

MEMORANDUM

TO: File 37-22545
FROM: ANewbry
DATE: 10/29/2015
RE: Ground Water Monitoring Plan

Shelley has requested that I evaluate the effectiveness of Blaine County School District's proposed monitoring plan, in response to a permit condition of approval on water permit 37-22545.

Permit Timeline:

Aug 11, 2010	Blaine County School District submits an Application for Permit to appropriate 9.4 cfs of ground water for heating and cooling of Wood River High School in the City of Hailey, ID.
Oct 5, 2010	The Department issues Permit to Appropriate Water 37-22545 to Blaine County School District (BCSD). The permit includes the condition of approval stated below.
Sept 26, 2013	BCSD submits a Request for Extension of Time to Provide Proof. They ask for an additional 90 days. The development is complete, but the permit holder starts the process of addressing the permit conditions.
Oct 4, 2013	The Department approves the Request for Extension of Time. The new deadline to submit proof becomes December 30, 2013.
Dec 27, 2013	BCSD submits a second Request for Extension of Time to Provide Proof. They ask for an additional 1 year and 9 months. The new deadline to submit proof becomes October 1, 2015. At the same time, BCSD submits a proposed monitoring plan to address a permit condition which requires ground water monitoring.
Jan 3, 2014	The Department approves the Request for Extension of Time, but does not confirm or deny the sufficiency of the proposed monitoring plan.
Sept 30, 2015	The Department receives Blaine County School District's Statement of Completion for Submitting Proof of Beneficial Use with a data submittal, in response to permit condition #9.

Permit 37-22545 was issued in 2010 with the following condition of approval:

Prior to diversion under this right the right holder shall submit to the Department for review and approval a ground water level and water use monitoring plan which includes the following:

- *A plan for gathering baseline water level measurements near the diversion and injection sites.*
- *A plan and schedule for recording and reporting water use and water levels once diversion and use has commenced.*

Monitoring and recording shall occur for a sufficient period of time to demonstrate that the reinjection of ground water diverted under this right prevents injury to existing water rights.

On approval of the monitoring plan by the Department, the right holder shall install all necessary measuring and monitoring equipment specified by the approved plan.

The Department retains jurisdiction to adjust the monitoring plan (including but not limited to increasing or decreasing the period of monitoring). The Department also retains jurisdiction to require the right holder to reduce using water, ceasing using water, or provide mitigation to avoid injury to existing water rights.

The right holder assumes all risk of injury to existing water rights or property as a result of this use including injection of water back into the aquifer.

* * *

The Department holds that the intent of this permit condition was to address public interest concerns. The objective was to prevent the permit holder from raising local ground levels enough to cause property damage to low elevation locations, such as basements.

In December 2013, BCSD submitted a proposed monitoring plan to address this permit condition. The text of the monitoring plan is shown here:

The Blaine County School District proposes the following monitoring activities for Permit 37-22545:

- 1. Monitor and record aggregate production volumes (i.e. totalizer readings) days in which schools are in operation.*
- 2. Monitor and describe the number of production wells in operation.*
- 3. Monitor and record peak production flow rates.*
- 4. Measure and record injection-well water levels at times of peak system operation (e.g. twice during cold-weather periods and twice during hot-weather periods) during 2014.*
- 5. Measure and record groundwater levels on a monthly basis in the Monitoring Well.*
- 6. Measure and record groundwater levels in the Wood River High School Well No. 8 on a monthly basis during non-irrigation months. Measurements also will be taken in this well when injection well water levels are measured (see Item 4 above).*
- 7. Compile and interpret information collected as part of the above-listed monitoring activities for submittal with the proof of beneficial use.*

* * *

The monitoring plan was not submitted prior to diversion. The untimely submittal raises a conflict with the permit condition requirement to gather baseline ground water level data at and near the place of use—Wood River High School. Unfortunately, the Department did not comment on the acceptability of the proposed monitoring plan at the time it was submitted.

Therefore, the proposed monitoring plan does not meet the permit requirement for “gathering baseline water level measurements near the diversion and injection sites.” It is no longer fully feasible to meet this requirement because the system has now been in operation since 2011. If the permit holder has access to any of the extraction, injection, or depth-to-water records created at the commissioning of the system, these would help to establish some baseline water level data for the area near the Wood River High School.

The proposed monitoring plan does meet the requirement for “recording and reporting water use and water levels once diversion and use has commenced,” but is not rigorous enough to leave room for missing and/or erroneous data. The September 2015 data submittal on behalf of Blaine County School District does not quite fulfill all of the monitoring activities set out in the proposed December 2013 monitoring plan.

- Items 1, 2, 3, and 7 have been completed in a thorough fashion.
- Item 4 is partially complete; the data submittal includes measurements for January, February, March, and October, but the remainder of 2014 (following October) was missing.
- Item 5 is incomplete due to the condition of the well.
- Item 6 is also partially complete; the water levels in the injection wells were measured twice during cold-weather months, but not during the hot-weather months of 2014.

Diversion records in the Blaine County School District data submittal demonstrate that the high school heat exchange system exhibited a spike in water volume used during the summer of 2015. A footnote in the report comments that the spike in water use during the summer of 2015 should be attributed to a controller malfunction caused by a power surge. Therefore, this data should be omitted from the *Estimated Daily Production* data set of the September 2015 data submittal report and omitted from consideration for beneficial use.

If the permit holder will submit an additional extension request and the Department can approve it, I recommend that the Department require five additional years of monitoring pursuant to licensure of water permit 37-22545. An additional five years would allow the permit development period to include severe weather conditions, pushing the system to a higher maximum usage. The permit holder shall prepare an additional data submittal and submit it to the Department with their Statement of Proof of Beneficial Use.

I recommend a measurement schedule tailored to capture system usage during the greatest demand. The following monitoring plan is rigorous enough to facilitate the Department’s need for demand data at the time of licensing, while also allowing for extenuating circumstances of the applicant (ie. equipment malfunction, inclement weather, illness/personnel issues, etc.).

Recommended monitoring activities for Permit 37-22545 for 2016 through 2020:

1. Monitor and record aggregate production volumes (i.e. totalizer readings) and flow rates each day school is in operation (may include summer, excludes weekends and holidays).
2. Monitor and describe the number of production wells in operation at the time of each reading noted in item 1.
3. Measure and record injection-well water levels (depth-to-water) throughout the year, especially at times of peak system operation:
 - One measurement each week, December 1 to February 28
 - Two measurements each week, January 1 to January 31
 - Two measurements at least 30 days apart, March 1 to May 31
 - One measurement per month, June 1 to August 31
 - Two measurements at least 30 days apart, September 1 to November 31
4. Measure and record groundwater levels in the Wood River High School Well No. 8 or a different representative well near to the Wood River High School injection system, on the same days

which depth-to-water measurements are taken on the injection wells, outside of irrigation season.

5. Compile and interpret information collected as part of the above-listed monitoring activities for submittal with the proof of beneficial use.
 - Include annual diversion volumes through the heat exchangers.
 - Include maximum flow rates through the heat exchangers.
 - If the system has a bypass (extraction directly to injection), include annual volumes of bypassed water.
 - Provide an analysis of the potential to raise ground water locally (school campus and surrounding area). Discuss whether the system operation could create a perched water table.
 - Confirm that the capacity of the heat exchangers is congruent to the pumping rate. (Show that the water pumped is being beneficially used.)

Notes for future data submittals:

Please clearly explain misleading data associated with equipment malfunctions, such as the data submitted for summer 2015, and account for it in the analysis.

**RECEIVED****SEP 30 2015****DEPARTMENT OF
WATER RESOURCES**

September 29, 2015

Darla Block,
Technical Records Specialist
Idaho Department of Water Resources
PO Box 83720
Boise, Idaho 83720-0098

Subject: Statement of Completion, Permit 37-22545

Dear Ms. Block,

Please find attached a Statement of Completion for Permit 37-22545, which authorizes the diversion of up to 9.4 cfs of groundwater for heating and cooling purposes under an October 11, 2010 priority date. Also enclosed is a check in the amount of \$325 to cover processing fees.

Conditions of approval for Permit 37-22545 include monitoring over "a sufficient period of time to demonstrate that the reinjection of ground water diverted under this right prevents injury to existing water rights." The purpose of this letter is to summarize the results of past and current monitoring efforts.

Permit Description

Permit 37-22545, approved on October 5, 2010, authorizes a maximum diversion rate of 9.4 cfs of groundwater from January 1 through December 31 for heating and cooling purposes under an October 11, 2010 priority date. The original permit approved 4 points of diversion in the SWSE quarter-quarter of Section 10, Township 02N, Range 18E. A permit amendment approved March 8, 2011 authorized points of diversion in both the NWSE and SWSE quarter-quarters of Section 10, Township 02N, Range 18E.

Pumping and Injection System Description

Groundwater is diverted via one or more of three production wells and is re-injected in three injection wells (Figure 1). Drillers' reports for these wells are provided in Attachment A. The system is capable of operating with 1, 2, or 3 wells at one time.

According to District personnel, the production wells are each capable of producing approximately 820 gpm. Discharge when either 2 or 3 wells are operating is currently limited by distribution pipe diameter. Based on measurements taken by District personnel during the week of December 9, 2013, the aggregate discharge with 2 wells operating is approximately 1,740 gpm; the aggregate discharge with 3 wells operating is approximately 2,016 gpm (4.5 cfs).

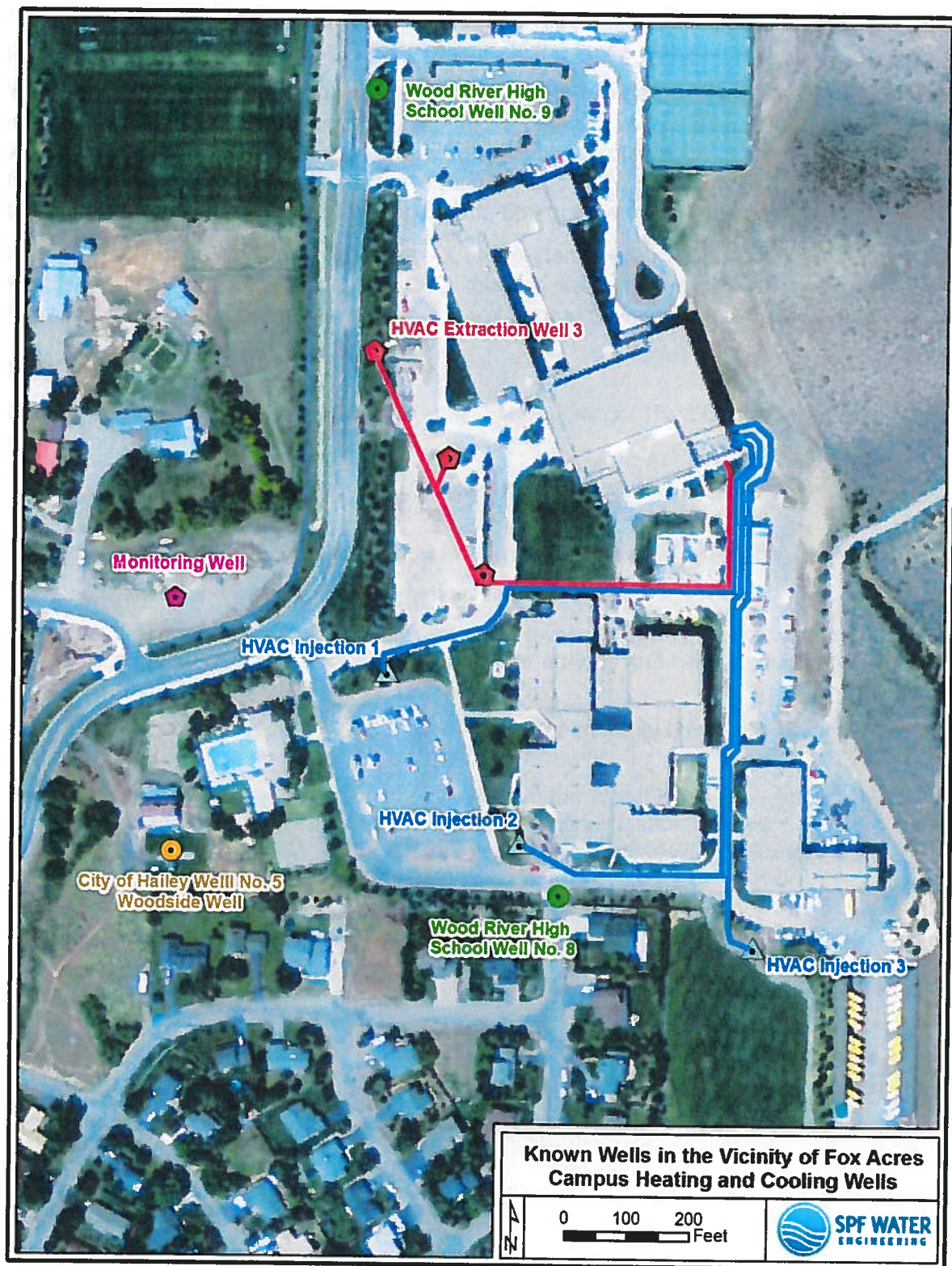


Figure 1. Fox Acres Campus Heating and Cooling Wells.

Normal heating/cooling loads typically require operation of only one well; a second production may kick in for short periods of time during times of high demand.¹

Water from the three production wells passes through two parallel heat exchangers and then into a manifold that divides the aggregate discharge into three pipes leading to three injection wells. Valves were set following construction to balance discharge, ensuring relatively equal flow to each injection well. Thus, the discharge into each injection well with one, two, and three production wells in operation is 270 gpm, 580 gpm, and 670 gpm, respectively.

Issues associated with the construction of this system were in litigation until October 2013. Following the litigation settlement, BCSD took on the responsibility of monitoring system flows. System flows are measured with a Veris Veribar flowmeter and Foxboro totalizer.

Monitoring Plan

On December 26, 2013, the Blaine County School District (BCSD) proposed the following monitoring activities for Permit 37-22545:

1. Monitor and record aggregate production volumes (i.e., totalizer readings) days in which schools are in operation.
2. Monitor and describe the number of production wells in operation.
3. Monitor and record peak production flow rates.
4. Measure and record injection-well water levels at times of peak system operation (e.g., twice during cold-weather periods and twice during hot-weather periods) during 2014.
5. Measure and record groundwater levels on a monthly basis in the Monitoring Well (see Figure 1).
6. Measure and record groundwater levels in the Wood River High School Well No. 8 (Figure 1) on a monthly basis during non-irrigation months. Measurements also will be taken in this well when injection well water levels are measured (see Item 4 above).
7. Compile and interpret information collected as part of the above-listed monitoring activities for submittal with the proof of beneficial use.

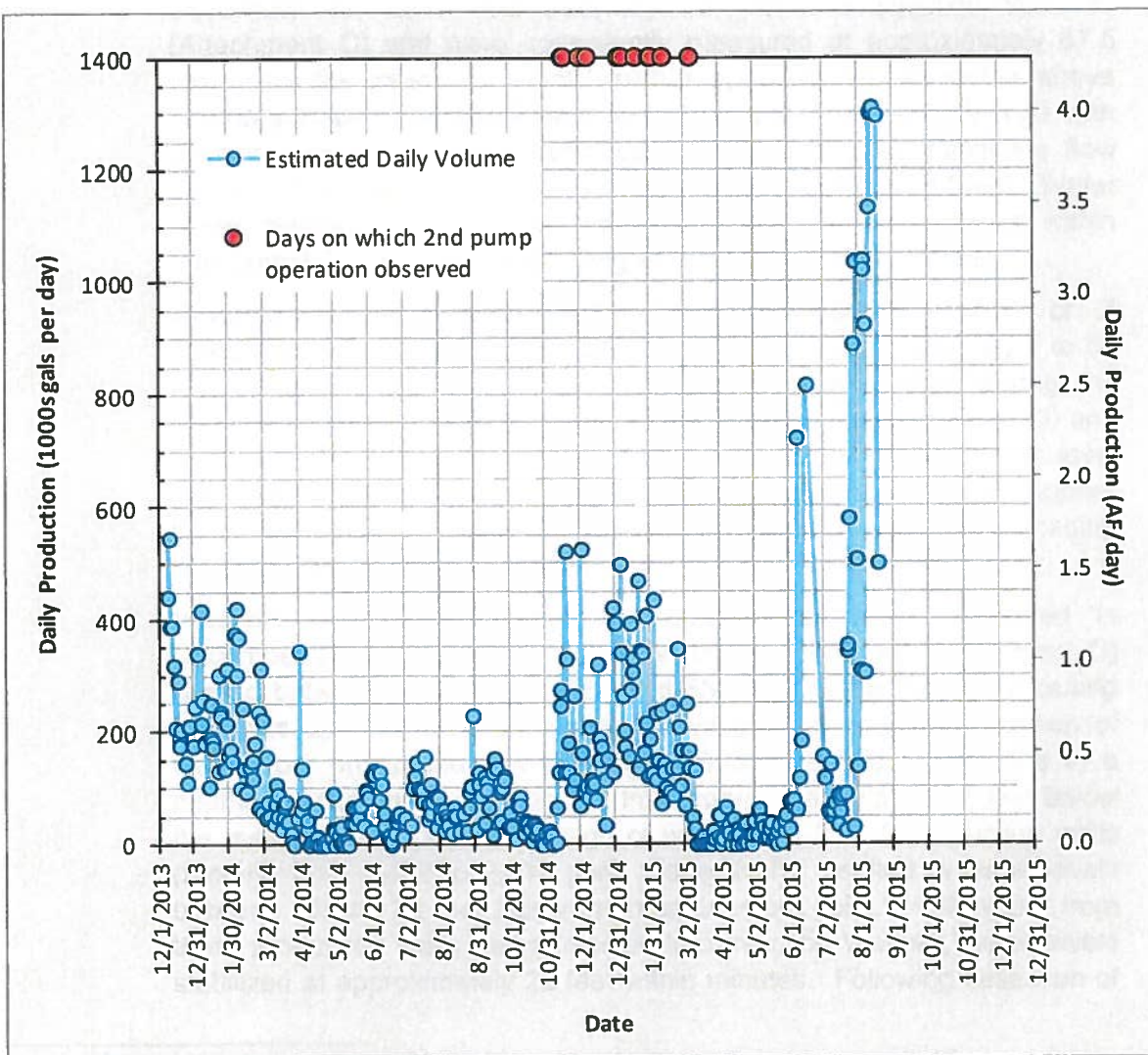
Monitoring Results

Aggregate Production

Aggregate production data collected by BCSD personnel from December 1, 2013 through August 18, 2015 are summarized in Figure 2 (see also Attachment B).

¹ Scott Davis, Blaine County School District, *personal communication*, 12/16/2013.

Estimated daily production volumes during this time ranged from zero to approximately 1.3 million gallons per day (mgd), or up to about 4 acre-feet per day (AF/day). Instantaneous flow rates (recorded only at the time that daily totalizer readings were taken) ranged from zero to 1,561 gpm (3.48 cfs). The estimated maximum average daily flow was 911 gpm (2 cfs); approximately one third of this amount was discharged into each injection well. Two-well operation was noted 11 times between December 5, 2013 and August 18, 2015 (Figure 2).



Note: high usage in the summer of 2015 was likely the result of a power surge on or around June 9 that damaged control equipment. This issue has been resolved.

Figure 2. Estimated daily production.

Groundwater Levels at Times of Peak Production

BCSD personnel conducted a series of well tests to measure groundwater levels under peak operating conditions as part of the monitoring effort. These tests, conducted in February 2014, consisted of measuring groundwater levels in individual injection wells before, during, and after maximum pumping by one, two, or three production wells.

Results from these tests are described below:

1. *Injection Well #1.* Non-pumping groundwater levels measured between December 12, 2013 and February 25, 2014 in Injection Well #1 (Attachment C) and were consistently measured at approximately 67.5 feet below the measuring point (which is approximately 20 inches above ground surface). Depth-to-water measurements in Injection Well #1 with discharge from all 3 production wells (representing an aggregate flow between 2,009 and 2,015 gpm) stabilized at approximately 14 feet. Water levels returned to 67.5 feet below the well measuring point within approximately 5 minutes of stopping all 3 production-well pumps.

Groundwater-level measurements during the operation of 1 or 2 production wells were less consistent, ranging from approximately 7 to 56 feet below the top of casing. Most measurements taken during the operation of 1 or 2 production wells ranged between approximately 40 and 60 feet below the well measurement point. Some of the water level measurements – especially those indicating a shallow water level – appear to be influenced by well in efficiency, turbulence, and/or cascading injection water in the injection well.

2. *Injection Well #2.* Non-pumping groundwater levels measured in December 2013 and February 2014 in Injection Well #2 (Attachment D) ranged between approximately 67 and 68.5 feet below the top of casing (which is approximately 21 inches above ground surface). Injection of water from one production well (approximately 835 gpm) resulted in a depths to water in the well ranging from approximately 52 to 56 feet below the measurement point. Injection of water from 2 or 3 production wells (ranging from 1,452 to 2,012 gpm, respectively) resulted in water levels between 18 and 22 feet below the measurement point.² With water from three production wells being injected into Injection Well #2, water levels stabilized at approximately 22 feet within minutes. Following cessation of

² The fact that water levels are similar 12 or three wells are pumping between approximately 1,500 and 2,000 gpm suggests that most of the apparent water level increase in the injection well as a result of well inefficiency.

pumping from all three production wells, water levels returned to 68 feet below the measurement point within 11 minutes, suggesting that at least some of the apparent water-level rise was a result of a well inefficiency.

3. *Injection Well #3.* Static groundwater levels measured in December 2013 and February 2014 in Injection Well 3 (Attachment E) were approximately 62 feet below the top of casing (which is approximately 2 feet above ground surface). Injection from a single well producing approximately 835 gpm (of which approximately one third is discharged into Injection Well #3) resulted in a water level approximately 40 feet below ground surface. Injection of water from 2 production wells (at an aggregate flow rate of 1,074 gpm) resulted in a depth to water of approximately 12 feet. Water levels in Injection Well #3 stabilized between approximately 10 and 12 feet below the measurement point within minutes after beginning to receive discharge from all three production wells (at an aggregate flow rate of 2,003 gpm). Water levels in the wells returned to 61 feet below top of casing within 14 minutes of stopping all three pumps, indicating that at least some of the apparent water-level rise was a result of well inefficiency).
4. *Irrigation Well No. 8.* This well is located on the south side of the Fox Acres campus near Injection Well #2. Several groundwater-level measurements in Irrigation Well No. 8 (on January 10, 2014, February 27, 2014, March 11, 2014, and October 8, 2014) indicate water levels between 63.5 and 64.25 feet below the top of casing, regardless of pumping and injection rates.
5. *Monitoring Well.* Mr. Jon Thomas (BCSD) reports that foreign objects (e.g., stones?) apparently thrown into the 57.5-foot deep monitoring well (Figure 1) have rendered this well unusable as a monitoring well. Mr. Thomas reports (Attachment that the sounding probe hangs up at approximately 41 feet below the top of casing (at which point the well is dry).

Monthly Measurement in Irrigation Well No. 8

Periodic measurements in this well indicate water levels between 63.5 and 64.25 feet below the top of casing (see above). Water levels in this well (and the three injection wells) will be measured on a monthly basis throughout the coming heating season.

Monitoring Conclusions

The purpose of groundwater-level monitoring under Permit 37-22545 is to demonstrate that the reinjection of ground water diverted under this right does not cause injury to existing rights. The closest rights (or properties) are located south and west of the injection wells.

Data collected to date indicate that injection is not injuring nearby rights or properties, and that it is unlikely that injection will injure nearby rights or properties, for the following reasons:

1. Although the District has 3 production wells, only 1 or 2 wells are operating at any one time. The maximum flow rate under normal operating conditions was less than approximately 1,560 gpm (3.48 cfs).
2. Static groundwater levels in the injection wells are approximately between approximately 62 and 68 feet below the tops of casings. Water levels in the injection wells rise to within approximately 10 feet from the top of casing under full production from three wells (over 2,000 gpm). However, water levels returned to static levels within minutes of stopping pumping. This strongly suggests that much of the apparent water level increase in the injection wells is the result of well inefficiency and does not reflect nearby groundwater levels. Similarly, measured water levels in Injection Well #2 regardless of whether there were two or three production wells producing water suggests that the apparent water level increases reflect a substantial amount of well inefficiency, not local groundwater level increases. (Measuring tubes will be used for future water level measurements, which should reduce some of the measurement uncertainty).
3. Although we do not have a full record of groundwater level measurements in Irrigation Well No. 8, those measurements that were made do not indicate a substantial rise in local groundwater levels as a result of injection.
4. The City of Hailey operates a municipal well (City of Hailey Well No. 5, a.k.a. Woodside Well) located approximately 450 feet from the closest injection well (Injection Well 1 – see Figure 1). The City does not monitor water levels in this well, but is unaware of any evidence suggesting that injection under Permit 37-22545 has had an adverse impact on the Woodside Well.^{3,4}
5. Observations in an unused well located approximately 350 feet from Injection Well No. 1 (now being used as a monitoring well – see Figure 1) indicate that water levels were greater than the depth of the well (57.5 feet) or greater than approximately 41 feet (the depth of a current well obstruction).

³ Tom Hellen, Public Works Director, City of Hailey, *personal communication*, December 5, 2013 and December 20, 2013.

⁴ Mariel Miller, Public Works Director, City of Hailey, *personal communication*, September 28, 2015.

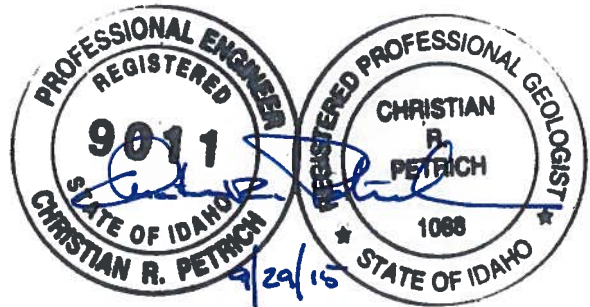
6. District personnel will continue to monitor groundwater levels in the injection wells and in Irrigation Well No. 8 through the coming heating season. I anticipate that these measurements will continue to show modest impacts to local groundwater levels as a result of injection, and will not indicate conditions that would lead to injury of existing rights or properties.

In summary, diversions under Permit 37-22545 are being put to beneficial use. In my opinion, Permit 37-22545 is ready for licensing.

Sincerely,



Christian R. Petrich, Ph.D., P.E., P.G.
Principal Engineer/Hydrologist



cc: Mike Chatterton, Blaine County School District
Howie Royal, Blaine County School District

Attachment A: Driller's Reports

Attachment B: Production Data

Attachment C: Injection Well #1 Data

Attachment D: Injection Well #2 Data

Attachment E: Injection Well #3 Data

Attachment F: Irrigation Well No. 8 Data

Attachment G: Monitoring Well Data

Attachment A: Driller's Reports

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Extraction well #1
AD

1. WELL TAG NO. D 0059616
Drilling Permit No. 861333
Water right or injection well # 37-22-545

2. OWNER:
Name Blaine Co School District #61
Address 118 W. Bullion St.
City Hailey State ID Zip 83333

3. WELL LOCATION:
Twp. 2 North ☒ or South ☐ Rge. 18 East ☒ or West ☐
Sec. 10 1/4 NW 1/4 SE 1/4

Gov't Lot _____ County Blaine
Lat. 43 ° 30.975 (Deg. and Decimal minutes)
Long. 114 ° 17.658 (Deg. and Decimal minutes)
Address of Well Site 1050 Fox Acres Rd. City Hailey
Lot _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☒ Other Heat Pump

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:
☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:
Seal material Bentonite From (ft) 0' To (ft) 40' Quantity (lbs or ft³) 1500# Placement method/procedure Temporary Casing

8. CASING/LINER:
Diameter (nominal) 12" From (ft) 0' To (ft) 116' Gauge/Schedule 25 Material steel
Casing Liner Threaded Welded
☒ ☐ ☐ ☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:
Perforations ☒ Y ☐ N Method Perforator
Manufactured screen ☐ Y ☐ N Type _____
Method of installation _____

From (ft) 115' To (ft) 116.5' Slot size 1/4" Numbe/pft 1700 Diameter (nominal) 12" Material steel Gauge or Schedule _____

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

10. FILTER PACK:
Filter Material _____ From (ft) _____ To (ft) _____ Quantity (lbs or ft³) _____ Placement method _____

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG) _____
Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:
Depth first water encountered (ft) 64' Static water level (ft) 64'
Water temp. (°F) _____ Bottom hole temp. (°F) _____
Describe access port _____

Well test: Test method:
Drawdown (feet) _____ Discharge or yield (gpm) 400+ Test duration (minutes) 60 min
Pump ☐ Bailor ☐ Air ☒ Flowing artesian ☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
16"	0'	3'	Overburden		
	3'	15'	Gravel & Clay		
	15'	21'	Clay		
	21'	48'	Gravel & Clay		
12"	48'	105'	Gravel & Clay (Gravel)		
	105'	120'	Gravel & Sediment (Gravel)		
	120'	135'	Gravel & Sediment		
	135'	166'	Shale (brown)		
	166'	169'	Hard Shale rock		

RECEIVED

AUG 12 2011

DEPT. OF WATER RESOURCES
SOUTHERN REGION

RECEIVED

AUG 10 2011

Department of Water Resources
Eastern Region

Completed Depth (Measurable): 169'
Date Started: 6/16/11 Date Completed: 6/30/11

14. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Hy Danning Drilling Co. No. 519

*Principal Driller Hy Danning Date _____

*Driller _____ Date _____

*Operator II Jed Danning Date 6/30/11

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Extraction Well #2
AD

1. WELL TAG NO. D 0059615
Drilling Permit No. 841332
Water right or injection well # 37-22-545

2. OWNER:
Name Blaine Co. School District #61
Address 118 W. Bullion St.
City Hailey State ID Zip 83333

3. WELL LOCATION:
Twp. 2 North ☒ or South ☐ Rge. 18 East ☒ or West ☐
Sec. 10 1/4 NW 1/4 SE 1/4

Gov't Lot _____ County Blaine
Lat. 43 ° 31.012 (Deg. and Decimal minutes)
Long. 114 ° 17.673 (Deg. and Decimal minutes)
Address of Well Site 1050 Fox Acres Rd.
City Hailey

Lot _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☐ Injection
☒ Other Heat Pump

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:
☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:
Seal material Bentonite From (ft) 0 To (ft) 40 Quantity (lbs or ft) 1400# Placement method/procedure Temporary Casing

8. CASING/LINER:
Diameter (nominal) 12" From (ft) 0 To (ft) 190 Gauge/Schedule .25 Material steel
Casing Liner Threaded Welded
☒ ☐ ☐ ☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:
Perforations ☒ Y ☐ N Method Perforator
Manufactured screen ☐ Y ☐ N Type _____
Method of installation _____

From (ft) 130 To (ft) 180 Slot size _____ Number 1800 Diameter (nominal) 12" Material steel Gauge or Schedule .250

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

10. FILTER PACK:
Filter Material _____ From (ft) _____ To (ft) _____ Quantity (lbs or ft) _____ Placement method _____

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG) _____
Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:
Depth first water encountered (ft) 64' Static water level (ft) 64'
Water temp. (°F) _____ Bottom hole temp. (°F) _____

Describe access port _____
Well test:
Drawdown (feet) _____ Discharge or yield (gpm) 400+ Test duration (minutes) 60
Test method:
Pump ☐ Bailer ☐ Air ☒ Flowing artesian ☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
16"	0'	3'	Overburden		
	3'	10'	Gravel & Clay		
	10'	20'	Clay		
	20'	48'	Gravel & Clay		
12"	48'	125'	Gravel & Clay		
	125'	180'	Gravel & Sediment		
	180'	190'	Rock (broken) Brown Shale casing		

RECEIVED

AUG 10 2011

Department of Water Resources
Eastern Region

RECEIVED

AUG 12 2011

DEPT. OF WATER RESOURCES
SOUTHERN REGION

Completed Depth (Measurable): 188'
Date Started: 6/16/11 Date Completed: 6/24/11

14. DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name W.D. Drilling Co. No. 519
Principal Driller W.D. Drilling Date _____
Operator W.D. Drilling Date _____
Operator II W.D. Drilling Date 6/24/11
Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Injection Well #1
RESOURCES
AT AD

1. WELL TAG NO. D 0058709
Drilling Permit No. 861264
Water right or injection well # 37 W 086 001

2. OWNER:
Name Plains Co. School District #61
Address 118 W. Burlington St.
City Haskell State ND Zip 58333

3. WELL LOCATION:
Twp. 2 North ☒ or South ☐ Rge. 18 East ☒ or West ☐
Sec. 10 NW 1/4 SW 1/4 SE 1/4

Gov't Lot _____ County Blaine
Lat. 43° ' 30.954 (Deg. and Decimal minutes)
Long. 114° ' 17.696 (Deg. and Decimal minutes)
Address of Well Site 1050 For Acres Rd.
City Blainey
(Leave all listed names of road - (Distance to Head of Landmark) -)
Lot _____ Blk _____ Sub Name _____

4. USE: ☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☒ Injection
☐ Other _____

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well

☐ Abandonment ☐ Other _____

6. DRILL METHOD:
☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other _____

Seal material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method/procedure
Bentonite	0' 40"	1550 #		Temporary casing

8. CASING/LINER:				Casing	Liner	Threaded	Welded
Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material			
12"	+2	100'	25	steel	☒	☐	☒
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:
Perforations ☒ Y ☐ N Method Perforator
Manufactured screen ☐ Y ☐ N Type _____
Method of installation _____

From (ft)	To (ft)	Slot size	Number of	Diameter (nominal)	Material	Gauge or Schedule
100'	175'	4x1"	2240	12"	steel	

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☐ N Type _____

Filter Material	From (ft)	To (ft)	Quantity (lbs or m ³)	Placement method

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG) _____
Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 61' Static water level (ft) 61
Water temp. (°F) _____ Bottom hole temp. (°F) _____
Describe access port _____

Well test:			Test method:			
Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Boiler	Air	Flowing artesian
—	500+	3 hrs	☐	☐	☒	☐

Water quality test or comments:

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
16"	0'	5'	Overburden		
	5'	48'	G: Clay		
12"	48'	56'	Clay		
	56'	148'	Gravel & Clay		
	148'	160'	Gravel & Sediment		
	160'	163'	Long Mudstone		

Completed Depth (Measurable): 175'

Date Started: 6/9/11 Date Completed: 7/13/11

14. DRILLER'S CERTIFICATION:
We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Jody Deering Drilling Co. No. 519

*Principal Dealer John Manning Date

*Driller _____ Date _____

*Operator II Jed Denny Date 7/18/11

Operator I _____ Date _____

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Injection Well #2

AD

1. WELL TAG NO. D 0056710
Drilling Permit No. 861265
Water right or injection well # 37 W 086-002

2. OWNER:
Name Blaine Co. School District #61
Address 118 W. Bullion St.
City Hailey State ID Zip 83333

3. WELL LOCATION:
Twp. 2 North ☒ or South ☐ Rge. 18 East ☒ or West ☐
Sec 10 NW 1/4 SW 1/4 SE 1/4

Gov'l Lot County Blaine
Lat. 43° 30.918 (Deg. and Decimal minutes)
Long. 114° 17.633 (Deg. and Decimal minutes)
Address of Well Site 1050 Fox Acres Rd.
City Hailey

(Give all names of road - Disregard to Road or Lane name)
Lot Blk. Sub. Name

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation ☐ Thermal ☒ Injection
☐ Other

5. TYPE OF WORK:
☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other

6. DRILL METHOD:
☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES:
Seal material Bentonite From (ft) 0 To (ft) 40 Quantity (lbs or ft³) 1450# Placement method/procedure Temporary casing

8. CASING/LINER:
Diameter (nominal) From (ft) To (ft) Gauge/Schedule Material Casing Liner Threaded Welded
12" 42' 175' 25 steel ☒ ☐ ☐ ☒

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s)

9. PERFORATIONS/SCREENS:
Perforations ☒ Y ☐ N Method Perforator
Manufactured screen ☐ Y ☐ N Type
Method of installation

From (ft)	To (ft)	Slot size	Number	Diameter (nominal)	Material	Gauge or Schedule
100'	175'	1/2"	2310	12"	steel	

Length of Headpipe Length of Tailpipe
Packer ☐ Y ☐ N Type

10. FILTER PACK:
Filter Material From (ft) To (ft) Quantity (lbs or ft³) Placement method

11. FLOWING ARTESIAN:
Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG)
Describe control device

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 62' Static water level (ft) 62'
Water temp. (°F) Bottom hole temp. (°F)

Describe access port

Well test: Drawdown (feet) Discharge or yield (gpm) Test duration (minutes) Pump Bailor Air Flowing artesian
 500+ 3 hrs ☐ ☐ ☒ ☐

Water quality test or comments:

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
16"	0'	5'	Overburden		
	5'	48'	Gravel & Clay		
12"	48'	55'	Clay		
	55'	130'	Gravel & Clay		
	130'	160'	Gravel & Sediment		
	160'	163'	Consolidated		
	163'	175'	Gravel & Sediment		
	175'		Mudstone		

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DEPT. OF WATER RESOURCES
SOUTHERN REGION

Completed Depth (Measurable): 175'
Date Started: 6/9/11 Date Completed: 7/15/11

14. DRILLER'S CERTIFICATION:

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

Company Name Jed Dunning Drilling Co. No. 519

*Principal Driller Jed Dunning Date

*Driller Jed Dunning Date

*Operator II Jed Dunning Date 7/18/11

Operator I Date

* Signature of Principal Driller and rig operator are required.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Injection Well #3

AD

1. WELL TAG NO. D 0058711Drilling Permit No. _____
Water right or injection well # 37 W 086-003

2. OWNER:

Name Blaine Co. School District #61
Address 118 W Bullion St
City Hailey State ID Zip 83333

3. WELL LOCATION:

Twp. 2 North ☒ or South ☐ Rge. 18 East ☒ or West ☐
Sec. 10 NW 14 SW 14 SE 14Gov't Lot _____ County Blaine
Lat. 43° 30.885 (Deg. and Decimal minutes)
Long. 114° 17.551 (Deg. and Decimal minutes)
Address of Well Site 1050 Fox Arrow Rd.
City Hailey
(Name of local water user or owner - California to West or Louisiana)
Lot _____ Blk _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method/procedure
<u>Bentonite</u>	<u>0'</u>	<u>40'</u>	<u>1750#</u>	<u>Temporary casing</u>

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Linear	Threaded	Welded
<u>12" +2"</u>	<u>182.25</u>			<u>steel</u>	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☒ Y ☐ N Method PerforatorManufactured screen ☐ Y ☒ N Type _____

Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
<u>130</u>	<u>180</u>	<u>1/2" x 1/4"</u>	<u>1400</u>	<u>12"</u>	<u>steel</u>	

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 60' Static water level (ft) 60'

Water temp. (°F) _____ Bottom hole temp. (°F) _____

Describe access port _____

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Boiler	Air	Flowing artesian
<u>-</u>	<u>5+</u>	<u>5 hrs</u>	☐	☐	☒	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water
				Y N
<u>16"</u>	<u>6'</u>	<u>3'</u>	<u>Overburden</u>	
	<u>3'</u>	<u>13'</u>	<u>Gravel & Clay</u>	
	<u>13'</u>	<u>18'</u>	<u>Clay</u>	
	<u>18'</u>	<u>25'</u>	<u>Gravel & Clay</u>	
	<u>25'</u>	<u>31'</u>	<u>Clay</u>	
	<u>31'</u>	<u>48'</u>	<u>Gravel & Clay</u>	
<u>12"</u>	<u>48'</u>	<u>130'</u>	<u>Gravel & Clay</u>	
	<u>130'</u>	<u>180'</u>	<u>Gravel & Sediment</u>	
	<u>180'</u>	<u>182'</u>	<u>Rock</u>	
<u>10"</u>	<u>182'</u>	<u>195'</u>	<u>Rock</u>	

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SOUTHERN REGIONCompleted Depth (Measurable): 195'Date Started: 6/13/11 Date Completed: 6/16/11

14. DRILLER'S CERTIFICATION:

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

Company Name Hy-Drill Drilling Co. No. 519Principal Driller Joe V. Manning Date _____Operator Joe V. Manning Date _____Operator II Joe V. Manning Date 6/17/11

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

Attachment B: Production Data

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
12/5/13 5:00 PM	8,974,000	1	733	1.63						
12/9/13 11:59 AM	10,649,000	0	0	0.00	1,675,000	5,459	442	1.36	307	
12/10/13 11:59 AM	11,196,000	0	0	0.00	547,000	1,440	547	1.68	380	
12/11/13 11:00 AM	11,569,000	0	0	0.00	373,000	1,381	389	1.19	270	
12/12/13 12:07 PM	11,976,000	0	0	0.00	407,000	1,507	389	1.19	270	
12/13/13 10:48 AM	12,277,000	0	0	0.00	301,000	1,361	318	0.98	221	
12/16/13 12:30 PM	12,912,000	0	0	0.00	635,000	4,422	207	0.63	144	
12/17/13 12:22 PM	13,202,000	0	0	0.00	290,000	1,432	292	0.89	203	
12/18/13 1:08 PM	13,398,000	0	0	0.00	196,000	1,486	190	0.58	132	
12/19/13 11:04 AM	13,559,000	0	0	0.00	161,000	1,316	176	0.54	122	
12/20/13 12:04 PM	13,771,000	0	0	0.00	212,000	1,500	204	0.62	141	
12/23/13 1:18 PM	14,219,000	1	593	1.32	448,000	4,394	147	0.45	102	
12/26/13 1:28 PM	14,549,000	0	0	0.00	330,000	4,330	110	0.34	76	
12/27/13 9:40 AM	14,726,000	0	0	0.00	177,000	1,212	210	0.65	146	
12/30/13 12:23 PM	15,282,000	1	520	1.16	556,000	4,483	179	0.55	124	
1/2/14 9:58 AM	15,993,000	1	474	1.06	711,000	4,175	245	0.75	170	
1/3/14 12:06 PM	16,363,000	0	0	0.00	370,000	1,568	340	1.04	236	
1/6/14 12:27 PM	17,009,000	0	0	0.00	646,000	4,341	214	0.66	149	
1/7/14 11:02 AM	17,400,000	1	431	0.96	391,000	1,355	416	1.28	289	
1/8/14 11:59 AM	17,669,000	0	0	0.00	269,000	1,497	259	0.79	180	
1/9/14 11:00 AM	17,845,000	0	0	0.00	176,000	1,381	184	0.56	127	
1/10/14 10:25 AM	18,020,000	0	0	0.00	175,000	1,405	179	0.55	125	
1/13/14 11:05 AM	18,332,000	1	722	1.61	312,000	4,360	103	0.32	72	
1/14/14 11:01 AM	18,580,000	0	0	0.00	248,000	1,436	249	0.76	173	
1/15/14 11:02 AM	18,771,000	0	0	0.00	191,000	1,441	191	0.59	133	
1/16/14 11:32 AM	18,960,000	1	732	1.63	189,000	1,470	185	0.57	129	
1/17/14 11:02 AM	19,130,000	1	718	1.60	170,000	1,410	174	0.53	121	
1/21/14 10:57 AM	19,658,000	0	0	0.00	528,000	5,755	132	0.41	92	
1/22/14 10:59 AM	19,962,000	0	0	0.00	304,000	1,442	304	0.93	211	
1/23/14 10:59 AM	20,197,000	0	0	0.00	235,000	1,440	235	0.72	163	
1/24/14 11:07 AM	20,428,000	0	0	0.00	231,000	1,448	230	0.70	160	
1/27/14 11:08 AM	20,837,000	0	0	0.00	409,000	4,321	136	0.42	95	
1/28/14 11:14 AM	21,152,000	0	0	0.00	315,000	1,446	314	0.96	218	
1/29/14 11:21 AM	21,369,000	0	0	0.00	217,000	1,447	216	0.66	150	
1/30/14 10:58 AM	21,525,000	1	738	1.64	156,000	1,417	159	0.49	110	
1/31/14 11:14 AM	21,697,000	0	0	0.00	172,000	1,456	170	0.52	118	
2/3/14 1:36 PM	22,155,000	0	0	0.00	458,000	4,462	148	0.45	103	
2/4/14 7:00 AM	22,428,000	1	735	1.64	273,000	1,044	377	1.16	261	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
2/5/14 7:00 AM	22,849,000	1	742	1.65	421,000	1,440	421	1.29	292	
2/6/14 7:17 AM	23,155,000	0	0	0.00	306,000	1,457	302	0.93	210	
2/7/14 11:23 AM	23,588,000	0	0	0.00	433,000	1,686	370	1.13	257	
2/10/14 8:23 AM	23,878,000	1	338	0.75	290,000	4,140	101	0.31	70	
2/11/14 7:42 AM	24,113,000	0	0	0.00	235,000	1,399	242	0.74	168	
2/13/14 9:52 AM	24,399,000	0	0	0.00	286,000	3,010	137	0.42	95	
2/14/14 10:10 AM	24,494,000	0	0	0.00	95,000	1,458	94	0.29	65	
2/18/14 8:06 AM	25,041,000	0	0	0.00	547,000	5,636	140	0.43	97	
2/19/14 8:06 AM	25,158,000	0	0	0.00	117,000	1,440	117	0.36	81	
2/20/14 7:00 AM	25,302,000	0	0	0.00	144,000	1,374	151	0.46	105	
2/21/14 8:28 AM	25,493,000	0	0	0.00	191,000	1,528	180	0.55	125	
2/24/14 7:44 AM	25,686,000	0	0	0.00	193,000	4,276	65	0.20	45	
2/25/14 7:28 AM	25,919,000	0	0	0.00	233,000	1,424	236	0.72	164	
2/26/14 7:08 AM	26,227,000	0	0	0.00	308,000	1,420	312	0.96	217	
2/27/14 7:00 AM	26,284,000	1	439	0.98	57,000	1,432	57	0.18	40	
2/28/14 7:08 AM	26,509,000	1	541	1.21	225,000	1,448	224	0.69	155	
3/3/14 7:07 AM	26,658,000	1	669	1.49	149,000	4,319	50	0.15	34	
3/4/14 7:00 AM	26,812,000	0	0	0.00	154,000	1,433	155	0.47	107	
3/5/14 7:00 AM	26,888,000	0	0	0.00	76,000	1,440	76	0.23	53	
3/6/14 7:00 AM	26,941,000	0	0	0.00	53,000	1,440	53	0.16	37	
3/7/14 7:00 AM	26,993,000	0	0	0.00	52,000	1,440	52	0.16	36	
3/10/14 7:00 AM	27,106,000	1	702	1.56	113,000	4,320	38	0.12	26	
3/11/14 7:00 AM	27,213,000	0	0	0.00	107,000	1,440	107	0.33	74	
3/12/14 7:00 AM	27,286,000	0	0	0.00	73,000	1,440	73	0.22	51	
3/13/14 8:12 AM	27,382,000	1	335	0.75	96,000	1,512	91	0.28	63	
3/14/14 9:02 AM	27,434,000	0	0	0.00	52,000	1,490	50	0.15	35	
3/17/14 7:00 AM	27,516,000	0	0	0.00	82,000	4,198	28	0.09	20	
3/18/14 7:00 AM	27,566,000	1	810	1.80	50,000	1,440	50	0.15	35	
3/19/14 7:00 AM	27,635,000	0	0	0.00	69,000	1,440	69	0.21	48	
3/20/14 7:00 AM	27,711,000	0	0	0.00	76,000	1,440	76	0.23	53	
3/21/14 7:00 AM	27,752,000	0	0	0.00	41,000	1,440	41	0.13	28	
3/25/14 7:44 AM	27,836,000	0	0	0.00	84,000	5,804	21	0.06	14	
3/26/14 7:00 AM	27,844,000	0	0	0.00	8,000	1,396	8	0.03	6	
3/27/14 7:00 AM	27,844,000	0	0	0.00	0	0	0	0.00	0	
3/31/14 7:00 AM	28,039,000	0	0	0.00	195,000	5,760	49	0.15	34	
4/1/14 7:00 AM	28,384,000	0	0	0.00	345,000	1,440	345	1.06	240	
4/2/14 7:00 AM	28,520,000	0	0	0.00	136,000	1,440	136	0.42	94	
4/3/14 7:00 AM	28,581,000	0	0	0.00	61,000	1,440	61	0.19	42	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
4/4/14 7:00 AM	28,658,000	1	341	0.76	77,000	1,440	77	0.24	53	
4/7/14 7:00 AM	28,741,000	1	713	1.59	83,000	4,320	28	0.08	19	
4/8/14 7:00 AM	28,785,000	0	0	0.00	44,000	1,440	44	0.14	31	
4/9/14 7:01 AM	28,785,000	0	0	0.00	0	0	0	0.00	0	
4/10/14 7:00 AM	28,785,000	0	0	0.00	0	0	0	0.00	0	
4/11/14 7:00 AM	28,793,000	0	0	0.00	8,000	1,440	8	0.02	6	
4/14/14 7:00 AM	28,813,000	0	0	0.00	20,000	4,320	7	0.02	5	
4/15/14 7:00 AM	28,874,000	0	0	0.00	61,000	1,440	61	0.19	42	
4/16/14 7:00 AM	28,888,000	0	0	0.00	14,000	1,440	14	0.04	10	
4/17/14 7:00 AM	28,888,000	0	0	0.00	0	0	0	0.00	0	
4/18/14 7:00 AM	28,888,000	0	0	0.00	0	0	0	0.00	0	
4/21/14 7:00 AM	28,894,000	0	0	0.00	6,000	4,320	2	0.01	1	
4/22/14 7:00 AM	28,894,000	0	0	0.00	0	0	0	0.00	0	
4/23/14 7:00 AM	28,900,000	0	0	0.00	6,000	1,440	6	0.02	4	
4/24/14 7:00 AM	28,900,000	0	0	0.00	0	0	0	0.00	0	
4/25/14 7:00 AM	28,900,000	0	0	0.00	0	0	0	0.00	0	
4/28/14 7:00 AM	28,936,000	1	648	1.44	36,000	4,320	12	0.04	8	
4/29/14 7:00 AM	29,026,000	0	0	0.00	90,000	1,440	90	0.28	63	
4/30/14 7:00 AM	29,054,000	0	0	0.00	28,000	1,440	28	0.09	19	
5/1/14 7:06 AM	29,054,000	0	0	0.00	0	0	0	0.00	0	
5/2/14 11:30 AM	29,083,000	0	0	0.00	29,000	1,704	25	0.08	17	
5/5/14 8:43 AM	29,132,000	0	0	0.00	49,000	4,153	17	0.05	12	
5/6/14 7:00 AM	29,162,000	0	0	0.00	30,000	1,337	32	0.10	22	
5/7/14 7:00 AM	29,166,000	0	0	0.00	4,000	1,440	4	0.01	3	
5/8/14 7:00 AM	29,166,000	0	0	0.00	0	0	0	0.00	0	
5/9/14 7:00 AM	29,173,000	0	0	0.00	7,000	1,440	7	0.02	5	
5/12/14 7:00 AM	29,192,000	0	0	0.00	19,000	4,320	6	0.02	4	
5/13/14 7:00 AM	29,192,000	0	0	0.00	0	0	0	0.00	0	
5/14/14 7:00 AM	29,192,000	0	0	0.00	0	0	0	0.00	0	
5/15/14 7:00 AM	29,229,000	0	0	0.00	37,000	1,440	37	0.11	26	
5/16/14 7:00 AM	29,296,000	0	0	0.00	67,000	1,440	67	0.21	47	
5/19/14 7:00 AM	29,405,000	0	0	0.00	109,000	4,320	36	0.11	25	
5/20/14 7:00 AM	29,467,000	0	0	0.00	62,000	1,440	62	0.19	43	
5/21/14 7:00 AM	29,518,000	0	0	0.00	51,000	1,440	51	0.16	35	
5/22/14 7:00 AM	29,565,000	0	0	0.00	47,000	1,440	47	0.14	33	
5/23/14 7:00 AM	29,634,000	0	0	0.00	69,000	1,440	69	0.21	48	
5/27/14 7:00 AM	29,770,000	0	0	0.00	136,000	5,760	34	0.10	24	
5/28/14 7:00 AM	29,867,000	0	0	0.00	97,000	1,440	97	0.30	67	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
5/29/14 7:00 AM	29,960,000	0	0	0.00	93,000	1,440	93	0.29	65	
5/30/14 7:00 AM	30,042,000	0	0	0.00	82,000	1,440	82	0.25	57	
6/2/14 7:00 AM	30,114,000	0	0	0.00	72,000	4,320	24	0.07	17	
6/3/14 7:00 AM	30,240,000	0	0	0.00	126,000	1,440	126	0.39	88	
6/4/14 7:00 AM	30,372,000	0	0	0.00	132,000	1,440	132	0.41	92	
6/5/14 7:00 AM	30,498,000	0	0	0.00	126,000	1,440	126	0.39	88	
6/9/14 7:00 AM	30,818,000	0	0	0.00	320,000	5,760	80	0.25	56	
6/10/14 7:00 AM	30,948,000	1	679	1.51	130,000	1,440	130	0.40	90	
6/11/14 7:00 AM	31,055,000	0	0	0.00	107,000	1,440	107	0.33	74	
6/12/14 7:00 AM	31,088,000	0	0	0.00	33,000	1,440	33	0.10	23	
6/13/14 7:00 AM	31,145,000	0	0	0.00	57,000	1,440	57	0.17	40	
6/16/14 7:00 AM	31,184,000	0	0	0.00	39,000	4,320	13	0.04	9	
6/17/14 7:00 AM	31,200,000	0	0	0.00	16,000	1,440	16	0.05	11	
6/18/14 7:00 AM	31,207,000	0	0	0.00	7,000	1,440	7	0.02	5	
6/19/14 7:19 AM	31,207,000	0	0	0.00	0	0	0	0.00	0	
6/20/14 7:05 AM	31,215,000	0	0	0.00	8,000	1,426	8	0.02	6	
6/23/14 7:05 AM	31,276,000	0	0	0.00	61,000	4,320	20	0.06	14	
6/24/14 7:00 AM	31,318,000	0	0	0.00	42,000	1,435	42	0.13	29	
6/25/14 7:00 AM	31,370,000	0	0	0.00	52,000	1,440	52	0.16	36	
6/26/14 7:00 AM	31,423,000	0	0	0.00	53,000	1,440	53	0.16	37	
6/27/14 7:00 AM	31,480,000	0	0	0.00	57,000	1,440	57	0.17	40	
6/30/14 7:26 AM	31,523,000	0	0	0.00	43,000	4,346	14	0.04	10	
7/1/14 6:45 AM	31,559,000	0	0	0.00	36,000	1,399	37	0.11	26	
7/2/14 6:30 AM	31,608,000	0	0	0.00	49,000	1,425	50	0.15	34	
7/7/14 7:00 AM	31,785,000	0	0	0.00	177,000	7,230	35	0.11	24	
7/8/14 7:00 AM	31,885,000	0	0	0.00	100,000	1,440	100	0.31	69	
7/9/14 7:00 AM	32,007,000	0	0	0.00	122,000	1,440	122	0.37	85	
7/10/14 7:00 AM	32,128,000	0	0	0.00	121,000	1,440	121	0.37	84	
7/11/14 7:00 AM	32,275,000	0	0	0.00	147,000	1,440	147	0.45	102	
7/14/14 7:00 AM	32,582,000	0	0	0.00	307,000	4,320	102	0.31	71	
7/15/14 7:00 AM	32,678,000	0	0	0.00	96,000	1,440	96	0.29	67	
7/16/14 7:00 AM	32,775,000	0	0	0.00	97,000	1,440	97	0.30	67	
7/17/14 7:00 AM	32,852,000	0	0	0.00	77,000	1,440	77	0.24	53	
7/18/14 7:00 AM	33,007,000	0	0	0.00	155,000	1,440	155	0.48	108	
7/21/14 7:00 AM	33,139,000	0	0	0.00	132,000	4,320	44	0.14	31	
7/22/14 7:00 AM	33,213,000	0	0	0.00	74,000	1,440	74	0.23	51	
7/23/14 7:00 AM	33,322,000	0	0	0.00	109,000	1,440	109	0.33	76	
7/24/14 7:00 AM	33,379,000	0	0	0.00	57,000	1,440	57	0.17	40	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
7/25/14 7:00 AM	33,456,000	0	0	0.00	77,000	1,440	77	0.24	53	
7/28/14 7:00 AM	33,553,000	0	0	0.00	97,000	4,320	32	0.10	22	
7/29/14 7:00 AM	33,641,000	0	0	0.00	88,000	1,440	88	0.27	61	
7/30/14 7:00 AM	33,723,000	0	0	0.00	82,000	1,440	82	0.25	57	
7/31/14 6:35 AM	33,785,000	0	0	0.00	62,000	1,415	63	0.19	44	
8/1/14 6:30 AM	33,833,000	1	808	1.80	48,000	1,435	48	0.15	33	
8/4/14 7:00 AM	33,907,000	0	0	0.00	74,000	4,350	24	0.08	17	
8/5/14 7:00 AM	33,968,000	0	0	0.00	61,000	1,440	61	0.19	42	
8/6/14 7:00 AM	34,019,000	1	618	1.38	51,000	1,440	51	0.16	35	
8/7/14 7:00 AM	34,063,000	0	0	0.00	44,000	1,440	44	0.14	31	
8/8/14 7:00 AM	34,097,000	0	0	0.00	34,000	1,440	34	0.10	24	
8/11/14 7:00 AM	34,155,000	0	0	0.00	58,000	4,320	19	0.06	13	
8/12/14 7:00 AM	34,220,000	0	0	0.00	65,000	1,440	65	0.20	45	
8/13/14 7:00 AM	34,272,800	0	0	0.00	52,800	1,440	53	0.16	37	
8/14/14 7:00 AM	34,321,000	0	0	0.00	48,200	1,440	48	0.15	33	
8/15/14 6:50 AM	34,371,000	0	0	0.00	50,000	1,430	50	0.15	35	
8/18/14 6:50 AM	34,445,000	0	0	0.00	74,000	4,320	25	0.08	17	
8/21/14 7:34 AM	34,615,000	0	0	0.00	170,000	4,364	56	0.17	39	
8/25/14 7:00 AM	34,715,000	0	0	0.00	100,000	5,726	25	0.08	17	
8/26/14 7:00 AM	34,782,000	0	0	0.00	67,000	1,440	67	0.21	47	
8/27/14 9:55 AM	34,886,000	0	0	0.00	104,000	1,615	93	0.28	64	
8/28/14 7:00 AM	34,977,000	0	0	0.00	91,000	1,265	104	0.32	72	
8/29/14 7:00 AM	35,208,000	0	0	0.00	231,000	1,440	231	0.71	160	
9/2/14 7:00 AM	35,323,000	0	0	0.00	115,000	5,760	29	0.09	20	
9/3/14 7:00 AM	35,450,000	0	0	0.00	127,000	1,440	127	0.39	88	
9/4/14 7:00 AM	35,557,000	0	0	0.00	107,000	1,440	107	0.33	74	
9/5/14 7:00 AM	35,644,000	0	0	0.00	87,000	1,440	87	0.27	60	
9/8/14 7:00 AM	35,757,000	0	0	0.00	113,000	4,320	38	0.12	26	
9/9/14 7:00 AM	35,878,000	0	0	0.00	121,000	1,440	121	0.37	84	
9/10/14 7:00 AM	35,988,000	0	0	0.00	110,000	1,440	110	0.34	76	
9/11/14 7:00 AM	36,084,000	0	0	0.00	96,000	1,440	96	0.29	67	
9/12/14 7:00 AM	36,150,000	0	0	0.00	66,000	1,440	66	0.20	46	
9/15/14 7:00 AM	36,204,000	0	0	0.00	54,000	4,320	18	0.06	13	
9/16/14 7:00 AM	36,332,000	0	0	0.00	128,000	1,440	128	0.39	89	
9/17/14 7:00 AM	36,483,000	0	0	0.00	151,000	1,440	151	0.46	105	
9/18/14 7:00 AM	36,636,000	0	0	0.00	153,000	1,440	153	0.47	106	
9/19/14 7:00 AM	36,770,000	0	0	0.00	134,000	1,440	134	0.41	93	
9/22/14 7:00 AM	36,891,000	0	0	0.00	121,000	4,320	40	0.12	28	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
9/23/14 7:00 AM	36,986,000	0	0	0.00	95,000	1,440	95	0.29	66	
9/24/14 7:00 AM	37,087,000	0	0	0.00	101,000	1,440	101	0.31	70	
9/25/14 7:00 AM	37,207,000	0	0	0.00	120,000	1,440	120	0.37	83	
9/26/14 7:00 AM	37,320,000	0	0	0.00	113,000	1,440	113	0.35	78	
9/29/14 7:00 AM	37,417,000	0	0	0.00	97,000	4,320	32	0.10	22	
9/30/14 7:00 AM	37,451,000	0	0	0.00	34,000	1,440	34	0.10	24	
10/1/14 7:00 AM	37,505,100	0	0	0.00	54,100	1,440	54	0.17	38	
10/2/14 7:00 AM	37,541,000	0	0	0.00	35,900	1,440	36	0.11	25	
10/3/14 7:00 AM	37,571,000	0	0	0.00	30,000	1,440	30	0.09	21	
10/6/14 7:00 AM	37,606,000	0	0	0.00	35,000	4,320	12	0.04	8	
10/7/14 7:00 AM	37,676,000	0	0	0.00	70,000	1,440	70	0.21	49	
10/8/14 7:00 AM	37,755,000	0	0	0.00	79,000	1,440	79	0.24	55	
10/9/14 7:14 AM	37,839,000	0	0	0.00	84,000	1,454	83	0.26	58	
10/10/14 7:34 AM	37,910,000	0	0	0.00	71,000	1,460	70	0.21	49	
10/13/14 7:00 AM	37,974,000	0	0	0.00	64,000	4,286	22	0.07	15	
10/14/14 7:00 AM	38,008,000	0	0	0.00	34,000	1,440	34	0.10	24	
10/15/14 7:00 AM	38,050,000	0	0	0.00	42,000	1,440	42	0.13	29	
10/16/14 7:00 AM	38,089,000	0	0	0.00	39,000	1,440	39	0.12	27	
10/17/14 7:00 AM	38,118,000	0	0	0.00	29,000	1,440	29	0.09	20	
10/20/14 7:00 AM	38,137,000	0	0	0.00	19,000	4,320	6	0.02	4	
10/21/14 7:00 AM	38,175,000	0	0	0.00	38,000	1,440	38	0.12	26	
10/22/14 7:00 AM	38,211,000	0	0	0.00	36,000	1,440	36	0.11	25	
10/23/14 7:00 AM	38,228,000	0	0	0.00	17,000	1,440	17	0.05	12	
10/24/14 7:00 AM	38,255,000	0	0	0.00	27,000	1,440	27	0.08	19	
10/27/14 7:00 AM	38,290,000	0	0	0.00	35,000	4,320	12	0.04	8	
10/28/14 7:00 AM	38,290,000	0	0	0.00	0	0	0	0.00	0	
10/29/14 7:00 AM	38,290,000	0	0	0.00	0	0	0	0.00	0	
10/30/14 7:00 AM	38,290,000	0	0	0.00	0	0	0	0.00	0	
10/31/14 7:00 AM	38,312,000	0	0	0.00	22,000	1,440	22	0.07	15	
11/3/14 7:00 AM	38,343,000	0	0	0.00	31,000	4,320	10	0.03	7	
11/4/14 7:00 AM	38,366,000	0	0	0.00	23,000	1,440	23	0.07	16	
11/5/14 7:00 AM	38,384,000	0	0	0.00	18,000	1,440	18	0.06	13	
11/6/14 7:00 AM	38,401,000	0	0	0.00	17,000	1,440	17	0.05	12	
11/7/14 7:00 AM	38,401,000	0	0	0.00	0	0	0	0.00	0	
11/10/14 7:00 AM	38,408,000	0	0	0.00	7,000	4,320	2	0.01	2	
11/11/14 7:00 AM	38,474,000	0	0	0.00	66,000	1,440	66	0.20	46	
11/12/14 7:00 AM	38,602,000	0	0	0.00	128,000	1,440	128	0.39	89	
11/13/14 7:00 AM	38,848,000	0	0	0.00	246,000	1,440	246	0.75	171	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
11/14/14 9:00 AM	39,146,000	0	0	0.00	298,000	1,560	275	0.84	191	
11/17/14 7:00 AM	39,523,000	2	1,475	3.29	377,000	4,200	129	0.40	90	
11/18/14 7:00 AM	40,046,000	1	809	1.80	523,000	1,440	523	1.61	363	
11/19/14 7:00 AM	40,377,000	2	1,271	2.83	331,000	1,440	331	1.02	230	
11/20/14 7:00 AM	40,556,000	0	0	0.00	179,000	1,440	179	0.55	124	
11/21/14 7:00 AM	40,683,000	0	0	0.00	127,000	1,440	127	0.39	88	
11/24/14 8:30 AM	40,984,000	1	691	1.54	301,000	4,410	98	0.30	68	
11/25/14 7:00 AM	41,232,000	1	839	1.87	248,000	1,350	265	0.81	184	
11/26/14 7:00 AM	41,345,000	0	0	0.00	113,000	1,440	113	0.35	78	
12/1/14 7:00 AM	41,684,000	0	0	0.00	339,000	7,200	68	0.21	47	
12/2/14 7:00 AM	42,210,000	1	790	1.76	526,000	1,440	526	1.61	365	
12/3/14 8:20 AM	42,384,000	2	1,353	3.01	174,000	1,520	165	0.51	114	
12/4/14 7:00 AM	42,474,000	0	0	0.00	90,000	1,360	95	0.29	66	
12/5/14 7:00 AM	42,578,000	0	0	0.00	104,000	1,440	104	0.32	72	
12/8/14 7:00 AM	42,828,000	0	0	0.00	250,000	4,320	83	0.26	58	
12/9/14 7:00 AM	43,038,000	2	1,274	2.84	210,000	1,440	210	0.64	146	
12/10/14 7:00 AM	43,154,000	0	0	0.00	116,000	1,440	116	0.36	81	
12/11/14 7:00 AM	43,256,000	1	839	1.87	102,000	1,440	102	0.31	71	
12/12/14 7:00 AM	43,363,000	0	0	0.00	107,000	1,440	107	0.33	74	
12/15/14 7:00 AM	43,598,000	0	0	0.00	235,000	4,320	78	0.24	54	
12/16/14 7:00 AM	43,918,000	0	0	0.00	320,000	1,440	320	0.98	222	
12/17/14 7:45 AM	44,110,000	0	0	0.00	192,000	1,485	186	0.57	129	
12/18/14 7:00 AM	44,255,000	0	0	0.00	145,000	1,395	150	0.46	104	
12/19/14 9:00 AM	44,444,400	1	737	1.64	189,400	1,560	175	0.54	121	
12/22/14 7:00 AM	44,540,000	0	0	0.00	95,600	4,200	33	0.10	23	
12/23/14 7:00 AM	44,655,000	0	0	0.00	115,000	1,440	115	0.35	80	
12/24/14 7:00 AM	44,807,000	1	705	1.57	152,000	1,440	152	0.47	106	
12/29/14 7:00 AM	45,450,000	1	742	1.65	643,000	7,200	129	0.39	89	
12/30/14 7:00 AM	45,869,000	1	794	1.77	419,000	1,440	419	1.29	291	
12/31/14 7:00 AM	46,261,000	1	319	0.71	392,000	1,440	392	1.20	272	
1/5/15 8:15 AM	47,983,000	2	1,561	3.48	1,722,000	7,275	341	1.05	237	
1/6/15 7:00 AM	48,455,000	0	0	0.00	472,000	1,365	498	1.53	346	
1/7/15 7:00 AM	48,720,000	0	0	0.00	265,000	1,440	265	0.81	184	
1/8/15 7:00 AM	48,920,000	2	1,234	2.75	200,000	1,440	200	0.61	139	
1/9/15 7:00 AM	49,093,000	1	807	1.80	173,000	1,440	173	0.53	120	
1/12/15 8:30 AM	49,576,000	1	844	1.88	483,000	4,410	158	0.48	110	
1/13/15 7:00 AM	49,945,000	1	696	1.55	369,000	1,350	394	1.21	273	
1/14/15 7:00 AM	50,218,000	1	389	0.87	273,000	1,440	273	0.84	190	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
1/15/15 7:00 AM	50,525,000	0	0	0.00	307,000	1,440	307	0.94	213	
1/16/15 9:15 AM	50,886,000	0	0	0.00	361,000	1,575	330	1.01	229	
1/20/15 7:00 AM	51,418,000	2	1,175	2.62	532,000	5,625	136	0.42	95	
1/21/15 7:00 AM	51,888,000	1	747	1.66	470,000	1,440	470	1.44	326	
1/22/15 7:00 AM	52,231,000	1	659	1.47	343,000	1,440	343	1.05	238	
1/23/15 7:00 AM	52,573,000	1	812	1.81	342,000	1,440	342	1.05	238	
1/26/15 7:00 AM	53,065,000	0	0	0.00	492,000	4,320	164	0.50	114	
1/27/15 7:00 AM	53,472,000	0	0	0.00	407,000	1,440	407	1.25	283	
1/28/15 7:00 AM	53,686,000	0	0	0.00	214,000	1,440	214	0.66	149	
1/29/15 7:00 AM	53,806,000	0	0	0.00	120,000	1,440	120	0.37	83	
1/30/15 7:00 AM	53,995,000	0	0	0.00	189,000	1,440	189	0.58	131	
2/2/15 7:00 AM	54,369,000	2	1,175	2.62	374,000	4,320	125	0.38	87	
2/3/15 7:00 AM	54,802,000	2	1,483	3.30	433,000	1,440	433	1.33	301	
2/4/15 7:00 AM	55,034,000	0	0	0.00	232,000	1,440	232	0.71	161	
2/5/15 7:00 AM	55,148,000	0	0	0.00	114,000	1,440	114	0.35	79	
2/6/15 7:00 AM	55,298,000	0	0	0.00	150,000	1,440	150	0.46	104	
2/9/15 7:00 AM	55,518,000	0	0	0.00	220,000	4,320	73	0.23	51	
2/10/15 7:00 AM	55,755,000	1	754	1.68	237,000	1,440	237	0.73	165	
2/11/15 7:00 AM	55,898,000	0	0	0.00	143,000	1,440	143	0.44	99	
2/12/15 7:00 AM	56,028,000	0	0	0.00	130,000	1,440	130	0.40	90	
2/13/15 7:00 AM	56,128,000	2	1,156	2.58	100,000	1,440	100	0.31	69	
2/17/15 7:00 AM	56,505,000	1	768	1.71	377,000	5,760	94	0.29	65	
2/18/15 7:00 AM	56,753,000	0	0	0.00	248,000	1,440	248	0.76	172	
2/19/15 7:00 AM	56,888,000	0	0	0.00	135,000	1,440	135	0.41	94	
2/20/15 7:00 AM	56,975,000	0	0	0.00	87,000	1,440	87	0.27	60	
2/23/15 9:10 AM	57,390,000	0	0	0.00	415,000	4,450	134	0.41	93	
2/24/15 7:00 AM	57,707,000	0	0	0.00	317,000	1,310	348	1.07	242	
2/25/15 7:00 AM	57,916,000	0	0	0.00	209,000	1,440	209	0.64	145	
2/26/15 7:00 AM	58,081,000	0	0	0.00	165,000	1,440	165	0.51	115	
2/27/15 9:10 AM	58,195,000	0	0	0.00	114,000	1,570	105	0.32	73	
3/2/15 7:00 AM	58,393,000	1	806	1.80	198,000	4,190	68	0.21	47	
3/3/15 7:00 AM	58,642,000	0	0	0.00	249,000	1,440	249	0.76	173	
3/4/15 7:00 AM	58,810,000	0	0	0.00	168,000	1,440	168	0.52	117	
3/5/15 7:00 AM	58,977,000	1	462	1.03	167,000	1,440	167	0.51	116	
3/6/15 7:00 AM	59,114,000	1	802	1.79	137,000	1,440	137	0.42	95	
3/9/15 7:00 AM	59,264,000	2	1,358	3.03	150,000	4,320	50	0.15	35	
3/10/15 7:00 AM	59,397,000	0	0	0.00	133,000	1,440	133	0.41	92	
3/11/15 7:00 AM	59,424,000	0	0	0.00	27,000	1,440	27	0.08	19	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
3/12/15 7:00 AM	59,424,000	0	0	0.00	0	0	0	0.00	0	
3/13/15 7:00 AM	59,424,000	0	0	0.00	0	0	0	0.00	0	
3/16/15 7:00 AM	59,429,000	0	0	0.00	5,000	4,320	2	0.01	1	
3/17/15 7:00 AM	59,442,000	0	0	0.00	13,000	1,440	13	0.04	9	
3/18/15 7:00 AM	59,442,000	0	0	0.00	0	0	0	0.00	0	
3/19/15 7:00 AM	59,442,000	0	0	0.00	0	0	0	0.00	0	
3/20/15 7:00 AM	59,442,000	0	0	0.00	0	0	0	0.00	0	
3/23/15 9:32 AM	59,442,000	0	0	0.00	0	0	0	0.00	0	
3/24/15 7:04 AM	59,442,000	0	0	0.00	0	0	0	0.00	0	
3/25/15 7:00 AM	59,453,000	0	0	0.00	11,000	1,436	11	0.03	8	
3/26/15 7:00 AM	59,478,000	0	0	0.00	25,000	1,440	25	0.08	17	
3/27/15 7:00 AM	59,488,000	0	0	0.00	10,000	1,440	10	0.03	7	
3/30/15 7:00 AM	59,529,000	0	0	0.00	41,000	4,320	14	0.04	9	
3/31/15 7:00 AM	59,582,000	0	0	0.00	53,000	1,440	53	0.16	37	
4/1/15 7:00 AM	59,582,000	0	0	0.00	0	0	0	0.00	0	
4/2/15 7:00 AM	59,582,000	0	0	0.00	0	0	0	0.00	0	
4/3/15 7:00 AM	59,592,000	1	328	0.73	10,000	1,440	10	0.03	7	
4/6/15 7:00 AM	59,676,000	1	782	1.74	84,000	4,320	28	0.09	19	
4/7/15 7:00 AM	59,741,000	0	0	0.00	65,000	1,440	65	0.20	45	
4/8/15 7:00 AM	59,774,000	0	0	0.00	33,000	1,440	33	0.10	23	
4/9/15 7:00 AM	59,793,000	0	0	0.00	19,000	1,440	19	0.06	13	
4/10/15 7:00 AM	59,793,000	0	0	0.00	0	0	0	0.00	0	
4/13/15 7:00 AM	59,832,000	1	405	0.90	39,000	4,320	13	0.04	9	
4/14/15 7:00 AM	59,878,000	0	0	0.00	46,000	1,440	46	0.14	32	
4/15/15 7:00 AM	59,878,000	0	0	0.00	0	0	0	0.00	0	
4/16/15 7:00 AM	59,906,000	0	0	0.00	28,000	1,440	28	0.09	19	
4/17/15 7:00 AM	59,922,000	0	0	0.00	16,000	1,440	16	0.05	11	
4/20/15 7:00 AM	59,922,000	0	0	0.00	0	0	0	0.00	0	
4/21/15 7:00 AM	59,927,000	0	0	0.00	5,000	1,440	5	0.02	3	
4/22/15 7:00 AM	59,963,000	0	0	0.00	36,000	1,440	36	0.11	25	
4/23/15 7:00 AM	60,001,000	0	0	0.00	38,000	1,440	38	0.12	26	
4/24/15 7:00 AM	60,003,600	0	0	0.00	2,600	1,440	3	0.01	2	
4/27/15 7:00 AM	60,053,000	0	0	0.00	49,400	4,320	16	0.05	11	
4/28/15 7:00 AM	60,053,000	0	0	0.00	0	0	0	0.00	0	
4/29/15 7:00 AM	60,071,000	0	0	0.00	18,000	1,440	18	0.06	13	
4/30/15 7:00 AM	60,112,000	0	0	0.00	41,000	1,440	41	0.13	28	
5/1/15 9:58 AM	60,160,000	0	0	0.00	48,000	1,618	43	0.13	30	
5/4/15 7:00 AM	60,209,000	0	0	0.00	49,000	4,142	17	0.05	12	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
5/5/15 7:00 AM	60,263,000	0	0	0.00	54,000	1,440	54	0.17	38	
5/6/15 7:00 AM	60,326,000	0	0	0.00	63,000	1,440	63	0.19	44	
5/7/15 7:00 AM	60,366,000	0	0	0.00	40,000	1,440	40	0.12	28	
5/8/15 7:00 AM	60,396,000	0	0	0.00	30,000	1,440	30	0.09	21	
5/11/15 7:00 AM	60,423,000	0	0	0.00	27,000	4,320	9	0.03	6	
5/12/15 7:00 AM	60,435,000	0	0	0.00	12,000	1,440	12	0.04	8	
5/13/15 7:00 AM	60,465,000	0	0	0.00	30,000	1,440	30	0.09	21	
5/14/15 7:00 AM	60,492,000	0	0	0.00	27,000	1,440	27	0.08	19	
5/15/15 7:00 AM	60,531,000	0	0	0.00	39,000	1,440	39	0.12	27	
5/18/15 7:00 AM	60,556,000	0	0	0.00	25,000	4,320	8	0.03	6	
5/19/15 7:00 AM	60,569,000	0	0	0.00	13,000	1,440	13	0.04	9	
5/20/15 7:00 AM	60,569,000	0	0	0.00	0	0	0	0.00	0	
5/21/15 7:00 AM	60,592,000	0	0	0.00	23,000	1,440	23	0.07	16	
5/22/15 7:00 AM	60,625,000	0	0	0.00	33,000	1,440	33	0.10	23	
5/26/15 7:00 AM	60,644,000	0	0	0.00	19,000	5,760	5	0.01	3	
5/27/15 7:00 AM	60,668,000	0	0	0.00	24,000	1,440	24	0.07	17	
5/28/15 7:00 AM	60,711,000	0	0	0.00	43,000	1,440	43	0.13	30	
5/29/15 7:00 AM	60,762,000	0	0	0.00	51,000	1,440	51	0.16	35	
6/1/15 7:00 AM	60,848,000	0	0	0.00	86,000	4,320	29	0.09	20	
6/2/15 7:00 AM	60,923,000	0	0	0.00	75,000	1,440	75	0.23	52	
6/3/15 7:00 AM	60,995,000	0	0	0.00	72,000	1,440	72	0.22	50	
6/4/15 7:00 AM	61,062,000	0	0	0.00	67,000	1,440	67	0.21	47	
6/5/15 7:00 AM	61,141,000	0	0	0.00	79,000	1,440	79	0.24	55	
6/8/15 8:50 AM	61,330,000	1	847	1.89	189,000	4,430	61	0.19	43	
6/9/15 7:00 AM	61,999,000	1	651	1.45	669,000	1,330	724	2.22	503	
6/10/15 9:30 AM	62,129,000	0	0	0.00	130,000	1,590	118	0.36	82	
6/11/15 7:00 AM	62,295,000	0	0	0.00	166,000	1,290	185	0.57	129	
6/16/15 8:55 AM	66,452,000	0	0	0.00	4,157,000	7,315	818	2.51	568	
7/1/15 7:27 AM	68,803,000	0	0	0.00	2,351,000	21,512	157	0.48	109	
7/2/15 7:17 AM	68,919,000	0	0	0.00	116,000	1,430	117	0.36	81	
7/6/15 7:00 AM	69,155,000	0	0	0.00	236,000	5,743	59	0.18	41	
7/7/15 7:00 AM	69,296,000	0	0	0.00	141,000	1,440	141	0.43	98	
7/8/15 7:00 AM	69,345,000	0	0	0.00	49,000	1,440	49	0.15	34	
7/9/15 7:00 AM	69,404,000	0	0	0.00	59,000	1,440	59	0.18	41	
7/10/15 7:00 AM	69,477,000	0	0	0.00	73,000	1,440	73	0.22	51	
7/13/15 7:00 AM	69,577,000	0	0	0.00	100,000	4,320	33	0.10	23	
7/14/15 7:00 AM	69,663,000	0	0	0.00	86,000	1,440	86	0.26	60	
7/15/15 7:00 AM	69,723,000	0	0	0.00	60,000	1,440	60	0.18	42	

Attachment B: Production Data

Blaine County School District Heating/Cooling System Water Production										
Date & Time	Totalizer Reading (gals)	No. of pumps	Obs. Flow (gpm)	Obs. Flow (cfs)	Diff. (gals)	Elapsed minutes	Est. Daily Volume for Reading Interval (gals, x 1,000)	Est. Daily Volume for Reading Interval (AF/ day)	Est Avg Daily Flow (gpm)	Comments
7/16/15 7:00 AM	69,804,000	0	0	0.00	81,000	1,440	81	0.25	56	
7/17/15 7:00 AM	69,892,000	0	0	0.00	88,000	1,440	88	0.27	61	
7/20/15 7:00 AM	69,968,000	0	0	0.00	76,000	4,320	25	0.08	18	
7/21/15 7:00 AM	70,058,000	0	0	0.00	90,000	1,440	90	0.28	63	
7/22/15 7:00 AM	70,401,000	0	0	0.00	343,000	1,440	343	1.05	238	
7/23/15 7:00 AM	70,754,000	1	345	0.77	353,000	1,440	353	1.08	245	
7/24/15 7:00 AM	71,336,000	1	645	1.44	582,000	1,440	582	1.79	404	
7/27/15 7:00 AM	74,012,000	0	0	0.00	2,676,000	4,320	892	2.74	619	
7/28/15 7:00 AM	74,043,000	0	0	0.00	31,000	1,440	31	0.10	22	
7/29/15 7:00 AM	75,078,000	0	0	0.00	1,035,000	1,440	1,035	3.18	719	
7/30/15 7:00 AM	75,586,000	0	0	0.00	508,000	1,440	508	1.56	353	
7/31/15 7:00 AM	75,724,000	0	0	0.00	138,000	1,440	138	0.42	96	
8/3/15 7:00 AM	76,652,000	0	0	0.00	928,000	4,320	309	0.95	215	
8/4/15 7:00 AM	77,692,000	1	850	1.89	1,040,000	1,440	1,040	3.19	722	
8/5/15 7:00 AM	78,713,000	1	856	1.91	1,021,000	1,440	1,021	3.13	709	
8/6/15 7:00 AM	79,020,000	0	0	0.00	307,000	1,440	307	0.94	213	
8/7/15 7:00 AM	79,944,000	1	859	1.91	924,000	1,440	924	2.84	642	Pump # 3 was running continuously
8/10/15 7:00 AM	83,345,000	1	806	1.80	3,401,000	4,320	1,134	3.48	787	
8/11/15 7:00 AM	84,648,000	1	359	0.80	1,303,000	1,440	1,303	4.00	905	
8/12/15 7:00 AM	85,949,000	1	859	1.91	1,301,000	1,440	1,301	3.99	903	
8/13/15 7:00 AM	87,249,000	1	859	1.91	1,300,000	1,440	1,300	3.99	903	
8/14/15 7:00 AM	88,561,000	1	859	1.91	1,312,000	1,440	1,312	4.03	911	
8/17/15 7:00 AM	92,458,000	1	559	1.25	3,897,000	4,320	1,299	3.99	902	
8/18/15 7:00 AM	92,960,000	0	0	0.00	502,000	1,440	502	1.54	349	

Attachment C: Injection Well #1 Data

DOO 58709

INJECTION WELL # 1

20" CASING to Ground

Well Name #1

Page 1

Measurement Point At Well

Measured By Tom & John

Measuring Equipment Toni's Sounder

Location Fox Acres HAiley, Id.

Date 12-12-13

Weather Overcast & Cool.

[illegible]

1/4

2/4

20" Top of Stand Pipe To Ground

Injection Well Measurements

Well Name # /

Page 1

Measurement Point @ Well

Measured By *A.T.*

Measuring Equipment Powers Well Sounder

Location Fox APCC Hatter Id.

Date 2/24/14

Weather Sunny 25° @ 9:00 AM

Time	Depth to Water (FT)	Production Well #			Comments
		Start	Stop	(GPM)	
8:00 AM		2		637 92%	
9:15			2	703 60%	All Production Wells Locked out
9:20	67.5				
9:15	67.5	2		818 100%	
9:30					
9:35	54				
9:40	49				
9:45	43				
9:48	39				
9:51	9				
9:55	9				
10:00	9				
10:05	56				
10:09	7				
10:18	15				
10:19	50				
10:25	28				
10:30	31				
		Locked out #1 AS we couldn't tell if it would come on			
10:34		2 & 3		1056 100%	
				1418	
				1462	
				1438	
10:35				1449	
10:36	9				
10:40	14				
10:45	14				
10:50	14				
10:55	15				
11:00	14				
11:15	15		2 & 3	Went back to Auto	

3/4

20" Top of Stand Pipe to Ground

DOO 56709
#1

Page

@ Well

Measured By

Powers Well Sounder

Location

Date _____

Weather

AM

Injection into
1 well only

Attachment D: Injection Well #2 Data

D005R710

INJECTION WELL #2

21 top of Lacing to Ground

Well Name # 2

Page 1

Measurement Point At well

Measured By Tom & Jon

Measuring Equipment Tonic Sounder

Location Fox ACRES Haines Id.

Date 12-13-13

Weather Overcast & Cold.

[illegible]

Attachment E: Injection Well #3 Data

D00 58711

#3 Injection

Injection Well #3

No Stand Pipe

18½" Top of Casing to Ground

Injection Well Measurements

Well Name # 3

Page 1

Measurement Point At Well

Measured By Tam & Jon

Measuring Equipment Toni's Soundee

Location Fox Acres, Hailu Id.

Date 12/13/13

Weather *Overcast & Cold*

[illegible]

MEASUREMENTS To Top of Stand Pipe. 2' Top of Stand pipe to Ground

Injection Well Measurements

Well Name DOO 58711 Page 1
 Measurement Point @ Well Measured By J.T.
 Measuring Equipment Power2 Well Sounder Location Fox Acres Hail, Id.
 Date 2/26/14 Weather 35% @ 9:40 AM
2/27/14 34° overcast @ 8:30 AM

	Time	Depth to Water (FT)	Production Well #			Comments
			Start	Stop	(GPM)	
2/25/14	4:00 PM	62.75				
2/26/14	9:40 AM		Nothing on since 9:10 AM			
			Locking all off			
	10:00		Got Pressure stuck @ 41' in			Monitoring Well
	10:23		Went Back on Auto			
2/27/14	7:35		2		726	WAS Running on Auto
AM	7:50			2		Nothing on - Locked out
	8:40	62.75				"
	8:45		1		835 100%	
	8:50	10				
	8:55	22				
	9:00	24				
	9:05	37				
	9:10	41				
	9:15	45				
	9:20	30	1, 2		902 100%	
	9:25	12				
	9:30	13				
	9:35	12				
	9:40	12				Starting to Rain
	9:45	13			1574 100%	
	9:50	15	1, 2, 3		1469	#3 Not Running UP
	9:52	11			2003 100%	
	9:55	11				
	10:00	10				
	10:05	12				
	10:10	12				Starting to Snow
	10:15	11				
	10:20	10				Went to Pressure #3 Irrigation Well
	10:35	10			302.9 100%	
	10:36			1, 2, 3		
	10:49	61				Back Flow Stopped
	10:50	62.75				
2/26/15	62'					Broken up with

Attachment F: Irrigation Well No. 8 Data

FOX ACRES
#8 IRRIGATION WELL
South of CCB
NO TAG

MEASUREMENT TO TOP OF WELL CASING
15" TOP OF CASING TO GROUND

Attachment G: Monitoring Well Data

~~Important~~ Well Measurements

All measurement
from Top of well casing
- 2' Top of casing to Green

Page 1

Measured By *A.T.*

Location Fox Acres Harley Id.

Date 1/10/14

Weather 14° @ 8:00 AM

[illegible]