



# COLORADO

Department of Public Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

February 7, 2018

JOHN OTT, ADMINISTRATOR  
ANIMAS WC, PWSID CO0134020  
PO BOX 1012  
DURANGO, CO 81302

RE: Notification of Final Evaluation of Surface Water Influence to Chapin Well (WL002), Hermosa Meadows Well (WL004) and Animas School Well (WL011) for the Animas WC, PWSID CO0134020, La Plata County

Dear Mr. Ott:

The Water Quality Control Division (Division) has completed an evaluation of the Animas WC (the system) Chapin Well, Hermosa Meadows Well and Animas School Well in accordance with Drinking Water Program Policy 3, *Evaluation of Ground Water Sources to Determine Direct Influence of Surface Water*. The result of this analysis is that the sources will be classified as groundwater.

This evaluation of the source as Groundwater Under the Direct Influence of Surface Water (GWUDI) was conducted by the Division utilizing data collected by the system from April 2017 through October 2017. The specific information for each water source evaluated for the system is presented in Table 1.

**Table 1:** Result of Initial GWUDI Evaluation for Animas WC (PWSID CO0134020)

WSF Number	Water System Facility (WSF) Name	Recommended Classification	Current Classification	Primary Justification	Suggested Additional Requirements
WL002	Chapin Well	Conditional GW	GW	Location near surface water	See Table 2
WL004	Hermosa Meadows Well	Conditional GW	GW	Location near surface water	See Table 2
WL011	Animas School Well	Conditional GW	GW	Location near surface water	See Table 2

Due to the fact that insufficient data was present to make a final GWUDI determination, the Division required the data presented in Table 2 to be collected.



**Table 2: Conditional Groundwater Minimal Monitoring Requirements**

Parameter	Location	Frequency	Sampling Dates
Conductivity and Temperature	WL004 and Animas River	2X per 7-day week	April 2017 through October 2017
Raw Water Total coliform (w/ <i>E. coli</i> )	WL004	1X month	April 2017 through October 2017
Microscopic Particulate Analysis (MPA)	WL004	3X as specified	1 <sup>st</sup> in Apr/May 2017, 2 <sup>nd</sup> in June/July 2017, 3 <sup>rd</sup> in Aug/Sept 2017
Aerobic Spores	WL004 and Animas River	3X as specified	1 <sup>st</sup> in Apr/May 2017, 2 <sup>nd</sup> in June/July 2017, 3 <sup>rd</sup> in Aug/Sept 2017 Concurrent with MPAs

Please note that the data collected from WL004 is considered representative of the water quality of WL002 and WL011.

**Results of Evaluation**

The Division analyzed the data collected as well as took into account the history of the wells, the well completion logs, the proximity to surface water, and the overall pumping rate of the wells in order to make a final determination of GWUDI. Table 3 summarizes the data collected by the system and analyzed by the Division. Figures 1 through 4 further show the results of the data collection for temperature and conductivity.

**Table 3: Summary of Data Evaluation**

Parameter	Result	Conclusion
Temperature and Conductivity	The data does not show significant variations of temperature and conductivity over short periods of time.	The temperature and conductivity data indicates a low risk of surface water influence on WL004.
Total coliform (w/ <i>E. coli</i> )	All results showed no presence of total coliform or <i>E. coli</i> .	The total coliform and <i>E. coli</i> results indicate a low risk of surface water influence on WL004.
MPA	4/3/17 Score 0, Low Risk 6/7/17 Score 0, Low Risk 8/2/17 Score 0, Low Risk	The MPA results indicate a low risk of surface water influence on WL004.
Aerobic Spores	WL004 4/3/17: <1 CFU/mL 6/7/17: <1 CFU/mL 8/2/17: <1 CFU/mL Animas River 4/5/17: 7.6 CFU/mL	The aerobic spore count results indicate a low risk of surface water influence on WL004.



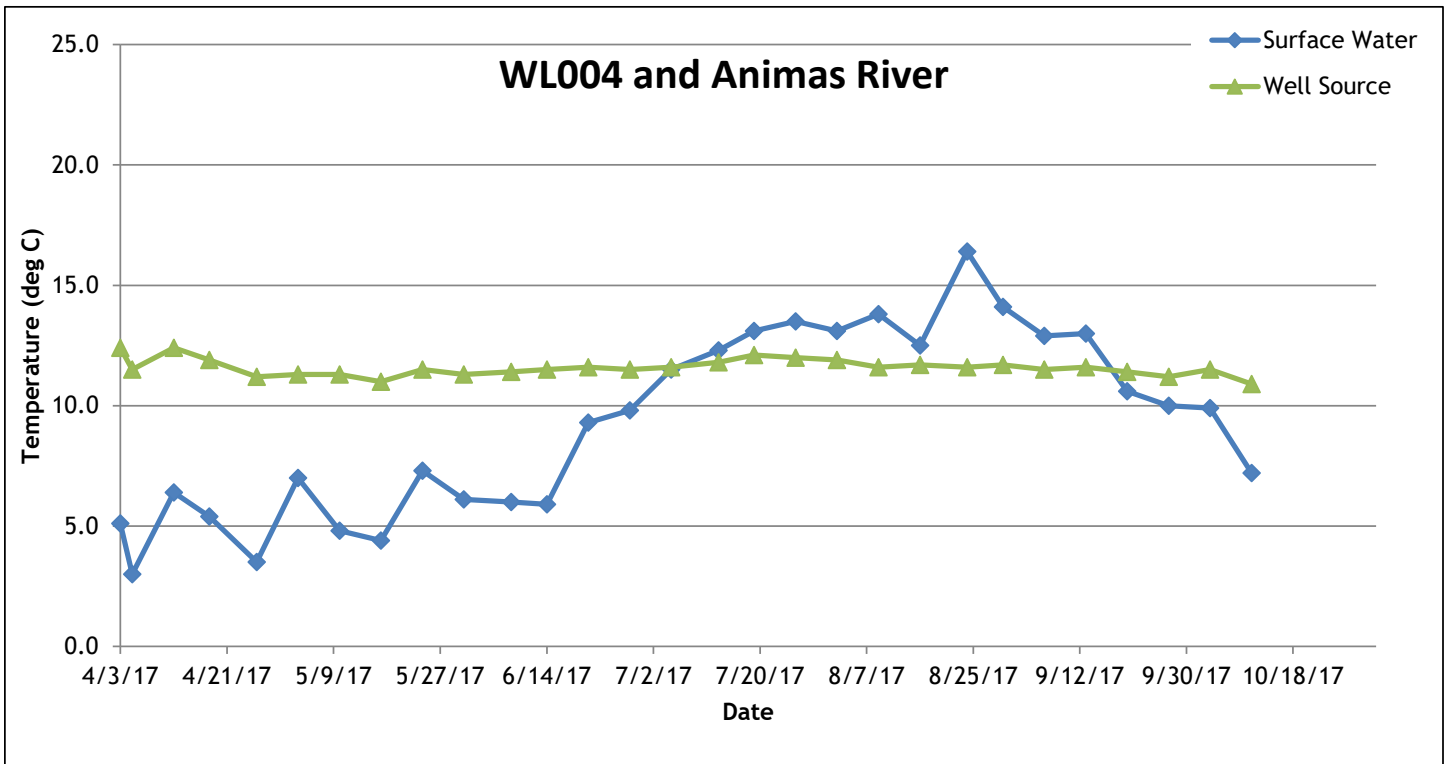


Figure 1: Temperature monitoring on WL004 and Animas River

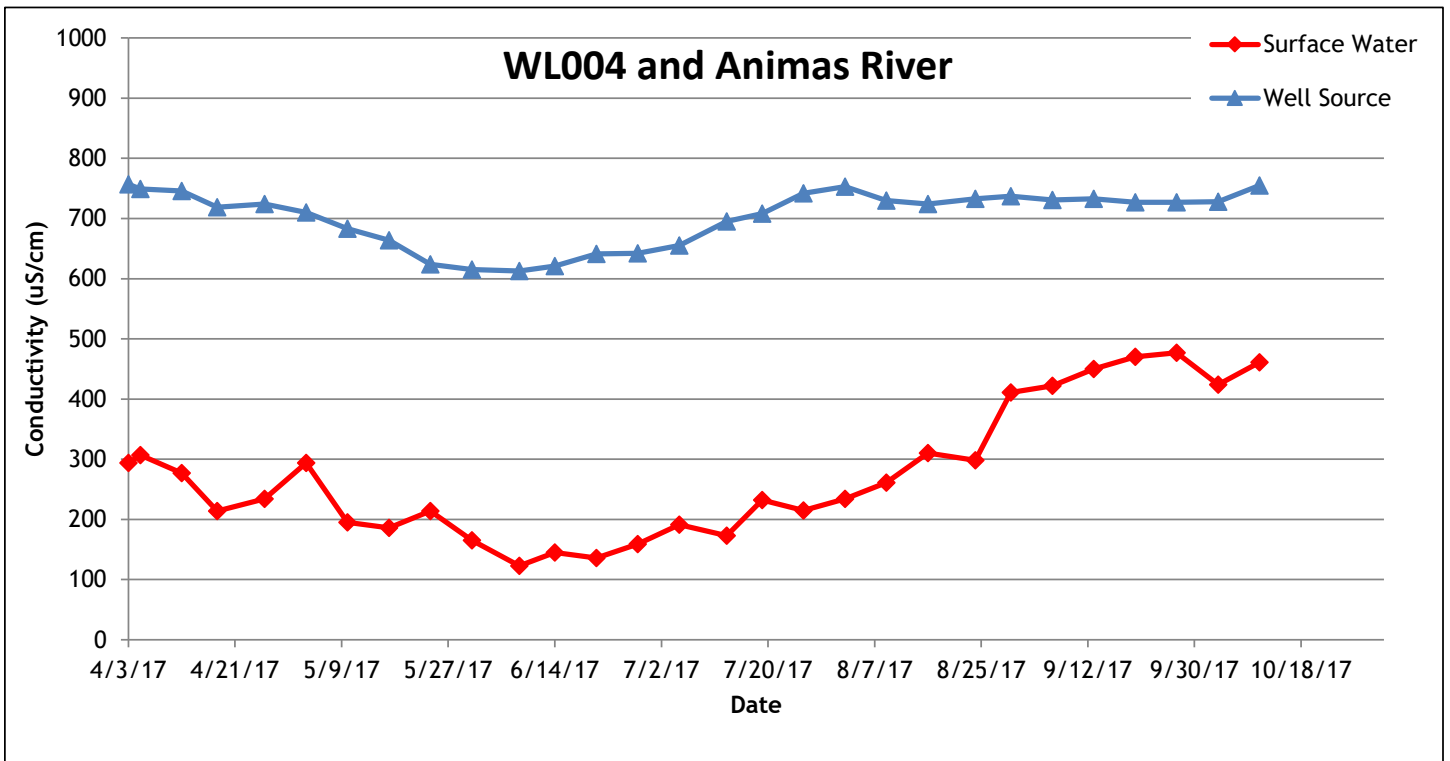


Figure 2: Conductivity monitoring on WL004 and Animas River



### Evaluation Conclusions

Based upon the data collected by the system and evaluated by the Division, the Division finds that the Animas WC water sources (Chapin Well, Hermosa Meadows Well and Animas School Well) will be regulated by the Division as groundwater (GW) sources. The Division will consider this evaluation final unless evidence is presented that conditions with Chapin Well, Hermosa Meadows Well and Animas School Well have changed to warrant further investigation with regard to the influence of surface water to the wells.

If you have any questions, please contact me by phone at 303-692-3527 or via e-mail at [bryan.pickle@state.co.us](mailto:bryan.pickle@state.co.us).

Sincerely,



Bryan Pickle  
Senior Groundwater Evaluation Specialist  
Compliance Assurance Section  
Water Quality Control Division  
Colorado Department of Public Health and Environment

File: PWSID No. CO0134020, La Plata County, Community - Groundwater