

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-21136

Exam Date: 10/30/2019

1. Current Owner:

GLANBIA FOODS INC
121 4TH AVE SOUTH
TWIN FALLS ID 83301

2. Accompanied by: Aric Frostenson, Land Application Manager, Glanbia Foods, Inc. Allison Inouye, IDWR, in-office background work.

Phone No: 208-316-1174

Address: 2499 E. 1775 S., Gooding, ID 83330

Relationship to permit Holder: Employee of Glanbia who operates the system.

3. **SOURCE:**

GROUND WATER

Method of Determination: Stood next to running well and walked up pond bank to observe water running into pond via pipeline.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Water from this permit is co-mingled in the pond with shares of Big Wood Canal Company water, and with waste water from the Glanbia Foods cheese plant west of Richfield.

Water Right No.	Source	Purpose of Use	Basis

Comments: Fourteen Big Wood Canal Company rights overlap the property.

2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NE¼ NE¼, Sec. 18, Twp 04S, Rge 20E, B.M. LINCOLN County

Method of Determination: Site visit and ArcMap aerial imagery.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04S	20E	7																27.0	27.0
04S	20E	8	16.0	13.0	14.0	35.0	14.0		0.2	31.0	35.0	6.1	37.0	36.0	37.0	38.0	31.0		343.3
04S	20E	17						30.0											30.0
04S	20E	18	35.0	4.6	14.0	35.0													88.6

Right Acre Limit: 400.0

Total Acres: 488.9

Method of Determination: Email and phone conversation with Mr. Frostenson.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
☒ Indicate weir size/pipe as applicable.
 Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be
☒ 1:24,000 or greater.
☒ Aerial Photo Attached (required for irrigation of 10+ acres).
☒ Photo of Diversion and System Attached

4.

Site Tag number	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
A0009962		500			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Ultrasonic	GE	PT878			Spring 2019

2. Measurements: Performed a flow rate check for about 10 minutes. The highest observed flow was 3524.9 gpm (7.85 cfs)

E. FLOW CALCULATIONS

 Additional Computation Sheets Attached

Measured Method: The measured flow rate of 3524.9 gpm converts to **7.85 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 400.0 \text{ acres} \times 4 \text{ AF/acre} = 1600.0 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 7.85 \text{ cfs} \times 214 \times 1.9835 = 3332.1 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{1600.00 \text{ AF}}$$

2. Volume Calculations for Other Uses: NA

G. NARRATIVE/REMARKS/COMMENTS

The field exam for permit 37-21136 was conducted on October 30, 2019 with Aric Frostenson present. Former IDWR water resource agent Allison Inouye did numerous hours of background work on the permit in preparation for the licensing. I met with Mr. Frostenson at the well and I ran a flowmeter check with a GE PT-878 ultrasonic flowmeter for about 10 minutes. The highest observed flow rate was 3524.9 gpm, or 7.85 cfs. The permit was issued with two points of diversion, but only one well was developed, so the undeveloped POD will be dropped at licensing.

From the well, water is diverted into a pond where it can be mixed with surface water provided by the Big Wood Canal Company. Adjacent to the pond is a separate pond which holds waste water from the Glanbia processing plant. A pumping plant draws water from both ponds and distributes it to one of three mainlines distributing water to the place of use. The place of use consists of 6 adjacent fields irrigated with center pivots.

One condition of the permit required the permit holder to demonstrate how it would limit the use of the permit to 400 acres. Mr. Frostenson identified the specific 400.0 acres currently being irrigated.

Additional conditions required the permit holder to file ownership change documents, change the purpose of use, and maintain control of the portions of the water rights that were used as mitigation for this permit. Department records show these conditions were satisfied.

I recommend licensing at the measured flow rate of 7.85 cfs, with a volume of 1600 AF (see volume calculations in this report).

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	04/01 to 10/31	7.85 CFS	1,600.0 AF
Totals:		7.85 CFS	1,600.0 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

I. AUTHENTICATION

Field Examiner's Name


 Jim Bitzenburg - Senior Water Resource Agent

Date

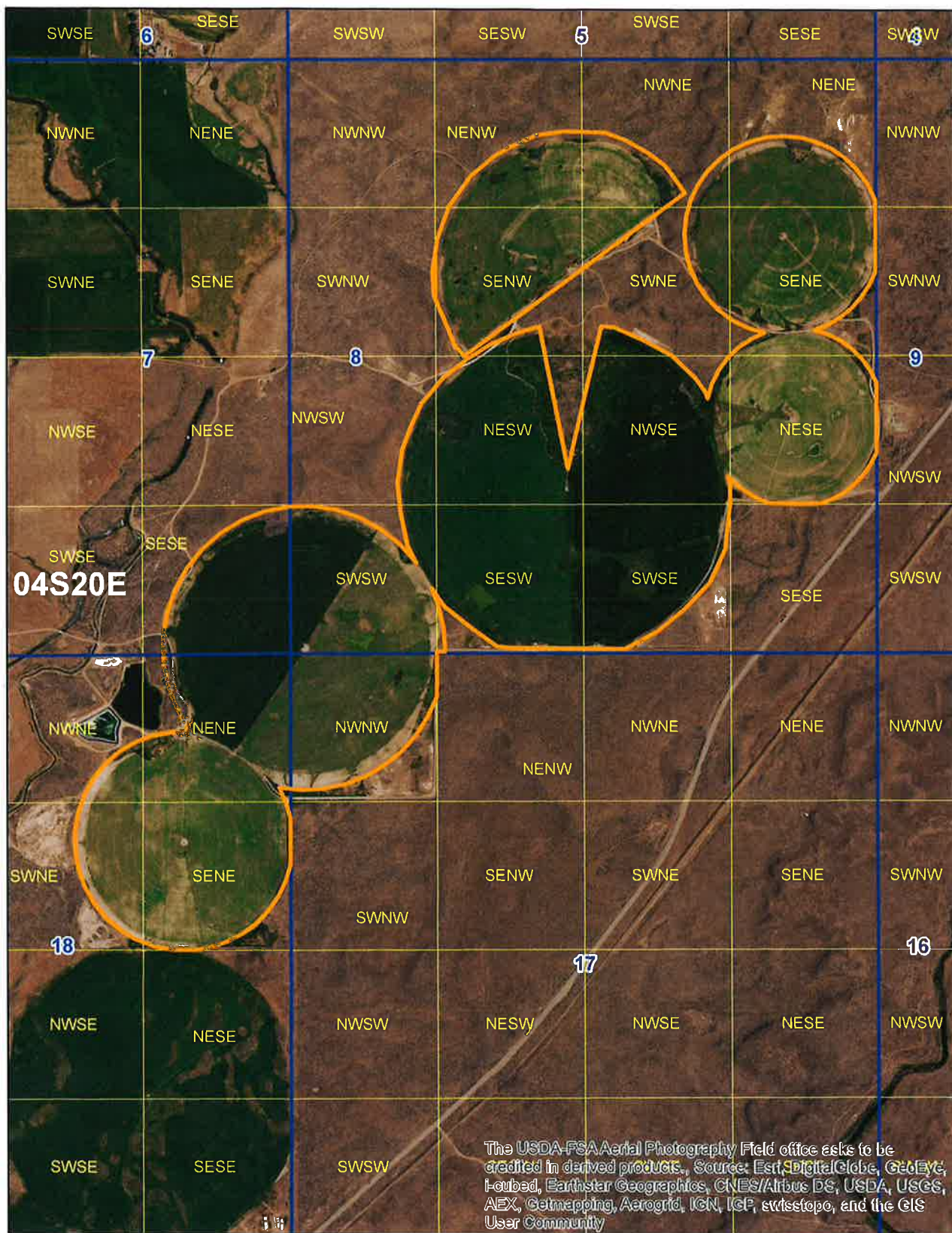
11-5-19

Reviewer

Date

37-21136 Glanbia Foods, Inc.

Permissible Place of Use - 488.9 acres



Legend

- Township/Range
- Sections
- QQ

Field Exam 37-21136

0 0.125 0.25 0.5 Miles



37-21136 Glanbia Foods, Inc.

"206" Irrigated Acres Map - 400.0 acres



Legend

- Township/Range
- Sections
- QQ

Field Exam 37-21136

0 0.125 0.25 0.5 Miles





Well and pump house.

Pipe from well to pond. Note flowmeter in lower center of photo.

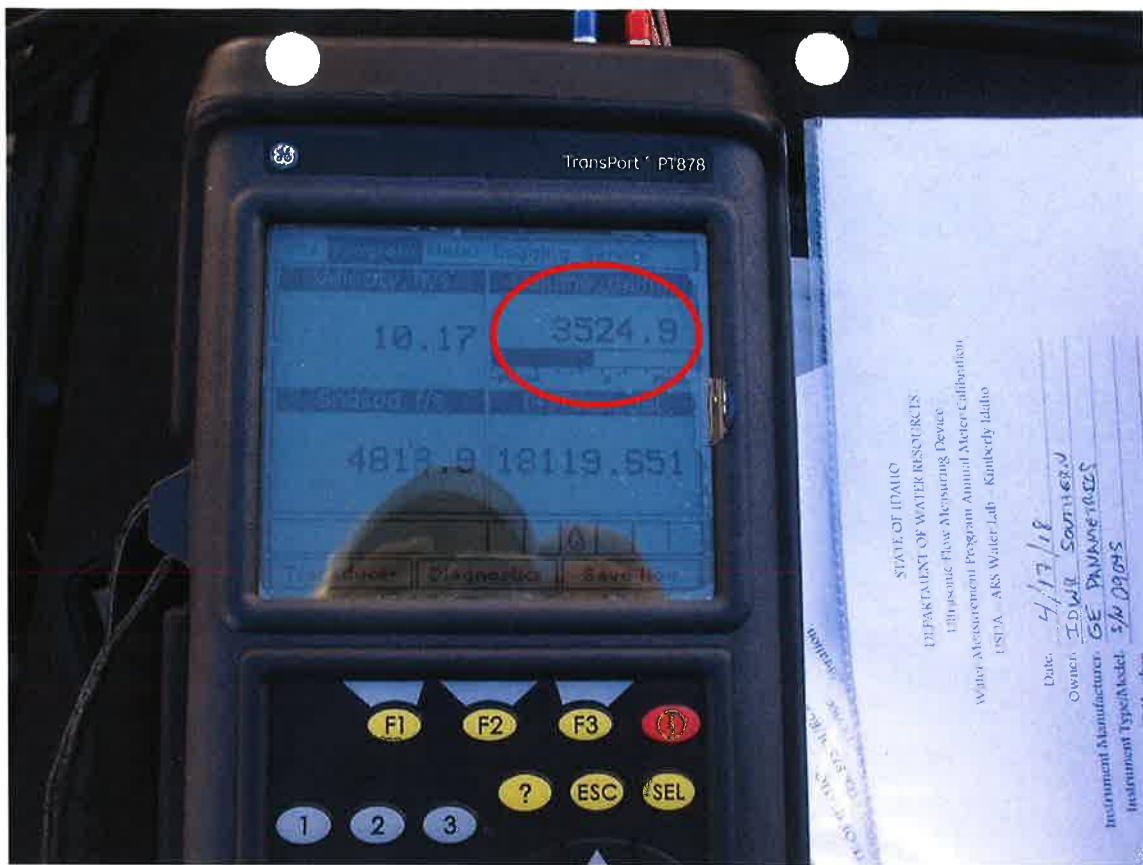




Pivot operating on Glanbia farm.

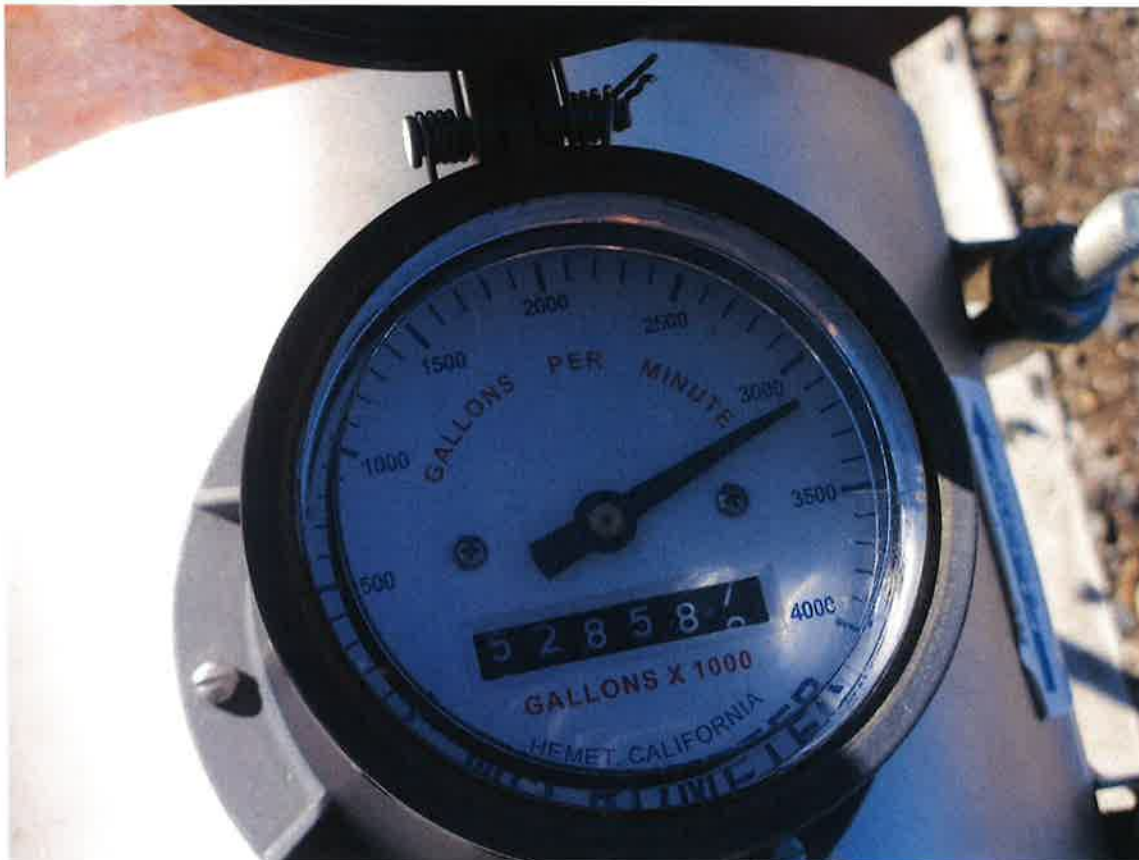
The place of use- one of the Glanbia pivots.





IDWR flowmeter showing flow rate at time of exam.

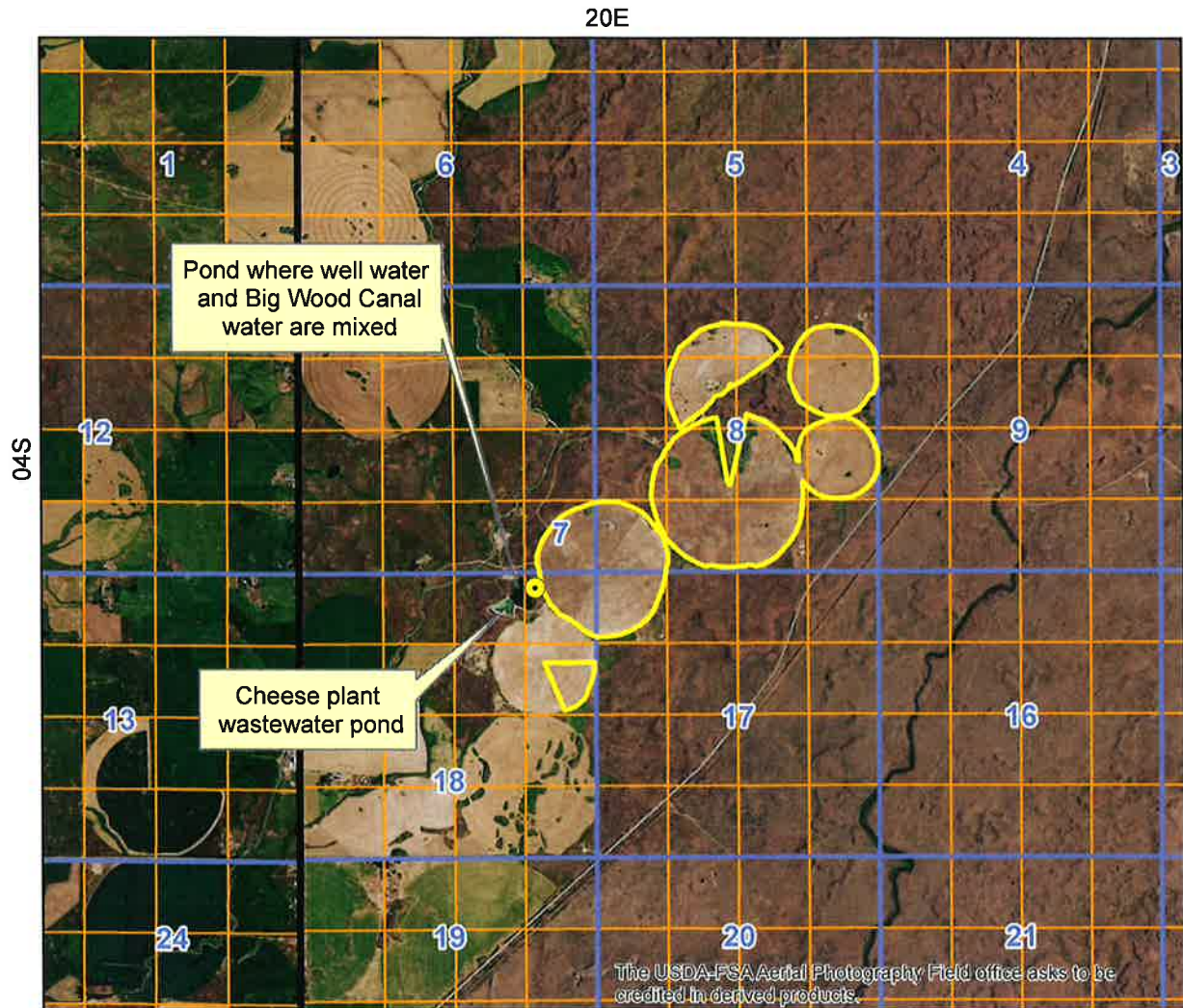
Installed flowmeter at time of exam.



State of Idaho
Department of Water Resources

37-21136 Glanbia Foods, Inc.

System Diagram - POU and POD map



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters

0 0.4 0.8 1.6 Miles



Field Exam 37-21136

Form 238-7
11/97 JGE

Correction
IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only			
Inspected by _____			
Twp _____	Rge _____	Sec _____	
1/4 _____	1/4 _____	1/4 _____	
Lat _____	Long _____		

1. WELL TAG NO. D 0023806DRILLING PERMIT NO. **804401**Other IDWR No. **375284****2. OWNER:**Name **Glanbia Foods Inc.**Address **1373 Fillmore St.**City **Twin Falls** State **ID** Zip **83301****3. LOCATION OF WELL by legal description:**

Sketch map location must agree with written location.

Twp. 4		North ☐ or South ☒	
Rge. 20		East ☒ or West ☐	
Sec. 18		NE 1/4 ☒ NW 1/4 ☐ SE 1/4 ☐ SW 1/4 ☐	
Gov't Lot _____		County Lincoln	
Lat _____		Long _____	
Address of Well Site 3 M NE of Richfield			
City Richfield			
(Circle all label names of road - Distance to Road or Landmark)			
Lt. _____	Bk. _____	Sub. Name _____	

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other **test**
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/Filter Pack			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
bentonite	0	18	400 lbs.	dry pour
				RECEIVED

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____Was drive shoe seal tested? ☐ Y ☒ N How? _____**8. CASING/LINER:**

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
18	+1	18	.250	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:**430'** ft. below ground Artesian pressure _____ lb.

Depth flow encountered _____ ft. Describe access port or control

devices: **steel plate****11. WELL TESTS:**
☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp. **<85**Bottom hole temp. **<85**

Water Quality test or comments: _____

Depth first Water Encounter _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water	
20	0	11	top soil	Y	N
20	11	14	black lava		
20	14	16	cinders		
20	16	18	black lava		
18	18	22	black lava		
18	22	26	broken lava & cinders		
18	26	66	medium hard black lava		
18	66	72	cinders		
18	72	76	hard lava		
18	76	79	cinders		
18	79	167	black lava & breaks		
18	167	172	soft broken lava & silt		
18	172	218	black lava		
18	218	224	soft broken lava & clay		
18	224	236	black lava		
18	236	239	soft lava		
18	239	271	medium hard lava		
18	271	279	soft broken lava & cinders		
18	279	309	hard lava		
18	309	317	medium hard lava		
18	317	329	hard lava		
18	329	343	medium hard lava & breaks		
18	343	361	hard like rhyolite		
18	361	367	medium hard lava & breaks		
18	367	382	hard lava		
18	382	387	medium hard lava		
18	387	391	soft broken lava & cinders	X	
18	391	409	medium hard lava		
18	409	417	soft broken lava & cinders	X	
18	417	418	medium hard lava		
18	418	431	hard lava		
18	431	433	soft broken lava	X	
18	433	446	medium hard lava & breaks	X	
18	446	451	cinders	X	

Continued on next page

Completed Depth **500'**

(Measurable)

Date: Started **9/16/2003**Completed **9/23/2003****13. DRILLER'S CERTIFICATION:**

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

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

Firm Official _____

Date **9/25/2003**

and _____

Driller or Operator _____

Date **9/25/2003**

(Sign once if Firm Official & Operator)

