

MEMO

For: 96-9044 Cove Group LLC

From: Sandy Hemenway

Date: 2/28/2011

REF: Licensing Review Memo

A Permit to Appropriate Water was approved on 6/29/2000 for Domestic 4-homes (0.10 cfs), and Irrigation of 2-acres (0.06 cfs), with a total diversion rate of 0.16 cfs. Proof of Beneficial Use was due on or before 7/1/2001, which was received on 2/23/2001, for Domestic 5-homes, and Irrigation 2-acres (\$50 C052405).

Tax Lot information that was updated 1/12/2009 confirms 4 lots, with 3-individual owners. The lots extend from the northeast to the south side of the road (the road runs through each of the individual lots). The sections of the lots on the north side of the road have a water meter that is for each individual lot. The 2 inch main comes off of the well, splits, and has 2 individual 2-inch mains, one running on each side of the road. The POD is located on Lot 4, owned by Newbury, with a 50-foot easement surrounding the well.

For the **Domestic place of use**, the lots on both sides of the road were used, to indicate the locations that are currently occupied by a house or R.V. site (4 legal lots). A close view on ArcMap was used to draw the shapefile for the **Irrigation POU**, making up the 2-acres. There are no **POU or POD Overlaps**.

Per management on 2/28/2011, the **irrigation component was removed**, with only the domestic internal/external use to be listed on the license, not to exceed ½-acre irrigation per lot. This was done to prevent the potential of transferring 2-acres irrigation that may not have been completely developed.

The **Field Exam** was conducted on 5/1/2001, accompanied by the project engineer, Carry Ann of James A. Sewell and Associates, Sandpoint, ID (208) 263-4160. The well is a 6 inch casing, 100 ft deep, 45 ft static, 5 ft drawdown, and was measured at 10-gpm, but on the drillers report it did not indicate the length of time pumped. Tag No. D00123241, and drilled on 6/7/2000 by Carl Pitts and Sons Drilling No. 168. It has a submersible 2 Hp Grundfos pump, with a 1-inch discharge to 3 (80)-gallon pressure tanks that discharge to a **Marker Meter** 1988 (serial No. 2751224) with a 1-inch discharge that measured 10-gallons in 20-seconds (0.07 cfs). There is a 2-inch main that comes out from the well, then splits and goes down both sides of the street. Off the 2-inch main are 1-inch service lines to each of the lots, with water service meters located at each of the lots on the north side of the road. Lot 3 shows a house, and the other lots are for R.V. parking, but could at some point in time be where homes could be built. There is a 50-foot **easement** that surrounds the POD. The **POD location** is in the SW corner of Lot 4. A Site Plan from James A. Sewell and Associates is included in the file.

CFS

(1) Theoretical (no length of time was given on the well log for the pump test, and no psi given on the Field Exam):

$[(8.8) \times (2\text{Hp}) \times (0.7)] / 5 \text{ ft} + (2.31 \times 20\text{psi}) = 0.24 \text{ cfs}$, at 30 psi it would be 0.165 cfs

(2) Physical Measure During the Field Exam (thru a Marker Meter 1988 Serial No. 2751224):

10-gallons in 20-seconds = 30 gpm $\times 0.00223 = \mathbf{0.07 \text{ cfs}}$ **Maximum Capacity of System**

(3) Pipe Conversion $Q = 5 \times 3.1416 \times [(2 \text{ inch}/12)/2] = 0.11 \text{ cfs}$ capacity of the main pipe (could be used for storage, but no additional information to verify this).

(4) Domestic 4-homes (Exhibit 12 shows max. internal at 0.10 cfs) allow 0.07 cfs (maximum capacity of system). Domestic use does not include lawn, garden, landscape, or other types of irrigation. That is included in the Irrigation Use component.

RECOMMEND TOTAL RATE OF DIVERSION: Domestic 0.07 cfs

Volume

Domestic (internal/external use): $1.2 \times 4 \text{ homes} = 4.8 \text{ af}$

Irrigation, per management on 2/28/2011, remove the irrigation component, and use Domestic internal/external use only.

$V_{ir} = 2.0 \text{ acres} \times 3.0 = 6.0 \text{ af}$

$V_{dr} = 0.07 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 29.7 \text{ af}$

$V = 6.0 \text{ af}$

RECOMMEND TOTAL ANNUAL VOLUME:

Domestic (4-homes) internal/external use = $1.2 \text{ af/home} \times 4 \text{ homes} = 4.8 \text{ af}$

RECEIVED

Form 2000
11/97

IDAHO DEPARTMENT OF WATER RESOURCES

IDWR/North

WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat _____ Long _____

1. WELL TAG NO. D D0013241
DRILLING PERMIT NO. _____
Other IDWR No. 564345

2. OWNER:
Name The Cove Group
Address 3509 N. Audubon
City Spokane State WA Zip 99208

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
W
X
S
E
Twp 56 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 29 1/4 NW 1/4 SW 1/4
Gov't Lot 1 County Bonner 10 acres 40 acres 160 acres
Lat R.P. 56N 05W 29S 400A
Address of Well Site _____

3 miles from downtown on river City Dietrich
(Give at least name of road + distance to road or landmark)
South side of river
Lt. 4 Bk. _____ Sub. Name Cove Group

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Feet	or Pounds	
<u>Bentonite</u>	<u>0</u>	<u>18</u>	<u>5</u>		<u>Temp Casing</u>

Was drive shoe used? ☒ ☐ N Shoe Depth(s) 28'
Was drive shoe seal tested? ☐ ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6</u>	<u>11</u>	<u>28</u>	<u>20</u>	<u>Steel</u>	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations _____ Method Telescoping
Screens Screen Type Johnson

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>88</u>	<u>93</u>	<u>25</u>		<u>6</u>	<u>SS</u>	☐	☐
<u>93</u>	<u>98</u>	<u>30</u>		<u>6</u>	<u>SS</u>	☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

45' ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☒ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>107</u>	<u>5'</u>	<u>30'</u>	<u>1hr</u>

Water Temp. Cold Bottom hole temp. _____

Water Quality test or comments: Good Clean

Depth first Water Encounter 45'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>8</u>	<u>0</u>	<u>18</u>	<u>Top Soil, Sand</u>		☒
<u>6</u>	<u>18</u>	<u>25</u>	<u>Sand</u>		☒
<u>6</u>	<u>25</u>	<u>45</u>	<u>Sand, silt</u>		☒
<u>6</u>	<u>45</u>	<u>65</u>	<u>Sand, silt</u>	☒	
<u>6</u>	<u>65</u>	<u>70</u>	<u>Sand, silt, layer of clay</u>	☒	
<u>6</u>	<u>70</u>	<u>76</u>	<u>clay</u>		☒
<u>6</u>	<u>76</u>	<u>80</u>	<u>Sand clean</u>	☒	
<u>6</u>	<u>80</u>	<u>85</u>	<u>Sand clean</u>	☒	
<u>6</u>	<u>85</u>	<u>90</u>	<u>Sand clean</u>	☒	
<u>6</u>	<u>90</u>	<u>95</u>	<u>Sand clean</u>	☒	
<u>6</u>	<u>95</u>	<u>98</u>	<u>Sand clean</u>	☒	
<u>6</u>	<u>98</u>	<u>100</u>	<u>Sand clay (Hard Pan)</u>	☒	

RECEIVED

OCT 20 2000

Department of Water Resources

Completed _____ Depth 98' (Measurable)
Date: Started 6/3/00 Completed 6-7-00

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Carl Pitts & Son's Drilling Firm No. 108

Firm Official Carl Pitts Date 6-7-00

and _____

Driller or Operator Steve Pitts Date 6-7-00

(Sign once if Firm Official & Operator)

56N 5W 29 FORWARD WHITE COPY TO WATER RESOURCES