
INTEROFFICE MEMORANDUM

FROM: PATRICK KELLY
SUBJECT: 61-7681
DATE: JANUARY 30, 2014

Permit 61-7681 authorized the use of 0.88 cfs of groundwater for irrigation purposes. The proof of beneficial use form indicates the system provides water use for forty-four acres of land to grow potatoes. Historical photography and field visits have confirmed the use of water to do so.

The permit owner applied for a 2 well system indicating that the well relevant to this water right would be back-up. The 6" well on the northwest corner of the property services water right 61-7665. This is owned by Thomas Elliot and is a commercial use for the two potato storage facilities located on the property. These wells were never connected to each other and now serve separate uses. We are removing the 6 inch commercial well from this water right.

The location of the well was incorrectly named on the application and permit. The permit placed the well in the NW SE of Section 26. The actual well location is the SE NE of Section 26. The correct location has been entered and an amendment is being filed for this purpose.

Based upon improved aerial photography, PLSS and taxlot data, it has been determined a small portion of BLM land directly to the west is being irrigated by the permit owner. In the interest of the water user, the SWNE quarter-quarter section (BLM ground) is not being included in the POU. The field exam completed in 1998 recommended 44 acres for POU. Improvements in mapping capabilities since then show an actual use of 28.7 acres.

Conditions to the permit state that surface water rights shall be fully used to the extent it is available in conjunction with groundwater diverted to this right. Phone contact with King Hill Irrigation was made to confirm the property owns 15.4 shares, which is equivalent to 1 acre per share. A field visit conducted January 27, 2014 by Patrick Kelly and Dan Nelson verified the pumping of canal water to the property for the property. See photos taken of pump house used to divert canal waters.

Well drillers report was pulled from water right 61-7665. Static water level and were given and marked correctly on the theoretical flow and volume completed in the field exam. However the field examiner did not account for drawdown in the system. Section C on the back of the Groundwater Theoretical Analysis suggests a 10' drawdown for systems up to 10 horsepower pumps. Given the large volume of clays found in the lithologic log for this well, drawdown is likely to occur in this system. This changes flow and volume calculations that were suggested in the field exam. Since the acreage in place of use is found to be smaller as well, the volume is being suggested differently as

well. See the attached theoretical and calculations included in this memo.

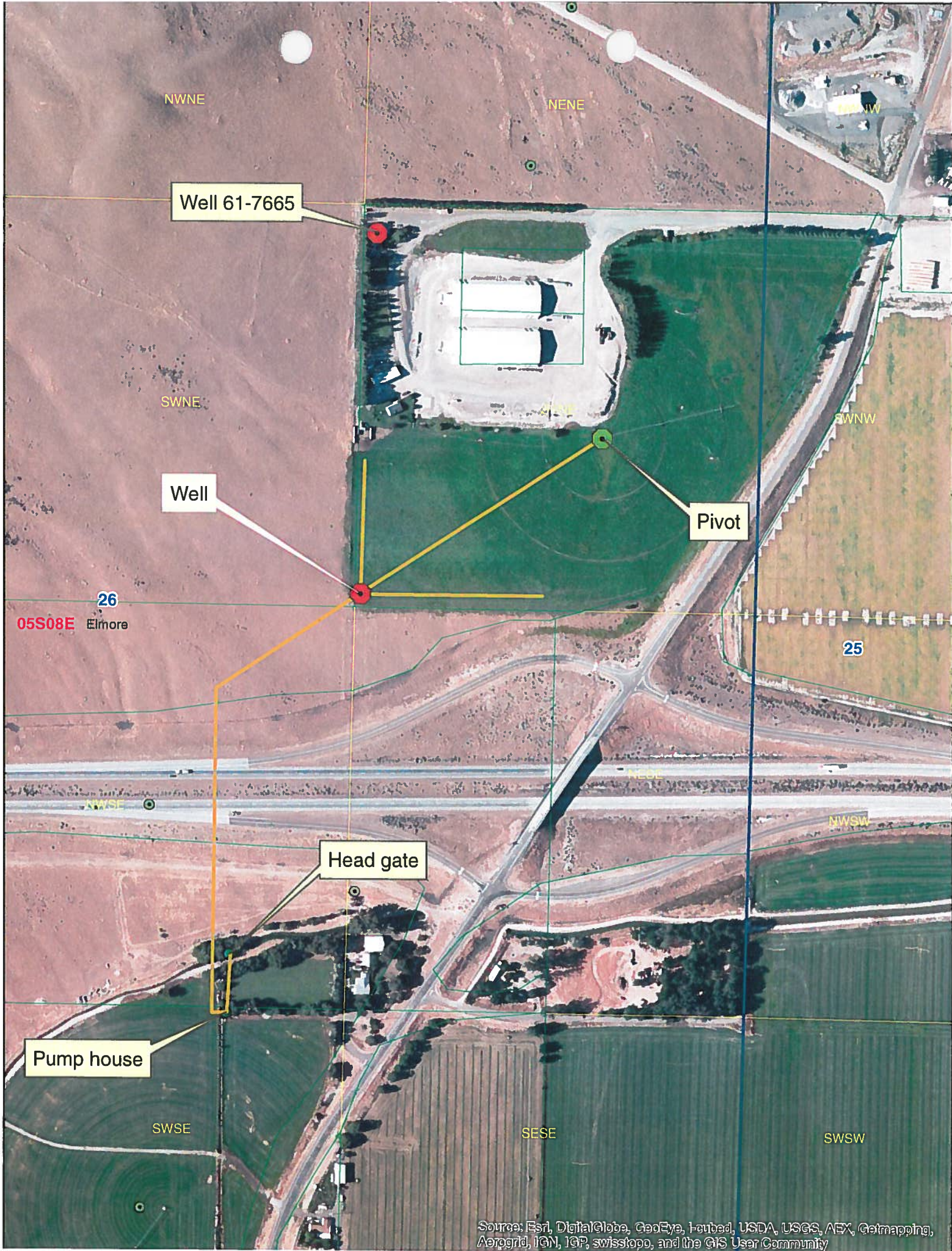
Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 28.7 \times 4.0 = \underline{114.8}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.26 \times 214 \times 1.9835 = \underline{110.4}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \underline{110.4}$$

Based on the use of the property, this water right is both supplemental and a primary use to the land owner.



Well 61-7665

Well

Pivot

Head gate

Pump house

26
05S08E Elmore

25

GROUNDWATER THEORETICAL ANALYSIS

FILE: 61-7681

DATE: 01-14-14

BY: Patrick Kelly

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times \text{HP}) \times (\text{EFF.})}{\text{TDH}}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

$$Q = \frac{(8.8) \times (10) \times (0.70)}{[(135) + (45 \times 2.31)]} = \frac{61.6}{236.95} = 0.26$$

LIFT FROM:

Measurement ()

Owner ()

Area estimate ()

Well Logs (X)

PSI FROM:

Measurement ()

Owner ()

Estimate ()

Owner Gage ()

Booster (Y) (N)

NOTES ON PUMP:

Motor Make, Serial or ID

Franklin

Pump Make, Serial or ID, rating

Jacuzzi

REMARKS: Depth to static Water = 125 ft.

Lift = 125 ft + 10 ft = 135 ft per condition C)

PSI = 45 from Notes on G-Flow Measurements on
Beneficial Use Report.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
DOT POINT PENState 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 Weston Corp. c/o Weston Farris
Address Box 9, Glenns Ferry, ID 83623
Drilling Permit No 61-91-W-001
Water Right Permit No 61-07665**7. WATER LEVEL**Static water level 125 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug
Temperature _____ OF Quality _____
*Describe artesian or temperature zones below*Form 238-7
8/90

State law 1

2. NATURE OF WORK☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase
☐ Abandoned (describe abandonment procedures such as
materials, plug depths, etc. in lithologic log)**8. WELL TEST DATA**☐ Pump ☐ Bailor ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
125		1

3. PROPOSED USE☐ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☒ Other Commercial (specify type)**9. LITHOLOGIC LOG**

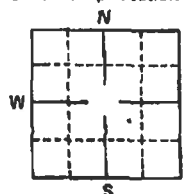
Bore Diam	Depth		Material	Water	
	From	To		Yes	No
10"	0	95	Sand with very little gravel		
10"	95	99	Sand and gravel		
10-8"	99	110	Brown sandy clay		
8"	110	115	Blue sand		
"	115	116	Blue sand and gravel		
"	116	120	Sand with big gravel		
"	120	149	Sand with some gravel		
"	149	150	Brown sand		
"	150	160	Blue sandy clay		
"	160	200	Blue sandy clay w/sandstone	X	
"	200	205	Sandy blue clay		
"	205	240	Gray sandy clay	X	
"	240	249	Blue sand w/ clay and shells	X	
"	249	307	Blue clay w/sandstone streaks	X	
"	307	310	Blue clay		
"	310	329	sandy clay	X	
"	329	331	Blue clay		
"	331	336	Sandstone	X	
8"	336	350	Blue clay		

4. METHOD DRILLED☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____**5. WELL CONSTRUCTION**Casing schedule ☒ Steel ☐ Concrete ☐ Other _____
Thickness _____ Diameter _____ From _____ To _____
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feet
_____ inches _____ inches _____ feet _____ feetWas casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation _____ inches by _____ inchesNumber _____ From _____ To _____
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feetWell screen installed? ☒ Yes ☐ No
Manufacturer's name Aardvark
Type slotted Model No _____Diameter 6.625 Slot size .010 Set from 210 feet to 310 feet
Diameter 6.625 Slot size .000 Set from 10 feet to 210 feet
Gravel packed? ☒ Yes ☐ No ☐ Size of gravel 20/40 sand
Placed from 10 feet to 310 feetSurface seal depth 110 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____Sealing procedure used: ☐ Slurry pit ☐ Temp surface casing
☒ Overbore to seal depthMethod of joining casing ☐ Threaded ☒ Welded ☐ Solvent
Weld
☐ Cemented between strata

Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location

Subdivision Name APR 13 1994

Lot No. _____ Block No. _____

County Elmore

T F N O E R W

10.Work started 6/5/91 finished 6/7/91**11. DRILLERS CERTIFICATION**I/We certify that all minimum well construction standards were
complied with at the time the rig was removed.Firm Name Hiddleston & Son, Inc Firm No. 35

Rt. 3, Box 610-D

Address Mtn Home, ID 83647 Date 6/25/91Signed by (Firm Official) [Signature]and
(Operator) [Signature]**1. WELL OWNER**Name Wes Pharris
Address Box 9, Glenns Ferry, ID 83623
Drilling Permit No 61-91-W-001
Water Right Permit No _____**2. NATURE OF WORK**☒ New well ☐ Deepened
☐ Well diameter increase
☐ Abandoned (describe abandonment
materials, plug depths, etc)**3. PROPOSED USE**☒ Domestic ☐ Irrigation ☐
☐ Industrial ☐ Stock ☐ V
☐ Other _____**4. METHOD DRILLED**☒ Rotary ☒ Air ☐ H
☐ Cable ☐ Dug ☐ O**5. WELL CONSTRUCTION**Casing schedule ☒ Steel ☐ I
Thickness _____ Diameter _____
.250 inches 6 5/8 inches
_____ inches _____ inches
_____ inches _____ inchesWas casing drive shoe used? ☒
Was a packer or seal used? ☐
Perforated? ☐
How perforated? ☐ FactorySize of perforation _____ inches
Number __________ perforations
_____ perforations
_____ perforationsWell screen installed? ☐ Yes
Manufacturer's name _____

Type _____

Diameter _____ Slot size _____ Se

Diameter _____ Slot size _____ Se

Gravel packed? ☐ Yes ☒ No

Placed from _____ feet

Surface seal depth 50 Material☒ Bentonite ☐ PSealing procedure used ☐ SMethod of joining casing ☐ Th☐ Ce

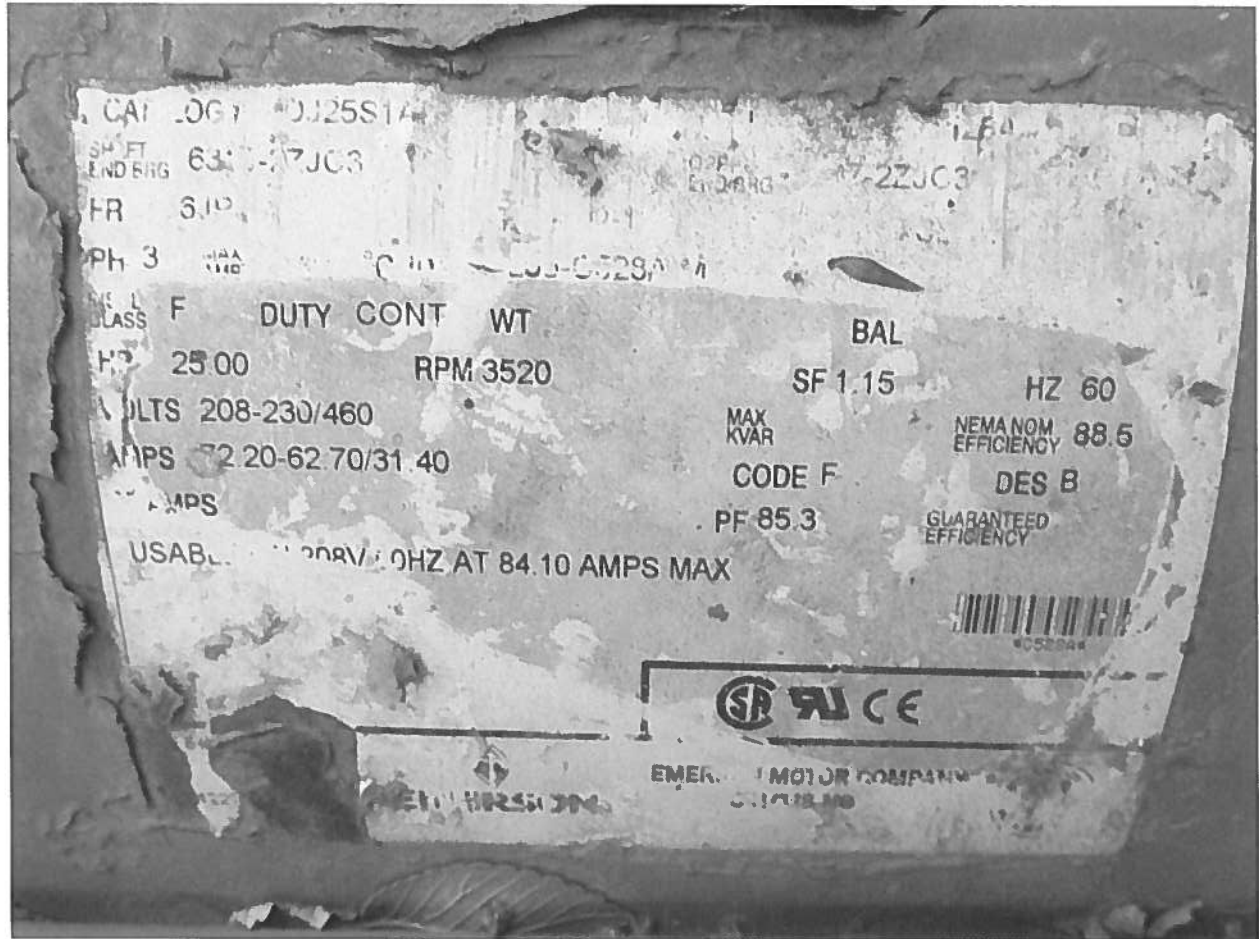
Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree

Process	Basin Sequence	Draft	Owner	Source	POD/ POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	37-21595	N	KING HILL IRRIGATION DISTRICT	MALAD RIVER	POU				X							X	X	X	X	X	X	0
Water Right	37-4112	N	KING HILL IRRIGATION DISTRICT	MALAD RIVER	POU				X							X	X	X	X	X	X	0
Water Right	61-10541	N	WHITWORTH, HERBERT K; WHITWORTH, WESLEY C	GROUND WATER	POD													X				0
Water Right	61-10541	N	WHITWORTH, HERBERT K; WHITWORTH, WESLEY C	GROUND WATER	POU													X				0
Water Right	61-10702	N	CHAMBERLAIN, KEITH J	GROUND WATER	POD												X					0
Water Right	61-10702	N	CHAMBERLAIN, KEITH J	GROUND WATER	POU												X					0
Water Right	61-10826	N	WATKINS, JOHN W; WATKINS,	GROUND WATER	POD													X				0
Water Right	61-10826	N	WATKINS, JOHN W; WATKINS,	GROUND WATER	POU													X				0
Water Right	61-7665	N	ELLIOTT, THOMAS A; FARRIS, WESTON D	GROUND WATER	POD			X											X			0
Water Right	61-7665	N	ELLIOTT, THOMAS A; FARRIS, WESTON D	GROUND WATER	POU				X													0
Water Permit	61-7681	N	ELLIOT, THOMAS A; FARRIS, WESTON D	GROUND WATER	POD			X											X			0
Water Permit	61-7681	N	ELLIOT, THOMAS A; FARRIS, WESTON D	GROUND WATER	POU			3.0	38.0									2.0	1.0			44
Water Right	61-7722	N	DURRANT, ANN; DURRANT,	GROUND WATER	POD												X					0
Water Right	61-7722	N	DURRANT, ANN; DURRANT,	GROUND WATER	POU												3.5					3.5

+



Pump used in well house south of I-84 to move surface water from canal to property and pivot.



Pump house #1. Pump used for 61-7681 is green to the right. The pump house actually directs water to other places using irrigation from canal.



Pump house #2



Water lines run from pump house (right) to different places of use. Water for irrigation moves under freeway and onto Farris property. Looking north from west side of pump house.



Head gate and canal. View is looking north from east side of pump house. Bubbler to left of picture.