

Wm. CURTIS WELLS & CO. / *consulting geologists*  
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October 17, 2006  
Revised: May 4, 2007

Mr. Stan Searle  
Silverado Ranch LLC  
2500 East Highway 105  
Monument, CO 80132-8366

Re: Continued Ground Water Consultation, Silverado Ranch, El Paso County, Colorado.  
Job No. 6119/6273

Dear Stan:

At your request I have reviewed my files concerning the 320-acre, proposed Silverado Ranch development, the plan for which is about to be submitted to the county planning department. The approximate outline of this property in Section 16, Township 15 South, Range 63 West, is shown on the attached Figure-1. As proposed, the property is to be divided for 64 single family homesites each serviced with an individual well and non-evaporative septic systems.

This property is within the Upper Black Squirrel Creek Ground Water Management District and the ground water beneath the property is administered by the Colorado Ground Water Commission. The only Denver Basin aquifer beneath the property is the not non-tributary Laramie Fox Hills formation. The sandstones in this aquifer should be at a depth of 200 through 450 feet below the ground surface. Domestic wells drilled into this formation may yield about 10 gallons per minute which should be adequate for single family homes.

On December 11, 2002, the Commission issued Determination of Water Rights No. 325-BD for the Laramie Fox Hills formation beneath this property. The Commission found that the Laramie Fox Hills aquifer should contain about 7,680 acre feet of water. As you know, the County's 300-year water supply policy controls how this ground water is to be used if you develop the property for homes. Over 300 years, the ground water can be used at a rate of 25.6 acre feet per year. If the water is used at a rate of 0.4 acre feet



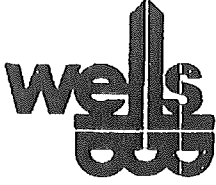
per year per home, up to 64 homes can be platted. This amount of water would allow an in-house use of 0.3 acre feet per year and the remaining water could be used to irrigate 1,700 square-feet of lawn or garden as shown on the table below.

	Amount/units	Use Rate (af./yr.)	Total (af./yr.)
In-house	64	0.30	19.2
Landscape Irrigation	2.53	2.5 per acre	6.3
Total			25.5

Although the Laramie Fox Hills ground water is considered not non-tributary, no formal Commission issued replacement plan is needed. Now that the Commission has issued the Laramie Fox Hills Determination of Water Rights well permits for the proposed wells can be obtained. The property is more than one mile from the aquifer/stream outcrop, thus the replacement obligation is just four percent of the ground water pumped. Individual, non-evaporative septic systems will return far more water to the shallow sandy soils beneath the land than is required.

The quality of the water produced from Laramie Fox Hills wells is normally adequate for drinking purposes. The chemical analysis of this water from an on-site stock well is listed on the attached Table I. As shown, the mineral constituents in the water are all below drinking water standards. Iron is commonly present in Laramie Fox Hills ground water at concentrations slightly higher than the drinking standard, thus prospective home buyers should be advised iron treatment may be necessary.

In your development planning there is three things that you should keep in mind. First, the development homesites should be platted so that individual wells can be at least 400 feet apart to avoid mutual well to well interference. Secondly, one of the initial wells needs to be geophysically logged and a copy of the log will have to be forwarded to Colorado Division of Water Resources. Lastly, as each well discharge needs to be metered, the development HOA should be responsible for recording the annual meter readings as these may have to be transmitted to the Division.



I trust this information satisfies your immediate needs. If you have questions, please call.

Very truly yours,

WM. CURTIS WELLS & CO.

A handwritten signature in black ink, appearing to read "Wm. Curtis Wells", is written over a horizontal line.

Wm. Curtis Wells, CPG  
Consulting Ground Water Geologist

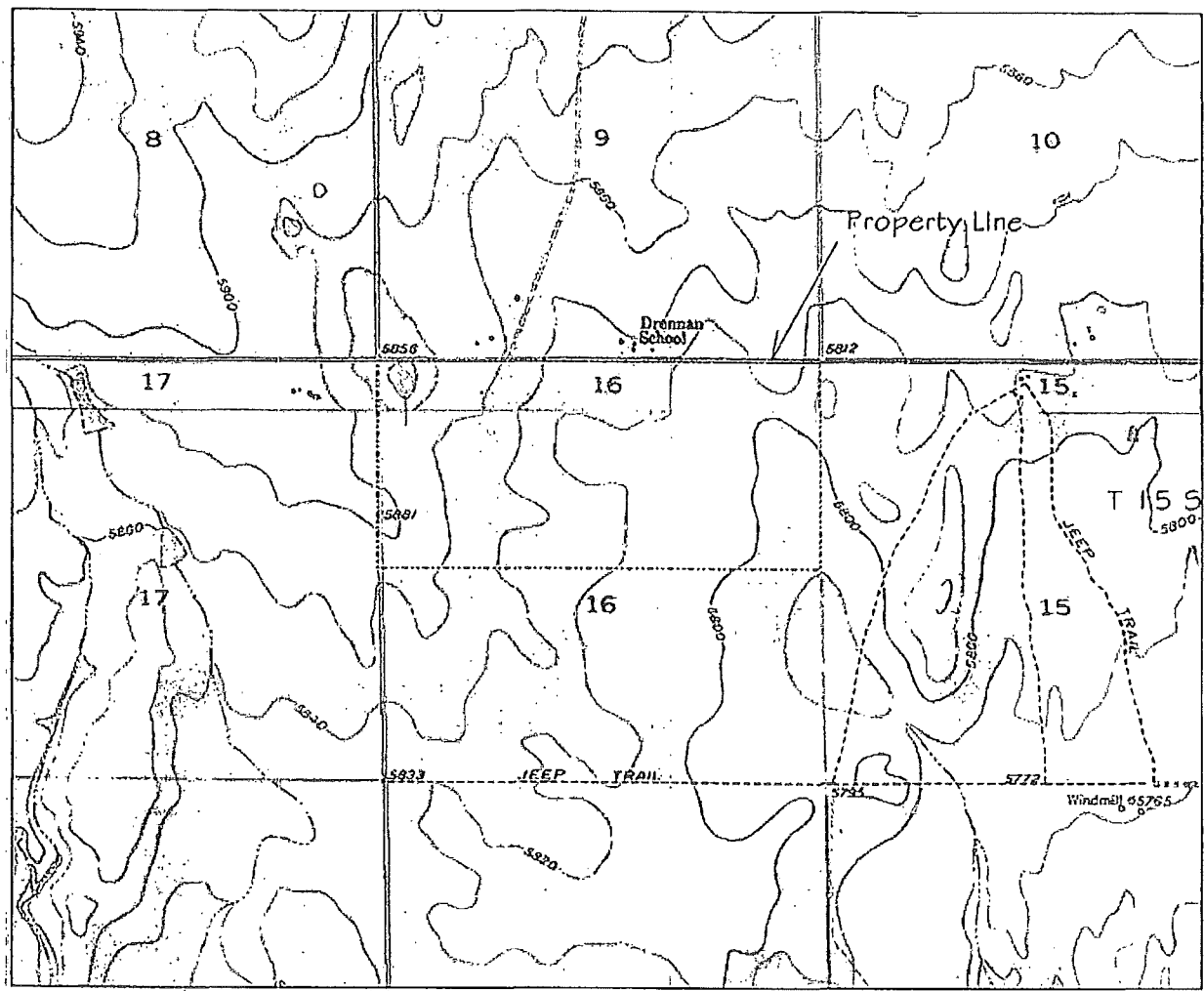
cc: Dean Mabe (e-mail)

Table I  
Ground Water Quality  
Silverado Ranch Laramie Fox Hills Stock Well

Mineral/Compound	Concentration (mg/l)	
		Upper Limits Drinking Water Standards
Sodium	170	
Bicarbonate	150	
Sulfate	25	250
Chloride	15	250
Nitrate-N	3.1	10
Fluoride	0.33	2.4
Hardness	150	
Arsenic	BDL	0.05
Barium	0.047	1.0
Cadmium	BDL	0.01
Chromium	0.0043	0.05
Lead	0.016	0.05
Mercury	BDL	0.002
Selenium	0.00635	0.01
Silver	0.063	0.05
Pesticides		
Endrin	BDL	0.0002
Lindane	BDL	0.004
Methoxychlor	BDL	0.1
Toxaphene	BDL	0.005
Herbicides		
2,4-D	BDL	0.01
2,4-5TP(silvex)	BDL	0.01
Gross Alpha	5.77	15
Gross Beta	5.3	50

BDL - Below Detection Limits

R 63 W



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Location Map  
Silverado Ranch

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Figure 1



Scale: 1" = 2000'