

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 95-10019, 95-9244, 95-12599

1. Owner: North Kootenai Water District Phone No. (208)772-3619

Current Address: P.O. Box 2290, Hayden, ID 83835

2. Accompanied by: See Attachment 1 EXAM DATE : See Attachment 1

Address: _____ Phone No _____

Relationship to Permit Holder: See Attachment 1

3. Source: Groundwater: Rathdrum Prairie Aquifer tributary to N/A

B. OVERLAP REVIEW

1. Other water rights with the same place of use: See Table 1 in Section E

2. Other water rights with the same point of diversion: See Table 1 in Section E

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion: See Attachment 2

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

2. Place(s) of Use: See Attachment 3

Indicate Method of Determination

TWP	RGE	SEC	NE			NW			SW			SE			Totals

SUPPORT DATA

IN FILE # 95-9244

[illegible]

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

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

Measurements:

E. Narrative/Remarks/Comments

Background

North Kootenai Water District is a quasi-municipal governmental agency. The District owns and operates 16 public water systems within Kootenai County. Two of these water systems are fed by surface water sources and the remainder are fed by groundwater (the Rathdrum Prairie Aquifer).

Table 1: Current Water Right Licenses Specified for NKWD Service Area

Water Right License	Beneficial Use	Diversion (cfs)	AFA
95-7138	Municipal	0.14	60.6
95-7713	Municipal	0.04	29
95-7827	Municipal	0.2	55.2
95-8522	Municipal	0.61	441.6
95-8639	Municipal	1	376
95-9199	Municipal	8.83	-
95-9217	Municipal	2.51	-
95-7763 ¹	Municipal	3	1148.4
95-7231 ¹	Municipal	0.08	15.6
Total		16.41	2126.4

1. Water Right No. 95-7231 is currently owned by the Ranch Valley Water Association and the beneficial use on the license is listed as domestic. Water Right No. 95-7763 is currently owned by the Honeysuckle Hills Owners Association and the beneficial use on the license is listed as domestic. Adjudication claims for both of these water rights have been filed with IDWR as accomplished transfers to North Kootenai Water District. The beneficial use has been filed as municipal.

Recommended Amendments

The recommended changes to the points of diversion can generally be summarized as follows:

1. Removal of the following points of diversion:
 - a. Ohio Match 2 (permits 95-12599 and 95-10019): No pump in well
 - b. Lancaster 2 (permits 95-9244 and 95-10019): Well to be abandoned
2. Addition of the following points of diversion:
 - a. Lancaster 4 to permits 95-9244 and 95-10019 ✓
 - b. Ranch Valley (EO#009217) to permit 95-9244
 - c. Sylte (EO#009200) to permit 95-9244
 - d. East Seasons Acres (EO#009103) to permit 95-9244
 - e. Hayden Well 2 to permit 95-10019 ✓
3. Amendment to legal description of the following points of diversion for permit 95-9244 based on GPS data (the recommended legal description is shown in Attachment 2):
 - a. GTE 1 (EO#009196)
 - b. Chilco 1 (EO#005189)
 - c. Echo Beach (EO#005192)

Attachment 2 is a list of all the points of diversion that we recommend be included in the licenses. The above amendments and additions have been made within this Attachment 2.

Examinations

The water right examinations for the points of diversion associated with Permit Numbers 95-9244, 95-12599, and 95-10019 were completed in 2011. All of the District's points of diversion for which exams were completed have a permanent flowmeter. The District reads these meters on a weekly basis to track production.

In accordance with IDAPA 58.01.08 Section 501.17, a water system must have sufficient source capacity to supply the maximum daily demand plus fire suppression needs. This requirement is directly applicable to the following water systems:

- Hillside
- Twin Lakes
- Rimrock

Thus, tests on these systems were run with a fire hydrant open. The flowmeter for each source was monitored for 5 to 10 minutes (until stabilization occurred) and then recorded. The results of these examinations are reported in Attachment 5.

For those systems that do not provide fire flow, each well was run for 5 to 10 minutes directly into the system during "normal" conditions (average daily demand) and the flowmeter reading was recorded.

Examinations for the following points of diversion were completed in 2011 for the reasons listed:

1. Hayden Well 2: This well was recently added to the system (2010) and had not been previously examined.
2. GTE 1 (EO#009196): The capacity of this well was recently upsized to meet system demands and was therefore re-examined.
3. Lancaster 4: This well was recently added to the system (2010) and had not been previously examined.
4. East Seasons (EO#009103): This well has not been examined previously as full beneficial use of its permit (95-10019) had not been completed.

Results of these exams were added to the results of the previous exams completed in 2008 and 2009 for water right numbers 95-8639, 95-9199 and 95-9217 (which are now licenses).

Have conditions of permit approval been met?

Yes, the conditions of these permits have been met:

1. Suitable measuring devices have been installed on all points of diversion associated with the permits.
2. The District is conforming with the current Rathdrum Prairie Groundwater Management Plan.

F. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method:

See Attachment 6

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: N/A

H. RECOMMENDATIONS Based on the diversion capacity (See Attachment 5) we recommend that each license be for the diversion amount listed below.

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Permit 95-12599	01/01	12/31	5.48 cfs	
Permit 95-9244	01/01	12/31	2 cfs	
Permit 95-10019	01/01	12/31	0.2 cfs	

Totals: 7.68 cfs

2. Recommended Amendments

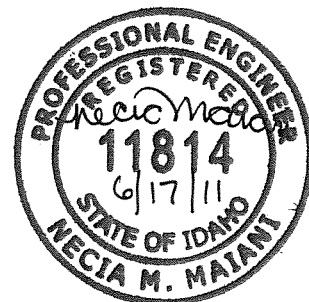
☒ Change P.D. as reflected above ☒ Add P.D. as reflected above ___ None
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. AUTHENTICATION

Field Examiner's Name Necia Maiani Date 6/17/11

Reviewer _____ Date _____

SEAL



Water Right Examiner
#12-139

Attachment 1

System	Well	Exam Date	Accompanied By	Relationship to Permit Holder
Ohio Match	Ohio Match 1	5/22/2008	Brad O'Connell	Employee
Hillside	Finucane	2/12/2009	Jared Felton	Employee
	Hayden Well 2	3/29/2011	Mike Banker	Employee
GTE/Hayden Pines	Hayden Pines	2/12/2009	Jared Felton	Employee
	GTE 1 ¹	5/23/2008	Brad O'Connell	Employee
		3/29/2011	Mike Banker	Employee
	GTE 2	2/12/2009	Jared Felton	Employee
Twin Lakes	Tree Farm 1	2/12/2009	Jared Felton	Employee
	Tree Farm 2	2/12/2009	Jared Felton	Employee
	Echo Beach	6/20/2008	Ricky Billman	Employee
Rimrock	Lancaster 1	2/12/2009	Jared Felton	Employee
	Lancaster 3	2/12/2009	Jared Felton	Employee
	Lancaster 4	3/29/2011	Mike Banker	Employee
Hayden Orchards	Hayden Orchard	5/23/2008	Brad O'Connell	Employee
Chilco	Chilco 1	6/20/2008	Ricky Billman	Employee
	Chilco 2	6/20/2008	Ricky Billman	Employee
Atlas Acres	Atlas Acres	5/22/2008	Brad O'Connell	Employee
Mountain View	Elk Street	6/20/2008	Ricky Billman	Employee
	Echo Street	6/20/2008	Ricky Billman	Employee
Meadowland Acres	Meadowland Acres	5/23/2008	Brad O'Connell	Employee
East Seasons	East Seasons	3/29/2011	Mike Banker	Employee
Valley Green	Valley Green	2/12/2009	Jared Felton	Employee

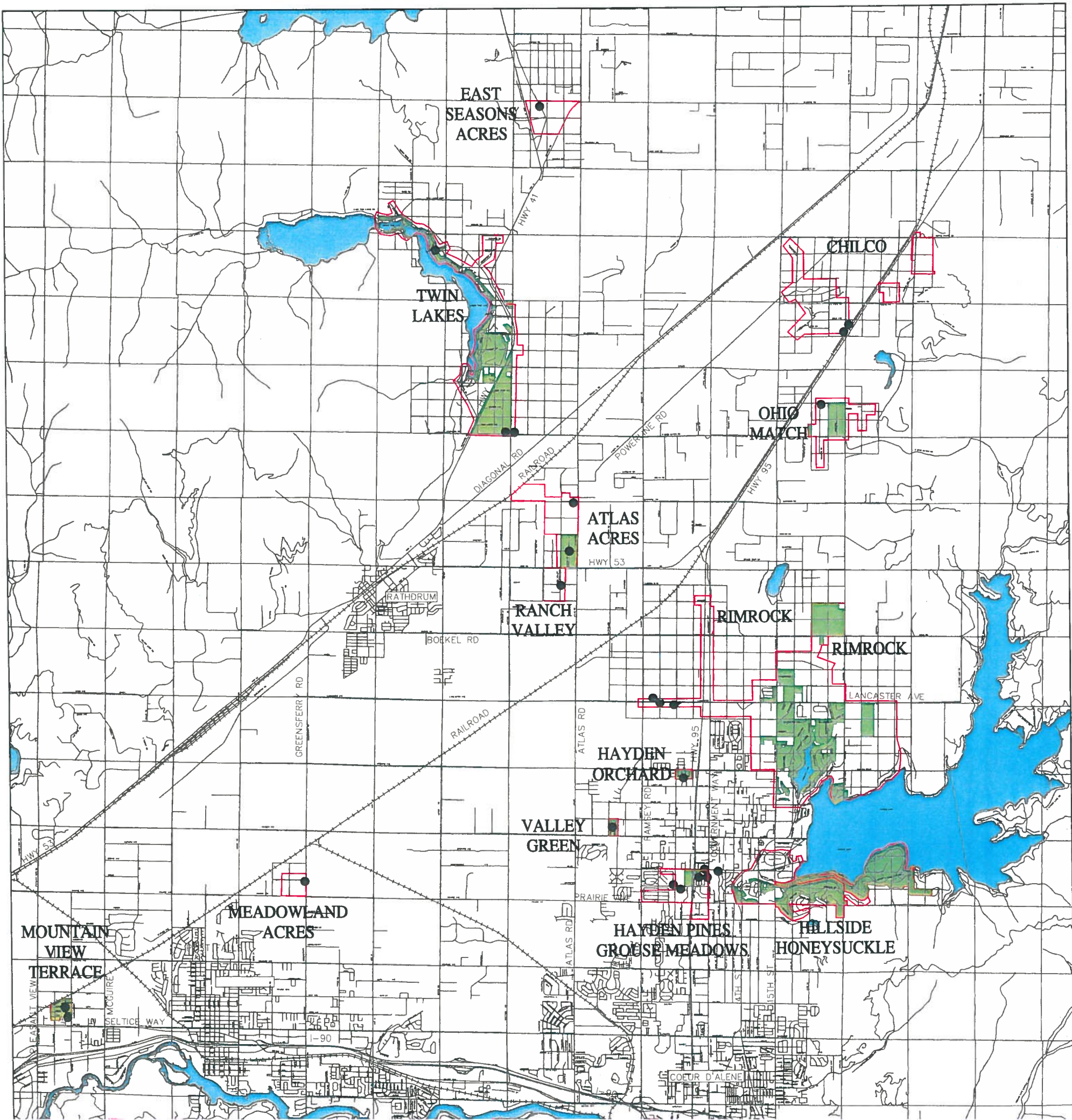
Notes:

1. Improvements were made to GTE 1 in 2010 that significantly increased the capacity of the well. Thus, a second field examination was completed in order to prove out permit 95-12599 which NKWD obtained in part to cover the increase in capacity of GTE 1. Results from the 3/29/2011 exam will be included within this package.

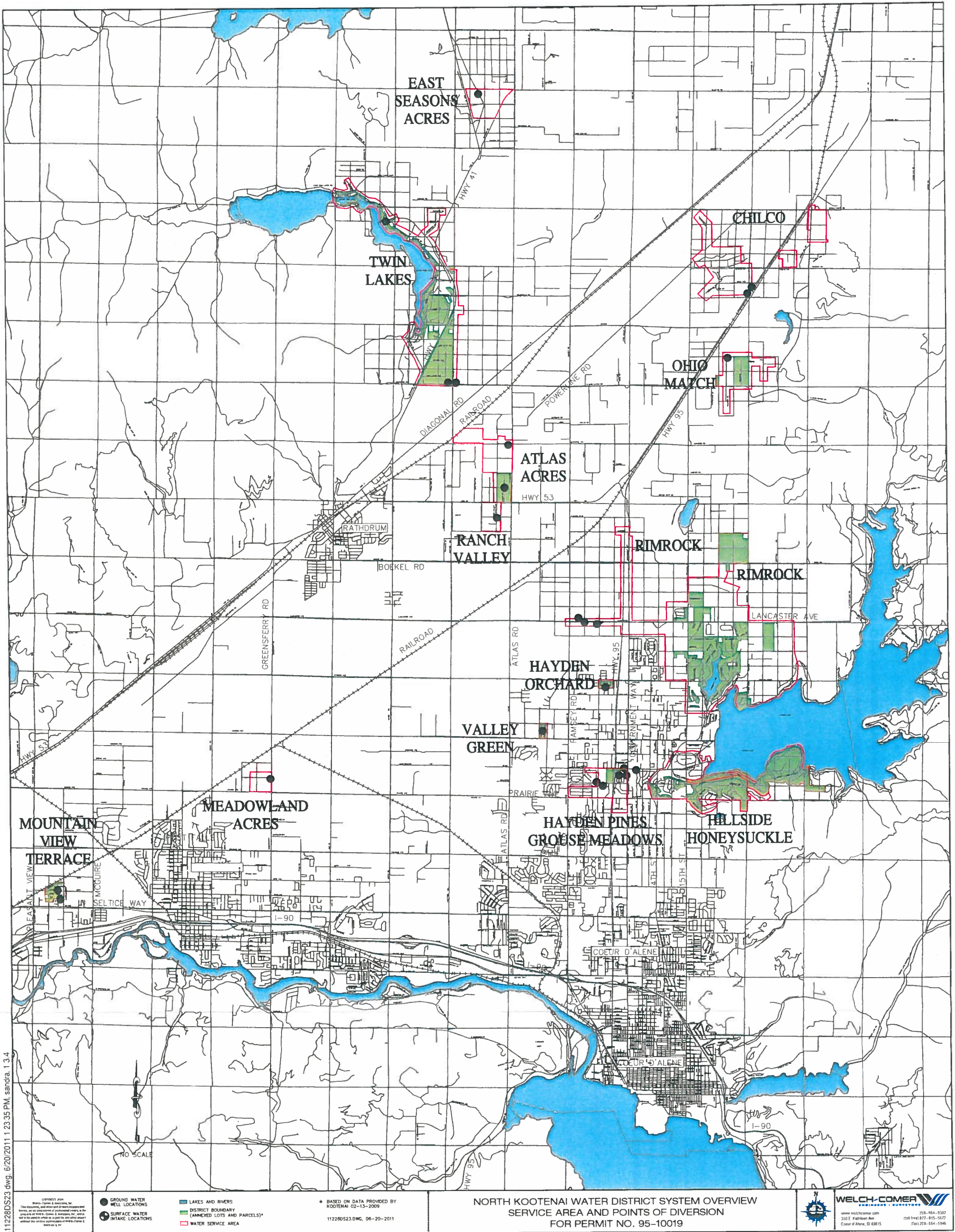
Attachment 2: Points of Diversion											
System	PWS Number	Well	DEQ Identification Number	Well Drilling Permit Number	Latitude '1	Longitude '1	1/4 1/4	Section	Township	Range	County
Ohio Match	1280127	Ohio Match 1	EO #005184	#D0010243	47°51.183N	116°45.060W	NWSE	18	52N	03W	Kootenai
	Hillside	Finucane	EO #005170		47°45.089N	116°47.021W	NWSW	24	51N	04W	Kootenai
Hayden Well 1		EO #005169		47°45.077N	116°47.281W	NESE	23	51N	04W	Kootenai	
Hayden Well 2		NA		47°45.082N	116°47.279W	NESE	23	51N	04W	Kootenai	
GTE/Hayden Pines		1280257	Hayden Pines	EO #005168	#D0041569	47°45.008N	116°47.392W	NESE	23	51N	04W
		GTE 1	EO #009196		47°44.882N	116°47.836W	SWSE	23	51N	04W	Kootenai
		GTE 2	EO #005172		47°44.874N	116°47.805W	SWSE	23	51N	04W	Kootenai
	Twin Lakes	1280099	Tree Farm 1	EO #005190		47°50.800N	116°51.082W	SESE	17	52N	04W
		Tree Farm 2	EO #005191	#D0051936	47°50.800N	116°51.055W	SESE	17	52N	04W	Kootenai
		Echo Beach	EO #005192		47°53.173N	116°52.533W	NENE Lt 1	6	52N	04W	Kootenai
Rimrock	1280009	Lancaster 1	EO #005154		47°47.256N	116°47.827W	NWNWNE	11	51N	04W	Kootenai
		Lancaster 3	EO #009199	#D0022244	47°47.320N	116°48.268W	SWSW	2	51N	04W	Kootenai
		Lancaster 4	NA	#D0057349	47°47.19"N	116°48.15"W	SWSW	2	51N	04W	Kootenai
Hayden Orchards	1280088	Hayden Orchard	EO #005171		47°46.308N	116°47.696W	NWNE	14	51N	04W	Kootenai
Chilco	1280048	Chilco 1	EO #005189		47°52.179N	116°44.591W	SWNW	8	52N	03W	Kootenai
		Chilco 2	EO #005186	#D0013463	47°52.182N	116°44.588W	SWNW	8	52N	03W	Kootenai
Atlas Acres	1280005	Atlas Acres	EO #005155		47°49.246N	116°49.910W	NESE	28	52N	04W	Kootenai
		Sylte Well	EO #009200	#D0028350	47°49.882N	116°49.834W	NENE	28	52N	04W	Kootenai
Mountain View	1280123	Elk Street	EO #005195		47°43.081N	116°59.531W	SESW	32	51N	05W	Kootenai
		Echo Street	EO #005194		47°43.201N	116°59.586W	NESW	32	51N	05W	Kootenai
Meadowland Acres	1280277	Meadowland Acres	EO #009114		47°44.897N	116°54.979W	SESE	23	51N	05W	Kootenai
Valley Green	1280195	Valley Green	EO #005166		47°45.657N	116°49.064W	SWSE Lt. 7	15	51N	04W	Kootenai
East Seasons Acres	1280278	East Seasons Acres	EO #009103		47°55.061N	116°50.530W	NENW	28	53N	04W	Kootenai
Ranch Valley	1280151	Ranch Valley	EO #009217		47°48.798N	116°50.069W	SENE	33	52N	04W	Kootenai

Notes:

1. Latitude and longitude were established using a handheld GPS unit. The estimated accuracy of this equipment is +/- 20 feet. Information for Lancaster 4 was obtained from Google Earth.



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Attachment 4

System	Well	Identification Number	Additional Description	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size	Notes
Ohio Match	Ohio Match 1	EO #005184	Inside Well		5			1.5"	Submersible
	Finucane	EO #005170		GE	75	PXJ329123		6"	Turbine
Hillside	Hayden Well 1	EO #005169		GE	200	5K6278XH34A	Peerless	236369	Turbine
	Hayden Well 2			Hitachi	300		Goulds	12"	Submersible
GTE/ Hayden Pines	Hayden Pines	EO #005168			30				Submersible
	GTE 1	EO #009196	Outside Well	CentriPro	200		Goulds	8"	Submersible
	GTE 2	EO #005172	Inside Well		30		Red Jacket		Submersible
Twin Lakes	Tree Farm 1	EO #005190	Inside Well	Franklin	25	01F19-28-0032		4"	Submersible
	Tree Farm 2	EO #005191	Outside Well	Franklin	30	336333963 00J19-19-	Grundfos	6"	Submersible
	Echo Beach	EO #005192		Franklin	30		Grundfos	mod. 230S300-9	Submersible
Rimrock	Lancaster 1	EO #005154		GE	200	GLJ723123	Worthington	VTP305405	Turbine
	Lancaster 3	EO #009199	Inside Well		200			12"	Submersible
	Lancaster 4		Outside Well	CentriPro	200		Goulds	8"	Submersible
Hayden Orchards	Hayden Orchard	EO #005171			15			3"	Submersible
Chilco	Chilco 1	EO #005189			15			4"	Submersible
	Chilco 2	EO #005186			10		Grundfos	230S100-3	Submersible
Atlas Acres	Atlas	EO #005155			10	4KNE0616	Red Jacket	2"	Submersible
	Sylte Well	EO #009200			30			3"	Submersible
Mountain View	Elk Street	EO #005195			7.5			R-8889-02-D-555	Turbine
	Echo Street	EO #005194		US Vertical	50	R8889-02-D-55 R2085810	Aurora Verti-Line	V74-01443	Turbine
Meadowland Acres	Meadowland Acres	EO #009114			7			3"	Submersible
Valley Green	Valley Green	EO #005166			10		Jacuzzi	6" Ductile	Submersible
East Seasons	East Seasons	EO #009103		Franklin	5			2"	Submersible
Ranch Valley	Ranch Valley	EO #009217						1.5"	Submersible

Attachment 5: Flow Measurements											
System	Well	Identification Number	Exam Date	Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date	Measured Flow Rate
Ohio Match	Ohio Match 1	EO #005184	5/22/2008	Master Meter				2216149	1.5"	Unknown	0.16 cfs
	Ohio Match 2						Not Tested, No Pump				
Hillside	Finucane	EO #005170	2/12/2009	Rockwell				92557	3"	Unknown	0.98 cfs
	Hayden Well ¹	EO #005169				Licensed Under 95-7763 at 3 cfs					3 cfs ⁴
	Hayden Well 2		3/29/2011	Siemens	MegaFlo	Mag 5000	7ME6520-4VJ13-2AA2	7ME652286902U010	12"	10/10/2010	3.42 cfs
	Hayden Pines	EO #005168	2/12/2009	McCrometer				06-07860-04		Unknown	0.38 cfs
GTE/Hayden Pines	GTE 1	EO #009196	3/29/2011	Siemens	MegaFlo	5100	7ME6520-4BJ13-2AA2	7ME652370002U170	12"	10/10/2010	3.36 cfs
	GTE 2	EO #005172	2/12/2009	McCrometer				78-4-353	4"	Unknown	0.49 cfs
	Tree Farm 1	EO #005190	2/12/2009	Siemens		Digital	Meg 140	5000	4"	Unknown	0.36 cfs
	Tree Farm 2	EO #005191	2/12/2009	McCrometer				07-05206-07	6"	Unknown	1 cfs
Twin Lakes	Echo Beach	EO #005192	6/20/2008	Drawdown in tank						Unknown	0.49 cfs
	Lancaster 1	EO #005154	2/12/2009	McCrometer			F7000	E06-00289	10"	Unknown	2.45 cfs
	Lancaster 3	EO #009199	2/12/2009	Master Meter	Class II			8040444	8"	Unknown	2.30 cfs
	Lancaster 4		3/29/2011	Master Meter	Class II	MasterM	6861893	252200	8"	4/12/2010	2.23 cfs
Hayden Orchards	Hayden Orchard	EO #005171	5/23/2008	Precision	Invensys			60039485	2"	Unknown	0.18 cfs
	Chilico 1	EO #005189	6/20/2008	Badger Meter				62759-004	4"	Unknown	0.78 cfs
	Chilico 2	EO #005186	6/20/2008	Master Meter				61771067	4"	Unknown	0.56 cfs
	Atlas Acres	EO #005155	5/22/2008	McCrometer					2"	Unknown	0.18 cfs
Atlas Acres	Syte Well	EO #009200			Not Tested, Separate Permit 95-9129						0.53 cfs ⁵
Mountain View	Elk Street	EO #005195	6/20/2008	Rockwell				1328456	3"	Unknown	0.21 cfs
	Echo Street ²	EO #005194	6/20/2008	Master Meter				97233	4"	Unknown	0.96 cfs
Meadowland Acres	Meadowland Acres	EO #009114	5/23/2008	Kent Meter		T3000		96420028	3"	Unknown	0.53 cfs
Valley Green	Valley Green	EO #005166	2/12/2009	Precision	Steel	PMM		94564977	2"	Unknown	0.16 cfs
East Seasons Acres	East Seasons Acres	EO #009103	3/29/2011	Master Meter	6819292		DS	7737788	3/4"	8/30/2010	0.04 cfs
Ranch Valley	Ranch Valley ³	EO #009217		Licensed Under 95-7231 at 0.08 cfs							0.08 cfs ⁶

Total Diversion Capacity (cfs): 24.83

Notes:

- The diversion capacity of Hayden Well 1 is covered under Water Right 95-7763.
- The flow measurement shown for Echo Street was taken on 1/12/2008 (once the meter was fixed).
- The diversion capacity of Ranch Valley is covered under Water Right 95-7231.
- As shown on the 1980 Field Exam Report and license 95-7763.
- Diversion capacity is based on the Theoretical Diversion as calculated in Attachment 6.
- As shown on the Field Exam Report and license 95-7231.

Attachment 6 Theoretical Diversion

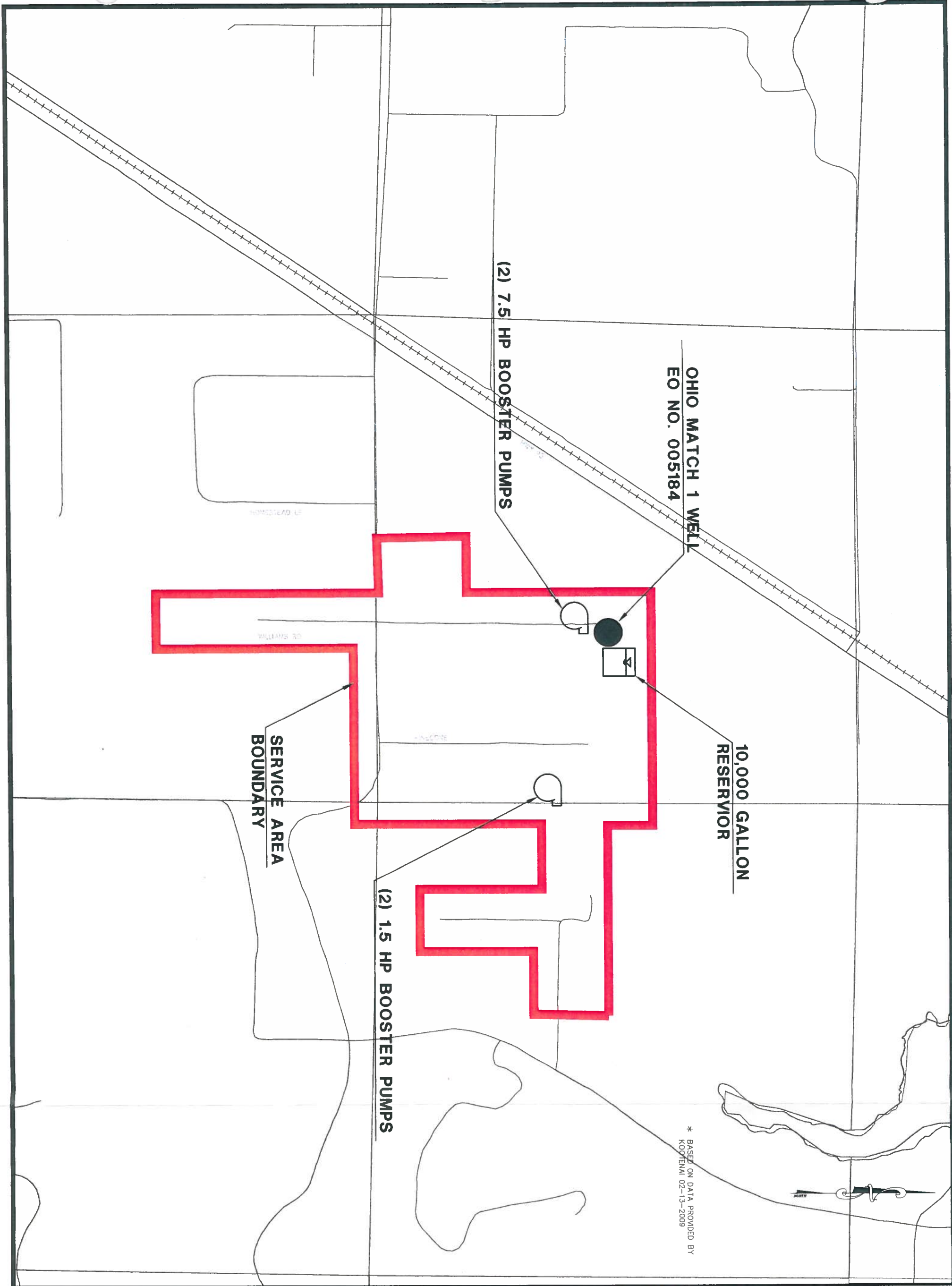
Equation:

$$Q = \text{HP} \times 3956 \times \text{Eff.} / H$$

Well	Discharge to:	Special Design Condition	H = Design Discharge Head (Approximate) feet	Pump Horse Power (HP)	Assumed Pump Efficiency (Eff)	Discharge (Q) gpm
Ohio Match 1	Ground Storage		90	5	0.75	165
Finucane	System	Fire Flow	532	75	0.75	418
Hayden Well 1*	Not Tested					1,347
Hayden Well 2	System		620	300	0.75	1,436
Hayden Pines	Ground Storage		267	30	0.75	333
GTE 1	Ground Storage		338	200	0.75	1,756
GTE 2	Ground Storage		268	30	0.75	332
Tree Farm 1	System	Fire Flow	528	25	0.75	140
Tree Farm 2	System	Fire Flow	528	30	0.75	169
Echo Beach	Ground Storage		315	30	0.75	283
Lancaster 1	System	Fire Flow	598	200	0.75	992
Lancaster 3	System	Fire Flow	598	200	0.75	992
Lancaster 4	System	Fire Flow	550	200	0.75	1,079
Hayden Orchard	Ground Storage		310	15	0.75	144
Chilco 1	Ground Storage		85	15	0.75	524
Chilco 2	Ground Storage		85	10	0.75	349
Atlas	Ground Storage		253	10	0.75	117
Sylte Well	Not Tested		373	30	0.75	239
Elk Street	Ground Storage		92	8	0.75	242
Echo Street	Ground Storage		92	50	0.75	1,613
Meadowland Acres	Ground Storage		300	7	0.75	69
Valley Green	Ground Storage		310	10	0.75	96
East Seasons Acres	Ground Storage		618	5	0.75	24
Ranch Valley*	Not Tested					36
Total						12,893.47 gpm
						28.73 cfs

*These points of diversion were not tested as they have already been licensed. The amount licensed for diversion at each well has been entered as the Discharge.

OHIO MATCH



NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

OHIO MATCH
PWS NO. 1280127

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NO.	DATE	REVISION DESCRIPTION	BY

PROJECT NO.: 11228
DESIGNED BY: KJO
DRAWN BY: SDS/JLG
CHECKED BY: SDS/JLG
DWG NAME: 11228DS28.dwg
DATE: 04-11-11
SHEET NO:

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Ohio Match 1
EO#005184

USE TYPEWRITER OR
BALL POINT PEN

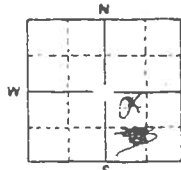
State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

RECEIVED

JUL 22 1977

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		7. WATER LEVEL	
Name <u>STEVENS SOUTHER</u>		Static water level <u>160</u> feet below land surface	
Address <u>421 N 20TH POA Ida 83814</u>		Flowing? ☐ Yes ☒ No G.P.M. flow _____	
Owner's Permit No. <u>10 # 95-7713</u>		Temperature <u>60.0</u> ° F. Quality <u>Good</u>	
		Artesian closed-in pressure _____ p.s.i.	
		Controlled by ☐ Valve ☒ Cap ☐ Plug	
2. NATURE OF WORK <u>95-76-N-91</u>		8. WELL TEST DATA	
☒ New well ☐ Deepened ☐ Replacement		☐ Pump ☐ Bailer ☒ Other <u>AIR</u>	
☐ Abandoned (describe method of abandoning)		Discharge G.P.M. <u>15</u> Draw Down <u>5</u> Hours Pumped <u>1.5</u>	
3. PROPOSED USE		9. LITHOLOGIC LOG	
☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)		Hole Diam. Depth Material Water	
☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		Yes No	
4. METHOD DRILLED		10 <u>0</u> <u>35</u> <u>Small Boulders & Gravel</u> <u>X</u>	
☐ Cable ☒ Rotary ☐ Dug ☐ Other		<u>8</u> <u>35</u> <u>94</u> <u>" "</u> <u>" "</u> <u>X</u>	
5. WELL CONSTRUCTION		<u>94</u> <u>103</u> <u>Basalt</u> <u>X</u>	
Diameter of hole <u>6</u> inches Total depth <u>235</u> feet		<u>103</u> <u>107</u> <u>Clay</u> <u>X</u>	
Casing schedule: ☒ Steel ☐ Concrete		<u>107</u> <u>128</u> <u>Basalt</u> <u>X</u>	
Thickness Diameter From To		<u>128</u> <u>135</u> <u>Clay</u> <u>X</u>	
<u>.250</u> inches <u>8</u> inches <u>+ 1</u> feet <u>94</u> feet		<u>135</u> <u>176</u> <u>Basalt</u> <u>X</u>	
<u>.250</u> inches <u>6</u> inches <u>1</u> feet <u>220</u> feet		<u>176</u> <u>200</u> <u>Clay</u> <u>X</u>	
_____ inches _____ inches _____ feet _____ feet		<u>200</u> <u>235</u> <u>Broken Basalt</u> <u>X</u>	
_____ inches _____ inches _____ feet _____ feet			
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>22</u> Material used in seal ☐ Cement grout			
☒ Pudding clay ☒ Well cuttings			
Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing			
☒ Overbore to seal depth			
6. LOCATION OF WELL <u>95</u>		10. Work started <u>7/1/76</u> finished <u>7/7/76</u>	
Sketch map location must agree with written location.		11. DRILLERS CERTIFICATION	
		Firm Name <u>Associated Well Drillers</u> Firm No. <u>245</u>	
County <u>Kootenai</u>		Address <u>Box 723 C.D.A. Idaho</u> Date <u>7/7/77</u>	
NW 1/4 SE 1/4 Sec. <u>18</u> T. <u>52</u> N. R. <u>3</u> E. W.		Signed by (Firm Official) <u>Robert F. Pigot</u>	
		and (Operator) <u>Robert F. Pigot</u>	

RECEIVED

JUL 02 1999

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

780227

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

IDWR/North

WELL TAG NO. D0010243

DRILLING PERMIT N 95-76-N-91-400

Other IDWR No _____

2. OWNER:

Name North Kootenai Water DistrictAddress PO Box 2290City HaydenState IDZip 83835

3. LOCATION OF WELL by legal description:

N			
W			E
S			

Twp 52N North ☒ or South ☐
Rge 03W East ☐ or West ☒
Sec 18 1/4 NW 1/4 SE 1/4
10 Ac 40 Ac 160 Ac
Gov't Lot _____ County Kootenai
Lat _____ Long _____
Address of Well Site: (see next line)
City _____

Lot _____ Blk _____ Sub Name (see next line)

4. USE:

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

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

☐ New Well ☐ Modify ☐ Abandonment ☒ Other clean-out

RILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			Amount	Method
Material	From	To	Sacks/Lbs	

Drive Shoe Used? ☐ Y ☒ N Shoe Depth(s) _____Drive Shoe Seal Tested? ☐ Y ☒ N How? _____

8. CASING/LINER

Diam	From	To	Gauge	Material	Casng	Liner	Weld	Thrded
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length Headpipe _____ Length Tailpipe _____

9. PERFORATIONS/SCREENS

☐ Perforations? Method _____☐ Screens? Screen Type _____

From	To	Slot	Nmbr	Diam	Material	Casng	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL or ARTESIAN PRESSURE

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

11. WELL TESTS:

☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min	Drawdown	Pump Level	Time

Water Temp _____

Bottom hole temp _____

Water Quality test or comments (below) Depth first Water Encountered _____

12. LITHOLOGIC LOG (Describe repairs or abandonment)

Bore Diam	From	To	Remarks: Lithology, Water Quality and Temperature	Water	
				Y	N
			Set over the well and cleaned it out.	☐	☐
			no modifications made	☐	☐

Completed Depth 235 (Measurable)Date: Started 6/27/99 Completed 6-27-99

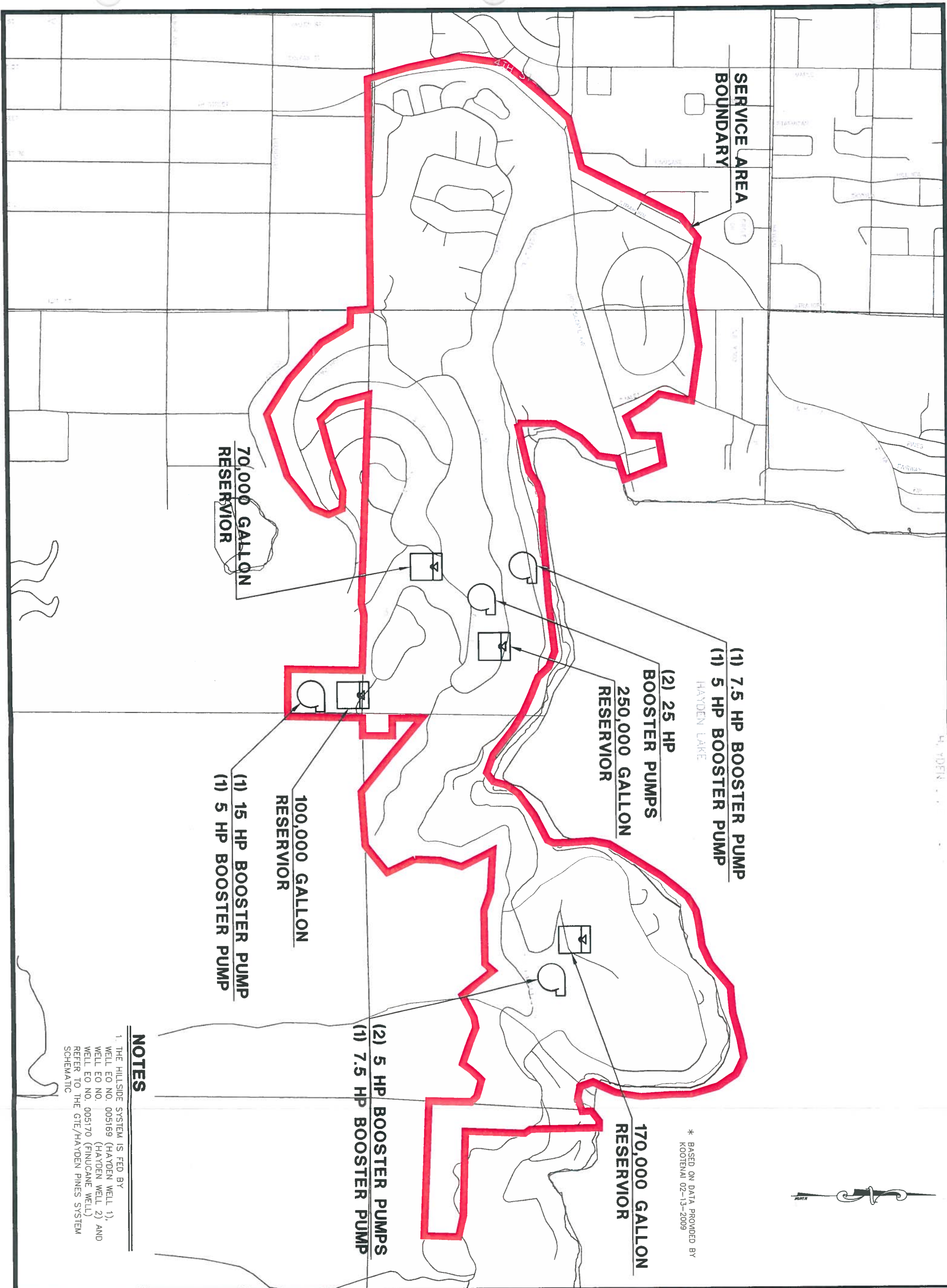
13. DRILLERS CERTIFICATION

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

Firm United Drilling Inc
Name _____Firm No 414Firm Official
and _____Date 7/1/99Supervisor or Operator Jason C BeckhamDate 7/1/99

FORWARD WHITE COPY TO WATER RESOURCES

HILLSIDE



NOTES

1. THE HILLSIDE SYSTEM IS FED BY
WELL EO NO. 005169 (HAYDEN WELL 1),
WELL EO NO. (HAYDEN WELL 2) AND
WELL EO NO. 005170 (FINUCANE WELL)
REFER TO THE GTE/HAYDEN PINES SYSTEM
SCHEMATIC

NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

HILLSIDE/HONEYSUCKLE HILLS
PWS NO. 1280095

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(fax) 208-664-5946

NO	DATE	REVISION DESCRIPTION	BY

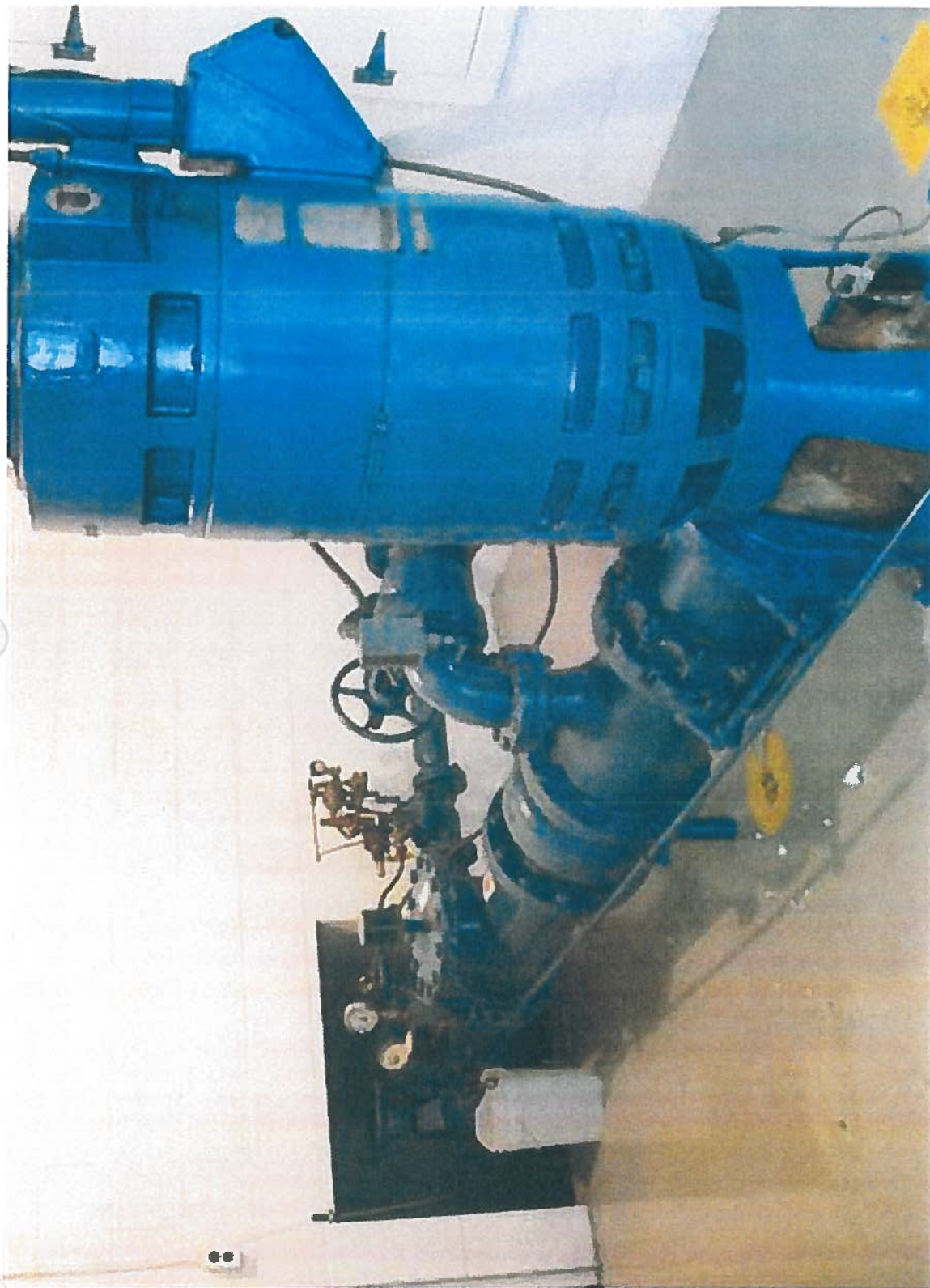
PROJECT NO. 11228
DESIGNED BY: KJO
DRAWN BY: SDS/JLG
CHECKED BY: SDS/JLG
DWG NAME: 11228DS28.dwg
DATE: 04-11-11
SHEET NO:

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* BASED ON DATA PROVIDED BY
KOOTENAI 02-13-2009



Finucane Well
EO#005170



Hayden Well 1
EO#005169



Hayden 2

Exhibit

Hayden

Well 1
(GTE/Hillside
System)

WELL OWNER
Name Honeywell Hills ASSC. INC
City Hayden Co. Ida
Owner's Permit No. _____

7. WATER LEVEL
Static water level 273 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure 0 p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

NATURE OF WORK
New well ☐ Deepened ☐ Replacement
Abandoned (describe method of abandoning) _____

8. WELL TEST DATA
☐ Pump ☒ Bailor ☐ Other
Discharge G.P.M. 50 Draw Down 0 Hours Pumped 2

PROPOSED USE
Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) _____
Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

9. LITHOLOGIC LOG
Hole Diam. Depth From To Material Water
20 0 33 Sand & Gravel
33 33 36 Sand & Gravel
36 36 71 Gravel 6" + Big stuff
71 71 88 Sand & Gravel
88 88 95 Sand & Gravel
95 95 109 Gravel 6" + Big stuff
109 109 111 Bolder
111 111 115 Sand & Gravel
115 115 129 Gravel 6" + Big stuff
129 129 142 Bolder
142 142 152 Gravel & sand
152 152 161 Bolder
161 161 271 Sand & Gravel
271 271 373 Sand
373 373 381 Water sand
381 381 388 Sand & Gravel
388 388 392 Sand & Gravel
392 392 398 Sand & Gravel
398 398 400 TO

METHOD DRILLED
Cable ☐ Rotary ☐ Dug ☐ Other

WELL CONSTRUCTION
Diameter of hole 16 inches Total depth 350 feet
Lining schedule ☒ Steel ☐ Concrete
Thickness Diameter From To
75 inches 16 inches 2 feet 350 feet
inches inches feet feet
inches inches feet feet
inches inches feet feet
inches inches feet feet
Drive shoe used? ☒ Yes ☐ No
Seal packer or seal used? ☐ Yes ☒ No
Cased? ☐ 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

Is screen installed? ☒ Yes ☐ No
Manufacturer's name W.P. Johnson
Slot size 1/16 inch Set from 316 feet to 338 feet
Slot size 1/16 inch Set from 336 feet to 337 feet
Slot size 1/16 inch Set from 337 feet to 350 feet
Seal packed? ☐ Yes ☒ No Size of gravel _____
Seal from _____ feet to _____ feet

Seal depth 30' Material used in seal ☐ Cement grout
☒ Pudding clay ☐ Well cuttings
Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing
☐ Overbore to seal depth

LOCATION OF WELL
Each map location must agree with written location. 95

Subdivision Name _____
Lot No. _____ Block No. _____
County _____
State _____
Twp. _____ Sec. _____ T. _____ N/S, R. _____ E/W

10. Work started APR 18 77 finished APR 24 1977

11. DRILLERS CERTIFICATION
Firm Name F.H. Holman Drilling Co Firm No. 105
Address Old Pines Rd. Hayden, ID Date APR 24 77
Signed by (Firm Official) J. L. Johnson
and
(Operator) Ken Phinney

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Hayden Well 2
(GTE/Hillside
system)

1. WELL TAG NO. D 0054618

Drilling Permit No. 85162

Water right or injection well # 95-9244

2. OWNER: North Kootenai Water Dist.

Name _____

Address PO Box 2290

City Hayden State ID Zip 83835

3. WELL LOCATION:

Twp. 51 North ☒ or South ☐ Rge. 04 East ☐ or West ☒

Sec. 23 NE 1/4 NE 1/4 1/4

Gov't Lot _____ County Kootenai

Lat. _____ (Deg. and Decimal minutes)

Long. _____ (Deg. and Decimal minutes)

Address of Well Site Honeysuckle Ave "Hwy 95"

+ Gov't Way City Hayden

Lot. _____ Blk. _____ Sub. Name _____

4. USE:

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

☐ Other _____

5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well

☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☐ Air Rotary ☐ Mud Rotary ☒ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (bs or ft)	Placement method/procedure
Quickseal	0	60	2000 lbs	Trimy pipe

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
20	+2	350	10	55	☒	☐	☒
			125		☐	☐	☐
					☐	☐	☐
					☐	☐	☐

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

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____

Manufactured screen ☒ Y ☐ N Type Tech screen

Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material
360	350	100	10	18"	55

Length of Headpipe 3' Length of Tailpipe 4'

Packer ☒ Y ☐ N Type _____

10. FILTER PACK:

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

11. FLOWING ARTESIAN:

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

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 254 Static water level (ft) 254

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

Describe access port _____

Well test:	Test method:
Drawdown (feet)	Pump ☐
Discharge or Yield (gpm)	Boiler ☐
Test duration (minutes)	Air ☐
	Flowing artesian ☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Core Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water
20	0	3	Brown Sp. 6 Soil	X
	3	24	Silt. Sand Gravel & Cols	X
	24	45	Silt. Sand Gravel & Cols	X
	45	60	Sand & Gravel Cols	X
	60	60	Boulder Sand Gravel	X
	60	128	Sand Gravel & Cols	X
	128	136	Gravel, Sand & Cols	X
	136	139	130' below	X
	139	145	Gravel & Sand Cols	X
	145	150	Sand & Gravel	X
	150	156	Boulder	X
	156	170	Gravel, Sand & Cols	X
	170	185	Coarse Sand & pebbles	X
	185	232	Gravel, Sand & Cols	X
	232	254	Gravel & Sand	X
	254	267	Coarse Sand & Gravel	X
	267	278	Fine Sand & Clay	X
	278	298	Coarse Sand & Gravel	X
	298	319	Coarse Sand & Gravel	X
	319	335	Coarse Sand & pebbles	X
	335	348	Coarse Sand	X
	348	380	Coarse Sand & Gravel	X

Completed Depth (Measurable): _____

Date Started: 7-14-08 Date Completed: 9-10-08

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 Boyer & Young Co. No. 610

*Principal Driller Mark Date 1-29-09

*Driller _____ Date _____

*Operator Mark Date 1-28-09

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

GTE/HAYDEN PINES

* BASED ON DATA PROVIDED BY
KOOTENAI 02-13-2009



NOTES
1. WELL EO NO. 005169 (HAYDEN WELL 1),
WELL EO NO. (HAYDEN WELL 2) AND
WELL EO NO. 005170 (FINUCANE WELL)
SERVE THE HILLSIDE SYSTEM

(2) 15 HP BOOSTER PUMPS
(1) 7.5 HP BOOSTER PUMP
(1) 85 BHP FIRE PUMP

GTE 2 WELL
EO NO. 005172
GTE 1 WELL
EO NO. 009196

115,000 GALLON
RESERVIOR

HAYDEN PINES WELL
EO NO. 005168
14,000 GALLON
RESERVIOR

HAYDEN 1 WELL
EO NO. 005169

FINUCANE
WELL
EO NO. 005170

(2) 25 HP
BOOSTER PUMPS
HAYDEN 2 WELL
EO NO.

(2) 7.5 HP
BOOSTER PUMPS

SERVICE AREA
BOUNDARY

NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

GTE/HAYDEN PINES
PWS NO. 1280257

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NO.	DATE	REVISION DESCRIPTION	BY

PROJECT NO.: 11228
DESIGNED BY: KJO
DRAWN BY: SDS/JLG
CHECKED BY: SDS/JLG
DWG NAME: 11228DS28.dwg
DATE: 04-11-11
SHEET NO:

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GTE 1
EO#009196



Hayden Pines
EO#005168

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the State Reclamation Engineer
within 30 days after completion or abandonment of the well.

RECEIVED

1. WELL OWNER

Name Hadden Pines Inc.
Address Hadden Lake Sta. P.O. Box 845
Owner's Permit No. 95-71-N-62

7. WATER LEVEL

Static water level 267 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other
Discharge G.P.M. 30 Draw Down 0 Hours Pumped 4

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☒ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 330 feet
Casing schedule. ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>377</u> inches	<u>8</u> inches	<u>15</u> feet	<u>237</u> feet
<u>350</u> inches	<u>6</u> inches	<u>200</u> feet	<u>330</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☒ Factory ☒ Knife ☐ Torch
Size of perforation 1/4 inches by 1 1/2 inches
Number 76 perforations From 307 feet To 325 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? ☒ Yes ☐ No To what depth 279 feet
Material used in seal ☐ Cement grout ☒ Puddling clay

9. LITHOLOGIC LOG

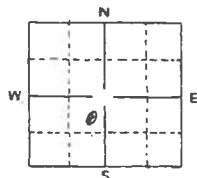
Hole Diam	Depth		Material	Water	
	From	To		Yes	No
12	0	18"	Top Soil / Gravel / Brown		
	18"	6"	Cobble stones		
	6"	34"	Gravel / Sand / Silt		
	34"	38"	Red Gravel		
8	38"	160"	Gravel / Sand / 3/4" minus		
	160"	198"	Sand Fine Brown		
	198"	287"	Gravel / Sand / 1/2" minus		
6	287"	288"	One Dam Big		
	288"		Bolder Granite		
6			Black and white		
6	288"	301"	Coarse washed sand		
6			Sand		
6	301"	325"	Gravel 1 1/4" minus		
6			washed		
6	325"	330"	Sand Fine		

The top of the bolder
was out of the well
but when we drilled
through we made it
9 ft of water at
that point in the drilling
of the hole it then
came up to 267 ft
after the perforations
were in and the well
developed

07113

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Kootenai
S.E. 1/4, SW 1/4, Sec. 23, T. 51 N., R. 4 W.

10.

Work started June 8, 1971 finished July 1, 1971

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is
true to the best of my knowledge.

E.H. Holman Drilling Co. 105
Driller's or Firm's Name Number
601 S. Pines Rd. Spokane, Wn.
Address
E.H. Holman Jr. July 24, 1971
Signed By Date

WELL DRILLER'S REPORT

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.

G12 Outside
(GTE/Hillside
System)

1. WELL OWNER

Name Hayden Pines Water Co.
Address Hayden Lake Idaho
Owner's Permit No. 95-77-N-111

7. WATER LEVEL

Static water level 26.8 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature _____ ° F. Quality _____
Artesian closed-in pressure _____ p.s.i.
Controlled by ☐ Valve ☐ Cap ☐ Plug

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>100</u>	<u>0</u>	<u>5</u>

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)
☒ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

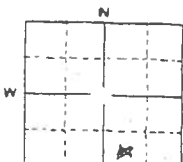
Diameter of hole 16 inches Total depth 367 feet
Casing schedule ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>375</u> inches	<u>16.00</u> inches	<u>2</u> feet	<u>339</u> feet

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 _____ feetWell screen installed? ☒ Yes ☐ No
Manufacturer's name W.O. Johnson
Type Stainless Steel Model No. 304
Diameter 16 Slot size 160 Set from 339 feet to 344 feet
Diameter 140 Slot size 30 Set from 344 feet to 357 feet
140 357 367Gravel packed? ☐ Yes ☒ No Size of gravel _____
Placed from _____ feet to _____ feetSurface seal depth 30 Material used in seal ☐ Cement grout
☒ Pudding clay ☐ Well cuttings
Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing
☐ Overbore to seal depth

LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Kootenai

10.

Work started 9/24/77 finished 12/13/77

11. DRILLERS CERTIFICATION

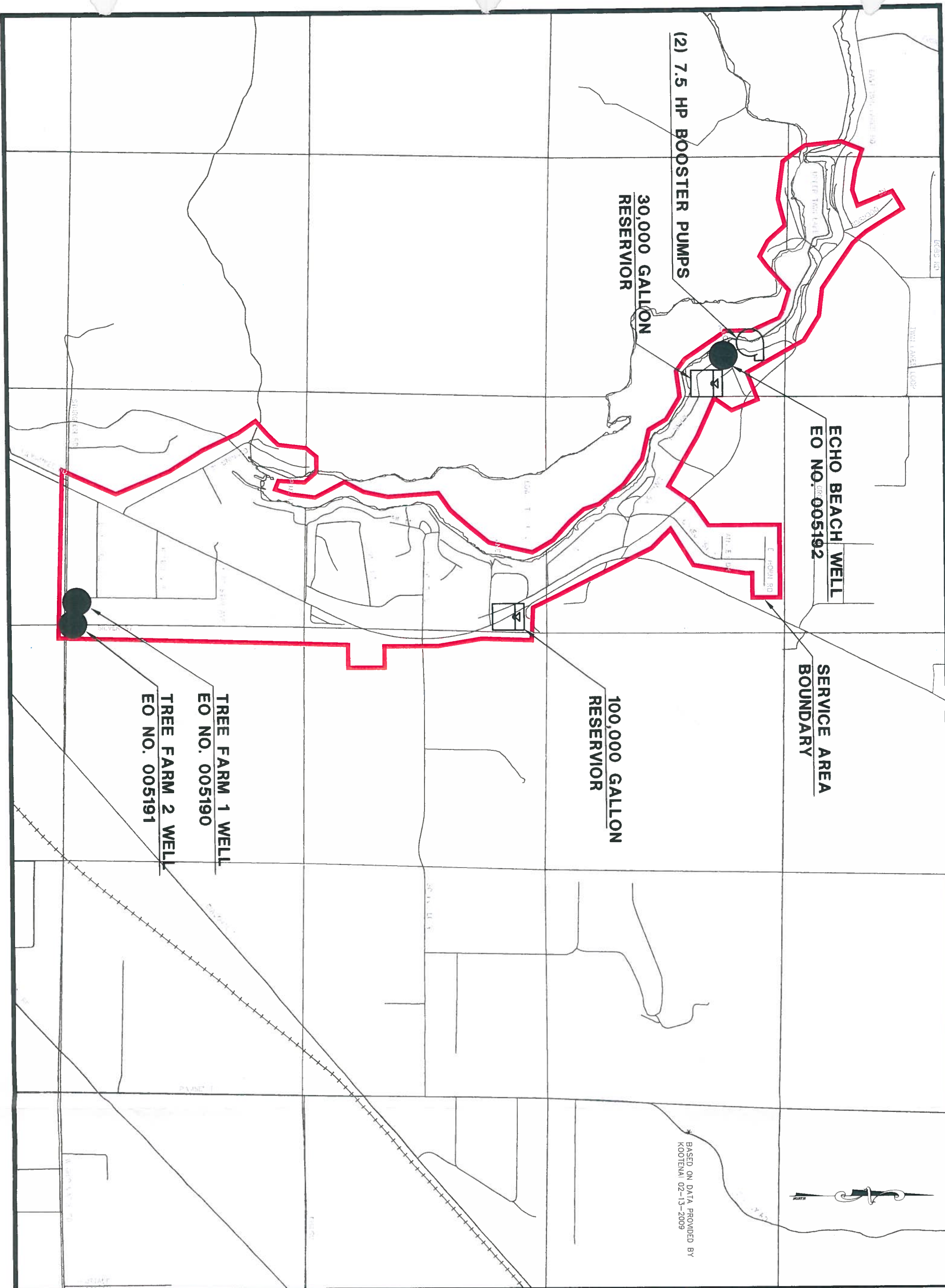
Firm Name E. H. Helman Drilling Co. Firm No. 105
Address Gold-Pines Rd. Hayden Idaho Date 12/21/77
Signed by (Firm Official) E. H. Helman
and
(Operator) Don Koch

WELL DRILLER'S REPORT

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]

TWIN LAKES



NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

TWIN LAKES
PWS NO. 1280099

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NO.	DATE	REVISION DESCRIPTION	BY

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DESIGNED BY: KJC
DRAWN BY: SDS/JLG
CHECKED BY:
DWG NAME: 11228DS28.dwg
DATE: 04-11-11
SHEET NO:

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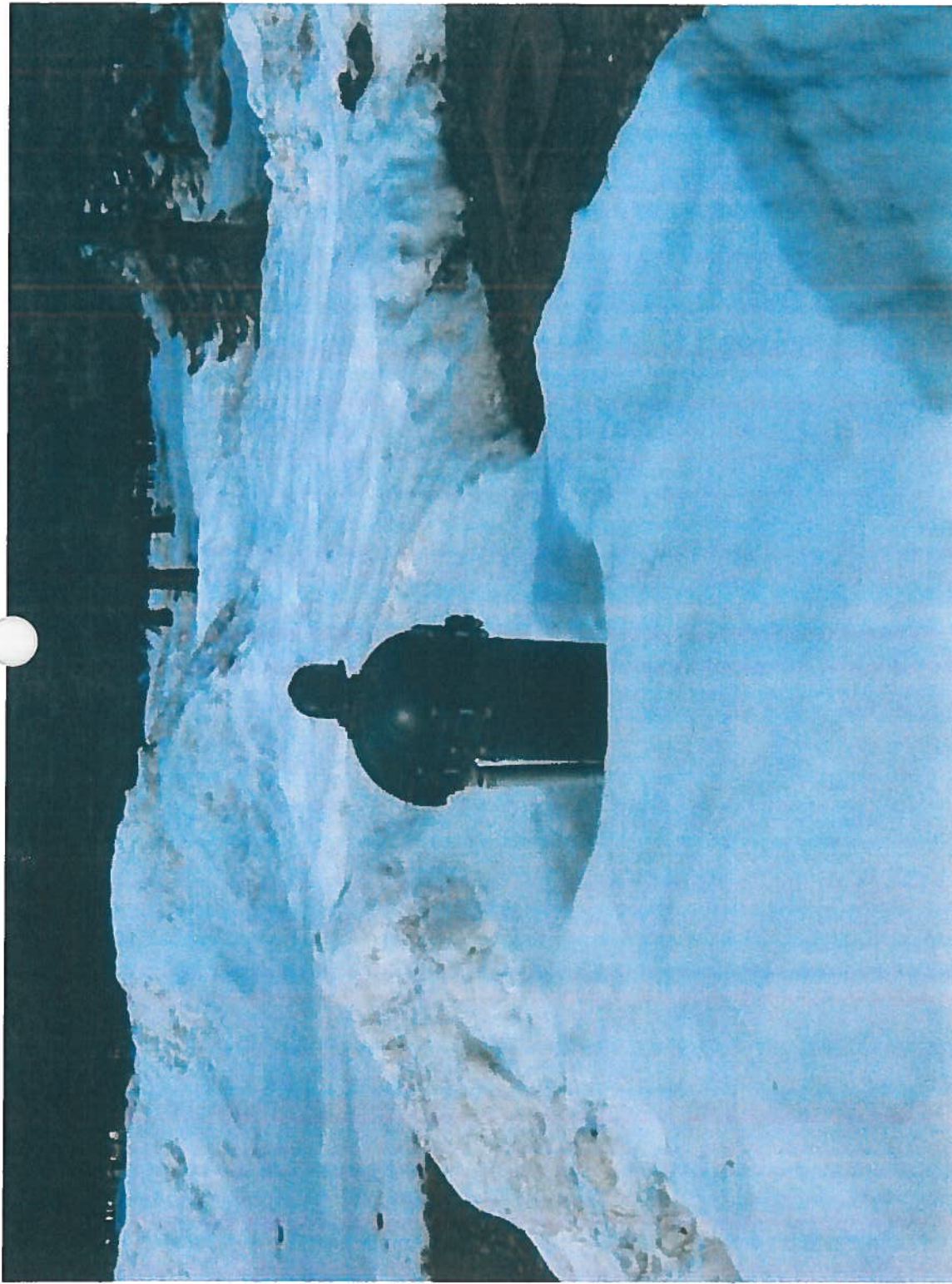
Echo Beach
EO#005192

Tree Farm 1
EO#005190



Tree Farm 1
EO#005190





Tree Farm 2
EO#005191

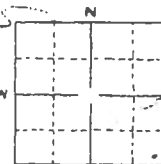
WELL DRILLER'S REPORT

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

FEB 27 1975
bip 30

Department of Water Resources

Tree Farm

1. WELL OWNER Name <u>Twin Lakes Estates</u> Address <u>Box 423 C.D.A., Idaho</u> Owner's Permit No. <u>95-7498</u>	7. WATER LEVEL Static water level <u>285</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature <u>33</u> ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																												
2. NATURE OF WORK <u>95-75-N-80</u> ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____	8. WELL TEST DATA ☐ Pump ☒ Bailor ☐ Other <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Draw Down</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td><u>- 150 +</u></td> <td><u>none</u></td> <td><u>surge 60</u></td> </tr> <tr> <td></td> <td></td> <td><u>bailed for</u></td> </tr> <tr> <td></td> <td></td> <td><u>20 hrs.</u></td> </tr> </tbody> </table>	Discharge G.P.M.	Draw Down	Hours Pumped	<u>- 150 +</u>	<u>none</u>	<u>surge 60</u>			<u>bailed for</u>			<u>20 hrs.</u>																																																																
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3. PROPOSED USE ☐ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type) _____ ☒ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Hole Diam.</th> <th colspan="2">Depth</th> <th rowspan="2">Material</th> <th colspan="2">Water</th> </tr> <tr> <th>From</th> <th>To</th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>8"</td> <td><u>48'</u></td> <td><u>48'</u></td> <td><u>1" GRAVEL</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>48'</u></td> <td><u>57'</u></td> <td><u>Bolder "blasted"</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>57'</u></td> <td><u>107'</u></td> <td><u>1" GRAVEL</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>107'</u></td> <td><u>128'</u></td> <td><u>Bolder "blasted"</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>128'</u></td> <td><u>150'</u></td> <td><u>1" GRAVEL</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>150'</u></td> <td><u>154'</u></td> <td><u>Bolder</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>154'</u></td> <td><u>207'</u></td> <td><u>1/4 To 1/2" GRAVEL</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>207'</u></td> <td><u>212'</u></td> <td><u>Bolder</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>212'</u></td> <td><u>310'</u></td> <td><u>1/4 To 1/2" GRAVEL</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td><u>HIT H2O AT 310'</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td><u>310'</u></td> <td><u>350'</u></td> <td><u>1/4 To 1/2" GRAVEL</u></td> <td></td> <td></td> </tr> </tbody> </table>	Hole Diam.	Depth		Material	Water		From	To	Yes	No	8"	<u>48'</u>	<u>48'</u>	<u>1" GRAVEL</u>				<u>48'</u>	<u>57'</u>	<u>Bolder "blasted"</u>				<u>57'</u>	<u>107'</u>	<u>1" GRAVEL</u>				<u>107'</u>	<u>128'</u>	<u>Bolder "blasted"</u>				<u>128'</u>	<u>150'</u>	<u>1" GRAVEL</u>				<u>150'</u>	<u>154'</u>	<u>Bolder</u>				<u>154'</u>	<u>207'</u>	<u>1/4 To 1/2" GRAVEL</u>				<u>207'</u>	<u>212'</u>	<u>Bolder</u>				<u>212'</u>	<u>310'</u>	<u>1/4 To 1/2" GRAVEL</u>						<u>HIT H2O AT 310'</u>				<u>310'</u>	<u>350'</u>	<u>1/4 To 1/2" GRAVEL</u>		
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5. WELL CONSTRUCTION Diameter of hole <u>8</u> inches Total depth <u>350</u> feet Casing schedule: ☒ Steel ☐ Concrete <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>3/32</u> inches</td> <td><u>8</u> inches</td> <td><u>1</u> feet</td> <td><u>350</u> feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ inches</td> <td>_____ inches</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> Was a packer or seal used? ☒ Yes ☒ No Perforated? ☒ Yes ☐ No How perforated? ☐ Factory ☒ Knife ☐ Torch Size of perforation <u>1/4</u> inches by <u>1 1/2</u> inches <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td><u>120</u> perforations</td> <td><u>331</u> feet</td> <td><u>349</u> feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> <tr> <td>_____ perforations</td> <td>_____ feet</td> <td>_____ feet</td> </tr> </tbody> </table> 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>21'</u> Material used in seal ☒ Cement grout ☐ Pudding clay ☐ Well cuttings Sealing procedure used ☐ Sherry pit ☒ Temporary surface casing ☐ Overbore to seal depth	Thickness	Diameter	From	To	<u>3/32</u> inches	<u>8</u> inches	<u>1</u> feet	<u>350</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	<u>120</u> perforations	<u>331</u> feet	<u>349</u> feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	11. DRILLERS CERTIFICATION Firm Name <u>Carmon Development</u> Firm No. <u>228</u> Address <u>St. Maries, Idaho</u> Date <u>2-19-75</u> Signed by (Firm Official) <u>John M. Carmon</u> and <u>Frank A. Martin</u> (Operator)																																								
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Kootenai</u> SE 1/4 SE 1/4 Sec. <u>17</u> T. <u>52</u> N. S. R. <u>4</u> E. <u>W</u>																																																																													

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[Press](#)
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[Sitemap](#)

Echo
Beach

024683

WELL LOG AND REPORT OF THE
STATE RECLAMATION ENGINEER OF IDAHO

ENT'D

95-64-N-3

Permit No. G-30778 Well No. _____ County Kootenai

Owner Charles T. Howard

Address Rathdrum, Idaho

Driller E.A. Holman

Address 601 S Pines, Spokane 66, Washington

Well location NE 1/4 NE 1/4 Sec. 6 T. 52 N. R. 4 E. W. Lot 1

Size of drilled hole 8"

Locate well in section

NW 1/4	NE 1/4
SW 1/4	SE 1/4

Total depth of well 355'

Give depth to standing water from the ground 322' Water temp. _____ °Fahr.

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

Size of pump and motor used to make test _____

Length of time of test _____ 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 _____ Weight of casing per lineal foot _____

Thickness of casing _____ Casing material _____

(STEEL, CONCRETE, WOOD, ETC.)

Diameter, length and location of casing _____

(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.

Number and size of perforations _____ located 339' feet to 351' feet from ground

Date of commencement of well _____ Date of completion of well _____

S. 4 52 N 4 W

W.S.S.

WELL LOG

[illegible]

WELL DRILLER'S STATEMENT

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

Signed /s/ E. A. Holman

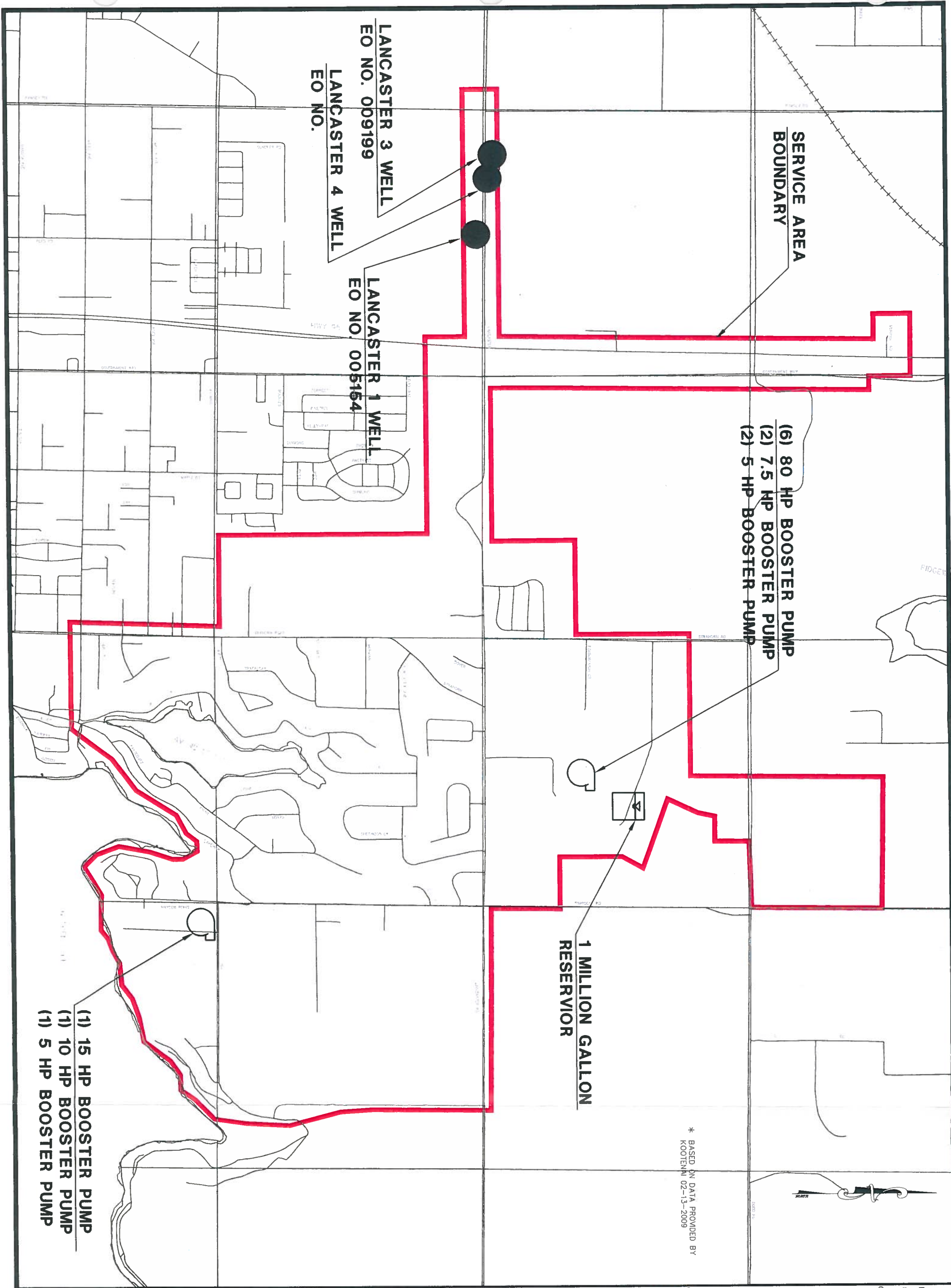
By _____

Dated _____ 19__

License No. 105

024684

RIMROCK



* BASED ON DATA PROVIDED BY
KOOTENAI 02-13-2009

NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

RIMROCK
PWS NO. 1280009

WELCH-COMER
ENGINEERS | SURVEYORS

www.welchcomer.com
350 E. Kathleen Ave.
Coeur d'Alene, ID 83815

208-664-9382
(toll free) 877-815-5672
(fax) 208-664-5946

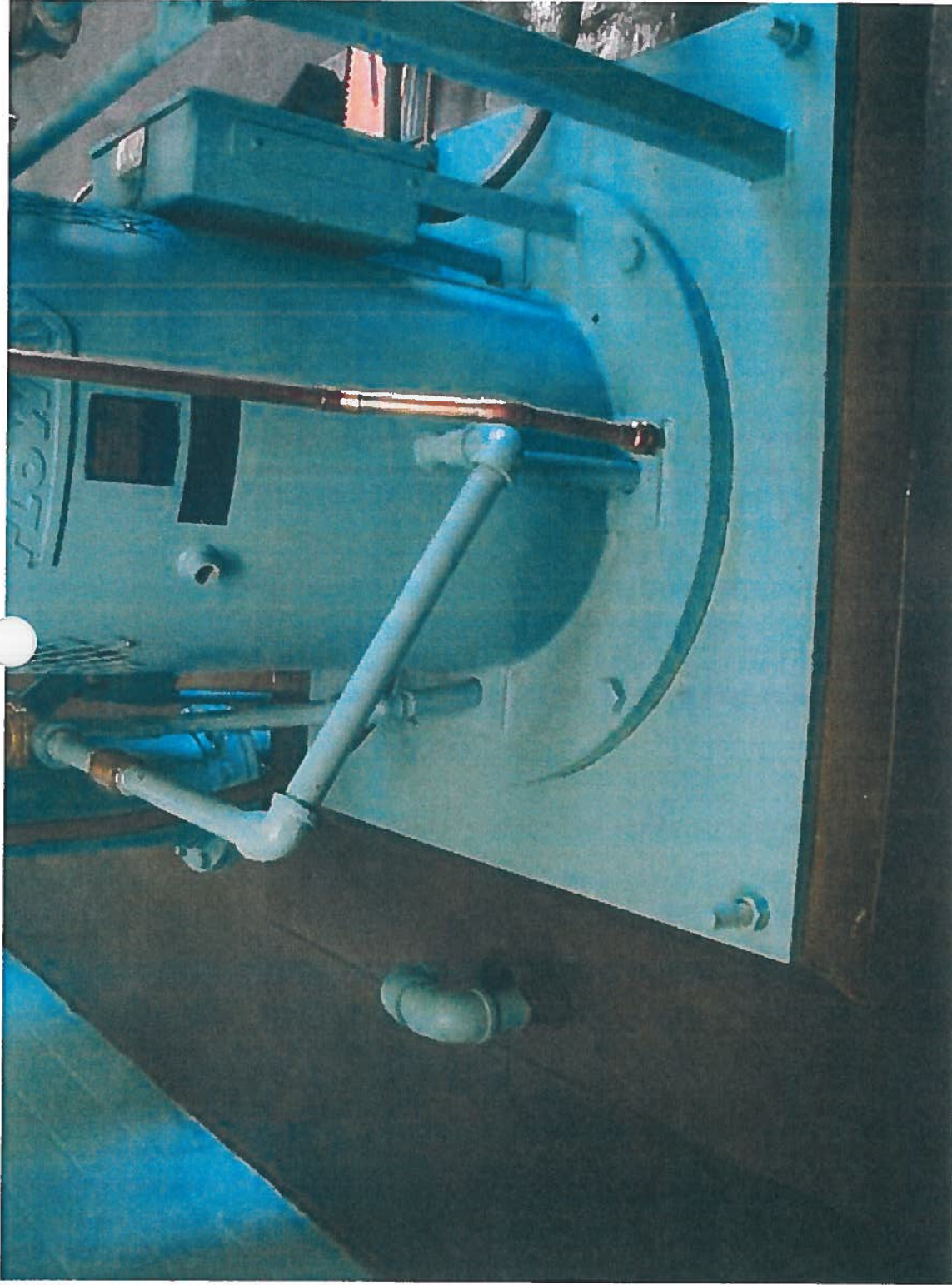
NO.	DATE	REVISION DESCRIPTION	BY

PROJECT NO.: 11228
DESIGNED BY: KJC
DRAWN BY: SDS/JLG
CHECKED BY: SDS/JLG
DWG NAME: 11228DS28.dwg
DATE: 06-20-11
SHEET NO.: 1

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Lancaster 1
EO#005154



Lancaster Well 3
EO#009199



Lancaster 4

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

RECEIVED

Office Use Only

Inspected by

Twp

Rge

Sec

1/4

1/4

1/4

Long:

WELL TAG NO. D 0022244

Drilling Permit No. 7-76578

Other IDWR No. W44 TD 348420 Water Right 95-8639

2. OWNER:

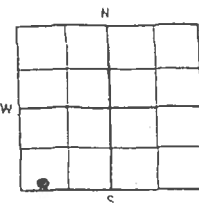
Name North Kootenai Water Dist

Address 1841 West Hayden Ave

City Hayden State Id. Zip

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.


 Twp. 51 N North ☐ or South ☐
 Rge. 4 W East ☐ or West ☐
 Sec. B SE 1/4 SW 1/4 SW 1/4
 Gov't Lot County Kootenai
 Lat. Long.

 Address of Well Site Ramsey Rd and
 Lancaster City Hayden

L.I. 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

DRILL METHOD

☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
Cement + Bentonite	0	60	84 sks		fill bottom up

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 400'Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16"	+2	348	325	mild steel	☒	☐	☒	☐

Length of Headpipe 5' Length of Tailpipe 10'

9. PERFORATIONS/SCREENS

Perforations Method

Screens 304 stainless Screen Type Johnson V-wire

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
348	363	125		14"	stainless	☐	☐
363	368	100		14"	stainless	☐	☐
368	373	40		14"	stainless	☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

315 ft. below ground Artesian pressure 0 lb.

Depth flow encountered 318 ft. Describe access port or control devices: plate welded on top with port

11. WELL TESTS:

☐ Pump☐ Air☐ Flowing Artesian

Yield gal./min	Drawdown	Pumping Level	Time
No test pump was done by Holt			

Water Temp. N/A Bottom hole temp.

Water Quality test or comments N/A Manganese appeared

with bailer sample Depth first Water Encounter 318

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

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
20	0	60	sand-gravel cobbles		X
16	60	74	sand-gravel cobbles		X
16	74	124	tight silty sand-gravel		X
16	124	148	Loose sand-gravels		X
16	148	155	tight silty sand-gravel		X
16	155	190	Loose sand + gravel		X
16	190	262	sand-gravel-cobbles-silt		X
16	262	293	Loose sand-gravel cobbles		X
16	293	308	tight silty sand-gravel cobbles		X
16	308	318	Coarse silty sand		X
16	318	375	Loose sand-gravel (water)	X	
16	375	378	fine sand	X	
16	378	400	gray sandy silt seams of water	X	

16" casing

K-packer at 343
Top of screen 348

Bottom of screen 373

Bottom of tail pipe 383

Completed Depth 383 (Measurable)

Date: Started 4/26/02 Completed 6/5/02

13. DRILLER'S CERTIFICATION

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

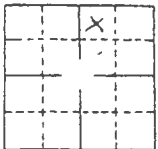
Company Name Holt Drilling Inc Firm No. 596

Firm Official Randy Holt Date 6/10/02

and Driller or Operator Wade Iverson Date 6/10/02

(Sign once if Firm Official & Operator)

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUSE TYPEWRITER OR
BALLPOINT PENState 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>Hayden Pines Water Co</u> Address <u>P.O. Box 992 Hayden Rd</u> Owner's Permit No. <u>95-90-N-17</u>		7. WATER LEVEL Static water level <u>325</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 _____ °F. Quality _____ 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"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>45</u></td><td><u>325</u></td><td><u>48 +</u></td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>		Discharge G.P.M.	Pumping Level	Hours Pumped	<u>45</u>	<u>325</u>	<u>48 +</u>																																																																												
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5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>1.50</u> inches</td><td><u>10</u> inches</td><td><u>1</u> feet</td><td><u>364</u> feet</td></tr><tr><td><u>1.365</u> inches</td><td><u>10</u> inches</td><td><u>364</u> feet</td><td><u>384</u> feet</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 <u>Johnson</u> Type <u>S/S</u> Model No. _____ Diameter <u>10</u> " Slot size <u>70</u> Set from <u>384</u> feet to <u>404</u> feet Diameter <u>8</u> Slot size <u>0</u> Set from <u>404</u> feet to <u>408</u> 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 ☐ Puddling 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 _____		Thickness	Diameter	From	To	<u>1.50</u> inches	<u>10</u> inches	<u>1</u> feet	<u>364</u> feet	<u>1.365</u> inches	<u>10</u> inches	<u>364</u> feet	<u>384</u> feet									11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>H2O Well Service</u> Firm No. <u>448</u> Address <u>Hayden Idaho</u> Date <u>6-12-90</u> Signed by (Firm Official) <u>John Johnson</u> and (Operator) <u>Paul Pitts</u>																																																															
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USE TYPEWRITER OR
BALLPOINT PEN

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

0.1N3

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 HAYDEN PINES WATER CO.
Address 8601 N. HAYDEN PINES WAY
HAYDEN LAKE IDAHO 83835
Owner's Permit No. 95-80-N-29

7. WATER LEVEL

Static water level 335 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature 48 °F. Quality GOOD
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe method of abandoning)

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other NO TEST

Discharge G.P.M.	Drawdown	Hours Pumped

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)
☒ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal
or Injection

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
20	0	20	GRAVEL 2" MIN.		X
16	20	26	BOULDERS		X
16	26	60	GRAVEL 6" MINUS		X
16	60	64	BOULDER		X
16	64	68	GRAVEL 3" MINUS		X
16	68	71	BOULDER		X
16	71	79	GRAVEL 2" MINUS		X
16	79	82	BOULDER		X
16	82	122	GRAVEL 6" MINUS		X
16	122	297	GRAVEL + SAND 3" MINUS		X
16	297	345	SAND + FEA GRAVEL 1" MIN		X
16	345	352	" " " " " "		X
16	352	360	COARSE SAND		X
16	360	363	BOULDER		X
16	363	377	PER GRAVEL + SAND 1" MIN		X
16	377	408	COARSE SAND + FEA GRAVEL		X
			TRACE OF CLAY		

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 16 inches Total depth 408 feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>.375</u> inches	<u>16</u> inches	<u>2</u> feet	<u>408</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

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 1/8 inches by 4 inches

Number	From	To
<u>960</u> perforations	<u>377</u> feet	<u>408</u> feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No

Manufacturer's name JOHNSON

Type STAINLESS Model No. STD.

Diameter 16 Slot size 1/25 Set from 376 feet to 408 feet

Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____

Placed from _____ feet to _____ feet

Surface seal depth 20 ft Material used in seal: ☒ Cement grout

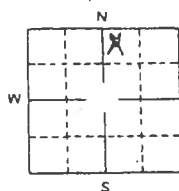
☐ Puddling clay ☐ Well cuttings

Sealing procedure used: ☐ Slurry pit ☒ Temporary surface

☐ casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County KOOTENAI

N 41 1/4 NE 1/4 Sec. 11 T. 51 N. R. 4 E. W

10.

Work started JAN 28-84 finished JUNE 20-80

11. DRILLERS CERTIFICATION

Firm Name HOLMAN DRILLING Comp Firm No. 108

Address E 3410 9TH AVE Date 7-15-80

SPOKANE WA 99202

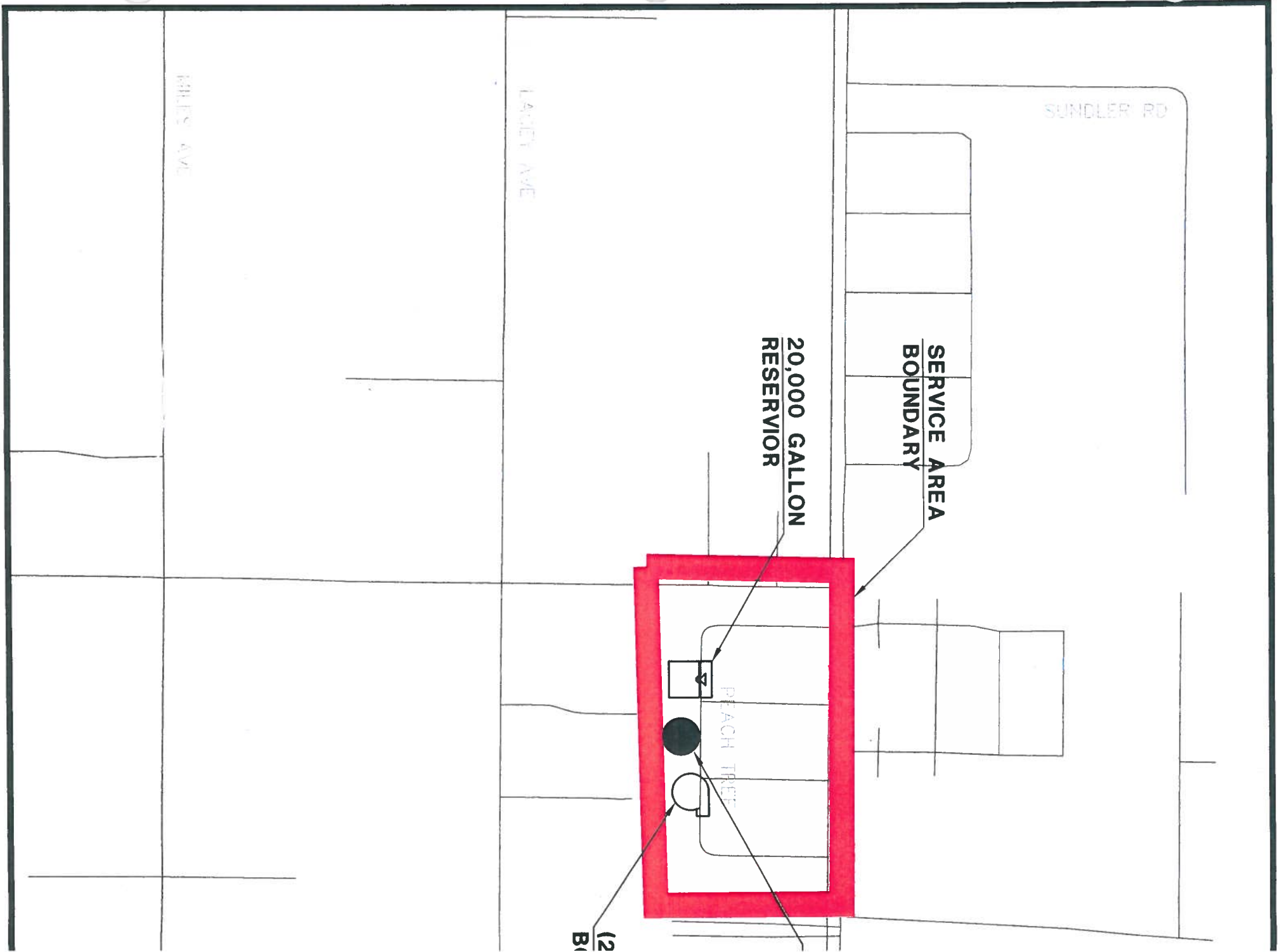
Signed by (Firm Official) Arnold Holman

and _____ PRES.

(Operator) Arnold Holman

Supervisor/Operator: Larry Cannon Date: 3-10-2010

HAYDEN ORCHARDS





Hayden Orchards
EO#005171

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

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.

ENTD

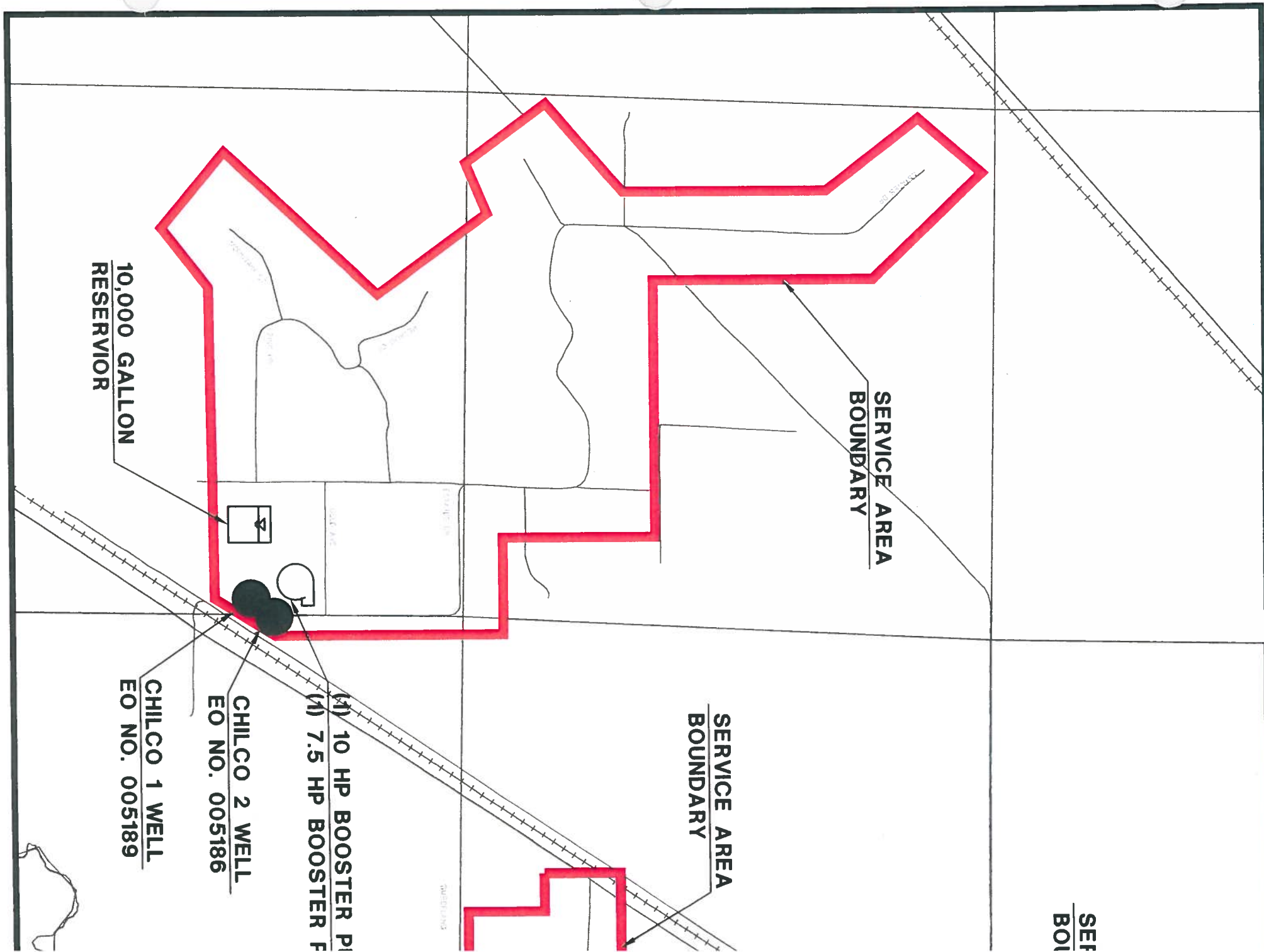
Hayden
Orchards

1. WELL OWNER Name <u>Hayden Pine's Water Co</u> Address <u>Hayden Lake, Idaho</u> Owner's Permit No. <u>95-77-N-77</u>		7. WATER LEVEL Static water level <u>305</u> feet below land surface Flowing? ☒ Yes ☐ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																																																																																															
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5. WELL CONSTRUCTION Diameter of hole <u>8</u> inches Total depth <u>380</u> feet Casing schedule: ☒ Steel ☐ Concrete Thickness _____ Diameter _____ From _____ To _____ <u>250</u> inches <u>8</u> inches + <u>2</u> feet <u>370</u> feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet 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 <u>UOP Johnson</u> Type <u>Stainless Steel</u> Model No. <u>304</u> Diameter <u>7 1/2</u> Slot size <u>40</u> Set from <u>370</u> feet to <u>372</u> feet Diameter <u>7 1/4</u> Slot size <u>120</u> Set from <u>372</u> feet to <u>380</u> feet Gravel packed? ☐ Yes ☒ No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>100</u> Material used in app: ☒ Cement grout ☐ Puddling clay ☐ Well cuttings Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing ☐ Overlays to seal depth		11. DRILLERS CERTIFICATION Firm Name <u>E.H. Holman Drilling Co</u> Firm No. <u>105</u> Address <u>101 S. Pine St</u> Date <u>7/7/77</u> Signed by (Firm Official) <u>[Signature]</u> and <u>[Signature]</u> (Operator) <u>Al Butler</u>																																																																																																																																															
6. LOCATION OF WELL Sketch map location must agree with written location. <u>95</u> <table border="1"><tr><td>N</td><td></td><td></td><td></td><td></td></tr><tr><td>W</td><td></td><td></td><td>X</td><td>E</td></tr><tr><td>S</td><td></td><td></td><td></td><td></td></tr></table> Subdivision Name <u>Hayden Orchards</u> Lot No. <u>9 & 10</u> Block No. <u>1</u> County <u>Kootenai</u> <u>NE 1/4 Sec. 14 T. 51 N. R. 4 E/W</u>		N					W			X	E	S																																																																																																																																					
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USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

CHILCO





Chilco 1: EO#005189 (Near)

&

Chilco 2: EO#005186 (Far)



Chilco 1
EO#005189

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter
or
Ball Point Pen

95-94-N-0257-000

1. DRILLING PERMIT NO. 95 - 9A - N - 0257 - 000
Other IDWR No. 95-07827

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
100+			4 HRS

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

2. OWNER:

Name HAYDEN PINES WATER CO
Address PO BOX 992
City HAYDEN State ID Zip 83835

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

Twp. 52 North ☐ or South ☐
 Rge. 03 East ☐ or West ☒
 Sec. 07 SE 1/4 SE 1/4 NE 1/4
 Gov't Lot _____ County KOOTENAI

Address of Well Site ACROSS STREET FROM

21800 ESTATES DR City ATHOL
(Give at least name of road + distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name CHILCO ESTATES

4. PROPOSED USE:

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

5. TYPE OF WORK

☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

2. DRILL METHOD

☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
CEMENT	0	80	300 LBS	SLURRY

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
12	+2	147	.250	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method SAW CUT
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
130	145	1/16	160	12	STEEL	☐	☐
						☐	☐
						☐	☐

STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

FORWARD WHITE COPY TO WATER RESOURCES

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
14	0	1	TOPSOIL BROWN SOFT		X
14	1	10	LARGE COBBLES W/CLAY TAN SOFT		X
14	10	14	GRAVEL W/COBBLE BROWN SOFT		X
14	14	18	LARGE COBBLES W/LITTLE GRAVELS TAN MED.		X
12	18	20	BOULDER DARK MED. HARD		X
12	20	40	LARGE GRAVELS W/COBBLE TAN SOFT		X
12	40	68	GRAVEL CEMENT GRAYISH MED.		X
12	68	102	GRAVEL W/SAND TAN MED. SOFT	X	
12	102	128	GRAVEL W/CLAY LENSES GRAYISH MED SOFT	X	
12	128	145	PEA GRAVEL BROWN MED. SOFT	X	
12	145	147	CEMENT GRAVEL TAN SOFT	X	

1x12" Welded on cap

RECEIVED

DEC 19 1994

NORTH CAROLINA
LOWE

Completed Depth 147 (Measurable)
Date: Started 11/26/94 Completed 11/29/94

13. DRILLER'S CERTIFICATION

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

Firm Name H2O WELL SERVICE, INC. Firm No. 449

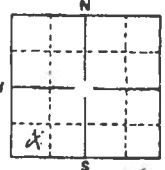
Firm Official [Signature] Date 12/14/94

and Supervisor or Operator [Signature] Date 12/14/94

(Sign once if Firm Official & Operator)

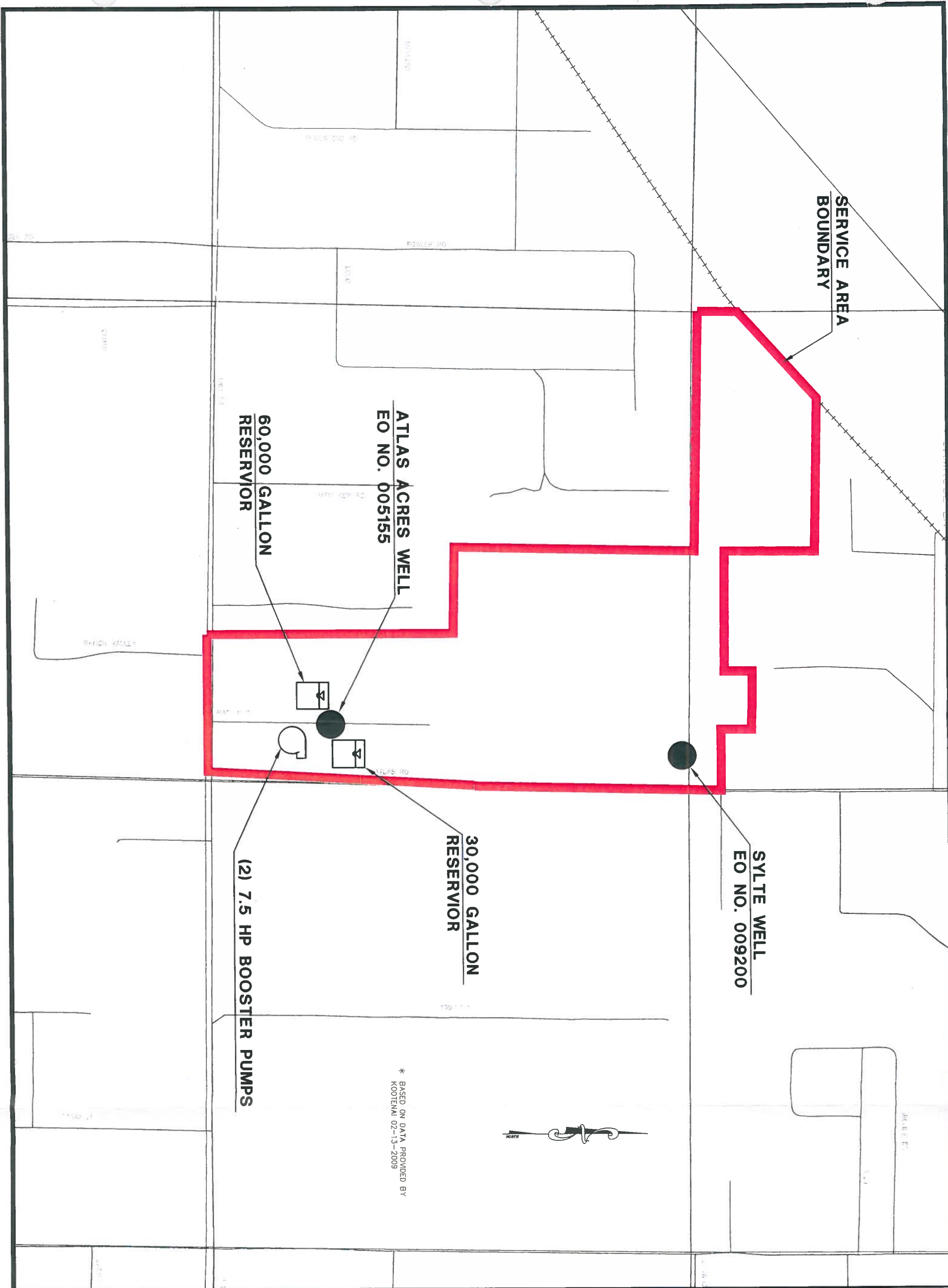
WELL DRILLER'S REPORT

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>Charles A Ford</u> Address <u>Hayden Lake Idaho</u> Owner's Permit No. <u>95-78-N-31</u>		7. WATER LEVEL Static water level <u>75</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																																			
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning)		8. WELL TEST DATA ☐ Pump ☒ Bailer ☐ Other Discharge G.P.M. <u>100</u> Draw Down <u>0</u> Hours Pumped <u>4</u>																																																																																			
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A parcel of land in Lots 7 and 8 of the plat of Hayden Haven, in Section 10, Township 51 North, Range 3 West, Boise Meridian, Kootenai County, Idaho, more particularly described as follows: Commencing at the Northeast corner of Lot seven of the above mentioned plat; thence S. $21^{\circ}14'$ W. a distance of 307.70 feet to the True Point of Beginning; thence S. $21^{\circ}14'$ W. along the East line of said lot seven a distance of 97.00 feet to the shoreline of Hayden Lake; thence along the shorelands of Hayden Lake, N. $61^{\circ}13'58''$ W. a distance of 100.85 feet, more or less, to a point on the west line of said lot seven; thence along the shorelands of Hayden Lake N. $89^{\circ}02'09''$ W. a distance of 80.11 feet, more or less, to a point on the west line of said lot eight; thence along the west line of said lot eight N. $21^{\circ}14'$ E. a distance of 111.58 feet; thence S. $68^{\circ}46'$ E. a distance of 175.12 feet to the Point of Beginning.

ATLAS ACRES



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NO.	DATE	REVISION DESCRIPTION	BY

NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

ATLAS ACRES
PWS NO. 1280005

PROJECT NO.: 11228
DESIGNED BY: KJO
DRAWN BY: SDS/JLG
CHECKED BY:
DWG NAME: 11228DS28.dwg
DATE: 04-11-11
SHEET NO:



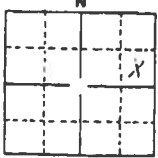
Atlas Acres
EO#005155

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

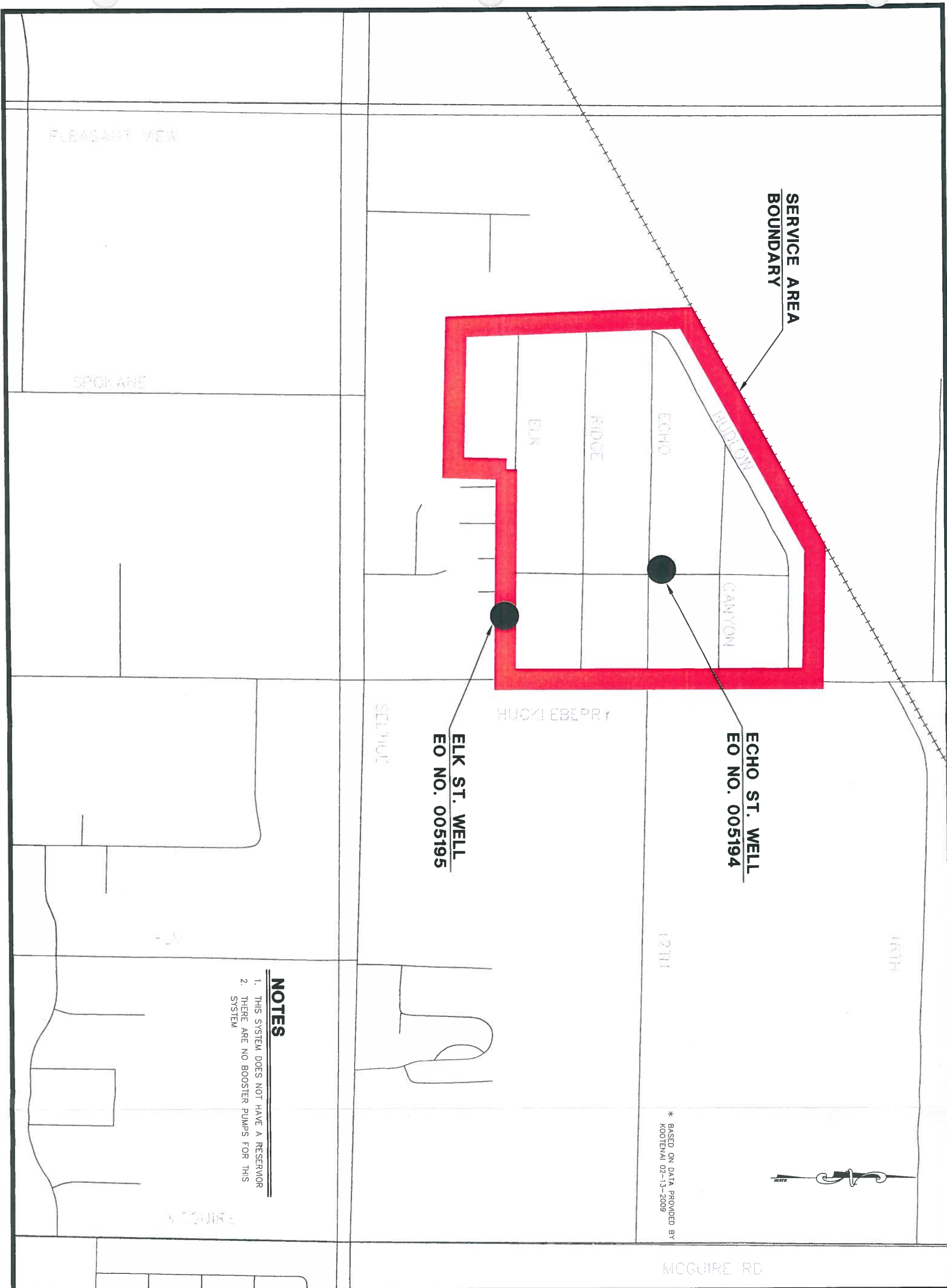
State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>Rene A. Saville & Son R. Bee. EE.</u> Address <u>103 - Shoshone Ave. CDTA, Ida.</u> Owner's Permit No. <u>95-28-N-46</u>		7. WATER LEVEL Static water level <u>25.3</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																																																																																			
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5. WELL CONSTRUCTION Diameter of hole <u>8</u> inches Total depth <u>308</u> feet Casing schedule: ☒ Steel ☐ Concrete Thickness Diameter From To <u>250</u> inches <u>3</u> inches <u>2</u> feet <u>308</u> feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet 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 <u>3/8</u> inches by <u>1 1/4</u> inches Number From To <u>175</u> perforations <u>389</u> feet <u>306</u> 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>100</u> Material used in seal ☐ Cement grout ☒ Puddling clay ☐ Well cuttings Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing ☐ Overbore to seal depth		11. DRILLER'S CERTIFICATION Firm Name <u>E.H. Holman Drilling Co.</u> Firm No. <u>105</u> Address <u>401 S. Pine St. Boise, Idaho 83721</u> Signed by (Firm Official) <u>[Signature]</u> and (Operator) <u>[Signature]</u>																																																																																																																																			
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Kootenai</u> <u>SE 1/4 Sec. 28, T. 52, N. 4, R. 4, E. 1W</u>																																																																																																																																					

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

MOUNTAIN VIEW



NOTES

1. THIS SYSTEM DOES NOT HAVE A RESERVOIR
2. THERE ARE NO BOOSTER PUMPS FOR THIS SYSTEM

* BASED ON DATA PROVIDED BY
KOOTENAI 02-13-2009



NORTH

MCGUIRE RD

PROJECT NO.: 11228
DESIGNED BY: KJO
DRAWN BY: SDS/JLG
CHECKED BY:
DWG NAME: 11228DS28.dwg
DATE: 04-11-11
SHEET NO:

NORTH KOOTENAI WATER DISTRICT
WATER RIGHT EXAMINATION
PERMIT NO. 95-9244, 95-12599
AND 95-10019

MOUNTAIN VIEW TERRACE
PWS NO. 1280123

WELCH-COMER
ENGINEERS | SURVEYORS

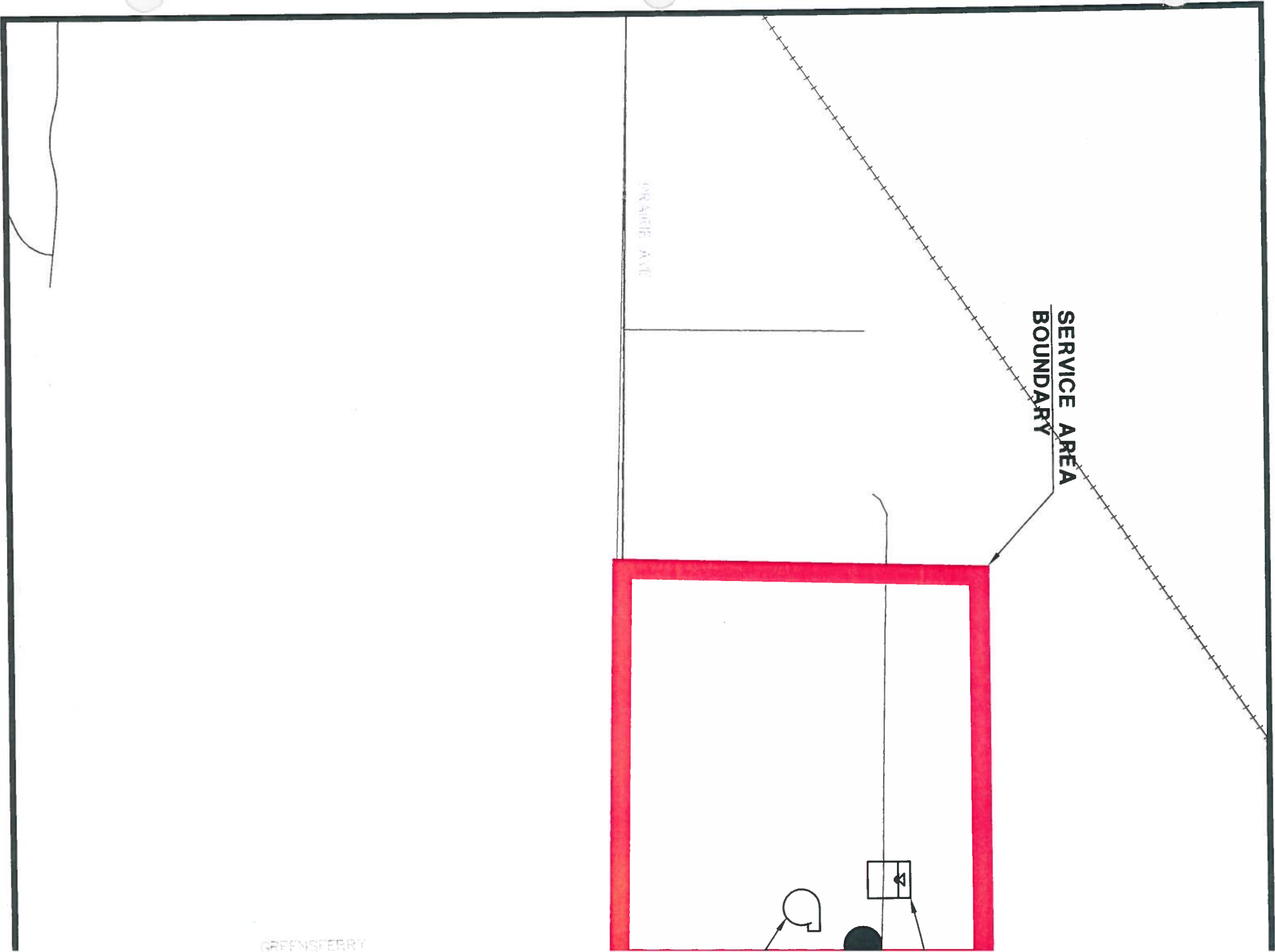
www.welchcomer.com
350 E. Kathleen Ave.
Coeur d'Alene, ID 83815

208-664-9382
(toll free) 877-815-5672
(fax) 208-664-5946

[illegible]

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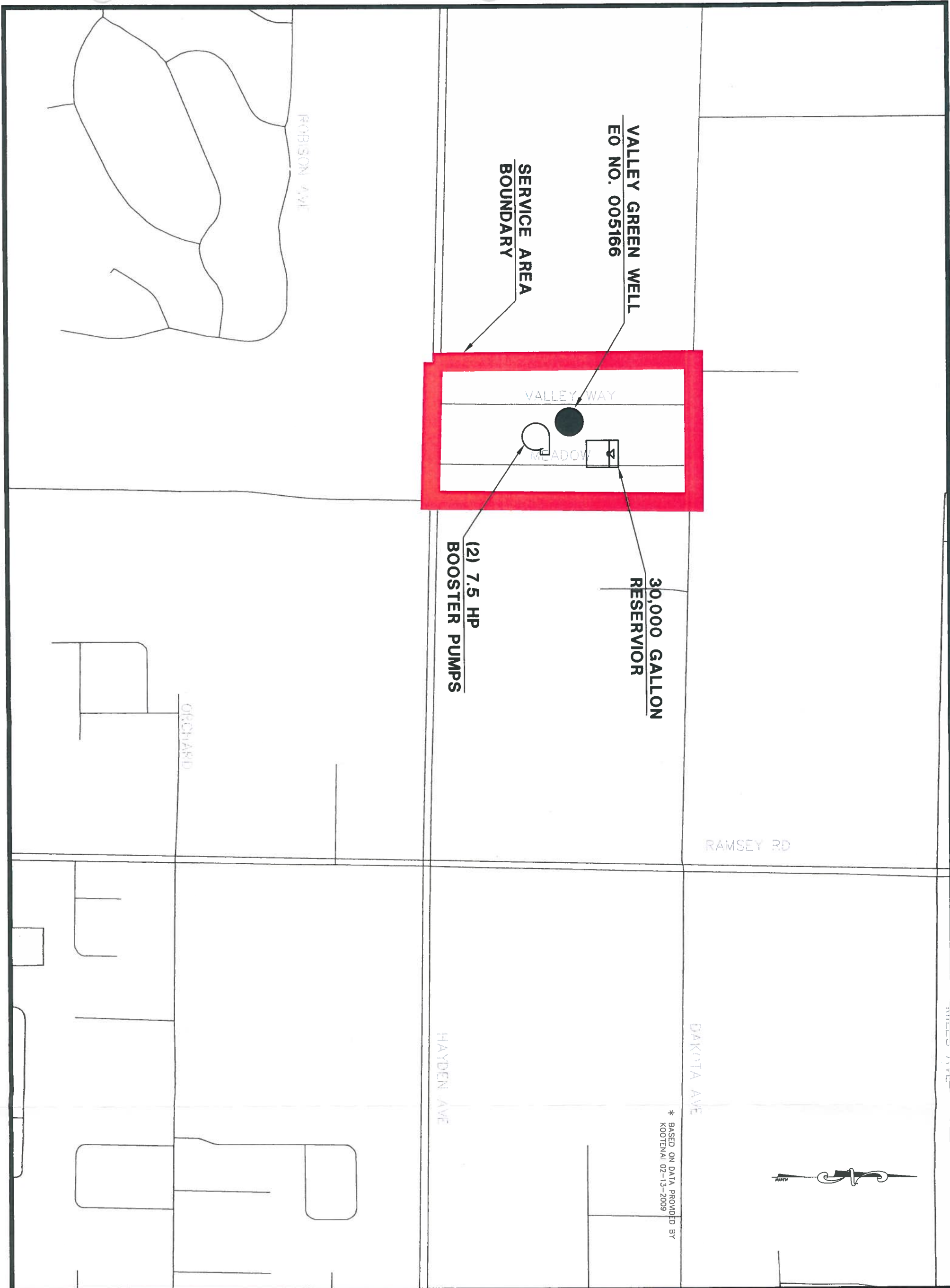
MEADOWLAND ACRES





Meadowland Acres
EO#009114

VALLEY GREEN



PROJECT NO.: 11228
DESIGNED BY: KJO
DRAWN BY: SDS/JLG
CHECKED BY:
DWG NAME: 11228DS28.dwg
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AND 95-10019
VALLEY GREEN
PWS NO. 1280195

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NO.	DATE	REVISION DESCRIPTION	BY

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USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Resources

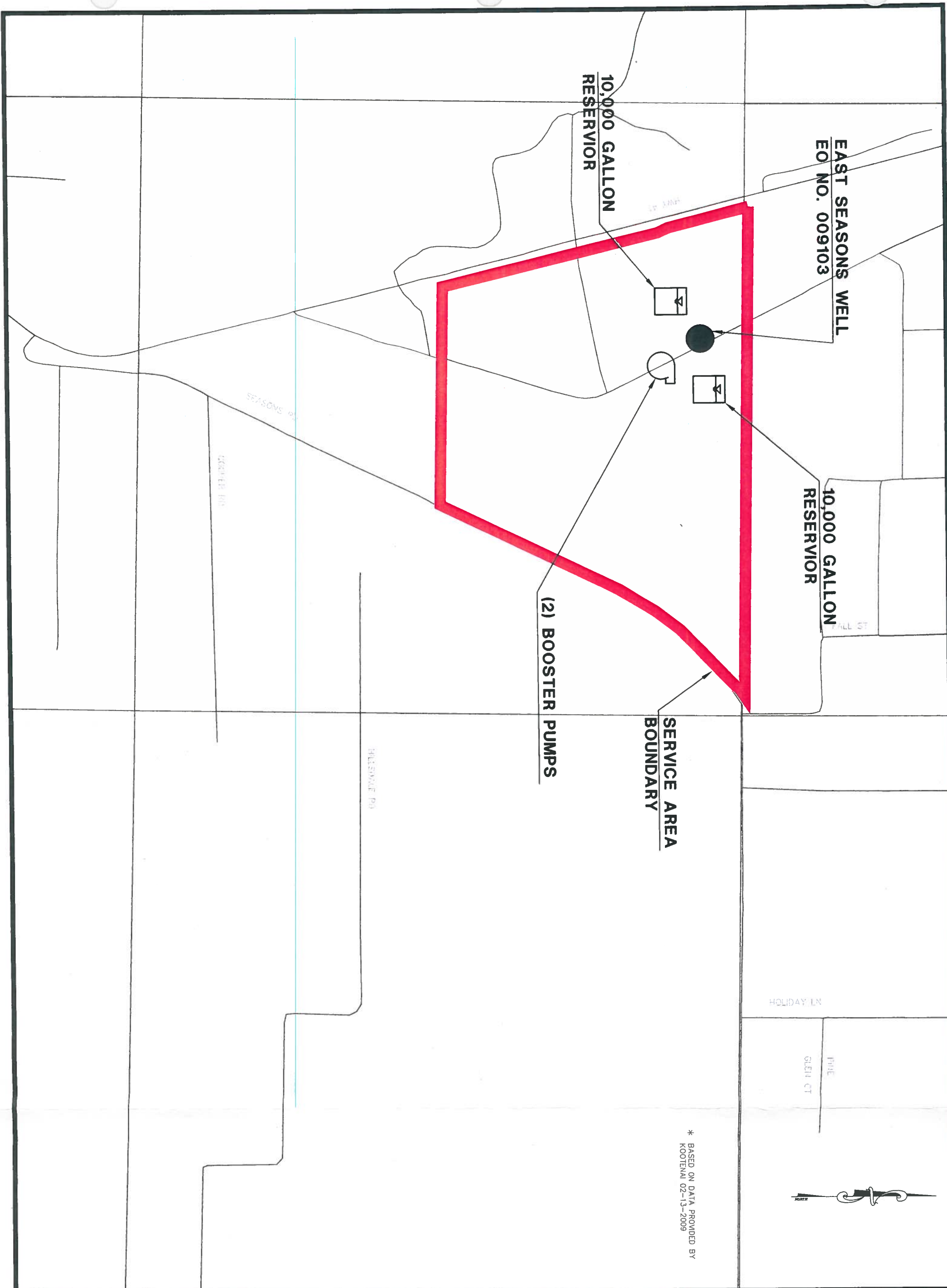
WELL DRILLER'S REPORT

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.

POSTED

1. WELL OWNER Name <u>ERORALL REALTY, INC.</u> Address <u>HIWAY 95N COEUR D'ALENE 10A</u> Owner's Permit No. <u>95-77-N-157</u>		7. WATER LEVEL Static water level <u>299</u> feet below land surface Flowing? ☐ Yes ☐ No G.P.M. flow _____ Temperature _____ ° F. Quality _____ Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																																																																							
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning)		8. WELL TEST DATA ☐ Pump ☒ Bailer ☒ Other <u>AIR</u> <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Draw Down</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>100</u></td><td><u>0</u></td><td><u>7</u></td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>		Discharge G.P.M.	Draw Down	Hours Pumped	<u>100</u>	<u>0</u>	<u>7</u>																																																																																																																
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5. WELL CONSTRUCTION Diameter of hole <u>8</u> inches Total depth <u>390</u> feet Casing schedule ☒ Steel ☐ Concrete <table border="1"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>.350</u> inches</td><td><u>8</u> inches</td><td><u>1 1/2</u> feet</td><td><u>390</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><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 <table border="1"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table> Well screen installed? ☒ Yes ☐ No Manufacturer's name <u>JOHN JON</u> Type <u>8" X 15' TELESCOPIC</u> Model No. _____ Diameter <u>8"</u> Slot size <u>.30</u> Set from <u>375</u> feet to <u>390</u> 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 ☐ Pudding clay ☒ Well cuttings Sealing procedure used ☐ Slurry pit ☒ Temporary surface casing ☒ Overbore to seal depth		Thickness	Diameter	From	To	<u>.350</u> inches	<u>8</u> inches	<u>1 1/2</u> feet	<u>390</u> feet																	Number	From	To																																																																																													
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EAST SEASONS ACRES



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PWS NO. 1280278

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East Seasons Acres
EO#009103



Sylte
EO#009200

Sylte Well (Atlas Acres System)

Form 238-7
6/02

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:		

WELL TAG NO. D 0028350
ILLING PERMIT NO. 803795
Water Right or Injection Well No. 95-9129 **RECEIVED**
JUN 11 2003

2. OWNER:

Name Sylte Development LLC
Address 8626 W Sylte Rd
City Rathdrum State ID Zip 83858

3. LOCATION OF WELL by legal description:

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

Twp. 52 North ☒ or South ☐
Rge. 4 East ☐ or West ☒
Sec. 28 1/4 NE 1/4 NE 1/4
Gov't Lot 10 acres County Kootenai 160 acres

Lat: 44° 15' N Long: 114° 15' W
Address of Well Site 1/2 mile north on Atlas off Hwy 53
City Rathdrum

Lt. 1 Blk. 1 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	55	1,600 lbs	surface pipe

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 327

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8	+1 1/2	327	322	steel	☒	☐	☒	☐

Length of Headpipe Length of Tailpipe

Packer ☒ Y ☐ N Type K-packer

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method

Screen Type & Method of Installation telescoping

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
328	338	50		7	stainless	☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

230 ft. below ground

Artesian pressure lb.

Depth flow encountered ft. Describe access port or control devices: cap

52N 4W 28

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50+		320	2hr

Water Temp. cold

Bottom hole temp.

Water Quality test or comments: clear

Depth first Water Encounter 230

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
120	35		silty sand&gravel		
35	50		clean sand&gravel		
8	50	158	clean sand&gravel		
158	216		silty sand&gravel		
216	246		blue clay	x	
246	248		brown silty sand&gravel	x	
248	286		blue silty sand&blue clay	x	
286	340		sand&gravel	x	

Completed Depth 338 1/2

(Measurable)

Date: Started 5-27-03

Completed 6-3-03

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 Bronson Water Wells Firm No. 360

Principal Driller Clint Bronson Date 6/9/03

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

RANCH VALLEY



- NOTES**
1. THIS SYSTEM DOES NOT HAVE A RESERVOIR
 2. THERE ARE NO BOOSTER PUMPS FOR THIS SYSTEM

* BASED ON DATA PROVIDED BY KOOTENAI 02-13-2009



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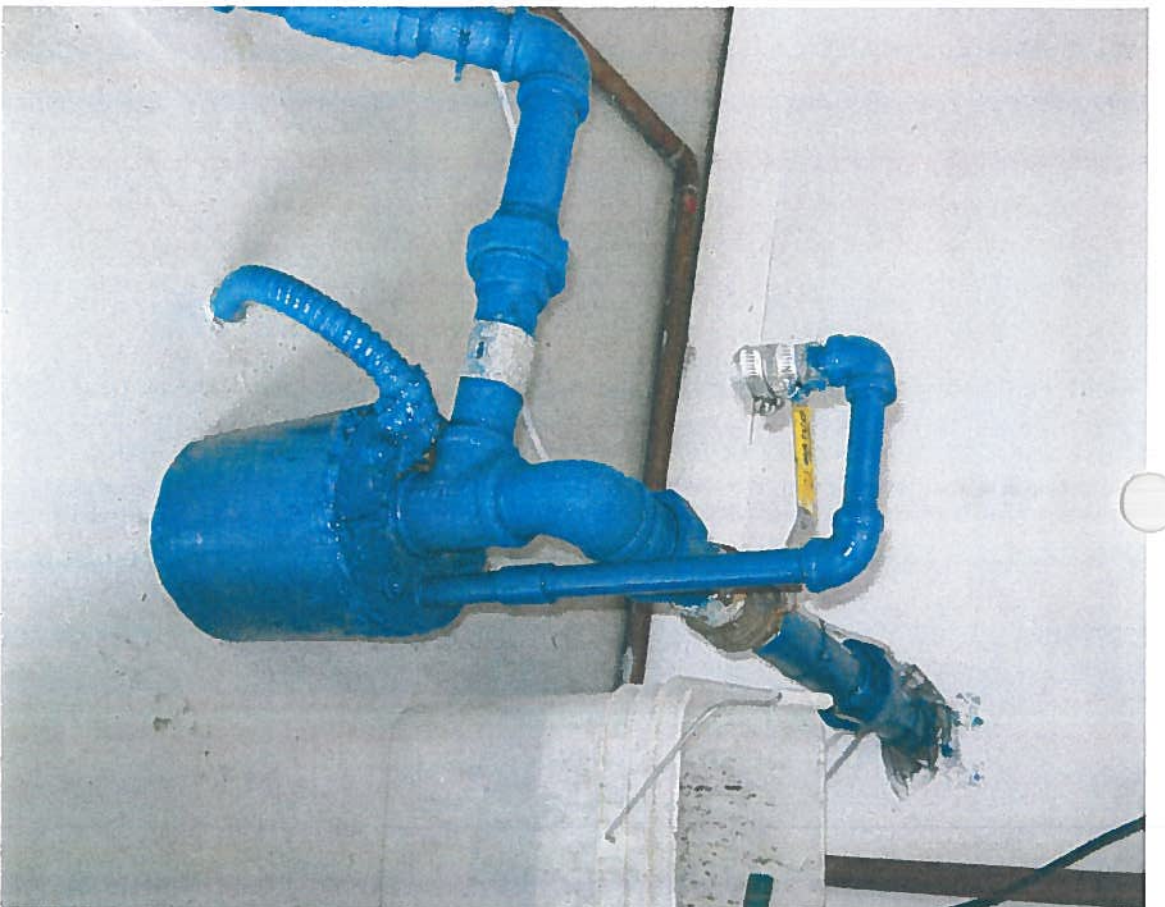
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Ranch Valley
EO#009217