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Department of Water Resources
Eastern Region

Project No. 116-07-2014

Expert Report and Narrative Relative to Water Right Transfer #79466 for Dairy #3

Prepared for:

Cedar Ridge Dairy
Filer, Idaho

February 13, 2015

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Expert Report and Narrative Relative to Water Right Transfer #79466 for Dairy #3

Brockway Engineering, PLLC
February 13, 2015

A. Introduction

A.1. Objectives

Transfer 79466 is being applied for by the Applicant to add a third well as an authorized POD for water right 47-2306B.

A.2. Executive Summary

A new well will be authorized as a POD for water right 47-2306B. The new POD will be located on the west side of Dairy #3. Water right 47-2306B allows a diversion rate of 0.59 cfs for stockwater use and 0.59 cfs for commercial water use for a total of 0.59 cfs (264 gpm) through the existing two wells. No additional diversion rate or volume is proposed. The beneficial use, period of use, place of use and ownership of 47-2306B will also remain unchanged. This transfer is in the local public interest as it will not impact other existing water rights in the area.

B. Water Right Information

B.1. Water Source

Water right 47-2306B is a ground water right with two authorized points of diversion or wells. The wells were drilled in 1999 and one well was modified in 2005. The wells have a diameter of 8 inches and were drilled to a depth of 355 feet. The well that was modified in 2005 was drilled to a depth of 450 with a 6 inch diameter hole. The wells are located at Township 11 South Range 16 East Section 6 SENE. The well drillers logs are provided in Appendix A.

B.2. Water Right History

Water right 47-2306B was created by Transfer 5148 that was approved by the Idaho Department of Water Resources on June 11, 1998. The parent water right to 47-2306B was water right 47-2306 which was used for irrigation purposes.

Water right 47-2306B was partially decreed in the Snake River Basin Adjudication on June 2, 2009. Since the time of the partial decree, water right 47-2306B has been fully utilized for stockwater and commercial purposes at the authorized place of use (also known as Dairy #3).

B.3. Water Right Details

Water right 47-2306B allows a diversion rate of 0.59 cfs for stockwater use and 0.59 cfs for commercial water use for a total of 0.59 cfs (264 gpm) through the two wells identified above. The allowed volume under 47-2306B is 250 acre feet per year. The period of use is from January 1st through December 31st.

B.4. Transfer Application

Transfer application #79466 proposes to add a third well or point of diversion to the existing water right. No additional diversion rate or volume is proposed. The beneficial use, period of use, place of use and ownership of 47-2306B will also remain unchanged.

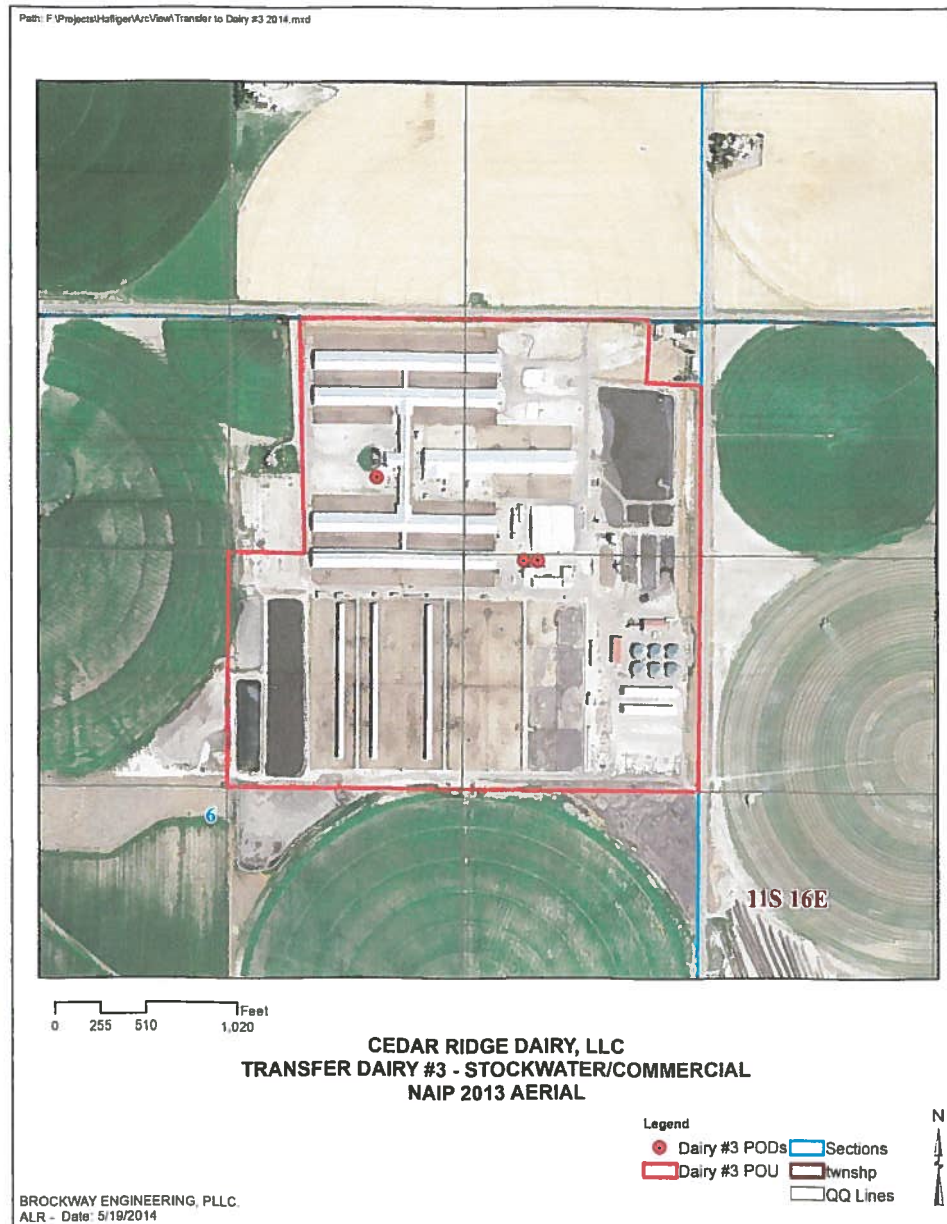


Figure 1: Dairy #3 Location, proposed place of use and well locations.

C. Aquifer Impact

There will be no additional aquifer impact or water level drawdown beyond what is authorized by decreed water right 47-2306B and the historical pumping that has occurred since Transfer 5148 was approved in 1998. The authorized decreed diversion rate of 0.59 cfs and the annual volume of 250.0 acre feet for 47-2306B will be diverted in combination from the proposed new well and the two existing

wells. The new third well will reduce the amount of water required to be diverted from the two existing wells. The total additive pumping from all three wells will be limited to 0.59 cfs and an annual volume of 250.0 acre feet.

D. Evaluation of Transfer Application Criteria

D.1. Authority to File

Four Sisters Dairy LLC owns water right 47-2306B. Therefore, the Applicant has authority to submit an application for transfer for 47-2306B.

D.2. Water Right Validity

Water right 47-2306B was partially decreed in June 2, 2009 and has been fully utilized since that time for stock and commercial water uses. There are no forfeiture issues with water right 47-2306B.

D.3. Injury to Other Water Rights and Domestic Wells

No injury to other water right holders or local domestic wells will occur because no additional diversion is proposed under Transfer #79466. The proposed third well is located on the west side of Dairy #3. The authorized decreed diversion rate of 0.59 cfs and the annual volume of 250.0 acre feet for 47-2306B will be diverted from the proposed new well and the two existing wells. The new third well will reduce the amount of water required to be diverted from the two existing wells. The total additive pumping from all three wells will be limited to 0.59 cfs and an annual volume of 250.0 acre feet.

D.4. Enlargement of Use

No enlargement of this water right will occur as a result of Transfer #79466 because the diversion rate, volume, beneficial use and period of use are not

changing. A flow meter will be installed on the new well and flow measurements will be made monthly and provided to the Idaho Department of Water Resources.

D.5. Local Public Interest

This transfer is in the local public interest as it will not impact other existing water rights in the area. Further, authorizing the additional point of diversion will allow the Applicant to best utilize the wells in combination to efficiently operate the water distribution system for Dairy #3. This type of transfer is common practice within the State of Idaho, and regularly approved by IDWR, where an existing ground water right adds a point of diversion for such purposes.

D.6. Beneficial Use/Conservation of Water Resources

The currently approved beneficial uses of stockwater and commercial use are recognized as beneficial uses of water by the Idaho Department of Water Resources. No change in the water right is proposed regarding the purpose of use. The additional well will also improve efficiency for the water distribution system on Dairy #3.

Appendix

Appendix A: Ground Water Well Logs

Form 238-7
11/97 JGE

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Office Use Only			
Inspected by _____			
Temp	Rgs	Sec	
1/4	1/4	1/4	
Lat	Long		

1. WELL TAG NO. D 0008070

DRILLING PERMIT NO. 17-99-S-0053-000

Other IDWR No. WR 47-02306B

2. OWNER:

Name Hank C. Halliger

Address 3772 N. 1700 E.

City Subl

State ID Zip 83310

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

Twp. <u>11</u>		North ☐ or South ☒	
Rgs. <u>16</u>		East ☒ or West ☐	
Sec. <u>6</u>		1/4 <u>SE</u> 1/4 <u>NE</u>	
Gov't Lot		County <u>Twin Falls</u>	
Lat		Long	

Address of Well Site 2200 E. 3490 N.

City Eller

(Take all local roads to road * distances to front of landowner)

Lt. _____ Dist. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK: check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES:

Seal/Filler Pack		AMOUNT		METHOD
Material	From	To	Each or Patches	
Bentonite	0	10	200lbs	dry pour

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

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Couple	Material	Casing	Liner	Welded	Threaded
8	+1	19	25	steel	☒	☐	☐	☐

Length of Headpipe 1" Length of Tailpipe _____

9. PERFORATIONS/SCREENS:

☐ Perforations ☐ Screens Method _____ Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

282 ft. below ground Artesian pressure _____ lb.

Depth flow encountered _____ ft. Describe access point or control device: well cap

11. WELL TESTS:

Yield gal/min.	Drawdown	Pumping Level	Time

Water Temp. <85

Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter 305'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water
10	0	14	top soil & clay	
10	14	19	med. lava	
8	19	100	med. lava	
8	100	106	red ash & red lava cinders	
8	106	124	med. lava	
8	124	131	soft lava cinders	
8	131	163	med. lava	
8	163	167	fractured & cinders	
8	167	167	med. lava	
8	167	205	soft lava cinders no returns	
8	205	230	soft lava	
8	230	250	med. lava	
8	250	255	cinders	
8	255	305	med. to soft lava	X
8	305	322	med. lava	X
8	322	330	soft lava	X
8	330	355	soft lava	X

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JUN 29 1999	JUN 04 1999
Department of Water Resources	Department of Water Resources
Southern Region	Southern Region
Completed Depth <u>355'</u>	Completed <u>4/23/99</u> (Measurable)
Date: Started <u>4/19/99</u>	

13. DRILLER'S CERTIFICATION:

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

Company Name: Eaton Drilling & Pump Services Inc. Firm No. 76
Firm Official: [Signature] Date: 6/26/99
and
Driller or Operator: [Signature] Date: 6/26/99
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Office Use Only

Inspected by _____

Twp _____ Rge _____ Sec _____

_____ 1/4 _____ 1/4 _____ 1/4

Lat. : : Long: : :

Other IDWR No.

City Buhl State MO Zip 63316

Sketch map location must agree with written location

Take at least 200 mg of iron - 100 mg in the morning and 100 mg in the evening.

City Elder _____

LL _____ Bk. _____ Sub. Name _____

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other **commercial**

☐ New Well ☐ Modify ☐ Abandonment ☐ Other

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

Seal/Filter Pack		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	19	200 lbs.	dry pour

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

Was drive shoe seal tested? ☐ Y ☒ N How? _____

Diameter	From	To	Charge	Material	Casing	Liner	Welded	Threaded
8	<1	19	.25	steel	X	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe 1' (Length of Tailpipe)

☐ Perforations Method _____

☐ Screens Screen Type _____

[illegible]

282 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control
device: well cap

☐ Pump ☐ Boiler ☐ Air ☐ Flaming Arrow

Yield gal./min.	Drawdown	Pumping Level	Time

Water Quality test or comments.

Depth first Water Encounter 306'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Depth	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10	0	14	top soil clay		
10	14	19	med. lava		
8	19	37	med. lava		
8	37	40	cinders		
8	40	47	med. lava		
8	47	50	cinders no returns		
8	50	60	med. lava		
8	60	63	broken		
8	63	175	med. lava		
8	175	180	soft lava cinders		
8	180	288	soft lava		
8	288	305	soft lava cinders		X
8	305	330	soft lava fractured		X
8	330	355	soft lava fractured		X

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JUN 24 1959

நெடுமாலைக்கிணர்-2002

RECEIVED

JUL 13 1963

MICROFILME:

Department of Water Resources

Completed Depth 366' (Measurable)
Date Started 4/23/99 Completed 5/1/99

We certify that all minimum wet construction standards were complied with at the time the sign was removed.

Company Name Eaton Drilling & Pump Service, Inc. Firm No. 26

Firm Official Lang Nelson Date 5/28/89
and

Officer or Owner: [Signature] Date: 5/26/99
(Signature from Officer & Company)

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