STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-8738
Exam Date: 6/12/2006

1. Current Owner: CITY OF HEYBURN
PO BOX 147
HEYBURN ID 83336-0147
(208)679-8158

2. Accompanied by: Ralph Martini
Phone No: 208 431-2913
Address:
Relationship to Permit Holder: Operator

3. **SOURCE** **TRIBUTARY**
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 36-8550

C. DIVERSION AND DELIVERY SYSTEM

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

GROUND WATER SE1/4NW1/4NW1/4 Sec. 9, Twp 10S, Rge 23E, B.M.
MINIDOKA County

Method of Determination:

2. GPS

Method of Determination:

3. ___X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
____X_ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
____X_ Aerial Photo Attached (required for irrigation of 10+ acres).
____X_ 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
A0007815	Fairbanks	150		Fairbanks	10"

PLACE OF USE: MUNICIPAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
10S	23E	8	X	X	X	X													
10S	23E	9		X	X		X	X	X	X	X			X			X		
10S	23E	10									X		X	X		X	X	X	
10S	23E	11			X	X				X	X	X	X	X	X	X			
10S	23E	15	X	X	X	X	X	X	X	X	X	X	X	X		X			
10S	23E	16	X	X	X L 6	X	X	X L 4		X L 5					X L 7				
10S	23E	22	X	X	X		X			X	X L 5								

Method of Determination:

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_____ 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

*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: Time Fill into a storage tank 75 feet in Diameter using ultrasonic level meter and stop watch. Re-lift pumps out of tank were shut down and fill depth was 1.00 ft. Calculated volume was 33,028.9 gallons/per foot of tank which was timed at 20.317 minutes

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method:

Q= v/t= πr^2/t= (3.14)(37.5)^2/1219seconds= 3.62 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

   $V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) =

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

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

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

Have conditions of permit approval been met? X Yes ____No

H. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
MUNICIPAL	01/01 to 12/31	3.300 CFS	
	Totals:	3.300 CFS	

2. Recommended Amendments

___Change P.D. as reflected above ___Add P.D. as reflected above X None

___Change P.U. as reflected above ___Add P.U. as reflected above ___Other

I. AUTHENTICATION

Field Examiner's Name Carla R. Kuhn Date 6-12-06

Reviewer AOR Date 6/19/06



Well House & Holding tank



Deep well name plate 125 Hp

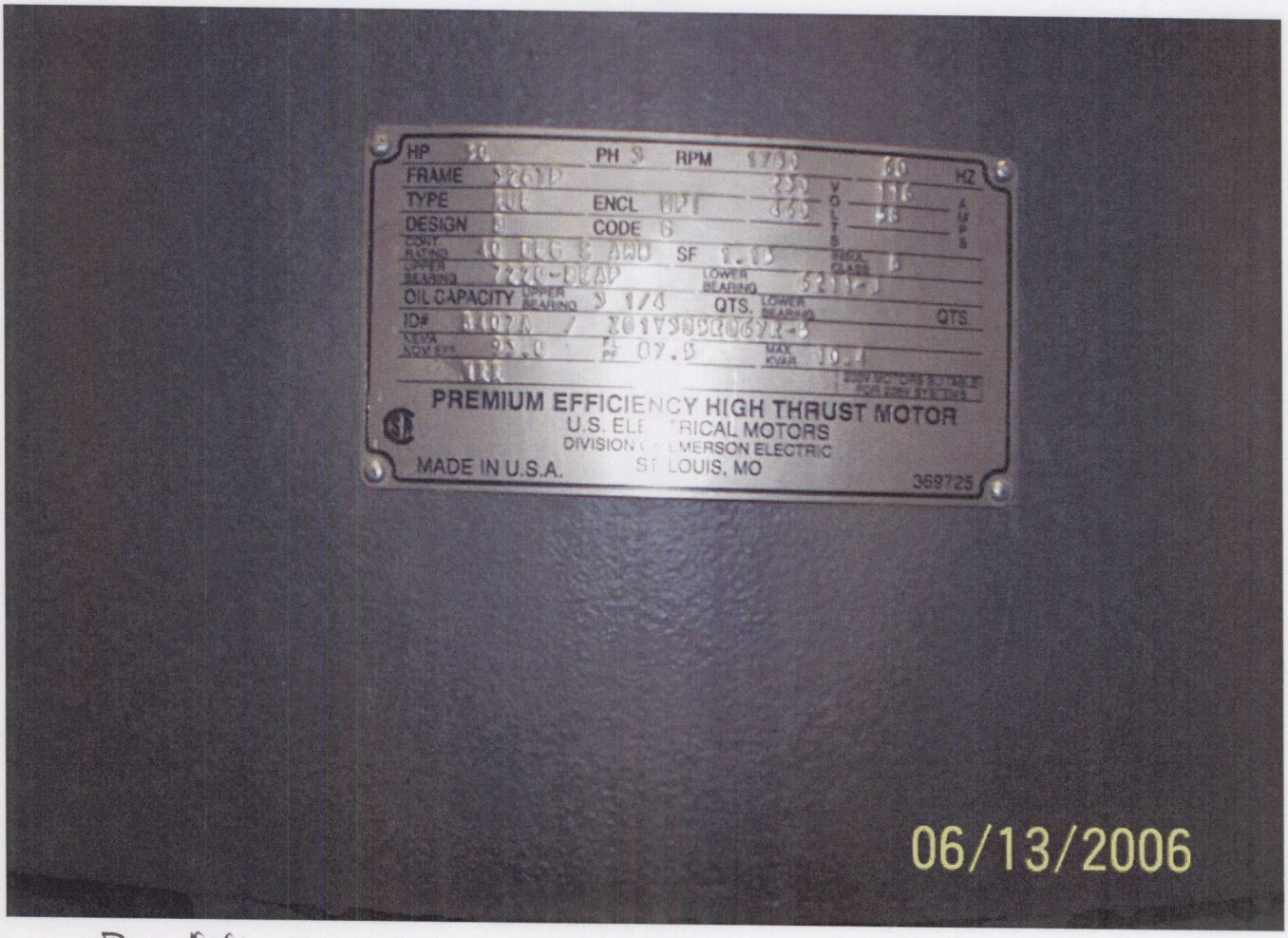


VFD for Re-let



Deep well motor



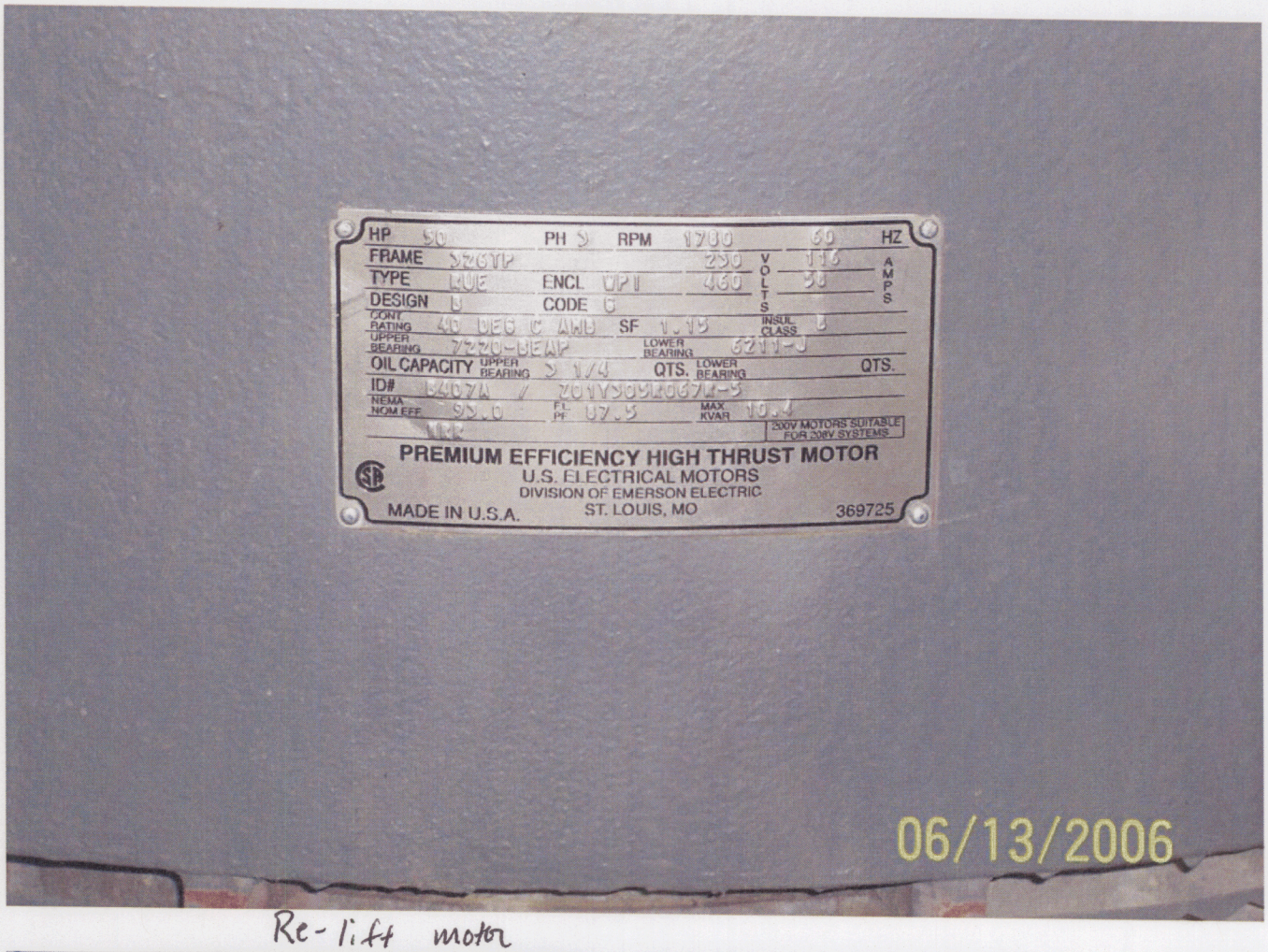


Re-lift Pumps



Flow meter on service side of tank





Re-lift motor



BACK-up Generator

To: Alan Merritt
Idaho Department Water Resources

From: City of Heyburn

Mr. Merritt;

Here are the figures that you needed to complete our paperwork.

We calculated that 1 foot of our storage tank holds 33,028.875 gallons; at that capacity it took our deep well pump 20.317 minutes to add 1 foot of depth. This figures out to be 1626 gallons per minute from the deep well pump.

Please call if you have any questions.

Thanks You

Ralph Martini

Pump Test:

75' dia concrete tank with total depth of 16'. All outflow shut off and depth raised 1.00 ft. over 1219 seconds. Depth monitored with ultrasonic depth meter that reads in 1/100th of feet and time measured with stop watch.

$$Q = V/T = \frac{\pi r^2}{s} = \frac{\pi(37.5)^2}{1219} = 3.62 \text{ cfs}$$