

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 22-13265
Exam Date: 05/28/2020

1. Current Owner:
CITY OF VICTOR PO BOX 122 VICTOR ID 83455-0122
2. Accompanied by: Robert Heuseveldt, P.E., CFM
Phone No: (208)399-2155
Address: PO Box 122 Victor ID 83455
Relationship to permit Holder: City Engineer

3. SOURCE:
GROUND WATER

Method of Determination: Site Visit

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
22-13717	Ground Water	Municipal	Permit
22-7762	Ground Water	Municipal	License
22-566A	Springs	Municipal	Decreed
22-122	Springs	Municipal	Decreed

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SW¼ NW¼, Sec. 2, Twp 03N, Rge 45E, B.M. TETON County

Method of Determination: GPS and site visit.



⊙ 89°E (T) ⊙ 43°37'3"N, 111°7'14"W ±32ft ▲ 6128ft

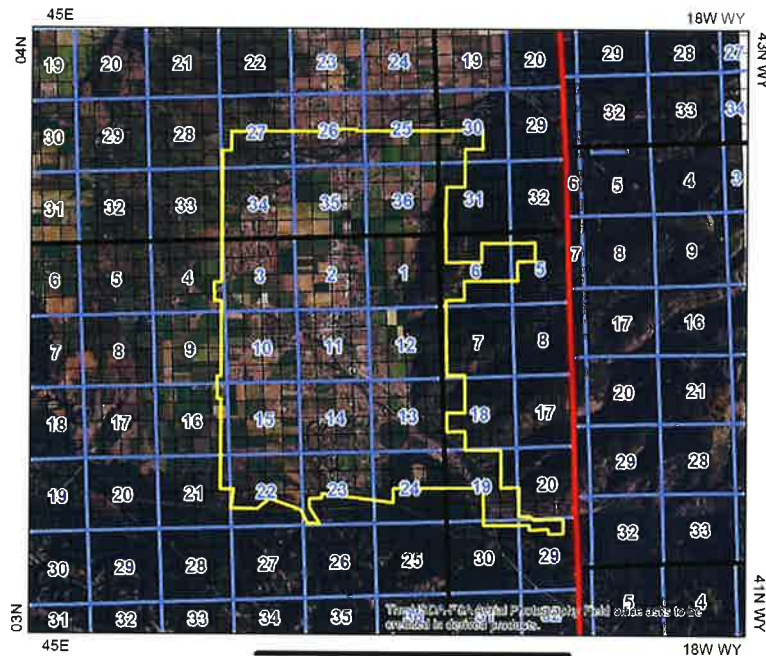


North Well Water Supply System
Your Watermark - See Settings

license Field Exam 22-13265
28 May 2020, 09:55:50

Place of Use: Municipal (Large POU)

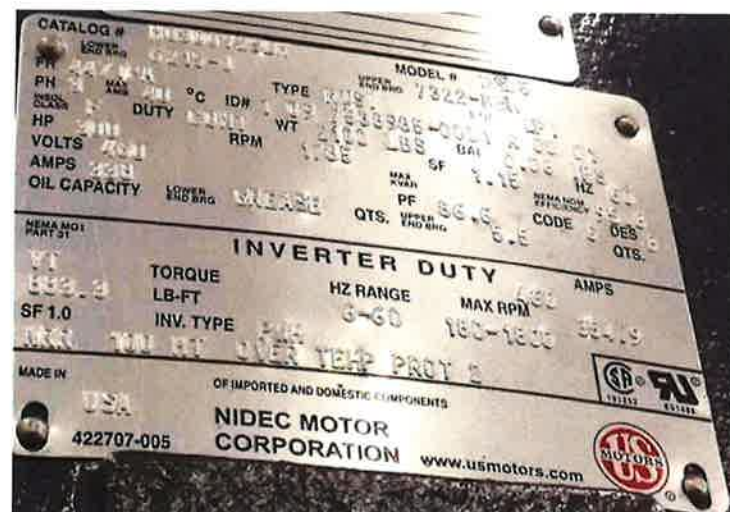
Method of Determination: Aerial photography and map



- 3.
- ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
 - ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
 - ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
 - ☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
North Well	US Motors	300			



D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flow Meter	Magnetic	McCrometer	Ultra Mag	UM06-12	12"	



2. Measurements:

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: Flow Meter reading. $Q = 5.65$ cfs. Recommended rate = 3.0 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 =$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: 3.0cfs X 1.9835 X 365 days = 2171.9 AF

Volume calculation based additional development and diversion of water from the north well under water right 22-13265.

The City of Victor provided a water use report showing the quantity of water diverted between 2017 and 2019. The north well went into production in mid-August 2019. The City's report includes seven months (August 2019 – March 2020) of water use data for the north well. To calculate a full year of water use from the north well the City of Victor calculated an estimate based on how their water system operates. Based on the City of Victor's water report the additional water developed within their municipal water delivery system is 196.2 acre-feet.

G. NARRATIVE/REMARKS/COMMENTS

The City of Victor's municipal water system consists of a spring source and two ground water wells that utilize two storage tanks and several boosters that deliver water throughout the municipal service boundary. The water system operates in three modes. Operation mode 1 diverts water from Game Creek Spring and a 100,000 gallon storage tank to feed the system. When the spring source can't meet demands and when the 100,000 gallon storage tank drops to a certain level then the Sherman booster turns on and the system begins operation in Mode 2. In mode 2 the spring is not used to deliver water throughout the service area. The spring begins to fill the 100,000 gallon storage tank. The Willow Creek well and water from the Sherman tank is utilized during this time. The operation of the Willow Creek well is based on water levels in the Sherman tank. Once water level in the Sherman tank drops to a designated level the Willow Creek well will turn on. When the Sherman tank fills the Willow Creek well is turned off and the system returns back to operation mode 1. Operation mode 3 is where additional water has been developed and used within the City of Victor's water delivery system. In operation mode 3 the North well is turned on to maintain water pressure and keep up with water demand. The booster that is used to divert water from the Sherman tank is turned off and the Willow Creek well is turned on to refill the tank. When the tank is full the North well is turned off and the booster is turned on and draws water from the Sherman tank. The booster and the North well do not operate together. In mode 3 the city does not use the spring. The North well is needed to maintain a constant water pressure and keep up with water demand while the spring and Willow Creek well divert water to the depleted storage tanks. The additional water that has been diverted and developed under right 22-13265 has come from the utilization of the North well. Based on the City's water report an additional 196.2 acre-feet is necessary to keep up with current water demands. The City of Victor has demonstrated in their water report that there has been an increase in water use.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
MUNICIPAL	01/01 to 12/31	3.00 CFS	196.2 AF
<u>Totals:</u>		3.00 CFS	196.2 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

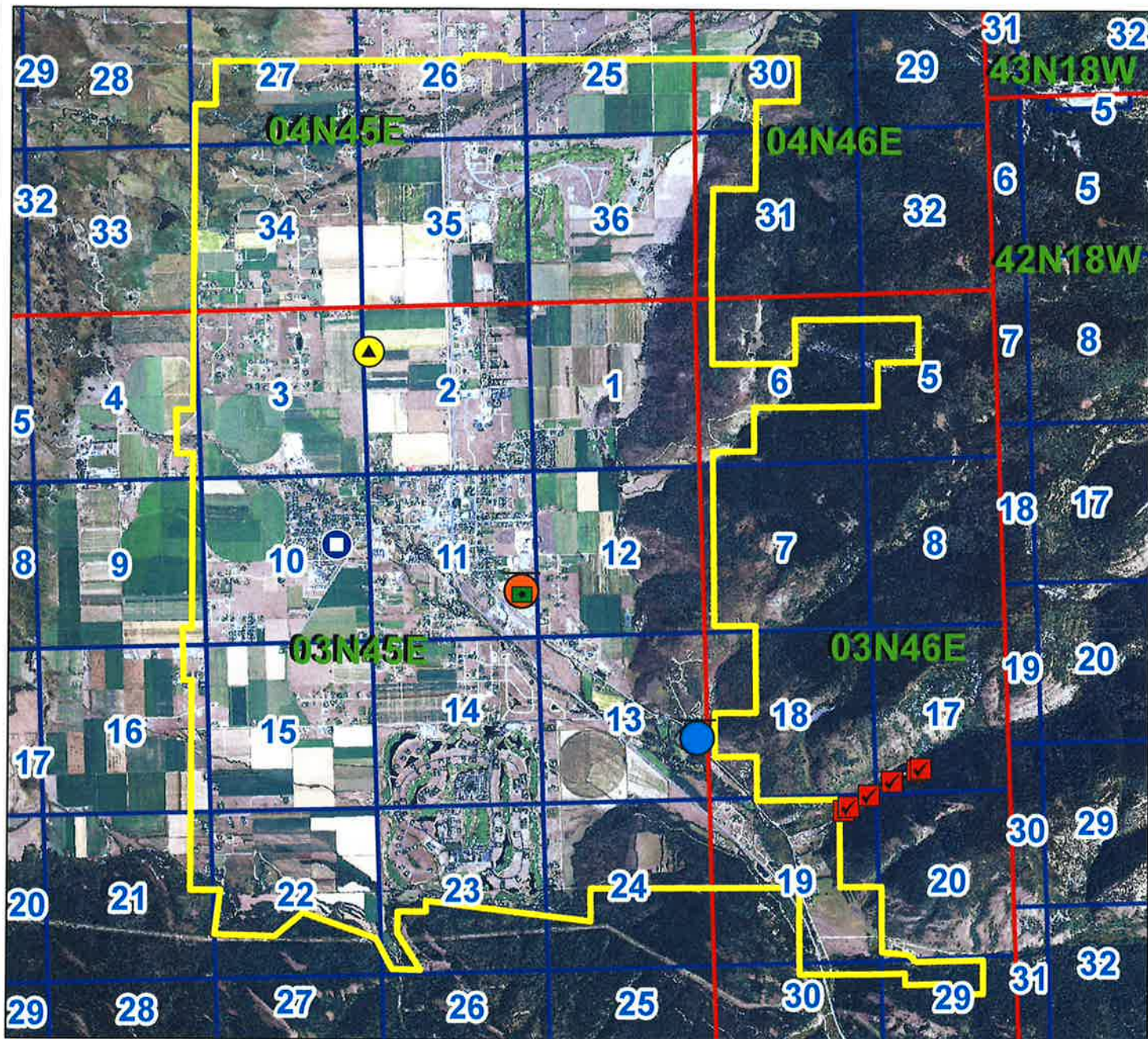
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

I. AUTHENTICATION

Blake Jordan - Water Rights Supervisor

Field Examiner's Name Blake Jordan Date 5/28/2020

Reviewer _____ Date _____



-  North_Well_22-13265
-  Willow Creek Well 22-13265
-  Booster Station
-  Sherman Tank
-  Springs_22-122_22-566A
-  100,000 Gallon Storage Tank
-  Municipal_Service_Area
-  Township/Range
-  Sections

0 2,650 5,300 10,600 Feet

1 inch = 4,829 feet

