

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-18042
Exam Date: 11/24/2020

1. Current Owner:
KOOTENAI COUNTY SOLID WASTE 3650 N RAMSEY RD COEUR D ALENE ID 83815
2. Accompanied by: Laureen Chaffin and John Phillips
Phone No: 208-446-1430
Address: Same as above
Relationship to permit Holder: Permit holder's representatives

3. **SOURCE:**
GROUND WATER

Method of Determination: Arcmap and DRG.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
95-15434	RUNOFF	INDUSTRIAL STORAGE, INDUSTRIAL FROM STORAGE, and FIRE PROTECTION STORAGE	PERMIT IN PROCESS FOR LICENSING
95-18045	GROUNDWATER	INDUSTRIAL, FIRE PROTECTION	PERMIT IN PROCESS FOR LICENSE

Comments: Right 95-15434 is the permit from which 95-18042 and 95-18045 was split from; 95-15434 uses runoff water captured in ponds not associated with this right's ponds for irrigation storage & from storage use, and fire protection storage use that overlaps this water right. Right 95-15434 is not a concern for overlap with this right, as the 5 ponds associated with 95-15434 are a separate water system than the industrial use designated under this right. Right 95-18045 uses groundwater from a well to provide water for industrial and fire protection beneficial uses that overlap this right. The Kootenai County Solid Waste facility has a separate storage reservoir for fire protection purposes along with multiple sedimentation ponds, and any additional water needs to fight an active fire is considered an exempt use, thus do not constitute an overlap concern between the two rights.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NW¼ SE¼, Sec. 1, Twp 48N, Rge 05W, B.M. KOOTENAI County
GROUND WATER NW¼ SE¼, Sec. 1, Twp 48N, Rge 05W, B.M. KOOTENAI County

Method of Determination: GPS; well D0022522 is located at -116°55.556, 47°32.024, and well 95-87-N-52 is located at -116°55.542, 47°31.993.

PLACE OF USE: FIRE PROTECTION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	05W	1		X L2	X		X L3	X L4	X	X	X	X	X	X		X			
48N	05W	2													X			X	
48N	05W	11	X L1																
48N	05W	12					X L3	X L4											

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	05W	1			4.2						1.3			0.8		2.7			9.0

Total Acres: 9.0

Method of Determination: Field exam and Arcmap aerial imagery.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be

X 1:24,000 or greater.X Aerial Photo Attached (required for irrigation of 10+ acres).X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0022522		1			
95-87-N-52		1			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: Unable to perform flow measurement because system piping pumped directly into storage tank and pressure tanks without access to perform a measurement.

E. FLOW CALCULATIONSX Additional Computation Sheets Attached

Measured Method: Two theoretical pumping equations were computed, and determine the combined flow from the two wells as follows:

- Well 95-87-N-52 = 5.9 gpm with the 1hp pump estimated to be at a depth of 435 ft, and system operating at of 45 psi.
- Well D0022522 = 5.8 gpm with the 1 hp pump estimated to be at a depth of 445 ft, and system operating at 45 psi.
- Total diversion rate = 5.9 gpm + 5.8 gpm = 11.7 gpm = **0.03 cfs** considering department rounding standards.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 9 \text{ acres} \times 3.0 \text{ afa} = 27 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \text{ cfs} \times 231 \text{ days} \times 1.9835 = 13.7 \text{ af considering department rounding standards.}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{13.7 \text{ af}}$$

2. Volume Calculations for Other Uses:

This water right has a fire protection direct flow beneficial use, resulting in no maximum diversion volume applied to the water right license.

G. NARRATIVE/REMARKS/COMMENTS

This WR was split from 95-15434, and accounts for two groundwater wells located at the Kootenai County Solid Waste Facility that are used solely for irrigation and fire protection purposes. The wells associated with this WR were split as they are a separate water system, and not interconnected with the industrial beneficial use water system designated under right 95-15434.

Field exam performed on 6/5/2020 with the applicant's representatives, Laureen Chaffin and John Phillips, showed two wells, D002252 & 95-87-N-52, which were used for irrigation and fire protection purposes. Each groundwater POD, piping was routed underground to two separate 5,000 gallon storage tanks prior to distribution through pressure tanks for irrigation use. Each well has a 1hp pump installed, and due to inadequate piping requirements to complete flow measurements, a theoretic pumping equation was computed to derive each pump's flow rate as follows:

- Well 95-87-N-52 = 5.9 gpm with the 1hp pump estimated to be at a depth of 435 ft, and system operating at of 45 psi.
- Well D0022522 = 5.8 gpm with the 1 hp pump estimated to be at a depth of 445 ft, and system operating at 45 psi.
- Total diversion rate = 5.9 gpm + 5.8 gpm = 11.7 gpm = 0.03 cfs considering department rounding standards.

The diversion rate of **0.03 cfs** is recommended as the maximum diversion rate for licensing purposes. The applicant had permit approved for a larger rate, but is limited by pumping performance determined at time of field exam.

The applicant was permit approved to develop 454 acres of irrigation and irrigation from storage; during the field exam, the irrigation POU was identified and sketched out on field maps. The applicant's representatives identified that irrigation had occurred from the two wells only, and only the section of land between the solid waste facility operation and HWY 95 was irrigated in order to get grass and trees started providing green space along the travel corridor. During licensing review, Arcmap aerial imagery was used to trace out the irrigated acreage equaling 9.0 acres. The annual volume for the irrigation beneficial use equals 9.0 ac x 3.0 afa = 27 af ($V_{I.R.}$), but the applicant is limited by pump performance to the $V_{D.R.}$ irrigation volume that equals 0.03 cfs x 231 days x 1.9835 = **13.7 af** considering department rounding standards, which is recommended for licensing purposes. The applicant did not develop irrigation from storage during the development period

for the permit, resulting in irrigation storage and irrigation from storage beneficial uses being removed from the permit during licensing review.

The fire protection beneficial use is recommended for this license, allowing both well's production to be used in the event active fire suppression is required. The fire protection POU encompasses the entirety of the applicant's property, and the fire protection POU is identical to that of right 95-15434 from which this right was split. Due to the fire protection beneficial use being a direct flow component, no maximum diversion volume is assigned to this water right.

As this right was split from 95-15434, several conditions pertaining to wildlife storage, fire protection storage, and industrial uses were removed from 95-18042 during licensing review as follows: 26A, 218, 219, 220, 082, WD8, 111, X02, 046, and 106. Condition R62 was added to describe the diversion rate and volume per acre limitations for the irrigation of 9 acres. Condition 004 was added to describe that the water right license does not grant any right-of-way or easement across the land of another. All other conditions on permit will remain on the license.

Right 95-15434 is the permit from which 95-18042 and 95-18045 was split from; 95-15434 uses runoff water captured in ponds not associated with this right's ponds for irrigation storage & from storage use, and fire protection storage use that overlaps this water right. Right 95-15434 is not a concern for overlap with this right, as the 5 ponds associated with 95-15434 are a separate water system than the industrial use designated under this right. Right 95-18045 uses groundwater from a well to provide water for industrial and fire protection beneficial uses that overlap this right. The Kootenai County Solid Waste facility has a separate storage reservoir for fire protection purposes along with multiple sedimentation ponds, and any additional water needs to fight an active fire is considered an exempt use, thus do not constitute an overlap concern between the two rights. There are no additional overlap concerns for this right.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
FIRE PROTECTION	01/01 to 12/31	0.03 CFS	
IRRIGATION	03/15 to 10/31	0.03 CFS	13.7 AF

Totals: 0.03 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 ☒ None

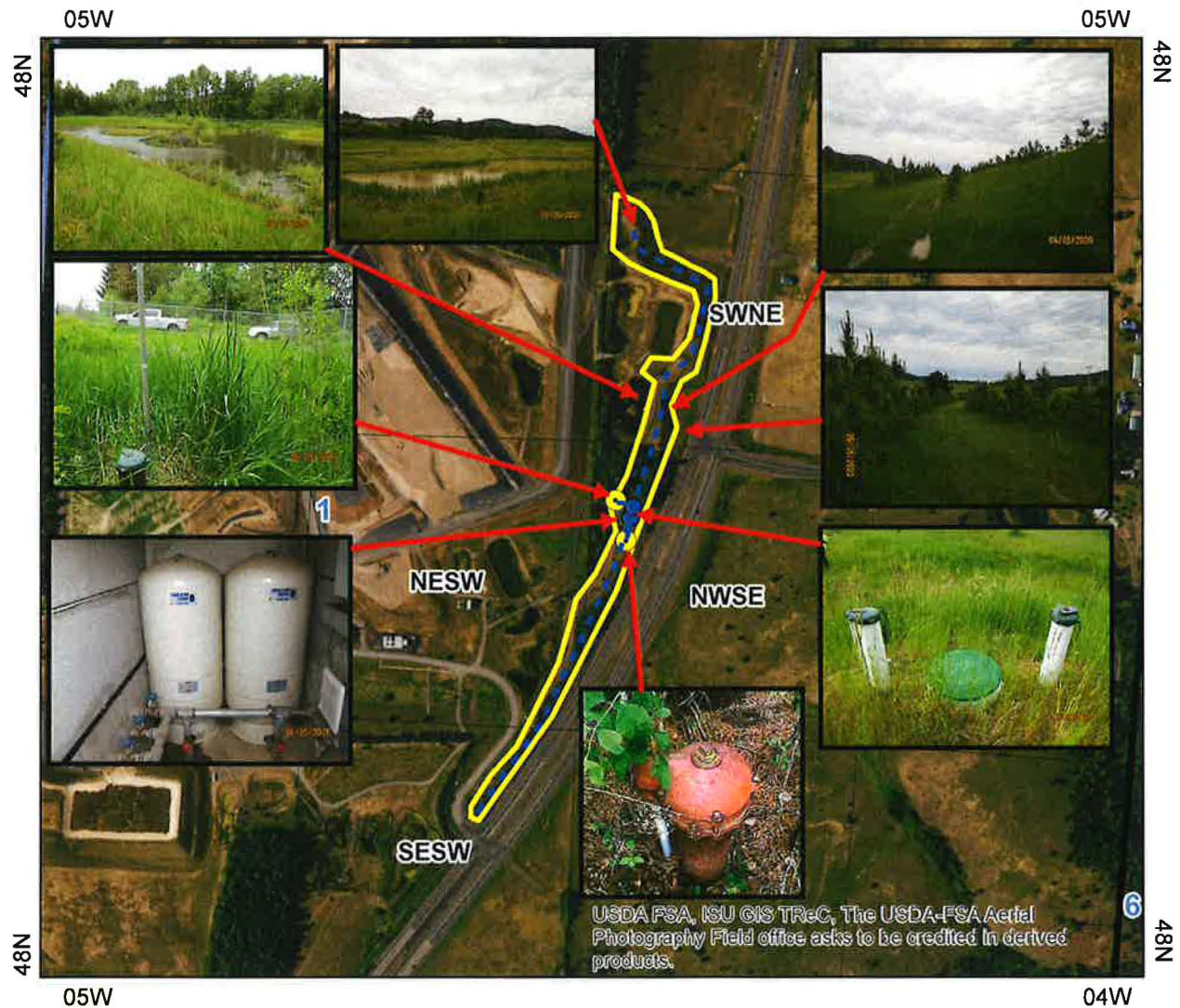
I. AUTHENTICATION

Luke Bates - Water Resource Agent

Field Examiner's Name  Date 12/07/2020
 Reviewer Adm Fink Date 12/7/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-18042

IRRIGATION system diagram.



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

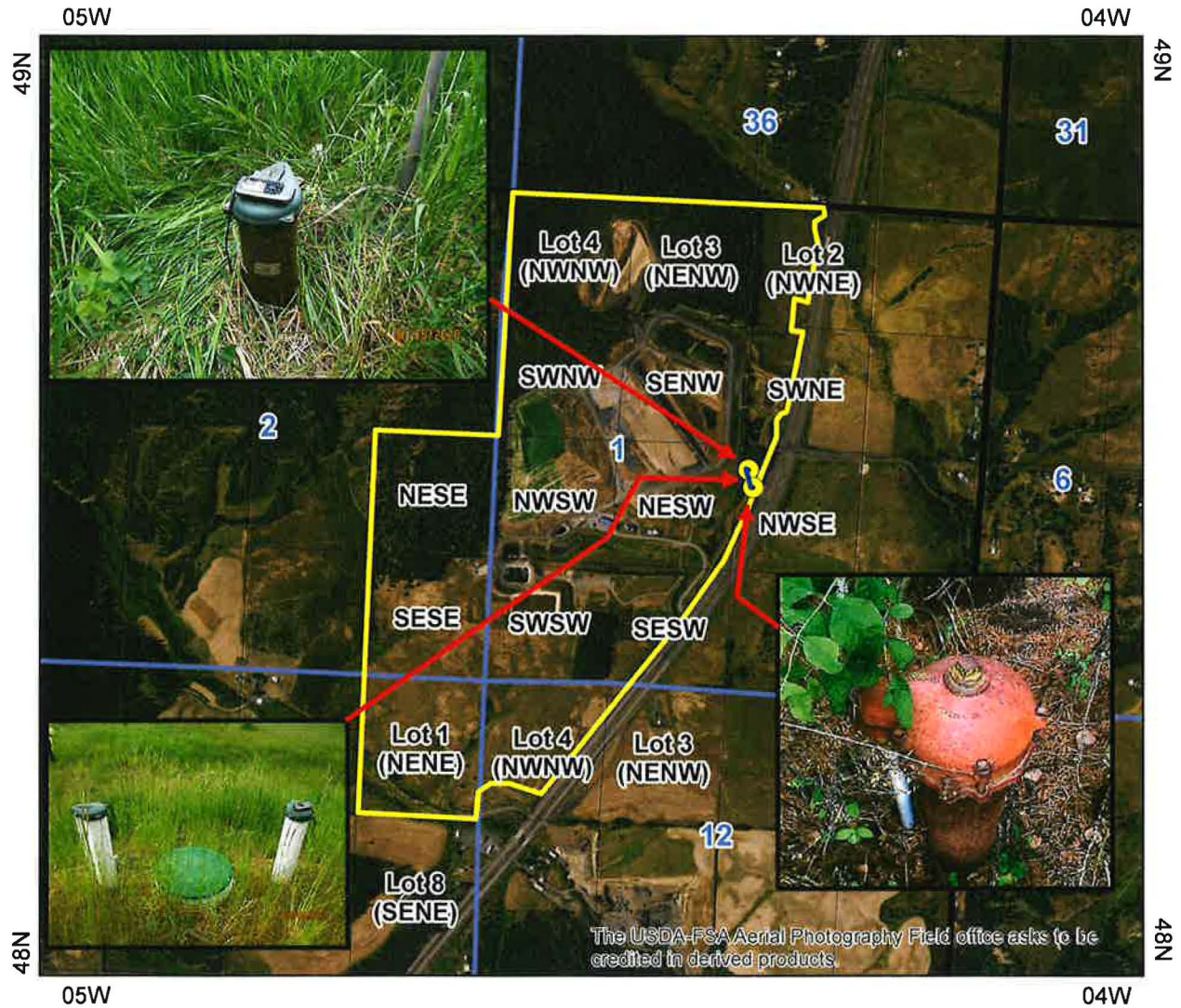
0 0.1 0.2 0.4 Miles



USDA FSA, ISU GIS TRC, The USDA-FSA Aerial Photography Field office asks to be credited in derived products.

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-18042

FIRE PROTECTION system diagram.



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

0 0.225 0.45 0.9 Miles



THEORETICAL PUMPING EQUATIONS FOR WR# 95-18042

Theoretical Pumping Equation is required because system did not allow for a proper measurement. Pump is estimated to be at 435 ft, and running at 45 psi.

<u>PUMP EQUATIONS</u>						
WATER RIGHT No. 95-18042						
WELL 95-87-N-52		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	1	539.0816	0.8	435	45
Q =		0.013 cfs		5.9 gpm		

Theoretical Pumping Equation is required because system did not allow for a proper measurement. Pump is estimated to be at 445 ft, and running at 45

PUMP EQUATIONS						
WATER RIGHT No. 95-18042						
WELL D0022522		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	1	549.0816	0.8	445	45
Q = 0.013 cfs		5.8 gpm				

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>Bill Cunningham</u> Address <u>HC 12 Box 257</u> Owner's Permit No. <u>Cda Idaho</u>	7. WATER LEVEL Static water level <u>25</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 <u>95-87-N-52</u> ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr><tr><td><u>1 gal</u></td><td><u>425'</u></td><td><u>3 hrs</u></td></tr></table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>1 gal</u>	<u>425'</u>	<u>3 hrs</u>																																																																																																																																														
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th 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>0'</td><td>10'</td><td>Top Soil Brown Clay</td><td></td><td>X</td></tr><tr><td>8"</td><td>10'</td><td>50'</td><td>Red Clay</td><td></td><td>X</td></tr><tr><td>8"</td><td>50'</td><td>80'</td><td>Dark Brown Clay</td><td></td><td>X</td></tr><tr><td>8"</td><td>80'</td><td>125'</td><td>Tan Clay</td><td></td><td>X</td></tr><tr><td>8"</td><td>125'</td><td>140'</td><td>Sandy Tan Clay</td><td></td><td>X</td></tr><tr><td>8"</td><td>140'</td><td>150'</td><td>De composed Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>150'</td><td>175'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>175'</td><td>180'</td><td>Soft Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>180'</td><td>190'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>190'</td><td>200'</td><td>Soft white Quartz Brown Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>200'</td><td>220'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>220'</td><td>225'</td><td>Soft Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>225'</td><td>245'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>245'</td><td>250'</td><td>Soft Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>250'</td><td>280'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>280'</td><td>280'</td><td>Soft white quartz brown Granite</td><td>X</td><td></td></tr><tr><td>6"</td><td>280'</td><td>288'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>288'</td><td>294'</td><td>Soft Black & White Granite</td><td>X</td><td></td></tr><tr><td>6"</td><td>294'</td><td>375'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>375'</td><td>387'</td><td>Soft Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>387'</td><td>390'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>390'</td><td>420'</td><td>Soft Black & White Granite</td><td></td><td>X</td></tr><tr><td>6"</td><td>420'</td><td>450'</td><td>Hard Black & White Granite</td><td></td><td>X</td></tr></tbody></table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	8"	0'	10'	Top Soil Brown Clay		X	8"	10'	50'	Red Clay		X	8"	50'	80'	Dark Brown Clay		X	8"	80'	125'	Tan Clay		X	8"	125'	140'	Sandy Tan Clay		X	8"	140'	150'	De composed Granite		X	6"	150'	175'	Hard Black & White Granite		X	6"	175'	180'	Soft Black & White Granite		X	6"	180'	190'	Hard Black & White Granite		X	6"	190'	200'	Soft white Quartz Brown Granite		X	6"	200'	220'	Hard Black & White Granite		X	6"	220'	225'	Soft Black & White Granite		X	6"	225'	245'	Hard Black & White Granite		X	6"	245'	250'	Soft Black & White Granite		X	6"	250'	280'	Hard Black & White Granite		X	6"	280'	280'	Soft white quartz brown Granite	X		6"	280'	288'	Hard Black & White Granite		X	6"	288'	294'	Soft Black & White Granite	X		6"	294'	375'	Hard Black & White Granite		X	6"	375'	387'	Soft Black & White Granite		X	6"	387'	390'	Hard Black & White Granite		X	6"	390'	420'	Soft Black & White Granite		X	6"	420'	450'	Hard Black & White Granite		X
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4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____	10. RECEIVED JUN 09 1987 013648 Department of Water Resources RECEIVED MAY 26 1987 Department of Water Resources Nashua District Office																																																																																																																																																				
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>.250</u> inches</td><td><u>6</u> inches</td><td><u>1 1/2</u> feet</td><td><u>150</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></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" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>_____ perforations</td><td>_____ feet</td><td>_____ 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>50'</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>.250</u> inches	<u>6</u> inches	<u>1 1/2</u> feet	<u>150</u> feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	_____ inches	_____ inches	_____ feet	_____ feet	Number	From	To	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet	_____ perforations	_____ feet	_____ feet																																																																																																																					
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6. LOCATION OF WELL Sketch map location must agree with written location Subdivision _____ MAR 09 1988 Lot No. _____ Block No. _____ County <u>Kootenai</u> <u>SW 1/4 NE 1/4 Sec. 1, T. 48 N, R. 5 E</u>	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>Hayden</u> Firm No. <u>4488</u> Address <u>Hayden</u> Date <u>4/20/87</u> Signed by (Firm Official) <u>John Wheeler</u> and <u>William L. Peters</u> (Operator)																																																																																																																																																				

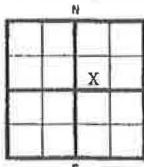
WELL DRILLER'S REPORT

Inspected by _____
Twp _____ Rge _____ Sec _____
Lat _____ 1/4 _____ 1/4 _____
Long _____

1. WELL TAG NO. D0022522
Drilling Permit No: 781509
Other IDWR No. _____

2. OWNER
Name KOOTENAI COUNTY SOLID WASTE
Address P.O. BOX 9000
City COEUR D'ALENE State ID Zip 83816

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



Twp. 48N North or South
Rge. 5W East or West
Sec. 1 SW 1/4 NE 1/4 1/4

Gov't Lot _____ County KOOTENAI

Lat: _____ Long: _____

Address of Well Site
City WORLEY

(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		
BENTONITE	0	18	10 BAGS	OVERBORE

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 210

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6	+2	210	.250	STEEL	☒	☐	☒	☐
4	-180	460	.160	PVC	☐	☒	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method SKILL SAW

☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
-120	460	1/8 X 8	84	4	PVC	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

250 ft. below ground Artesian pressure _____ lb.

Depth flow encountered 238 ft. Describe access port or control devices: _____

48N 5W 1

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min	Drawdown	Pumping Level	Time
3			

Water Temp. COLD Bottom Hole Temp COLD

Water Quality test or comments: CLEAR

Depth first Water encountered 238

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore	From	To	Remarks: Lithology, Water Quality, Temperature	Water	Y	N
10	0	3	Top Soil			
10	3	20	Tan Clay			
8	20	70	Brown Clay			
8	70	115	Red Clay			
8	115	195	Tan Clay			
8	195	210	Soft Black Decomposed Granite			
6	210	225	Med. Salt & Pepper Granite			
6	225	238	Green Granite 3 ppm			
6	238	340	Gray & White Granite			
6	340	460	Black & White Granite			

Completed Depth 460 (Measurable)

Date: Started 8/1/02 Completed 8/2/02

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 WellService, Inc. Firm No. 448

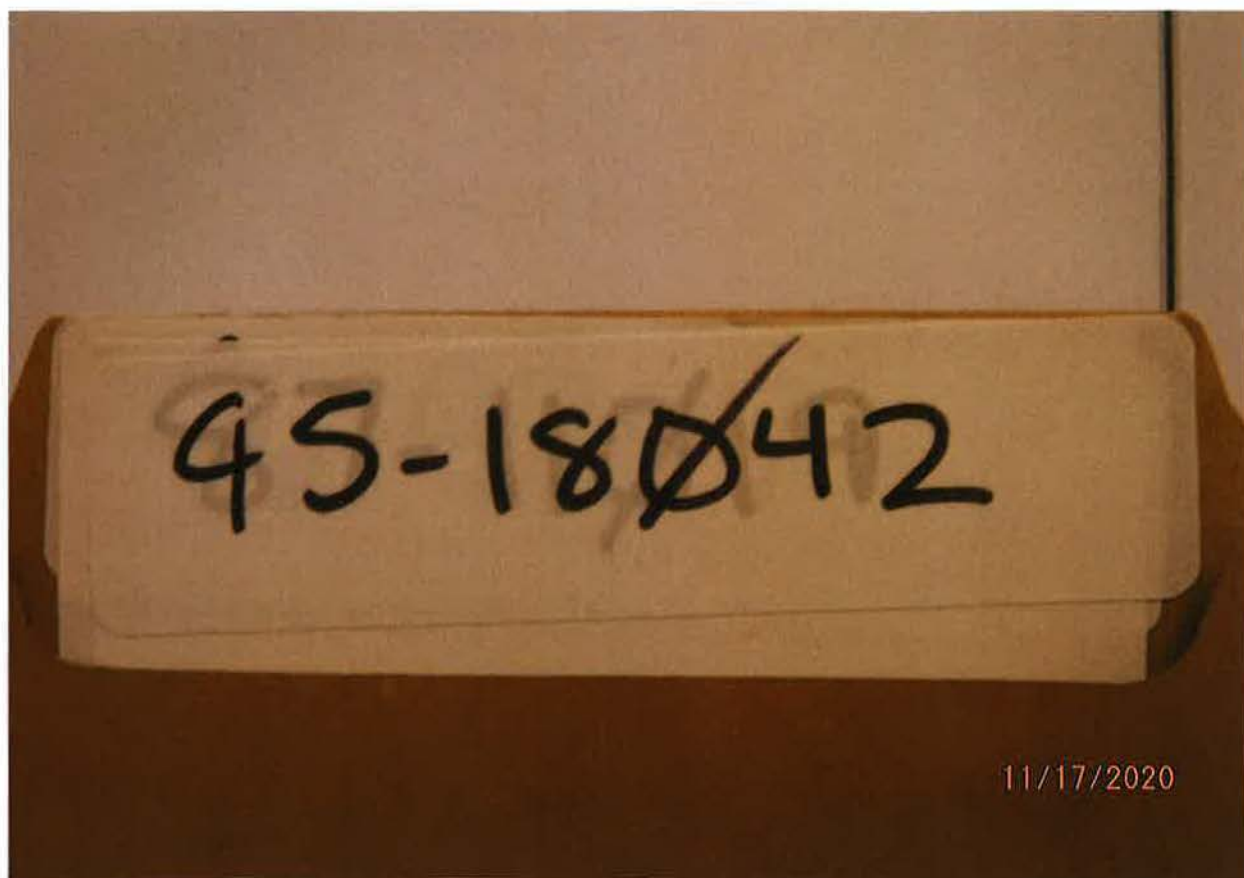
Firm Official Jim McLuslie Date 8/15/02

and Supervisor or Operator Jim McLuslie Date 8/15/02

(Sign Once if Firm Official and Operator)

Jim McLuslie

125°
up grade



POD – WELL D0022522



GROUNDWATER POD – WELL D-TAG D0022522



GROUNDWATER POD – WELL 95-87-N-52



EACH WELL HAS A 1 HP PUMP





2EA 5,000 GAL STORAGE TANKS



EACH STORAGE TANK HAS A 1HP DISTRIBUTION PUMP



IRRIGATION WATER CONVEYANCE SYSTEM PIPING IN PUMP VAULT



IRRIGATION POU



IRRIGATION POU



IRRIGATION POU – AROUND POND AREA



IRRIGATION POU