2006-09-29.

<sup>33</sup> Hearing Transcripts, page 711.

<sup>34</sup> *Goodwell*, *supra* note 6.

44. The evidence and submissions of the Coal Owners is that it was notorious that CBM was known to be found in coal seams. It is therefore telling that no effort was made to expressly seek to reserve this substance until EnCana's predecessor, PanCanadian Petroleum, started doing so in its leases sometime in or about 1993.<sup>35</sup>

45. Dean Percy testified that the *Southern Ute* case would be found to have persuasive precedential value in Canada.<sup>36</sup> The dictionary definitions cited in that case provide ample authority as to the common usage and understanding of coal and CBM as of the early 1900s. In the *Southern Ute*<sup>37</sup> case, the United States Supreme Court made the following findings in relation to the common understanding of the terms "coal" and "CBM gas" as of the early 1900s:

At the time the Acts were passed, most dictionaries defined coal as the solid fuel resource. For example, one contemporary dictionary defined coal as a "solid and more or less distinctly stratified mineral, varying in color from dark-brown to black, brittle, combustible, and used as fuel, not fusible without decomposition and very insoluble." Century Dictionary and Cyclopedia 1067 [1725] (1906). See also American Dictionary of the English Language 244 (N. Webster 1889) (defining "coal" as a "black, or brownish black, solid, combustible substance, consisting, like charcoal, mady of carbon, but more compact"); 2 New English Dictionary on Historical Principles 549 (J. Murray ed. 1893) (defining coal as a "mineral, solid, hard, opaque, black, or blackish, found in seams or strata in the earth, and largely used as fuel"); Webster's New International Dictionary of the English Language 424 (W. Harris & F. Allen eds. 1916) (defining coal as a "black, or brownish black, solid, combustible mineral substance"). In contrast, dictionaries of the day defined CBM gas -- then called "marsh gas," "methane," or "fire-damp" -- as a distinct substance, a gas "contained in" or "given off by" coal, but not as coal itself. See, e. g., 3 Century Dictionary and Cyclopedia 2229 (1906) (defirung "fire-damp" as "the gas contained in coal, often given off by it in large quantities, and exploding, on ignition, when mixed with atmospheric air"; noting that "fire-damp is a source of great danger to life in coal-mines"). **As these dictionary definitions suggest, the common understanding of coal in 1909 and 1910 would not have encompassed CBM gas, both because it is a gas rather than a solid [\*875] mineral and because it was understood as a distinct substance that escaped from coal as the**

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<sup>35</sup> See Exhibit 20-49; see also Hearing Transcripts page 434, lines 21-23 and pages 558, line 22 to page 559, line 4.

<sup>36</sup> Hearing Transcripts, page 677.

<sup>37</sup> *Southern Ute*, *supra* note 8.

**coal was mined, rather than as a part of the coal itself.**  
[emphasis added]

46. To the same effect, the 2000 edition of the Canadian Oxford Dictionary defines “coal” as “a hard black or blackish rock, mainly carbonized plant matter, found in underground seams and used esp. as a fuel”.<sup>38</sup> In general terms, the same vernacular meaning of “coal” has prevailed throughout the last century.

47. The evidence from each member of the Coal Owners’ Panel corroborates that they do not dispute this historical common understanding of coal as a solid, black or blackish, combustible rock. Relevant portions of the Coal Owners’ Panel’s evidence include:

- a. On behalf of **CDP**, in answer to questioning about the common conception of coal, Mr Hatt acknowledged that:

“If we’re talking about the vernacular – Q. Yes.

A. – MR. HATT: -- I would probably think most people would think of it as a solid.”<sup>39</sup>

- b. On behalf of **EnCana**, Mr. Welsh admitted that: “coalbed methane in the vernacular is a gas when you’re producing it; absolutely.” He further agreed that coal on the surface is a solid and that, had he not spoken with Dr. Levine, he would describe coal as a solid.<sup>40</sup>

- c. On behalf of **EnCana**, Mr. Welsh further acknowledged that from December 2001 through July of 2002, EnCana made a series of proposals to jointly exploit or farm-in on Centrica’s coalbed methane interests under the standard 1990 CAPL Operating Procedure. These EnCana and PanCanadian proposals expressly provide that: “**Coalbed methane or CBM: Means natural gas, which may be found to be occupying a Coal Bed ...**”, [including by double negative] “**the in situ desorption of natural gas from**

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<sup>38</sup> See the dictionary definitions spanning the time period of 1893 through 1916, cited at pages 7-8 of *Southern Ute*, *supra* note 8; and the *Canadian Oxford Dictionary* (2000 ed.) at Exhibit 20-060.

<sup>39</sup> Hearing Transcripts, page 1046, Lines 10-16.

<sup>40</sup> Hearing Transcripts, pages 1045-46; 1134.

**the coal**".<sup>41</sup> In other words, as recently as 2002, EnCana took the position in its dealings with Centrica that CBM is natural gas and not coal.

d. On behalf of **CDP and EnCana**, Dr. Levine provided a one-sided dissertation on the "Limitations of Language and Terminology" in order to suggest that, on a scientific basis, CBM should be considered to be a constituent of coal. However, Dr. Levine was compelled to make the following admissions under cross-examination:

- "The term "coal" has been used to describe this black rock for hundreds of years."<sup>42</sup>
- "It's my feeling that both in the past and present day usage that for all but a select community of scientists, the term "coal" is applied to a rock that has certain characteristics that don't infer anything specific regarding its composition, just its general properties."<sup>43</sup>
- "I'm just saying in terms of common usage, the word "solid," yes, is valid to describe coal."<sup>44</sup>
- Also, Dr. Levine's Report states: "Use of the term 'solid' to describe coal is valid only in the vernacular sense where it may be used to describe a material that is firm or compact in substance."<sup>45</sup>

e. Finally, on behalf of **CDP and EnCana**, upon Dean Lucas being asked to comment upon the above-noted excerpt from Dr. Levine's Report, he testified: "Here, Dr. Levine seems to be contrasting the vernacular sense and the scientific sense. So I guess putting this into the context of what I dealt with in my report, so far as this goes, this is consistent with the approach that the court, for example, took in the *Borys* case, because the court very,

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<sup>41</sup> Hearing Transcripts, pages 1191-1197; EnCana Farmout and Joint Venture Proposals at Exhibit 20-059.

<sup>42</sup> Hearing Transcripts; page 1262 lines 6-7.

<sup>43</sup> Hearing Transcripts; page 1204, lines 4-9.

<sup>44</sup> Hearing Transcripts; page 1205, lines 24-51.

<sup>45</sup> Exhibit 19-002-2006-09-15 at page 7 lines 16-17.

very clearly did distinguish between the vernacular sense and the scientific sense of the word "petroleum" in that case."<sup>46</sup>

48. In addition, the most widely accepted geological definition of coal, being the Bates and Jackson *Dictionary of Geological Terms* published by the American Geological Institute, begins: "**coal - a readily combustible rock ...**". Both Mavor and Levine accepted this as an accurate and functional definition of coal.

49. In summary, the evidence before the Board in this Proceeding includes dictionary definitions of the word "coal" that span the time period of over a century, from 1893 to 2000. There is remarkable consistency in these definitions, establishing a common usage of the word "coal" to mean a solid, black or blackish, combustible rock. This is consistent with the most widely accepted geological definition of coal, as "a readily combustible rock". Further, there is a definitive finding of the Supreme Court of the United States, which would have persuasive precedential value in Canada, that the common understanding of coal in 1909 would not have encompassed CBM gas. Finally, all four members of the Coal Owners' Panel admitted that the vernacular or common meaning of the word "coal" is that of a solid rock. In this regard, as recently as 2002, EnCana made a series of proposals to Centrica which expressly defined CBM to be natural gas, including in its *in situ*, adsorbed state.<sup>47</sup>

50. By contrast, there is no evidence whatsoever to suggest that anyone other than a rarefied, select number of coal scientists would consider "coal" to be anything other than a solid rock.

### c. The Science of CBM and the Law

51. Centrica adopts the Joint Argument on Scientific and Technical Issues that Centrica has filed in concert with ConocoPhillips, Devon, Fairborne, Quicksilver and Canpar.

52. The scientific debate that took place during this Proceeding was spirited and interesting. However, the Alberta and other Courts have dictated that vernacular rather than scientific meanings of words in conveyance instruments should be used in construing the intent

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<sup>46</sup> Hearing Transcripts, page 1371.

<sup>47</sup> EnCana Farmout and Joint Venture Proposals, *supra* note 41.

of the parties. To the extent that the science informs the general understanding of the relationship between CBM and coal as they exist in a virgin reservoir, an understanding of the basic science is relevant. However, to the extent that the science of coal at the molecular level is only known or comprehensible to a select few scientists, it is submitted that it is of little assistance to this Board, which is charged with the practical mandate of administering the economic, orderly and efficient development in the public interest of the oil and gas resources of Alberta.

53. As discussed in detail in the Joint Argument on Scientific and Technical Issues, the evidence clearly establishes that the mainstream scientific view of CBM is that it is a gas before and after disturbance of the coal reservoir by man. Pressure reduction during production does not cause coal, a rock, to change to a gas. There is no phase change that occurs when drilling disturbs the coal bed and both “free gas” and the greater density “adsorbed gas” flow to the lower density region in the wellbore. These are the same flow mechanics that prevail in conventional natural gas reservoirs. The ease of separation of natural gas from coal allows gas stored in coal to be produced with virtually the same industry-wide natural gas drilling and completion techniques used for conventional reservoirs.

54. While there is no Canadian jurisprudence that deals with the precise issue of whether rights to CBM belong to the natural gas owners, the U.S. Supreme Court decision of *Southern Ute* applied the same interpretive approach to distinguishing between subsurface mineral rights as *Borys*.

55. In *Southern Ute*, the Court reviewed a grant containing a reservation of “all coal in the said lands and the right to prospect for, mine and remove the same.” At issue was whether this reservation included CBM. In considering the wording of the grant, the Court unequivocally concluded that the common understanding of coal in the early part of the twentieth century would not have included CBM because it is a gas rather than a solid. The Court found that at that time, it was understood that CBM was a “distinct substance” that escaped from coal, rather than part of the coal itself.<sup>48</sup>

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<sup>48</sup> *Southern Ute* at page 8, *supra* note 8.

56. Dr. Levine posits a different theory. He says that the science of coal is so complex that the best one can do is to say that gas stored in coal is a constituent part of the coal. Notwithstanding the complexity at the molecular level, Dr. Levine admits that the gas is attached to the rock only by weak attractive physical forces but is not chemically bonded to the coal.<sup>49</sup>

57. With respect, the science of coal is not so complex that it cannot be understood to the extent required to determine whether gas stored in coal should be classified as "gas" or "coal". The issue was put to Dr. Levine by Chairman McCrank during the Hearing when he asked him about whether the coalification process could have produced some of the reservoirs in and around the coal. The following exchange is instructive:

Q. Could it very well have produced some of the reservoirs of natural gas in and around the coal?

A. DR. LEVINE: Very likely.

Q. And you would not of course indicate that that gas that was produced by the methane in a reservoir would be owned by the coal owners I take it?

DR. LEVINE: No. **I'm looking at coal as a rock and if it's in another -- if it's outside, then, no.**

Q. How far away does the gas have to be?

A. DR. LEVINE: One of the questions I had is what are we actually talking about in terms of -- by some criteria, some stratigraphic boundaries would apply and often times it's quite sharp between methane -- coal and the floor rock underneath it and the roof rock overlying it and **anything that was outside of the stratigraphic boundary of the coal I would not regard as part of the coal.**

Q. And later on in that same page, page 968, on line 19 you state, in response to a question of Mr. Crowther's, and I'll just read the question so that we have it in context: "But assuming that were to happen, Dr. Levine, that gas formed outside of the coal reservoir were to migrate to the unsaturated coal reservoir, would that gas become part of a coal?" And your answer is: "In my view, yes. I would not be able to distinguish methane that formed from within the coal from methane that migrated from out." And that's correct, I take it?

A. DR. LEVINE: Yes, that's correct.<sup>50</sup>

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<sup>49</sup> Hearing Transcripts, page 783.

<sup>50</sup> Hearing Transcripts, pages 1391-1392.

58. This evidence highlights the fact that Dr. Levine sees coal as a rock and that CBM only becomes a constituent of the rock when it migrates into the coal seam and becomes adsorbed to the rock matrix. This leads to the impractical and somewhat incredible result that a molecule of CBM would be considered by Dr. Levine to be natural gas as long as it remains outside of the coal seam but becomes coal if it migrates into the coal reservoir. Hence, ownership depends not on the character of the mineral but on its location.

59. This approach to minerals classification and ownership is contrary to the applicable principles under Canadian law. By statute, under the *OGC Act*, “gas” is defined as “a mixture mainly of methane” which is “recovered or recoverable at a well from an underground reservoir and that is gaseous at the conditions under which its volume is measured or estimated”.<sup>51</sup> In *Anderson*, the Supreme Court of Canada addressed the split title issue “on the basis of the phase the hydrocarbon was in under initial conditions at the time of the contract for the sale of the property”. The Court held that a subsequent phase change in the mineral did not alter ownership.<sup>52</sup>

60. Dr. Levine’s theory is at odds with the approach set forth in the *Anderson* case. The phase of the hydrocarbon under initial reservoir conditions surely is not dependent upon whether the gas molecule is outside or inside of the stratigraphic boundary of a coal seam. Dr. Levine’s theory also does not account for CBM which is in a free gas state within the coal bed.

61. With respect, it appears that Dr. Levine’s theory is intended to fit within the legal construct of an approach to ownership of minerals based upon strata. In this regard, Dr. Levine’s approach borders on advocacy rather objective scientific inquiry. Dean Lucas discussed the concept of ownership based upon strata in his report.<sup>53</sup> However, on cross-examination by Mr. Larder, Dean Lucas admitted that the case of *Little v. Western Transfer* did not amount to a theory of ownership regarding coal that has been articulated by the Canadian Courts.<sup>54</sup> Dean Percy explained in both in his report and in oral evidence that the *Little* case deals solely with the

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<sup>51</sup> *OGC Act*, section 1(1)(y), *supra* note 3.

<sup>52</sup> *Anderson* at page 17 (S.C.C.), *supra* note 7.

<sup>53</sup> Lucas Report, Exhibit 03-036-2006-09-15, p. 5-6.

<sup>54</sup> Hearing Transcripts, pages 1347-1348.

concept of outstroke and that it has nothing to do with the right to remove different minerals from the same strata.<sup>55</sup>

62. In the result, clearly the better view is that which accords with common sense and the understanding of the mainstream scientific community, as explained by Mr. Mavor in his evidence. Coal is a rock and, therefore, a solid substance. Gas stored in coal is in a gaseous state at the *in situ* temperature and pressure conditions of Alberta's coal seams. Coal is a container for natural gas in coal. The two substances are distinct and easily separated.

**d. Application of the Common Law to the CBM Split Title Dispute**

63. The top Courts in both Canada and United States have made it clear that, where disputed ownership of various subsurface minerals is vested in different parties, the relevant instruments are to be interpreted on the basis of a vernacular understanding as at the time of the grant.<sup>56</sup>

64. As discussed above, as understood by the reasonably knowledgeable landowner, businessman or engineer, the vernacular meaning at the time of the grants was that coal was understood to be a solid, black or blackish, combustible rock. The fact that noxious "marsh gas", "methane" or "fire damp" was trapped within the coal was well-known in that it constituted an ever-present and serious hazard for coal mining operations.<sup>57</sup>

65. Given the common knowledge of the existence of these two separate substances in Alberta coal beds, the intent of the parties in granting natural gas and related hydrocarbons, excluding coal, must have been to convey the interest in the "marsh gas", "methane" or "fire damp" to the grantee, while reserving out only the interest in the coal rock to the CPR. No other interpretation accords with the ordinary meaning of the words used by the parties in the conveyance instruments. This is the result that is dictated by the decision of the Privy Council in *Borys*.

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<sup>55</sup> Exhibit 18-003a-2006-09-29 pages 14-16; Hearing Transcripts, pages 673-677.

<sup>56</sup> *Borys* at page 226-227, *supra* note 5; and *Southern Ute* at page 3, *supra* note 8.

<sup>57</sup> *Goodwell* at para. 34, *supra* note 6; and *Southern Ute* at page 9, *supra* note 8.

66. The result is the same under Canadian law based upon the mainstream understanding of the science of coal and CBM. Chairman McCrank asked Dean Percy to consider Mr. Mavor's characterization of CBM being a vapour that is compressed or adsorbed in the porosity within the solid coal rock under virgin reservoir conditions. Given CBM being in a gaseous form and coal being in a solid form, the Chairman asked Dean Percy to predict how the Canadian Courts would resolve the issue of ownership. Dean Percy's response was as follows:

A. MR. PERCY: If the courts were faced with deciding what was meant by natural gas and what was meant by CBM, they would start off by saying what's the vernacular understanding of the two substances. When I read the Amoco and Southern Ute decision, I was struck by, first of all, the similarity of the approach of the United States Supreme Court to the Borys case, and it occurred to me back in 1999 when I put that case on my syllabus that coal -- the US Supreme Court concluded what was meant by coal in the vernacular. The answer was hard black stuff. What was meant by natural gas? Stuff existing in a vaporous state. So it's been my feeling that it's highly likely that the Canadian courts would make a similar distinction.<sup>58</sup>

67. When the same proposition was put to Dean Lucas, he agreed that his opinion would be the same as that expressed by Dean Percy.<sup>59</sup>

68. It is respectfully submitted that this is the correct legal analysis and that the Board should adopt this approach in deciding that CBM is "gas" for the purposes of granting well licenses and holdings pursuant to the pending applications by the Natural Gas Rights Holders.

## V. SETTLED EXPECTATIONS OF THE PARTIES AND INDUSTRY

69. As evidenced in its publications, the Board has already made the determination that CBM is natural gas.<sup>60</sup> Specifically, for the past 15 years since the issuance of Bulletin IL-91, industry has understood and conducted itself on the basis that the EUB and the Alberta Department of Energy consider CBM "to be a form of natural gas."

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<sup>58</sup> Hearing Transcripts, pages 728-730.

<sup>59</sup> Hearing Transcripts, pages 1388-1389.

<sup>60</sup> Bulletin IL-91-11, *supra* note 9; EUB EnerFAQs No. 10 re: Coalbed Methane at Exhibit 10-003-2004-01-01; and Alberta Energy Utilities Board, "Across the board – Busting the myths behind CBM", March 2006 at Exhibit 10-024-2006-09-29.

70. Alberta Courts have applied the doctrine of “settled expectations” by considering evidence regarding the regulatory environment in Alberta, the particular leasing arrangements made by the CPR as petroleum owner and the views of the parties.<sup>61</sup> Such expectations may properly be taken into account when making findings of fact.

71. In this case, it is a settled expectation within the oil and gas and coal industries that CBM is a form of natural gas. This point was well demonstrated in the recent dealings that took place between Centrica and EnCana (and its predecessor PanCanadian) over a proposed joint venture to exploit Centrica’s interests as a natural gas owner on its CBM lands.

72. In relation to the parties’ negotiations and the proposals of 2001-2002, Mr. Welsh confirmed that PanCanadian had direct experience in every CBM play in the world, including expertise in coal, geology, reservoir modelling, petrophysical analysis, core analysis, gas content analysis, well test analysis and production operations. He further acknowledged that EnCana was a landowner with substantial holdings in both coal and natural gas rights, and that it had on staff engineers and business people.<sup>62</sup>

73. With this considerable expertise and wealth of commercial experience, PanCanadian and EnCana made proposals in writing to Centrica to jointly exploit or farm-in on Centrica’s coalbed methane interests under the standard 1990 CAPL Operating Procedure. These proposals expressly provide that: “Coalbed methane or CBM: Means natural gas, which may be found to be occupying a Coal Bed ...”, [including by double negative] “the in situ desorption of natural gas from the coal”.<sup>63</sup> In other words, as recently as 2002, EnCana specifically addressed its mind to CBM, including in its adsorbed state, and took the position in its dealings with Centrica that CBM is natural gas and belonged to Centrica under and by virtue of Centrica’s natural gas leases.

74. In this context, it is also significant that EnCana amended its standard form of leases in or about 1993 specifically to reserve out CBM in addition to coal.<sup>64</sup> As the largest

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<sup>61</sup> *Anderson* at paras. 148-158 (Alta. Q.B); affirmed on this point at para. 52 (Alta. C.A.); reversed in part on other grounds; decision affirmed (S.C.C.) but the doctrine of settled expectations was not addressed by the Court, *supra* note 7; see also, *Goodwell*, *supra* note 6.

<sup>62</sup> Hearing Transcripts, pages 1192-1193.

<sup>63</sup> Hearing Transcripts, pages 1191-1197; EnCana Farmout and Joint Venture Proposals at Exhibit 20-059.

<sup>64</sup> See Exhibit 20-49; see also Hearing Transcripts, page 434, lines 21-23 and page 558, line 22 to page 559, line 4.

owner of coal rights in Canada, in its dealings with industry from 1993 through 2002, EnCana treated CBM as natural gas and not part of its coal holdings. It is submitted that this is poignant evidence of the settled expectations of the parties and of industry on the issue of CBM ownership.

75. Finally, EnCana drilled CBM wells on Crown Lands under its natural gas leases prior to the amendment of the *Mines and Minerals Act* in 2003.<sup>65</sup> For those wells, EnCana took the position in applying for its well licenses that CBM is natural gas. Now that it serves its economic interests on freehold lands, EnCana wants CBM to be classified as coal, thereby giving rise to two completely different regulatory regimes for the same mineral.

## **VI. COAL OWNERS SEEK TO STERILIZE DEVELOPMENT OF ALBERTA'S CBM RESOURCES**

76. It is clear from the evidence of the Natural Gas Rights Holders that the measures proposed by EnCana are not acceptable as they are either not practical or not possible or both.

77. Under the *OCG Act* and the *CC Act*, the Board has a statutory obligation to provide for the economic, orderly and efficient development of Alberta's oil and gas and coal resources in the public interest.

78. The Coal Owners have not applied for any well licences to drill CBM wells by virtue of their coal ownership rights. Rather, they demand that the Natural Gas Rights Holders "quiet title" before they will withdraw their objections to development of CBM. If this involves litigation, then they are prepared to have the resource sterilized for as long as it takes for the issue to be resolved by the Courts. It has also been suggested that this may include extending the dispute to encompass the grant of coal rights on all Crown Lands, predating the 2003 amendment to the *Mines and Minerals Act*, on the basis that the legislation is prospective in effect.<sup>66</sup>

79. The Coal Owners want to exercise a veto over development of CBM on freehold lands in order to advance their economic interests. The collateral impact of such a position is to

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<sup>65</sup> Hearing Transcripts, page 1182

<sup>66</sup> Hearing Transcripts, pages 1358-1359

sterilize development of CBM on freehold lands until the issue is ultimately resolved by the Courts. Such a result would conflict with the Board's statutory mandate to provide for the economic, orderly and efficient development of Alberta's oil and gas and coal resources in the public interest.

## VII. CONCLUSION

80. It is submitted that the evidence tendered in this Proceeding clearly establishes that CBM is natural gas and that it is within the Board's jurisdiction to make that determination in order to perform its statutory mandate. This determination is in accordance with:

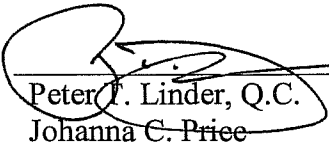
- the statutory definitions of "gas" and "coal";
- the vernacular meanings and common understanding of these terms as they were used at the time of the original grants and over the past century up to today;
- the mainstream scientific understanding of coal and gas stored in coal, as it exists in a virgin reservoir;
- the applicable common law principles as articulated by the highest Courts in both Canada and the United States;
- the settled expectations of the parties and industry; and
- the best and most practical treatment of gas in coal for regulatory purposes in order to enable the Board to provide for the economic, orderly and efficient development of Alberta's oil and gas and coal resources in the public interest.

81. The Applicants have provided sufficient evidence to establish that they are entitled to produce gas stored in coal under their valid and subsisting natural gas leases. It is respectfully submitted that the Board should grant the well licences and establish the holdings applied for by the Applicants.

ALL OF WHICH IS RESPECTFULLY SUBMITTED, this 15<sup>th</sup> day of November, 2006.

**PEACOCK LINDER & HALT LLP**

Per:



Peter T. Linder, Q.C.  
Johanna C. Price

Solicitors for Centrica Canada Limited