Attachment B

MSL 083666 (RD3 Wellsite and Access Road)



Lands Division

Land Management Branch 3rd Floor, South Petroleum Plaza

9915 - 108 Street Edmonton, Alberta TSK 2G8 File No: N

MSL 083666

Phone: Fax:

(780) 415-4654 (780) 427-1185

August 4, 2009

EnCana FCCL Oil Sands Ltd. Suite 1800, 855 – 2nd Street SW Calgary, Alberta T2P 2S5

Attention: Deanna Miller, Land Department

Dear Sir/Madam:

RE:

Mineral Surface Lease Application No. MSL 083666

Pt. NW 34-076-03-W4M; W1/2 3-077-03-W4M (±4.24 acres)

Wellsite (observation water well) and Access Road

Christina Lake Project

LETTER OF AUTHORITY

Further to your application dated December 17, 2008 and as amended December 18, 2008, this is to advise that the department has completed its review of your request.

Pursuant to Section 20 of the Public Lands Act, authority is hereby granted to enter upon those portions of vacant or other public lands for which you have obtained the occupant's consent, the approximate location of which is shown on the attached plan, for the purpose of a wellsite and access road, subject to the conditions in Schedule A, attached.

Based on the information supplied with your application, first year's charges for this authority are indicated below. Please remit this amount within 30 days. This account will be subject to a 12% interest charge if payment is not received within the time specified.

SCHEDULE A

MSL 083666

1. 006 IN THIS DOCUMENT, unless the context indicates otherwise:

"approval (of a departmental officer)" whenever required, must be in writing.

"authority" means: this document or the right to occupy public land granted by this document.

"department" means:

Sustainable Resource Development

Lands Division

Petroleum Plaza, South Tower

9915 - 108 Street

Edmonton, Alberta T5K 2G8 Telephone: (780) 427-3570

"departmental officer" means: an employee of Sustainable Resource Development, Lands Division, responsible for the management of surface activity on the land.

"holder" means: the recipient of the right to occupy public land granted by this document.

"land(s)" means: the specific land which the holder is authorized to occupy by this document.

"minister" means: the Minister of Sustainable Resource Development.

payments required by this document are to be made payable to "The Minister of Finance" and may be delivered to the nearest Public Lands office, or mailed to:

Sustainable Resource Development Lands Division Main Floor, Petroleum Plaza, South Tower 9915 - 108 Street Edmonton, Alberta T5K 2G8

- a) The holder shall comply with all relevant laws in the Province of Alberta.
- A copy of this authority shall be retained on the job site during all phases of your activity, including, if applicable, preparation, construction, development, maintenance and abandonment.

- h) The holder shall indemnify and save harmless the Department from any and all claims, actions, suits, or similar proceedings commenced by any competent regulatory body against the holder or the Department in connection with the activity or holder's use of the land, including without limitation the local municipality, any other department or agency of the Alberta Government or the Government of Canada.
- i) The holder shall maintain liability insurance with respect to the activity in an amount and form satisfactory to the Department, in its sole discretion. The holder shall provide certified copies of such insurance policies upon the request of the Minister.
- i) This authorization is granted subject to further amendment by the Minister of Sustainable Resource Development, or his designate, in his sole discretion.
- 2. 099 The holder shall contact and advise the departmental officer of its intentions:
 - prior to entry upon the lands for a stated purpose.
 - prior to any additional construction during the term of this authority.
 - at the completion of operations or construction, and
 - upon abandonment of this activity.

Upon contact prior to initial entry on the land, the departmental officer shall issue a confirmation number that shall be maintained on file by the holder and be provided to the departmental officer on request.

Lac La Biche Area Lac La Biche Office (780) 623-5240

- 3. 177 This authorization is approved subject to the methods and environmental conditions outlined in the Environmental Field Report dated March 24, 2009 (revised).
- 4. 062 The holder shall within 30 days provide to the department a written consent from the following occupant(s) who hold prior legal rights:

Alberta-Pacific Forest Industries Inc. c/o Evergreen Land Use Consulting 400-6th St SW Calgary, AB T2P 1X2

Attention: Bill Hamilton



Environmental Field Report (EFR) 3.0 Completion of Supplement A Sites and Installations

The cover document and the appropriate supplement form must be submitted for each surface disposition application. All blanks must either be filled in or 'N/A' noted where applicable. Failure to fill out the document and form(s) completely will result in the EFR being rejected.

New ☐ Revised Date Submitted: 17-12-2008				
A. Site Description				
1. Stability concerns: Yes No If 'Yes', explain mitigation: N/A				
Questions 2, 3, 4 and 5 of section A apply to MSL only. The "Wellsite Spacing Recommendations" may be used as a guide http://srd.alberta.ca/lands/formspublications/usingpublicland/default.aspx .				
2. Well type: Oil Sweet Gas Sour Gas Coalbed Single Multi-well (H ² S) Methane Well pad pad				
Other Observation water well				
3. Well depth: <u>450</u> m				
4. Flare requirements for drilling:				
☐ Flare pit ☐ Flare tank ☐ Flare stack				
5. Number of zones to be completed/produced <u>N/A</u> Inter-well spacing <u>N/A</u> m.				
B. Vehicle/Equipment Access				
How will the site be accessed? (Check boxes that apply)				
☐ By an existing access held under disposition or jurisdiction (specify name, disposition number, and owner):				
New application (LOC)				
New access included in this application.				
Note: If access is part of the site and installation application, an access supplement must be submitted.				

C. Contamination Prevention

3. Access required to water source? Yes No If 'Yes' attach a sketch.
F. Construction Strategy 1. Vegetation Removal Explain: Land will be cleared in accordance with the Timber Management Regulation and the Forest and Prairie Protection Act Regulations, Parts 1 and 2. Vegetation removal activities will be scheduled during frozen ground conditions to minimize impacts on soil and wildlife.
2. Brush Disposal Explain: Brush will be mulched, piled and burned in the areas stripped of topsoil, or spread, or chipped and spread, in areas where padding might be required for construction purposes.
5. Topsoil handling: (Check appropriate boxes) No stripping Minimum surface disturbance Stripping Single Lift Two Lift Other (Explain)
Additional details: No soil salvage is required. The drilling of the proposed observation water well will occur during frozen ground conditions and the access to the well will be winter access only.
G. Reclamation Strategy Revegetation strategy: (Check appropriate boxes) No, No, No, No, No, No, No, No
Non-native Seed
Production/Operation: No hydrocarbon production or operation of the proposed observation water well. The roposed well will be drilled for observation purposes and will be abandoned and reclaimed at the end of its production yele
applicable to MSL only see Appendix III - Lease Description and Wellsite Sizing Information
ote: Complete and attach the lease description and wellsite sizing template (in the Appendix) if a non-standard wellsite is required as per the lease description and wellsite sizing document (see instructions).
Operating Condition

Contamination Prevention

In addition to complying with Federal, provincial and local laws and regulations respecting the environment, including release of substances, the holder shall, to the department's satisfaction, take necessary precautions to prevent contamination of land, water bodies and the air with



Environmental Field Report (EFR) 4.0 Supplement B - Access

The cover document and the appropriate supplement form must be submitted for each surface disposition application. All blanks must either be filled in or 'N/A' noted where applicable. Failure to fill out the document and form(s) completely will result in the EFR being rejected. New New Revised Date Submitted 17-12-2008 LOC Number __ dd/mm/yyyy Legal land description: From: LSD 13 Sec 03 Twp 77 Rge 3 Rge 3 W 4 To: LSD 13 Sec 34 Twp 76 Note: The Pre-disturbance Planning and Surface Access Management sections of the Public Lands Operational Handbook should be consulted when dealing with new access development, extensions or upgrading existing access. Before a road is approved, the applicant may be requested to present the advantages and disadvantages on any alternate proposals, the rationale for selecting a particular route and the trade-offs made. A. Type of Access/Dimensions 1. Initial access width 8.0m and type of access: undeveloped dry undeveloped frozen dry weather all-weather (permanent) ☐ NA Explain: Winter access only. 2. Final access width 8.0m as applied for and type of access: undeveloped dry undeveloped frozen dry weather all-weather (permanent) **Explain:** The proposed winter access will not be permanent and will be reclaimed at the end of its production cycle. Notes: For winter access it is recommended that existing seismic lines be used for initial access to a location. Widening of these lines should be minimized. Minimal widths for initial access are to be used wherever possible. Once a well or development is considered viable, the applicant generally plans to move to a wider ROW (e.g. 20m) for development of a high grade road. In this case, the 20m width can be applied for with the understanding there will be no additional clearing beyond the 8-10m width indicated until the development is proven viable. If the entire Row is cleared initially and then not required for the development, it will be treated as Unauthorized use of public land and appropriate enforcement action will be taken.

June 2008

power to the facility.

If electricity is required at a facility, the Row must be planned to ensure the power line is located on the downwind side. This is required to maximize the tree-free area adjacent to the power lines, thus reducing the potential of falling trees hitting the power line and possibly starting a wildfire, as well as, cutting off

D. Construction Strategy				
Plan attached (include all areas of existing clearing(s) and new clearing(s) to be used, and their dimensions)				
1. Vegetation removal: Explain: The land will be cleared in accordance with the <i>Timber Management Regulation</i> and the <i>Forest and Prairie Protection Act Regulations</i> , <i>Parts 1 and 2</i> . Vegetation removal activities will be scheduled during frozen ground conditions to minimize impacts on soil and wildlife.				
2. Brush disposal: Explain: Brush will be mulched, piled and burned in the areas stripped of topsoil, or spread, or chipped and spread, in areas where padding might be required for construction purposes.				
3. Topsoil handling/Topsoil stripping width: (Check the appropriate boxes for initial and final access)				
Minimal surface disturbance (no stripping)				
☐ Stripping ☐ Single Lift ☐ Two Lift ☐ Other N/A				
Explain if more than one box has been checked. N/A				
Additional details: No soil salvage is required. The drilling of the proposed observation water well will occur during frozen ground conditions and the access to the well will be winter access only.				
~				
E. Reclamation Strategy				
Revegetation strategy: (Check appropriate boxes)				
Natural recovery				
Interim: EnCana will adopt a natural recovery approach to re-vegetate, supplemented with tree and shrub planting using native species.				
Production/Operation: No hydrocarbon production or operation of the proposed observation water well. The proposed well will be drilled for observation purposes and will be abandoned and reclaimed at the end of its production cycle.				



Environmental Field Report (EFR) 2.0 Completion of EFR Cover Document For all Dispositions

The cover document and the appropriate supplement form must be submitted for each surface disposition application. All blanks must either be filled in or 'N/A' noted where applicable. Failure to fill out the document and form(s) completely will result in the EFR being rejected.

New Revised						
Date Submitted 17-12-2008 Department Number						
dd/mm/yyyy Site/Project Name: ECA FCCL HARDY 13-3-77-3						
A. Communications						
1. Applicant: EnCana FCCL Oil Sands Ltd Christina Lake Thermal Project						
2. Company contact person for EFR: Carolina Molina Phone: (403) 645-6323						
3. E-mail: Carolina.molina@encana.com Cell Phone: (403) 816-2843						
5. Company representative who conducted the onsite assessment for the EFR:						
Julie Carignan, Golder Associates Ltd.						
6. Phone: (780) 743-4040 Cell Phone: (780) 598-7182						
7. Fax: (780) 743-4237 E-mail: Julie.carignan@golder.com						
8. Date of on-site assessment: 25/07/2008 dd/mm/yyyy						
Note: SRD reserves the option to audit individual EFR's to ensure field visits have been conducted and information supplied is accurate.						
B. Surface Location						
LSD <u>13</u> Sec <u>3</u> Twp <u>077</u> Rge <u>03</u> W <u>4</u>						
LSD <u>12</u> Sec <u>3</u> Twp <u>077</u> Rge <u>03</u> W <u>4</u>						
LSD <u>5</u> Sec <u>3</u> Twp <u>077</u> Rge <u>03</u> W <u>4</u>						
LSD <u>5</u> Sec <u>3</u> Twp <u>077</u> Rge <u>03</u> W <u>4</u>						
LSD <u>13</u> Sec <u>34</u> Twp <u>076</u> Rge <u>03</u> W <u>4</u>						
 Construction is proposed under the following soil conditions (check the box that applies):						

	If 'Yes', contact Forest Protection Division for additional hazard reduction requirements. <u>Alberta SRD - Wildfires - FireSmart - Information & Projects</u>						
	Lac La Biche (Wes Nimco)						
Ć	d. Follow the "Bear Smart" program to reduce bear-human conflicts and increase public stewardship of black and grizzly bears in Alberta by providing strategies, information and education materials to its staff and contractors.						
4. A	re Permanent/Research Sample Plots/Rangeland Benchmarks located within 100 m of the boundary of the ands under application? No						
	If 'Yes', indicate the legal land description and GPS coordinates for each plot/benchmark in relation to the disposition boundary (degree, decimal, minutes).						
Rese	rvation No. N/A PSP/RSP No. N/A LSD N/A Sec N/A Twp N/A Rge N/A W N/A						
Latit	tude N/A Longitude N/A Distance away N/A m						
plots are n	is held by SRD appear as DRS or PNT reservations on the LSAS report. The forest industry also has sample, and if these are registered, they will appear as ISP's on the LSAS report. If the forest industry sample plots not registered, they will not appear on the LSAS report. The proponent is responsible for determining if there my PSP's or ISP's on the land under application. PSP's and ISP's must not be disturbed.						
5. I	keholders, Other Land Users Is there potential impact on or conflict with stakeholders and other land users? Yes No If "Yes" to either, please list and explain mitigation:						
	Alberta Pacific Forest Industries Ltd. will be contacted and consulted as per its Forest Management Agreement (FMA 0100029).						
	Paramount Energy Operating Corp. will be contacted and consulted as per its Annual Operating Agreement (AOA 060020).						
<u>I</u>	da Herman will be contacted and consulted as per her Trapping disposition (TPA 616).						
1	Meg Energy will be contacted and consulted for accessing proposed development area.						
[What actions have been taken to integrate this disposition with other existing/planned activities and resources to minimize the impacts on the land base? (Check appropriate boxes.) Not applicable Use common corridor						
	☐ Parallel existing clearing/right of way						
	☐ Use existing clearing/right of way						
	Other Use shortest path for access						
	Explain: The proposed developments will minimize the impacts on the land base by using the most suitable location for the observation water well, in addition to using the shortest path to access the well and by using existing licensed rights-of-way to access the general development area.						
8	dentify any aesthetic concerns related to the proposed activity (i.e., negative effects on the aesthetic/sensory aspects of the surrounding land including view, smell, noise, etc.). Not applicable From public access From residence From recreation facility Other						

Spe	ecies 3 N/A	Species 4 N/A		
☐ Endangered		☐ Endangered		
	Threatened	☐ Threatened		
	Special Concern	☐ Special Concern		
	At Risk	At Risk		
	May Be At Risk	May Be At Risk		
E	xplain any conflict and proposed mitigation	Explain any conflict and proposed mitigation		
N	'A	N/A		
-	110			
hab		lopment inventory be conducted on all native grasslands h concentration of Species at Risk and limited site specific		
6.	Has a pre-development Species at Risk inventory berelated to this project? Yes (copy of inventory at	en completed to alert the applicant of any wildlife concern tached) 🛛 No		
If 'No', explain: The proposed application area is located in the Boreal Forest Region therefore no proinventory is required. However, ANHIC and FWMIS searches were completed on 03/11/2008 and 03/respectively, as part of the EFR process, with no results noted.				
	Has the activity been assessed to ensure it does not no	egatively affect any species at risk? 🗌 Yes 🛛 No		
	development inventory is required. However, ANHIC at 03/11/2008 respectively as part of the EFR process with	consultation with, and approval from, the ASRD regional		
8.	If Access Restrictions apply, include legal land descri	iption and explain mitigation measures.		
	LSD <u>N/A</u> Sec <u>N/A</u> Twp <u>N/A</u> Rge <u>1</u>	N/A W N/A		
	LSD N/A Sec N/A Twp N/A Rge 1	N/A W N/A		
	Explain mitigation strategy: N/A	W 1144-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
9. If within or adjacent (within 100 m) to a <i>Protected Area</i> , indicate the type of protected area and explain we measures will be taken to avoid conflict with the protected area.				
	☐ Natural Area ☐ Ecological Reserve ☐ Pa	ark 🛮 Other <u>N/A</u>		
	Name of protected area: N/A			
	Explain mitigation strategy: N/A			
10.	Are there any environmentally sensitive areas in the require special measures to protect? Yes	vicinity (within 100 m) of the proposed activity that will No		
	If 'Yes', list and explain:			
11.	Is the proposed activity within a permafrost area? [If 'Yes', specify the Permafrost Protection Plan number			

5.	Provide the name of the salvage purchaser N/A following:			, or check one of the			
	☐ Not known at this time	By TM88 (or equival	ent)	By Timber permit			
6.	When will the salvage be removed/hauled from the site to a wood processing plant?						
	Proposed date start: N/A	d/mm/yyyy					
	Proposed date complete: N/d	A d/mm/yyyy					
No		r moving the salvage to a site th the wood to a site with all-weath		le to ensure all the wood can be removed.			
	copy of the TM88 or equivalent in the contract of the contract and manufacturing can be contracted as the contract of the cont		field office to	o ensure proper tracking of ownership,			
F.	Soil and Vegetation Manag	gement					
Di	il salvage, storage, replacement, s <i>turbance, Clearing and Soil Man</i> ailable at: <u>http://www.srd.gov.al</u>	agement," of the "Public Land	s Operation				
No	ote: Projects on specific areas of requirements during the pla		survey. The	e proponent is to identify such			
	re there soil sensitivities (i.e., shal 2.)? Yes No	low depth to water table; shal	low depth to	bedrock; soils are gravely or stony,			
Ex	plain: N/A						
Su hu	rface expression (i.e., topograph; mmocky, but the micro relief for th	y). In the development area, the proposed developments is lev	surface expr	ession is generally undulating to cky.			
Sit	e drainage (i.e., drainage is very	poor, poor, imperfect, modera	itely well, we	ell, rapid, or very rapid)			
Th	e proposed development area drair	nage varies from poorly-drained	to well-drain	ed.			
Ar	e there problem vegetation/weed	s/invasive species on or near s	ite at time of	assessment?			
-	Yes No Explain N/A						
Ide	entification of species, degree of i	nfestation and approximate a	mount of are	ea infested per species.			
П	Trace (rare)	Species 1 S	pecies 2	Species 3			
	Low (occasional)	Species 1 S	pecies 2	Species 3			
		Species 1 S	pecies 2	Species 3			
	High (fairly dense)	Species 1S	pecies 2	Species 3			
	there a risk of weed spread to the High Moderate	e site if development proceeds Low	?				
	any risk, provide details in recla high or moderate, show location		ns of supple	ments.			

June 17, 2008

Noxious Weeds

131 The holder shall cut, keep down and destroy all noxious weeds and restricted weeds as per the *Public Lands*

Waste Material Disposal

The holder shall remove all garbage and waste material from this site to the satisfaction of the department, in it s sole discretion.

Watercourse/Water Body - No Material to be Deposited

The holder shall not deposit or push debris, soil or other deleterious materials into or through any watercourse or water body or on the ice of any watercourse/water body.

Erosion Prevention

The holder shall take all precautions and safeguards necessary to prevent soil and surface erosion to the satisfaction of the department in its sole discretion.

Natural Drainage - No Interruption

161 The holder shall not create any interruptions to natural drainage, including ephemeral draws that may result in blockage of water flow.

LAND STATUS AUTOMATED SYSTEM

LAND STANDING REPORT **ENR-LSAS** LSRC1130 TIME: 08:58:20 REQUESTED BY: LSLEI02 REPORT DATE: 2009 08-05 PAGE SELECTION CRITERIA REQUESTED LAND LIST: INCLUDE TITLE INFORMATION : INCLUDE REQUEST LAND STATUS: INCLUDE SELECT GEO-ADMINISTRATIVE AREA: ALL SELECT ACTIVITIES: ALL/NONE/SOME MAX STATUS IF SOME, SPECIFY TYPE INCL/EXCL ACTIVITIES ALL 6 I SURFACE DISP I RESERVATIONS 6 ALL ALL I **ENCUMBRANCES** 6 6 ALL LAND POSTINGS 1 INTERIM RECORDS 6 ALL I ALL I SUBDIVISIONS REQUESTED ACTIVITY REQUESTED ACTIVITY: MSL- 083666 SCHLOULE 'B'; REQUESTED LAND ADMINISTERED SURVEY .. AREA IN HECTARES ... AREA IN ACRES ... OWNERSHIP TITLE STATUS TITLE STATUS BY STATUS LAND LAND TITLE REQUESTED LAND 4-03-076-34-NW CROWN UNTITLED FLW UNSURVEYED 64.750 160.00 UNTITLED FLW UNSURVEYED 64.750 160.00 4-03-077-03-SW CROWN 4-03-077-03-NW UNTITLED FLW UNSURVEYED 160.00 CROWN 64.750 TOTAL CROWN UNTITLED UNSURVEYED 194.250 480.00 LAND STATUS INFORMATION (TO QUARTER SECTION ONLY) OWNERSHIP TITLE ADMINISTERED SURVEY -- AREA IN HECTARES -- -- AREA IN ACRES LAND IDENTIFIER STATUS STATUS BY STATUS LAND TITLE LAND TITLE 4-03-076-34-NW CROWN UNTITLED FLW **UNSURVE YED** 64.750 160.00 4-03-077-03-SW CROWN UNTITLED FLW **UNSURVE YED** 64.750 160.00 CROWN UNTITLED FLW **UNSURVE YED** 64.750 160.00 4-03-077-03-NW GEO ADMINISTRATIVE AREAS COAL DEVELOPMENT REGION NORTHERN FORESTED CODE: CDR-2

> 4-03-076 4-03-077

LAND STATUS AUTOMATED SYSTEM

ENR-LSAS

REPORT DATE: 2009-08-05

LAND STANDING REPORT

TIME: 08:58:20

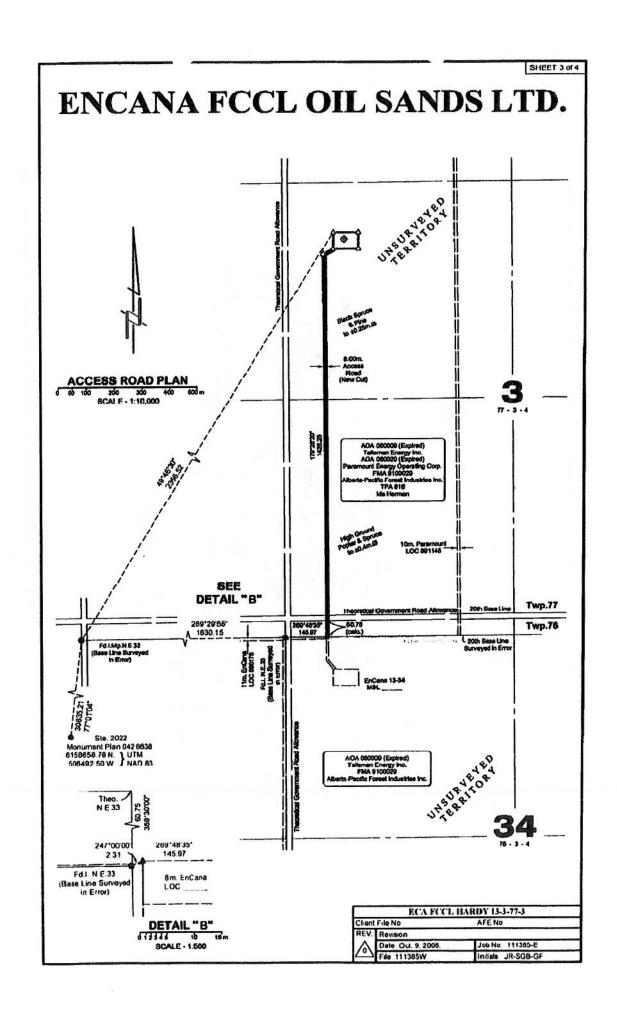
REQUESTED BY: LSLE102

LSRC1130 PAGE 3

			ACT	TIVITIES		
ACTIVITY	STATUS/TYPE LAND ID	DATE HECTARES	EXPIRY ACRES	CLIENT/INTERIM REMARKS METES AND BOUNDS REMARKS	ACRES	AL AREA HECTARES
FMA - 9100029	ACTIVE/DISPOSED ON 4-03-076 4-03-077	1991-SEP-01	2011-AUG-31	ALBERTA-PACIFIC FOREST INDUSTRIES *	13,703,981.39	5.545.804.094
LOC - 891145	ACTIVE/DISPOSED ON 4-03-076-34-NW 4-03-077-03-SW 4-03-077-03-NW		2014-DEC-19	PARAMOUNT ENERGY OPERATING CORP.	27.35	11.070
HSL- 083666	APP. FOR AMENDMEN ON 4-03-076-34-NW 4-03-077-03-SW 4-03-077-03-NW	L 5		ENCANA FCCL LTD. AND ADJ THEOR RD ALLOW	4.24	1.715
MSL- 083668	APPLICATION ON 4-03-076-34-NW	2008-DEC-17 0.760	1.88	ENCANA FCCL LTD.	1.88	0.760
TPA - 616	ACTIVE/DISPOSED ON 4-03-077-03	1986-NOV-21	2009-JUN-30	HERMAN, IDA	0.00	0.000

*** NOTE: THE FOLLOWING DISCLAIMER ***

SHEET 1 of 4



Attachment C

Application for Variance in the Lower Athabasca Regional Plan (LARP)



Application for Variance in a Regional Plan

Form (LUS-02)

Land Use Secretariat

Alberta Land Stewardship Act

9th floor, Centre West Building 10035 – 108 Street Edmonton, AB T5J 3E1

TEL: 780-644-7972 or Toll Free Rite Line at: 310-0000

FAX: 780-644-1034

Instructions:

- Complete one form for each application you are filing.
- · Please print clearly.
- Legal representation is not required; however, if you have retained representation, please indicate on the form.
- Submit your completed form(s) to the Stewardship Commissioner, Land Use Secretariat.
- The Alberta Land Stewardship Act and regulations can be found on the Queen's Printer website.

Tracking Number (LUS Office Use Only):

Date Stamp - Request Received by LUS

Part 1: Details of Application for Variance

Lower Athabasca Regional Plan

Name of Regional Plan

If the application is with respect to a land area, provide the legal description (Township, Range, Meridian). If the application is with respect to an existing land use, provide a description of that land use.

A. Clearly identify the restriction, limitation or requirement under the Regional Plan that has resulted in you applying for a variance.

See Attached

B. Explain why the variance is necessary.
See Attached
Part 2: Requested Relief
Fait 2. Requested Noise
Describe the specific variance that you are applying for, including any proposed terms and conditions of that variance.
See Attached
The Court of the C
Part 3: Other Applicable Information
Please provide any additional information that may be relevant to this application.
See Attached
1 3500 (182 193 1 9400 (200 (201)

Part 4: Applicant Information				
First Name: Kendall	Last Name: Dilling			
Company Name or Association Name (if any)				
Professional Title (if applicable): VP	Regulatory & Community	Services		
	Fax #:			
	ess, you agree to receive communications from the			
Daytime Telephone #: 403 - 366 - 5	Alternate Telephone #:	103-510-7002		
Mailing Address: 421-7 Avenue	SW	Calgary		
Apt/Suite/Unit#	Street Address	City/Town		
Alberta		TZPoms		
Province	Country (if not Canada)	Postal Code		
Signature: John Ol	<u></u>	Date: Nov 15, 2012		
Please note: You must notify the Land Us	e Secretariat of any change of address or telep	phone number in writing.		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Demand information requested on this for	m is collected under the provisions of the Free	dom of Information and Protection of Privacy Act,		
Chapter/Regulation: F-25 RSA 2000.	m is conected under the provisions of the free	dom of miormation and Protection of Privacy Act,		
	ii (iflinabla)	W. D. William B. C. C. C.		
Part 5: Representative Informat	поп (п аррпсавіе)			
I hereby authorize the named compar	ny and/or individual(s) to represent me:			
First Name:	Last Name:			
Company Name:				
Professional Title:				
Professional Title:				
	you agree to receive communications from the Lar	Fax #:		
Daytime Telephone #:	Alternate Telephone #:			
Mailing Address:Apt/Suite/Unit#	Street Address	City/Town		
Apt/suite/onit#	Street Address	city, roun		
Province	Country (if not Canada)	Postal Code		
Signature of Applicant:		Date:		
Please note: If you are representing the a behalf of the applicant. Please confir	pplicant and are NOT a solicitor, please confir m this by checking the box below.	m that you have written authorization to act on		
I certify that I have written authorized behalf and I understand that I may be	ation from the applicant to act as a represental easked to produce this authorization at any tim	tive with respect to this application on his or her e.		

Attachment D

Map of Christina Lake Remote Disposal Pads Locations

Attachment E

Figure 1.2-2 Christina Lake Thermal Revised Project Footprint

Attachment F

Figure 1.3-1 Christina Lake Thermal Project

Attachment G

Section 3.8 Deep Well Disposal from CLTP 1E, 1F and 1G

The SAGD zone pay in most of Section 10 Township 76, Range 6 W4M is underlain by a saline aquifer without any separating mudstone. In most of Section 15 Township 76, Range 6 W4M and parts of Sections 11 and 12 Township 76, Range 6 W4M, there is a mudstone which separates the underlying aquifer from the SAGD pay above. There is no aquifer below the SAGD pay in most of Sections 11, 13 and 14 Township 76, Range 6 W4M. However, given the regional nature of the aquifer, it is considered, from an engineering viewpoint, that the whole SAGD reservoir for this Core Area is in communication with the regional aquifer.

The overall development plan proposes a total of 141 SAGD well pairs on a total of 19 well pads with seven well pads broken out for Phase 1E, six pads for Phase 1F and six pads for Phase 1G. Figure 3.7-1 shows the configuration of the well pads for the Project.

3.8 DEEP WELL DISPOSAL

Water disposal wells for current operations are located in the southwest of Section 16 Township 76, Range 6 W4M, where water is injected into thick water sands at the base of the McMurray Formation. As part of Phase 1B, remote water disposal was initiated at 15-35-Section 76 Range 4 W4M. Additional wells are being drilled east of the 15-35 well which will be required to accommodate Phases 1C and 1D as well as the Project (Figure 1.3-1). The proposed well locations are:

- 1AA/13-34-076-03 W4M; and
- 1AA/13-03-077-03 W4M.

These locations are ideal candidates for waste water disposal since the McMurray Formation in this area is thick (50 to 90 m), porous (greater than 33%), 100% saline water saturated and is far away (7 to 8 km) from the closest bitumen accumulation. A type well from the immediate area is shown in Figure 3.8-1.

When the Project is operational, the total quantity of deep well disposal water will be up to 19,328 m³/d. This value consists of up to 17,932 m³/d of boiler blowdown water and about 1,396 m³/d of regeneration wastewater (upset case with no boiler blowdown recycle). Normal disposal requirements are expected to be 8,966 m³/d of steam blowdown (based on 50% blowdown recycle) and 940 m³/d of regeneration waste water.

