

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34321

Exam Date: 9/22/2016

1. Current Owner: BRAD PINTLER Or
STACY PINTLER
12744 DEER FLAT RD
NAMPA ID 83686
(208)465-5390

2. Accompanied by: BRAD PINTLER

Phone No:

Address:

Relationship to Permit Holder:

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: 63-10476

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE1/4SW1/4 Sec. 16, Twp 02N, Rge 02W, B.M. CANYON County

Method of Determination:

GPS points collected with Garmin unit. Point compared with digital PLSS map.

2.

PLACE OF USE: COMMERCIAL

Twp Rge Sec	NE				NW				SW				SE				Totals
02N 02W 16	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
														X			

Method of Determination: Aerial imagery compared with digital PLSS 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
63-88-W-015	HITACHI	10	G89184E	STA-RITE	8"
	WELL INFORMATION COLLECTED FROM 63-10476 FIELD EXAM. UNABLE TO VERIFY PUMP INFORMATION DURING 2016 EXAM.				

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: System was not running at time of exam.**E. FLOW CALCULATIONS**☐ Additional Computation Sheets Attached

Measured Method: Information collected when well was measured during 63-10476 field exam.

Permit	1.00 cfs
Commercial use under 63-33358	0.36 cfs
B. U. Proof Fee	\$125 → 1.01 to 2.00 cfs
63-10476 Measurement from Well	1.32 cfs
Licensed Beneficial Use from Well	0.68 cfs
License Recommendation	0.64 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:

Mint harvest occurs from July through September (92 day season).
Mint still operations run 6 days a week for up to 20 hours a day.

6 days a week = 85.71% season
20 hrs a day = 83.33% season

$$V_{\text{Commercial}} = 92 \text{ days} \times 0.64 \text{ cfs} \times 1.9835 \times 0.8571 \times 0.8333 = 83.4 \text{ af}$$

G. NARRATIVE/REMARKS/COMMENTS

The field exam was conducted on September 22, 2016 by agents Patrick Kelly and Aaron Skinner. We were accompanied by permit and land owner Brad Pintler. Water right 63-34321 was created as a result of splitting 63-33358 during the licensing process. An application to amend permit 63-33358 was made in 2012 to identify commercial beneficial use in Section 16.

Brad and Stacy Pintler are the current permit owners to 63-33358. Current county taxlot data indicates the Pintlers own the property relevant to the permit. No additional changes are required to be made for licensing at this time.

The POD for 63-34321 was visited during the exam. A GPS coordinate was collected at this time (43d 30.542,-116d 35.015). No well tag exists on the well casing. These coordinates place the well in the NESW ¼¼. Mr. Pintler indicated that the well was drilled by a previous land owner. A well log was located through the well construction search within the NESW ¼¼ in the name of William Lowber. Mr. Lowber drilled the well when developing the irrigation use authorized by 63-10476. Information was collected in the backfile for this right to obtain the field exam that was completed in 1988. Photographs of Mr. Lowber are shown standing at the well site. The system has not changed since it was described by the field agent. A measurement of 1.32 cfs was measured by the agent at the time of the exam. This is useful information since the well was not running during my exam. Mr. Pintler had no pump information available and it is safe to assume the 1.32 cfs is still deliverable from the well. An amendment to 63-34321 is required to correct the legal description of this diversion.

The commercial POU (still operation) within the NWSE ¼¼ is visible by aerial imagery. The legal description is verified through our digital PLSS map. Amendments are not required regarding POU.

A diversion rate of 1.00 cfs is permitted for commercial use. The original application for permit was filed for one well and operation facility within Sec 19. The permit was later amended to reflect commercial use within Sec 16. Because he developed two separate systems independent from each other, a combined use limits of the two rights is not practical. It is in the best interest for regulation purposes to split the commercial use between the two rights to total 1.00 cfs.

If we consider the 1.32 cfs to be maximum diversion of the Sec 16 well and subtract the 0.68 cfs licensed under 63-10476, that leaves 0.64 cfs to be diverted for the mint still operation under 63-34321. This also prevents adding a combined use limit for diversion rate at this well. The remaining 0.36 cfs of the permit will then be made available for license 63-33358.

Water is diverted from the well and enters an 8" pipe that is primarily used for irrigation purposes. Water dumps into an open box and then into a bubbler. From the bubbler, a 20 hp Baldor Reliance motor pumps water to a boiler inside the mint still operation. Water is heated and delivered back outside to large yellow trailers where the mint is steamed. A mint oil/water mixture then enters the four mint stills and oils are separated from the mixture and stored for sale. Wastewater or unused water from the system enters back into the bubbler and is delivered back into the irrigation system and reused on adjacent fields during flood irrigation.

According to Mr. Pintler, mint operations are run up to 20 hours a day, 6 days a week from July through September. This information was the best available data for quantifying a maximum annual volume.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
COMMERCIAL	01/01 to 12/31	0.64 CFS	83.4 AF
<u>Totals:</u>		0.64 CFS	83.4 AF

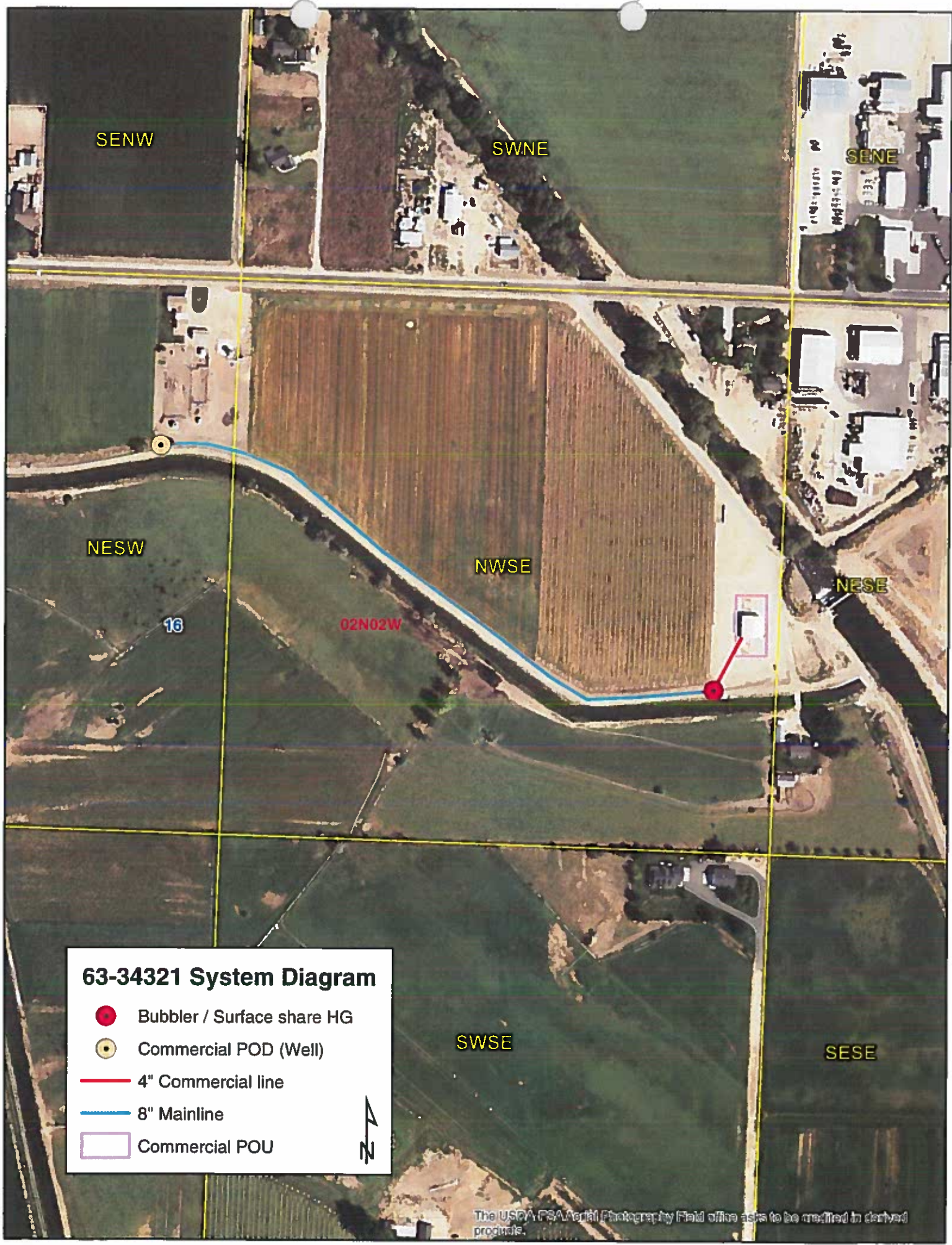
2. Recommended Amendments

☒ 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Patrick Kelly Date 12-1-2016
 Reviewer _____ Date _____



63-34321 System Diagram

-  Bubbler / Surface share HG
-  Commercial POD (Well)
-  4" Commercial line
-  8" Mainline
-  Commercial POU



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUSE TYPEWRITER OR
BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources, within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>William Lowber</u> Address <u>R 4 Box 4434 Nampa ID</u> Owner's Permit No. <u>63-10476</u>	7. WATER LEVEL Static water level <u>30'</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature _____ °F. Quality _____ <i>Describe artesian or temperature zones below</i>																															
2. NATURE OF WORK <u>63-88-W-015</u> <u>63-10474</u> ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>500 +</u></td><td><u>70'</u></td><td><u>1/2</u></td></tr></tbody></table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>500 +</u>	<u>70'</u>	<u>1/2</u>																									
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3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td><u>16</u></td><td><u>0</u></td><td><u>10'</u></td><td><u>Overburden</u></td><td></td><td><u>X</u></td></tr><tr><td><u>16</u></td><td><u>10</u></td><td><u>20</u></td><td><u>Loam Rock</u></td><td></td><td><u>X</u></td></tr><tr><td><u>12</u></td><td><u>20</u></td><td><u>70</u></td><td><u>Loam Rock</u></td><td><u>30'</u></td><td><u>X</u></td></tr></tbody></table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	<u>16</u>	<u>0</u>	<u>10'</u>	<u>Overburden</u>		<u>X</u>	<u>16</u>	<u>10</u>	<u>20</u>	<u>Loam Rock</u>		<u>X</u>	<u>12</u>	<u>20</u>	<u>70</u>	<u>Loam Rock</u>	<u>30'</u>	<u>X</u>			
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4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____																																
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>2 1/2</u> inches</td><td><u>12</u> inches</td><td><u>1</u> feet</td><td><u>20</u> feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ inches</td><td>_____ inches</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Was casing drive shoe used? ☐ Yes ☒ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ feet</td></tr></tbody></table> Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>20'</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Pudding clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☐ Welded ☐ Solvent Weld _____ ☐ Cemented between strata Describe access port _____	Thickness	Diameter	From	To	<u>2 1/2</u> inches	<u>12</u> inches	<u>1</u> feet	<u>20</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet
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6. LOCATION OF WELL Sketch map location must agree with written location. <table border="1"><tr><td>N</td><td></td><td></td></tr><tr><td>W</td><td></td><td>E</td></tr><tr><td>S</td><td></td><td></td></tr></table> County <u>Canyon</u> Subdivision Name <u>DEC 12 1988</u> Lot No. _____ Block No. _____ T. <u>2N</u> N/S, R. <u>2W</u> E/W	N			W		E	S			10. Work started <u>3/1/88</u> finished <u>3/2/88</u>																						
N																																
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	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>Holder Drilling</u> Firm No. <u>197</u> Address <u>Caldwell ID</u> Date <u>3/2/88</u> Signed by (Firm Official) <u>Ed Holder</u> and (Operator) <u>Same</u>																															



Well POD

43 30.542
-116 35.015

Well was drilled in 1988 for irrigation right 63-10476.

12" casing delivers water to 8" mainline.

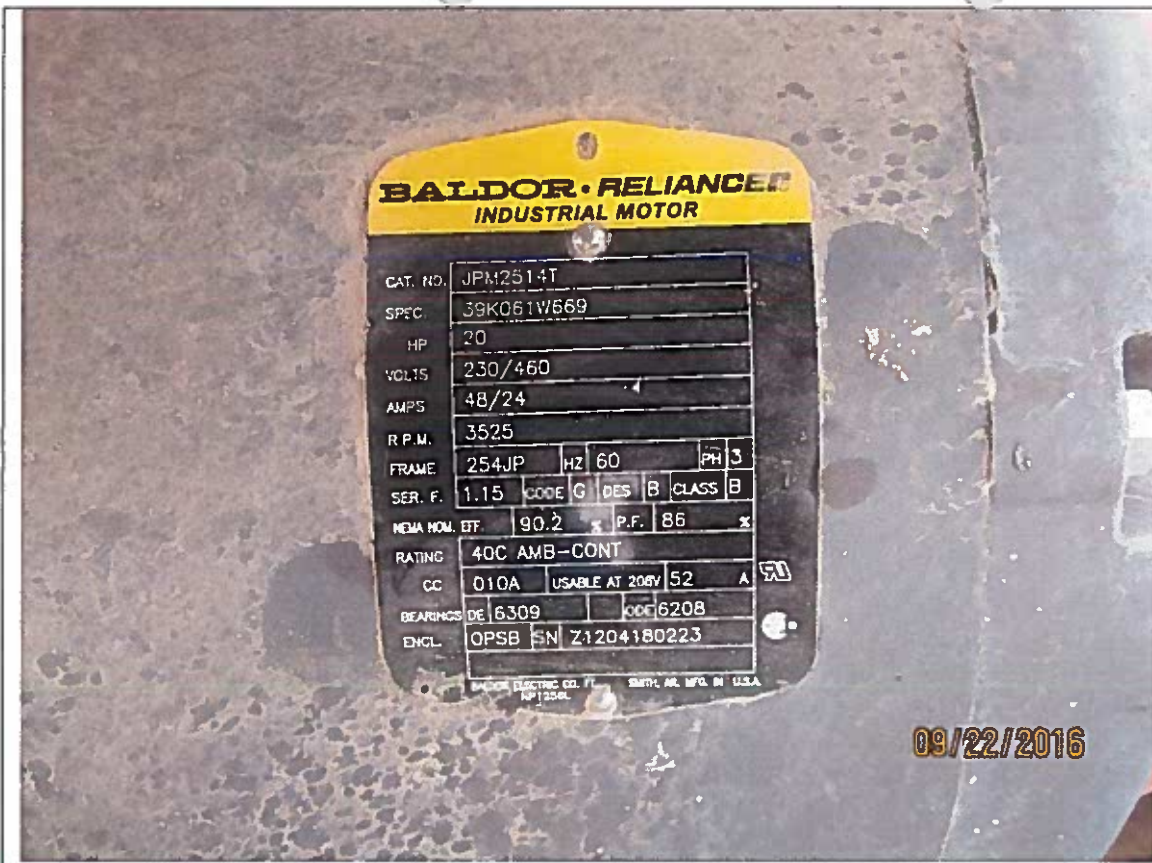


Bubbler location towards SE corner of property.

8" mainline shown open discharge into headgate box at top of photo. Canal bank shown on left delivers surface shares to headbox.

Water enters bubbler and can enter booster pump or run into 8" Al irrigation mainline shown running towards top right of photo.

Blue line delivers commercial waste water back to bubbler system.



Baldor Reliance
Booster Pump.

20 hp

Phase: 3

Cat. No. :
JPM2514T



Standing on canal
bank looking north
towards mint still.



Mint still facility.

Water lines coming out of building deliver hot water to steam trucks that steam the mint leaves.



Boiler.



Mint stills.



Yellow trucks hold mint product and are used as containers during steaming process.