

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
APR 28 2011
DEPARTMENT OF
WATER RESOURCES

A. GENERAL INFORMATION

Permit No. 57-11626

1. Owner Thomas J. and Jenine M. Wilke Phone No. 208-337-5500

Current address 6420 Johnstone Rd., Homedale, ID 83628

2. Examiner's name Scott King, SPF Water Engineering EXAM DATE April 11 & 27, 2011

3. Accompanied by Thomas Wilke Email _____

Address _____

Relationship to permit holder same Phone No. _____

4. Source Ground Water tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use Surface water from Gem Irrigation District can be used for stock

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

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion: SEE ATTACHED TABLE

Ident. No.	Gov't Lot	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks

2. Place(s) of Use: Method of determination 2009 Photo, Exam

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	05W	9					S	S	S	S		S							

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
see attached table					

*Code to correspond with no. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

Capacity estimated based on theoretical equations and pump capacity curves.

E. NARRATIVE/REMARKS/COMMENTS

Seven wells with submersible pumps provide water to an interconnected stock watering system.

Two storage tanks are used (10,000 and 50,000 gallon capacity).

Wells #1 and #7 also serve nearby homes (one each). The remaining five wells are used only for stock water. Domestic use is not included on the amended permit.

When available, surface water provided by Gem Irrigation District can be used to provide water for stock.

Tom Wilke, system owner, stated the system has been used to supply 9,000 heifers during the permit development period.

The amended permit lists 2 points of diversion in SWNW Section 9; 3 wells are located in this tract. A licensing amendment is required to add an addition point of diversion here. One of these wells in SWNW Section 9 (identified as #1) also supplies water to one home located about 400 feet northwest of the well.

The amended permit lists 4 wells in NWSW Section 9; 3 wells are located in this tract.

The amended permit lists 2 wells in NESW Section 9; 1 well is located in this tract. This well (identified as #7) also provides water to one home located about 450 feet northwest of the well.

The amended permit is conditioned for "Stockwater use is for 9,000 heifers or 3,000 dairy cows in a feedlot and does not include any use for a dairy operation" (Condition #7). The facility and associated water use does not include a dairy operation. Only heifers are watered.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS

Additional computation sheets attached

Measured Method:

Discharge capacity estimated based on pump curves and theoretical equations. See attached table in Attachment 4.

Total combined pumping capacity estimated at 274 gpm (0.61 cfs).

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$ _____

2. Volume Calculations for Other Uses:

Required Volume: 9,000 cattle x 12 gpd/hd x 365 days / 325,850 = 121.0 afa

Potential Volume: 0.61 cfs x 365 dys x 1.9835 = 441.6 afa

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Stockwater	1/1	12/31	0.61	121.0
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Totals:			0.61 cfs	121.0 afa

2. Recommended Amendments

- ☒ Change P.D. as reflected on page 1
 ☐ Add P.D. as reflected on page 1
 ☒ None
☐ Change P.U. as reflected on page 1
 ☐ Add P.U. as reflected on page 1
 ☐ Other

I. AUTHENTICATION

Field Examiner's Signature _____

Date April 27, 2011

Reviewer _____

Date _____



**ATTACHMENT 1
STATEMENT OF COMPLETION FOR SUBMITTING PROOF OF
BENEFICIAL USE**

AND

COPY OF AMENDED PERMIT NO. 57-11626

COPY

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COMPLETION
FOR SUBMITTING PROOF OF BENEFICIAL USE

FOR OFFICE USE ONLY

Am't. of Fee \$: _____
Receipt No: _____
Receipt By: _____
Date Received: _____

The Idaho Department of Water Resources considers this form a statement by the permit holder(s) that development of a water right has been completed and that water has been applied to beneficial use to the extent described below. This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner. Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an Assignment of Permit form. If you wish to relinquish your permit because you have not relinquished the authorized use of the water and are not applying for an extension, please notify the Department in writing.

1. Permit No.: 57-11626 Telephone No.: 208-337-5500
2. Name of Permit Holder(s): Thomas J. and Jenine M. Wilke
3. Mailing Address: 6420 Johnstone Road City: Homedale
State: ID Zip: 83629 Email: _____
4. Source of Water: Ground Water If GROUND WATER (well), Date Drilled: mo. _____ / yr. _____
Well Driller: See Attached Drilling Permit Number: _____
5. Extent of use(s) completed (as authorized by the water right permit)
Domestic (No. of households): 2 Stockwater (No. and type of stock): 9,000 heifers or 3,000 dairy cows
Irrigation (No. of acres): _____ Other: _____
6. Total rate of diversion or storage volume for which proof is submitted: 2.0 cfs OR _____ acre-feet
7. Compliance with a measuring device requirement, lockable controlling device requirement, and/or other conditions of permit: Refer to the approval conditions on your permit and respond accordingly. The Department will not issue a license if permit conditions are not met.
- Measuring Device: Is a measuring device required? Yes ☐ No ☒
If yes, has the measuring device been installed? Yes ☐ No ☐
- Lockable Controlling Device: Is a lockable device required to control the diversion? Yes ☐ No ☒
If yes, has the lockable device been installed? Yes ☐ No ☐
- Other Conditions of Permit: Do the approval conditions on your permit require you to submit additional information in connection with your proof of beneficial use? If yes, list the conditions below and attach documents with the required information.
- Completed? Yes ☐ No ☒
8. Fee Enclosed: \$ n/a See fee schedule on back of the instructions for filing proof of beneficial use.
Proofs filed without an appropriate fee will be considered incomplete.
9. Person to contact to accompany the Department representative during field examination of the water system.
Name: n/a Telephone Number: _____
Mailing Address: _____ City: _____
State: _____ Zip: _____ Email: _____

The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder: *Thomas J. Wilke* Date: 4/12/11
(Include your title, if on behalf of company or organization)

Mail to: Idaho Department of Water Resources, PO Box 83728, Boise, ID 83720-0098

State of Idaho
Department of Water Resources
Amendment of Permit

NO. 57-11626

Priority: January 30, 2003

Maximum Diversion Rate: 2.00 CFS

This is to certify, that **NORTHWEST FARM CREDIT SERVICES FLCA**
PO BOX 279
ONTARIO OR 97914-0279

And

TOM WILKE And JENINE M WILKE
6420 JOHNSTONE RD
HOMEDALE ID 83629

have applied for an amendment of a permit and the amendment is APPROVED for development of water as follows:

Source: GROUND WATER

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
STOCKWATER	01/01 to 12/31	2.00 CFS

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER	NW¼SW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	NW¼SW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	NW¼SW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	NW¼SW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	NE¼SW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	NE¼SW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	SW¼NW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County
GROUND WATER	SW¼NW¼	Sec. 9, Twp 02N, Rge 05W, B.M.	OWYHEE County

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	05W	4							X	X	X	X	X	X			X		
02N	05W	9		X	X	X	X	X	X	X	X	X	X		X	X			
02N	05W	16		X	X		X			X									

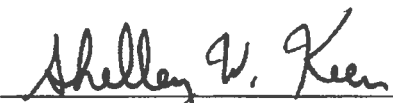
State of Idaho
Department of Water Resources
Amendment of Permit

NO. 57-11626

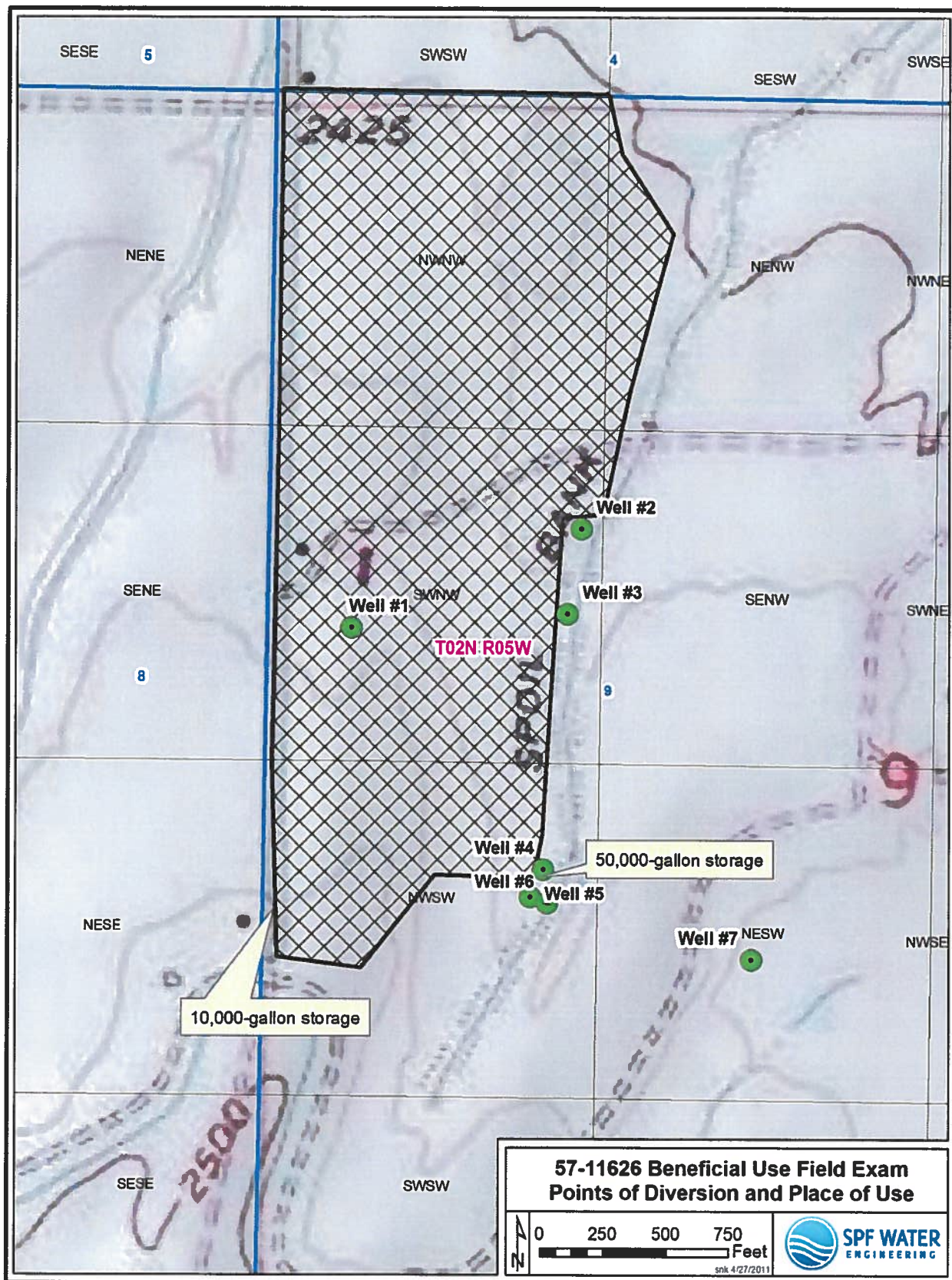
CONDITIONS OF APPROVAL

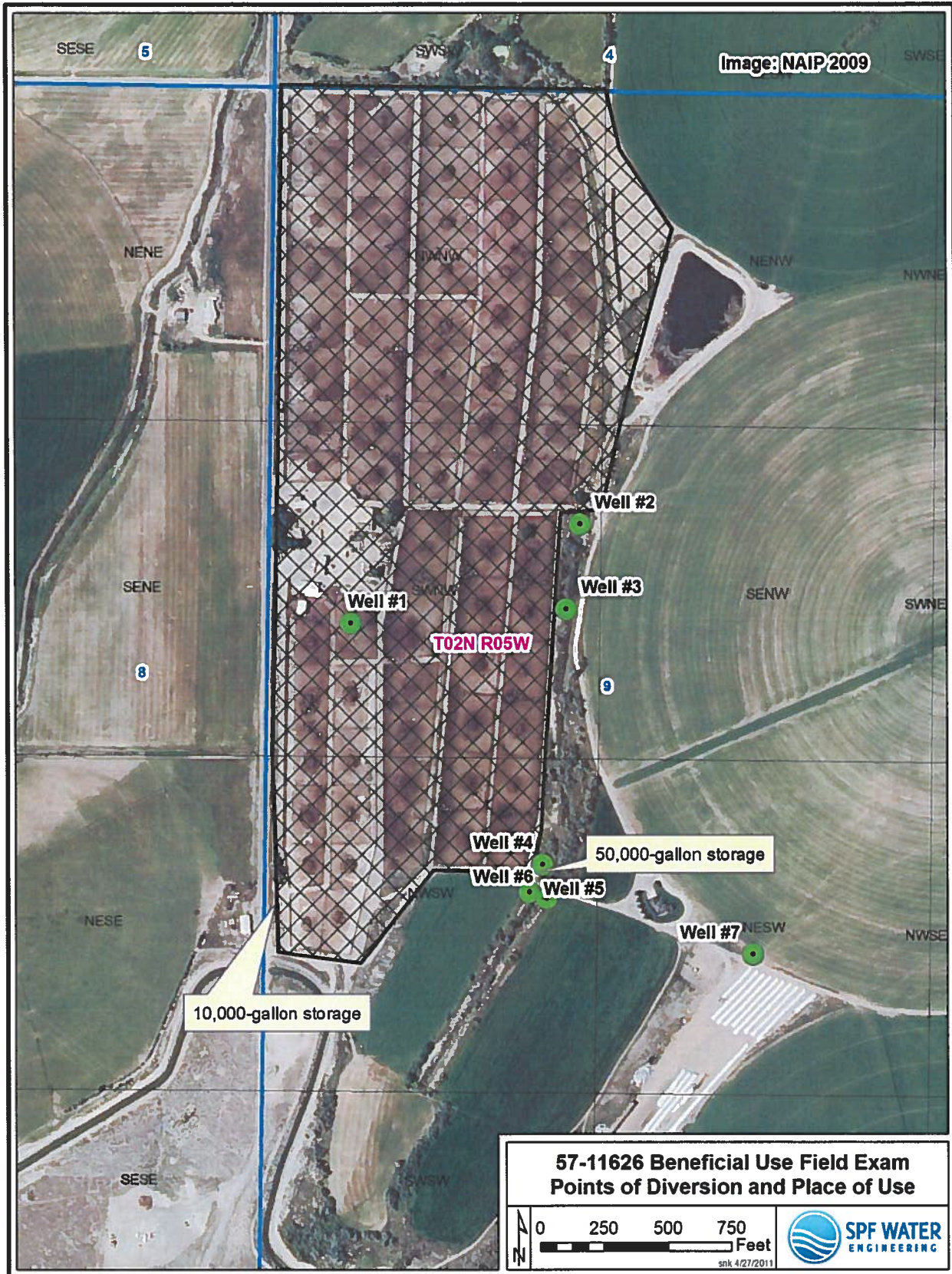
1. Proof of application of water to beneficial use shall be submitted on or before **May 1, 2011**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.
4. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
5. Prior to the diversion and use of water under this approval, the right holder shall comply with applicable county zoning and use ordinances.
6. Prior to the diversion and use of water under this approval, the right holder shall comply with applicable water quality permitting requirements administered by the Department of Environmental Quality or the Department of Agriculture.
7. Stockwater use is for 9000 heifers or 3000 dairy cows in a feedlot and does not include any use for a dairy operation.
8. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
9. The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.

This amendment of permit is issued pursuant to the provisions of Section 42-211, Idaho Code. Witness the signature of the Director, affixed at Boise, this 1st day of April, 2007.


for DAVID R. TUTTILL, JR., Interim Director

ATTACHMENT 2
MAPS





**ATTACHMENT 3
POINT OF DIVERSION TABLE
PART C.1.**

Ident. No.	Gov't Lot	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks
1			SW	NW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery
2 (D0047814)			SW	NW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery
3 (D0053576)			SW	NW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery
4 (D0047343 & D0052105)			NW	SW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery
5 (D0020371)			NW	SW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery
6 (D0042237)			NW	SW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery
7 (D0018547 & D0039068)			NE	SW	9	T02N	R05W	Owyhee	GPS, on site investigation, 2009 Aerial Imagery

Table 1: Points of Diversion

**ATTACHMENT 4
PUMP AND MOTOR DATA
AND
CAPACITY CALCULATIONS**

Ident. No.	Motor Make	HP	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size	Pump Model
1	Franklin	3	Unknown	FPS (Franklin)	Unknown	FPS 4400 Tri-Seal
2 (D0047814)	Unknown	7.5	Unknown	Grundfos	Unknown	Grundfos 75S75-12
3 (D0053576)	Franklin	3	Unknown	FPS (Franklin)	Unknown	FPS Constant Pressure 35 gpm
4 (D0047343 & D0052105)	Unknown	1.5	Unknown	Grundfos	Unknown	Grundfos 10S15-21
5 (D0020371)	Unknown	5	Unknown	Goulds	Unknown	Goulds Model 33GS
6 (D0042237)	Franklin	5	Unknown	FPS (Franklin)	Unknown	FPS 4400 High Capacity
7 (D0018547 & D0039068)	Unknown	5	Unknown	Unknown	Unknown	Unknown

Table 2: Pump and motor data.

Ident. No.	HP	Discharge Pressure (PSI)	Estimated Pumping Lift (ft)	Misc Friction Losses (ft)	TDH (ft)	Efficiency (%)	Estimated Flow Capacity (gpm)	Pump Curve Capacity at TDH (gpm)	Note
1	3	45	200	15	319	70%	26	25	
2 (D0047814)	7.5	5	230	18	260	70%	80	75	
3 (D0053576)	3	5	200	15	227	70%	37	38	
4 (D0047343 & D0052105)	1.5	5	200	10	222	70%	19	12	
5 (D0020371)	5	5	250	15	277	70%	50	42	
6 (D0042237)	5	5	250	15	277	70%	50	40	
7 (D0018547 & D0039068)	5	50	200	15	331	70%	42	42	pump curve not available. Estimated curve capacity.
Totals:							304	274	

Table 3: Capacity Calculations.

ATTACHMENT 5
WELL DRILLER'S REPORTS AND
PUMP CAPACITY CURVES

WELL #1

720577

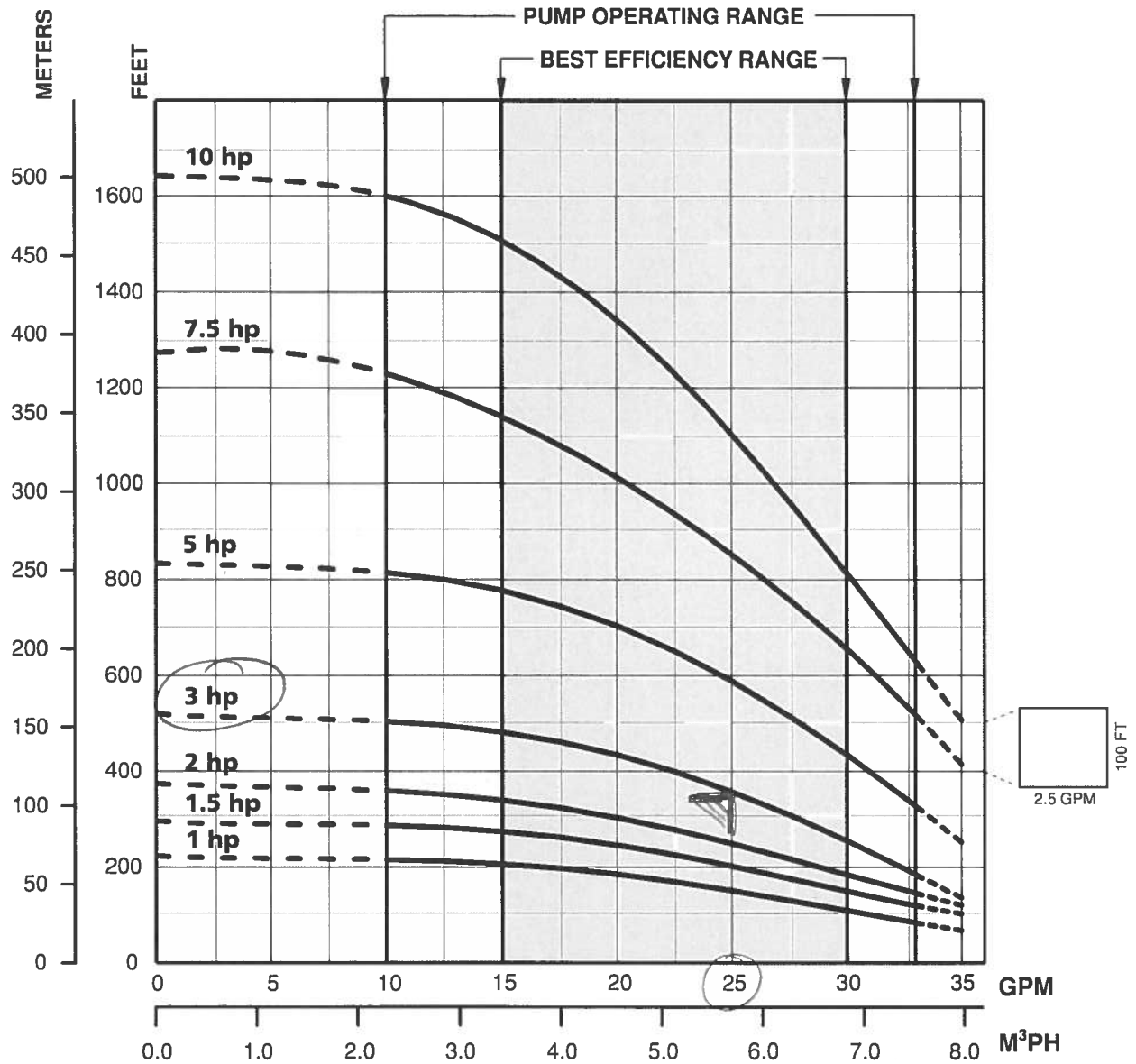
State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

[illegible]

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

Submersible Pumps

4" Tri-Seal Pumps 25 GPM Performance Curves



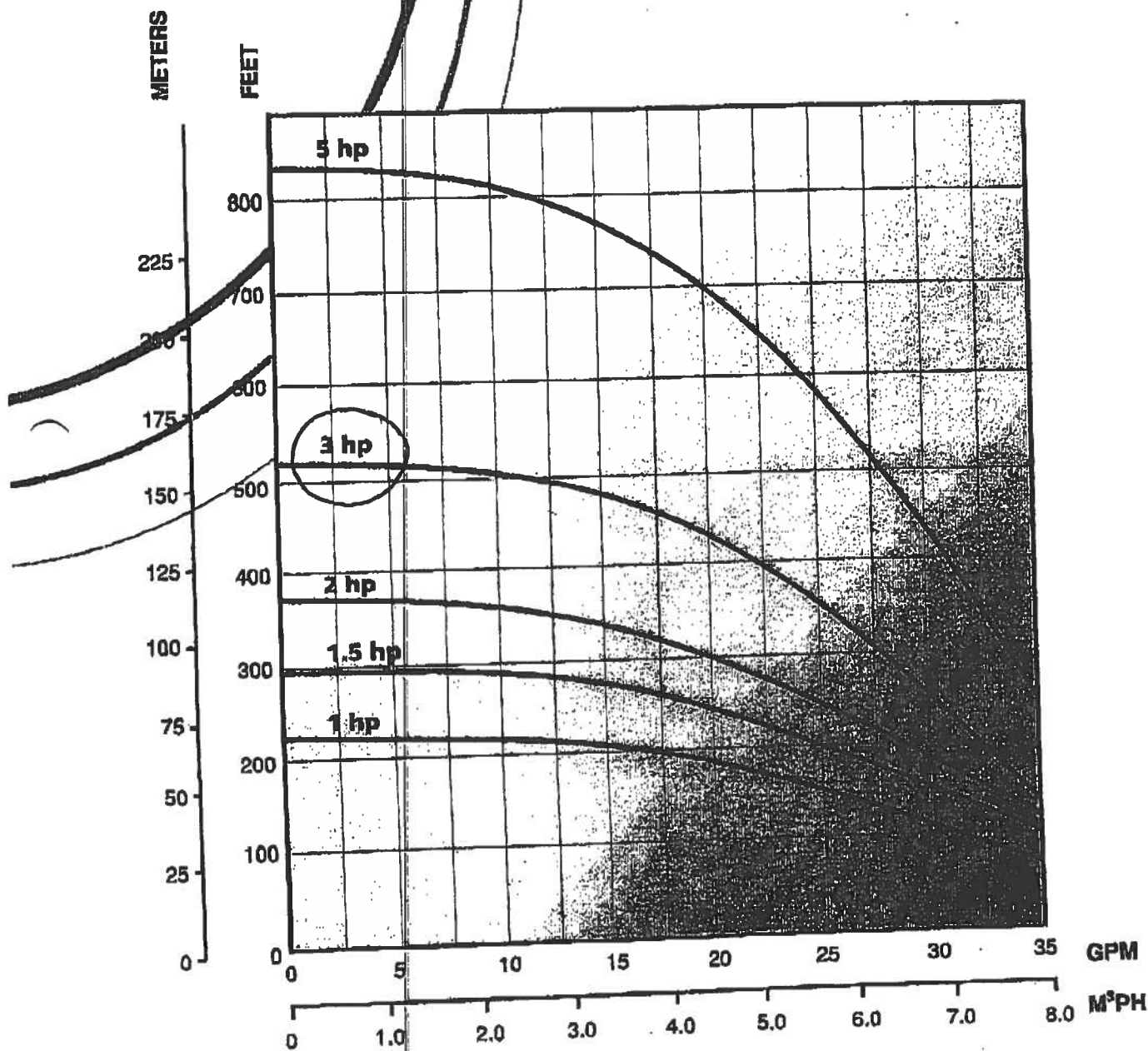
well #1

4400-Tri-Seal

FPS

4" Submersible Pumps

25 GPM Tri-Seal Performance Curve



WELL #2

57

Form 238-7
6/02IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT1. WELL TAG NO. D 0047814
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER:

Name Tom Wilke
Address 8420 Jackson Rd
City Hamden State Id Zip 83628

3. LOCATION OF WELL by legal description:

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

Twp. 2 North X or South ☐
Rge. 5 East 1 or West X
Sec. 9 SW 1/4 NE 1/4 1/4
Gov't Lot _____
Lat: : : Long: : :
Address of Well Site Scene

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

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

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
<u>Bentonite</u>	<u>0</u>	<u>40</u>	<u>20 Sacks</u>	<u>over bore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 40Was drive shoe seal tested? ☒ Y ☐ N How? Air Test

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6" +1</u>	<u>40</u>	<u>20</u>	<u>20</u>	<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____

Screen Type & Method of Installation _____

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

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
---	---	---	---	---

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

40 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Descr be access port or control devices: well cap

845155

Office Use Only

Well ID No. 415275
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat: : : Long: : :

WELL #2

12. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>60</u>	<u>---</u>	<u>700</u>	<u>4 Hrs</u>

Water Temp. 72 Bottom hole temp. 72Water Quality test or comments: Good

Depth first Water Encounter _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>100</u>	<u>5</u>		<u>overburden</u>		☒
<u>105</u>	<u>40</u>		<u>Brown clay</u>		☒
<u>640</u>	<u>65</u>		<u>Brown clay</u>		☒
<u>65</u>	<u>209</u>		<u>Blue clay</u>		☒
<u>209</u>	<u>400</u>		<u>Blue clay & shale</u>		☒
<u>400</u>	<u>720</u>		<u>Blue clay & shale</u>		☒
<u>720</u>	<u>740</u>		<u>sand</u>	☒	

RECEIVED

APR 19 2007

WATER RESOURCES
WESTERN REGIONCompleted Depth 740 (Measurable)Date: Started 1/29/07 Completed 3/30/07

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 ECL Holder Drilling Firm No. 578Principal Driller E J Holder Date 3/30/07

and Driller or Operator II _____ Date _____

Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

Well #2

Model 75S

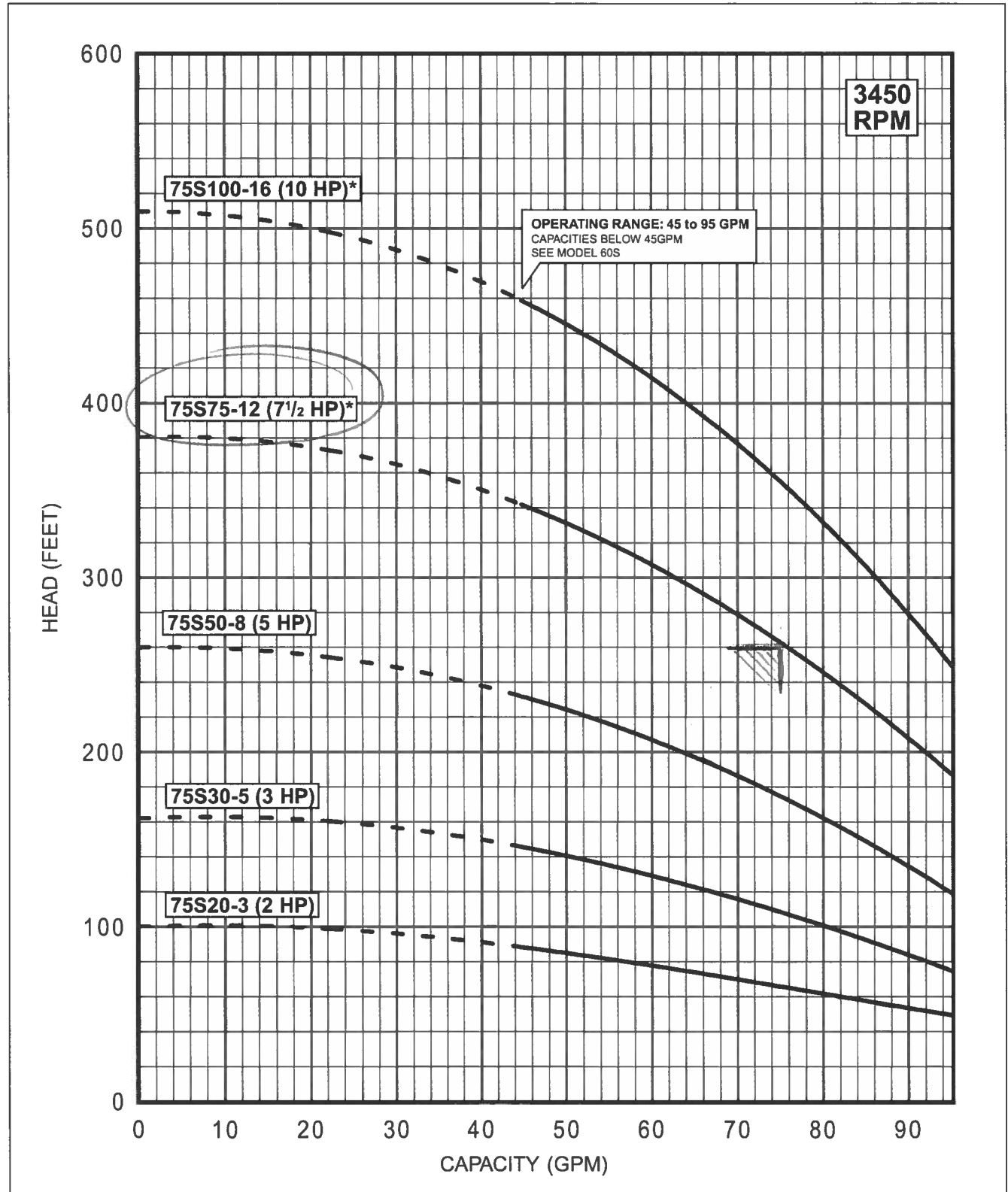
75 GPM

Performance Curves

FLOW RANGE: 45 - 95 GPM

OUTLET SIZE: 2" NPT

NOMINAL DIA.: 4"



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

4" motor standard, 2-10 HP/3450 RPM

* Also available with 6" motor. Performance is the same only at Best Efficiency Point.

Consult factory for actual performance.

Performance conforms to ISO 2548 Annex B
@ 5 ft. min. submergence.

WELL #3

57

Form 238-7
6/07IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

856037

Well #3

1. WELL TAG NO. D 0053576

Drilling Permit No. _____

Water right or injection well # 57-116262. OWNER: Wilke FarmsName Wilke FarmsAddress 6420 S. 4th St. R2City Hamdale State IL Zip 83628

3. WELL LOCATION:

Twp. 2 North ☒ or South ☐ Rge. 5 East ☐ or West ☒Sec. 9 SE 1/4 SW 1/4 NW 1/4Gov't Lot _____ County OwyheeLat. 43 ° 31.530 (Deg. and Decimal minutes)Long. 116 ° 56.756 (Deg. and Decimal minutes)Address of Well Site Same City _____

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

Lot. _____ Blk. _____ Sub. Name _____

4. USE:

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

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 ³)	Placement method/procedure
<u>Benomatic</u>	<u>0</u>	<u>25</u>	<u>13 sacks</u>	<u>over bore</u>

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
<u>8"</u>	<u>+1</u>	<u>25</u>	<u>250</u>	<u>steel</u>	☒	☐	☒
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 25

9. PERFORATIONS/SCREENS:

Perforations ☒ Y ☐ N Method _____Manufactured screen ☒ Y ☐ N Type PVC 20Method of installation set

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
<u>240</u>	<u>260</u>	<u>20</u>		<u>4 1/2</u>	<u>PVC</u>	<u>1/4</u>

Length of Headpipe 240 Length of Tailpipe 0Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

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

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____Describe control device well cap

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 200 Static water level (ft) 6Water temp. (°F) Cold Bottom hole temp. (°F) ColdDescribe access port cap

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing a test
			☐	☐	☐	☐

Test method:

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>12"</u>	<u>0</u>	<u>5</u>	<u>Top soil</u>	☐
<u>12"</u>	<u>5</u>	<u>25</u>	<u>tan clay</u>	☐
<u>8"</u>	<u>25</u>	<u>208</u>	<u>blue clay</u>	☒
<u>8"</u>	<u>208</u>	<u>240</u>	<u>blue clay & shale</u>	☐
<u>8"</u>	<u>240</u>	<u>260</u>	<u>blue clay sandstone</u>	☒

RECEIVED

AUG 07 2009

WATER RESOURCES
WESTERN REGIONCompleted Depth (Measurable): 260Date Started: May 12/09Date Completed: Jul 18/09

14. DRILLER'S CERTIFICATION:

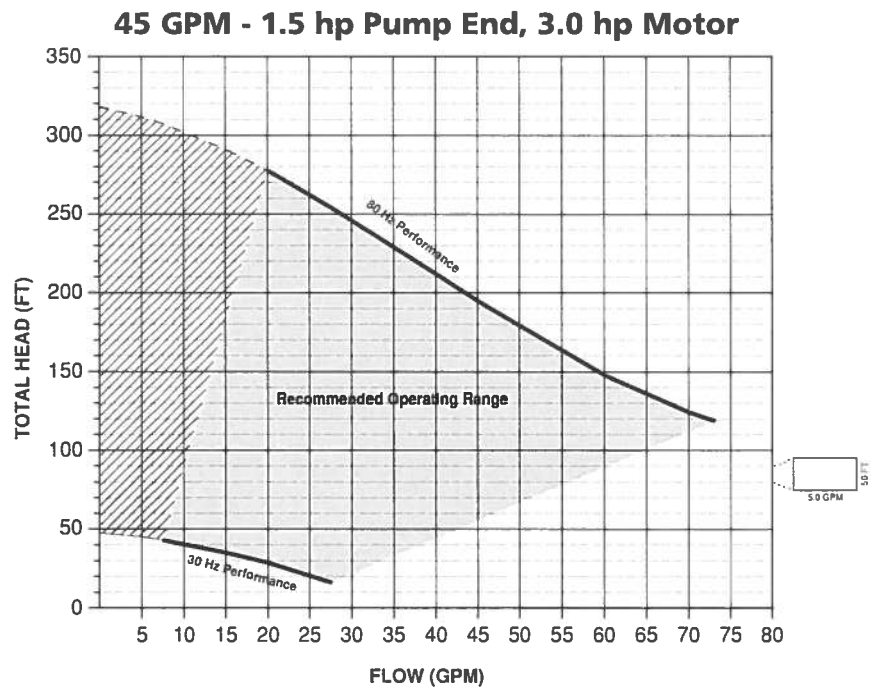
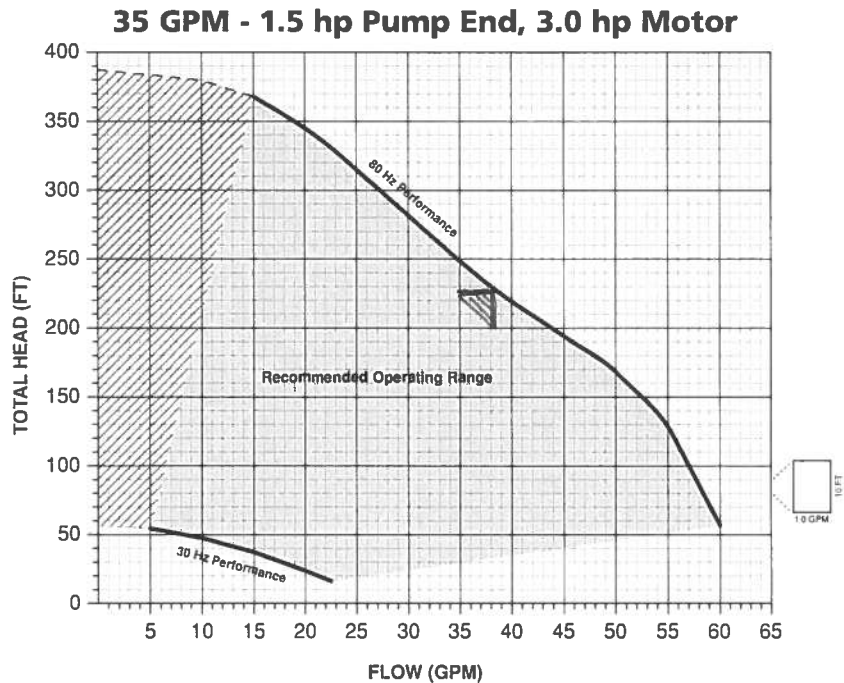
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Ed L. Hold - P. 110 Co. No. 578*Principal Driller Ed L. Hold Date 7/18/09*Driller Same Date _____

*Operator II _____ Date _____

Operator I _____ Date _____

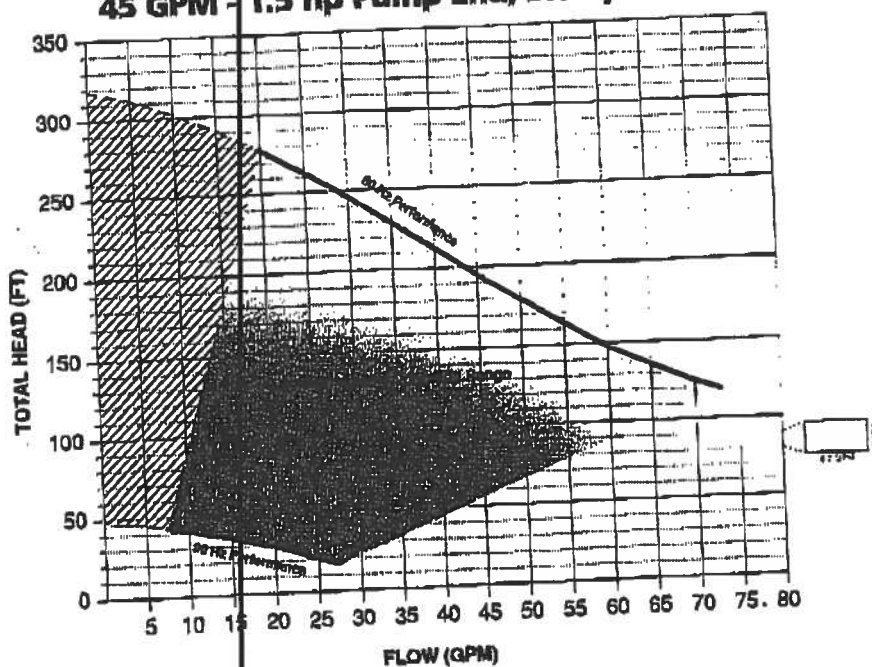
* Signature of Principal Driller and rig operator are required.

Motors, Drives, Controls & Protection**Constant Pressure Drives****SubDrive150 Performance**

Note: Actual maximum performance of the SubDrive QuickPAK system is power limited by the SubDrive unit. This limit is based on the maximum allowable AMP load of the submersible motor. The result is in some installations an 80Hz speed may not be attained.

Motors, Drives, Controls & Protection

SubDrive150 Performance



Note: Actual maximum performance of the SubDrive QuickPAK system is power limited by the SubDrive unit. This limit is based on the maximum allowable AMP load of the submersible motor. The result is in some installations an 80% speed may not be attained.

WELL #4

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 47343
DRILLING PERMIT NO. _____
Water Right or Injection Well No. 57-11626

2. OWNER:

Name Tom Wilke
Address 6420 Johnstone Rd
City Homedale State ID Zip 83628

3. LOCATION OF WELL by legal description:

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

Twp. 2 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 9 NW 1/4 SW 1/4 SE 1/4
Gov't Lot _____
County Owyhee
Lat: _____ Long: _____
Address of Well Site End of Johnstone Rd
City Homedale

(Give at least name of road - Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

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
<u>Bentonite</u>	<u>0</u>	<u>39</u>	<u>20</u>	<u>overbore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 40
Was drive shoe seal tested? ☒ Y ☐ N How? Air test

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8"</u>	<u>1</u>	<u>40</u>	<u>250</u>	<u>Steel</u>	☒	☐	☒	☐

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

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____
Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

842222
Office Use Only
Well ID No. 412468
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat: _____ Long: _____

12. WELL TESTS:

☒ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>25</u>		<u>300</u>	<u>4 Hrs</u>

Water Temp. 55 Bottom hole temp. 81

Water Quality test or comments: Good

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>12</u>	<u>0</u>	<u>5</u>	<u>overbore</u>		☒
<u>12</u>	<u>5</u>	<u>39</u>	<u>tan clay</u>		☒
<u>8</u>	<u>39</u>	<u>60</u>	<u>tan clay</u>		☒
<u>60</u>	<u>60</u>	<u>80</u>	<u>Blue clay</u>		☒
<u>80</u>	<u>80</u>	<u>200</u>	<u>Blue clay</u>		☒
<u>200</u>	<u>200</u>	<u>230</u>	<u>Blue clay & shale Fract</u>	☒	
<u>230</u>	<u>230</u>	<u>280</u>	<u>Blue clay</u>		☒
<u>280</u>	<u>280</u>	<u>480</u>	<u>Blue clay & shale</u>		☒
<u>480</u>	<u>480</u>	<u>560</u>	<u>Blue clay & shale</u>		☒
<u>560</u>	<u>560</u>	<u>600</u>	<u>Blue clay & shale</u>		☒
<u>600</u>	<u>600</u>	<u>620</u>	<u>Shale Fracture</u>	☒	
<u>620</u>	<u>620</u>	<u>660</u>	<u>Blue clay & shale</u>	☒	

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NOV 21 2006

WATER RESOURCES
WESTERN REGION

Completed Depth 660 (Measurable)
Date: Started 9/20/06 Completed 11/20/06

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 Ed Holder Drilling Firm No. 578
Principal Driller Ed Holder Date 11/20/06
and _____
Driller or Operator II _____ Date _____
Operator I _____ Date _____

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

Model 10S

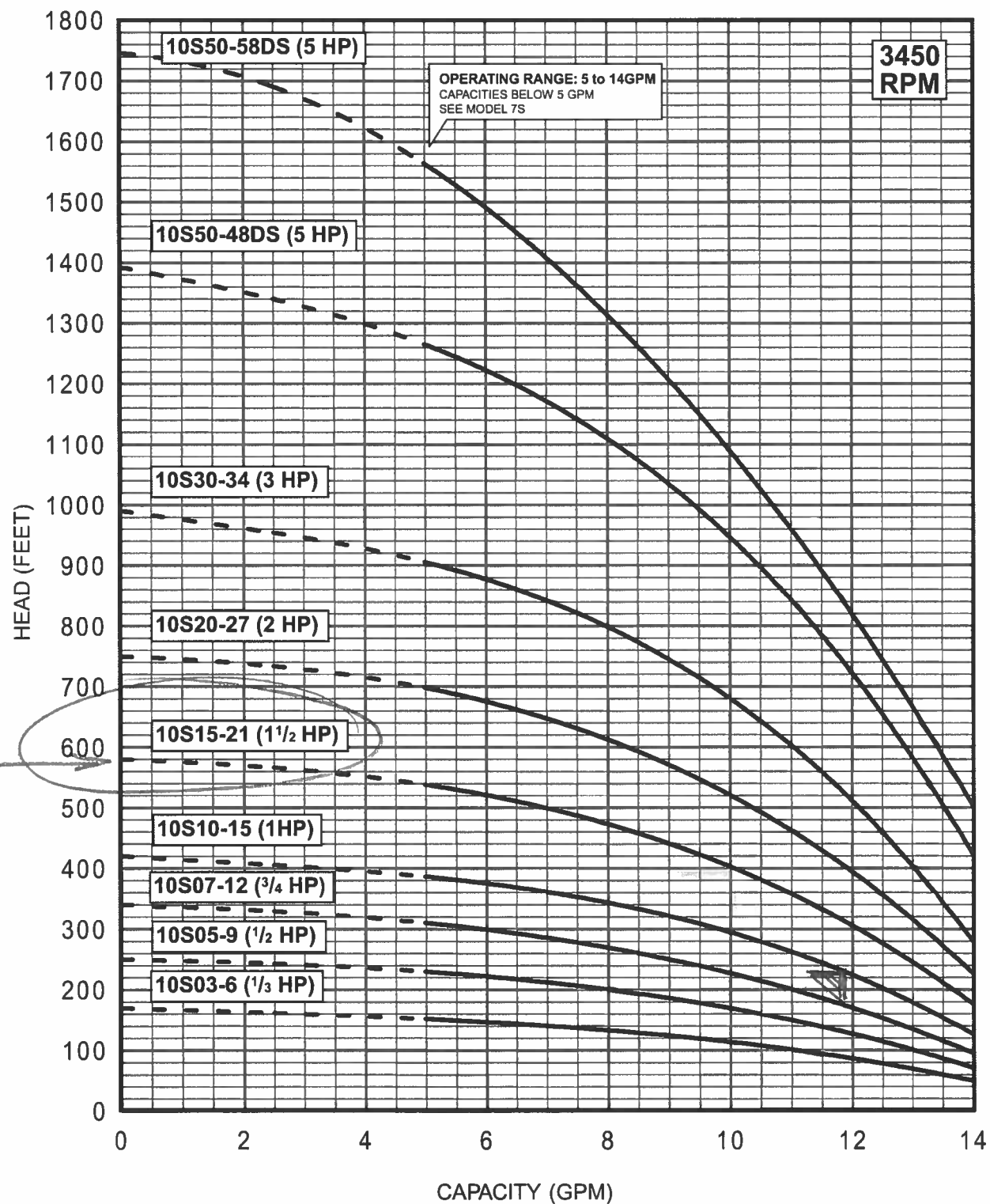
10 GPM

Performance Curves

FLOW RANGE: 5 -14 GPM

OUTLET SIZE: 1 1/4 " NPT

NOMINAL DIA. 4"



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
4" MOTOR STANDARD, 3450 RPM.

Performance conforms to ISO 2548 Annex B
@ 2 ft. min. submergence.

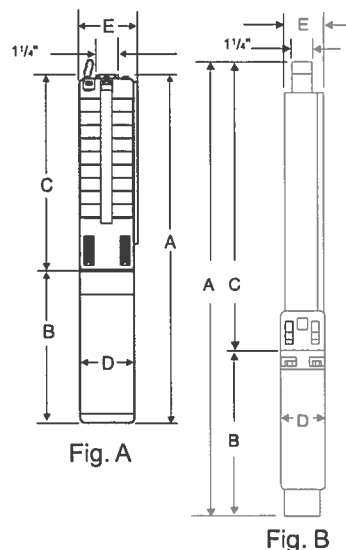
DIMENSIONS AND WEIGHTS

MODEL NO.	FIG.	HP	MOTOR SIZE	DISCH. SIZE	DIMENSIONS IN INCHES					APPROX. SHIP WT.
					A	B	C	D	E	
10S03-6	A	1/3	4"	1 1/4" NPT	19.9	8.8	11.1	3.8	3.9	26
10S05-9	A	1/2	4"	1 1/4" NPT	23.0	9.5	13.5	3.8	3.9	29
10S07-12	A	3/4	4"	1 1/4" NPT	26.7	10.7	16.0	3.8	3.9	32
10S10-15	A	1	4"	1 1/4" NPT	30.3	11.8	18.5	3.8	3.9	34
10S15-21	A	1 1/2	4"	1 1/4" NPT	37.1	13.6	23.5	3.8	3.9	44
10S20-27	A	2	4"	1 1/4" NPT	43.5	15.1	28.4	3.8	3.9	49
10S30-34	A	3	4"	1 1/4" NPT	54.7	20.6	34.1	3.8	3.9	83
10S50-48DS	A	5	4"	1 1/4" NPT	69.4	23.6	45.8	3.8	3.9	115
10S50-58DS*	B	5	4"	1 1/4" MPT	88.2	23.6	64.5	3.8	4.3	142

NOTES: All models suitable for use in 4" wells, unless otherwise noted.

Weights include pump end with motor in lbs.

* Built into sleeve 1 1/4" MPT discharge, 5" min. well dia.



MATERIALS OF CONSTRUCTION

COMPONENT	SPLINED SHAFT (6-27 Stgs.)	CYLINDRICAL SHAFT (34-48 Stgs.)	DEEP SET (58 Stgs.)
Check Valve Housing	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Check Valve	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Diffuser Chamber	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Impeller	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Suction Interconnector	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Inlet Screen	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Pump Shaft	304 Stainless Steel	431 Stainless Steel	431 Stainless Steel
Straps	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Cable Guard	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
Priming Inducer	304 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Coupling	329/420/431 Stainless Steel	329/420/431 Stainless Steel	329/420/431 Stainless Steel
Check Valve Seat	NBR/304 Stainless Steel	NBR/316 Stainless Steel	NBR/316 Stainless Steel
Top Bearing	NBR/304 Stainless Steel	NBR/316 Stainless Steel	NBR/316 Stainless Steel
Impeller Seal Ring	NBR/PBT (Valox®)	NBR/PPS (Ryton®)	NBR/PPS (Ryton®)
Intermediate Bearings	NBR	304 Stainless Steel	NBR/316 Stainless Steel
Shaft Washer	Not Required	LCP (Vectra®)	LCP (Vectra®)
Split Cone	Not Required	304 Stainless Steel	304 Stainless Steel
Split Cone Nut	Not Required	316 Stainless Steel	304 Stainless Steel
Sleeve	Not Required	Not Required	316 Stainless Steel
Sleeve Flange	Not Required	Not Required	Zincless Bronze*

NOTES: Specifications subject to change without notice.

Valox ® is a registered trademark of General Electric Co.

Vectra ® is a registered trademark of Hoechst Calanese Corporation.

Ryton ® is a registered trademark of Phillips 66.

* Stainless Steel option available.



GRUNDFOS PUMPS CORPORATION • 2555 Clovis Avenue • Clovis, CA • 93612
 Area Centers: Allentown, PA • Atlanta, GA • Chicago, IL • Clovis, CA • Dallas, TX • Seattle, WA
 (800) 333-1366 • FAX (800) 333-1363
 Canada: Mississauga, Ontario • Mexico: Apodaca, N.L.

LSP-TL-1010 6/96
 PRINTED IN USA

WELL #5

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only			
Well ID No.			
Inspected by			
Twp	Rge	Sec	
1/4	1/4	1/4	
Lat:	:	Long:	:

1. WELL TAG NO. D 0020371
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER:

Name Tom Wilke
Address Rt 1 Box 1155
City Homedale State IO Zip 83628

3. LOCATION OF WELL by legal description:

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

Twp. 2 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 9 SW 1/4 NW 1/4
Gov't Lot _____ County _____

Lat: : : Long: : :
Address of Well Site 1155 Johnstone Rd.
City Homedale

(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 Material	From	To	Weight / Volume	Seal Placement Method
Bentonite	0	20	74 sacks	Overbore

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
8"	±1	37	250	Steel	☒	☐	☐	☐
4 1/2"	20	150	4	PVC	☐	☒	☐	☐

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

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____
Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
20	150	60	100	4 1/2"	PVC	☐	☒

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

Well cap

12. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
40	0	150	6 HRS

Water Temp. 62 Bottom hole temp. 62

Water Quality test or comments: Good

Depth first Water Encounter 60

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	5	over burden		☒
12	5	20	tan clay		☒
12	20	60	Blue clay	☒	
8	60	90	Blue clay shale		☒
8	90	150	Blue clay		☒
8	150	250	Blue clay shale	☒	

RECEIVED

NOV 21 2002

WATER RESOURCES
WESTERN REGION

Completed Depth 250 (Measurable)

Date: Started 9/13/2002 Completed 9/18/2002

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 Ed L Holder Drilling Firm No. 578

Principal Driller Ed I 4666 Date 9/18/2002

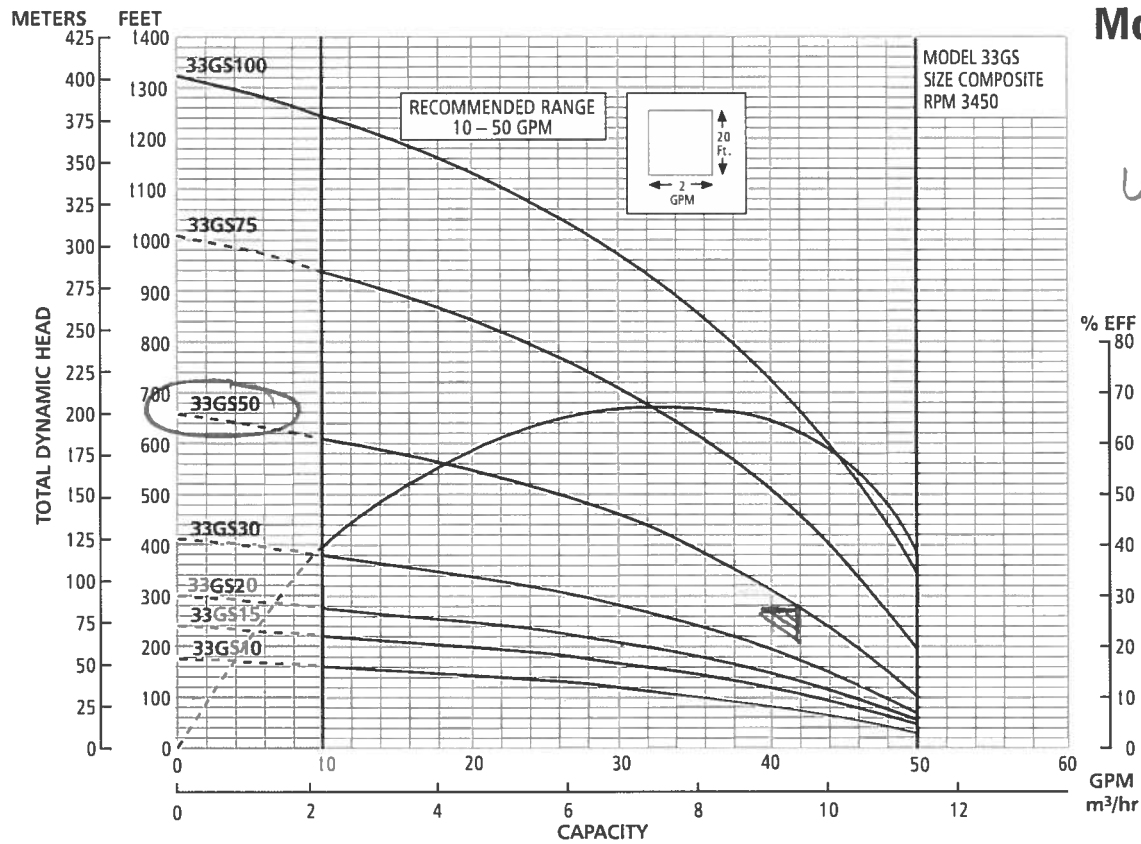
Driller or Operator II _____ Date _____

Operator I _____ Date _____

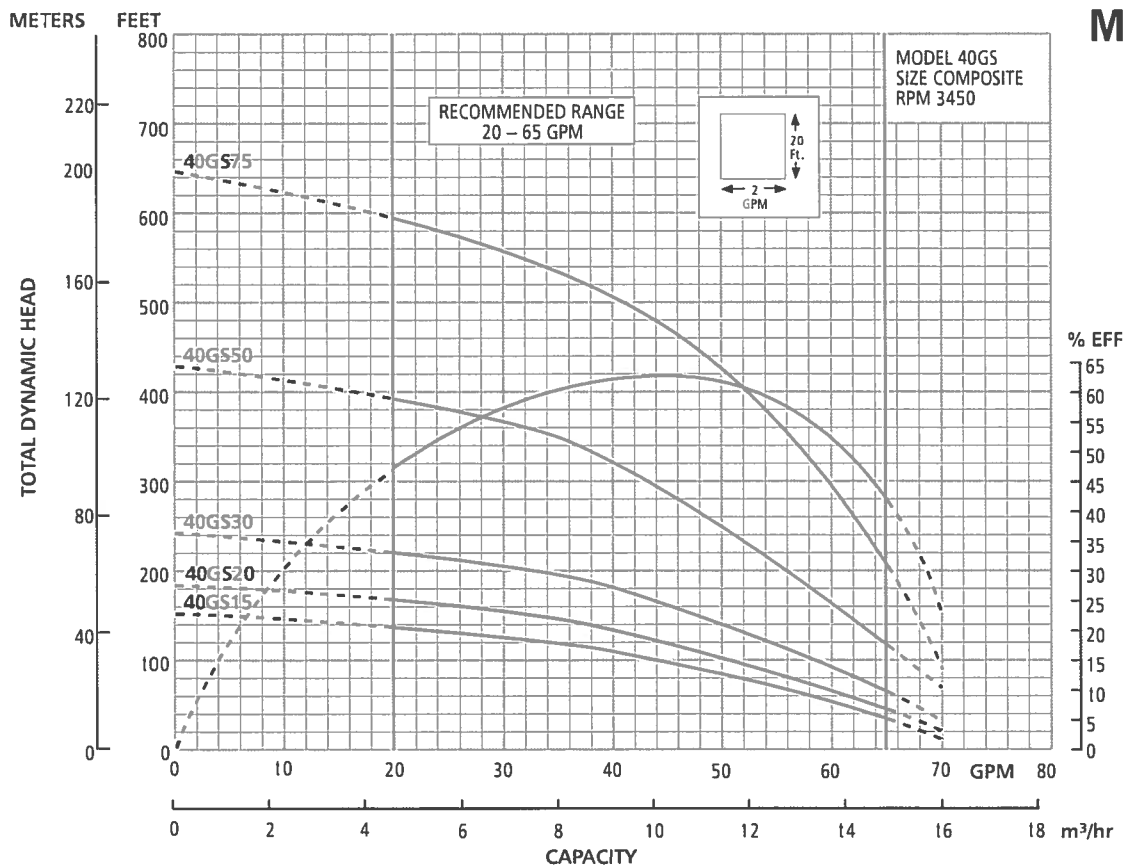
Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

Model 33GS



Model 40GS



well #5

Model 33GS

GOULDS PUMPS
Residential Water Systems

SELECTION CHART

Horsepower Range 1 - 3, Recommended Range 10 - 50 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																													
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	520	560	600			
33GS10	1	0		48	45	41	36	30	22	11																						
		20	44	39	34	28	19																									
		30	39	33	27	17																										
		40	32	25	15																											
		50	24	14																												
		60	12																													
Shut-off PSI			67	58	50	41	32	24	15	6																						
33GS15	1½	0		50	48	46	43	40	37	32	26	19																				
		20	48	45	43	39	35	31	24	17																						
		30	45	42	39	35	30	23	15																							
		40	42	38	34	29	22	14																								
		50	38	33	28	21	12																									
		60	33	27	20	11																										
Shut-off PSI			95	86	78	69	60	52	43	34	26	17																				
33GS20	2	0			49	48	46	44	41	38	35	32	28	22																		
		20	49	47	45	43	40	38	34	31	26	21	14																			
		30	47	45	42	40	37	34	30	25	20	13																				
		40	44	42	40	37	33	29	24	19	11																					
		50	42	39	36	33	29	24	18																							
		60	39	36	32	28	23	16																								
Shut-off PSI			121	112	103	95	86	77	69	60	51	43	34	26																		
33GS30	3	0				49	48	46	45	43	41	40	38	35	33	31	28	24	20	15												
		20	50	48	47	46	44	43	41	39	37	35	32	30	27	23	19	13														
		30	49	47	46	44	42	41	39	37	34	32	29	26	22	18	12															
		40	47	45	44	42	40	38	36	34	32	29	25	22	17	11																
		50	45	44	42	40	38	36	34	31	28	25	21	16																		
		60	43	42	40	38	36	33	31	28	24	20	15																			
Shut-off PSI			170	161	152	144	135	126	118	109	100	92	83	74	66	57	48	40	31	23												

Horsepower Range 5-10, Recommended Range 10 - 50 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																											
			50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	
33GS50	5	0		50	48	46	44	41	38	35	31	27	20	11																
		20	50	48	46	44	41	38	35	32	27	21	11																	
		30	49	47	45	43	40	37	34	30	25	17																		
		40	48	46	44	41	39	36	32	27	21	12																		
		50	47	45	43	40	37	34	30	25	18																			
Shut-off PSI			264	242	220	199	177	156	134	112	91	69	47	26																
33GS75	7½	0				50	48	47	46	44	42	40	38	36	33	31	27	23	19	14										
		20			50	49	47	46	44	42	41	38	36	34	31	28	24	19	14											
		30		50	49	48	46	45	43	42	40	37	35	32	29	26	22	17	12											
		40		50	49	47	46	44	43	41	39	36	34	31	28	24	20	15												
		50		49	48	47	45	43	42	40	38	35	33	30	26	22	17	12												
Shut-off PSI			415	393	371	350	328	306	285	263	241	220	198	176	155	133	111	90	68	47										
33GS100	10	0							49	48	46	45	43	42	41	40	39	38	36	34	31	28	25	22	18	13				
		20							50	48	46	45	43	42	41	40	39	38	36	34	31	29	25	22	18	14				
		30							49	47	45	44	43	42	41	40	39	37	35	33	30	27	24	20	16	12				
		40							50	48	46	45	44	43	42	40	39	38	36	34	32	29	26	22	18	14				
		50							49	47	45	44	43	42	41	40	39	37	35	33	30	27	24	20	16	12				
Shut-off PSI			551	529	508	486	464	443	421	399	378	356	334	313	291	269	248	226	205	183	161	140	118	96	75	53				

WELL #6

51
Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

837334
Office Use Only
Well ID No. 407800
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat: _____ Long: _____

1. WELL TAG NO. D 0042237
DRILLING PERMIT NO 57-11624
Water Right or Injection Well No _____

2. OWNER:
Name Tom Wilke
Address 6420 Johnstone Rd
City Home Dale State Id Zip 83628

3. LOCATION OF WELL by legal description:
You must provide address or Lot Blk, Sub or Directions to well
Twp 2 North ☒ or South ☐
Rge 5 East ☐ or West ☒
Sec 9 SW 1/4 NW 1/4
Gov't Lot _____ County OUAhee
Lat: _____ Long: _____
Address of Well Site 6420 Johnstone Rd
City Home Dale
(Give at least name of road - Distance to Road or Landmark)
Lt _____ Blk _____ Sub Name _____

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

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
<u>Bentonite</u>	<u>0</u>	<u>39</u>	<u>16 sacks</u>	<u>over bore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 39
Was drive shoe seal tested? ☒ Y ☐ N How? Air Test

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8"</u>	<u>1</u>	<u>39</u>	<u>250</u>	<u>steel</u>	☒	☐	☒	☐

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

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____
Screen Type & Method of Installation _____

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

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

5 ft. below ground Artesian pressure _____ lb
Depth flow encountered _____ ft Describe access port or control devices:
Water and 1/4 steel plate

12. WELL TESTS:

Yield gal/min	Drawdown	Pumping Level	Time
<u>235</u>	<u>0</u>	<u>600</u>	<u>1 Hr</u>

Water Temp 65 Bottom hole temp 65

Water Quality test or comments: 6-2-2

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology Water Quality & Temperature	Y	N
<u>12</u>	<u>0</u>	<u>5</u>	<u>over burden</u>		☒
<u>12</u>	<u>5</u>	<u>39</u>	<u>clay tan</u>		☒
<u>8</u>	<u>39</u>	<u>60</u>	<u>tan clay</u>		☒
	<u>60</u>	<u>200</u>	<u>blue clay + shale</u>		☒
	<u>200</u>	<u>250</u>	<u>shale fractured</u>	☒	
	<u>250</u>	<u>300</u>	<u>blue clay + shale</u>		☒
<u>6</u>	<u>300</u>	<u>350</u>	<u>shale fractured</u>	☒	
	<u>400</u>	<u>560</u>	<u>blue clay + shale</u>	☒	
	<u>560</u>	<u>600</u>	<u>shale hard</u>		☒

RECEIVED

JUN 15 2006

WATER RESOURCES
WESTERN REGION

Completed Depth 600 (Measurable)
Date: Started 11/9/05 Completed 11/12/05

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 Ed Holder Drilling Firm No 578

Principal Driller Ed Holder Date 11/12/05

and
Driller or Operator II _____ Date _____

Operator I _____ Date _____

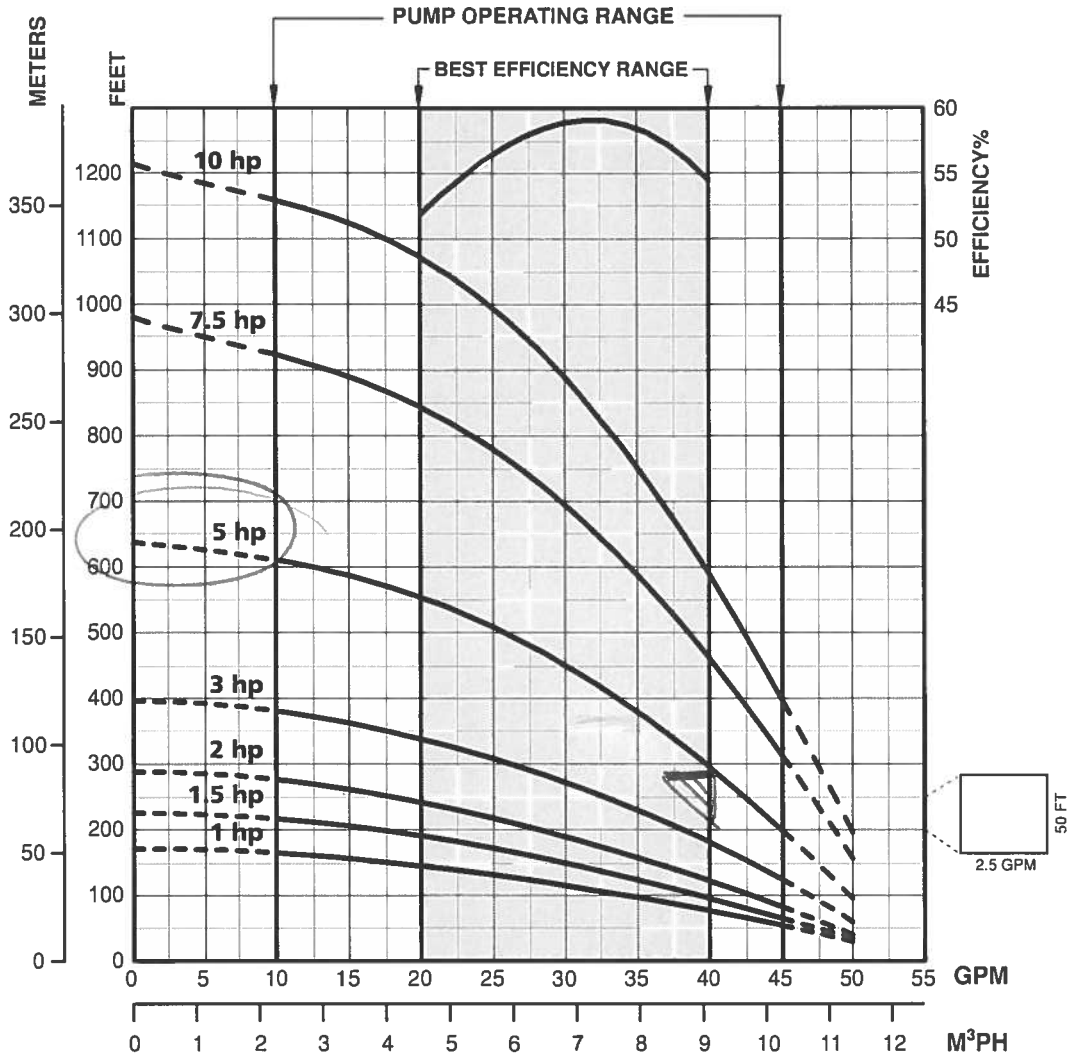
Principal Driller and Rig Operator Required
Operator I must have signature of Driller/Operator II

FORWARD WHITE COPY TO WATER RESOURCES

Well #16

Submersible Pumps

4" High Capacity Pumps 35 GPM Performance Curves



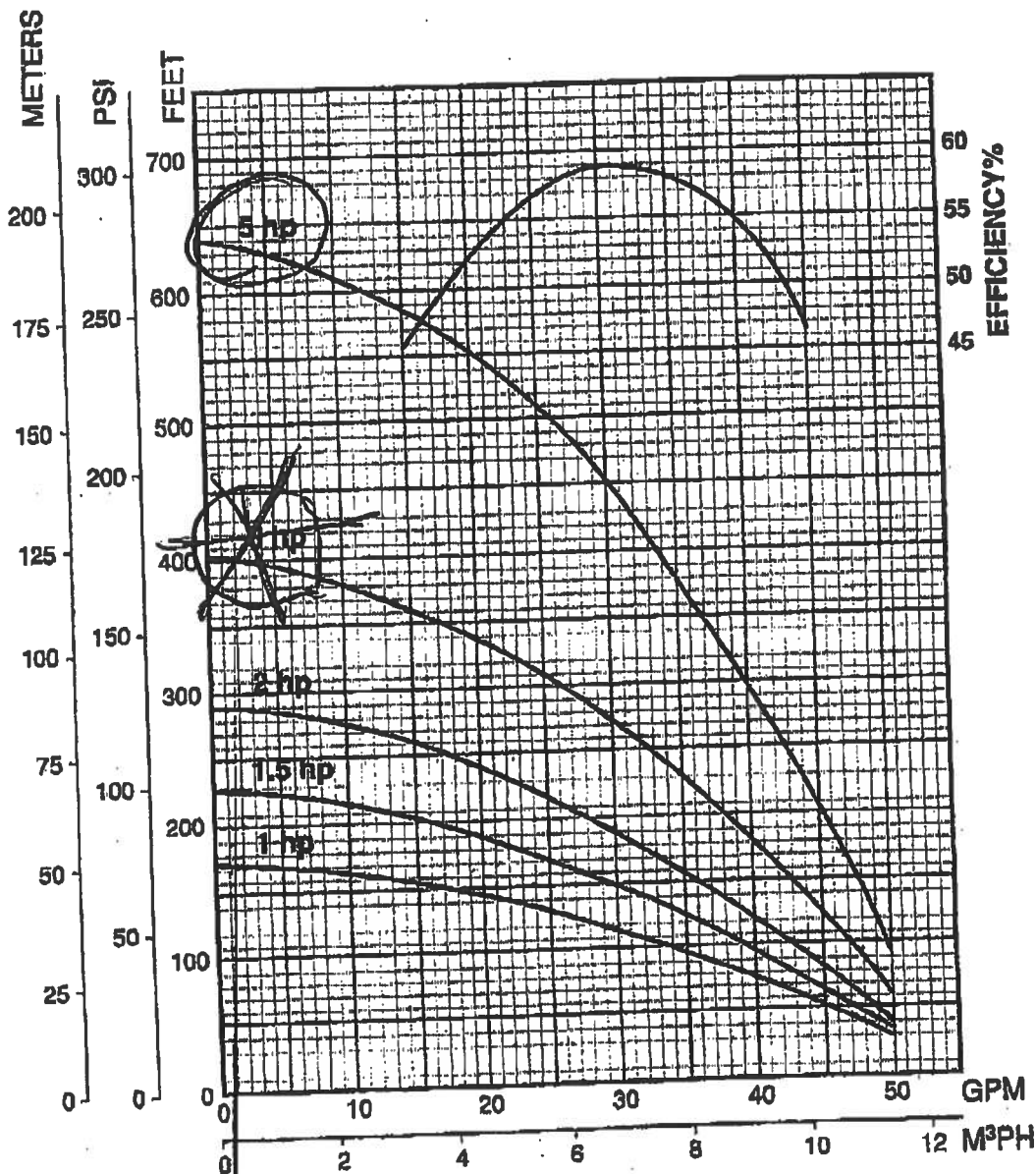
Capacities in U.S. Gallons per Minute

HP	PSI	Depth to Pumping Water Level, or Lift, in Feet. Shaded Areas Indicate Most Efficient Performance																
		20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	
1	0			44	40	34	28	22	13									Shut-off 171 ft
	10		43	39	33	27	21	11										
	20	43	38	32	26	20												
	30	37	31	26	19													
	40	30	25	18														
	50	24	16															
	60	14																
	70																	
	80																	
Shut-off PSI		65	57	48	39	31	22	13	5									

Well #6

4" Submersible Pumps

FPS 4400 High Capacity 35 GPM Performance Curves



Notes: 1. Performance shown does not include friction loss in the drop pipe.
2. All performance data is based on rated motor nameplate voltage.

WELL #7

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

769404

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 1/4 1/4
Lat: : : Long: : :
☒ Air ☐ Flowing Artesian

1. WELL TAG NO. D 0018547

DRILLING PERMIT NO. _____

Other IDWR No. _____

2. OWNER:

Name Tom Wilke
Address Rt 1 Box 1155
City Homedale State ID Zip 83428

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N
W E S
Twp. 2 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 9 NE 1/4 SW 1/4 1/4
Gov't Lot _____ County Cassia 10 acres 40 acres 160 acres
Lat: : : Long: : :
Address of Well Site Rt 1 Box 1155
City Homedale
(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	
<u>Bentonite</u>	<u>0</u> <u>18'</u> <u>10</u>	<u>overbore</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 34'

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>6"</u>	<u>1'</u>	<u>34'</u>	<u>250</u>		☒	☐	☒	☐

Length of Headpipe 0 Length of Tailpipe 0

9. PERFORATIONS/SCREENS

Perforations Method
Screens Screen Type NO SCREEN

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

28' 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>40</u>	<u>100'</u>	<u>215'</u>	<u>2 hr</u>

Water Temp. 56 Bottom hole temp. 56

Water Quality test or comments: good

Depth first Water Encounter 28'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	<u>0</u>	<u>8'</u>	<u>TOP SOIL</u>		
	<u>8'</u>	<u>28'</u>	<u>COURSE GRAVEL</u>		
	<u>28'</u>	<u>50'</u>	<u>BROWN CLAY</u>		
	<u>50'</u>	<u>170'</u>	<u>BLUE CLAY</u>		
	<u>170'</u>	<u>171'</u>	<u>FINE SAND</u>		
	<u>171'</u>	<u>214'</u>	<u>BLUE CLAY</u>		
	<u>214'</u>	<u>215'</u>	<u>FINE SAND</u>		

RECEIVED

JUN 25 2001

WATER RESOURCES

RECEIVED

JUN 23 2001

Idaho Department of Water Resources

Completed Depth 215' (Measurable)
Date: Started 6-11-01 Completed 6-14-01

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 Clearwater Drilling Firm No. 382

Firm Official Bruce R. Rasmussen Date 6-21-01

and

Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

**ATTACHMENT 6
PHOTOGRAPHS**



Figure 1: Well #1



Figure 2: Well #1 pump house.



Figure 3: Well #2 and pump house (on left).



Figure 4: Well #2 inside pump house.



Figure 5: Well #3 and pump house.

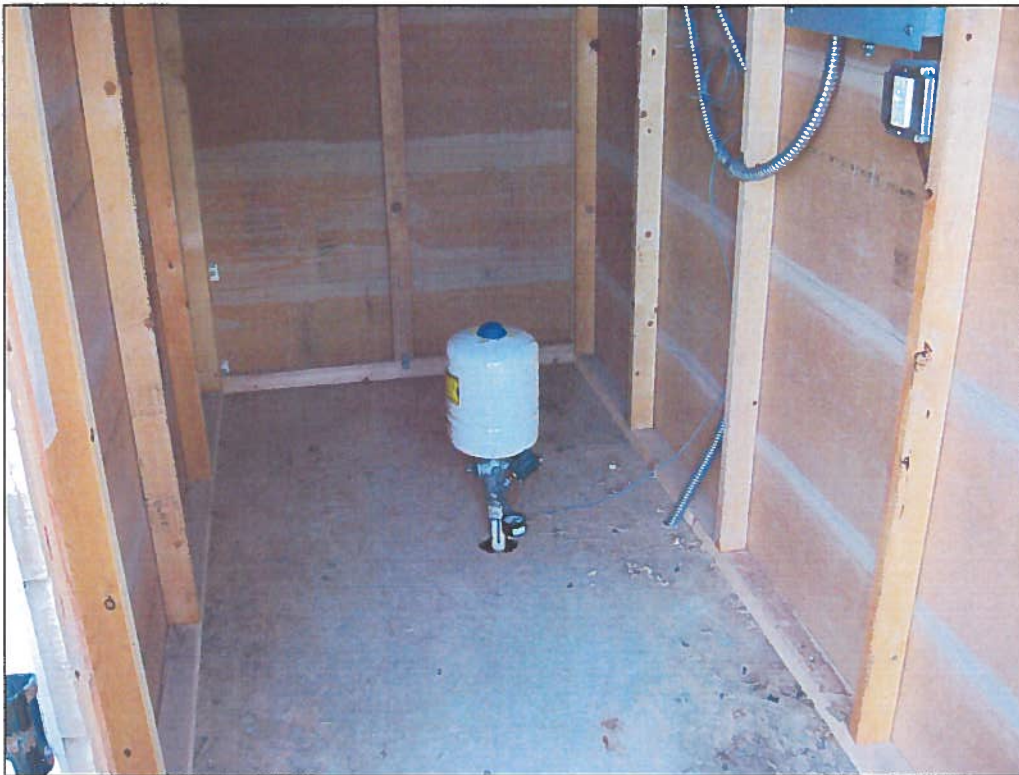


Figure 6: Well #3 inside pump house.



Figure 7: Well #4 and 50,000-gallon storage facility.



Figure 8: Pump and controls for 50,000-gallon storage facility.



Figure 9: Well #5 and pump house.



Figure 10: Well #6.



Figure 11: Well #7.



Figure 12: Well #7 pump house. The home in the background is also served by Well #7.



Figure 13: 10,000-gallon storage facility.



Figure 14: Pump and control for 10,000-gallon storage facility.



Figure 15: Place of Use at northwest corner facing east.



Figure 16: Place of use at southwest corner facing north.



Figure 17: Place of use near southern end facing northeast.