



Date: December 4th, 2018

Shell Canada Ltd
PO Box 6848
6814 Airport Road
Fort St John, BC, V1J 5T8

Attention: Jim Chramosta, Environmental and Regulatory Specialist

Re: Shell Canada Certificate of Restoration Application (Part-II) for the Well Site Shell Et Al HZ Groundbirch 01-27-80-21 W6M (WA # 28666)

This office has received an Application for a Certificate of Restoration (CoR-Part II), and a Surface Reclamation Assessment Report for wellsite (**Never drilled**) for the above referenced well authorization (WA # 28666) submitted by Eco-Web Ecological Consulting Ltd on behalf of Shell Canada Ltd on October 30th, 2018.

Based upon review of the information provided by the applicant, the reclamation inspection assessment report was reviewed and was found that the site has been fully reclaimed and the restoration of the site is satisfactory. Therefore, your application for a Certificate of Restoration approved and a copy of the Certificate of Restoration is enclosed (Certificate # 5908).

Please note Section 41(3) of the Oil and Gas Activities Act (OGAA) and section 47 (1) of the Environmental Management Act, which respectively read:

"The issuance of a certificate of restoration does not relieve a person from any obligations under section 40 or under an order referred to in subsection (1) (b) of this section in respect of any matter that was not known to the commission at the time the certificate of restoration was issued."

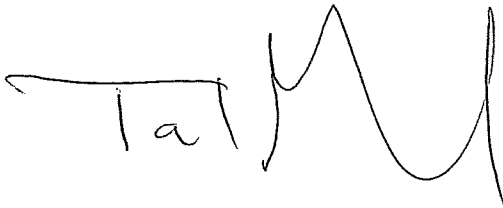
And:

"A person who is responsible for remediation of a contaminated site is absolutely, retroactively and jointly and separately liable to any person or government body for reasonably incurred costs of remediation of the contaminated site, whether incurred on or off the contaminated site."

Therefore Shell Canada Ltd remains liable for any contamination presently on site.

Any questions can be directed to the undersigned at (250) 794-234

Sincerely,

A handwritten signature in black ink, appearing to read 'Taher Morsi'. The signature is written in a cursive style with a horizontal line under the first part of the name.

Taher Morsi, Ph.D., P.Ag
Environmental Management Officer
Operational Policy & Environment
Resource Development & Stewardship Branch
Telephone: 250-794-5234
Facsimile: 250-794-5380

E-Mail: Taher.Morsi@bcogc.ca

cc: Tim Sanderson, Eco-Web Ecological Consulting Ltd, 8211 93rd Street, Fort St
John, BC, V1J6X1



**CERTIFICATION OF RESTORATION
APPLICATION FORM – PART 2**

Physical Address: 6534 Airport Road,
Fort St. John, B.C. V1J 4M6
Mailing Address: Bag 2, Fort St. John, B.C.
V1J 2B0
Phone: (250) 794-5200

Date Received

THIS IS AN AUDITABLE DOCUMENT

This form must be submitted under the authorities of the Oil and Gas Activities Act, s. 41, and the Environmental Management Act S.B.C. 2003, c. 53, in hardcopy, to the Oil and Gas Commission, at the address noted above. This form may only be completed by a professional or technologist registered as a member in good standing with an organization operating under an act of the British Columbia legislature.

COMMISSION USE ONLY

A

Commission File No. or AD No.:

Document:

ADMINISTRATION

B

Well Permit No.: **28666**

Well Name: SHELL ET AL HZ GROUNDBIRCH 01-27-080-21

Well Location: 01-27-080-21

Petroleum Title (*Permit, Lease, Number, etc*): 9637391

Title Holder(s) (*Permittee, Lessee, etc*): Shell Canada Limited

Surface Landowner: n/a
(*Attach Letter of Release*)

Surface Occupant: n/a
(*Attach Letter of Release*)

Applicant's Agent in Field

Name: Tim Sanderson

Company: Eco-Web Ecological Consulting Ltd.

Position: Professional Agrologist

Address: 8211-93 street

City: Fort St John

Province: British Columbia

Postal Code: V1J 6X1

Phone: 250-787-1110

Fax: 250-787-1175

Email: tsanderson@eco-web.ca

Agent Signature:

Date: Feb 15, 2018

\$1500 Application Fee Attached

RESTORATION INFORMATION

C

Description of Area(s) Restored (*Location, Remote Sump, Access and other disturbed areas affiliated with this location*):

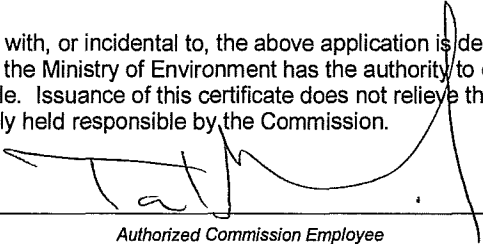
The restored area includes a 200m x 275m lease site and a 30m x 243m access road. The site is associated with (3) 25m x 25m decking sites and a 30m x 80m decking site. The decking sites were primarily used as timber/brush storage and no soil stripping took place at these locations. The 1-27-80-21 lease site was constructed in 2012 but the site was never drilled and had final reclamation completed in 2015.

The entire wellsite and access road have been recontoured to conform to the surrounding topography and aspect. Good soil management practices have been implemented to ensure adequate salvage of the A horizon material while minimizing admixing (under 30%) of the B horizon. Field investigation determined that the topsoil soil within the development had been handled very well. There were no concerns with admixing of clay subsoils into the A horizon surface soils and admixing values were between 0-10%. Due to the minimal admixing, the soil textures on the wellsite and access road were within the same textural category as the control points. Soil structure was maintained across the entire development with the average aggregate class of the surface soils being the same as the undisturbed ground. All the samples taken at the control points and on the wellsite and access road were in the "Friable" category allowing for good tilth and optimum cultivation.

Based on the site inspection the average topsoil replacement depth was 12.8 cm across the wellsite and 16 cm on the access road. The average depth of the topsoil all control points was 10.8 cm.

The site was seeded, and plug planted in the fall of 2015. As part of Shells ongoing initiative to incorporate native revegetation into their Groundbirch field, this site was planted with a custom native seed mix composed of: 25% tufted hairgrass, 25% June grass, 25% awned wheatgrass and 25% Rocky Mountain fescue. The site was also planted with 26,200 native plugs comprised of: white spruce, balsam poplar, trembling aspen, willow, Mertens sedge, red raspberry, lodgepole pine, wild rose, thimbleberry, fireweed and yarrow. After the first year of growth it was noted that there was a high amount of agronomics expressing themselves on the site due to Shell having previously seeded the topsoil stripping piles with a forestry reclamation mix (tall fescue, smooth brome, timothy, clover, alfalfa). In order

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| to reverse this trajectory towards agronomic grasses the lease site and access road had an additional 8640 native plugs planted on the site in the fall of 2016. | |
| Details of any areas left unrestored at Landowner's request: | |
| No areas were left unrestored | |
| | |
| Was "Approval to Construct" subject to any reclamation conditions? | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| Reclamation Inspection Report included? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| Is this location within the Agricultural Land Reserve? <i>If YES, attach Schedule B</i> | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

| APPROVAL – FOR COMMISSION USE ONLY | | D |
|---|--|-------------|
| CERTIFICATE OF RESTORATION | CERTIFICATE NO. | <u>5908</u> |
| <p>This is to certify that the surface of the land held in conjunction with, or incidental to, the above application is deemed to be satisfactorily restored. Despite the issuance of this Certificate, the Ministry of Environment has the authority to order further site investigation or remedial action upon inspection of the site or file. Issuance of this certificate does not relieve the Applicant of any restoration requirements for which the Applicant is subsequently held responsible by the Commission.</p> | | |
| Approval Date: <u>Dec 4th 2018</u> |  Authorized Commission Employee | |
| <p>The personal information requested on this form is collected under the authority of and used for the purpose of administering the <i>Petroleum and Natural Gas Act and the Environmental Management Act</i>. Under certain circumstances, some information may be released subject to the provisions of the <i>Freedom of Information and Protection of Privacy Act</i>. If you have any questions about the collection, use or disclosure of this information, contact the Corporate Services Branch, Records Administrator, in Fort St. John at the address above.</p> | | |