

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12001

Exam Date: 5/17/2012

1. Current Owner: BRANDON SCHMECKPEPER
18205 S CLOVERDALE
KUNA ID 83634
(208)283-9494

2. Accompanied by: Brandon Schmeckpeper
Phone No: (208)283-9494 (cell)
Address: Same as Above
Relationship to Permit Holder: Same

3. SOURCE TRIBUTARY
GROUND WATER N/A

B. OVERLAP REVIEW

- Other water rights with the same place of use: None
- Other water rights with the same point of diversion: None. Unrecorded domestic use same well.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NE1/4SE1/4 Sec. 9, Twp 01N, Rge 01E, B.M.

ADA County

Method of Determination: GPS Location N43.436311° W116.336912° Garmin model GPSmap 76 Datum NAD 83

2. PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
01N	01E	9																	7.6
																			7.6

Total Acres: 7.6

Method of Determination: Bing (2011) Aerial Photography w/ field verification.

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 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
No Metal Tag –					
WC Well ID #306328	Unknown	5	Unknown	Goulds	Pump Model 40GS50 - 3" Discharge

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

D. FLOW MEASUREMENTS1. **Measurement**

Equipment	Type	Make/Model No.	Serial No.	Size	Calib. Date
No physical measurement @ exam	N/A	N/A	N/A	N/A	N/A

See Flow Calculations Section below for Theoretical HP Equation, Sprinkler System, Pump Curve, & Well Log Pump Test Estimations.

2. Measurements: None taken. Well discharge piping not suitable (insufficient pipe length) for polysonic measurement.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: Theoretical HP Equation:

$$HP = 5$$

$$PSI = 34 \text{ (pressure gage reading inside well house/garage)}$$

$Z = 164 \text{ ft}$ (Static Water Level 154 ft, est. pumping level 10 ft below static water level for small system < 10 hp. Well Log indicates pumping level of 260 ft, but discharge of 100 gpm indicates likely larger than 5 hp pump used for test. 164 ft more reasonable pumping level value for system in place.)

$$Q = (8.8 \times 0.7 \times HP) / [Z + (2.31 \times PSI)] = (8.8 \times 0.7 \times 5) / [164 + (2.31 \times 34)] = \mathbf{0.13 \text{ cfs}}$$
 est. capacity of pumping system

Measured Method: Sprinkler System Estimation:

$$\# \text{ of lines @ one time} = 2$$

$$\# \text{ of sprinkler heads @ one time} = 8 \text{ heads each line} = 2 \times 8 = 16 \text{ heads}$$

$$\text{Type of sprinklers} = \text{Nelson R2000WF (WF20)}$$

$$\text{Nozzle size} = \text{max nozzle size WF20 rated for 4.18 gpm @ 35 psi (see attached sprinkler spec sheet)}$$

$$Q = \# \text{ heads} \times \text{gpm} = 16 \times 4.18 \text{ gpm} = 66.88 \text{ gpm} = \mathbf{0.15 \text{ cfs}}$$
 est. discharge from sprinklers

Measured Method: Pump Curve (attached- supplied by permit holder):

$$TDH = 242.5 \text{ ft \{per HP Equation est. above } [164 + (2.31 \times 34)] \} \rightarrow Q = \sim 51 \text{ gpm} = \mathbf{0.11 \text{ cfs}}$$
 est. pump capacity

Measured Method: Well Capacity/Well Log Pump Test:

$$\text{Well Log Pump Test : Discharge} = 100 \text{ gpm} = \mathbf{0.22 \text{ cfs}}$$
 w/ 106 ft drawdown (260 ft pumping level) pumped for 2 hours.

$$\text{Theoretical HP Equation est. capacity of pumping system} = \mathbf{0.13 \text{ cfs}}$$

$$\text{Diversion rate based on sprinkler type @ 35 psi} = \mathbf{0.15 \text{ cfs}}$$

$$\text{Pump Curve est. pump capacity} = \mathbf{0.11 \text{ cfs}}$$

$$\text{Well Capacity/Well Log Pump Test} = \mathbf{0.22 \text{ cfs}}$$

$$\text{Permitted Rate} = \mathbf{0.24 \text{ cfs}}$$

$$\text{Beneficial Use Limit} = 7.6 \text{ ac} \times 0.02 \text{ cfs/ac} = \mathbf{0.15 \text{ cfs}}$$

$$\text{Proof of Beneficial Use fee paid} = \$100.00 = \text{up to } \mathbf{1.00 \text{ cfs}}$$

$$\text{Recommend Beneficial Use Limit Rate} = \mathbf{0.15 \text{ cfs}}$$

Highest rate allowable based on beneficial use limit 0.15 cfs recommended. Theoretical HP Equation est. 0.13 cfs $\geq$ 75% (87%) of recommended rate. Also, 0.15 cfs is est. discharge from sprinkler system.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 7.6 \text{ ac} \times 4.5 \text{ afa/ac} = 34.2 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 77.4 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 34.2 \text{ afa} < 77.4 \text{ afa} = \text{Recommend } 34.2 \text{ afa}$$

2. Volume Calculations for Other Uses: No other uses recommended for licensing. Domestic use from same well, ~ 1.6 afa volume used for domestic purposes -> system capable of diverting enough volume (77.4 afa) for both uses.

G. NARRATIVE/REMARKS/COMMENTS

SYSTEM DESCRIPTION:

System consists of a 6" dia well with a 3" discharge line piped to valve box from which a 2 1/2" mainline pipes water to west and a 3" mainline pipes water to east for a K-Line Irrigation sprinkler system. 2 lines with 8 Nelson R2000 WF20 sprinkler heads on each line attached to feeder line off mainline riser for irrigation.

IRRIGATION PRACTICES:

Large pasture areas irrigated with sprinkler system described above. Lawn and small landscaped areas around house water with hose and portable lawn sprinkler(s). Pasture grass grown for Schmeckpeper's few horses, cows, and goats.

OVERLAP:

Well also used for unrecorded domestic use. No recorded water rights associated with POD or POU. Permit issued with condition stating owner must use all surface water appurtenant to the land before using ground water for irrigation. Appears this condition used in error, considering there are no surface water rights available for use on the land.

COMPLIANCE WITH PERMIT CONDITIONS:

Recommend any and all supplemental conditions on permit be removed for licensing. Permitted water bearing zone 140 to 300 ft. Per well log, water bearing zone 70 to 309 ft (if water present in layers above 308 ft could enter well). Diversion outside Bs 63 Ground Water Restricted Area. Recommend amending water bearing zone condition to match well construction record. To the best of my knowledge, owner has complied with all other permit conditions.

Have conditions of permit approval been met? ☒ Yes* ☐ No
 *Conditions met provided WB Zone modified as discussed above.

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	0.15 CFS	34.2 AF
<u>Totals:</u>		0.15 CFS	34.2 AF

2. Recommended Amendments

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

I. AUTHENTICATION

Field Examiner's Name Angeli M. Quinn Date 6/26/2012

Reviewer _____ Date _____

R2000WF Performance

Flow in **GPM**

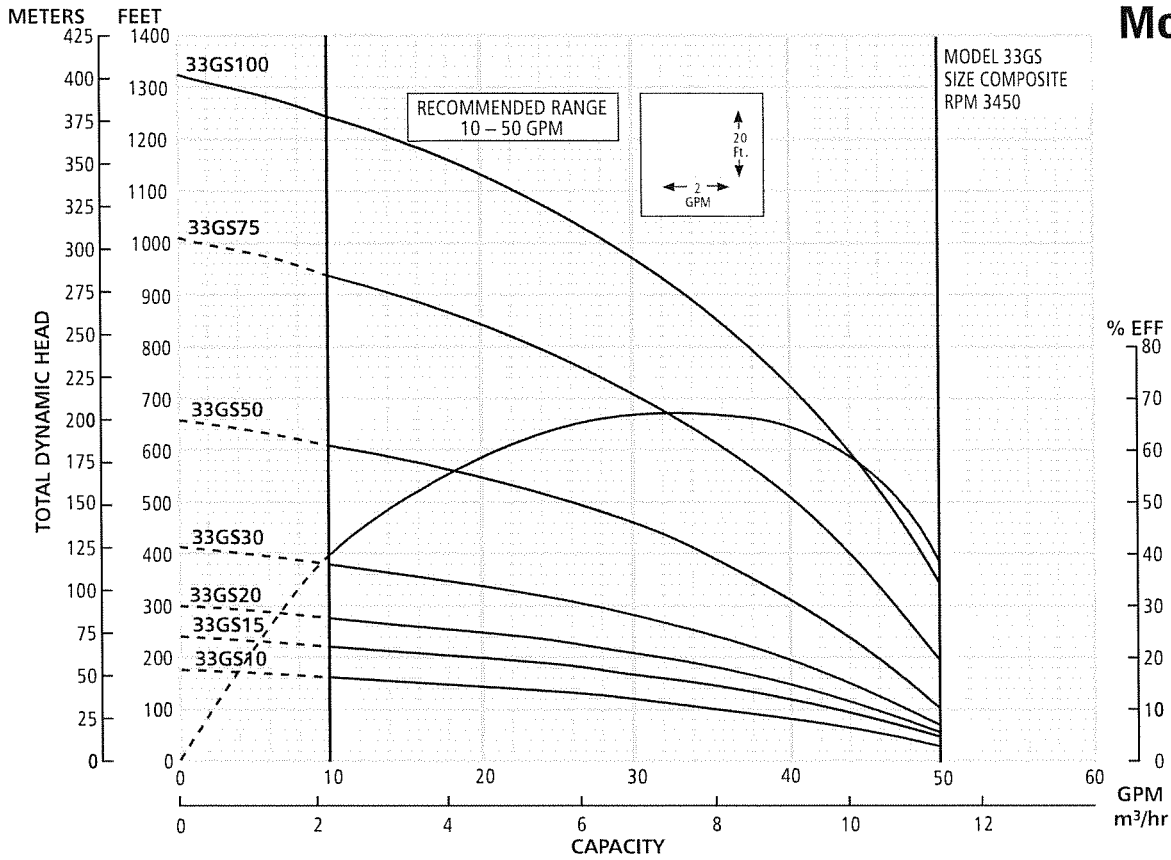
Plate Options*	Recommended Nozzles	PSI						
		30	35	40	45	50	55	60
Purple WF12  Radius 34 - 37' #10299-110 (w/ #10) #10299-112 (w/ #11 or #12 Nozzle)	#10 Blue** #9306-078 	.97	1.05	1.12	1.19	1.25	1.31	1.37
	#11 Orange #9306-086 	1.17	1.27	1.36	1.45	1.53	1.61	1.68
	#12 Purple #9306-094 	1.39	1.50	1.61	1.70	1.80	1.89	1.98
Green WF14  Radius 39 - 41' #10299-114	#13 Yellow (13/128) #9306-102 	1.64	1.78	1.90	2.02	2.13	2.23	2.34
	#14 Green (7/64) #9306-109 	1.85	2.00	2.15	2.28	2.40	2.53	2.64
Red WF16  Radius 40 - 42' #10299-116	#15 Tan (15/128) #9306-117 	2.17	2.35	2.53	2.67	2.82	2.97	3.11
	#16 Red (1/8) #9306-125 	2.50	2.70	2.89	3.07	3.23	3.40	3.54
Gold WF18  Radius 41-43' #10299-118	#18 Gold (9/64) #9306-141 	3.20	3.44	3.68	3.89	4.11	4.30	4.48
Dark Brown WF20  Radius 42-45' #10299-120	#20 Dark Brown*** #9306-156 	3.90	4.18	4.48	4.76	5.00	5.25	5.47

*All plate options are high angle.

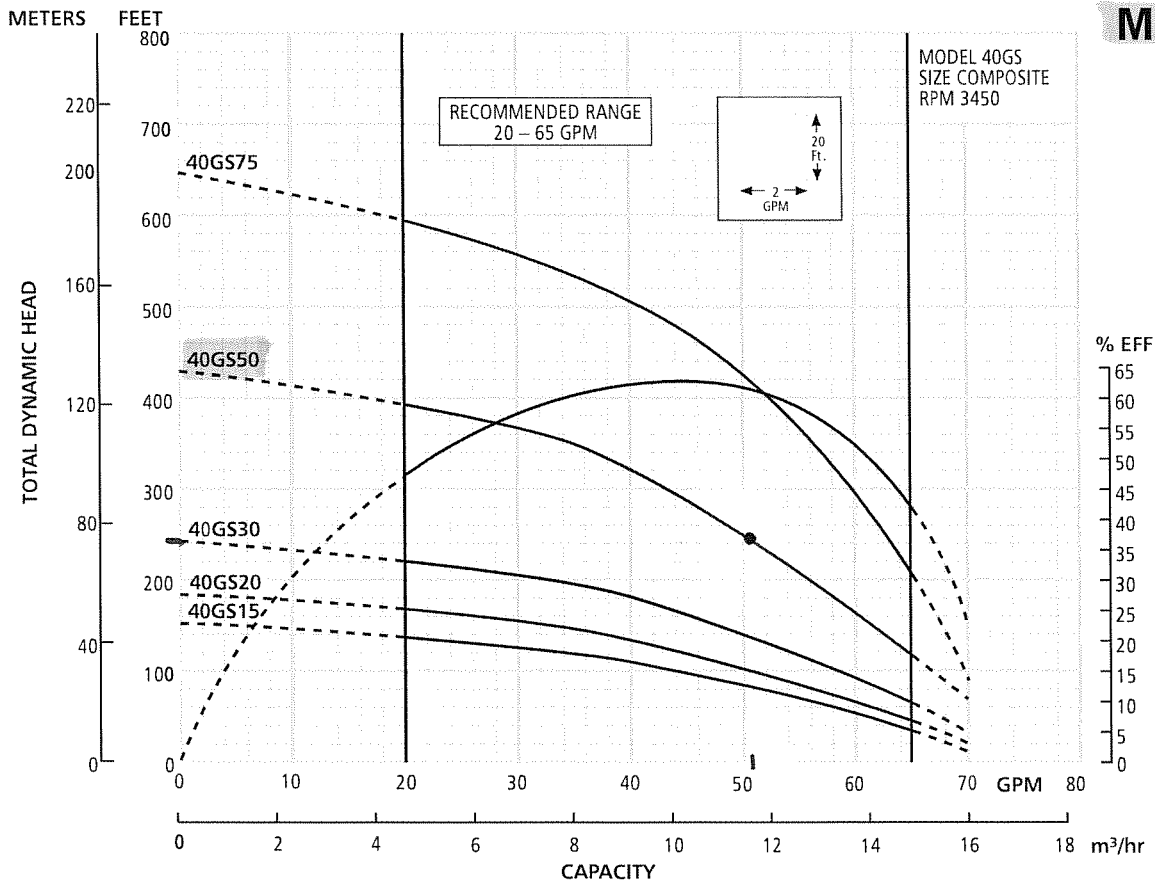
**Always use a purple motor (brake) in combination with a #10 nozzle.

***Always use a gold motor (brake) and brown plate in combination with a #20 nozzle.

Model 33GS



Model 40GS



Model 40GS

SELECTION CHART

Horsepower Range 1½ – 7½, Recommended Range 20 – 65 GPM, 60 Hz, 3450 RPM

Pump Model	HP	PSI	Depth to Water in Feet/Ratings in GPM (Gallons per Minute)																											
			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	440	480	520	560	600	640		
40GS15	1½	0		65	59	53	46	35																						
		20	58	51	43	31																								
		30	50	41	28																									
		40	40	25																										
		50	22																											
Shut-off PSI			57	49	40	31	23	14																						
40GS20	2	0			63	58	53	47	38	25																				
		20	61	57	51	44	35																							
		30	56	50	43	33																								
		40	49	42	31																									
		50	40	29																										
Shut-off PSI			71	62	53	45	36	27	19	10																				
40GS30	3	0				63	59	56	51	47	41	33	20																	
		20	65	62	58	54	50	45	38	32	30																			
		30	61	58	54	49	44	37	28																					
		40	57	53	48	43	36	26																						
		50	52	48	42	35	24																							
Shut-off PSI			97	88	80	71	62	54	45	36	28	19	10																	
40GS50	5	0					65	64	62	60	58	56	53	51	48	45	42	38	33	26										
		20				65	63	61	59	57	55	52	50	47	44	41	36	31	23											
		30			64	63	61	59	57	54	52	50	47	44	40	36	30	21												
		40		64	62	60	58	56	54	52	49	46	43	39	35	29	20													
		50	64	62	60	58	56	54	51	49	46	43	39	34	28															
Shut-off PSI			178	169	161	152	143	135	126	117	109	100	91	83	74	65	57	48	39	31	22									
40GS75	7½	0									65	64	63	62	61	60	59	57	56	54	53	49	44	38	30					
		20									65	64	63	62	61	59	58	57	55	54	52	50	48	43	37	28				
		30									65	64	63	62	61	59	58	57	55	53	52	50	48	45	40	32	22			
		40									65	64	63	62	60	59	58	56	55	53	51	49	47	45	42	36	27			
		50									65	64	62	61	60	59	58	56	55	53	51	50	47	45	42	39	31	20		
Shut-off PSI			271	263	254	245	237	228	219	211	202	194	185	176	168	159	150	142	133	124	116	107	90	72	55	38				

63-12001 Beneficial Use Field Report System Diagram and Map



0 0.02 0.04 0.08 0.12 0.16 0.2 Miles
Bing (2011) Aerial Photo

Legend

- POD
- POU
- Township/Range
- Sections
- QQ

457'-11 1/4"



1519'-9 13/16"

469'-15/16"

1528'-5/16"

63-12001 Beneficial Use Field Report Photos



63-12001 Exam 5/17/2012: POD facing north.



63-12001 Exam 5/17/2012: Pressure gage inside garage on line from well to home, gage before pressure tank. Likely same pressure from well into irrigation mainlines.

63-12001 Beneficial Use Field Report Photos Continued



63-12001 Exam 5/17/2012: POU front pasture with sprinklers running in field along drive way. Photo taken facing northeast.



63-12001 Exam 5/17/2012: POU back pasture with K-Line Irrigation System in place. Photo taken facing northwest.

4/2011

IDAHO DEPARTMENT OF WATER RESOURCES
FIELD EXAMINERS
WELL INSPECTION FORM

1. IDENTIFICATION # NEW ID # 306328 - NO METAL TAG (Tag #, etc.)

OTHER APPLICABLE # WR PERMIT # 63-12001 (Water right #, etc.)

2. OWNER BRANDON SCHMECKPEPER Phone (208) 283-9494

Address 18205 S. COVERDALE RD. City KUNA

State ID Zip 83634 Email schmeck@clear.net

3. WELL LOCATION (GPS required in Degrees Decimal Minutes – use PLS if GPS not available)

Lat. N43.436311° Long. W116.336912°

Twp 1N Rge 1E Sec 9 ¼ NE ¼ SE

4. WELL CONSTRUCTION ☒ Well log attached ☐ Well log not found

Any obvious construction problems that may be a source for contamination or waste? ☐ Yes ☒ No

If yes, describe below &/or see attached (list any that apply): ☐ Photos ☐ Diagram ☐ Other

5. HYDROLOGIC INFORMATION

Static water if measured _____ ft. Water temperature if measured _____ °F

Flowing artesian ☐ Yes ☒ No Pressure if measured _____ psi

NOTES NO MEASUREMENT(S) TAKEN.

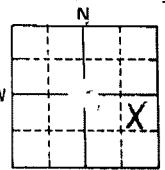
INSPECTED BY

Angela M. Quinn

DATE 5/17/2012

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTState 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.**RECEIVED**
USE TYPEWRITER OR
BALLPOINT PEN
JUN 29 1989

Department of Water Resources

1. WELL OWNER Name <u>Russ Knopp</u> Address <u>8225 Blue Ridge Ln.</u> <u>Boise</u> Owner's Permit No. <u>63-88-2-121</u>	7. WATER LEVEL Static water level <u>154</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>58</u> °F. Quality <u>20</u> Describe artesian or temperature zones below.																																																																
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>100</u></td><td><u>260</u></td><td><u>2 hours</u></td></tr></tbody></table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>100</u>	<u>260</u>	<u>2 hours</u>																																																										
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3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <u>78313</u> <table border="1"><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>9"</td><td>0</td><td>2</td><td>Dirt & Boulders</td><td></td><td>✓</td></tr><tr><td>9"</td><td>2</td><td>70</td><td>very hard lava rock</td><td></td><td>✓</td></tr><tr><td>6"</td><td>70</td><td>75</td><td>SINDERS RED</td><td></td><td>✓</td></tr><tr><td>6"</td><td>75</td><td>275</td><td>Solid lava</td><td></td><td>✓</td></tr><tr><td>6"</td><td>275</td><td>285</td><td>brown sticky clay</td><td></td><td>✓</td></tr><tr><td>6"</td><td>285</td><td>300</td><td>black lava</td><td></td><td>✓</td></tr><tr><td>6"</td><td>300</td><td>302</td><td>SINDERS</td><td></td><td>✓</td></tr><tr><td>6"</td><td>302</td><td>308</td><td>Rock lava</td><td></td><td>✓</td></tr><tr><td>6"</td><td>308</td><td>309</td><td>sand & gravel</td><td>✓</td><td></td></tr></tbody></table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	9"	0	2	Dirt & Boulders		✓	9"	2	70	very hard lava rock		✓	6"	70	75	SINDERS RED		✓	6"	75	275	Solid lava		✓	6"	275	285	brown sticky clay		✓	6"	285	300	black lava		✓	6"	300	302	SINDERS		✓	6"	302	308	Rock lava		✓	6"	308	309	sand & gravel	✓	
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4. METHOD DRILLED ☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____	RECEIVED JUN 30 1989 Department of Water Resources Western Regional Office																																																																
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>250</u> inches</td><td><u>6</u> inches</td><td><u>1</u> feet</td><td><u>20</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"><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>70</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 <u>Sanitary well seal</u>		Thickness	Diameter	From	To	<u>250</u> inches	<u>6</u> inches	<u>1</u> feet	<u>20</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 Name <u>Micro...</u> County <u>Ada</u> Lot No. _____ Block No. _____ NE 1/4 SE 1/4 Sec. <u>9</u> , T. <u>1</u> N., R. <u>1</u> E.	10. Work started <u>4/7/89</u> finished <u>4/10/89</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>Can-Hda Well</u> Firm No. <u>304</u> Address <u>4250 Murphy Rd. Kuna</u> Date _____ Signed by (Firm Official) <u>Earl Skinner</u> and (Operator) <u>Bud...</u>																																																																	

Grimm, Angie

From: Brandon Schmeckpeper [schmeck@clear.net]
Sent: Friday, June 22, 2012 2:03 PM
To: Grimm, Angie
Subject: RE: 18205 S. Cloverdale-Schmeckpeper water right
Attachments: Gould.well.pumps.pdf; IrrMains_Schmeckpeper_Cloverdale.pdf

Angie,

I received your phone message:

Pump m/n: 40GS.

Main from valve box next to well head is located along South property line towards Cloverdale Rd and also a main goes West to back pasture (see attached drawing).

If you need any additional info, please let me know.

Brandon Schmeckpeper

From: Grimm, Angie [mailto:Angie.Grimm@idwr.idaho.gov]
Sent: Friday, May 18, 2012 2:03 PM
To: schmeck@clear.net
Subject: RE: 18205 S. Cloverdale-Schmeckpeper water right

Brandon,

Yup, that's correct. I'm going to recommend 0.15 cfs. The next step in the process is I finish up looking over your permit and write up a formal field exam report. Then my recommendations (field report) go to the next step in the process which is issuing a water right license. If there are any additional questions someone from the Department will be in touch with you prior to issuing the license. If there aren't any questions or issues that come up, you won't hear anything from us until you receive your water right license in the mail.

Thanks,
Angie
334-2190

From: Brandon Schmeckpeper [mailto:schmeck@clear.net]
Sent: Friday, May 18, 2012 1:53 PM
To: Grimm, Angie
Subject: RE: 18205 S. Cloverdale-Schmeckpeper water right

Angie,

Thank you for the explanation. If I understand it correctly, your recommendation would equate to 66.88 gpm (which equals .15 cfs) and under the current circumstances, is a fair assessment.

Thank you for the information. So what is the next step in the process?

Brandon

From: Grimm, Angie [<mailto:Angie.Grimm@idwr.idaho.gov>]
Sent: Friday, May 18, 2012 12:17 PM
To: schmeck@clear.net
Subject: RE: 18205 S. Cloverdale-Schmeckpeper water right

Brandon,

Thank you so much for getting this information to me so quickly. This will help in my exam report. The theoretical horse power equation indicates the well is capable of producing approximately 0.09 cfs (41 gpm). However, the sprinkler information indicates if operating 16 of the WF20 sprinkler heads rated for 4.18 gpm @ 35 PSI (based on pressure reading of gage in garage during exam) the flow would be 0.15 cfs (66.88 gpm) through the system. I'm inclined to recommend the 0.15 cfs diversion rate for your water right license. This provides for almost a full inch to the acre (irrigating approximately 9 acres of 11.7 acres per aerial photography): $0.15 \text{ cfs} / 9 \text{ ac} = 0.017 \text{ cfs/ac} \sim 0.02 \text{ cfs/ac}$. 0.02 cfs/ac is the maximum rate per acre allowable per Idaho law. Please let me know if you have any questions about these preliminary findings. Thanks again for the sprinkler information. It's been very helpful.

Thanks,
Angie

Angela M. Grimm, P.G.
Water Resource Agent, Sr.
IDWR - Western Region
2735 Airport Way
Boise, ID 83705-5082
(208)334-2190 phone
(208)334-2348 fax

From: Brandon Schmeckpeper [<mailto:schmeck@clear.net>]
Sent: Friday, May 18, 2012 10:14 AM
To: Grimm, Angie
Subject: 18205 S. Cloverdale-Schmeckpeper water right

Angie,

The heads to be used are the WF18 and/or WF20. The drop in elevation from well head to road is 15 + feet.
PS: I can run other sprinklers in addition to the 16 sprinkler out front.

It was very nice to meet you. Let me know if I can be of any further assistance.
Please use the email schmeck@clear.net to send me your preliminary findings.

Thank you.....Brandon Schmeckpeper
208-283-9494