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DEPARTMENT OF
WATER RESOURCES

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November 4, 2009

Attn: Gary Spackman, Director
Idaho Department of Water Resources
322 East Front Street
Boise, Idaho, 83702

To Whom It May Concern:

Since the hearing between myself and Pancheris in April of 2005 and subsequent "Conditions of Approval," much has been done and much has happened that was not planned. So, I am sending you this report to update the Department on our progress and challenges.

Geothermal Spring Permit 65-13912. Permit approved October 4, 2006. Proof of Beneficial Use due October 1, 2011.

* Project construction began before the permit was approved. Water was being diverted under the existing decreed water rights.* A geothermal pool was constructed to maintain continuous use of those rights which had been on legal hold for six years.

* Regarding water quality, we have returned water to its source. Water quality has not been changed by its diversion nine hundred feet through a plastic pipeline and back to Moore's Creek.

* A flow meter was installed by Terry Scanlan in August 2008 on the spring pump. He states that there is no lockable controlling works on the discharge piping, but the power supply can be locked out.

* Terry Scanlan provided to IDWR the plans and specifications for the spring diversion to the Department. No response came from the department regarding approval of same. As you will see by the enclosed data, continuous monitoring shows "no harm" to the Pancheri hot water supply due to the implementation of improvements at present. No commercial use has yet been established.

* Bill Carter of Musgrove Engineering analyzed the diversion works and delivery system for the improvements, and prepared a letter dated July 9, 2008, to address your requirement. Terry Scanlon submitted that letter to IDWR with a cover letter dated July 11, 2008. No response has been received from IDWR regarding the adequacy of Bill's analysis.

I request that you approve the spring diversion system plans and specifications based on Terry Scanlan's mailing to you on March 3, 2008, and Bill Carter's analysis of July 9, 2008.

Geothermal Well Permit 65-13913 Permit approved October 4, 2006. Proof of Beneficial Use due October 1, 2011.

* 65-1972 & 65-1913

* (Condition #8 of Permit 65-13912; Condition #7 of Permit 65-13913)

- * Well construction began July 2007.
- * We have not pursued water quality permits because the unused well will return water to Moores Creek. *Please confirm this.*
- * On April 7, 2008, you wrote a letter notifying me that totalizing flow meters were required on the well pump as well as the spring pump. They were installed in September 2007 and August 2008 respectively.
- * You approved a test plan for this geothermal well which was conducted by Terry Scanlan in late August and early September of 2008. This test could not be completed because of faulty equipment (I am still trying to get a refund for this). The data from a four-day test without interruption were supplied electronically to IDWR staff. Jill Hazlipp and Dan Matthews sent you a letter on February 26, 2009, questioning any conclusions based upon so brief a test. They wanted to do another test in 2009.

**Circumstances under which I have no control have intervened in 2009, to wit, the economy and, most particularly, the reactions of local people to the sewer proposal of the South Lake Sewer District.*

The Sewer Issue

Jeff Lappin of Valley County District Health required us to monitor for an appropriate place for a septic tank the winter of 2005 for our proposed development. In the way to find a good dry place, we also found a good wet one. So the rare phenomenon of a well without much iron in Valley County was located as well as a site for the septic field and tank for Phase I of our development. Those were properly installed for the three bedroom home with indoor and outdoor geothermal pools, geothermal heating system with back-up "Munchin" heater and air-conditioner. Jeff Lappin said that to effect the plan of more than one building that we envisioned for the spa development, we would need to hook on to a sewer system. An alternative individual system would be too expensive, especially with all the costs of the protest and subsequent hearing.

By 2005, a moratorium on building on the west of Cascade Lake had been invoked for lack of an approved plan to remove sewage. No proposed subdivisions could be approved without it. Meanwhile, building on the north end of the lake flourished with Tamarack in full swing.

In September of 2005, I began working with Jim Keller of Keller Engineering when he called me in quest of a site for a plant of the South Lake Sewer District, which had been working about a decade without success. We discussed a system to locate a plant on my land. Under the first proposal, I would have received the run-off water for irrigation purposes. Glen Holdren followed up on this idea in March of 2006. He prepared a contract that John Lane of the South Lake Sewer District brought me in June, but which John, as Chair of the District, did not approve. Soon thereafter, the District took the project to my neighbor with my blessing.

In November of 2006, the new mayor of Cascade, Dick Carter, wanted to extend the Cascade Sewer District to include the South Lake District and wrote a letter to the South Lake District. The Cascade ponds were badly in need of upgrading, pushing the EPA limitations. The mayor had found a similar system in Blackfoot where the ponds were upgraded to tenfold capacity using aeration and chemicals. The summer of 2007, my husband flew the mayor and his appointed guests at no cost to them other than gasoline to Blackfoot to see how that plant worked. I told Keller Engineering in August of 2007 (after renegotiating with them from April through July) that I was halting with them in order to throw my support to the city. One sewer made more sense and less expense. But the Cascade City Council refused to extend the limitations of the Cascade District beyond the city limits.

February 2008 I contacted Steve Thomas, who had proposed a major development on the west side of Cascade Lake, because I needed help to modify the proposal and negotiate with the South Lake Sewer District. We changed the nature of the agreement from irrigation to renting ground for monthly payments from the South Lake District. When they could not obligate future funds, we changed this to an Option to Purchase Agreement, letting them buy five and a half acres on Cabarton Road of my ranch to provide a site, since all their other options had caved. The price was based on other options they had entertained. On October 16, 2008, the final agreement and option was signed. A year later, a couple of weeks ago, the conditional use permit to establish a sewer on the option land was denied by Valley County. Subsequently, I have received notification that my agreement with the South Lake Sewer District is void.

As you can see, ***I have done everything possible, and conditions are indeed "beyond my control."***

Conclusion: My own losses of income and principal in 2008 - 2009 as an investor have required me to do all the "diligence." In June, Terry Scanlan provided me with a history of your requirements and our compliance. Since then no attorneys, hydrologists, or other professionals have been employed in my project. I have learned a lot by doing daily water monitoring and watching the sewer proposal unravel. *It is the hour to bide time.* I hope that I can resume, that a sewer proposal will arise successfully and that we can resume testing the geothermal well in order to use the water by 2011. However, ***I think it is probable that we may have to ask for an extension on the geothermal well, Geothermal Well Permit 65-13913, because of "circumstances beyond my control."***

* We have made great progress in completing Phase I of building and developing the spring, *Geothermal Spring Permit 65-13912*, which you are welcome to see at any time by contacting me.

* We have a great future plan developed by Sage Landscaping and Design Company in Boise that shows proposed locations of three four-plexes, a geothermal swimming pool, additional hot pools and another building to house men's and women's changing/bath rooms, sauna and steam rooms and meeting/retreat rooms. We have done a lot of landscaping, transplanting trees, installing drip irrigations systems, dug ponds and paid for a survey that separates the spa development from the rest of the ranch for future use.

In the meantime, we continue to do diligence monitoring water:

Monitoring Pancheri water with a flow meter. (taken from a report by T. Scanlan)

*A flow meter was installed about July 30, 2004 by Interwest Supply from whom I bought it. Pancheris identified the place where the pipeline was shallow and could be easily accessed. The first of July 2007, the meter (#1) stopped functioning.

*Terry Scanlan assumed that the failure was mechanical and asked me to buy another flow meter (#2), which Interwest Supply installed September 2007. Terry looked at #1 and realized it stopped because debris jammed the meter impeller. It functioned when cleaned. Then, in late June 2008, meter #2 stopped.

* Meter #1 was reinstalled in early July 2008. Interwest Supply determined that meter #2 had been jammed with small rocks. On September 12, 2008, the reinstalled meter #1 stopped functioning.

*Meter #2 was reinstalled by Interwest on June 15, 2009. The Interwest crew reported that there was substantial debris in the pipe, including rocks and fragments of PVC pipe. They speculated that the pipe had broken and been repaired upstream. The reinstalled meter #2 stopped functioning June 15 within minutes of being reinstalled.

*I started monitoring the water the summer of 2009 as soon as the Pancheri pipe was unplugged and the meter put in place. Following is a log of that activity:
(CM is me; GA is Gayle Allen, my husband; HI is Hector Ibarra, my hired man)

Date	Time	person	Pancheri meter	Spring meter	Darwin's temp.	Weir
6/25	1:26pm	HI	272680			
6/26	6:00pm	HI	274719			
6/27	4:15pm	HI	275073			
6/28	3:30pm	HI	276130			
6/29	11:00am	HI	277075			
6/30	9:00am	HI	278136			
7/1	3:29pm	CM	279583			
7/1	10:12am	CM		7726?		
7/1	3:10pm	CM			43.5c	
7/1	3:20pm	CM		77322		
7/2	8:40am	CM	280419			Weir is nearly
7/2	8:51am	CM		77513		covered on the
7/2	9:00am	CM			42.3	left, facing West
7/2	5:58pm	CM	280867			
Spring pump turned off at 6:30pm on 7/2.						
7/3	8:25am	CM	281517			
7/3	8:34am	CM		77776		

7/3	8:47am	CM		41.9c
7/3	8:40am	CM	waded in high irrigation boots to read weir at 8.6 (8 plus 3 small out of 5). This whole area is flooded, very difficult to walk for reading.	
7/3	7:25pm	GA		44.8c
7/3	7:25pm	CM	77897 (Carol found air sucking at spa house and checked meter to find pump on in field rotating water to creek. Turned off pump.)	
7/3	7:05pm	GA	281966	
7/4	7:45am	CM	282492	
7/4	7:55am	CM	77898 Pump is off this time.	
7/4	8:00 am	CM		42.3c

Observation: Darwin's valve is not very deep. The temperature seems to be affected by the heat of the air above it. That is, it is cold in the morning and higher when the day is hot in the late afternoon.

7/5	9:40am	HI	283529			
7/6	1:15pm	HI	284629			
7/7	5:04pm	HI	285841			
7/8	11:30am	HI	286693			
7/9	11:00am	HI	287812			
7/10	8:59am	CM	288797	CM	8:50am	42.5c
7/10	1:31pm	CM	288985			
Turned on pump 7/10 at 9:30 pm; turned water to ditch 11:30pm.						
Turned off pump 6:54am 7/11						
7/11	7:10am	CM	289727			
7/11	7:05 am	GA		78002	GA 7:57am	42.5c
7/12	6:30am	GA	290746	"	GA 6:25am	43.2c
7/12	5:30pm	GA	291237		GA 5:35pm	43.5c
7/13	6:30am	GA	291824		GA 6:35pm	43.0c
7/13	7:43 pm	GA	292417			
7/13	7:30pm	GA	Turned on spring pump.		CM 7:20pm	43.4c
	9:30pm	GA	Turned off spring pump.			

Note: The switch at the house has not been working as planned and as I accepted. Checking the pump at the spring showed it to be revolving after the house turn-off was turned off. So we are calling an electrician to find out how to remedy this. One must go to the power pole by the spring to turn the power off and on at this time.

7/14	8:35am	CM		78036	CM 8:40am	43.1c
7/14	8:50 am	CM	293008			
7/15	6:46am	CM		"	CM 6:42am	42.7c
7/15	6:55am	CM	293935		CM 6:42pm	43.8c
7/15	6:50pm	GA	294397			
7/16	7:33am	GA	294913		GA 7:25am	42.9 c

..Spring pump on at 12:30 and off at 9:00 pm

7/16	5:47 pm	GA	295343	78104 (5:50)	CM 5:55pm	43.8c
7/17	7:15 am	GA	295918		GA 7:05 am	43.3 c
Spring pump off and on for tests 7/17						
7/18	7:09 am	GA	296955	78175		43.3 c
7/19	7:15 am	GA	298021	"	GA 7:10am	43.5 c
7/19	7:54pm	CM	298571	"	TButler 7:45pm	43.8c
7/20	7:20am	GA	299075	"	GA 7:15am	43.3c
7/21	7:38am	GA	300052	"	GA 7:30am	43.1c
7/22	7:30am	GA	300910	"	GA 7:20am	43.1c
7/22	8:20pm	GA	301337	"	GA 7:50pm	43.3c
7/23	7:26am	GA	301717	78211	GA 7:17am	42.5c
7/24	11:00 am	HI	302787	"		
7/25	1:25pm	HI	303931	"		
7/26	11:00am	HI	304864	"		
7/27	10:17am	HI	305816	"		
7/28	8:00am	HI	306590	"	HI 4:48pm	44.2c
7/29	8:10am	HI	307491	78278 (9:03am)	HI 9:07am	43.6c
7/30	8:12am	HI	308449	78278	HI 8:35am	43.5c
7/31	8:12am	HI	309456	78306	HI 8:23am	43.5c
8/1	8:26am	HI	310404	"	HI 8:54am	43.4c
8/2	8:23am	HI	311286	"	HI 8:37am	43.4c
8/3	8:37am	HI	312119	78322	HI 8:12am	43.6c
8/4	9:30am	HI	313027	"	HI 9:42am	44.0c

We stopped monitoring the temperature in the Darwin Pancheri pasture per Joan Pancheri's request; Hector removed the ladder Leonard Pancheri loaned us, and returned it per my instruction on 8/4. I returned the thermometer to Terry Scanlan.

Date	Time	Person..	Flow Meter @ Duane's	..	Stop Watch	..	My Spring Pump
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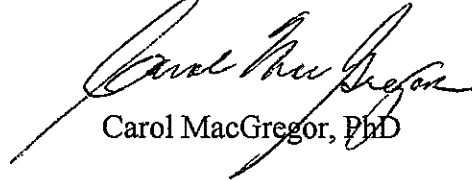
8/9	1:41pm	CM	318329 (1 revolution =1:23:78)				78322
8/19	6:24pm	CM	328182		6:14 pm		78339
8/26	3:22pm	HI	334642		3:30pm		"
9/2	3:45pm	HI	340689		3:38pm		78367
9/9	3:40pm	HI	347702		3:40pm		"
9/16	4:12pm	HI	355041		3:35pm		"
9/23	2:42pm	HI	361982		2:20pm		78367
9/30	3:14pm	HI	369461		3:22pm		78516
10/7	5:35pm	HI	375468		5:30pm		78516
Gayle turned on the spring pump Tuesday Oct 13 to heat house; off Tues Oct. 20.							
10/21	9:00 am	CM	386455		9:10am		81218
10/28		CM					

* Terry Scanlan asked me to continue monitoring as often as possible and has been in touch with Pancheris to advise them of this procedure. "The more information, the better

for all," he says. However, we shall not monitor temperature at the Darwin Pancheri ranch per their request.

I hope that you will respond to this report, send your responses to reports that you have received a long time ago, and keep me apprised. Although we live most of the time at Cascade, the best mailing address remains **1109 Warm Springs Avenue, Boise, Idaho 83712.**

Sincerely,

A handwritten signature in cursive script, appearing to read "Carol MacGregor".

Carol MacGregor, PhD

cc: Terry Scanlan
Jill Haizlipp
Julie Klein Fischer