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OCT 21 2005

WATER RESOURCES
WESTERN REGION

October 19, 2005

Steve Lester
Idaho Department of Water Resources
Western Regional Office
2735 Airport Way
Boise, ID 83705

Re: Application for Permit No. 63-32185, Roswell Marsh Wildlife Habitat Area

Dear Steve:

I have reviewed your letter of October 13, 2005 regarding this application. Of the issues raised in your letter the first that needs to be addressed is to obtain approval to have the application considered at this time.

My understanding has always been the Basin 63 moratorium is applicable to certain applications for consumptive uses from water sources tributary to the Boise River or the Boise River itself. (The reach of the Boise River to which the moratorium applies seems to depend upon whom within IDWR is asked but that is not an issue here.) The attached report dated August 10, 2004 from SPF Water Engineering, LLC finds the ground water sought by this application is tributary to the Snake River and not the Boise River.

Based upon the Conclusion 2 of the August 10, 2004 report, the applicant requests Application for Permit 63-32185 be processed at this time.

The applicant understands additional information will be required to process the application and that information will be forthcoming once a favorable decision to process the application has been obtained. Should IDWR need any additional information to determine whether or not to process this application, please let me know.

Thank you for your consideration. Please inform me of your decision so I may advise the applicant and, hopefully, proceed with this application.

Yours truly,

David B. Shaw

Encl.

cc: David Barber w/o encl.



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OCT 21 2005

WATER RESOURCES
WESTERN REGION

August 10, 2004

Clair Kofoed
Regional Habitat Biologist
Idaho Dept. of Fish and Game
30845 Old Fort Boise Road
Parma, ID 83660

Subject: Water Supply Well for Roswell Marsh Project

Dear Mr. Kofoed:

The Idaho Department of Fish and Game (IDFG) is considering drilling a well for water to maintain wetland habitat at the Roswell Marsh. The marsh covers approximately 80 acres in Section 25 of Township 5N, Range 6W. Two factors influencing the feasibility of such a project are whether (1) properly completed wells at the site can supply 2 to 6 cfs of ground water, and (2) the proposed water use would qualify for an exemption from the Basin 63 administrative processing hold on new water rights. At your request, SPF Water Engineering, LLC (SPF) has reviewed well logs and hydrologic information from the Roswell Marsh area to address these two questions. This letter presents the results of our review.

Potential Well Yields

The first question is whether one or more wells would be capable of producing between 2 and 6 cfs on a sustainable basis. A 6-inch diameter test well (Attachment A) was constructed at the project site in May 2004 to determine geologic conditions. The test well penetrated primarily sand and gravel to a total depth of 145 feet. The well was completed by perforating the casing from 85 to 95 feet. Following completion, the well produced 45 gpm by air-lift pumping.

The air-lift test of the completed well indicated relatively low production potential at the site (45 gpm, 0.1 cfs), but the lithologic log suggests the presence of productive aquifer materials. Specifically, the log lists gravel from 20 to 78 feet, and coarse sand and pea gravel with interbedded clay layers from 78 to 145 feet. It is not known how deep the sands and gravel extend at the site, but these materials should produce high yields to properly completed wells. We suspect that the test well construction (6-inch perforated casing) and pumping method (air-lift) may have limited the amount of water that could enter the well. A properly constructed production well equipped with a large diameter casing and well screen may be capable of substantially higher production than the air-lift pumping test in the test well suggests.

Other wells in the vicinity of the Roswell Marsh penetrating aquifer materials similar to those encountered in the Test Well provide insight into potential yields of a well or wells

at the Roswell site. A search of the Idaho Department of Water Resources (IDWR) computer database was conducted to identify wells in the Roswell Marsh area that were constructed to produce high yields. Large diameter wells in the local area that are recorded in the database are listed on Table 1. Well log copies are provided in Attachment B, and well locations are shown on Figure 1.

The well log search revealed high capacity wells on the ridge to the south and southeast of the Roswell Marsh and further south in Arena Valley (Figure 1). Some wells in this area penetrate more than 200 feet of saturated coarse-grained sediments, as demonstrated by well logs 2 and 10 (Attachment B). The best of these wells produce yields of 3 to 6 cfs with less than 50 feet of drawdown. Alternatively, wells northwest and northeast of Roswell Marsh (well logs 1 and 4) produce less than 1 cfs with more than 50 feet of drawdown. These lower capacity wells penetrate less sand and gravel (and more clay and shale) than the high capacity wells further to the south.

These comparisons suggest that a high capacity well (with discharge rates greater than 2 cfs) is possible if the coarse-grained sediments continue to depths over more than 200 feet beneath the Roswell Marsh. In such an instance, a production well completed with screens beginning below approximately 100 feet depth could be constructed. If coarse-grained sediments do not extend below 200 feet, a thinner section of aquifer will be developed, and well yields may be less.

Potential for Exemption from Basin 63 Administrative Processing Hold

The Idaho Department of Water Resources is currently not processing new water right applications for consumptive uses of ground water in the Boise River Basin. We understand that the reason for the "administrative processing hold" stems, in part, from concerns about decreasing ground water levels in some areas of the Boise River Valley and fully appropriated flows in the Boise River above Star Bridge. However, in some cases IDWR has allowed exemptions from the administrative processing hold if ground water is tributary to the Snake or Payette Rivers rather than to the Boise River. We therefore examined existing water level data to (1) determine the direction of ground water flow in the Roswell Marsh area and (2) evaluate local water level trends.

First, regional water-table contours are provided in Lindholm et al. (1988). The applicable portion of this map (i.e., vicinity of the Roswell marsh) is reproduced in Attachment C. Regional ground water level contours suggest a westerly ground water flow direction in the vicinity of the Roswell Marsh toward the Snake River. The Lindholm and et al. map is a regional scale map based on 1980 data.

Ground water level contours were also plotted using water level data collected as part of the Treasure Valley Hydrologic Project. A water level contour map (Attachment D) based on Spring 2000 data (Petrich and Urban, 2004) also shows westerly flow toward the Snake River in the vicinity of the Roswell Marsh (dashed lines in the Oregon portion of the map represent inferred contour lines; data from Oregon wells were not collected

as part of the TVHP). These TVHP data (compiled by Scott Urban, IDWR) are based on wells with screen completions in the uppermost 200 feet of aquifer.

Second, five wells were identified in the vicinity of the Roswell Marsh having more than one water level measurement in the IDWR Well_Log database. Three of these wells indicate stable water levels (Attachment E). One well (05N05W-29CDDA1) indicates currently stable water levels although the current levels are less than the initial measurement. One well (04N06W-02DDA1) indicates a slight decline, although this is likely associated with local conditions. In general, water levels appear to be stable in the Roswell Marsh area. This is not an area that has been identified by IDWR as an area experiencing water level declines (Shane Bendixsen, IDWR, personal communication).

Thus, we believe that there is a legitimate technical basis for exempting the proposed Roswell Marsh water right application from the administrative hold. This is because ground water flows directly toward the Snake River, not the Boise River, because regional ground water levels appear to be stable.

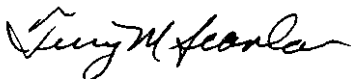
Conclusions

1. Well yields of more than 2 cfs are anticipated if coarse-grained sand and gravel deposits extend to depths of more than 200 feet at the project site. If the coarse-grained materials extend to less than 200 feet, yields to properly constructed production wells may be less than 2 cfs. Production wells at this site should be constructed with 16-inch diameter well casing, stainless steel well screen, and gravel pack.
2. The ground water flow direction at the project site appears to be in a westerly direction toward the Snake River. Ground water in this area can be considered tributary to the Snake River rather than the Boise River. Regional ground water levels appear to be stable in this area. IDFG should consider applying for an exemption to the administrative processing hold based on these findings.

Please contact us with any questions concerning this analysis.

Sincerely,

SPF WATER ENGINEERING, LLC



Terry M. Scanlan, P.E., P.G.



Christian R. Petrich, Ph.D., P.E.

Attachments

- A. Well driller's report for the Roswell Test Well
- B. Well drillers' reports for local production wells
- C. Regional water table contour map (Lindholm et al., 1988)
- D. Regional water table contour map (TVHP data)
- E. Hydrographs from wells in the vicinity of Roswell Marsh

References

- Lindholm, G.F., Garbedian, S.P., Newton, G.D. and Whitehead, R.L., 1988. Configuration of the Water Table and Depth to Water, Spring 1980, Water-Level Fluctuations, and Water Movement in the Snake River Plain Regional Aquifer System, Idaho and Eastern Oregon., U.S. Geologic Survey Hydrologic Investigations.
- Petrich, C. and Urban, S., 2004. Characterization of Ground Water Flow in the Lower Boise River Basin, Idaho Water Resources Research Institute and the Idaho Department of Water Resources, Research Report IWRRI-2004-01.

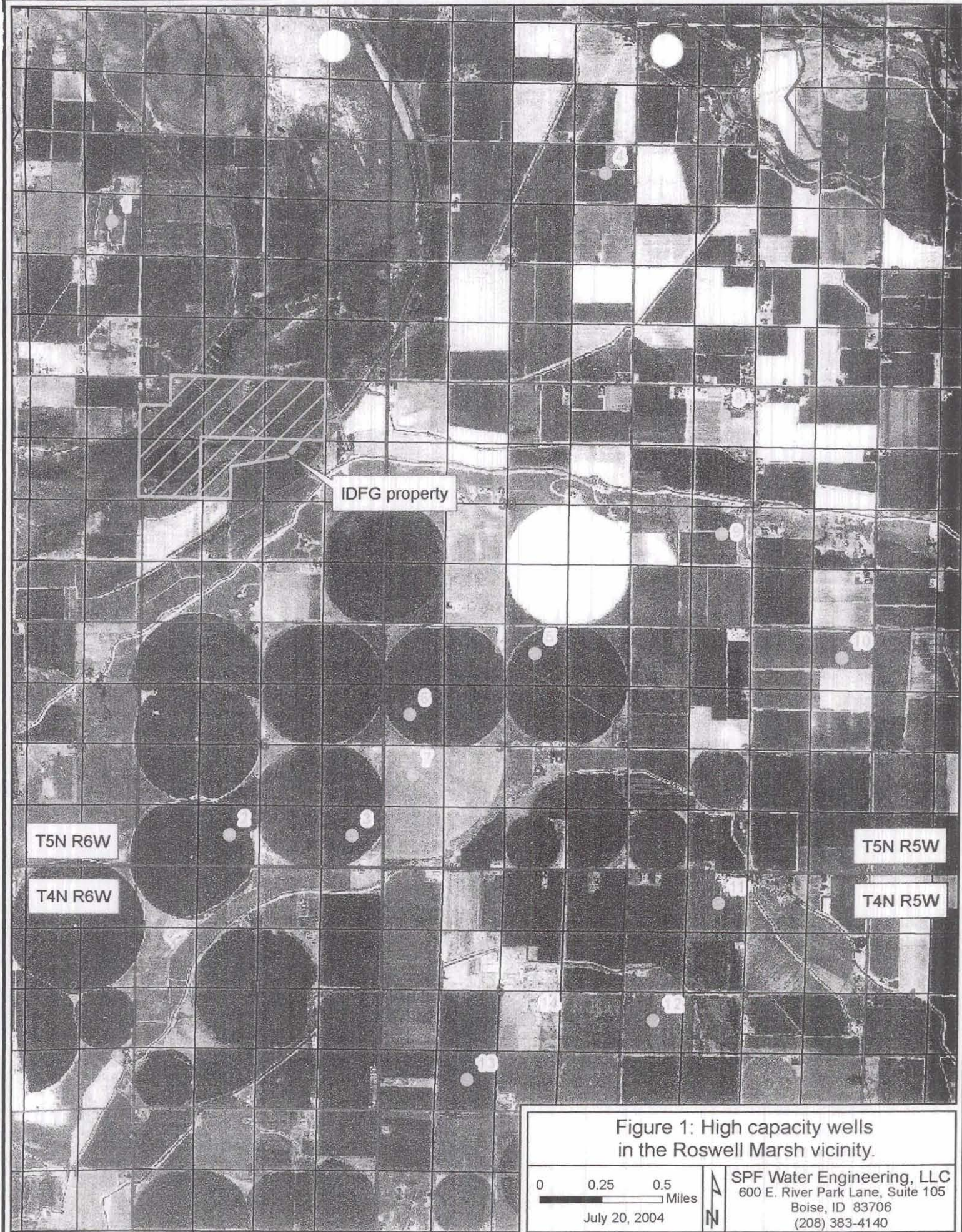


Figure 1: High capacity wells
in the Roswell Marsh vicinity.

**ATTACHMENT A
WELL DRILLER'S REPORT FOR
ROSWELL MARSH TEST WELL**

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only		
Well ID No.	815532	
Inspected by		
Twp	Rge	Sec
1/4	1/4	1/4
Lat	Long	

1. WELL TAG NO. D 0031214
DRILLING PERMIT NO. _____
Water Right or Injection Well No. _____

2. OWNER:
Name Idaho Dept. of Fish & Game
Address P.O. Box 25 600 S. Walnut
City Boise State ID Zip 83704

3. LOCATION OF WELL by legal description:

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

Twp. 5 North ☒ or South ☐
Rge. 6 East ☐ or West ☒
Sec. 25 1/4 SW 1/4 NE 1/4
Gov't Lot _____ County Canyon

Lat: _____ Long: _____
Address of Well Site Pebble Lane S. Hwy 18
City Parma

Li. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply

(Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
3/8 Benbrite	0	18	10 bags	dry pour 10"

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 145

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16"	+1.16	145	20	Steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method Hot Oil Perforance

Screen Type & Method of Installation _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
85	95	8 perforations				☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
<u>N/A</u>				

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

10 ft. below ground Artesian pressure _____ lb.

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

Sanitary Well Cap

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>45</u>	<u>35'</u>	<u>80</u>	<u>1 Hrs</u>

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
10"	0	3	top soil		
10"	3	110	Brown clay		
10"	110	20	fine sand		
10"	20	78	loam		
10"	78	80	cemented sand		
10"	80	100	coarse sand & fine gravel		
10"	100	110	blue clay & sand		
10"	110	127	coarse sand & fine gravel		
10"	127	135	coarse sand & fine gravel		
10"	135	145	coarse sand & fine gravel		

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JUL 08 2004

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WESTERN REGION

Completed Depth 145 (Measurable)

Date: Started 5-17-04 Completed 5-25-04

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 Richardson & Co Firm No. 333

Principal Driller _____ Date _____

Driller or Operator [Signature] Date 6-25-04

Operator _____ Date _____

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

FORWARD WHITE COPY TO WATER RESOURCES

ATTACHMENT B
WELL DRILLER'S REPORTS FOR
LOCAL PRODUCTION WELLS

Well ID	Contact	Use	TWP	RNG	SEC	Tract	Well Address	Gallons Per Minute	Static Water Level	Total Depth	Casing Depth	CSG DIA	Construction Date	Permit Number	Tag Number
1	Downs Dairy	Commercial	05N	06W	23	SENE	31156 MARKER RD	190	54	298		12	9/4/1992	725773	
2	Ronald G. Smith Stateline Farms	Irrigation	05N	06W	36	SESW		3000	140	599		16	7/31/1989	722790	
3	Arena Valley Vineyards, LLC	Irrigation	05N	06W	36	SESE		230	128	211	211	8	8/27/2001	770301	D0018920
4	Aristogenes Inc	Irrigation	05N	05W	19	NENE		380	12	108	104	10	11/9/1990	723943	
5	Agland Inc	Irrigation	05N	05W	31	NWNE		1850	136	470	262	16	8/18/1997	731305	
6	Ronald G. Smith Stateline Farms	Irrigation	05N	05W	31	SWNW	25352 Wamstad		140	605	585	24	1/30/2000	732679	D0007924
7	Robert M. Hall	Irrigation	05N	05W	31	NWSW				299	299	16	12/3/1977	805569	
8	Turnura Farms	Irrigation	05N	05W	29	NENW			11	300	300	12	12/31/9999	790613	
9	Roswell Water Users Corp	Municipal	05N	05W	29	NESW	STEPHEN LANE	300	100	390	345	10	6/22/1998	732043	D0007018
10	T & K Farms Inc, Cloudcroft Inc	Irrigation	05N	05W	32	NENE				385	385	16	6/5/1990	723832	
11	Merle H. Jenkins	Irrigation	04N	05W	5	NENW		2600	58	173	168	16	5/10/1992	725621	
12	Stewart A. Cruickshank	Irrigation	04N	05W	5	NWSW			19	96	96	12	2/28/1972	798218	
13	Jean Jenkins Merle H. Jenkins	Irrigation	04N	05W	6	NWSESW	W HOWE	1370	26	208	208	16	6/11/1993	726996	
14	Merle H. Jenkins	Irrigation	04N	05W	6	NWSE		400	12	117	114	16	1/26/1971	798217	

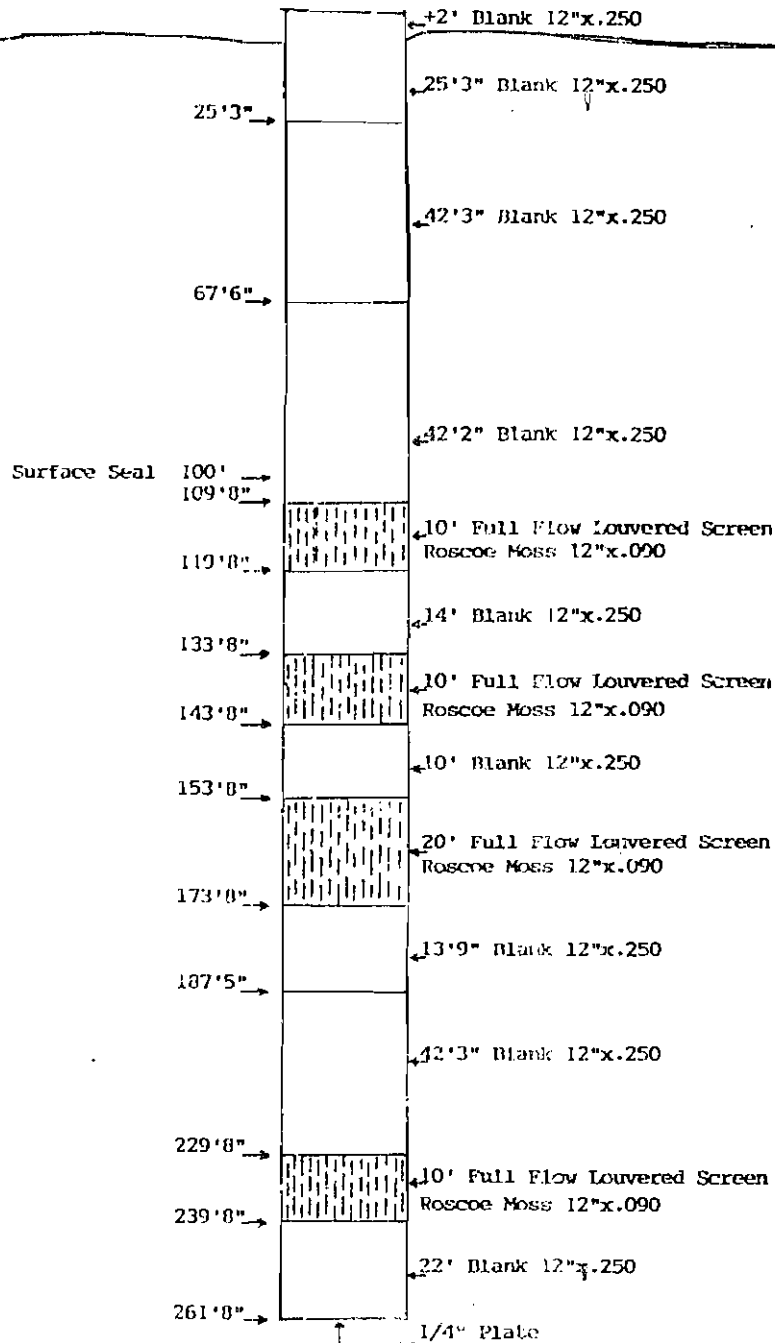
requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

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

Lown's Dairy
31156 Marker Rd
Parma, ID 8

5N 6W
Sec 23

Drilling Permit: 63-92-W-434
Water Permit: 63-11283

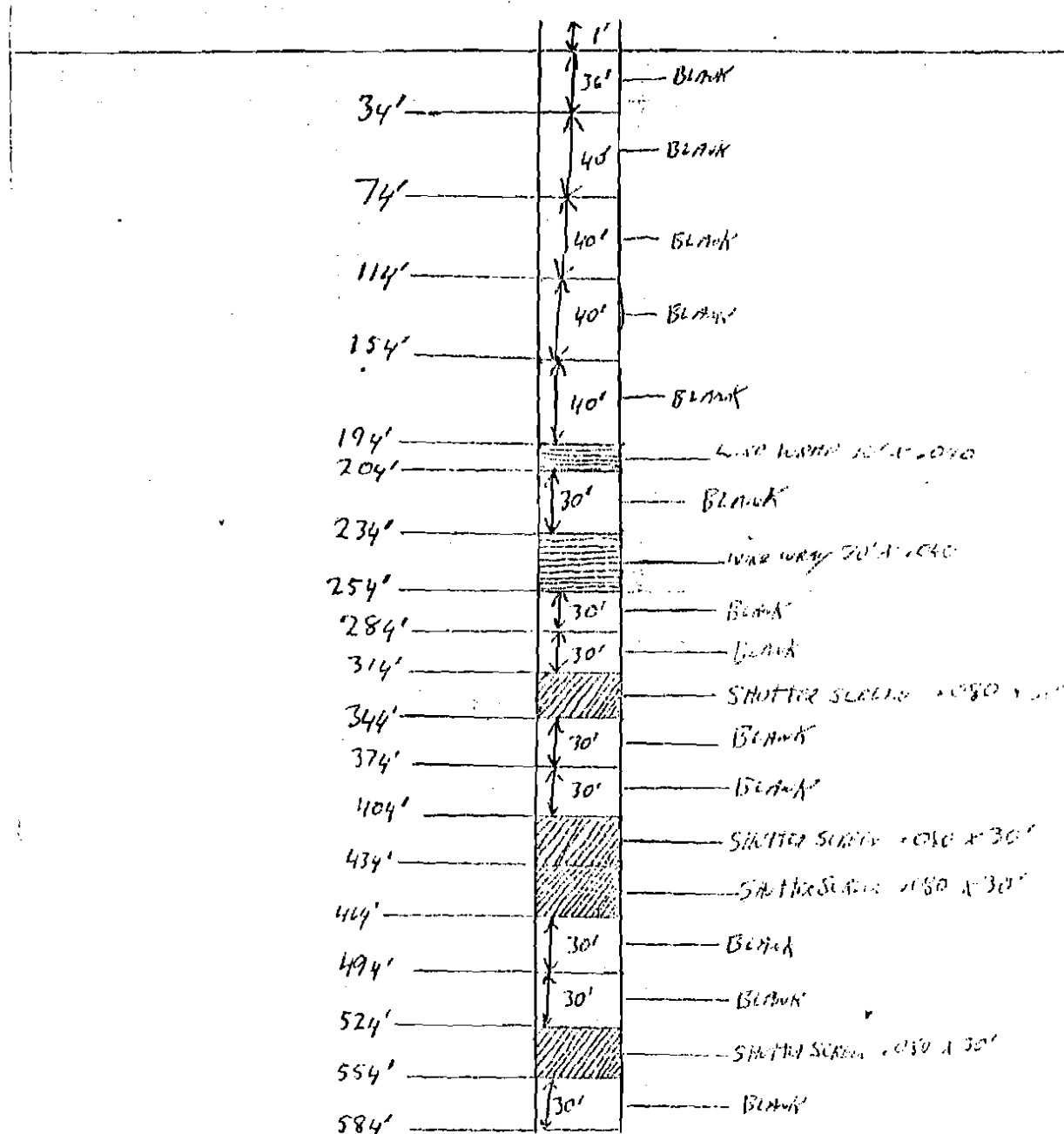


	0-9 - SANDY TOPSOIL
	9-13 - SAND, MEDIUM, BROWN
	13-18 - COARSE SAND, SOME GRAVEL
	18-35 - COARSE SAND, LAYER GRAVEL UP TO 5"
	35-48 - CLEAN WHITE QUARTZ COARSE
	48-78 - SAND - FINE TO COARSE w/ GRAVEL
	78-80' - COARSE GRAVEL
	80'-135' - SAND - FINE TO COARSE w/ FINE GRAVEL
	135'-186' - SAND - MED TO COARSE w/ FINE GRAVEL
	186'-187' - CLAY - BROWN TO GR.
	189-305'
	SAND - MED TO COARSE w/ FINE GRAVEL
	305-306 - SANDSTONE - PIECES OF MUD
	306-308 - CLAY - FINE SAND BLEND
	308'-402' - SAND - MED TO COARSE - w/ FINE GRAVEL
	402'-442' - SAND - COARSE - GRAVEL UP TO 2"
	442'-520' - SAND - MED TO COARSE w/ FINE GRAVEL
	520' - 581' - SAND - MED TO COARSE - GRAVEL UP TO 2"
	582'-593 - SAND - MED TO COARSE w/ FINE GRAVEL
	593-599 - CLAY - MED TO COARSE

247117
-88-W-082

SECTION OF CORE

IRWIN, IDAHO



IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 18920
DRILLING PERMIT NO. _____
Other IDWR No. 63-31133

2. OWNER: Arena Valley Vineyards
Name _____
Address 9304 Burnett Av
City Wilder State ID Zip 83709

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

North _____
Twp. 5 North ☒ or South ☐
Rge. 6 East ☐ or West ☒
Sec. 36 1/4 S/E 1/4 S/E 1/4
Gov't Lot _____ County Canyon
Lat. _____ Long. _____
Address of Well Site Arena Valley Rd.
City Wilder

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

Lt. _____ Bk. _____ Sub. Name 500' north of
Golden Gate Canal

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD

☐ Air Rotary ☐ Cable ☒ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
bentonite grout	0	150	60 sk		pumped
#6-9 sand	150	215	58 sk		poured

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8	42	171	322	steel	XX	☐	XX	☐
8	201	211	322	steel	XX	☐	XX	☐
6	201	211	280	steel	☐	XX	XX	☐

Length of Headpipe _____ Length of Tailpipe 10'

9. PERFORATIONS/SCREENS

Perforations _____ Method _____
Screens _____ Screen Type Johnson V-wire

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
171	201	40		8	stnls	XX	☐
170	201	40		8	tel. stnls	☐	XX

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

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

11. WELL TESTS:

☒ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
230	42	170	4 hr

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

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

Bo. Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	2	silty sand		X
	2	10	clay		X
	10	17	pea gravel		X
	17	58	coarse to fine gravel		X
	58	170	pea gravel with coarse gravel		X
	170	201	sand & pea gravel	X	
	201	310	blue clay		X

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SEP 25 2001
WATER RESOURCES
WESTERN REGION

Completed _____ Depth 211' (Measurable)
Date: Started 7/25/01 Completed 8/27/01

13. DRILLER'S CERTIFICATION

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

Company Name Stevens & Sons Firm No. 153

Firm Official Ron Stevens Date 9/13/01

and
Driller or Operator _____

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 67994
Use Typewriter or Ballpoint Pen

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

1. DRILLING PERMIT NO 63-99-40213-200
Other IDWR No. 03-10611 TRAPS 4976

2. OWNER:

Name Agland, Inc.
Address P.O. Box 27
City Boise State ID Zip 83707

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N	
1	X
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
S	

Twp. 5 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 31 1/4 NW 1/4 NE 1/4
Gov't Lot _____ County Canyon
Lat: _____ Long: _____
Address of Well Site On Farmland
Matthews City Russell
(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 Reverse

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From To	Sacks or Pounds		
Benavite 5"	0' 230'	35 pounds		Overburden
3/4 Gravel	230' 470'	50 yards		

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
16"	11 1/2' 240'	250	Steel	☒	☐	☒	☐
16"	240' 300'	250	Steel	☒	☐	☒	☐
16"	300' 400'	250	Steel	☒	☐	☒	☐
16"	400' 470'	250	Steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe 42'

9. PERFORATIONS/SCREENS

☐ Perforations Method Wire wrap
☒ Screens Screen Type Johnson .040

From To	Slot Size	Number	Diameter	Material	Casing	Liner
240' 280'	.040		16"	Steel	☒	☐
300' 380'	.040		16"	Steel	☒	☐
400' 470'	.040		16"	Steel	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

136 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: 2" access port

11. WELL TESTS:

☒ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
1850		160'	4 hrs.

Water Temp. 59' Bottom hole temp. _____

Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From To	Remarks: Lithology, Water Quality & Temperature	Water
28"	0' 10'	Topsoil	
	10' 16'	Topsoil + Burnt Clay	
	16' 48'	Sand + Gravel	
	48' 56'	Cemented Gravel	
	56' 185'	Coarse Sand + Gravel	
	185' 190'	Sandy Red Clay	
	190' 197'	Blue Sandy Clay	
	197' 360'	Coarse Sand + Gravel	
	360' 370'	Mud to Coarse Gravel + Clay	
	370' 384'	Sandy Clay + Gravel	
	384' 420'	Coarse gravel + Clay Mix	
	420' 438'	Gray Sandy Clay	
	438' 440'	Coarse Sand + Gravel	
	440' 470'	Gray Sandy Clay	

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AUG 26 1997

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WESTERN REGION

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RECEIVED

AUG 22 1997

SEP 04 1997

Department of Water Resources

Department of Water Resources

Completed Depth 760' (Measurable)
Date Started 7-18-97 Completed 8-18-97

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 Riverside Inc Firm No. 333

Firm Official _____ Date _____

and _____

Supervisor or Operator _____ Date 8/21/97

(Sign once if Firm Official Operator)

FORWARD WHITE COPY TO WATER RESOURCES

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 7924
DRILLING PERMIT NO. 732-679
Other IDWR No. 63-88-W-082 REPLACEMENT WELL #

2. OWNER:
Name ARNOLD G. Smith - STATELINE FARMS
Address 25352 WAMSTAD
City PARMA State ID Zip 83660

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

Tw. 5 North ☒ or South ☐
Rge. 5 East ☐ or West ☒
Sec. 31 1/4 SW 1/4 NW 1/4
Gov't Lot 2 County CANYON
Lat: _____ Long: _____
Address of Well Site _____ City PARMA

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply

☐ New Well ☐ Modify ☐ Abandonment ☒ Other (Replacement etc.)

6. DRILL METHOD

☐ Air Rotary ☐ Cable ☐ Mud Rotary ☒ Other REVERSE

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
BENTONITE 5/8"	0	305	50.000	OVER BORE/POUR
Colorado 69 SAND	300	600	66.015	POURED

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
24" + 18"	305	375		Steel	☒	☐	☒	☐
16"	295	365		Steel	☒	☐	☐	☐
16"	445	485		Steel	☒	☐	☐	☐

Length of Headpipe 70' Length of Tailpipe 15'

9. PERFORATIONS/SCREENS

Perforations Method JOHNSON
Screens Screen Type WIRE WRAP SCREENS

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
365	445	.080		16"	S.S.	☒	☐
485	585	.080		16"	S.S.	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

140 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: 1 1/2" pipe w/cap

11. WELL TESTS:

Yield gal/min.	Drawdown	Pumping Level	Time
WELL WILL NOT BE TESTED OWNER WILL INSTALL PUMP			

Water Temp. 62° Bottom hole temp. _____
Water Quality test or comments: _____

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
32"	0	12	SANDY TOP SOIL		X
	12	16	Cleche SANDSTONE		X
	16	19	MED. SAND, CLAY MIX		
	19	22	Cleche CLAY		
	22	48	SAND, GRAVEL RIVER ROCK		
	48	95	SAND, SANDSTONE, GRAVEL		
	95	97	HARD BURNT BROWN CLAY		
	97	115	SAND, DEO GRAVEL VARIOUS COLORS		
	115	130	FINE SAND STREAKS SANDSTONE		
	130	152	FINE COARSE SAND, SMALL GRAVEL		
	152	179	SANDSTONE, HARD CLAYSTONE		
	179	182	FINE BR SAND, SANDSTONE		
	182	183	BLUE CLAY		
	183	192	BLUE SANDSTONE FINE SAND		
	192	590	FINE COARSE SAND, DEO GRAVEL		
	590	605	GRAY CLAY		

RECEIVED

MAR 30 2000

Department of Water Resources

Completed Depth 600' (Measurable)
Date: Started 1-19-00 Completed 1-30-00

13. DRILLER'S CERTIFICATION

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

Company Name RIVERSTONE INC Firm No. 333

Firm Official _____ Date _____
and _____
Driller or Operator _____ Date 3-29-00

(Sign and Print Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

USE TYPEWRITER OR
BALLPOINT 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.

7

1. WELL OWNER

Name Robert M. Hall
Address Rt. 1, Parma, Idaho 83660
Owner's Permit No. _____

7. WATER LEVEL

Static water level _____ 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 ☐ Bailor ☐ Other

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 28 inches Total depth 299 feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>.250</u> inches	<u>16</u> inches	<u>2</u> feet	<u>148</u> feet
<u>.250</u> inches	<u>16</u> inches	<u>188</u> feet	<u>208</u> feet
<u>.250</u> inches	<u>16</u> inches	<u>288</u> feet	<u>298</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

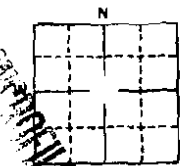
Was casing drive shoe used? ☐ Yes ☒ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet
_____ perforations	_____ feet	_____ feet

Well screen installed? ☒ Yes ☐ No
Manufacturer's name Roscoe Moss
Type _____ Model No. _____
Diameter 16 Slot size 80 Set from 148 feet to 188 feet
Diameter 16 Slot size 80 Set from 208 feet to 288 feet
Gravel packed? ☒ Yes ☐ No Size of gravel 3/8 minus
Placed from 20 feet to 299 feet
Surface seal depth 20' 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. 3 Block No. _____

County Canyon

NW & SW & Sec. 31, T. 5N N/S, R. 5W E/W

10.

Work started 11-28-77 finished 12-3-77

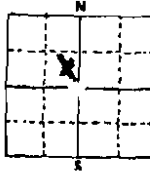
11. DRILLERS CERTIFICATION

Firm Name Pete Cope Drilling Co. Inc. Firm No. 213
10566 K-Bar-T Drive
Address Boise, Idaho 83703 Date 12-5-77

Signed by (Firm Official) Pete Cope
and
(Operator) Frank Hostain

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. JUL 29 1977

1. WELL OWNER Name <u>JUMURA Farms</u> Address _____ Owner's Permit No. <u>63.8570</u>	7. WATER LEVEL Static water level <u>11</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 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Drew Down</th> <th>Hours Pumped</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>	Discharge G.P.M.	Drew Down	Hours Pumped																																																																																					
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County _____ NE 1/4 NW 1/4 Sec. 29 T. 5 N. 5 E.	10. Work started _____ finished _____ 11. DRILLER'S CERTIFICATION Firm Name <u>K & H well Drill</u> Firm No. <u>194</u> Address <u>815 Plymouth</u> Date <u>6/15/77</u> Signed by (Firm Official) <u>W. H. Hume</u> and (Operator) <u>L. C.</u>																																																																																								

FORWARD WHITE COPY TO WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORTUS
b
PEWITER OR
OINT 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 T & K Farms
Address P. O. Box 1060
Homedale, ID 83628
Owner's Perm't No. 63-11263 63-90-W-060

JUN 26 1990

2. WATER LEVEL

Static water level _____ 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.

3. NATURE OF WORK

- ☒
- New well
- ☐
- Deepened
- ☐
- Replacement
-
- ☐
- Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

4. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped

5. PROPOSED USE

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

6. LITHOLOGIC LOG

103626

Bore Diam.	Depth		Material	Water Yes/No
	From	To		
28"	0	2	Sandy Clay	
	2	14	Silty Clay-Hard Pan Material	
	14	24	Sand-Gravel-Hard Pan	
	24	43	Sand-Gravel	
	43	46	Crse. Brn. Sand & Sma. Grvl.	
	46	51	Brn. Sandy Clay	
	51	54	Crse. Sand & Gravel	
	54	64	Fine Brn. Sand	
	64	74	Fine Brn. Sand w/grvl. at end	
	74	84	Brown Clay-	
	84	94	Fine Grvl. & Brn. Clay Sandiched	
	94	130	Fine Brn. Sand w/fine gravel	
	130	134	Brown Clay	
	134	140	Clay	
	140	151	Fine Sand-Fine Gravel	
	151	155	Clay	
	155	170	Clay-Sand & Fine Gravel	
			in some areas.	
	170	180	Fine sand w/sme. larger gravel	
	180	188	Brown Clay	
	188	195	Gravel-Sand-w/1st. 2' clay	
	195	205	Brn. & Blu Silty clay w/ some fine sand in areas.	
	205	209	Blue Clay	
	209	215	Fine blu grvl. w/some sand	X
	215	225	Fine blue sand.	X
	225	255	Fine blue sand & sme. Crse.	X
	255	265	Corse. Sand w/pea size at end	X
	265	273	Sandstone w/some blu clay	X
	273	282	Sandstone/clay	
	282	292	Coarse sand & Gravel	
	292	295	Sandstone w/sme. grvl.	
	295	297	Sandstone	
	297	310	Gravel/coarse sand	X
	310	315	Sandstone w/sme. grvl. mix	X
	315	325	Sndwched. Sandstone & Gravel	

7. METHOD DRILLED

- ☐
- Rotary
- ☐
- Air
- ☐
- Hydraulic
- ☒
- Reverse rotary
-
- ☐
- Cable
- ☐
- Dug
- ☐
- Other _____

8. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	16 inches	18 feet	210 feet
.250 inches	16 inches	270 feet	300 feet
.250 inches	16 inches	380 feet	385 feet

Was casing drive shoe used? ☐ Yes ☒ NoWas a packer or seal used? ☐ Yes ☒ NoPerforated? ☐ Yes ☒ NoHow 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 ☐ NoManufacturer's name Roscoe MossType Wirewrap Model No. _____Diameter 16" Slot size .040 Set from 210 feet to 270 feetDiameter 16" Slot size .040 Set from 300 feet to 380 feetGravel packed? ☒ Yes ☐ No Size of gravel 3/8"Placed from 18 feet to 385 feetSurface seal depth 18' Material used in seal: ☐ Cement grout☐ Bentonite ☒ Pudding clay ☐ _____Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing☒ Overbore to seal depthMethod of joining casing: ☐ Threaded ☒ Welded ☐ Solvent☐ Cemented between strataDescribe access port 2"

9. LOCATION OF WELL

Sketch map location must agree with written location.

Sketch map location must agree with written location.

County Canyon

NE 1/4 NE 1/4 Sec. 32 T. 5N N/S. R. 5W E/W.

10.

Work started 6/1/90 finished 6/5/90

11. DRILLERS CERTIFICATION

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

PETE COPE DRILLING CO., INC.

Firm Name _____ Firm No. 213Address 6505 West Chinden Blvd.Date 6/5/90Signed by (Firm Official) Pete Cope

and

(Operator) Frank C. Cushing

Form 238-7
9/82STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUS
PEWITTER OR
POINT PEN

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 T & K Farms
Address 63-90-W-0060
Owner's Permit No. 63-11263

7. WATER LEVEL

Static water level _____ 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 _____

Discharge G.P.M. _____ Pumping Level _____ Hours Pumped _____

3. PROPOSED USE

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

9. LITHOLOGIC LOG

103627

Bore Diam.	Depth		Material	Water	
	From	To		Yes	No
28"	325	331	Larger Gravel-Coarse Sand	X	
	331	335	Sandstone-Fine Sand	X	
	335	345	Good Pea sized-Coarse Sand	X	
	345	355	Gravel/Coarse Sand	X	
	355	365	Coarse to fine sand	X	
	365	385	Fine to Coarse Sand	X	

4. METHOD DRILLED

- ☐
- Rotary
- ☐
- Air
- ☐
- Hydraulic
- ☐
- Reverse rotary
-
- ☐
- Cable
- ☐
- Dug
- ☐
- Other _____

5. WELL CONSTRUCTION

Casing schedule: ☐ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Was casing drive shoe used? ☐ Yes ☐ NoWas a packer or seal used? ☐ Yes ☐ NoPerforated? ☐ Yes ☐ NoHow 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 _____ Material used in seal: ☐ Cement grout☐ Bentonite ☐ Puddling clay ☐ _____Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing☐ Overbore to seal depthMethod of joining casing: ☐ Threaded ☐ Welded ☐ Solvent

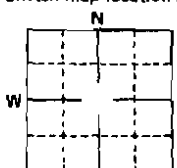
Weld

☐ Cemented between strata

Describe access port _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision _____

Lot No. _____ Block No. _____

County Canyon
NE 1/4 NE 1/4 Sec. 32 T. 5N N/S, R. 5W & W.

10.

Work started _____ finished _____

11. DRILLERS CERTIFICATION

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

Firm Name _____ Firm No. _____

Address _____ Date _____

Signed by (Firm Official) _____

and

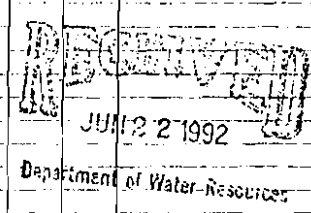
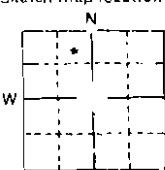
(Operator) _____

DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

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

USE TYPEWRITER OR
BALLPOINT PEN

11
10/2

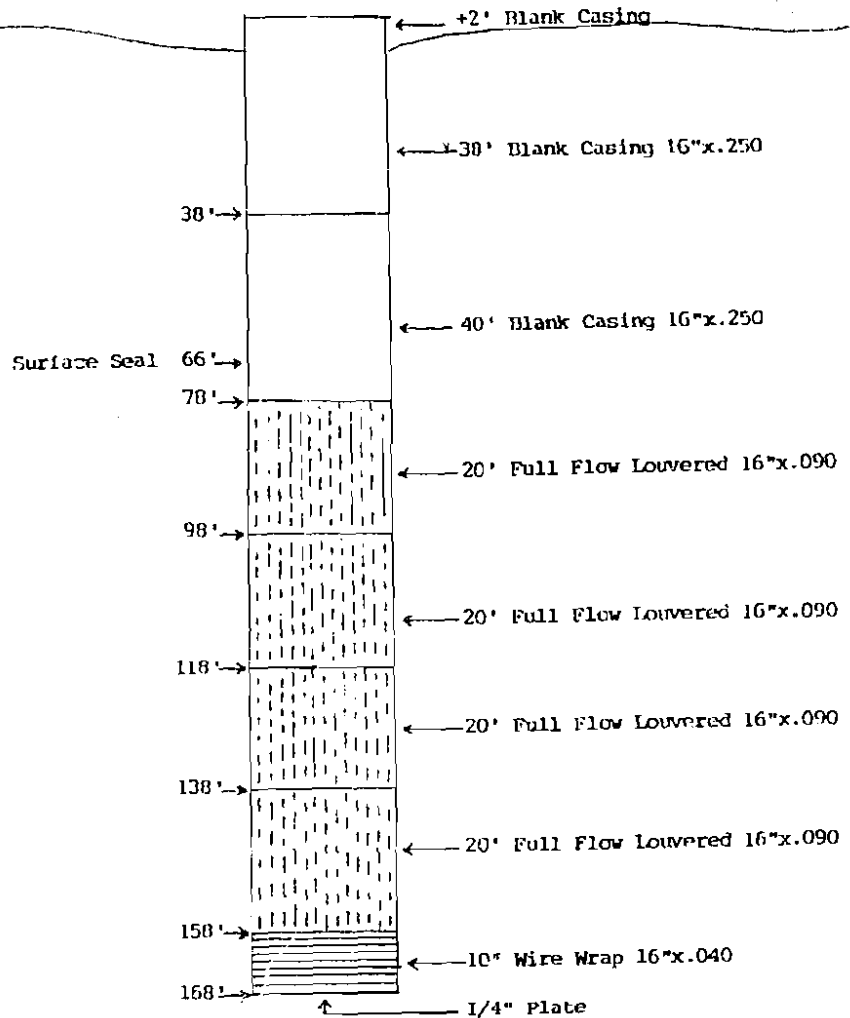
1. WELL OWNER Name: <u>Merle H. Jenkins</u> Address: <u>20569 Dixie, Parma, ID 83660</u> Drilling Permit No. <u>63-92-W-292</u> Water Right Permit No. <u>63-11711</u>	7. WATER LEVEL Static water level <u>58'</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>65</u> °F. Quality _____ Describe artesian or temperature zones below																																																				
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement Well diameter increase _____ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☒ Pump ☐ Bailor ☐ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Discharge G.P.M.</th> <th>Pumping Level</th> <th>Hours Pumped</th> </tr> </thead> <tbody> <tr> <td>980</td> <td>65'</td> <td>15</td> </tr> <tr> <td>1775</td> <td>65'</td> <td>Total</td> </tr> <tr> <td>2600</td> <td>71'</td> <td></td> </tr> <tr> <td>1835</td> <td>67'</td> <td></td> </tr> </tbody> </table>	Discharge G.P.M.	Pumping Level	Hours Pumped	980	65'	15	1775	65'	Total	2600	71'		1835	67'																																						
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5. WELL CONSTRUCTION *See Sectional Attached 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>.250 inches</td> <td>16"</td> <td>0</td> <td>10</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 ☐ Gun 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 <u>Roscoe Moss / W.A. Brown</u> Type <u>Full flow louvered</u> Model No. _____ Diameter <u>16"</u> Slot size <u>.090</u> Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☒ Yes ☐ No ☐ Size of gravel <u>3/8 minus</u> Placed from <u>66'</u> feet to <u>173'</u> feet Surface seal depth <u>66'</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>1 1/2" pipe w/ plug</u>	Thickness	Diameter	From	To	.250 inches	16"	0	10	inches	inches	feet	feet	inches	inches	feet	feet	inches	inches	feet	feet	Number	From	To	perforations	feet	feet	perforations	feet	feet	perforations	feet	feet	10. Work started <u>5-7-92</u> finished <u>5-10-92</u>																				
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6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Canyon</u> NE 1/4 NW 1/4 Sec. <u>5</u> T. <u>4</u> S. R. <u>5</u> W. X.	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>Riverside Drilling</u> Firm No. <u>333</u> Address <u>PO Box 720</u> Date <u>5-27-92</u> <u>Parma, ID 83660</u> Signed by (Firm Official) <u>Larry Daugherty</u> and (Operator) <u>Larry Daugherty</u>																																																				

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

C
Merle Jenkin
28569 Dixie Rd
Parma, ID 83660

Drilling Permit # 63-92-W-292
Water Permit # 63-11711

pg 2 of 2



04 N 05 W SEC 5

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.

12

1. WELL OWNER

Name Stewart Crisp Shank
Address Parma Idaho
Owner's Permit No. # 63-7515

7. WATER LEVEL

Static water level 19' feet below land surface
Flowing? ☐ Yes ☐ No G.P.M. flow
Temperature 60° 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 ☐ OtherDischarge G.P.M. 600 Draw Down 60 Hours Pumped 8

3. PROPOSED USE

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

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 12 inches Total depth 96' feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>1/4</u> inches	<u>12</u> inches	<u>2</u> feet	<u>96'</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

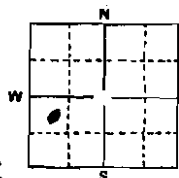
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☒ Factory ☐ Knife ☐ Torch
Size of perforation 1/8 inches by 2 inches

Number	From	To
<u>72</u> perforations	<u>66'</u> feet	<u>96'</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 _____ feetGravel packed? ☒ Yes ☐ No Size of gravel 3/4"
Placed from 66' feet to 20' feetSurface seal? ☒ Yes ☐ No To what depth 20' feet
Material used in seal ☒ Cement grout ☐ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

County CANYON
NW 1/4 SW 1/4 Sec. 5 T. 4 N. 1/2 R. 5 NW

10.

Work started 2-20-72 finished 2-28-72

11. DRILLER'S CERTIFICATION

This well was drilled under my supervision and this report is
true to the best of my knowledge.Driller's or Firm's Name Holloway Drilling Number 53
Address ONTARIO OREGON
Signed By Max Holloway Date 3-25-72

RECEIVED
JUL 15 1993

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

RECEIVED

JUL 08 1993

TYPEWRITER OR
BALLPOINT PEN

13

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 Merle S. Jean Jenkins
Address 28569 Dixie Ln., Parma, ID 83660
Drilling Permit No. 63-93-W-0379-000
Water Right Permit No. 63-11127

7. WATER LEVEL

Static water level 26' feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 65 °F. Quality _____
Describe artesian or temperature zones below.

2. NATURE OF WORK

- ☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase ☐ Modification
☐ Abandoned (describe abandonment or modification procedures
such as liners, screen, materials, plug depths, etc. in lithologic
log, section 9.)

8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
840	72'	4 hrs total
890	75'	
1370	80'	

3. PROPOSED USE

- ☐ Domestic ☒ Irrigation ☐ Monitor
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

- ☐ Rotary ☐ Air ☐ Auger ☒ Reverse rotary
☐ Cable ☐ Mud ☐ Other _____
(backhoe, hydraulic, etc.)

5. WELL CONSTRUCTION ** See attached sheet

** Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness Diameter From To
_____ 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 ☐ Gun
Size of perforation? _____ inches by _____ inches

Number From To
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet

** Well screen installed? ☐ Yes ☐ No

Manufacturer W.A. Brown Type Bridge
Top Packer or Headpipe Rose of Moss Louvered & Wire
Bottom of Tailpipe Wrap

Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Gravel packed? ☒ Yes ☐ No Size of gravel 3/8
Placed from 95' feet to 208' feet

Surface seal depth 95 Material used in seal: ☐ Cement grout
☐ Bentonite ☒ Pudding clay ☐ _____
Sealing procedure used: ☐ Slurry pit
☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded
☐ Solvent Weld ☐ Cemented between strata

Describe access port 1 1/2" pipe with plug

6. LOCATION OF WELL

Sketch map location must agree with written location.

Subdivision Name _____
Lot No. _____ Block No. _____
County Canyon
Address of Well Site W. Howe
(give at least name of road)
T. 04 N ☒ or S ☐
R. 05 E ☐ or W ☒
NWSE 1/4 SW 1/4 Sec. 6

11. DRILLER'S CERTIFICATION

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

Firm Name Riverside Drilling Firm No. 333
PO Box 720
Address Parma, ID 83660 Date 7-06-93

Signed by Drilling Supervisor [Signature]
and
(Operator) _____
(If different than the Drilling Supervisor)

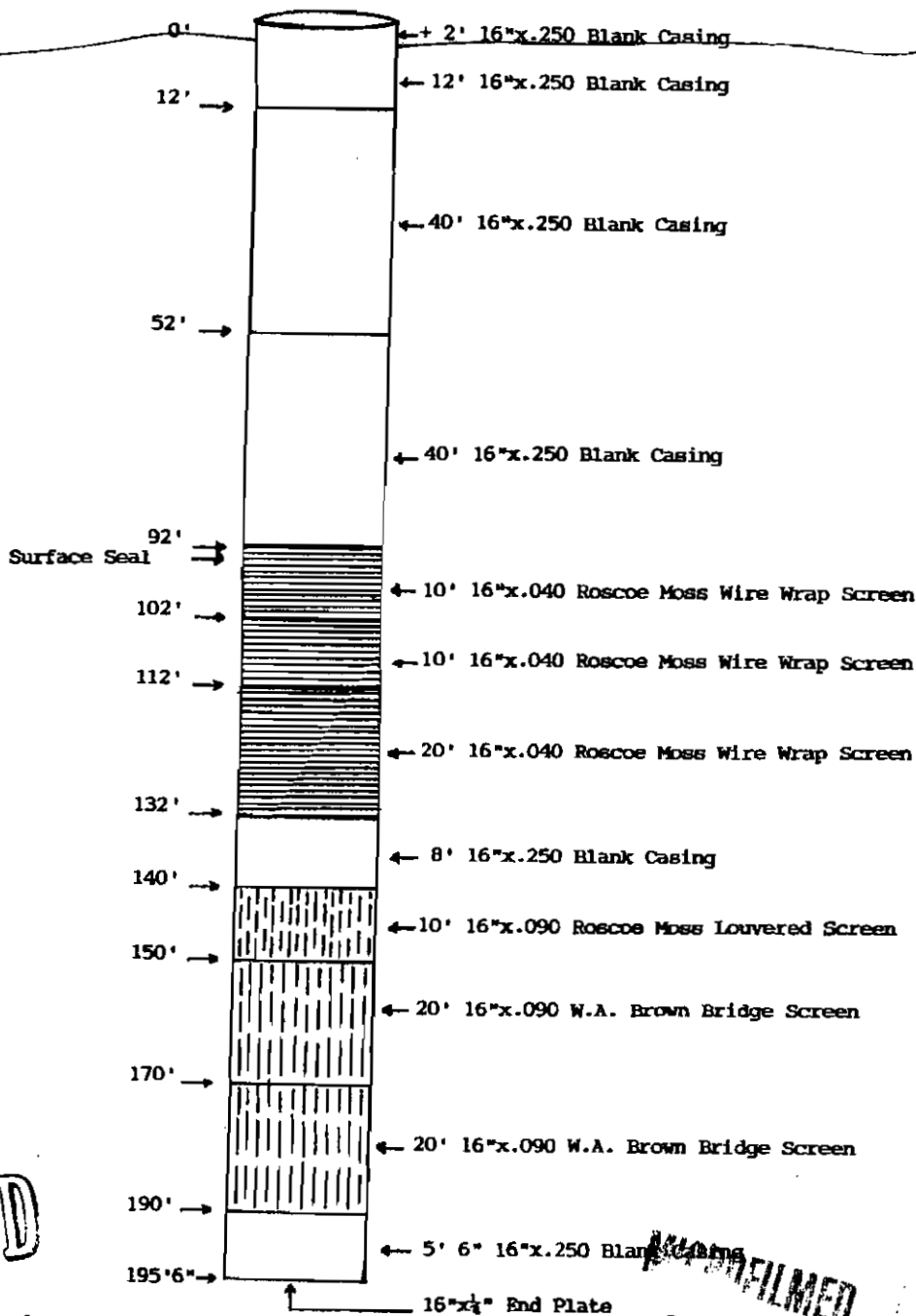
Merle & Jean Jenkins
28569 Dixie Ln
Parma, Idaho 83660

pg 2 of 2

Drilling Permit: 63-93-W-0379-000

4N 5W sec 6

70660



RECEIVED
JUL 13 1993

Department of Water Resources
Western Regional Office

RECEIVED
FEB 09 1994

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.

1. WELL OWNER

Name MARLE JENKINS
Address PARMA IDAHO
Owner's Permit No. _____

7. WATER LEVEL

Static water level 12 feet below land surface
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Temperature 60° 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>400</u>	<u>88</u>	<u>12</u>

3. PROPOSED USE

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

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 16 inches Total depth 117 feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>1/4</u> inches	<u>16</u> inches	<u>0</u> feet	<u>114</u> feet
_____ inches	_____ inches	_____ feet	_____ 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 3/8 inches by 1 inches

Number 888 perforations 10 feet 55 feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet

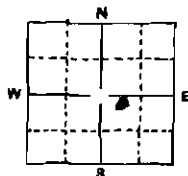
Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Diameter _____ Slot size _____ Set from _____ feet to _____ feet

Gravel packed? ☐ Yes ☒ No Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal? ☒ Yes ☐ No To what depth 20 feet
Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Canyon
NW 1/4 SE 1/4 Sec. 6, T. 4 N, R. 5 E

10.

Work started 1-19-71 finished 1-24-71

11. DRILLER'S CERTIFICATION

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

HOLLOWAY DRILLING Co 53
Driller's or Firm's Name Number
ONTARIO OREGON
Address
Max Holloway 2-12-71
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY

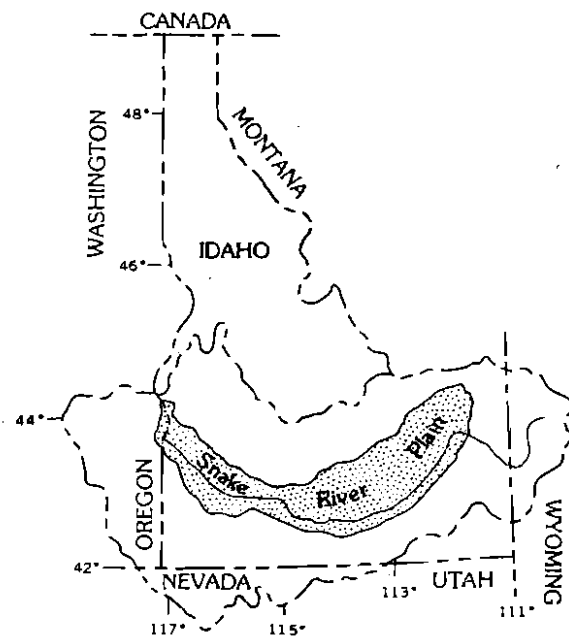
FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

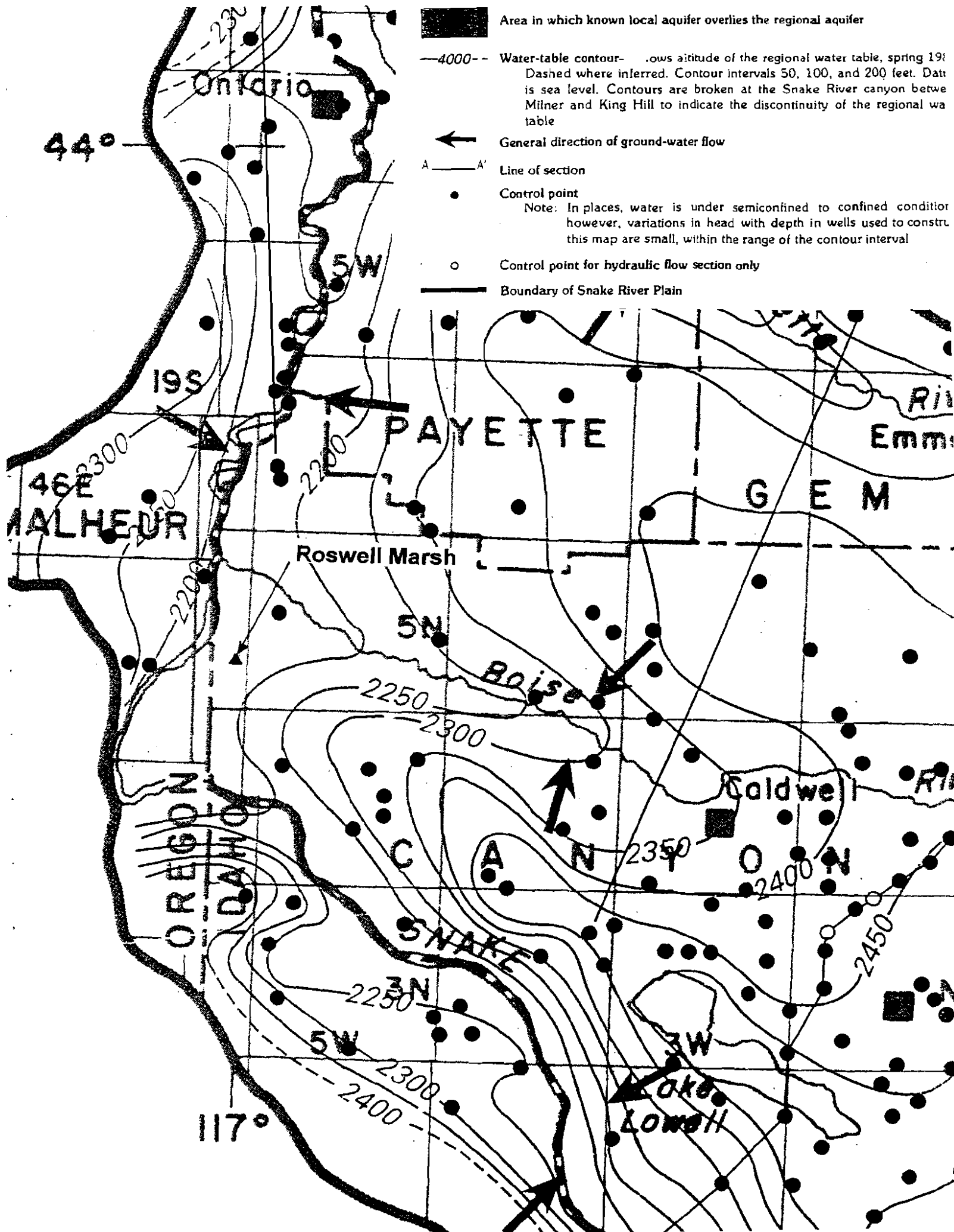
ATTACHMENT C
REGIONAL WATER TABLE CONTOUR MAP
(Lindholm et al., 1988)

CONFIGURATION OF THE WATER TABLE AND DEPTH TO WATER, SPRING 1980, WATER-LEVEL FLUCTUATIONS, AND WATER MOVEMENT IN THE SNAKE RIVER PLAIN REGIONAL AQUIFER SYSTEM, IDAHO AND EASTERN OREGON

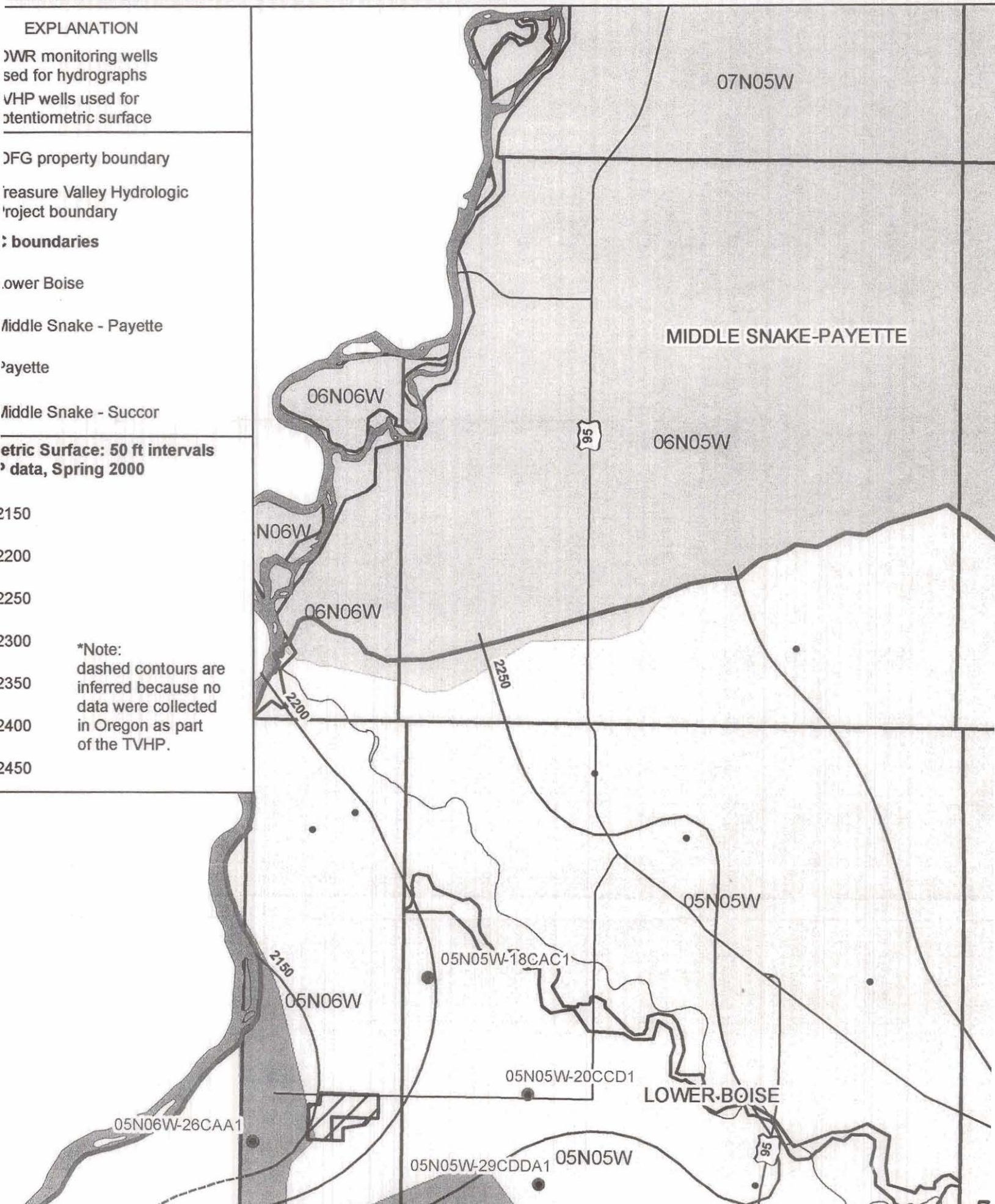
By G.F. Lindholm, S.P. Garabedian, G.D. Newton,
and R.L. Whitehead

A contribution of the
REGIONAL AQUIFER-SYSTEM
ANALYSIS PROGRAM





ATTACHMENT D
REGIONAL WATER TABLE CONTOUR MAP
(TVHP Data)



ATTACHMENT E
HYDROGRAPHS FROM WELLS IN
VICINITY OF ROSWELL MARSH
(IDWR Data)

Hydrographs of Selected Wells in Vicinity of Roswell Marsh

