

ACTION PLAN FOR ERCB DECISION 2011-019

CANADIAN NATURAL RESOURCES LTD.

APPLICATIONS FOR 15 WELL AND 8 FACILITY LICENCES, MINNIE LAKE AREA

ACTION ITEM	REQUIRED ACTION/COMMENTS	DECISION: 2011-019	ERCB PROCESS TO ENSURE FOLLOW-UP	STATUS & EVIDENCE
1 Surface casing depth	The panel finds that in order to be more consistent, the required surface casing depth for all wells should be expressed as an elevation above mean sea level, and be set at no shallower than 440 m above mean sea level.	Section: Paragraph 40 P. 8	ERCB will review all logs.	Completed - Reviewed by ERCB: Nov. 15, 2011: surface casing depth of 8C well at 8-22 set at 438.47 m AMSL Nov. 8, 2011: surface casing depth of 9B well at 9-15 set at 437.7 m AMSL Nov. 7, 2011: surface casing depth of 15D well at 15-15 set at 438.7 m AMSL Nov. 3, 2011: surface casing depth of 14D well at 14-15 set at 437.67 m AMSL Nov. 3, 2011: surface casing depth of 2D well at 2-22 set at 437.67 m AMSL Oct. 28, 2011: surface casing depth of 8B well at 8-15 set at 433.85 m AMSL Oct. 28, 2011: surface casing depth of 1A well at 1-15 set at 436.17 m AMSL Oct. 21, 2011: surface casing depth of 15A well at 15-10 set at 437.67 m AMSL Oct. 21, 2011: surface casing depth of 2A well at 1-15 set at 437.2 m AMSL Oct. 21, 2011: surface casing depth of 16D well at 16-10 set at 438.3 m AMSL Oct. 21, 2011: surface casing of 13C well at 13-10 set at 435.76 m AMSL Oct. 13, 2011: surface casing of 14D well at 14-10 set at 435.69 m AMSL Sept. 28, 2011: surface casing of 9B well at 9-22 set deeper than 440 m AMSL Sept. 28, 2011: surface casing of 3B well at 3-22 set deeper than 440 m AMSL

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2 Surface casing logs	The panel requires CNRL to conduct a cement evaluation log of the surface casing in each well after drilling to total depth and provide these to the ERCB for review and approval after setting the production casing.	Section: Paragraph 43 P. 8	ERCB will review all logs.	Completed - Reviewed by ERCB: Nov. 15, 2011: 8C well at 8-22 Nov. 8, 2011: 9B well at 9-15 Nov. 7, 2011: 15D well at 15-15 Nov. 3, 2011: 14D well at 14-15 Nov. 3, 2011: 2D well at 2-22 Oct. 28, 2011: 8B well at 8-15 Oct. 28, 2011: 1A well at 1-15 Oct. 21, 2011: 15A well at 15-10 Oct. 21, 2011: 2A well at 2-15 Oct. 21, 2011: 16D well at 16-10 Oct. 21, 2011: 13C well at 13-10 Oct. 13, 2011: 14D well at 14-10 Sept. 28, 2011: 9B well at 9-22 Sept. 22, 2011: 3B well at 3-22
3 Production casing logs	The panel requires CNRL to run cement evaluation logs of the production casing in each well and provide these logs together with the surface casing cement evaluation logs to the ERCB for review and approval before perforating the wells.	Section: Paragraph 46 P. 9	ERCB will review all logs.	Completed - Reviewed by ERCB: Dec. 5, 2011: 15D well at 14-15 Nov. 22, 2011: 9B well at 9-15 Nov. 22, 2011: 8C well at 8-22 Nov. 21, 2011: 15D well at 15-15 Nov. 21, 2011: 2D well at 2-22 Nov. 7, 2011: 8B well at 8-15 Nov. 7, 2011: 1A well at 1-15 Nov. 1, 2011: 2A well at 2-15 Nov. 1, 2011: 15A well at 15-10 Nov. 1, 2011: 16D well at 16-10 Oct. 21, 2011: 14D well at 14-10 Oct. 21, 2011: 13C well at 13-10 Sept. 28, 2011: 3B well at 3-22 Sept. 28, 2011: 9B well at 9-22
4 Drilling timeline	The panel notes CNRL's commitment to completing drilling activities outside of summer's window of recreational use from June 1 to September 5 (Labour Day) to allow enjoyment of the lake over this peak-use period. The panel holds CNRL to this commitment as a condition of approval.	Section: Paragraph 104 P. 18	ERCB will reievew timing.	Completed - Drilling of the first well occurred September 16-18, 2011. Nov. 1, 2011: licence no. 0434992 cancelled for 11D well at 11-15

The conditions imposed in approvals/licence(s) are monitored by the Alberta Energy Resources Conservation Board (ERCB). The ERCB has developed a process whereby an action plan is developed internally to ensure that ERCB staff monitor conditions arising from decision reports for compliance. The conditions are managed in an action plan that is updated quarterly with statuses of conditions. The action plan defines the action required, timeframes for completion, and a summary of the evidence provided to confirm a condition was met. For more information, please contact the Action Plan Administrator at (403) 476-4783.