

District of Barriere
REPORT TO COUNCIL

Date: March 14, 2022	File: 530.20/Rpts
To: Council	From: Bob Payette, CAO
Re: Proposed Backhoe Purchase	

Background:

Specifications:

- Year: Unknown (mid to late 90's)
- Make: Caterpillar
- Model: 416c 4wd
- PIN: 1WR03925
- Hours: 4629
- Price: To be determined

The current operations foreman believes that Clearwater purchased this machine new in the 90's. The machine has been used for municipal snow removal assistance, general cleanup, cemetery, and municipal water/ sewer system maintenance during that time.

Discussion:

Pros

- Low hour machine 4629 hours. Well maintained motors can achieve up to 10-20,000 hours
- Large repair recently performed at Caterpillar that addressed many wear items (document attached)
- 4 in 1 front bucket which can assist in digging and spreading material with the added benefit of being able to lift items such as debris with the available clamping force.
- Rear extendable boom allows for additional reach.
- Rear semi-quick change bucket which allows changing of buckets from digging to cleanup.
- Evidence of regular greasing of machine
- Newer tires
- 4wd
- Large machine
- Basic operation

Cons

- Although machine has lower hours it is more than 20 years old and could start to see age related failures in items such as wiring, high touch points, hydraulic hoses, and engine or hydraulic oil seals.
- The single large repair bill could be seen as evidence of a lack of or deferral of a regular maintenance program resulting in a single large repair bill.
- Seat shows signs of regular wear and a torn cushion.
- Right front tie rod is loose even with a new tie rod end. This is the result of a worn tapered seat from running with a worn-out tie rod end over a long period of time. Proper repair is replacement of the steering knuckle which could cost up to \$5000. A welder could look at repairing the tapered seat by installing a bushing, but inspection would be needed.
- Limited vehicle service history. It would be recommended to talk to Caterpillar and seeing which services are due based on hours then planning to have the work done over time

For the age of the equipment, the backhoe is in good condition. Clearwater has stuck to limited operators which helps in the wear and tear of any tool or piece of equipment. Although having a large backhoe is beneficial for digging, the weight at over 13,000lbs needs to be taken into consideration while operating. The operation is user friendly and an operator with some experience would learn quickly with limited supervision. Training and safe work procedure development would also be implemented.

Similar machines are priced from \$35,000 - \$50,000

Recommendation:

That Council direct staff to negotiate a reasonable purchase price with the District of Clearwater for the Backhoe described in this report.

Prepared by: *Bob Payette, CAO*



