SCHEDULE A

SITE ASSESSMENT REQUIREMENTS:

The soils of the surface lease and related developments must be documented prior to construction so that the reclamation of the land can be planned effectively and reclamation requirements can be achieved. The objective of reclamation is to return the land to an equivalent capability to what existed prior to development. This means that operators must plan their operations to ensure that conditions on the reclaimed site are similar to pre-construction conditions. This report will set out the reclamation plan and identify a baseline of information to refer to when reclamation work is being undertaken.

These assessment requirements are intended to provide the flexibility to respond to practical realities of differing site characteristics and soils. There is room for interpretation of the Schedule A assessment criteria based on site specific issues and the professional judgement of the specialist hired to carry out the assessment.

Surface lease means all leases, easements, and rights-of-way which may be required for a well site, access road, pipeline, camp, workspace, sump, borrow pit and/or any other area related to oil and gas production.

It is recommended that the owner of the development be familiar with the *Weed Control Act* and its regulations to ensure that the construction, management, and reclamation of the surface lease is in compliance with this Act.

The level of effort required to conduct site assessments will vary depending on local conditions, but the following requirements are the minimum information, which must be filed with the Oil and Gas Commission and the surface landowner:

NOTE: Site Development should NOT occur when the soil is extremely wet

Site Information:

- well name/location or pipeline location (well to well)
- proposed oil and gas development (list all)
- for wellsite/access applications, approximate total area disturbed by existing access roads and wellsites on each quarter section (in square meters or hectares)
- Area of existing and proposed buildings and structures at the location (in square meters or hectares)
- petroleum company name contact information
- location and legal description of property(s)
- name and contact information of surface landowner or specify if Crown land
- date of site assessment
- name and address of person conducting the site assessment
- approximate construction date
- Form C signed by the surface landowner or representative

Site Description:

- a brief description of the surficial geology. This information is available from published soil surveys and government reports.
- the agricultural capability rating from published resource inventory maps, such as the Canada Land Inventory maps.
- current land use (cultivated, forested, range/grazing or other)
- a rating of the surface drainage as good, moderate or poor and a description and location of any existing natural water courses.
- a description of the site topography, indicating the gradient and aspect of slopes.

Sampling Procedures:

The primary purpose of the site assessment is to document the soil quality, quantity, and profile of the surface lease. Soil sampling can be done with hand tools, an auger, or construction equipment. The following procedures must be followed:

- the soil conditions of a well site, camp, borrow pit etc. must be sampled at five locations: one sample must be taken 5 m inside from each corner of the surface lease boundary, and one sample must be taken at the center of the surface lease. This is the minimum number of samples; more may be necessary based on site conditions.
- access roads and pipelines greater than 500 m in length require one sample on the centerline of the surface lease for every 250 m in length. This is the minimum number of samples; more may be necessary based on site conditions. If a change in landform/topography/soil characteristics/vegetation is noticed while traversing the right of way, that change should be inspected and/or sampled.
- access roads and pipelines less that 250 m in length require a minimum of two samples including one at the terminus and one at the midpoint.
- For wellsites, soil samples must extend 20 cm below the B horizon (20 cm into the C horizon), or to a maximum depth of 100 cm below the surface of the ground. Under frozen conditions, the soil samples must extend deep enough to accurately characterize the B horizon(s). For pipelines, soil samples must extend deep enough to accurately characterize the B horizon(s).

Soil Assessment:

A visual analysis of the soil at each sample location should include the following information:

Sample Number	**A Horizon Depth (cm)**	**Description**	**B Horizon Depth (cm)**	**Description**

The A horizon is the upper portion of the soil profile that has been significantly altered by accumulation of organic matter and by weathering processes. This layer is commonly referred to as “topsoil”. The B horizon is the soil layer below the topsoil that has been altered by weathering but has little or no visible accumulation of organic matter.

The description of each horizon must include its texture class, based on the Canadian System of Soil Classification, Third Edition, 1998.

The A horizon from the five samples from a wellsite, camp, borrow pit etc. must be combined and thoroughly mixed. A portion of this combined sample must be sent to a laboratory for an analysis of its organic content, pH, and texture. A laboratory analysis for pipelines is not required.

Photographs:

Photographs must be taken which show the condition of the surface lease prior to disturbance. Each photograph should have noted with it the location, direction and any comments:

Maps:

The site assessment must include a sketch map and a legal survey plan of the surface lease and associated developments that show the following information:

Large scale map:

- location of where the soil samples were taken
- topographical features such as, slope direction and drainage pattern
- current vegetation and land use
- total area required for development (in square meters or hectares)
- location and description of works required to prevent soil erosion from runoff

Small scale legal survey:

- location of the proposed well site, camp, borrow pit, access road, and pipeline rights-of-way
- location of other existing wellsites, access roads and pipelines on the subject parcel