REPORT SX 86403N

WORKING PLAN
INTERIM
FINAL
DATE 96-05-07

TITLE FERTILIZING TRIAL OF NUTRI-COAT ON PLANTED
SPRUCE SEEDLINGS

Report prepared by: Marian Pigeon (Signature)
                 Marian Pigeon (Typed)

Report & Distribution approved by: R.B. McNaughton (Signature)
                                  R.B. McNaughton (Typed)

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COPIES TO

Bell Pole Company Ltd.
Revelstoke District
Nelson Region
Silviculture Branch

Approved: D.L. Oswald (Signature)
            D.L. Oswald (Typed)
WORKING PLAN

SX TRIAL 86403N

BELL POLE COMPANY LTD.

BOX 339, LUMBY, B.C.

VOE 2GO

FERTILIZING TRIAL OF INTERIOR SPRUCE AT THE TIME OF PLANTING.
Fertilizing of Interior Spruce at the time of planting

Introduction:
From past fertilizing trials it seems that fertilizing at the time of planting can greatly improve seedling growth and vigor and thus improve plantation success. Therefore, we propose that operational trials of fertilization be conducted on a cross section of our planting sites in the 1985 spring planting season.

Locations:
F.L. A18992 CP 4 Blk 2

Objectives:
1) to determine operational problems and costs associated with fertilization at the time of planting
2) to assess the growth response and survival of fertilized seedlings and compare the costs vs benefits.

Biological Constraints:
1) A slow release fertilizer will be used. Nutri-coat 16-10-10 (N-P-K) with a 9 month release period (Nutri-coat is comparable to Osmocote but somewhat less expensive)

Participants:
Bell Pole Company Ltd. - Warren Wright, Marian Pidgeon
Ministry of Forests, Revelstoke - Bill Beard
Nelson Regional Office - Chris Thompson

Responsibilities:
Bell Pole Company - working plan
- liaison with Silviculture Branch
- technical aspects of field problems
- assist with data analysis and reporting
- requisition supplies and fertilizer
- compiling reports
- selection of sites
- conducting field operations
- conducting subsequent survival and growth assessments
- preparing reports, providing field descriptions etc.

Schedule:

Plant - Spring 1985
Assessments - Fall 1985
Fall 1986
Fall 1989

Assessment Report and cost data.
Report fall 1985-86
Final report 1989/90

Trial Design:

1) Treatments: Control and 9 month release Nutri-coat, 30 grms broadcast to a 10 cm radius around each seedling

2) Layout:
- one plantation will be used for a fertilizer trial
- experienced forest technician will apply fertilizer and measure seedlings
- 400 trees will be staked and measured within the plantation and 200 trees will be fertilized with 30 grams of Nutri-coat fertilizer
- trial location will be situated on a representative portion of the plantation

Measurements taken:

<table>
<thead>
<tr>
<th>TIME</th>
<th>SURVIVAL</th>
<th>HEIGHT (cm)</th>
<th>ROOT COLLAR DIAMETER</th>
<th>% TREES FREE GROWING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

3) Cost arrangements

as this is a trial and because the company does not have any past costs to base project on, the fertilizer will be applied by forest technicians. Actual costs will be determined by obtaining productivity counts, trees fertilized and measured per man-day,
combined with operational judgement by the licensee.

4) Site descriptions

Each plantation selected for these trials will be characterized as fully as possible. Sites will be ecologically classified as well as given brush potential hazard ratings. Description of soil type, topography, slash, planting conditions (ie wx) and planting stock will also be included.