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August 12, 2014

RECEIVED
AUG 12 2014
DEPARTMENT OF
WATER RESOURCES

Tim Luke
Rob Whitney
Compliance Bureau
Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720-0098

Re: Water District 61E Complaint

Dear Messrs Luke and Whitney:

As you are aware, this law firm represents the interests of Double Anchor Ranches, Inc. ("Double Anchor"), 5714 W. Double Anchor Drive, Glens Ferry, ID 83623. Double Anchor owns and farms land in the Cold Springs Creek drainage basin that is organized under Idaho law as State Water District 61E. I am writing on behalf of my client to complain about the irrigation and water diversion practices of their upstream neighbor - Casa Del Norte, LP ("CDN"), operated by John and Theresa McCallum. These practices have injured my client's Cold Springs Creek water rights for many years, and continue to injure those rights during the current irrigation season as described in detail below.

I. Background

Double Anchor was relieved to receive a copy of CDN's June 30, 2014 letter to IDWR withdrawing its pending water right transfer application no. 78272, requesting strict Watermaster enforcement of the delivery of water rights from Cold Springs Creek, and offering its cooperation with IDWR to ensure proper distribution of water rights in priority. Double Anchor similarly requests strict control of the water rights in Water District 61E, together with immediate and ongoing accurate measurement of all diversions to ensure strict and accurate water administration and enforcement. Also needed is the immediate collection and analysis of stream flow and ground water pumping data to establish and support the existence and timing of the "futile" call regularly asserted against Double Anchor each year by CDN.

My client does not agree with the assertion in CDN's transfer withdrawal letter that "Double Anchor cannot determine any impact" that the transfer might have on its rights. Double

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given the past and current diversion and irrigation practices by CDN - many of which are discussed below, and given the almost complete lack of monitoring, it is impossible to determine the "status quo" of the existing water rights diversions by CDN on Cold Springs Creek and thus impossible to determine the precise full impacts of the proposed transfer. It appears to us that CDN's transfer application was an attempt to legitimize a series of CDN's long-standing illegal diversions that Double Anchor wants terminated. Nonetheless, given the apparent attitude of cooperation expressed in CDN's withdrawal letter, my client is hopeful that the parties and IDWR will be able to work together toward a comprehensive understanding of the basin such that all water rights may be properly administered. Regardless, no new transfer application that might be filed by CDN should be considered by IDWR until the issues discussed in this complaint are resolved.

II. Overview

Double Anchor is located downstream of CDN on Cold Springs Creek in Elmore County (please see Exhibit A). Double Anchor Ranches owns water rights that in total authorize the diversion of 18.36 cfs from Cold Springs Creek (please see Exhibit B). Those of immediate concern to Double Anchor are water right numbers 61-323 and 61-10349 that together authorize the diversion of 2.26 cfs from Cold Springs Creek. These two water rights have priority dates of 5/1/1872 and 5/1/1873 respectively. In priority on Cold Springs Creek, they are junior only to CDN's water right numbers 61-11906 (1.54 cfs for stockwater purposes - priority date of 5/18/1870) and 61-228 (1.84 cfs for irrigation purposes - priority date of 6/30/1870). These two water rights are the minimum lifeblood of Double Anchor's multi generation family farming and ranching operations.

Over the past seven years or so, my client has rarely received its early priority water rights after June 1, even though it had regularly received such water rights prior to the McCallums' taking over the irrigation of the property. During the current year (2014), with more Watermaster oversight Double Anchor received a portion of its first two priority water rights through almost the entire month of June, even though it was a relatively poor snow year (please see Exhibit C). Double Anchor desires to continue to receive these extremely important water rights under the prior appropriation system in the future.

III. Offending Diversion and Irrigation Practices

Double Anchor retained Hydro Logic, Inc. ("HLI") to assist it in understanding and analyzing CDN's transfer application no. 78272 (now withdrawn, as discussed above). Over the period of time HLI has worked with Double Anchor it has collected substantial quantities of data including photographs, stream flow data, and observations of diversions and practices on both the CDN and Double Anchor properties. The discussion herein is based upon those data and upon the analyses of that data by HLI. Thus to help it receive its early priority water rights,

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Double Anchor brings to IDWR's attention the following documented concerns it has with CDN's diversion and irrigation practices:

1. Irrigation of areas without water rights. Please refer to the enclosed preliminary¹ map showing the diversion system on the CDN ranch - Exhibit A. There are approximately 200 acres of CDN lands that have previously been irrigated without any appurtenant water rights whatsoever. CDN's irrigation of these lands has deprived Double Anchor and other Cold Springs Creek water right holders of their valuable property rights, and has resulted in damage to their property values and livelihoods.

Double Anchor understands that during some irrigation seasons, including the 2014 irrigation season, CDN has rented groundwater through the Idaho Water Resources Board's Water Supply Bank to irrigate at least a portion of these lands. However, as discussed below, HLI's available data show the diversion of ground water from the CDN wells in Cold Springs Creek drainage basin impacts and depletes the flows of Cold Springs Creek such that ground water rights should be administered in priority with surface water rights. The withdrawal of additional ground water from this basin through the introduction of rented ground water rights increases the impacts and depletions of the flows of Cold Springs Creek, and should be immediately curtailed and not considered again in the future.

A. Sections 8 and 17, T4S R9E. A large pivot sprinkler ("Ryegrass Pivot") covers much of the southern half of Section 8 and the northernmost portion of Section 17. Much of Ryegrass Pivot is covered by water right no. 61-301B - a geothermal groundwater right diverted from a well (the "Walker" well) located in the NE¼ of Section 8 (see Exhibits A and D). Water right 61-301B also authorizes irrigation of lands north of Ryegrass Pivot in this area running generally north and east from the area covered by Ryegrass Pivot towards the location of the geothermal well. However, approximately 56 acres in the western portion of the area covered by Ryegrass Pivot are not authorized to be irrigated pursuant to *any* water right according to IDWR's water right database (although these lands are covered this year by a Water Supply Bank Rental Agreement as discussed further below). This despite the fact that these acres are currently being irrigated and have been irrigated by CDN in the past. (Please see Exhibit D, showing irrigation of the area during the years of 2009 and 2011).

Additionally, the "Walker" geothermal well that is the point of diversion for

¹ This map is a compilation from three site visits to the CDN ranch by Ed Squires. The CDN diversion and distribution system is complex - commingling surface water, cold ground water, and geothermal ground water pursuant to 24 separate water rights. As such, this map represents the current level of understanding of the CDN water system but is probably incomplete.

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water right no. 61-301B has not been used for that purpose this year according to regular observations from site visits by HLI scientists who have regularly photographed the diversion works leading from the well and the associated storage reservoir (See Exhibit E). Photos from 2014 establish that the Walker geothermal well has not been used during the 2014 irrigation season both because the configuration of the well head and pipes did not change from March 13 to July 30; and because no pumping plant is available to divert water when the artesian pressure of the well dropped below ground level later in the irrigation season. HLI hydrologists have also established that the temperature of the runoff from the offending acres irrigated by the pivot sprinkler is 68.5 degrees F, far too cold for water that would have been originally diverted from the "Walker" geothermal well - which produces ground water that is too hot for direct irrigation use without cooling. Thus, we conclude that cold water is either being pumped from Cold Springs Creek, from the commingled CDN surface water reservoirs, from one of CDN's cold groundwater wells, or from all of the above. In any case, the Ryegrass Pivot area is being irrigated with water that would otherwise remain in the Cold Springs Creek drainage, be available to fill Double Anchor's senior water rights, and keep the Cold Springs Creek bed wetted against a premature futile call declaration caused by CDN's illegal practices. Currently, it is not possible to separate the water sources from which this irrigation demand is being supplied; thus monitoring of these separate sources is required. Not only are such diversions damaging to Double Anchor, monitoring by HLI suggests that the groundwater pumping from CDN cold water wells depletes the stream flows in Cold Springs Creek as will be explained later in this correspondence. (See Exhibit C.)

The entirety of the area under the Ryegrass Pivot sprinkler is that for which CDN and IDWR entered into a Water Supply Bank Rental Agreement on April 17, 2014 for the rental of irrigation water for a period of four years. One of the conditions under which the rental agreement was entered into is condition No. 11: "The renter must diligently pursue a permanent water right to provide for the uses authorized under this rental agreement." Yet, CDN cannot legitimately assert it is pursuing a permanent water right for this area as it withdrew its transfer application seeking to extend its surface water rights and cold groundwater rights for the irrigation of this area. Accordingly, the Water Bank Rental Agreement should be considered breached, should be rescinded by IDWR, and groundwater pumping under this Agreement should be immediately curtailed.

B. NW ¼ of Section 21, T4S R9E. There is a ¼-mile diameter pivoting sprinkler covering almost the entirety of the NW¼ of Section 21 - a total of approximately 128 acres. This pivot has no water right appurtenant to it according to IDWR's database, and it was not historically irrigated according to Double Anchor. Historical aerial photography establishes the past illegal irrigation of this acreage. (See Exhibit D). Double Anchor has previously complained to IDWR about this illegal diversion without a satisfactory response. (See Exhibit F).

C. NESW ¼¼ of Section 9, T4S R9E. The most northwesterly corner (approximately 14 acres) of a large irrigation pivot covering portions of Sections 9 and 18 has no water rights appurtenant to it according to the IDWR database. Again, this area has been previously irrigated by CDN. (See Exhibit D).

D. S½ of NW¼ of Section 16, T4S R9E. A pivot covering 47 acres has been installed in this area within the past two years or so. (See Exhibit P) The problem with this pivot is two-fold: (1) there has been no irrigation in this area since at least 1998 (see Exhibits D, P), raising the potential of forfeiture of any existing water rights, and (2) the ground water rights that are appurtenant to this area (61-2199A, 61-11887A and 61-301A) permit the maximum of irrigation within these two ¼¼ sections of 16.2 acres - far below that which is now irrigated. Obviously, the irrigation of most of the acreage under this pivot is illegal and should be curtailed.

2. Out of season diversions. On February 14, 2014, Kelly Riggs accompanied Watermaster Rich Neal to the CDN main diversion on Cold Springs Creek. They observed that CDN's upper main diversion on the west side of Cold Springs Creek was full and overflowing - diverting Cold Springs Creek water prior to the beginning of the irrigation season. Indeed, Mr. Riggs and Mr. Neal found that two large diversions from Cold Springs Creek owned by CDN were washed out and overflowing; not to the natural Cold Springs Creek bed, but instead onto the rocky flat north of CDN's Elk Pen and east of Cold Springs Creek. (See Exhibit G). These unauthorized diversion from Cold Springs Creek served to deplete the natural creek bed that conveys Cold Springs Creek waters to Double Anchor and other downstream water users because they reduce and foreshorten the natural spring run-off wetting of the Cold Springs Creek bed and the underlying floodplain gravel. Neal and Riggs estimated that 6 cfs (2,700 gpm) was being diverted through the Elk Pen/4-Mile Ditch weir with another 1 cfs (450 gpm) bypassing (escaping) the Elk Pen/4-Mile Ditch weir onto CDN lands. (See Exhibit G). Similarly, CDN's 4-Mile Ditch was full and flowing to CDN's upper Ryegrass Creek reservoir out-of-season with no livestock observed in that area. Although there is no way to determine how long these illegal diversions had been taking place, Double Anchor believes the diversions may have occurred all winter. Mr. Riggs and Mr. Neal also observed that the CDN main storage reservoir was ¾ full and its lower Pivot 4 Reservoir was completely full even though the irrigation season had not yet commenced. (See Exhibit H).

Although CDN owns a stockwater right authorizing the diversion of water into the Elk Pen Ditch and the 4-Mile Ditch, these ditches were full to the banks and overflowing onto CDN lands - far beyond what would be necessary for a few elk (the only stock observed in the area at the time). HLI has observed that less than 30 gallons per minute is necessary to wet either of these ditches from their points of diversion to the Elk Pen and upper Ryegrass Creek reservoir in late summer - more than adequate for stockwatering purposes. Certainly it is not necessary for either ditch to be bank-full or above in February (or indeed in any other month of the year).

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In addition to being illegal, these out-of-season diversions prevent the creek bed from being wetted and interferes with the natural flow of Cold Springs Creek downstream to Double Anchor and other senior water right holders, both in the short-term and in the long-term.

3. Diversions to Ryegrass Creek Drainage

A. Stockwater Diversions - no stock. CDN owns stockwater right no. 61-11906 authorizing diversions of water from Cold Springs Creek to virtually every location on its ranch, including areas in the neighboring Ryegrass Creek drainage. The so-called "4-Mile Ditch" diverts water to this drainage - as discussed above, Mr. Neal and Mr. Riggs observed that this ditch was overflowing its weir on February 14, 2014. (See Exhibit G). On March 13, 2014, Ed Squires of HLI took photos of the ditch running from Cold Springs Creek to the Ryegrass Creek drainage. (See Exhibit I). The only right authorized to be diverted through this ditch is stock water right no. 61-11906. Despite diversion of the water at this time, no stock were observed in the area. That the large volume of flow observed and documented by Mr. Neal and Mr. Riggs on February 14, 2014 was transported all the way to the CDN upper storage reservoir in the Ryegrass Creek drainage is evidenced by the washed-out diversion structure at that reservoir, a photograph of which was also taken by Mr. Squires. (See Exhibit J).

B. Diversions to Storage. On March 13, 2014, Ed Squires of HLI also took photos of the upper reservoirs on the CDN property in the Ryegrass Creek drainage into which the aforementioned 4-Mile Ditch from Cold Springs Creek was running. (See Exhibit K). As can be seen in the photos, the reservoir was brim full on March 13, 2014, but progressively less full from steady evaporation as the year progressed. Photographs of the adjacent Walker geothermal ground water well were also taken over the same time frame, but judging from the well head conditions observed, there have been no apparent diversions from the Walker geothermal well. (See Exhibit E). Moreover, the Walker geothermal well's above ground artesian head (flowing well without an installed pumping plant) appears to go away later in the irrigation season, thereby precluding its use for irrigation. Regardless, to our knowledge, there are no water rights authorizing any storage in this area at all.

C. These diversions of Cold Springs Creek to the Ryegrass Creek drainage not only remove the primary surface water source from the Cold Springs Creek drainage (thereby preventing Double Anchor from diverting its in-priority water rights), but also further deprive the Cold Springs Creek drainage of return flows and infiltration of non-consumptively used water that would otherwise add to stream flows lower on the creek later in the season.

4. Inadequate Monitoring of Commingled Sources. Water from cold water wells, Cold Springs Creek and geothermal wells are all diverted into CDN's main diversion pond. Water

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from the various sources is commingled in the diversion pond and then pumped to various locations on the ranch. Other than the Elk Pen flow-meter (discussed below), no measurements are made of water diverted into the pond, nor are any measurements taken of water diverted out of the pond. Because the various sources are commingled, and because CDN's uses of the different sources on various places of use do make a difference to downstream water users in receiving their water rights, each of the commingled sources, including ground water, must be measured. Indeed, Double Anchor and HLI believe the hydrologic monitoring of Cold Springs Creek establishes that ground water pumping by CDN depletes surface water flows in Cold Springs Creek, further underscoring the need to monitor the timing, diversion rates and pumped volume of CDN's wells.

5. Inaccurate Electronic Flow-meter. On March 13, 2014, Ed Squires of HLI estimated the flow through the CDN main diversion from Cold Springs Creek at the point of the CDN "bubbler" facility (see Exhibit L) at 3 cfs (1360 gpm) using a standard Bureau of Reclamation equation to derive flow from a vertical pipe. The calculations and measurements are attached as Exhibit M. On the same day, approximately 15 minutes later, Mr. Squires observed that CDN's Elk Pen electronic flowmeter was measuring the water flow through the same diversion pipe at 702 gallons per minute, or very close to half the flow measured at the bubbler. The Watermaster has made similar measurements with the same observations of the flow-meter showing approximately one-half the observed flow through the bubbler. On Mr. Squires' two other site visits, he observed that the flow-meter was not properly working; he questions the type suitability, location and viability of the installed flow meter for the intended purpose. A second flow-meter installed near CDN's "Pivot 4" diversion has not been in working condition on any site visits by HLI, Kelly Riggs and/or the Watermaster. (See Exhibit N)

IV. Discussion and Analysis

1. CDN's Illegal Practices and Unauthorized Diversions

CDN's unauthorized diversions and illegal irrigation practices must be curtailed to allow for proper administration of senior water rights of downstream users. CDN's current practices deprive Double Anchor and other downstream users of water to which they are entitled, and contribute to an artificially early futile call that has been asserted against Double Anchor both in the past and during this 2014 irrigation season. It is the duty of the Department of Water Resources to ensure distribution of water in water districts in accordance with the prior appropriation doctrine. I.C. §42-602. CDN's current practices and diversions have been and are in direct conflict with the prior appropriation doctrine. Accordingly, it is the duty of the Department of Water Resources and the District 61E Watermaster to ensure that CDN's illegal and improper practices and diversions no longer occur.

Illegal out-of-season diversions, illegal out-of-drainage-basin diversions, illegal irrigation of lands, unaccounted for commingling of water sources and uses, dysfunctional diversion works, and inaccurate monitoring individually and in combination serve to create an artificial

and premature “futile call” situation on Cold Springs Creek that deprives downstream water users of their in-priority water rights.

2. Observation/Monitoring of Stream Flows

Double Anchor commissioned HLI to monitor Cold Springs Creek during part of the 2014 irrigation season and to analyze the information obtained. The locations of the HLI monitoring points on Cold Springs Creek are shown on the map (Exhibit A) as “BLM Open Creek” - above the CDN property before any diversions from the creek occur; “Ross Rd. Culvert” - underneath Ross Road, a public right of way cutting across the CDN property at approximately the midpoint of the length that Cold Springs Creek traverses the CDN ranch; and “Riggs’ Diversion and Weir” - the Double Anchor diversion point below the CDN property. The data obtained from these monitoring points, along with temperature data have been graphed on Exhibit C.

A. Double Anchor’s Two Earliest Priority Cold Springs Creek Water Rights Can be Filled Well into the Irrigation Season

The data establish that water was available to fill at least some portion of Double Anchor’s two early priority water rights at its weir throughout the monitoring period - even when flows of Cold Springs Creek above the CDN diversion dropped below 5 cfs - and even when flows at the Ross Road Culvert had been prematurely and artificially dried up by CDN as of May 29.

B. CDN Pumping Affects Cold Springs Creek Stream Flows

The stream flow data from the Ross Road culvert shows a marked change from a previous flow pattern starting on May 22. (See Exhibit C). Prior to that date, CDN was diverting at least its senior priority Cold Springs Creek water right no. 61-228 and Double Anchor was able to divert its first two priority rights approximately one-half of the time on a daily basis² up to May 22. Thus Double Anchor was not receiving its full complement of in-priority water rights while CDN was receiving its first priority right (and perhaps more). Beginning on May 22, stream flows at the Ross Road culvert, which had previously been in lockstep with the stream flows above the CDN diversions, began to fluctuate in a radically different pattern due to additional ground water pumping diversions by CDN. This daily pumping cycle resulted in the complete depletion of the Cold Springs Creek stream flows at the Ross Road culvert, and an immediate significant decrease in water available to Double Anchor. HLI interprets the radical change in daily fluctuation of Cold Springs Creek flows as drawdowns (induced recharge) from pumping

² HLI’s monitoring clearly shows a daily fluctuation in Cold Springs Creek flows that is related to evapotranspiration and uptake of water into trees in the forest of the upper creek. This is an important observation because the Water Master should set the diversions to allow for the various water right amounts to be delivered at the low flow of the daily variation.

of CDN's ground water wells; showing a direct hydraulic continuity between ground water and surface water in Cold Springs Creek. According to HLI, this interconnection can be explained by the local sub-surface geology in the area. HLI further contends that the hypothesized hydraulic interconnection would be an easy circumstance to confirm by inexpensive testing and sampling using existing installed pumping plants and stream monitoring instruments.

In summary, the wide fluctuations in Cold Springs Creek measured at the Ross Road Culvert are due to either pumping from Cold Springs Creek itself, or from groundwater that is in hydraulic continuity to Cold Springs Creek. Regardless of the source from which the water is pumped, the fact is that the pumping reduced the flows to Double Anchor's weir³, thereby depriving Double Anchor of the water to which it was entitled pursuant to its water rights.

The need to separate and account for the various water sources diverted by CDN, in and of itself, is enough to warrant monitoring of water levels, pumping rates, and pumped volume from CDN's ground water wells. The strong evidence that ground water pumping directly affects the flow of Cold Springs Creek underscores this need.

Finally, any ground water production under State Water Supply Bank rental agreements from wells in the Cold Springs Creek drainage should be curtailed immediately as discussed above. If IDWR will not curtail IWSB rental agreements for the remainder of the 2014 irrigation season, the diversions (wells) through which the rented water is withdrawn should be monitored beginning immediately with a totalizing and instantaneous flow-indicating flow-meter. The use of rented ground water in 2015 and beyond should not be permitted both because of the impacts and depletions it causes to Cold Springs Creek, and because CDN is not diligently pursuing an alternative water right as required by its Water Bank Rental Agreement - as discussed above. Even if the rented groundwater were not impacting and depleting Cold Springs Creek, and even if CDN were diligently pursuing an alternative water right, the particular groundwater right being rented this year has not been shown to be hydraulically connected to the groundwater underlying the Cold Springs Creek basin - thus the current production of rented groundwater should also be immediately curtailed for this reason as well.

3. Needed Study of Cold Springs Creek Drainage Basin

CDN has consistently asserted the existence of a futile call on Cold Springs Creek over

³ Recall that CDN was receiving its first priority stockwater right (despite the lack of stock sufficient to justify diversion of the entire right) and its first priority irrigation water right before the wide fluctuations in stream flow occurred, so the diversions were already out of priority with Double Anchor not receiving the entirety of its first two water rights.

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the last seven years based solely on CDN's judgment of conditions that constitute a futile call even as CDN has contributed to the alleged futile call by way of its illegal diversion practices. The data collected from the drainage basin this spring and summer establishes that, at a bare minimum, the futile call occurred much later in this low-snowpack year than has been asserted against Double Anchor in the past. In fact, the 2014 data suggest that if: (1) Cold Springs Creek water is allowed to remain in its channel throughout the non-irrigation season; (2) water is not illegally diverted to lands outside of the drainage basin; and (3) the available water and diversions in/from Cold Springs Creek is accurately measured and administered in priority, downstream users (including Double Anchor) will enjoy much more water and a much longer irrigation season. Even this year, the Watermaster only recently (early to mid-July) determined that Double Anchor's call was futile. As discussed above, Double Anchor and HLI believe that this futile call was manipulated and premature because of illegal diversions by CDN both during and outside of the irrigation season. Given the importance of the determination of the futile call to Double Anchor and other downstream water right holders, and given the obvious impacts on Cold Springs Creek from CDN's unauthorized diversions and irrigation practices, it is essential to determine the circumstances and timing under which a futile call occurs using strictly controlled and monitored conditions - a determination that is not difficult.

To that end, IDWR and the District water right holders should engage in a cooperative study of the Cold Springs Creek drainage basin that includes the monitoring of all surface water flows and all surface water and ground water diversions beginning at the end of the 2014 irrigation season and extending to the end of the 2015 irrigation season. During this period, there must be strict Watermaster monitoring and control of Cold Springs Creek flows and all diversions in the basin for the remainder of this irrigation season, the non-irrigation season, and all of the 2015 irrigation season.

The current state of monitoring of stream flows on Cold Springs Creek is essentially non-existent making it very difficult to understand CDN's diversions and uses of water. The current state of monitoring water diversions from the Cold Springs Creek drainage basin is mostly inadequate for quantitative analysis and proper administration. For these reasons, significant changes to the diversion structures and monitoring stations is needed prior to the end of the current irrigation season. The minimum necessary equipment and infrastructure include the following:

A. Watermaster Controls.

- a. All Cold Springs Creek diversions must be lockable with a Watermaster-controlled key or combination.
- b. All diversions on Cold Springs Creek must be locked out and checked to insure that they are locked out during the non-irrigation season.

c. Only the Watermaster should be capable of unlocking diversions in priority beginning with the first diversion in the spring.

B. Water User Facilities.

a. A weir or flume or combination capable of measuring and recording the Cold Springs Creek stream flows above any CDN diversions.

b. A staff gage and brace of digital data-loggers for measuring flow in a vertical pipe at the CDN “bubbler” on Cold Springs Creek.

c. A weir or flume incorporated into CDN’s upper Cold Springs Creek diversion with the capability to measure and record diversions separate from the existing CDN Elk Pen flow-meter (which should be replaced with a suitable measuring device in any case).

d. A reconstructed weir with a calibrated staff gage and ability to record water levels at the Double Anchor upper diversion weir.

e. Designated 1¼ –inch diameter water level monitoring tubes in all ground water irrigation wells with pressure gages for the above ground piezometric head of the geothermal irrigation wells.

f. Digital water level measuring and recording instruments on all CDN irrigation wells.

g. Totalizing and instantaneous discharge flow-meters on all CDN irrigation wells (geothermal and cold water).

h. A weir or flume should be incorporated into the Ross Road culvert location and equipped with a continuous monitoring device.

i. The many water-spreading channels (see Exhibit O) constructed in the Cold Springs Creek bed on CDN lands must be closed off and a defined channel restored. Water-spreading channels can not be re-constructed in the stream bed after the spring run-off and flooding in 2015 restores the stream to a defined channel.

j. The uncontrolled CDN concrete diversion structure on Cold Springs Creek in the NE ¼, NW ¼, Section 10 should be equipped with a lockable gate.

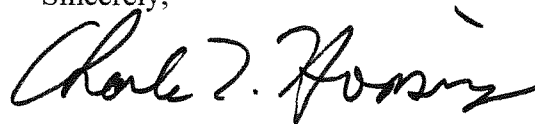
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V. Summary

Despite its many illegal diversions and practices, CDN has indicated its willingness to cooperate with IDWR in achieving proper distribution of water rights in the Cold Springs Creek drainage basin. With this assurance, and with the help of IDWR and the Watermaster, Double Anchor is hopeful that physical and administrative structures can be put in place that, together with proper monitoring, data collection and analysis, will result in a more complete understanding of the condition and behavior of the Cold Springs Creek drainage basin. Such an understanding will assist the agency, the Watermaster and all water right holders in the basin to work towards the fair and proper distribution of water rights therein.

My client remains ready and willing to cooperate with IDWR and the Watermaster in these endeavours. Please contact me for further discussion of this matter. We look forward to IDWR's response. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles L. Honsinger". The signature is fluid and cursive, with a large initial "C" and "H".

Charles L. Honsinger

cc: John Westra
Rich Neal
Bruce Smith
Double Anchor Ranches
Hydro Logic, Inc.
Water District 61E members

Preliminary Map of the Water Diversion System on Casa Del Norte Ranch, HLI's Stream Flow Measurement Points on Cold Springs Creek, and Water Right Place of Use Map for Casa Del Norte's 24 Water Rights and Priorities

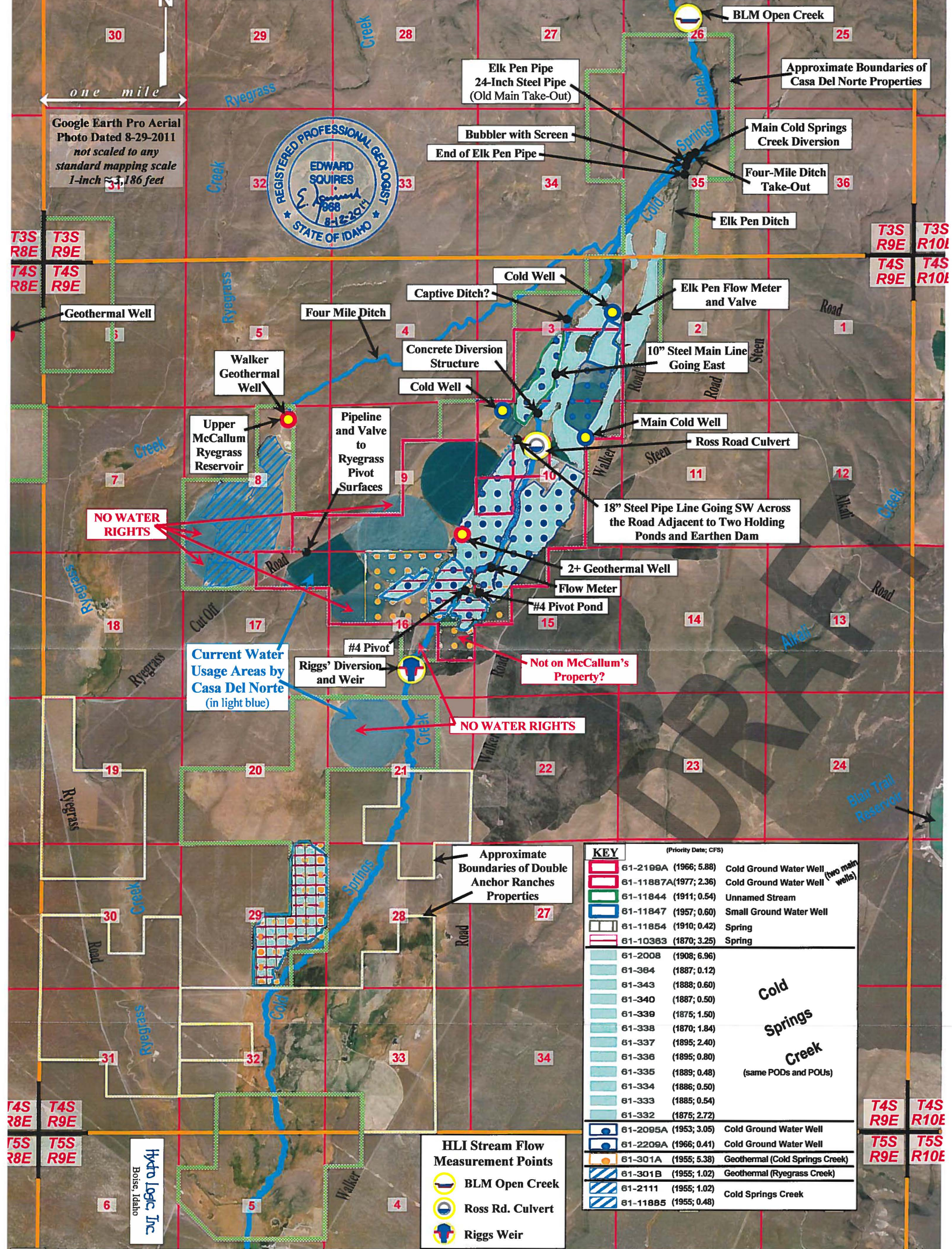


Exhibit A.

Exhibit A. Draft map showing Double Anchor Ranches' (DA) current level of understanding of the Casa Del Norte (CDN) water diversion and distribution system based on three allowed site visits for Ed Squires by John McCallum. Also shown are 1) the mapped CDN water rights places of use and priorities, 2) the approximate property boundaries of CDN and DA, 3) DA's three stream flow monitoring stations on Cold Springs Creek, and 4) CDN irrigated acreages without appurtenant water rights. The CDN water diversion and distribution system is complex and additional understanding is needed to complete this map. Further complicating the situation is the almost complete lack of monitoring infrastructure for the commingled surface water, cold ground water, and geothermal water rights and the ability to track where each source is being used.

Exhibit A.

Exhibit B. - Surface Water Rights and Ground Water Rights on Cold Springs Creek

Water Right No.	Priority Date	Div. Rate		Cum. Tot. cfs	Water Use	Owner	Comments
		cfs	gpm				
61-11906	5/18/1870	1.54	691	1.54	stk.	CHARTER MOUNTAIN RANCH INC	Stock watering - 365-day use if stock present
61-338	6/30/1870	1.84	826	3	irr.	CHARTER MOUNTAIN RANCH INC	
61-323	5/1/1872	1.00	449	4.38	irr.	DOUBLE ANCHOR RANCHES INC	
61-10349	5/1/1873	1.26	565	5.64	irr.	DOUBLE ANCHOR RANCHES INC	
61-339	5/1/1875	1.50	673	7.14	irr.	CHARTER MOUNTAIN RANCH INC	
61-332	5/18/1875	2.72	1,221	9.86	irr.	CHARTER MOUNTAIN RANCH INC	Source is Cold Springs Creek and Spring
61-318	5/1/1877	0.50	224	10.36	irr.	HALF MOON RANCH	
61-328	5/1/1877	1.40	628	11.76	irr.	ARK PROPERTIES LLC	Below Riggs on Cold Springs Creek
61-319	5/1/1878	0.80	359	12.56	irr.	HALF MOON RANCH	
61-326	5/1/1878	1.00	449	13.56	irr.	DOUBLE ANCHOR RANCHES INC	
61-327	5/1/1879	2.50	1,122	16.06	irr.	DOUBLE ANCHOR RANCHES INC	
61-345	6/30/1879	0.50	224	16.56	irr.	MULE SHOE LLC	
61-317	5/1/1880	1.36	610	17.92	irr.	BARBER CAVEN RANCHES	
61-320	5/1/1881	0.70	314	18.62	irr.	HALF MOON RANCH	
61-321	5/1/1883	0.90	404	19.52	irr.	HALF MOON RANCH	
61-309	6/1/1883	0.58	260	20.10	irr.	ARK PROPERTIES LLC	Below Riggs on Cold Springs Creek
61-330	5/1/1884	0.36	162	20.46	irr.	DOUBLE ANCHOR RANCHES INC	
61-347	5/1/1884	3.20	1,436	23.66	irr.	MULE SHOE LLC	
61-333	5/1/1885	0.54	242	24.20	irr.	CHARTER MOUNTAIN RANCH INC	
61-346	5/1/1885	0.70	314	24.90	irr.	BARBER CAVEN RANCHES	
61-331	5/1/1886	1.00	449	25.90	irr.	DOUBLE ANCHOR RANCHES INC	
61-334	5/1/1886	0.50	224	26.40	irr.	CHARTER MOUNTAIN RANCH INC	
61-364	5/1/1887	0.12	54	26.52	irr.	CHARTER MOUNTAIN RANCH INC	
61-341	5/7/1887	1.22	548	27.74	irr.	BLACKWELL, SAMUEL D	
61-340	6/30/1887	0.50	224	28.24	irr.	CHARTER MOUNTAIN RANCH INC	
61-342	6/30/1887	1.18	530	29.42	irr.	BLACKWELL, SAMUEL D	
61-343	6/30/1888	0.60	269	30.02	irr.	CHARTER MOUNTAIN RANCH INC	
61-335	5/1/1889	0.48	215	30.50	irr.	CHARTER MOUNTAIN RANCH INC	
61-336	5/1/1895	0.80	359	31.30	irr.	CHARTER MOUNTAIN RANCH INC	
61-337	12/1/1895	2.40	1,077	33.70	irr.	CHARTER MOUNTAIN RANCH INC	
61-2008	02/26/1908	6.96	3,124	40.66	irr.	CHARTER MOUNTAIN RANCH INC	Also stock water
61-2007	02/29/1908	2.10	942	42.76	irr.	MULE SHOE LLC	
61-2038	07/10/1913	1.20	539	43.96	irr.	DOUBLE ANCHOR RANCHES INC	
61-2048	07/16/1916	0.40	180	44.36	irr.	BARBER CAVEN RANCHES	
61-2052	12/19/1917	0.64	287	45.00	irr.	MULE SHOE LLC	
61-11899	03/15/1920	3.18	1,427	48.18	irr.	HALF MOON RANCH	
61-2064	06/14/1922	1.28	574	49.46	irr.	NEUER, OTTO	
61-12236	06/14/1922	0.44	197	49.90	irr.	HUNT, JOANN	
61-12237	06/14/1922	0.46	206	50.36	irr.	DENNY, SUSAN	
61-12238	06/14/1922	0.38	171	50.74	irr.	NEUER, EDUARD	
61-10718	02/01/1931	0.02	9	50.76	stk.	WILBUR F WILSON RANCH	
61-11502	06/28/1934	0.02	9	50.78	stk.	UNITED STATES OF AMERICA	
61-11503	06/28/1934	0.02	9	50.80	stk.	UNITED STATES OF AMERICA	
61-11507	06/28/1934	0.02	9	50.82	stk.	UNITED STATES OF AMERICA	
61-11552	06/28/1934	0.02	9	50.84	stk.	UNITED STATES OF AMERICA	
61-10299	03/15/1943	6.73	3,020	57.57	irr.	BLACKWELL, SAMUEL D	
61-2031	05/20/1952	2.02	907	59.59	irr.	BEAN, ANNABETH N	
61-2100	09/21/1953	5.42	2,432	65.01	irr.	CHARTER MOUNTAIN RANCH INC	Also domestic water
61-2111	07/05/1955	1.02	458	66.03	irr.	CHARTER MOUNTAIN RANCH INC	
61-11885	07/05/1955	0.48	215	66.51	irr.	CHARTER MOUNTAIN RANCH INC	
61-11904	07/05/1955	0.72	323	67.23	stk.	CHARTER MOUNTAIN RANCH INC	
61-2338	07/03/1957	1.51	678	68.74	irr.	WILBUR F WILSON RANCH	
61-4147	03/15/1971	10.00	4,488	78.74	irr.	DOUBLE ANCHOR RANCHES INC	
61-7200	10/01/1974	0.76	341	79.50	irr.	ELLIS LIVING TRUST	
61-7763	11/15/1999	0.22	99	79.72	stk.	CHARTER MOUNTAIN RANCH INC	
61-7764	03/03/2000	4.21	1,889	83.93	irr.	ARK PROPERTIES LLC	Also stock water
61-12209	11/28/2008	2.01	902	85.94	irr.	ARK PROPERTIES LLC	

Hydro Logic, Inc.

Ground Water Rights in T. 3 S. R. 9 E. All Sections

NO GROUND WATER RIGHTS IN T3S R9E Sec. 1-36

Ground Water Rights in T. 4 S. R. 9 E. All Sections

Water Right No.	Priority Date	Div. Rate		Cum. Tot. cfs	Water Use	Owner	Comments
		cfs	gpm				
61-2095A	03/07/1953	3.05	1,369	3.05	irr.	CHARTER MOUNTAIN RANCH INC	
61-2095B	03/07/1953	0.06	27	3	irr.	UNITED STATES OF AMERICA	
61-11905	03/07/1953	0.24	108	3.35	stk.	CHARTER MOUNTAIN RANCH INC	
61-2095A	03/07/1953	3.05	1,369	6.40	irr.	CASA DEL NORTE LP	
61-301A	06/10/1955	5.38	2,415	11.78	irr.	CHARTER MOUNTAIN RANCH INC	
61-301B	06/10/1955	1.02	458	12.80	irr.	CHARTER MOUNTAIN RANCH INC	
61-11908	06/10/1955	1.09	489	13.89	stk.	CHARTER MOUNTAIN RANCH INC	
61-11909	06/10/1955	0.24	108	14.13	stk.	CHARTER MOUNTAIN RANCH INC	
61-301A	06/10/1955	5.38	2,415	19.51	irr.	CASA DEL NORTE LP	
61-301B	06/10/1955	1.02	458	20.53	irr.	CASA DEL NORTE LP	
61-11847	03/15/1957	0.60	269	21.13	irr.	CHARTER MOUNTAIN RANCH INC	
61-11907	03/15/1957	0.24	108	21.37	stk.	CHARTER MOUNTAIN RANCH INC	
61-11847	03/15/1957	0.60	269	21.97	irr.	CASA DEL NORTE LP	
61-2121	06/04/1959	0.58	260	22.55	irr.	BEAN, ANNABETH N	Also domestic water
61-10375	01/01/1960	0.06	27	22.61	dom.	CHARTER MOUNTAIN RANCH INC	
61-10300	04/16/1960	0.09	40	22.70	stk.	BLACKWELL, FRANCES E; BLACKWELL, SAMUEL D	
61-2199A	07/19/1966	5.88	2,639	28.58	irr.	CHARTER MOUNTAIN RANCH INC	
61-2199B	07/19/1966	0.12	54	28.70	irr.	UNITED STATES OF AMERICA	
61-2199A	07/19/1966	5.88	2,639	34.58	irr.	CASA DEL NORTE LP	
61-2209A	09/12/1966	0.41	184	34.99	irr.	CHARTER MOUNTAIN RANCH INC	
61-2209B	09/12/1966	0.01	4	35.00	irr.	UNITED STATES OF AMERICA	
61-2209A	09/12/1966	0.41	184	35.41	irr.	CASA DEL NORTE LP	
61-11887A	03/15/1977	2.36	1,059	37.77	irr.	CHARTER MOUNTAIN RANCH INC	
61-11887B	03/15/1977	0.05	22	37.82	irr.	UNITED STATES OF AMERICA	
61-11887A	03/15/1977	2.36	1,059	40.18	irr.	CASA DEL NORTE LP	
61-7725	01/13/1997	1.73	776	41.91	irr.	CHARTER MOUNTAIN RANCH INC	
61-7765	11/15/1999	6.00	2,693	47.91	irr.	CHARTER MOUNTAIN RANCH INC	Also fish water
61-12210	11/28/2008	3.00	1,346	50.91	irr.	ARK PROPERTIES LLC	

Ground Water Rights in T. 5 S. R. 9 E. Sections 1-6

Water Right No.	Priority Date	Div. Rate		Cum. Tot. cfs	Water Use	Owner	Comments
		cfs	gpm				
61-2257	07/28/1941	-	-	-	stk.	UNITED STATES OF AMERICA	
61-10576	12/31/1942	0.09	40	0.09	stk.	STEPHENS & SONS	Also domestic water
61-12210	11/28/2008	3.00	1,346	3.09	irr.	ARK PROPERTIES LLC	

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All Other Water Rights in T. 3 S. R. 9 E. Sections 25-36

61-11566	04/17/1926	0.02	9	0.02	stk.	UNITED STATES OF AMERICA	COYOTE SPRING
61-2284	01/24/1942	0.01	4	0.03	stk.	UNITED STATES OF AMERICA	COYOTE SPRING
61-11453	04/05/1920	0.02	9	0.05	stk.	UNITED STATES OF AMERICA	LONE TREE SPRING
61-7132	11/28/1972	0.01	4	0.06	stk.	UNITED STATES OF AMERICA	PRINCE ALBERT SPRING; Also wildlife water
61-11514	04/17/1926	0.02	9	0.08	stk.	UNITED STATES OF AMERICA	PRINCE ALBERT SPRING
61-11565	06/28/1934	0.02	9	0.10	stk.	UNITED STATES OF AMERICA	RYEGRASS CREEK
61-4029	04/01/1927	5.14	2,307	5.24	irr.	WALKER, MARGARET & WILLIAM	RYEGRASS CREEK; Also stock water
61-11508	04/17/1926	0.02	9	5.26	stk.	UNITED STATES OF AMERICA	SPRING
61-11511	04/17/1926	0.02	9	5.28	stk.	UNITED STATES OF AMERICA	SPRING
61-11506	06/30/1934	0.02	9	5.30	stk.	UNITED STATES OF AMERICA	SPRING
61-2277	01/24/1942	0.01	4	5.31	stk.	UNITED STATES OF AMERICA	SPRING
61-2302	05/05/1953	0.01	4	5.32	stk.	UNITED STATES OF AMERICA	SPRING
61-11569	04/17/1926	0.02	9	5.34	stk.	UNITED STATES OF AMERICA	SPRING
61-11559	04/17/1926	0.02	9	5.36	stk.	UNITED STATES OF AMERICA	SPRING
61-11562	04/17/1926	0.02	9	5.38	stk.	UNITED STATES OF AMERICA	SPRING
61-2269	01/24/1942	0.01	4	5.39	stk.	UNITED STATES OF AMERICA	SPRING
61-7657	01/28/1991	0.02	9	5.41	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM; Also wildlife water
61-11656	06/28/1934	0.02	9	5.43	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-12288	03/04/1914	0.04	18	5.47	dom.	CASA DEL NORTE LP	UNNAMED STREAM
61-2319	05/05/1953	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-2330	10/13/1958	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM

All Other Water Rights in T. 4 S. R. 9 E. All Sections

Water Right No.	Priority Date	Div. Rate		Cum. Tot. cfs	Water Use	Owner	Comments
		cfs	gpm				
61-11434	1/1/1876	0.02	9	0.02	stk.	UNITED STATES OF AMERICA	ALKALI CREEK
61-371B	5/2/1872	0.40	180	0.42	stk.	CASA DEL NORTE LP	LITTLE CANYON CREEK
61-4029	04/01/1927	5.14	2,307	5.56	irr.	WALKER, MARGARET & WILLIAM	RYEGRASS CREEK; Also stock water
61-11585	06/28/1934	0.02	9	5.58	stk.	UNITED STATES OF AMERICA	RYEGRASS CREEK
61-322	5/1/1871	0.08	36	5.66	irr.	DOUBLE ANCHOR RANCHES INC	SPRING
61-2261	06/26/1941	0.01	4	5.67	stk.	UNITED STATES OF AMERICA	SPRING
61-2270	01/24/1942	0.01	4	5.68	stk.	UNITED STATES OF AMERICA	SPRING
61-12287	09/26/1958	0.12	54	5.80	stk.	CASA DEL NORTE LP	SPRING
61-7617	11/20/1989	-	-	-	irr.	CHARTER MOUNTAIN RANCH INC	SPRING
61-7656	11/16/1990	0.03	13	5.83	stk.	UNITED STATES OF AMERICA	SPRING
61-10296	1/1/1800	0.23	103	6.06	dom.	DOUBLE ANCHOR RANCHES INC	SPRINGS; Also stock water
61-10363	3/15/1870	3.25	1,459	9.31	irr.	CASA DEL NORTE LP	SPRINGS
61-11856	12/31/1870	0.06	27	9.37	dom.	CHARTER MOUNTAIN RANCH INC	SPRINGS
61-11854	04/01/1910	0.42	189	9.79	irr.	CASA DEL NORTE LP	SPRINGS
61-11844	02/15/1911	0.54	242	10.33	irr.	CASA DEL NORTE LP	UNNAMED STREAM; Also stock water
61-2278	01/24/1942	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-2285	01/24/1942	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-2286	01/24/1942	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-2287	01/24/1942	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-2290	01/24/1942	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-11620	06/04/1955	0.02	9	10.35	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM

All Other Water Rights in T. 5 S., R. 9 E. Sections 1-6

Water Right No.	Priority Date	Div. Rate		Cum. Tot. cfs	Water Use	Owner	Comments
		cfs	gpm				
61-10659	12/31/1930	0.13	58	0.13	dom.	ARK PROPERTIES LLC	HENLEY SPRINGS; Also stock water
61-11807	04/30/1952	0.34	153	0.47	irr.	ARK PROPERTIES LLC	HENLEY SPRINGS, UNNAMED STREAM
61-2304	05/05/1953	-	-	-	stk.	UNITED STATES OF AMERICA	UNNAMED STREAM
61-1660	03/15/1930	0.80	359	1.27	irr.	HALF MOON RANCH	UNNAMED STREAM

Cold Springs Creek Data Including Measured Creek Flows, Water Levels, Water Temperature, and Air Temperature

Exhibit C.

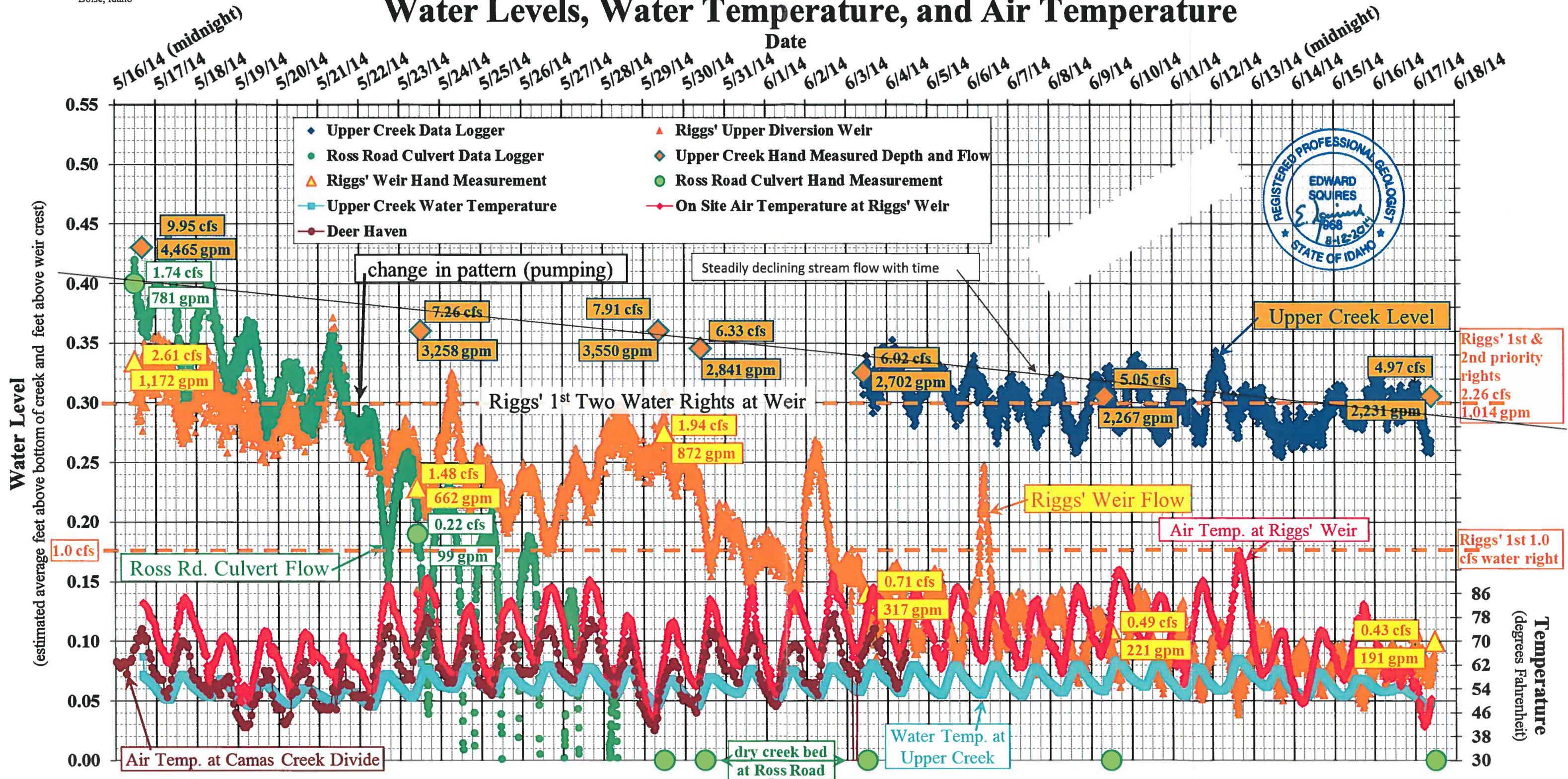
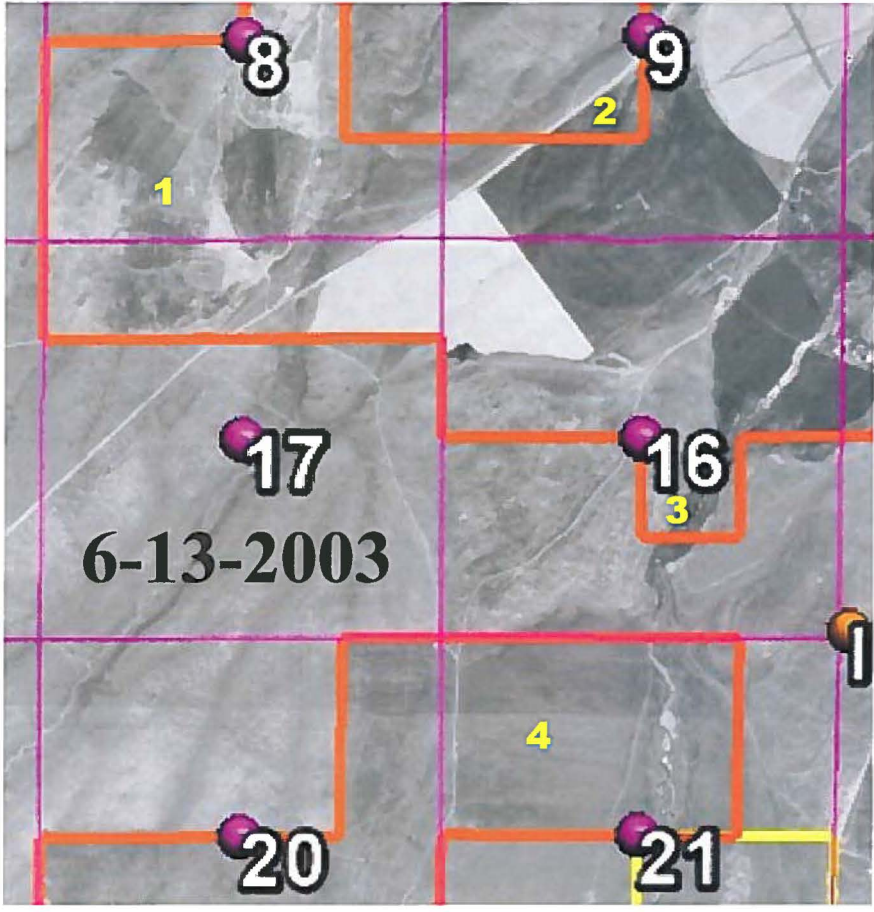
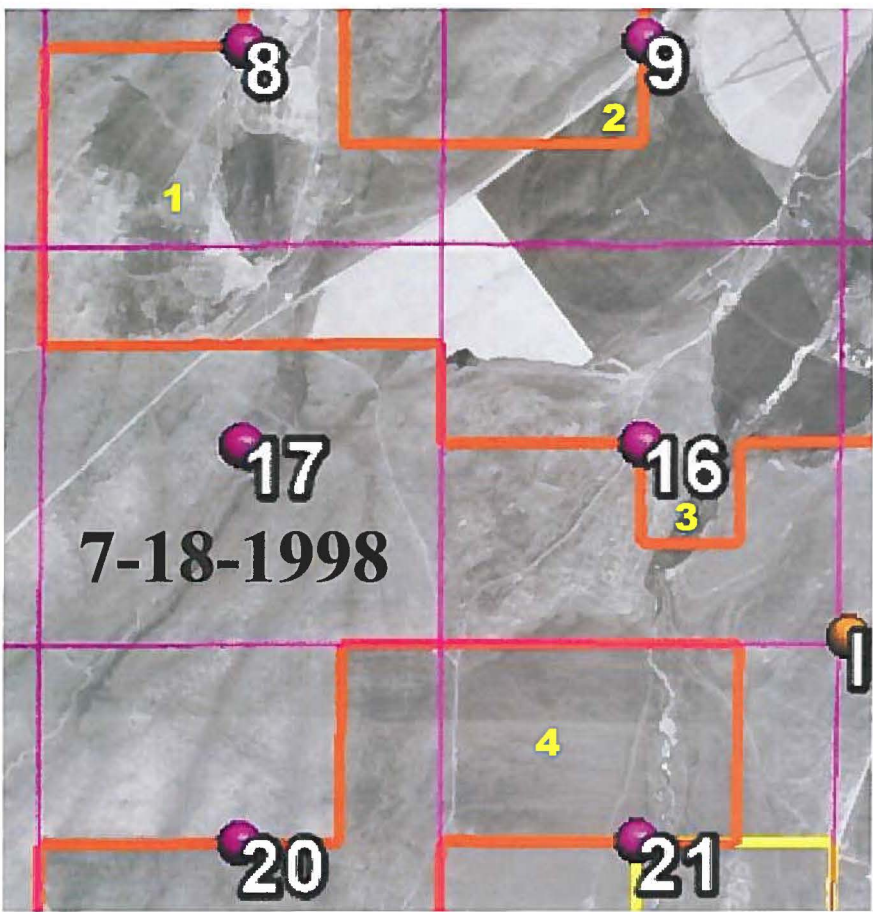


Exhibit C. – Preliminary plot of measured water levels and stream flows on Cold Springs Creek (CSC) and the Double Anchor Ranches' (DA) Upper Diversion weir. The upper CSC measurements are from the stream just above the Casa Del Norte Ranch (CDN) property on the DA's BLM grazing lease ground. The Ross Road CSC measurements were obtained at the Ross Road culvert. All measurements were obtained from public right of way or public access lands. Also shown are available ambient air and stream water temperature data. Apparent from the graph, is that DA, with only a few short-lived exceptions, did not receive its due water right amounts during the monitored period of the 2014 irrigation season even though significant surface water flows were available in CSC. During the period May 16-to-May 21, CDN was diverting at least its first priority irrigation right from CSC and DA was only intermittently receiving its 1st two priority irrigation rights. If CDN was diverting more than its 1st priority irrigation right during this period, its diversions should have been curtailed by the watermaster to ensure DA received its full first two water rights. Instead, beginning on May 22nd, a dramatic change in stream flows measured at the Ross Road culvert show that increased pumping diversions from the CSC, or from wells hydraulically interconnected to CSC, caused further reductions in the surface flows available at the DA weir and a tripling of the diurnal amplitude of the Ross Road stream flows that ultimately drew the CSC dry at that location resulting in a premature apparent futile call situation for DA. Beginning about May 30th, further reductions in the DA water right flows brought the flows at the DA weir to below its first priority (1 cfs) water right. The high variations in stream flows at Ross Road do not correlate to the relatively evenly diminishing CSC stream flows just above the CDN property line. The upper CSC stream flows steadily and evenly declined with time and the diminishing snow pack and bank storage. The CSC stream flows at Ross Road, however, fluctuate wildly in response to upstream pumping and diversions by CDN, apparently in excess of its senior-priority water rights. The observed water level and stream flow responses, as well as the causative factors, could be easily and conclusively demonstrated with additional monitoring of stream flows diversions and water well pumping, thus allowing for documentable and fair administration of water rights on this contentious and ephemeral stream with only sparse available data. Additional synthesis and interpretation of this data is underway.



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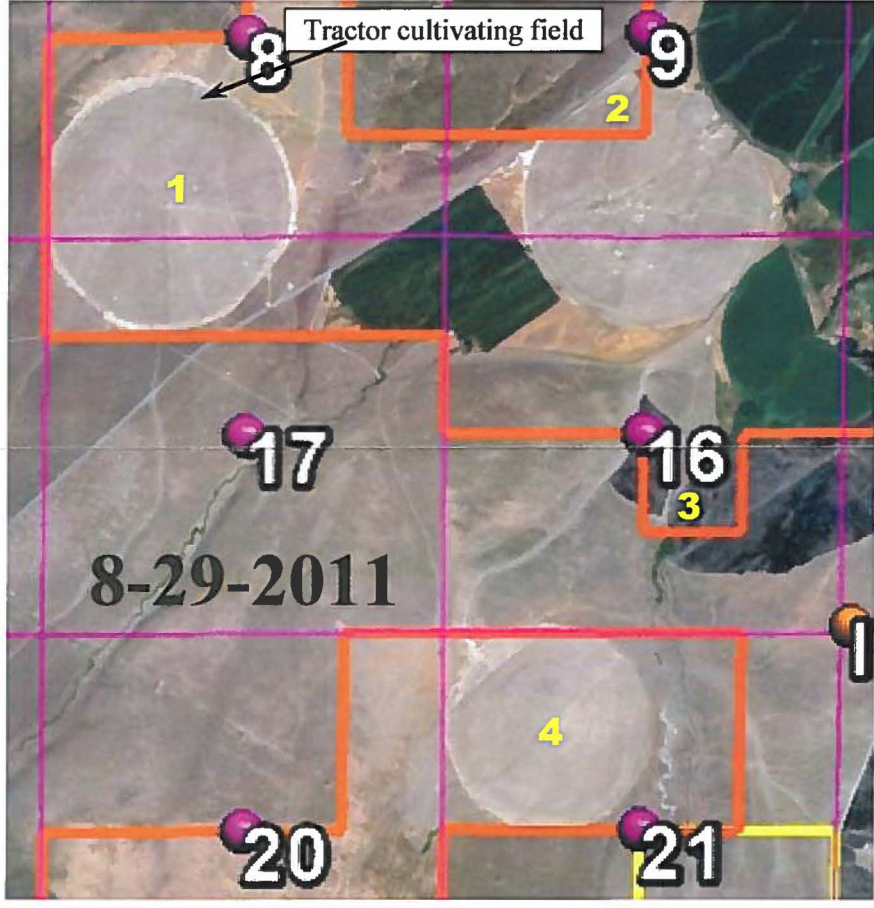
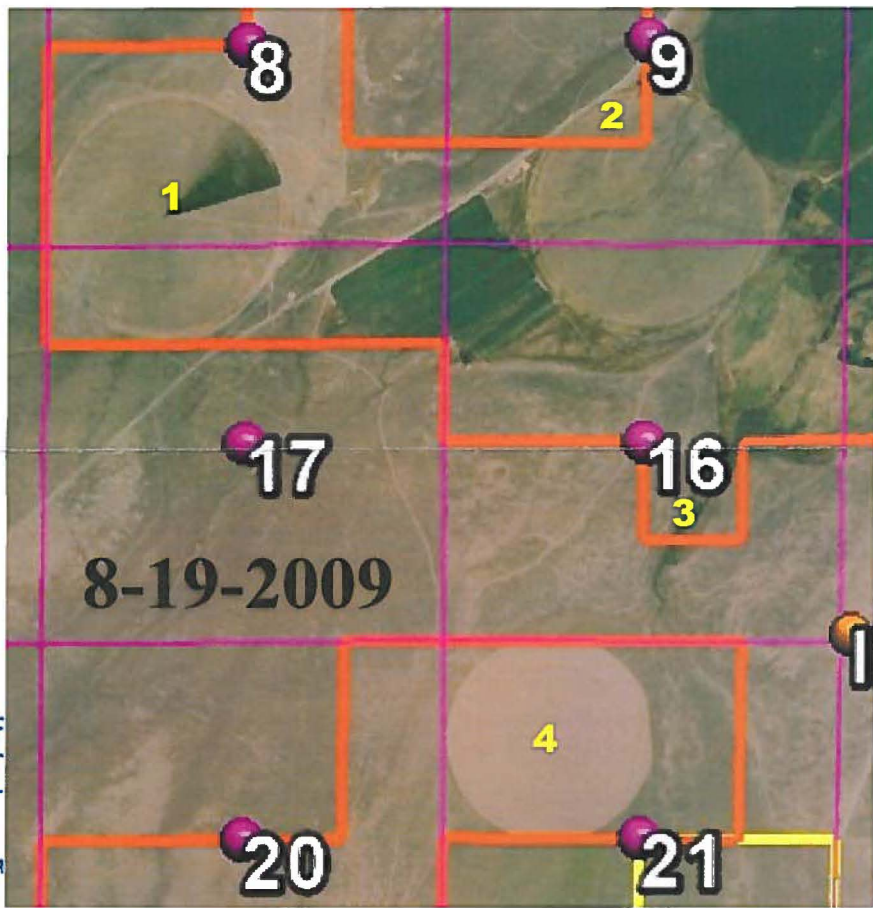
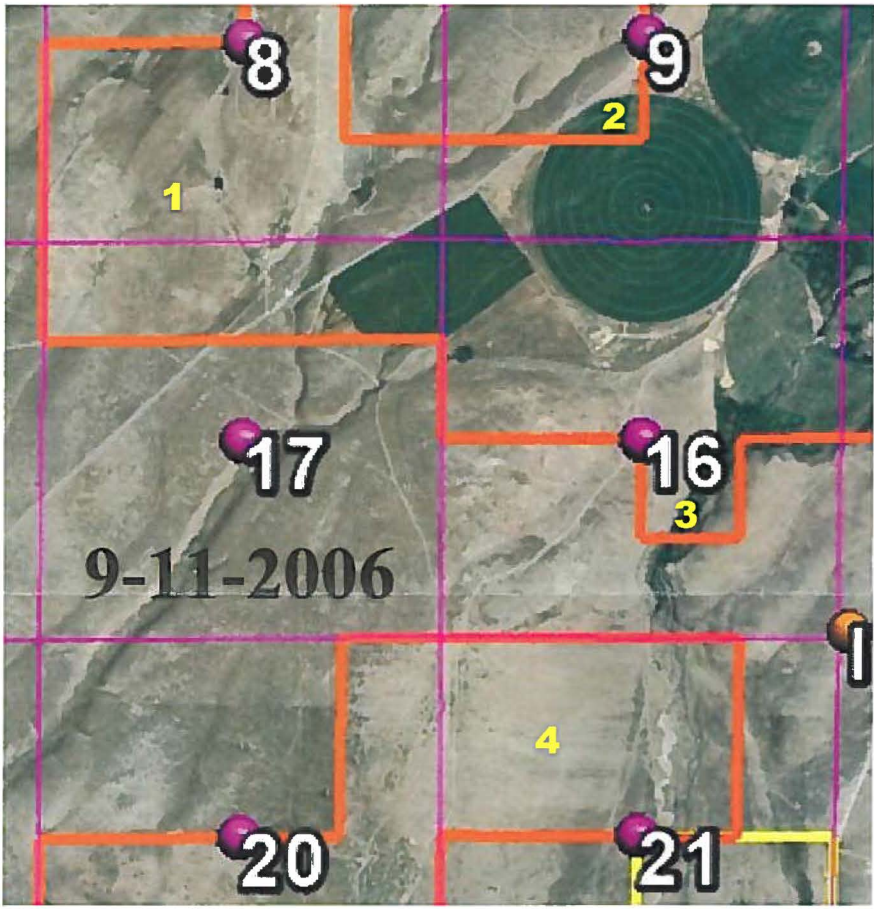
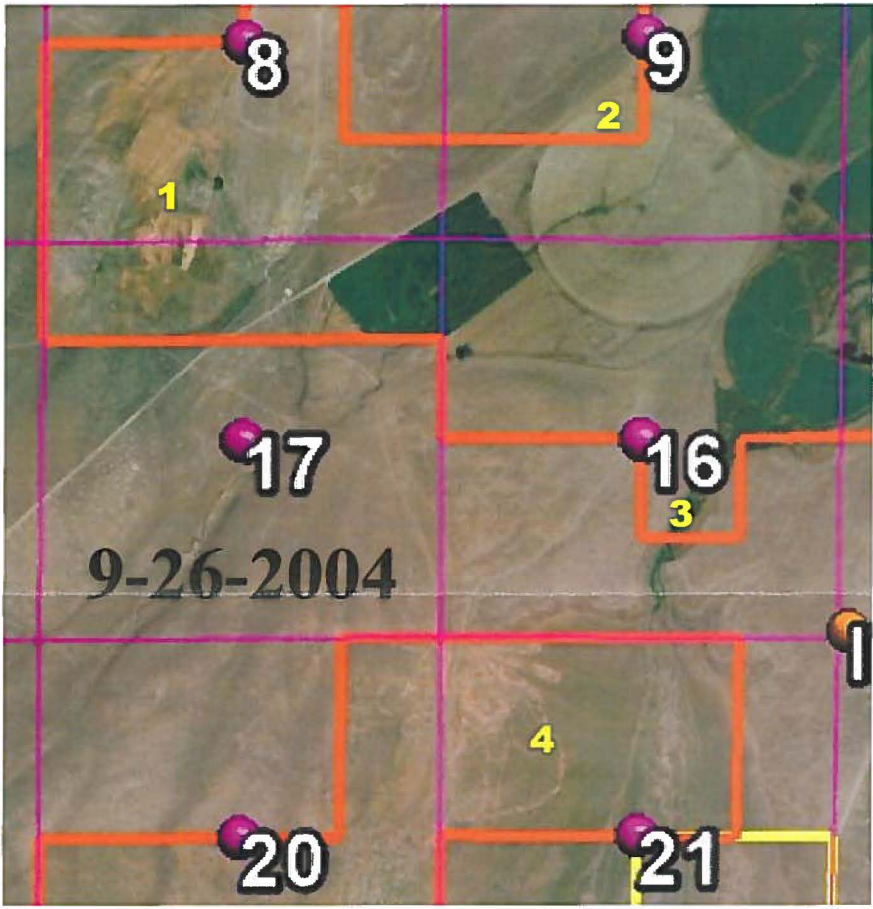


Exhibit D. Time series aerial photographs mosaic from Google Earth Pro® showing the progression of irrigation on Casa Del Norte Ranch for the period 7-18-1998 to 8-29-2011. The large purple dots next to white numbers are from Google Earth Pro and indicate the number and center of each land Section in Township 3 south and Range 9 east. The yellow numbers denote four areas of the ranch for which irrigation has taken place without appurtenant water rights including modifications to irrigation practices such as changing from flood or hand line irrigation to circular pivoting sprinklers. The date of each aerial photograph is noted in black bold numerals in Section 17 of each photo.

Exhibit D.



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Exhibit E. Time series photographic mosaic taken by Hydro Logic, Inc. personnel showing the site circumstances of the Casa Del Norte Ranch's "Walker" geothermal well at its Upper Ryegrass Creek Reservoir for the period 3-13-2014 to 7-30-2014. The date of each aerial photograph is noted in black bold numerals at the top of each photo. The configuration of the well head and pipes had not changed over the observation period suggesting the flowing artesian well had not been discharged in 2014. The artesian well head pressure is evident by the water spray from the capping casing flange and water leaking from the discharge up until the end of May. During late June to late July, the artesian pressure appears to have dropped and the water level in the casing dropping below ground level preventing any discharge from the well as shown by the lack of leaking water and dry conditions around the well head and concrete pad.. The well, which produces 140 degree F ground water is not equipped with a pumping plant or electrical power such that it cannot be produced when the artesian pressure is below ground.

Exhibit E.

State of Idaho Water Resources
P.O. Box 83720
Boise, Idaho 83720-0098

Dear Mr. Dave Tuthill,

This letter is to strongly protest the use of water from Cold Springs Creek, 61E. This water is being used on Township 4 South, Range 9 East, Section 8 - S. 1/2. This piece of ground has not had water, ever.

In the fall of 2007 a pivot was installed. This pivot was started the spring of 2008. This pivot is still running full time even while other users are without water.

In second piece of ground that is out of the watershed is Township 4 South, Range 9 East, Section 21 N 1/2. This pivot was erected the fall of 2007 and used to bring up a crop in 2007. The pivot is now being used full time. Historically this ground has a Jr. Water right. Pivot is still running while other users are without water.

We strongly protest the accountability of the system used for co-mingling of creek water and well water. We would like to see the department of water resources investigate these practices.

Thank you,

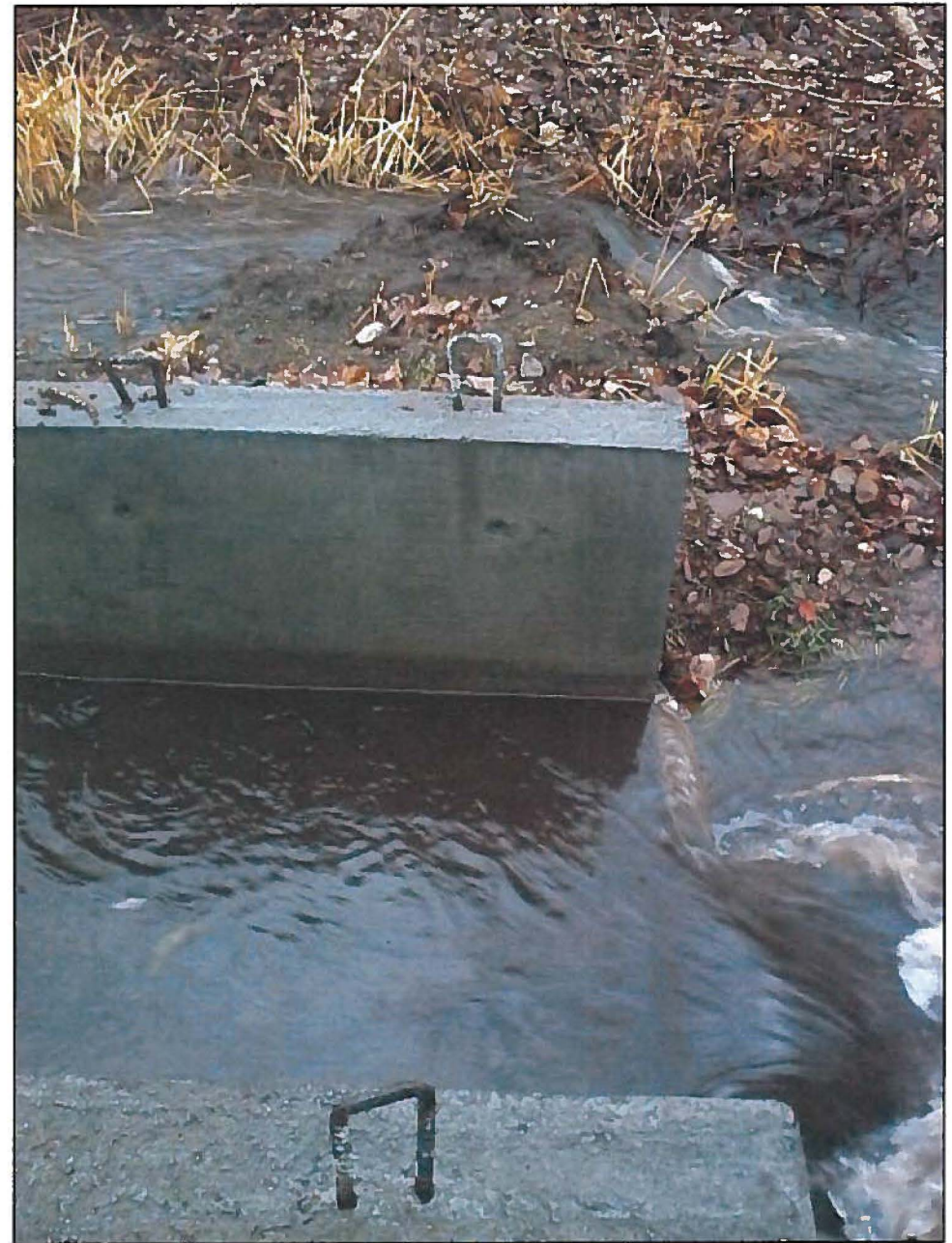
Double Anchor Ranches Inc.
Lynn R. Riggs & Sons



2-14-2014 Photograph by Kelly Riggs and Rich Neal during their site visit to the Casa Del Norte Ranch one day prior to the start of the irrigation season showing a washed out Elk Pen/Four-Mile Ditch Weir.



2-14-2014 Casa Del Norte's Elk Pen/Four-Mile Ditch weir. An estimated 2,700 gallons per minute was passing through weir and 450 gpm was bypassing it. Weir plate in concrete raceway is over-flooded.



2-14-2014 Illegal out-of-season diversion of water by Casa Del Norte with approximately 1 cfs bypassing the weir as leakage and flowing onto Casa Del Norte lands.

Exhibit G.



2-14-2014 photograph by Kelly Riggs and Water Master Rich Neal during their site visit to Casa Del Norte one day prior to irrigation season showing the Casa Del Norte "Pivot #4 reservoir" already brim full.



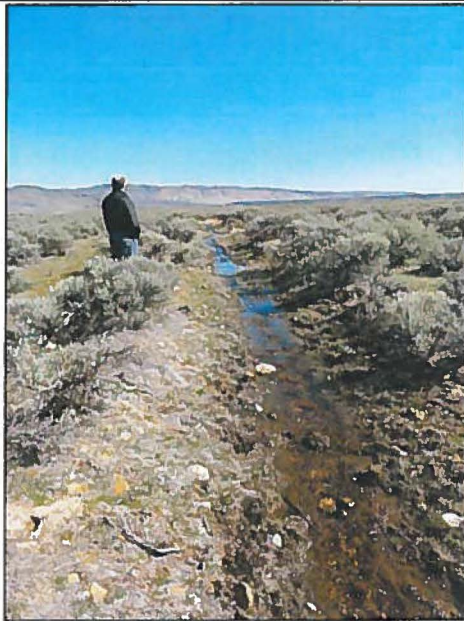
2-14-2014 Apparent out-of-season illegal diversion of water to storage prior to the irrigation season by Casa Del Norte to its Pivot #4 reservoir..



7-22-2013 photograph of the measurement weir for the Elk Pen Ditch just below the CDN's Upper Main Cold Springs Creek Diversion with only a few tens of gallons per minute flowing over the weir plate.



7-22-2013 photograph of the estimated 35-40 gallons per minute in the CDN Elk Pen Ditch at the Elk Pen. The ditch flow was also estimated at 35-40 gpm at the CDN Upper Diversion one mile upstream. These few elk were the only stock apparent along the course of the ditch.



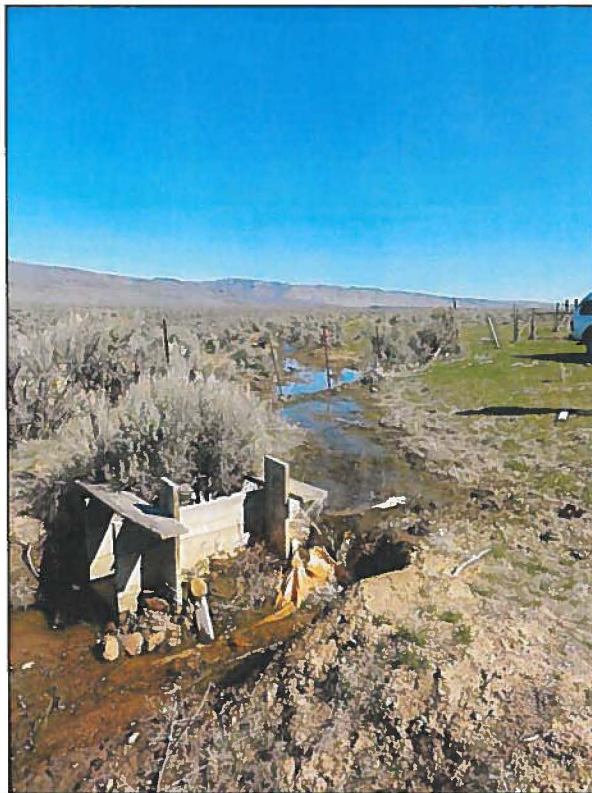
3-13-2014 photograph looking east showing approximately 40 gallons per minute of flow in the CDN 4-Mile Ditch one mile upstream of the CDN's upper Ryegrass Reservoir where the flow was similar.



3-13-2014 photograph looking southwest past the washed out diversion structure on the 4-Mile Ditch to the full CDN Upper Ryegrass reservoir in the background. Washout points to higher earlier flows.



3-13-2014 photograph looking southwest past the washed out diversion structure on the 4-Mile Ditch to the CDN Upper Ryegrass reservoir in the background. Washout points to higher earlier flows.



3-13-2014 photograph looking northeast past the washed out diversion structure to the CDN 4-Mile Ditch. Washout points to higher earlier flows and possibly those observed by Rich Neal and Kelly Riggs on February 14, 2014 prior to irrigation season.

3-13-2014



4-29-2014



Hydro Logic, Inc.
Boise, Idaho

5-29-2014



6-30-2014



7-30-2014

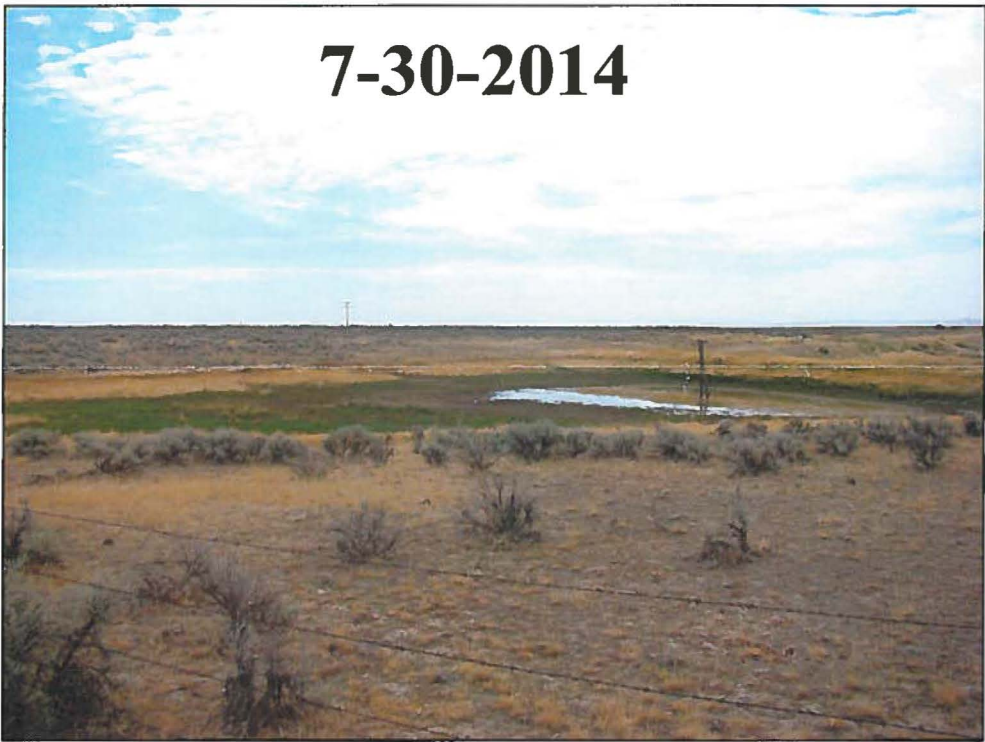


Exhibit K. Time series photographs of the CDN Upper Ryegrass Reservoir which is apparently a cooling pond for the “Walker” geothermal well. The reservoir was full in early March and appeared to have slowly evaporated through the year. Apparent in the lower view is the small amount of storage in the empty reservoir for any irrigation or cooling use and the Walker well does not appear to have been discharged in 2014. Photographs were taken from the adjoining BLM land to the north. Dates of the south-looking photographs are the large black numerals near the top of each photo.

Exhibit K.



7-22-2013 photo of CDN's "bubbler", a trash screen to separate debris from the stream intake prior to water entering a pipe to the irrigation distribution system. Water enters via vertical pipe at center. Corrugated steel ring raises the water level (head) to drive more water through.



7-22-2013 low flow entering the CDN "bubbler" from Cold Springs Creek.



3-13-2014 Vertical flow from CDN's bubbler pipe. Estimated flow using vertical pipe equation at 1,372 gpm based on 3½ inches of rise over the 20-inch diameter pipe. Elk Pen flow-meter showed 700 gpm a few minutes later when E. Squires and C. Honsinger visited and read it.



3-13-2014 Cold Springs Creek water entering the CDN bubbler and flowing out on to a trash screen which separates leaves, debris, and the many small fish seen stranded on the screen.

Exhibit M. - Table and Calculation of Vertical Pipe Flows

Table of Flow Rates Through a 20-Inch Diameter Vertical Pipe When Jet Is Less Than 7-Inches Tall

Head (inches)	Head (feet)	GPM (gallons / minute)	CFS (cubic-feet / second)	MGD (millions- of-gallons- per-day)
0.80	0.067	187	0.417	0.269
0.85	0.071	203	0.452	0.292
0.90	0.075	219	0.489	0.316
0.95	0.079	236	0.526	0.340
1.00	0.083	253	0.563	0.364
1.05	0.088	270	0.602	0.389
1.10	0.092	288	0.641	0.414
1.15	0.096	305	0.680	0.440
1.20	0.100	323	0.721	0.466
1.25	0.104	342	0.761	0.492
1.30	0.108	360	0.803	0.519
1.35	0.113	379	0.845	0.546
1.40	0.117	398	0.887	0.573
1.45	0.121	418	0.930	0.601
1.50	0.125	437	0.974	0.629
1.55	0.129	457	1.018	0.658
1.60	0.133	477	1.062	0.687
1.65	0.138	497	1.108	0.716
1.70	0.142	518	1.153	0.745
1.75	0.146	538	1.199	0.775
1.80	0.150	559	1.246	0.805
1.85	0.154	580	1.292	0.835
1.90	0.158	601	1.340	0.866
1.95	0.163	623	1.388	0.897
2.00	0.167	644	1.436	0.928
2.05	0.171	666	1.485	0.960
2.10	0.175	688	1.534	0.991
2.15	0.179	711	1.583	1.023
2.20	0.183	733	1.633	1.056
2.25	0.188	756	1.683	1.088
2.30	0.192	778	1.734	1.121
2.35	0.196	801	1.785	1.154
2.40	0.200	824	1.837	1.187
2.45	0.204	848	1.889	1.221
2.50	0.208	871	1.941	1.254
2.55	0.213	895	1.993	1.288
2.60	0.217	918	2.046	1.323
2.65	0.221	942	2.100	1.357
2.70	0.225	966	2.153	1.392
2.75	0.229	991	2.207	1.427
2.80	0.233	1015	2.262	1.462
2.85	0.238	1040	2.316	1.497
2.90	0.242	1064	2.371	1.533
2.95	0.246	1089	2.427	1.568
3.00	0.250	1114	2.482	1.604
3.05	0.254	1139	2.538	1.641
3.10	0.258	1165	2.595	1.677

Table of Flow Rates Through a 20-Inch Diameter Vertical Pipe When Jet Is Less Than 7-Inches Tall

Head (inches)	Head (feet)	GPM (gallons / minute)	CFS (cubic-foot / second)	MGD (millions-of-gallons-per-day)
3.15	0.263	1190	2.651	1.714
3.20	0.267	1216	2.708	1.750
3.25	0.271	1241	2.766	1.787
3.30	0.275	1267	2.823	1.825
3.35	0.279	1293	2.881	1.862
3.40	0.283	1319	2.939	1.900
3.45	0.288	1346	2.998	1.938
3.50	0.292	1372	3.057	1.976
3.55	0.296	1398	3.116	2.014
3.60	0.300	1425	3.175	2.052
3.65	0.304	1452	3.235	2.091
3.70	0.308	1479	3.295	2.129
3.75	0.313	1506	3.355	2.168
3.80	0.317	1533	3.416	2.207
3.85	0.321	1560	3.476	2.247
3.90	0.325	1588	3.537	2.286
3.95	0.329	1615	3.599	2.326
4.00	0.333	1643	3.660	2.366
4.05	0.337	1671	3.722	2.406
4.10	0.342	1699	3.784	2.446
4.15	0.346	1727	3.847	2.486
4.20	0.350	1755	3.910	2.527
4.25	0.354	1783	3.973	2.568
4.30	0.358	1811	4.036	2.608
4.35	0.362	1840	4.099	2.649
4.40	0.367	1868	4.163	2.691
4.45	0.371	1897	4.227	2.732
4.50	0.375	1926	4.291	2.773
4.55	0.379	1955	4.356	2.815
4.60	0.383	1984	4.420	2.857
4.65	0.387	2013	4.485	2.899
4.70	0.392	2042	4.551	2.941
4.75	0.396	2072	4.616	2.984
4.80	0.400	2101	4.682	3.026
4.85	0.404	2131	4.748	3.069
4.90	0.408	2161	4.814	3.111
4.95	0.413	2191	4.880	3.154
5.00	0.417	2220	4.947	3.197
5.05	0.421	2250	5.014	3.241
5.10	0.425	2281	5.081	3.284
5.15	0.429	2311	5.149	3.328
5.20	0.433	2341	5.216	3.371
5.25	0.438	2372	5.284	3.415
5.30	0.442	2402	5.352	3.459
5.35	0.446	2433	5.420	3.503
5.40	0.450	2464	5.489	3.548
5.45	0.454	2494	5.558	3.592

CDN together

Equation for vertical pipe flow:

$$Q = 6.17 \cdot d^{1.25} \cdot h^{1.35}$$

where:

Q = rate of flow gallons/minute

d = inside diameter of the pipe in inches

Casa Del Norte "Bubbler" on 3-13-2014



Chapter 14—Measurements in Pressure Conduits

13. Trajectory Methods.—Basically, trajectory methods consist of measuring the horizontal and vertical coordinates of a point in the jet issuing from the end of a pipe (Stock, 1955). The pipe may be oriented either vertically or horizontally. The principal difficulty with this method is in measuring the coordinates of the flowing stream accurately.

(a) Vertical Pipes.—Lawrence and Braunworth (1906) noted that two kinds of flow occur from the end of vertical pipes. With a small rise of water (up to 0.37d) above the end of the pipe, the flow acts like a circular weir. When the water rises more than 1.4d, jet flow occurs. When the rise is between these values, the mode of flow is in transition. Lawrence and Braunworth (1906) determined that when the height of the jet exceeded 1.4 d, as determined by sighting over the jet to obtain the maximum rise, the discharge is given by:

$$Q = 5.01 d^{1.75} h^{0.51} \quad (14-7)$$

where:

Q = rate of flow, gal/min

d = inside diameter of the pipe, in

h = height of jet, in

When the rise of water above the end of the pipe is less than 0.37d, discharge is given by:

$$Q = 6.17 d^{1.25} h^{1.35} \quad (14-8)$$

For jet heights between 0.37d and 1.4d, the flow is considerably less than that given by either of these equations. Figure 14-12, prepared using data from Stock (1955) gives flow rates in gallons per minute for standard pipes 2 to 12 in in diameter and jet heights from 1-1/2 to 60 in. Bos (1989) assigns to this method an accuracy of ±10 percent for the jet flow range to ±15 percent for the weir flow range.

For irrigation convenience, the Natural Resources Conservation Service produced a table from curves for vertical pipes in Stock (1955) for the NRCS National Engineering Handbook (1962n). This table is reproduced here as table 14-1. The table gives discharges

Water Measurement Manual

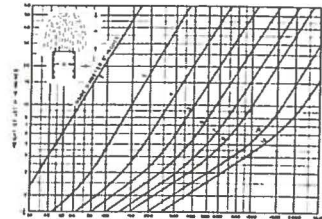


Figure 14-12—Discharge curves for measurement of flow from vertical standard pipes. The curves are based on data from experiments of Lawrence and Braunworth, American Society of Civil Engineers, Transactions, vol. 57, 1906 (courtesy of Utah State University).

Table 14-1—Flow from vertical pipes

Jet height (feet)	Diameter of pipe (inches)											
	2	3	4	6	8	10	12	14	16	18	20	24
2	0.01	0.02	0.03	0.05	0.08	0.12	0.18	0.25	0.35	0.45	0.60	0.80
3	0.02	0.04	0.06	0.10	0.15	0.22	0.32	0.45	0.60	0.80	1.10	1.50
4	0.03	0.06	0.09	0.15	0.22	0.32	0.45	0.60	0.80	1.10	1.50	2.00
5	0.04	0.08	0.12	0.20	0.30	0.42	0.60	0.80	1.10	1.50	2.00	2.70
6	0.05	0.10	0.15	0.25	0.38	0.52	0.75	1.00	1.30	1.80	2.40	3.30
7	0.06	0.12	0.18	0.30	0.45	0.65	0.90	1.20	1.60	2.10	2.80	3.90
8	0.07	0.14	0.21	0.35	0.52	0.75	1.00	1.30	1.80	2.40	3.20	4.40
9	0.08	0.16	0.24	0.40	0.60	0.85	1.10	1.50	2.00	2.70	3.60	5.00
10	0.09	0.18	0.27	0.45	0.68	1.00	1.30	1.80	2.40	3.20	4.20	5.80
12	0.11	0.22	0.33	0.55	0.82	1.20	1.60	2.20	3.00	4.00	5.20	7.20
14	0.13	0.26	0.39	0.65	0.98	1.40	1.90	2.60	3.60	4.80	6.20	8.50
16	0.15	0.30	0.45	0.75	1.12	1.60	2.20	3.00	4.20	5.60	7.20	10.00
18	0.17	0.34	0.51	0.85	1.25	1.80	2.50	3.40	4.80	6.40	8.20	11.50
20	0.19	0.38	0.57	0.95	1.40	2.00	2.80	3.80	5.20	7.00	9.00	12.50
24	0.23	0.46	0.69	1.15	1.70	2.40	3.40	4.60	6.20	8.20	10.50	14.50
30	0.29	0.58	0.87	1.45	2.10	3.00	4.20	5.60	7.60	10.00	13.00	18.00
36	0.35	0.70	1.05	1.75	2.50	3.60	5.00	6.60	9.00	12.00	15.50	21.00
42	0.41	0.80	1.20	2.00	2.90	4.20	5.80	7.60	10.00	13.50	18.00	24.50
48	0.47	0.90	1.35	2.25	3.20	4.60	6.40	8.40	11.00	15.00	20.00	27.50
54	0.53	1.00	1.50	2.50	3.60	5.00	7.00	9.20	12.00	16.50	22.00	30.00
60	0.59	1.10	1.65	2.75	3.90	5.40	7.60	10.00	13.50	18.50	24.50	33.50

Table prepared from discharge curves in Utah Engineering & Experiment Station, Bulletin 5, "Measurement of Irrigation Water," June 1955.
 * Standard pipe
 * Diameter of pipe at outlet

The "Water Measurement Manual", Third Edition, 2001, by the Bureau of Reclamation specifies that vertical pipe flows less than 0.37*d, where d is the diameter of the pipe in inches, are given by the equation $Q = 6.17 \cdot d^{1.25} \cdot h^{1.35}$. Q = rate of flow, gpm; d = inside diameter of the pipe, inches; h = height of jet above pipe opening, inches. Flows will be accurate to ±15%.



2-14-2014 CDN #4 Pivot/Reservoir intake screen. Photographs by Kelly Riggs with Water Master Rich Neal on 2-14-2014. Water was being diverted outside the irrigation season and the reservoir full.



2-14-2014 CDN #4 Pivot/Reservoir flow-meter. This is the third site visit where the flow-meter was found to be inoperative and/or inaccurately showing the current flow.

February 14, 2014 Casa Del Norte "Lower" diversion and flow-meter near the #4 Pivot Reservoir. There is currently no way to regulate flow into this diversion because the two valves did not appear to operate when Rich Neal and Kelly Riggs operated the valves. There is also no way to lock out the diversion. The intake is simply an open pipe in Cold Springs Creek. There is also no way to calibrate the meter to the flow in this low-gradient diversion.

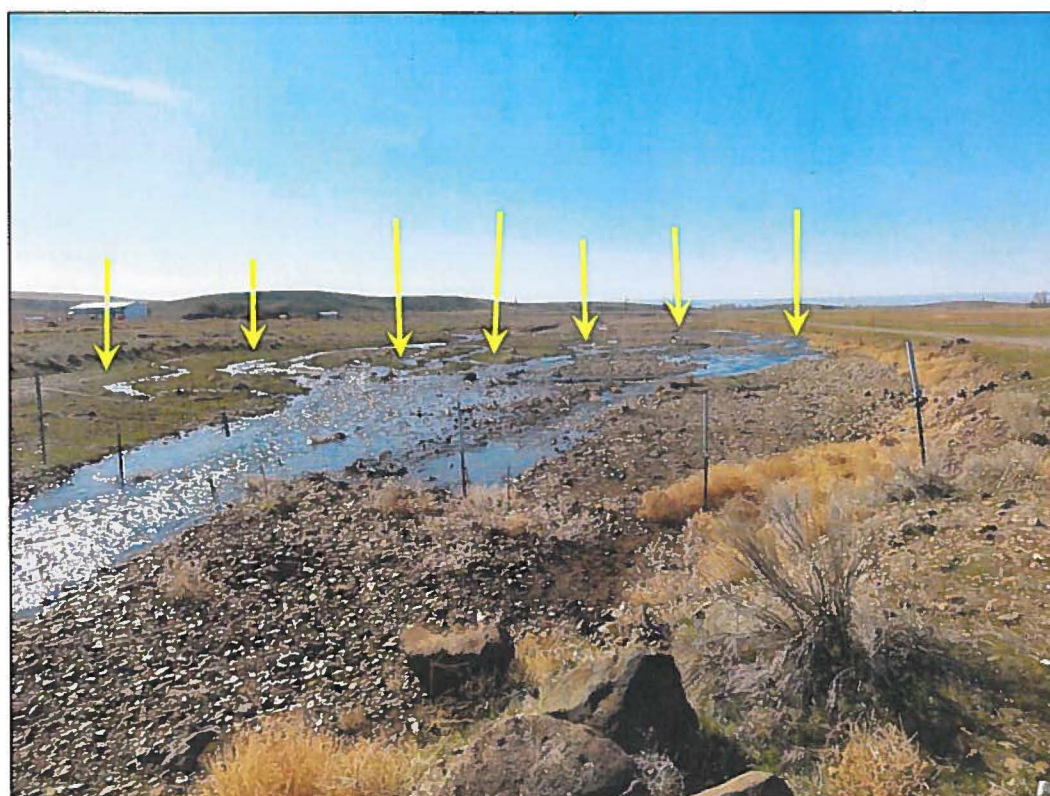


2-14-2014 CDN #4 Pivot/Reservoir flow-meter not suitable for the intended purpose; especially at lower flows.

Exhibit N.



13-13-2014 photograph of the braided channel of Cold Springs Creek and flow looking north from the Ross Road culvert crossing. Estimated flow ~ 7 cfs. Double Anchor believes the channel has been split (yellow arrows) to facilitate more infiltration on CDN land and slower downstream flow in main channel.



3-13-2014 photograph of the braided channel of Cold Springs Creek looking south from the Ross Road culvert crossing. Apparent are the many passive stream bed alterations (yellow arrows) that spread the stream flow across the floodplain to enhance infiltration on CDN lands above Double Anchor Ranches.

Map of Areas Historically Irrigated by Casa Del Norte without Apparent Sufficient Appurtenant Water Rights

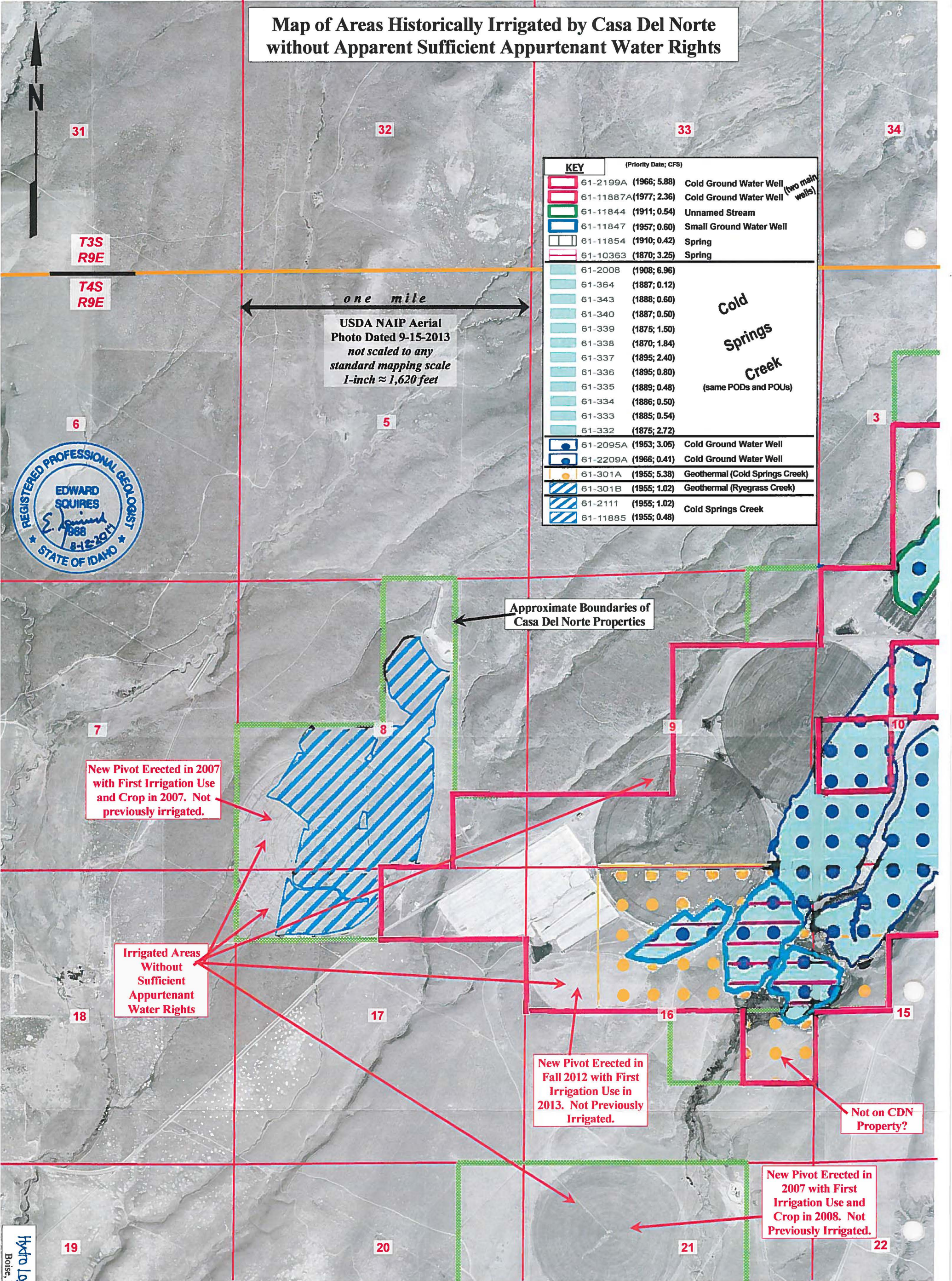


Exhibit P. Close-up annotated aerial photograph of the areas of the Casa Del Norte Ranch that have been previously irrigated without appurtenant water rights and in a less cluttered presentation than Exhibit A.