

63-33364
~~65-23360~~

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

RECEIVED

NOV 06 2009

WATER RESOURCES
WESTERN REGION

1. Name of Applicant Dale and/or Pamela G. Nixon Phone 208-722-9057
Mailing address 1255 Grandview Rd., Parma, ID 83660 Email _____
Representative Lori Graves, SPF Water Engineering LLC, 300 E. Mallard, Ste 350, Boise, ID 83706 208-383-4140
2. Source of water supply Ground Water which is a tributary of _____
3. Location of point of diversion is Township 6N Range 5W Sec. 21, in the $\frac{1}{4}$,
NW $\frac{1}{4}$, NE $\frac{1}{4}$, Govt. Lot _____, B.M., Payette County;
additional points of diversion if any: NWNE, Sec. 21
4. Water will be used for the following purposes:
Amount 1.0 for Commercial purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount 1.0 for Stockwater purposes from 1/1 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)
5. Total quantity to be appropriated is (a) 1.0 and/or (b) _____
cubic feet per second acre feet per annum
6. Proposed diverting works:
 - a. Describe type and size of devices used to divert water from the source Two existing wells, pumps, pipeline
 - b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet;
total reservoir capacity _____ acre-feet
 - c. Existing well diameters are 6 inches; depth of well is 213 ft (recorded for 2002 well, depth unknown)
 - d. Is ground water with a temperature of greater than 85°F being sought? No
 - e. If well is already drilled, when? 1989 & 2002; Drilling firm 1989 Well: not available, 2002 Well: No. 641;
Well was drilled for (well owner) Dale Nixon; Drilling Permit No. 789119
7. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
 - a. Hydropower; show total feet of head and proposed capacity in kW. _____
 - b. Stockwatering; list number and kind of livestock. 400 dry stock and replacement heifers, 800 milking cows
 - c. Municipal; show name of municipality. _____
 - d. Domestic; show number of households. _____
 - e. Other; describe fully. Commercial uses for dairy

9. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example: *D* for *Domestic*) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
6N	5W	21		C															
				S															

Total number of acres to be irrigated _____

10. Describe any other water rights used for the same purposes as described above. Include water delivered by a municipality, canal company, or irrigation district. If this application is for domestic purposes, do you intend to use this water, water from another source, or both, to irrigate your lawn, garden, and/or landscaping? 63-31140

- Who owns the property at the point of diversion? Applicants
- Who owns the land to be irrigated or place of use? Applicants
- If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: _____

12. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary. Filing is for expansion of existing dairy. The proposed stockwater will augment water right 63-31140. A drilling report (attached) was available for one of the two existing wells. Dairy waste water will be land applied to lands served by Black Canyon Irrigation District. Water bearing zone appropriated is from 200 to 215 feet.

Lori Graves, with SPF Water Engineering, is authorized to make modifications to this application during processing on behalf of applicant,

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

BE IT KNOWN that the undersigned hereby makes this application for permit to appropriate the public waters of the State of Idaho as herein set forth.



Signature of Applicant

Dale Nixon

Print Name (and title, if applicable)

For Department Use:

Received by DB Date 11-16-09 Time 3:00 PM Preliminary check by KW
 Fee \$ 250- Receipted by DB Receipt No. W037989 Date 11-16-09
 Publication prepared by DB Date 4/29/2010 Published in INDEPENDENT ENTERPRISE
 Publication approved _____ Date _____ Dates Published MAY 5 & 12, 2010

DAILY FRESH WATER REQUIREMENT FOR DAIRY FACILITY

FOR: Nixon Dairy
BY: Lori Graves, SPF Water Engineering, LLC
DATE: 10/23/2009

STOCKWATER REQUIREMENT

TYPE OF ANIMAL	NUMBER	USE/DAY	TOTAL GAL/DAY	TOTAL GAL/YEAR
MILKING COWS	800.00	35.00	28,000.00	10,220,000.00
DRY COWS & HEIFERS	400.00	14.00	5,600.00	2,044,000.00
TOTAL GALLONS			33,600.00	12,264,000.00

COMMERCIAL REQUIREMENT

WASH PEN ESTIMATE	NUMBER OF NOZZLES	TIME PER USE(IN MINUTES)	NUMBER OF USES	TOTAL GAL/DAY	TOTAL GAL/YEAR
	50.00	1.00	20.00	5,000.00	1,825,000.00

MILKING PARLOR ESTIMATES

ITEM	GAL/STEP	X'S/DAY	GAL/STEP	GAL/STEP	GAL/YEAR
BULK TANK	116.00	2.00	232.00		84,680.00
COW PREP	0.25	1,600.00	400.00		146,000.00
PIPELINES	60.00	2.00	120.00		43,800.00
PARLOR CLEANUP	400.00	2.00	800.00		292,000.00
WASHPEN CLEANUP	400.00	2.00	800.00		292,000.00
TOTAL MILK PARLOR USE		2.00	2,352.00		858,480.00

MISCELLANEOUS USES

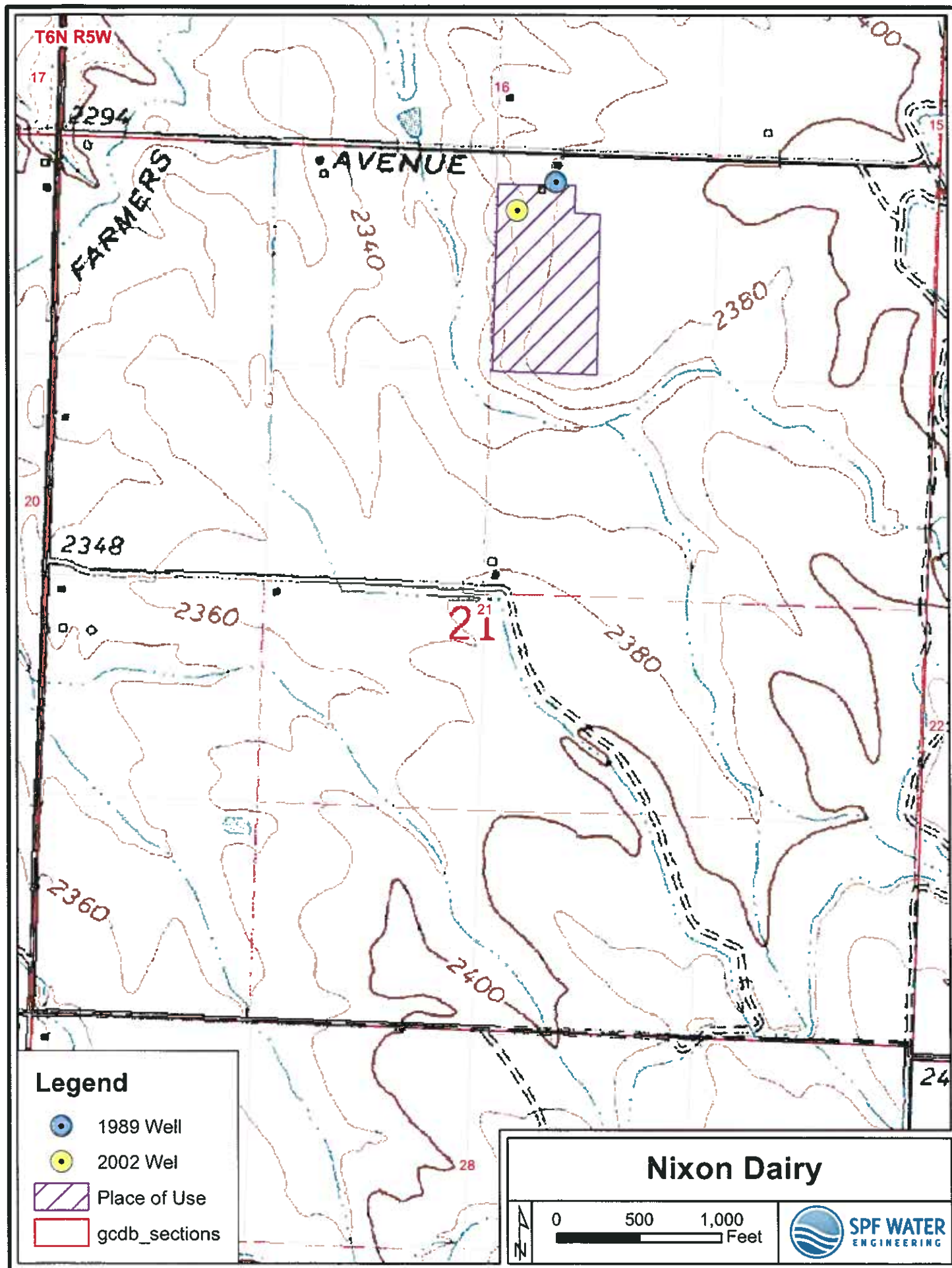
ITEM	GAL/S/OP	X'S/DAY	GAL/S/DAY	GAL/S/YEAR
TOWEL WASHING	50.00	4.00	200.00	73,000.00
MISC MAINTENANCE	1,000.00	1.00	1,000.00	165,000.00
RESTROOM	50.00	10.00	500.00	182,500.00
FEED PREP & DUST CONTROL	50.00	8.00	400.00	146,000.00
TOTAL MISCELLANEOUS USES			2,100.00	566,500.00

MISTERS

SPRINKLERS PER 5 COWS	NUMBER OF COWS	RATE PER SPRINKLER, IN GPM	HOURS USED PER DAY	DAYS USED PER YEAR	GALS PER DAY	GAL/S/YR
1	800	0.50	10.00	90.00	48000	4,320,000.00

FLOW RATE			
	TOTAL RATE PER DAY (GALS/ DAY)	TOTAL RATE OVER 2 HOURS (CFS)	TOTAL RATE OVER 5 HOURS (CFS)
STOCKWATER	33,600.00	0.62	0.25
COMMERCIAL	57,452.00	1.07	0.43
TOTAL	91,052.00	1.69	0.68

ANNUAL VOLUME	
STOCKWATER	37.64
COMMERCIAL	23.23
TOTAL	60.9



T6N R5W

2006 Photo

17

16

15

20

21

22

28

Legend

● 1989 Well

● 2002 Well

▨ Place of Use

▭ gcdb_sections

Nixon Dairy

0 500 1,000 Feet



Buffington, Denise

From: Buffington, Denise
Sent: Thursday, April 29, 2010 1:43 PM
To: Independent Enterprise
Subject: LEGAL NOTICE
Attachments: Payette County - Cover Letter.Doc; Payette County Ads - COMBINED.Doc

Attached please find (1) legal notice being submitted for publication. Please contact me if you have any questions or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Buffington
Administrative Assistant
Dept of Water Resources
Western Region

April 29, 2010

LEGAL NOTICE DEPARTMENT

INDEPENDENT ENTERPRISE
124 S MAIN
PAYETTE, ID 83661

RE: Application For Permit No(s): 3-10265 & 63-33364

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before 5/24/2010. Your cooperation is appreciated.

Sincerely,

Denise Buffington
Administrative Assistant

Enclosure(s)

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

3-10265

IDAHO POWER CO

PO BOX 70

BOISE, ID 83707

Point of Diversion SENE S20 T07N R05W PAYETTE County Source GROUND WATER Tributary SNAKE RIVER

Point of Diversion SENE S20 T07N R05W PAYETTE County Source GROUND WATER Tributary SNAKE RIVER

Point of Diversion L8 S20 T07N R05W PAYETTE County Source GROUND WATER Tributary SNAKE RIVER

Point of Diversion L8 S20 T07N R05W PAYETTE County Source GROUND WATER Tributary SNAKE RIVER

Use: INDUSTRIAL 01/01 to 12/31 0.32 CFS

Use: COOLING 01/01 to 12/31 4.41 CFS

Total Diversion: 4.73 CFS

Date Filed: 9/11/2009

Place Of Use: COOLING AND INDUSTRIAL

T07N R04W S33 NE (ALL)

A maximum of 4 shallow ground water wells in the 2 point of diversion locations listed. Cooling and Industrial use is for a power plant. The ¼ ¼ description is not listed for Government Lot 8. Unable to determine exact ¼ ¼, per map.

63-33364

DALE NIXON

PAMELA G NIXON

1255 GRANDVIEW RD

PARMA, ID 83660

Point of Diversion NWNE S21 T06N R05W PAYETTE County Source GROUND WATER Tributary

Point of Diversion NWNE S21 T06N R05W PAYETTE County Source GROUND WATER Tributary

Use: STOCKWATER 01/01 to 12/31 1 CFS

Use: COMMERCIAL 01/01 to 12/31 1 CFS

Total Diversion: 1 CFS

Date Filed: 11/6/2009

Place Of Use: COMMERCIAL AND STOCKWATER

T06N R05W S21 NWNE

Water bearing zone to be appropriated is from 200 to 215 feet.

Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Idaho Code § 42-203A. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Wy, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before 5/24/2010. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Interim Director

Published on 5/5 & 5/12/2010

Walker, Kay

From: Walker, Kay
Sent: Thursday, April 15, 2010 10:25 AM
To: LGraves@spfwater.com
Cc: Walker, Kay
Subject: Application for Permit 63-33364 for Dale and Pamela Nixon

Hi, Lori! I am reviewing the above application for permit and have a few questions in regard to the quantity of water that has been filed on. The attachments you submitted with the application provide lots of information that seems to contradict other information provided. Please see if you can narrow this down for me.

1. The application was filed for 1.0 cfs of water for stockwater and commercial uses.
2. The "Daily Fresh Water Requirement for Dairy Facility" worksheet, on page 2, states that the total flow rate over 2 hours would be 1.69 cfs and over 5 hours 0.68 cfs. If the system is ever going to exceed 1.0 cfs then the maximum diversion rate should be filed upon. We also note that there is an additional right from the wells for 0.14 cfs but the two rights, used in combination, would not be able to provide 1.69 cfs.
3. Information provided in "Technical Memorandum" by Jason Thompson, P.E., states... "The pumping rated used in this Theis analysis is the summer daily water demand of 63 gpm, which is greater than the annual water demand estimate of 38 gpm." If the summer demand is only predicted to be 63 gpm (0.14 cfs) during the summer and 38 gpm (0.084 cfs) during the winter, why are they applying for 1.0 cfs? Also, if they intend to utilize 1.0 cfs why were these smaller amounts used to predict drawdown for area wells?

As you can probably tell, I am very confused by this information. Please let me know why there are so many different quantities discussed so I can proceed with my review.

Thanks!! Kay

per phone con w/ Lori & Scott King 4/16/2010

① - system capacity cannot exceed 1.0 cfs -

② - Ran Theis @ 63 gpm - shows drawdown at peak annual amt.

Will not run at 1.0 cfs continuously so 63 gpm was conservative approach



SPF WATER
ENGINEERING

November 6, 2009

RECEIVED

NOV 06 2009

WATER RESOURCES
WESTERN REGION

Steve Lester
IDWR Western Region Office
2735 Airport Way
Boise, ID 83705

Subject: Application for Permit

Dear Steve,

Enclosed on behalf of Dale and Pamela Nixon is an Application for Permit proposing expansion to an existing dairy operation. Check No. 5675 is enclosed for the \$250 filing fee.

Because this application involves a commercial dairy, the Department is expected to require the applicant to evaluate the availability of water and local public interest concerns relating to large livestock feedlot or dairy operations per *Idaho Code* § 42-203A(5). In an effort to expedite processing of the application, these concerns have been addressed below.

1. Effect of proposed ground water diversion to the local aquifer and on neighboring wells.

To evaluate the potential effects of the proposed increased diversion on nearby wells, SPF Water Engineering (1) searched for well diversions using Idaho Department of Water Resources (IDWR) online databases for water rights and well construction within a ½-mile radius of the proposed wells, (2) examined IDWR hydrograph data for ground water levels over a larger area, and (3) analyzed increased diversions at the Nixon Dairy using the Theis (1935) analytical solution for ground water flow to a well.

Recorded Water Rights and Well Driller's Reports

Within an approximate ½-mile radius of the proposed points of diversion, five decreed water rights were found; four for domestic use and one for domestic and stockwater use, which is the current authorized water right for the Nixon dairy. A summary of the water rights and their diversion locations are included in Attachment A.

Well Driller's Reports for eight domestic wells were found. Well depths range between 104 and 246 feet. Static water levels range from 23 to 100 feet. The wells proposed on this application have been drilled; one in 1989 and one in 2002. We were able to locate only the Well Driller's Report for the 2002 well. This well serves as the primary well for the dairy. The 1989 well is a domestic well that serves one home, and is also plumbed as a back-up well for the dairy. Copies of the appurtenant Well Driller's Reports and their locations are included in Attachment B.

Available Water Level Data

IDWR hydrograph data (<http://www.idwr.idaho.gov/hydro.online>) was reviewed for three area wells described below. Well Driller's Reports and hydrographs for these three wells are included as Attachment C.

- The hydrograph for a 169' deep well located approximately 2¼ miles southwest (6N5W30BAB1) from the proposed well sites indicates a generally stable water level without significant declines between 1980 and 2003.
- The hydrograph for a 322' deep well located approximately 2¾ miles southeast (6N5W35BAC1) from the proposed well sites indicates a stable water level between 1993 and 2007.
- The hydrograph for a 385' deep well located approximately 4 miles southeast (6N5W36CDB1) from the proposed well sites has fluctuating data in the early 1980's due to pumping action, but shows no indication of water level decline since the mid-1990's.

Existing regional long-term water level declines are not apparent from these data.

Theis Analysis

A Theis analysis was conducted to predict the possible drawdown in neighboring wells from the proposed increase in withdrawals and has been included as Attachment D. The results of the analysis indicate that the proposed withdrawals represent a projected average ground water level impact of less than about 1.4 feet at a distance of 100 feet, 1.0 foot at a distance of 500 feet and 0.9 foot at a distance of 1,500 feet from the pumping wells after one year of continuous pumping. As a result, no injury is expected from the proposed withdrawals by Nixon Dairy.

2. **Public interest criteria related to the water resource.** The Nixon dairy has been licensed to sell milk since 1998. IDEQ, IDA and the EPA were made aware of the proposed dairy expansion as described below. Referenced correspondence is included as Attachment E.

Marv Patton (332-8550), IDA Bureau Chief, was notified of the Nixon's expansion request October 8, 2009. Mr. Patton provided the attached comment letter and stated that IDA is kept current on dairy growth through required Nutrient Management Plans and dairy inspections.

Lauri Monnot (373-0550), Sr. Water Quality Analyst with IDEQ, was notified of the Nixon's expansion request October 8, 2009 as indicated on the attached email.

The EPA is normally not notified regarding CAFO applications however, as advised in Ms. Monnot's e-mail, Maria Lopez was contacted October 13, 2009. Ms. Lopez referred us to Nick Peak (378-5765), who is the Idaho CAFO contact for the EPA. Mr. Peak stated that the EPA does not regulate CAFO's until they reach 700 mature cows. When a dairy reaches that size, the IDA refers the subject dairy to the EPA for review and a potential National Pollution Discharge Elimination System (NPDES) permit, depending on their waste water management procedures.

Please let me know if further information is needed for processing this application. Thanks
Steve.

Sincerely,



Lori Graves
Water Rights Specialist



Scott King, P.E.
Supervising Engineer

Cc: Dale Nixon, Dennis Fulcher

Enclosures

SPF file number: 824.0010

ATTACHMENT A
AREA WATER RIGHT DATA

T6N R5W

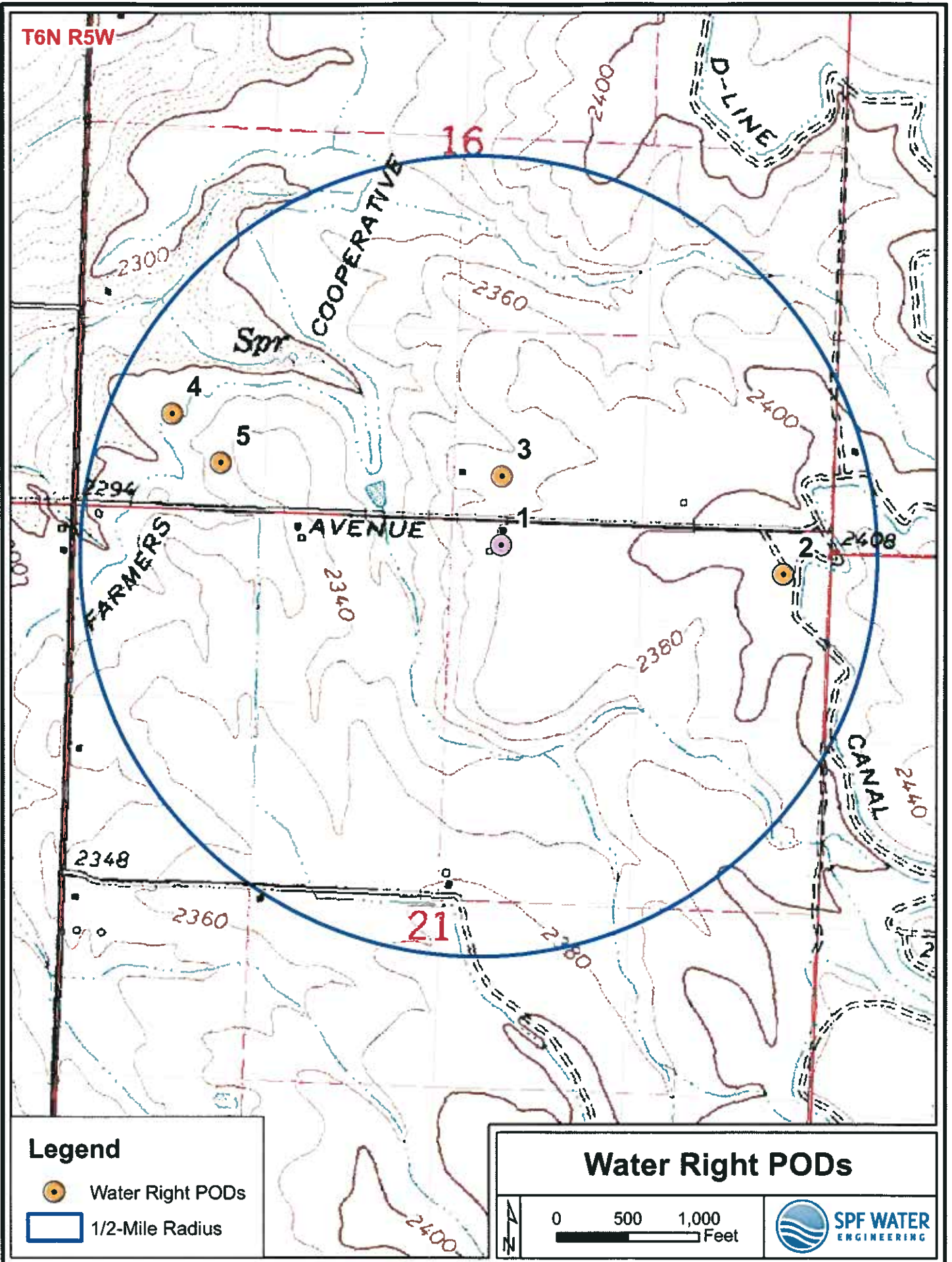
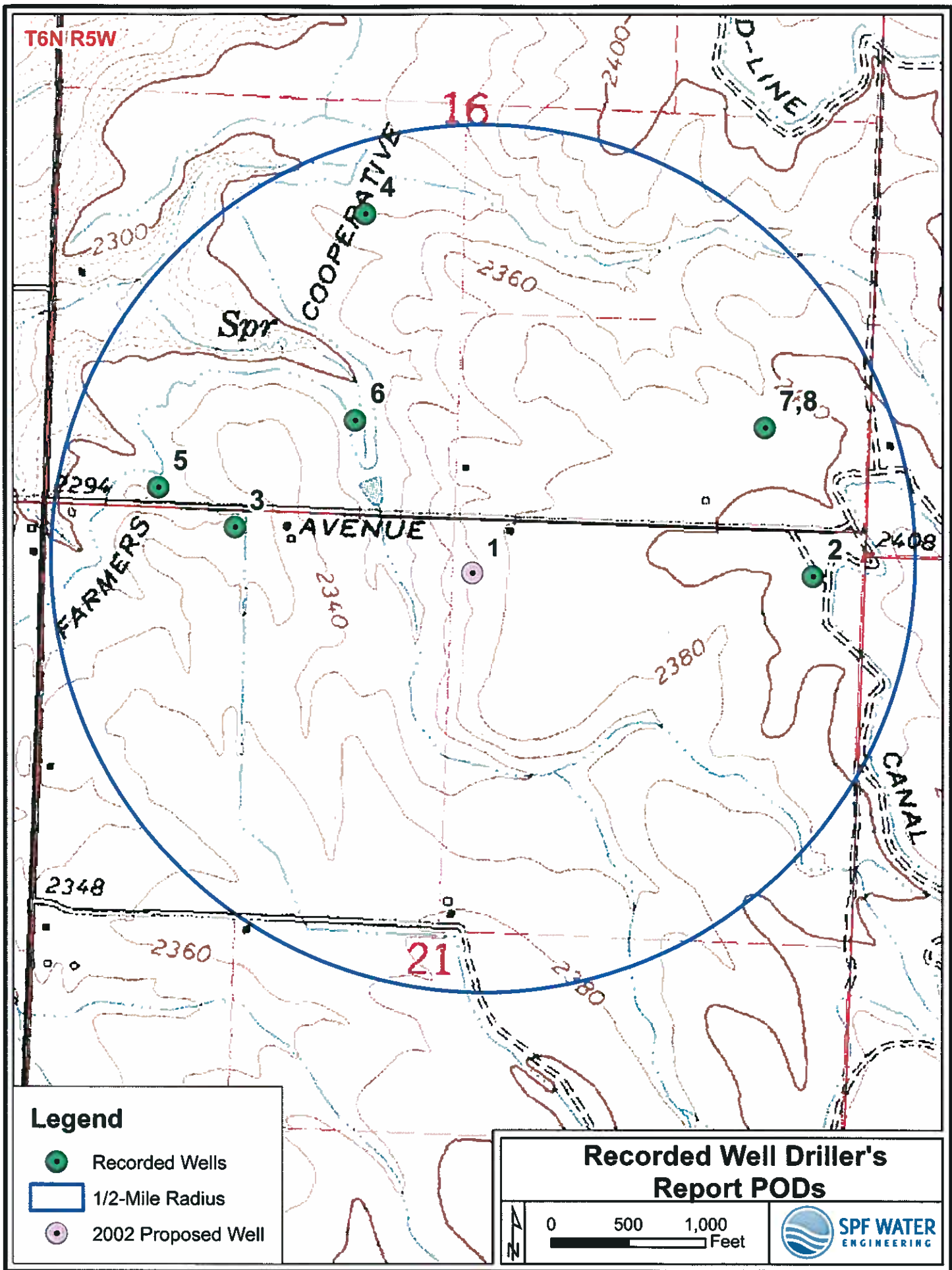


Table 1: Water Right PODs Within a 1/2 Mile Radii

Water Right	Basis	Priority	Decreed Date	Source	CFS	AFA	Owner	Dom, Stock	Map No.
63-31140	Decreed	Mar 24 1989	Apr 29 2009	GROUND WATER	0.14	0.0	DALE NIXON	Dom, Stock	1
63-30024	Decreed	Jun 16 1989	May 26 2000	GROUND WATER	0.04	0.0	BILL E HAGER	Dom	2
63-21789	Decreed	Apr 1 1940	May 18 2001	GROUND WATER	0.04	0.0	BEVERLY A HAMMAR	Dom	3
63-30152	Decreed	Jun 1 1978	May 17 2001	GROUND WATER	0.04	0.0	BRIAN T ATKINSON	Dom	4
63-21965	Decreed	May 20 1978	May 17 2001	GROUND WATER	0.04	0.0	BRIAN T ATKINSON	Dom	5

ATTACHMENT B

AREA WELL DRILLER'S REPORT DATA



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 002593C
DRILLING PERMIT NO. _____
Other IDWR No. _____

2. OWNER:
Name Dale Nixon
Address 1255 Grandview RD
City Parma State ID Zip 81660

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
W
E
S
Twp. 6 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 21 SW 1/4 NE 1/4 NE 1/4
Gov't Lot _____ County _____
Lat: _____ Long: _____
Address of Well Site Same as above
City _____
(Give at least name of road, distance to road or landmark)

Lt. _____ Blk. _____ Sub. _____ Name _____

4. USE:

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

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	
Benatrite	0 20 14 Sacks	Overhaul

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
6	+2	201.9	1/4	Steel	☐	☐	☒	☐

Length of Headpipe 5' Length of Tailpipe 3'

9. PERFORATIONS/SCREENS

Perforations _____ Method _____

Screens _____ Screen Type Johnson

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
203	213	.20		5" J	Stainless	☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

55 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
100	NA	214	2 hours

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
6	0	3	Tap soil		X
6	3	7	Hard Pan		X
6	7	8	clay		X
6	8	22	gravel		X
6	22	48	Bn sandy clay	X	
6	48	65	Sand & clay streaks		X
6	65	86	Bn clay		X
6	86	88	Fine sand	X	
6	88	120	Sandy Bn clay		X
6	120	130	Fine sand clay streaks	X	
6	130	146	Bn clay sand streaks	X	
6	146	154	Fine sand	X	
6	154	165	Bn clay		X
6	165	178	Fine sand	X	
6	178	191	Blue clay		X
6	191	198	Sand mottled coarse	X	
6	198	198	Blue clay		X
6	198	201	Coarse sand and gravel	X	
5	201	213	Coarse sand and gravel	X	
5	213		Blue clay		X

RECEIVED

DEC 26 2002

Department of Water Resources

Completed Depth 216 (Measurable)
Date: Started 10-15-02 Completed 11-18-02

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 McLaran Well Drilling Firm No. 641

Firm Official David Ingram Date 11-18-02

and
Driller or Operator Same Date _____
(Sign once if Firm Official & Operator)

USE ADDITIONAL SHEETS IF NECESSARY. FORWARD THE WHITE COPY TO THE DEPARTMENT

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT1. WELL TAG NO. D D0047446
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER:

Name Darwin Ames
Address 2111 Marshall Avenue
City Caldwell State Id Zip 83605

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 6 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 21 1/4 NW 1/4 NW 1/4
Gov't Lot _____ County CanyonLat: _____ Long: _____
Address of Well Site 1/4 mile east of 95 on GrandviewCity Parma
LI. _____ Blk. _____ Sub. Name _____

4. USE:

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

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 Material	From	To	Weight / Volume	Seal Placement Method
Bentonite Chips	0	18	550#	Overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 157'Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+2	157	.250	Steel	☒	☐	☒	☐

Length of Headpipe 10' Length of Tailpipe _____Packer ☒ Y ☐ N Type K-Packer

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____

Screen Type & Method of Installation Johnson / wash down

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
156	161	.025		5"	SS	☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

45 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
100*			1 hr

Water Temp. 58° Bottom hole temp. _____Water Quality test or comments: P.H. 7.5 Iron 5Hardness 3 Grains Depth first Water Encounter 82'

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water	Y	N
10	0	18	Gravel & Sand			
6	18	33	Sand			
	33	82	Clay			
	82	84	Sand & gravel		X	
	84	86	Clay			
	86	93	Sand		X	
	93	104	Clay			
	104	128	Sand		X	
	128	147	Clay			
	147	153	Clay w/ Sand Strips			
	153	161	Sand		X	

RECEIVED
OCT 20 2006
WATER RESOURCES
WESTERN REGION

RECEIVED
AUG 07 2007
WATER RESOURCES
WESTERN REGION

Completed Depth 161' (Measurable)Date Started 10-10-06 Completed 10-11-06

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 Adamson Pump & Drilling Firm No. 457Principal Driller David Adamson Date 10-11-06and Driller or Operator II David Gibbons Date 10-11-06Operator I Derek Burke Date 10-11-06

Principal Driller and Rig Operator Required.

Operator I must have signature of Driller/Operator II.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

USE TYPEWRITER OR
BALLPOINT PEN

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>HOWARD MALONE JR.</u> Address <u>R#2 Box 2280</u> Owner's Permit No. <u>PARMA, Idaho 83660</u>	7. WATER LEVEL Static water level <u>32</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>49</u> OF. Quality <u>Groundwater PA 9.0</u> Describe artesian or temperature zones below.																																																																								
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> <tr> <td><u>50</u></td> <td><u>Approx 50 feet</u></td> <td><u>3</u></td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>50</u>	<u>Approx 50 feet</u>	<u>3</u>																																																																		
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☒ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <u>86514</u> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Bore Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th rowspan="2">Water Yes/No</th> </tr> <tr> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>8</u></td> <td><u>0</u></td> <td><u>3</u></td> <td><u>Soil</u></td> <td><u>X</u></td> </tr> <tr> <td><u>8</u></td> <td><u>3</u></td> <td><u>5</u></td> <td><u>HARD PAN</u></td> <td><u>X</u></td> </tr> <tr> <td><u>8</u></td> <td><u>5</u></td> <td><u>14</u></td> <td><u>BROWN CLAY</u></td> <td><u>X</u></td> </tr> <tr> <td><u>8</u></td> <td><u>14</u></td> <td><u>20</u></td> <td><u>BROWN SANDY CLAY</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>20</u></td> <td><u>25</u></td> <td><u>BROWN CLAY SAND</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>25</u></td> <td><u>42</u></td> <td><u>BROWN AND BLACK GRAVEL (dry)</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>43</u></td> <td><u>48</u></td> <td><u>BROWN SANDY CLAY</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>48</u></td> <td><u>49</u></td> <td><u>BROWN SAND</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>49</u></td> <td><u>75</u></td> <td><u>BROWN AND BLACK GRAVEL DRY</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>75</u></td> <td><u>110</u></td> <td><u>BROWN AND BLACK GRAVEL</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>110</u></td> <td><u>113</u></td> <td><u>BROWN CLAY</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>113</u></td> <td><u>130</u></td> <td><u>Blue CLAY</u></td> <td><u>X</u></td> </tr> <tr> <td><u>6</u></td> <td><u>131</u></td> <td><u>?</u></td> <td><u>Black sand and gravel</u></td> <td><u>X</u></td> </tr> </tbody> </table>	Bore Diam.	Depth		Material	Water Yes/No	From	To	<u>8</u>	<u>0</u>	<u>3</u>	<u>Soil</u>	<u>X</u>	<u>8</u>	<u>3</u>	<u>5</u>	<u>HARD PAN</u>	<u>X</u>	<u>8</u>	<u>5</u>	<u>14</u>	<u>BROWN CLAY</u>	<u>X</u>	<u>8</u>	<u>14</u>	<u>20</u>	<u>BROWN SANDY CLAY</u>	<u>X</u>	<u>6</u>	<u>20</u>	<u>25</u>	<u>BROWN CLAY SAND</u>	<u>X</u>	<u>6</u>	<u>25</u>	<u>42</u>	<u>BROWN AND BLACK GRAVEL (dry)</u>	<u>X</u>	<u>6</u>	<u>43</u>	<u>48</u>	<u>BROWN SANDY CLAY</u>	<u>X</u>	<u>6</u>	<u>48</u>	<u>49</u>	<u>BROWN SAND</u>	<u>X</u>	<u>6</u>	<u>49</u>	<u>75</u>	<u>BROWN AND BLACK GRAVEL DRY</u>	<u>X</u>	<u>6</u>	<u>75</u>	<u>110</u>	<u>BROWN AND BLACK GRAVEL</u>	<u>X</u>	<u>6</u>	<u>110</u>	<u>113</u>	<u>BROWN CLAY</u>	<u>X</u>	<u>6</u>	<u>113</u>	<u>130</u>	<u>Blue CLAY</u>	<u>X</u>	<u>6</u>	<u>131</u>	<u>?</u>	<u>Black sand and gravel</u>	<u>X</u>
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4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☒ Cable ☐ Dug ☐ Other _____	5. WELL CONSTRUCTION Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Thickness</th> <th>Diameter</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>.25</u> inches</td> <td><u>6</u> inches</td> <td><u>15</u> feet</td> <td><u>118 1/2</u> feet</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches Number _____ From _____ To _____ _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☐ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>20</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Pudding clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☐ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld _____ ☐ Cemented between strata Describe access port <u>Well Cap</u>	Thickness	Diameter	From	To	<u>.25</u> inches	<u>6</u> inches	<u>15</u> feet	<u>118 1/2</u> feet																																																																
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6. LOCATION OF WELL Sketch map location <u>must</u> agree with written location. N W Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Payette</u> <u>NW</u> 1/4 SW 1/4 Sec. <u>16</u>, T. <u>6</u> N. R. <u>5</u> W.	10. Work started <u>17 JUNE 86</u> finished <u>28 JUNE 86</u> 11. DRILLERS CERTIFICATION <u>DR</u> I/We certify that all minimum well construction standards were complied with at the time the rig was removed. <u>GARY DUSPIVA</u> WELL Firm Name <u>DRILLING & DEV</u> Firm No. <u>395</u> Address <u>R#3 Box 3069</u> Date <u>25 July 1986</u> <u>PARMA, IDAHO 83660</u> Signed by (Firm Official) <u>Gary Duspiva</u> and _____ (Operator) <u>Gary Duspiva</u>																																																																								

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 0009344
 DRILLING PERMIT NO. 63-99-W-0185-000
 Other IDWR No. _____

2. OWNER: Kevin Smith
Name
Address P O BOX 885
City Fruitland State ID Zip 83619

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
 W E S
 Twp. 4 North ☒ or South ☐
 Rge. 5 East ☐ or West ☒
 Sec. 16 1/4 SW 1/4 SW 1/4
 Gov't Lot _____ 10 acres _____ 40 acres _____ 160 acres
 County payette
 Lat. : : Long. : :
 Address of Well Site 1082 Grand
view rd City Paulsboro
 (Give at least name of road - distance to road or landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

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	150	650	Overboard Slurry

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 158
Was drive shoe seal tested? ☒ Y ☐ N How? Blue Dry

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	1	158	20	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____ MICROFILMED

9. PERFORATIONS/SCREENS

Perforations	Method _____
Screens	Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

52 ft. below ground Artesian pressure lb.
Depth flow encountered ft. Describe access port or
control devices:

11. WELL TESTS:

☐ Pump ☐ Bailer

Yield gal./min.	Drawdown	Pumping Level	Time
200		171	2

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

[illegible]

13. DRILLER'S CERTIFICATION

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

Company Name _____ WEISER, ID 83372 Firm No. 445

Firm Official [Signature] Date 8-6-99
and
Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

[illegible]

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only

Well ID No. 44674

Inspected by _____

Twp _____ Rge _____ Sec _____

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

Lat : : Long: : :

1. WELL TAG NO. D 0047226
 DRILLING PERMIT NO. _____
 Water Right or Injection Well No. _____

2. OWNER:

Name	Mobile Home Locators		
Address	5600 E. Cleveland Blvd		
City	Caldwell	State	ID 83605

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk. Sub. or Directions to well.

Twp. 6 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 16 $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$
Gov'l Lot _____
County Payette $\frac{10 \text{ acres}}{40 \text{ acres}} \frac{1}{160 \text{ acres}}$
Lat. : : Long. : :
Address of Well Site 1550 Grandview Ave

City Panama

(Give at least name of road + Distance to Road or Landmark)

Lt. Blk. Sub. Name

4. USE:

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

5. TYPE OF WORK check all that apply

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Bentonite	0	20th	850lbs	overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 233'

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Linear	Welded	Threaded
6"	+2	233	250	steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe 10' Length of Tailpipe _____
Packer ☒ Y ☐ N Type K Packer

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method

Screen Type & Method of Installation Johnson washdown

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
236	246	.010		5"	stainless steel	☐	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

100 ft. below ground Artesian pressure _____ lb./sq.in.
Depth flow encountered _____ ft. Describe access port or control devices: _____
well cap

12. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
no test completed			

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: no test completed

... Depth first Water Encounter 112'

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

[illegible]

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 **ABC Well Drilling & Pump Inc** Firm No. **621**

Principal Driller Cathy Byrne Date 10/05/06

and
Driller or Operator II Randy Payne Date 10/05/06

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator 1 must have signature of Driller/Operator (1).

FORWARD WHITE COPY TO WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Basin 63
Application 860408

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

1. WELL TAG NO. D 0000799
DRILLING PERMIT NO. 763038
Other IDWR No. _____

2. OWNER:
Name Liberty Homes
Address 1718 Cold Blvd
City Cold State Id Zip 83651

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N		Twp. <u>6</u>		North ☒ or South ☐	
E		Rge. <u>5</u>		East ☐ or West ☒	
S		Sec. <u>16</u>		SE 1/4 or SW 1/4	
W		Gov't Lot _____		County _____	
		Lat: _____		Long: _____	
		Address of Well Site <u>1409</u>		City <u>Parma</u>	
		(Give at least name of road, distance to road or landmark)			

Lt. _____ Blk. _____ Sub. Name Parcel 7

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

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	Feet	Yards	
Bentright	0	20	10		Over Bore

Was drive shoe used? ☒ N Shoe Depth(s) 20'
Was drive shoe seal tested? ☒ Y ☐ N How? Dry Hole

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6" +1	69	250		Steel	☒	☐	☒	☐
4 1/2"	60	100		PVC	☐	☒	☐	☒

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations _____ Method Saw Cut
Screens ☒ Screen Type PK Well Screen

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
100	120	20" #		4 1/2"	Pvc	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

11. WELL TESTS:

☐ Pump	☐ Bailor	☐ Air	☐ Flowing Artesian
Yield gal./min.	Drawdown	Pumping Level	Time
<u>35</u>	<u>80</u>	<u>95</u>	<u>10 hr</u>

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: Noted

Depth first Water Encounter _____
12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
8	0	2	Top Soil		☒
8	2	5	Hard Pan		☒
8	5	20	Cemented Gravel		☒
6	20	55	Cemented Gravel		☒
6	55	70	Sandy Clay		☒
6	70	120	Blue clay with Sand Strips		☒

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FEB 17 2000

Department of Water Resources

Completed _____ Depth 120 (Measurable)
Date: Started 1-4-00 Completed 1-20-00

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 Pro Water Well Firm No. 575

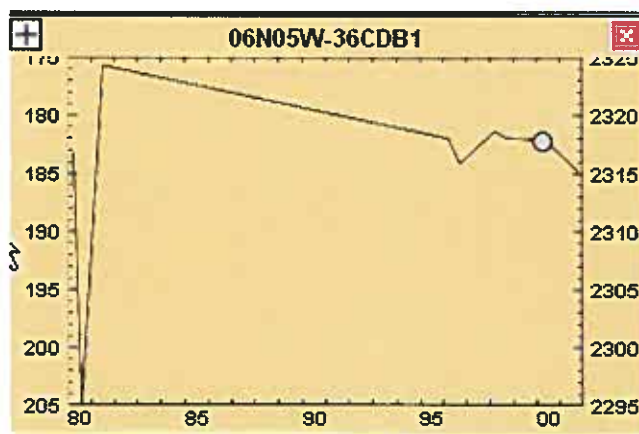
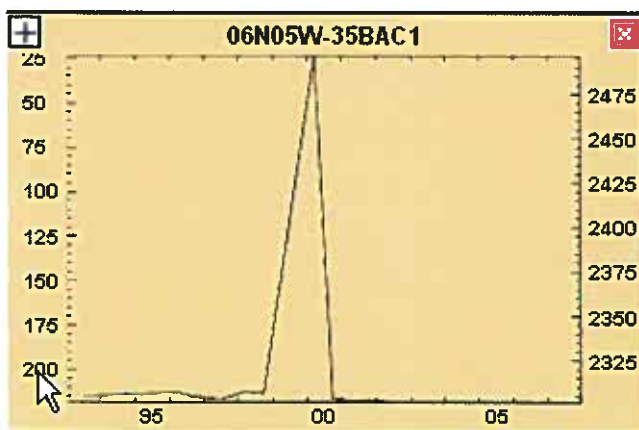
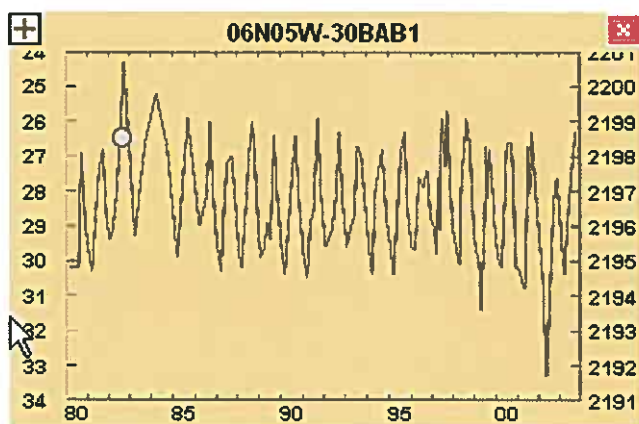
Firm Official Paul Ransom Date 2-1-00

and Driller or Operator Mike Ransom Date 1-26-99

(Sign once if Firm Official & Operator)

ATTACHMENT C
HYDROGRAPH WELL DATA

IDWR HYDROGRAPH DATA



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JUN 8 1966

WELL LOG AND REPORT OF THE
STATE RECLAMATION ENGINEER OF IDAHO Department of Reclamation

Permit No. B-29956 Well No. 1 County Canyon

034816

Owner Charles N. Pittman

Locate well in section

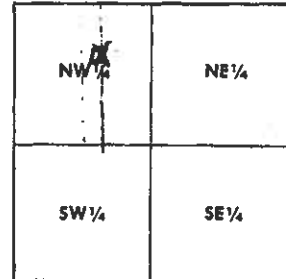
Address R. #2 - Parma, Idaho

Driller H. C. Nicholson

Address Arzette, Idaho, License #54

Well location NE 1/4 37 1/2 Sec. 30, T. 6 N. R. 5 W

Size of drilled hole 12 in.



Total depth of well 169 ft.

Give depth to standing water from the ground 28' Water temp. _____ °Fahr.

On "Pumping Test" delivery was 800 g.p.m. or _____ c.f.s. Drawdown was 80 feet.

Size of pump and motor used to make test Gas Motor - 8 in Pipe - Pumped 100 in of Water.

Length of time of test 25 hours - _____ minutes.

If flowing well, give flow _____ c.f.s. or _____ g.p.m. and of shut off pressure _____

If flowing well, described control works _____

(TYPE AND SIZE OF VALVE, ETC.)

Water will be used for Irrigation and stock water Weight of casing per lineal foot _____

Thickness of casing 1/4 in. Casing material steel
(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing 12" - 135 ft.
(CASING 12" IN DIAMETER OR LESS, GIVE INSIDE DIAMETER;
CASING OVER 12" IN DIAMETER, GIVE OUTSIDE DIAMETER)

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks—seals, grouting, etc.
12"	top	135 ft.		

Number and size of perforations _____ located _____ feet to _____ feet from ground

Date of commencement of well 6-28-61 Date of completion of well 7-10-61

NENW S. 30 6N SW

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

This well was drilled under my supervision and the above information is true and correct to the best of my knowledge and belief.

Signed H. C. Nicholson

By _____

Dated 7-10, 1961.

License No. 54

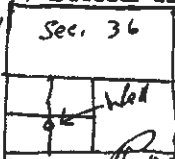
State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

06N05W-358AC1

[illegible]

WELL LOG AND REPORT TO THE

STATE RECLAMATION ENGINEER OF IDAHO



RECEIVED

Log No. APR 29 1957

Rec. Department of Reclamation

Well No. _____

Permit No. _____

034811

(DO NOT FILL IN)

Owner Robert J. Nabelek Address Rt. 1 PARMA, IdahoDriller Halloway Drilling Co Address Ontario Ore. Lic. No. 132Location of Well: SW 1/4 S.W. 1/4 Sec. 36, T. 6 N., R. 5 W. PAYETTE County,
and 200 feet N/S, and 0 feet E/W from S.W. Corner of S.W. 1/4 S.W. 1/4 Sec. 36Size of Drilled Hole 16" Total depth of Well 385'Give depth of standing water from surface 190' Water Temp. 69° °FahrenheitOn pumping test delivery was 800 g.p.m. or _____ c.f.s. Drawdown was 60' or 250' feet.Size of pump and motor used to make the test 12" Bowler pump pipe D.S. Cat. motorLength of time pumped during check was 14 hr. 3 minutes.

If flowing well, give flow in c.f.s. _____ or g.p.m. _____ and shut in pressure _____

If flowing well, describe control works _____ (TYPE AND SIZE OF VALVE, ETC.)

Water will be used for Irrigation Weight of casing per linear foot 59'Thickness of casing 5/16" Casing material Steel pipe
E.G., PIPE, CONCRETE, WOOD.Diameter, length and location of casing 16"-307'5"-80'8" 12" standard perforated
(CASING 12" IN DIAMETER AND UNDER GIVE INSIDE DIAMETER, CASING OVER 12" IN DIAMETER GIVE OUTSIDE DIAMETER.)Number and size of perforations 560-6" x 3/8" located 308' feet to 378' feet
from surface of ground.

Other perforations _____

Date of commencement of well March 11-57 Date of completion of well April 24-57Type of well rig 72 Star Cable tool Rig.

CASING RECORD

DIAM. CASING	FROM FEET	TO FEET	LENGTH	REMARKS -- SEALS, GROUTING, ETC.
16"	0	307'5"	307'5"	
12"	300'	380'8"	80'8"	

GENERAL INFORMATION—Pumping Test, Quality of Water, Etc.

well pumped large quantity of sand
first 10 hrs. practically clearing last
two hrs.

SWSW 5.36 6N SW

WELL LOG

From Foot	To Foot	Type of Material	Drilling Time		Water-bearing Formation Ans. Yes or No	Casing Perforated Ans. Yes or No
			Hrs.	Min.		
0	6"	top Soil			No	No
6'	34'	yellow clay			"	"
34'	36	loose dry sand			"	"
36	54	sand rock			"	"
54	93	dry Gravel			"	"
93'	132	dry sand			"	"
132'	136'	strip clay			"	"
136'	140'	sand rock			"	"
140	193	loose dry sand			"	"
193	260	fine grey sand			yes	no.
260	266	Grey Clay			no	no.
266	303	fine sand with water			yes	no.
303	325	Blue shale			no	yes
325	328	Blue sand			yes	yes
328	335	Broken shale			P.	yes
335	350	Hard Blue shale			No	yes
350	353	Pea Gravel Blue			yes	yes
353	380	Hard Blue shale			No	yes
380	385	If more space is required use Sheet No. 2			yes	nothing
		Grey coarse sand				

WELL DRILLERS STATEMENT

This well was drilled under my jurisdiction and the above information is true and correct to the best of my knowledge and belief.

Signed Holloway Drilling Co
By May Holloway

Dated April 27, 1957

License No. 132

ATTACHMENT D
THEIS ANALYSIS



TECHNICAL MEMORANDUM

DATE: November 6, 2009
TO: Lori Graves
FROM: Jason Thompson, P.E.
CC: FILE
RE: Nixon Dairy – Theis Analysis
JOB NO.: 824.0010



Effect of Proposed Diversion on Neighboring Wells

To quantify the effect that the proposed diversion may have on nearby wells, a Theis analysis using the non-equilibrium well equation was performed. The non-equilibrium well equation (Theis, 1935) is a commonly accepted method to estimate of the drawdown observed at various distances from a well.

There are assumptions inherent to the use of the Theis equation. These include: (1) the aquifer is homogeneous and isotropic, uniform in thickness and areal extent; (2) the aquifer receives no recharge; (3) the pumping well penetrates the full aquifer thickness; (4) water removed by discharge is removed instantaneously; (5) the pumping well is 100 percent efficient; (6) laminar flow exists throughout the aquifer; and (7) the water table or potentiometric surface has no slope. These assumptions are rarely completely satisfied under field conditions, but this method is commonly used to provide an indication of possible well interference in sedimentary aquifers.

The proposed diversion rate on the water right application is 1.0 cfs (449 gpm) for the expanded dairy operation for stockwater and commercial uses. This rate represents the anticipated maximum diversion rate of the expanded dairy.

The Theis equation calculates drawdown effects using an annual average continuous pumping rate. The dairy's total future annual water demand is expected to be 61 acre feet per year, equal to 0.084 cfs (38 gpm). During the summer months, water demands are greater primarily due to mister use. Summer water demands are projected to be 91,050 gpd, which is equivalent to 0.14 cfs (63 gpm).

The pumping rate used in this Theis analysis is the summer daily water demand of 63 gpm, which is greater than the annual water demand estimate of 38 gpm. Therefore, this analysis is expected to be conservative for considering annual impacts.

The Theis equation requires an estimate of aquifer transmissivity and storativity. For this analysis, a transmissivity of 75,000 gpd/ft and a storativity of 0.0005 were assumed. The transmissivity value is an interpolation based on modeling results from the Treasure Valley Hydrologic Project (Petrich 2004).

Results of the Theis analysis using the expanded dairy's anticipated future water demands are included as Table 1. Continuously pumping the well at 63 gpm for one month would result in a predicted drawdown of 1.1 feet at a distance of 100 feet from the dairy, 0.8 feet at a distance of 500 feet, and 0.6 feet at a distance of 1,500 feet. Continuously pumping the well at 63 gpm for one year would result in a predicted drawdown of 1.4 feet at a distance of 100 feet, 1.0 feet at a distance of 500 feet, and 0.9 feet at a distance of 1,500 feet.

It should be noted that the drawdown estimates assume the aquifer zones are in direct hydraulic connection with one another. If wells in the vicinity of the dairy tap aquifer(s) other than the zones utilized by the dairy wells, then interference drawdown will likely be reduced or eliminated. These drawdown estimates are based on the assumption of no annual recharge. Actual drawdown will therefore likely be less than these estimated amounts.

References

Petrich, C. 2004. Simulation of ground water flow in the lower Boise River basin. Idaho Water Resources Research Institute, IWRRI-2004-02.

Theis, C.V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground-water storage. Transactions, American Geophysical Union, 16: 519-524

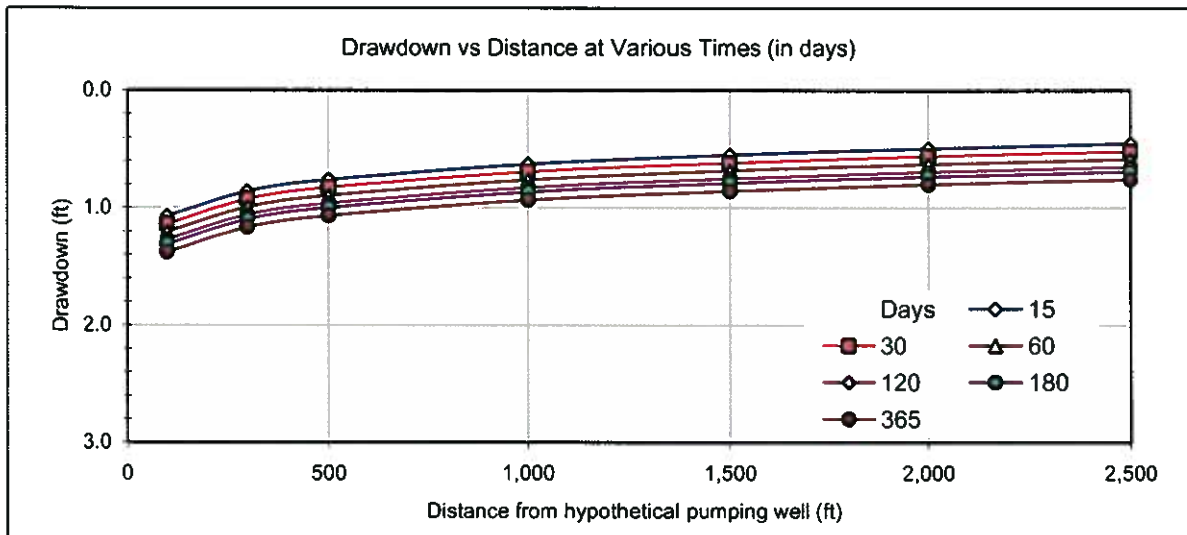
Table 1. Theis Worksheet

Project: Nixon Dairy
 Project Number: 824.0010

Assumed Parameter Values

Q=	63	(gpm)
T=	75,000	(gpd/ft)
S=	0.0005	(dimensionless)

Time (days)	Time (minutes)	Radius (ft)						
		100	300	500	1,000	1,500	2,000	2,500
0.01	14	0.37	0.17	0.08	0.01	0.00	0.00	0.00
0.1	144	0.59	0.38	0.28	0.16	0.09	0.05	0.03
0.2	288	0.65	0.44	0.35	0.22	0.15	0.10	0.07
0.4	576	0.72	0.51	0.41	0.28	0.21	0.16	0.12
0.8	1152	0.79	0.58	0.48	0.35	0.27	0.22	0.18
1.0	1440	0.81	0.60	0.50	0.37	0.29	0.24	0.20
2.0	2880	0.88	0.67	0.57	0.43	0.36	0.30	0.26
7.0	10080	1.00	0.79	0.69	0.55	0.48	0.42	0.38
15.0	21600	1.07	0.86	0.76	0.63	0.55	0.49	0.45
30.0	43200	1.14	0.93	0.83	0.69	0.62	0.56	0.52
60.0	86400	1.20	0.99	0.89	0.76	0.68	0.63	0.58
120.0	172800	1.27	1.06	0.96	0.83	0.75	0.69	0.65
180.0	259200	1.31	1.10	1.00	0.87	0.79	0.73	0.69
365.0	525600	1.38	1.17	1.07	0.93	0.86	0.80	0.76



ATTACHMENT E
AGENCY COMMENTS



STATE OF IDAHO

DEPARTMENT OF AGRICULTURE

C.L. "BUTCH" OTTER
Governor
CELIA R. GOULD
Director

October 9, 2009

Lori Graves
SPF Water
300 E Mallard, Ste 350
Boise, Id 83706

Re: Dale Nixon d/b/a Day & Night Farm

Dear Ms. Graves:

The Dale Nixon d/b/a/ Day & Night Farm, 1255 Grandview Ave, Parma, Idaho was issued a license to sell milk at this location in December 1998. The facility is regularly inspected for sanitary and environmental compliance by the Idaho State Department of Agriculture. A review of the compliance history of this operation revealed they are in compliance with state requirements.

Please contact this office if you need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Marv Patten".

Marv Patten, Chief
Dairy & CAFO Bureau

cc: Levi Masmeyer, State Dairy Inspector
Day & Night Farm

Lori Graves

From: Lori Graves
Sent: Saturday, October 10, 2009 9:50 AM
To: 'Lauri.Monnot@deq.idaho.gov'
Subject: RE: Nixon Dairy Expansion
Thanks for the information Lauri.

From: Lauri.Monnot@deq.idaho.gov [mailto:Lauri.Monnot@deq.idaho.gov]
Sent: Friday, October 09, 2009 12:05 PM
To: Lori Graves
Cc: Craig.Shepard@deq.idaho.gov
Subject: RE: Nixon Dairy Expansion

Hi Lori,

Thank you for contacting me regarding the proposed Nixon dairy expansion. DEQ does not regulate dairy expansion, therefore we do not have comments on this application. We will, however, keep this in or Lower Boise tributary archive for reference in water quality assessments and TMDL development. Please be sure to communicate with ISDA and EPA (Maria Lopez) about this expansion. EPA regulates NPDES permits for discharge from dairy operations.

Thanks,
Lauri Monnot
Senior Water Quality Analyst

From: Lori Graves [mailto:LGraves@spfwater.com]
Sent: Friday, October 09, 2009 10:33 AM
To: Lauri Monnot
Subject: Nixon Dairy Expansion

Lauri,

Attached is a draft application for Dale and Pam Nixon's proposed dairy expansion. IDWR requires that applicants show they have been in contact with DEQ and ISDA regarding proposals associated with dairies. Dale and Pam wish to expand their current dairy operation to approximately 800 wet cows and 400 dry and replacement cows. Their current operation consists of $\pm$ 400 wet cows and 200 dry and replacement cows. Dale does not anticipate that the expansion will require facility modifications and that they will not exceed their existing permit requirements regarding dairy discharge at this time. Please let me know if you have any questions or need further information. Thanks Lauri.

Lori Graves
Water Rights Specialist
300 E. Mallard, Ste 350
Boise, ID 83706
208.383.4140 x219
fax 208.383.4156
e-mail lgraves@spfwater.com
www.spfwater.com

10/10/2009