### SASKATCHEWAN SOIL TESTING LABORATORY

### 1981-1982 REPORT

# E.H. HALSTEAD, DIRECTOR

During the current year the Saskatchewan Soil Testing Laboratory has received and processed the largest number of samples since its inception in 1966. Despite the crowded quarters from which the Laboratory operates a total of 70,880 samples were received and analyzed over the period July 1, 1981 to January 31, 1982. The number of samples received over the same period in 1980-81 was 41,383. The total sample volume for the entire 1980-81 year of 50,350 represented the best year the laboratory had experienced up to that time. Comparative sample number of 1980-81 and 1981-82 are presented below.

## SAMPLES RECEIVED

	July 1/81 1	to Jan 31/82	July 1/80 to	Jan 31/81
COMPLETE	(19,305)	57,915	(11,167)	33,501
NITRATE	(791)	2,373	(403)	1,209
INDUSTRY		7,707		3,858
SOIL SCIENCE	,	773		483
UNIVERSITY		1,294		467
PLANT		587		1,641
GARDEN		149		83
WATER		82		141
T	OTAL	70,880		41,383

The increase in sample volume can be attributed to four major factors:

- 1. The network of custom soil sampling agents which was established by the Laboratory.
- 2. A greater awareness of the importance of soil testing as a means of evaluating soil nutrient requirements.
- 3. An early harvest coupled with an unusually open autumn sampling period.
- 4. A large increase in the number of samples analyzed for consultants and industrial clients.

# Turn Around Time

With the increased number of samples received, turn around time remained as one of the major problems faced by the Laboratory. Despite the implementation of two shifts, samples could not be analyzed and the reports generated fast enough to keep up with the rate of sample receipts. As a result, at the height of the season, delays of approximately one month occurred between the receipt of the sample and mailing of the soil test report.

# Space Requirements

A space requirement study for an expanded soil testing facility was completed in November, 1981. This proposal asks for an approximate doubling of the space currently occupied by the Laboratory. Discussions are presently underway as to whether the space should be rented or built by the University. At this time, it appears that building is the more attractive alternative. It is unlikely, however, that a final decision on relocating the Laboratory will be made until the status of grants from the Provincial Government for new equipment and lease hold improvements is known.

# Agronomic Support

The Laboratory is currently advertizing for the services of a full time Agronomist. This appointment is required to provide assistance with soil test interpretation, updating of nutrient recommendations, rewriting of soil test bulletins and the initiation of additional services such as plant tissue analysis.

# Data Handling

The data handling system within the Laboratory is currently being reviewed. The purpose of this exercise is to explore ways in which turn around time can be reduced. In addition, the system should allow for a ready means of data retrieval for its summary and research value.

### Funding

Since the Laboratory operates on a fee for service basis some uncertainty always exists as to whether or not current committments can be met. This is particularly the case since it is known that sample volumes can fluctuate widely from year to year. This uncertainty makes it difficult to retain sufficient qualified people to adequately handle high sample volumes as was experienced this year. In this respect we are currently exploring ways and means of obtaining more samples during the off seasons and the possibility of obtaining support personnel from outside agencies.