

MEMORANDUM

TO: Water Right File 65-23777

FROM: Daniel Nelson – Analyst 3

DATE: October 28, 2019

SUBJECT: Licensing Review of Water Right 65-23777

The field exam for this right was performed by Certified Field Examiner Dave Shaw of ERO Resources Corporation. This permit was approved as a fire protection water right for 1.40 cfs.

Mr. Shaw was unable to measure the flow rate of the well without causing damage to the existing buildings, which seems reasonable. Mr. Shaw provided a pump curve for the measurement of this well. In my review of the pump curve, at a diversion rate of 480 gpm, this pump would need a total dynamic head of approximately 200 ft. The well driller's report states that at 480 gpm, the well had a drawdown of 85 feet, which would allow approximately 115 feet or 50 psi for the operation of the system. This seems reasonable for this system, so I agree with Mr. Shaw's recommendation of a diversion rate of 480 gpm or 1.07 cfs.

Mr. Shaw also supplied documentation stating that the sprinkler system was tested for a 480 gpm flow, so I am confident that not only is a flow rate reasonable. The sprinkler tests suggest that this flow rate is needed to protect these building against fire. Therefore, he has also shown that this fire protection use meets the definition of a beneficial use.

The place of use for the permit and that supplied by Mr. Shaw reduced the place of use to specific buildings. This kind of detail is not needed for a fire protection right, so I created a single shape file that surrounded the buildings.

Conditions:

Conditions 077 and 01M will be carried forward to licensing. Condition 121 will be changed to condition 103 as is standard. The remainder of the conditions will be dropped at licensing.