

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.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
D0044452	Submersible	7.5			2 inch pipe

E. FLOW CALCULATIONS

Theoretical yield:

$$Q = \frac{8.8 \times (Hp) \times (Eff)}{H}$$

Where: Hp = 7.5 Hp (per Elsing Drilling)

Eff = 70% (assumed)

H = elevation distance + 2.31 x operating pressure (assume elevation difference of 299.0 feet based on well log pumping level during well test and operating pressure of 60 psi).

$$H = 279.0 \text{ feet} + (2.31 \times 60 \text{ psi}) = 394.5$$

$$Q = \frac{8.8 \times (7.5) \times (0.70)}{394.5}$$

Q = 0.12 cfs Rate exceeds permitted amount of 0.04 cfs, therefore **recommend permitted rate of 0.04 cfs**

F. VOLUME CALCULATIONS X Additional Computation Sheets Attached

Not required for domestic uses per new Beneficial Use Examination Rules implemented 3/29/2012.

G. NARRATIVE/REMARKS/COMMENTS

Application for permit 36-16401 was filed on March 31, 2006 for the diversion of 0.04 cfs of groundwater for domestic use associated with a concrete batch plant. Permit 36-16401 was issued on May 30, 2006 and Proof of Beneficial Use was filed on May 6, 2009.

The system consists of one well (D0044452), a 7.5 HP pump and a 1000 gallon storage tank. A two inch line fills the storage tank which is regulated with a float system. A string of concrete settling ponds captures the truck wash water to recycle for batch mixing. (see pictures)

Elsing Drilling stated the well pumped about 51 gpm at the time of the drilling pump test. A theoretical estimate of the well yield indicates that it can produce at least the permitted rate of 0.04 cfs, so it is recommended that license 36-16401 be issued for 0.04 cfs for domestic use. Domestic use is for potable water for the batch plant, mixing concrete and cleaning trucks at the batch plant.

An analysis was completed to insure that the batch plant is using less than the 2500 gpd limit listed on the permit conditions. (see attached computations sheet) A maximum total of approximately 2300 gpd was calculated for batch mixing, daily washing of the three trucks and office use. The manager indicated that the truck wash water is captured in settling ponds and then recycled for mixing concrete so actual water usage is almost certainly less than the calculated amount.

Note that a volume estimate is not required for domestic uses per new Beneficial Use Examination Rules implemented 3/29/2012.

Cindy Yenter, Watermaster of Water District 130, requested that the measuring device condition and Water District 130 flag be removed from the license for non jurisdictional purposes.

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>
DOMESTIC	01/01 to 12/31	0.040 CFS	N/A
<u>Totals:</u>		0.040 CFS	N/A

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

Sara Reeder

Date

5/25/12

Reviewer

[Signature]

Date

5/25/12

Jeff Coates.
420-0995

(50-100) Batch

- Max Batches 12 dz. partial 75g
6 Full 100 gal

$$6 \times 100 = 600 \text{ gal per day}$$

$$12 \times 75 = \boxed{900} \text{ gal}$$

- Washing Trucks

3 trucks 1x per day for 15-30 min
(avg. 22.5 min)

$$3 \times 18 \text{ gpm} \times 22.5 \text{ min} = \boxed{1215} \text{ gal}$$

- * Plus ~~recycle~~ recycle wash water
for mixing.

- | | | |
|--------------|---|-------------------------------------|
| 3 employees | } | IDWR Standard 50 gpd
per worker. |
| 1 Bath room | | |
| 1 Break room | | |

$$50 \times 3 = \boxed{150} \text{ gpd}$$

- $900 + 1215 + 150 = \boxed{2265 \text{ gpd}}$

7.5 HP Grundfoss
279 Ft. to water

$$\frac{7.5 \times .7 \times 8.8}{279 + (50 \times 2.31)} = \frac{46.2}{394.5} = .12 \text{ cfs}$$

Permit Limited to .04



NENE

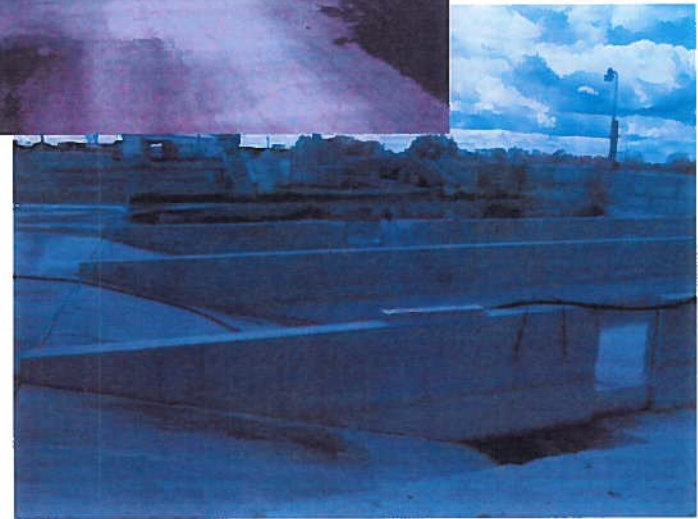
I-84

23

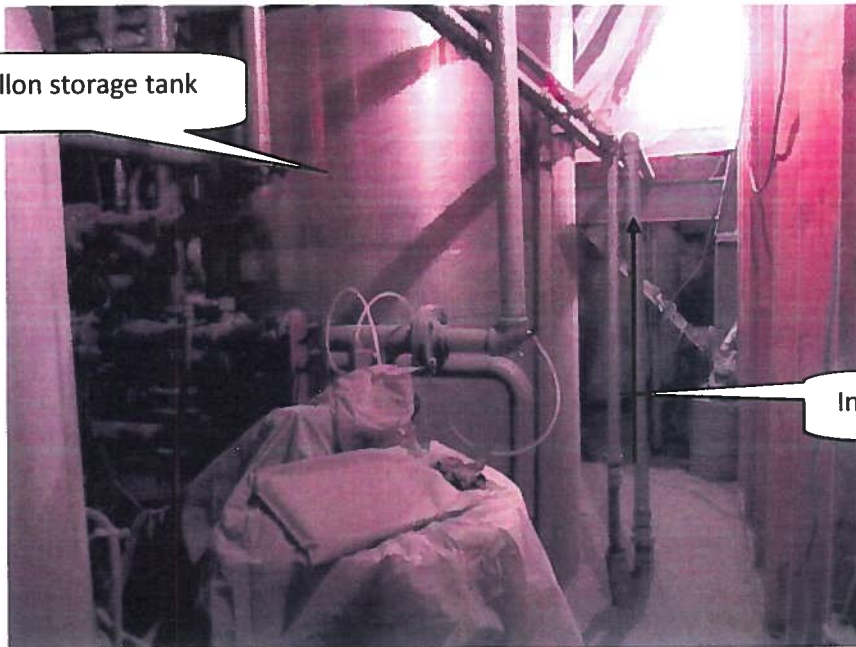
SENE

23

Recycling Ponds for truck wash water



1000 gallon storage tank



Incoming 2 " line to tank