

**TEST REPORT ON IDLERS
INCORPORATING EDWIN LOWE LTD CARTRIDGES
RETURNED FROM P.C.S. SASKATCHEWAN, CANADA
– AFTER SUSTAINED OPERATIONS UNDERGROUND**

IDLER SPECIFICATION –

**6” O/D X 30 MM DIAMETER SHAFT, INCORPORATING
EDWIN LOWE LTD 6306/30 MM PREFABRICATED CARTRIDGES**

- DELIVERED OCTOBER 1993

POTASH CORPORATION OF SASKATCHEWAN

P.O. NO. (ON FILE)

PROJECT NO. (ON FILE)

APRIL 1995

(CUSTOMER NAME ON FILE)

TEST PROCEDURE

Due to the design of these rolls, each roll shell was cut in two so that the shafts could be removed.

After removal of the shafts, the end caps were machined adjacent to the outside steel seal retaining plate to remove the six locking dedents which secure the bearing and seal in the end bell. After removal of these dedents, the bearing/seal assembly was removed from the end bell housing.

The following observations were noted during the inspection procedure:

1. The T.I.R. was measured at both ends of each roll and the results measured. The results ranged from a low of .015” to a high of .035” T.I.R.
2. Each roll was free to rotate with no sticking or hard spots.
3. After removal of the outside steel seal retaining plate, trace amounts of foreign substance was observed attached to the inside diameter of the plate. The material was too small to identify.
(This area is outside the sealing elements).
4. The triple lip seal was removed. The triple lips and the seal cavity adjacent to the bearing were filled with grease.
5. Grease removed from the lip area revealed no contaminates either visually or by manipulation of the grease between the fingers.
6. The same results were observed with the grease taken from the seal cavity.
7. The bearings were free to rotate and well filled with grease, which was clean and of the right consistency.

CONCLUSIONS

It is my opinion that these rolls are in excellent condition and would have performed well for many more years.

Regards.

(Name on file)

General Manager

Engineered Systems Group