SPF WATER ENGINEERING

February 24, 2008

John Westra
Western Regional Manager
Idaho Department of Water Resources
2735 Airport Way
Boise, ID 83705-5082

Subject: *Orchard Ranch, LLC Application 63-32703*

Dear Mr. Westra:

Enclosed on behalf of Orchard Ranch, LLC is additional information requested in your letter dated November 5, 2008. This additional information is submitted in support of application for permit number 63-32703, which requests authorization to divert groundwater for municipal use within the Orchard Ranch Planned Community. In our letter dated January 30, 2009, we requested that IDWR interrupt processing of the application to allow the applicant more time to compile this information. We request that IDWR proceed with processing of application 63-32703 upon receipt of this submittal.

Amended Permit Application

Potential well production rates ranging from 500 to 1,000 gpm or more are expected in the project area (Attachment B, *Ground-water Resource Evaluation of the Orchard Ranch Property,* SPF Water Engineering, 2007). In order to produce 9.6 cfs (4,300 gpm) with the largest well out of service (as required by IDEQ), the public water system is expected to need six to ten wells. The application for permit has been amended to request ten points of diversion (PODs) in Basins 61 and 63.

Responses to Overview Questions

Based on water demand data provided by Manhard Bellatrix in the Orchard Ranch Planned Community application, the anticipated average day and maximum day water demands for the development are approximately 2,990 gpm (6.66 cfs) and 4,480 gpm (9.98 cfs), respectively. The anticipated annual diversion volume, based on the average day demand provided in the Planned Community application, is approximately 4,820 AF.

300 E. Mallard Drive, Suite 350, Boise, Idaho 83706 Tel: 208-383-4140 Fax: 208-383-4156

The permit and transfer application diversion rates are not intended to be additive. The applicant intends to develop the Planned Community under permit application 63-32703 and only intends to transfer water if necessary for mitigation of any portion of the water use proposed by the permit application. We request that processing of application 63-32703 be resumed, and that processing of the transfer application be suspended until necessary. The applicant can amend or withdraw the transfer application as appropriate based on the outcome of the permitting process.

The application is intended to cover reasonably anticipated future needs associated with the Orchard Ranch Planned Community. A planning horizon of 40 years is appropriate given the size of the PUD, a realistic phasing plan, economic uncertainties, and the likely length of the county permitting process. Manhard Bellatrix prepared the Planned Community application (submitted in 2006) and the phasing plan at that time estimated construction of the first residential phase would occur within four years after county approval of the application, with the development completed 18 years after county approval. In retrospect, the applicant believes this estimate may have been too optimistic and that a longer period is needed for a reasonable planning horizon. Given the current economic climate and market conditions, likely delays in county approvals and more realistic phasing plans, development of residential and commercial phases of the project are expected to continue for approximately 40 years after county approval of the Planned Community application.

Permit 63-32703 - Effect on existing water rights *(IDAPA 37.03.08.40.05.c)*

Because the application requests appropriation of groundwater, a map showing the location of known wells and springs within one mile of the proposed points of diversion is included as Attachment A.

SPF Water Engineering searched for wells and groundwater points of diversion using the online IDWR Well Construction Search and IDWR Water Right and Adjudication Search on December 22, 2008. SPF Water Engineering also searched for spring points of diversion using the IDWR Water Right and Adjudication Search on December 22, 2008.

IDWR records do not indicate the presence of appropriated springs within one mile of the Orchard Ranch property boundary. IDWR records are available for seven wells present within one mile of the Orchard Ranch property boundary. These seven wells include one cathodic protection well, four domestic wells, one industrial well, and one stockwater well. IDWR records indicate four licensed or decreed water rights are diverted from wells within one mile of the Orchard Ranch property boundary. Water rights 61-7148 and 61-7180 are diverted from the Johnny Weimer well (well log

no. 3), with a total authorized maximum diversion rate of 0.06 cfs (27 gpm). Water rights 61-4074 and 61-10124 are diverted from the Union Pacific Railroad Company well (well log no. 7), with a total authorized maximum diversion rate of 0.33 cfs (148 gpm).

The cathodic protection well (well log no. 2) is not a water supply well. The six water supply wells range in depth from 633 to 744 feet. Static water levels reported when drilled ranged from 480 to 540 feet. Placement of perforated or screened intervals suggests that water is diverted from between zero and 250 feet below the static water level.

The six water supply wells are located east of the Orchard Ranch property, as shown in Attachment A. The proposed PODs on the amended permit application are located greater than one mile from the recorded wells. Records of existing wells located within one mile of the proposed PODs were not found.

Sufficiency of water supply *(IDAPA 37.03.08.40.05.d)*

Water demand data estimated by Manhard Bellatrix in the Orchard Ranch Planned Community application are provided in Attachment B. The anticipated average day and maximum day water demands for the public water system are approximately 2,990 gpm (6.66 cfs) and 4,480 gpm (9.98 cfs), respectively. The anticipated annual diversion volume, based on the average day demand provided in the Planned Community application, is approximately 4,820 AF. The public water system demands include minimal residential irrigation, but do not include irrigation of common areas. At full build out, irrigation of common areas will be supplied by reuse of treated wastewater effluent via a separate non-potable irrigation system.

Aquifer properties and water availability are discussed in Attachment C, *Ground-water Resource Evaluation of the Orchard Ranch Property* (SPF Water Engineering, 2007). Water level data available from IDWR were discussed in detail in Section 2.5 of the report. As shown in Figures 8 and 9 of the report, water level trends in wells closest to the site and outside of the Cinder Cone Butte Critical Ground Water Area (wells 01S04E-30AAC1, 01S04E-10DAD1, 01S04E-03ADB1, and 01N04E-28CAC1) were stable or increased slightly over the period of record. Water level data indicate that groundwater flow in the vicinity of Orchard Ranch is southwesterly toward the Snake River (Attachment C, Figures 6 and 7).

A groundwater level change map produced by IDWR (Harrington, 2004[1]) also indicates that water level declines observed in the Cinder Cone Butte area have not propagated to the Orchard Ranch site, even after approximately 30 years of diversion. SEBAL[2] evapotranspiration data from the year 2000 indicate that consumptive use associated with irrigated crops in the Cinder Cone Butte area is approximately 16,000 acre-feet per year. The effects of diverting a smaller annual volume (4,900 acre-feet per year) on the Orchard Ranch property would not be expected to propagate to the Cinder Cone Butte area.

The *Ground-water Resource Evaluation of the Orchard Ranch Property* (SPF Water Engineering, 2007) concluded that aquifer sustainability could not be determined from available information and recommended water level monitoring during aquifer development.

> *"The long-term sustainable production capacity in this area is unknown. Large increases in ground-water production will likely be constrained by low recharge in upgradient areas. Structural controls (e.g., faulting) may limit ground-water flow into the general Orchard Ranch area. The long-term sustainability of aquifers in the Orchard Ranch area will best be determined through increased ground-water pumping and careful water-level monitoring. Pumping and static water levels in this area should be monitored over the aquifer development period to prevent over-pumping and evaluate sustainable yield".*

A proposed plan for monitoring and reporting data is provided in Attachment D.

The proposed PODs on amended application 63-32703 are located near the northwestern boundary of the Mountain Home Ground Water Management Area (MHGWMA), as shown in Attachment A. The MHGWMA boundary is an administrative boundary, not a hydrogeologic boundary and will only shift if modified by administrative action. The existing administrative boundary, created in 1982, has not been revised based on data collected by IDWR over the last 26 years. IDWR documents and the Expanded Natural Resources Interim Committee Mountain Home Working Group have noted that the MHGWMA administrative boundary includes areas where there is appropriable groundwater, as described below.

---

[1] Harrington, H., 2004. *Mountain Home Plateau Ground Water Conditions and Management Activities*, presented to the Idaho Legislature Natural Resources Interim Committee by Helen Harrington, IDWR, August 5, 2004.

[2] Surface Energy Balance Algorithm

IDWR has acknowledged that the MHGWMA administrative boundary created in 1982 includes areas where new appropriations could be authorized without injuring existing water rights (Harrington and Bendixsen, 1999[1]). An IDWR open-file report noted that water levels in some parts of the MHGWMA had water level declines of 50 to 60 feet between the 1960s and 1998. However, the north and northwest parts of the area were observed to have water levels that were apparently stable and had increases of as much as 3 to 4 feet between the 1960s and 1998 (Harrington and Bendixsen, 1999). Water level data indicate that the Orchard Ranch project, which is located in the northwest part of the MHGWMA, is in an area with stable water level.

The *Final Report and Recommendations* of the Expanded Natural Resources Interim Committee Mountain Home Working Group (2004) also acknowledged that "...there are areas of the Mountain Home Basin where underlying ground water levels in the regional aquifer have not declined significantly...," and that "...the areas of ground water decline are sufficiently separated by horizontal distance and the parallel direction of ground water flow that withdrawals of ground water from one area do not significantly impact water levels in the other area." The Working Group recommended that "...the Idaho Department of Water Resources reconsider the boundaries of the Mountain Home Ground Water Management Area and the Cinder Cone Butte Critical Ground Water Area, and redefine the boundaries of areas for ground water management to match physical evidence of declining ground water levels and areas of water supply."

Although the administrative boundary of the MHGWMA has not been revised as recommended by the Working Group, stable groundwater levels in the vicinity of the Orchard Ranch project indicate that there is some groundwater available for appropriation at this location, as discussed in Attachment C. Attachment D provides a plan for monitoring water levels during the development period to prevent over-pumping and evaluate sustainable yield.

Good faith, delay or speculative purposes *(IDAPA 37.03.08.40.05.e)*

The application is made in good faith, and is not for speculative purposes. The property is currently owned by several parties. A summary of parcel ownership and copies of deeds are provided in Attachment E.

The applicant applied to Ada County for approval of the proposed planned community on December 20, 2006. A copy of the planned community application is provided in

[1] Harrington H. and Bendixsen, S., 1999, *Ground Water Management Areas in Idaho, Overview as of 1998.* Idaho Department of Water Resources, Open-File Report, December 1999.

Attachment F. The applicant is currently in the process of revising the application in response to comments from the Ada County planning staff.

Financial resources *(IDAPA 37.03.08.40.05.f)*

A copy of the infrastructure and financing plan provided to Ada County is included in Attachment G.

A description of the water supply system from the Community Services and Utility Plan submitted to Ada County with the Orchard Ranch Planned Community Application is provided in Attachment B. Development of detailed plans and specifications for the public water system can be completed within a reasonable timeframe controlled by the applicant. Because the timeframe for water right permitting is lengthy and uncertain, the applicant does not wish to invest in preparation of plans and specifications for the public water system prior to receiving approval of pending water right applications.

Local public interest *(IDAPA 37.03.08.40.05.g)*

The proposed community water system for the Orchard Ranch Planned Community will be a public water system as defined by IDAPA 58.01.08 *Idaho Rules for Public Drinking Water Systems.* The applicant will submit a water system facility plan, plans and specifications, and other related documents to the Idaho Department of Environmental Quality (IDEQ) for review and approval prior to construction of the water system facilities. IDEQ will also require the applicant to submit documentation of technical, financial, and managerial capacity to construct, operate, and maintain the public water system. Because the public water system will be regulated by IDEQ, the applicant will meet the definition of a "municipal provider" as described in I.C. § 42-202B(5)(c).

The status of Ada County approvals is described above in response to part 40.05.e.

Please contact me at your convenience with any questions.

Sincerely,

Roxanne Brown

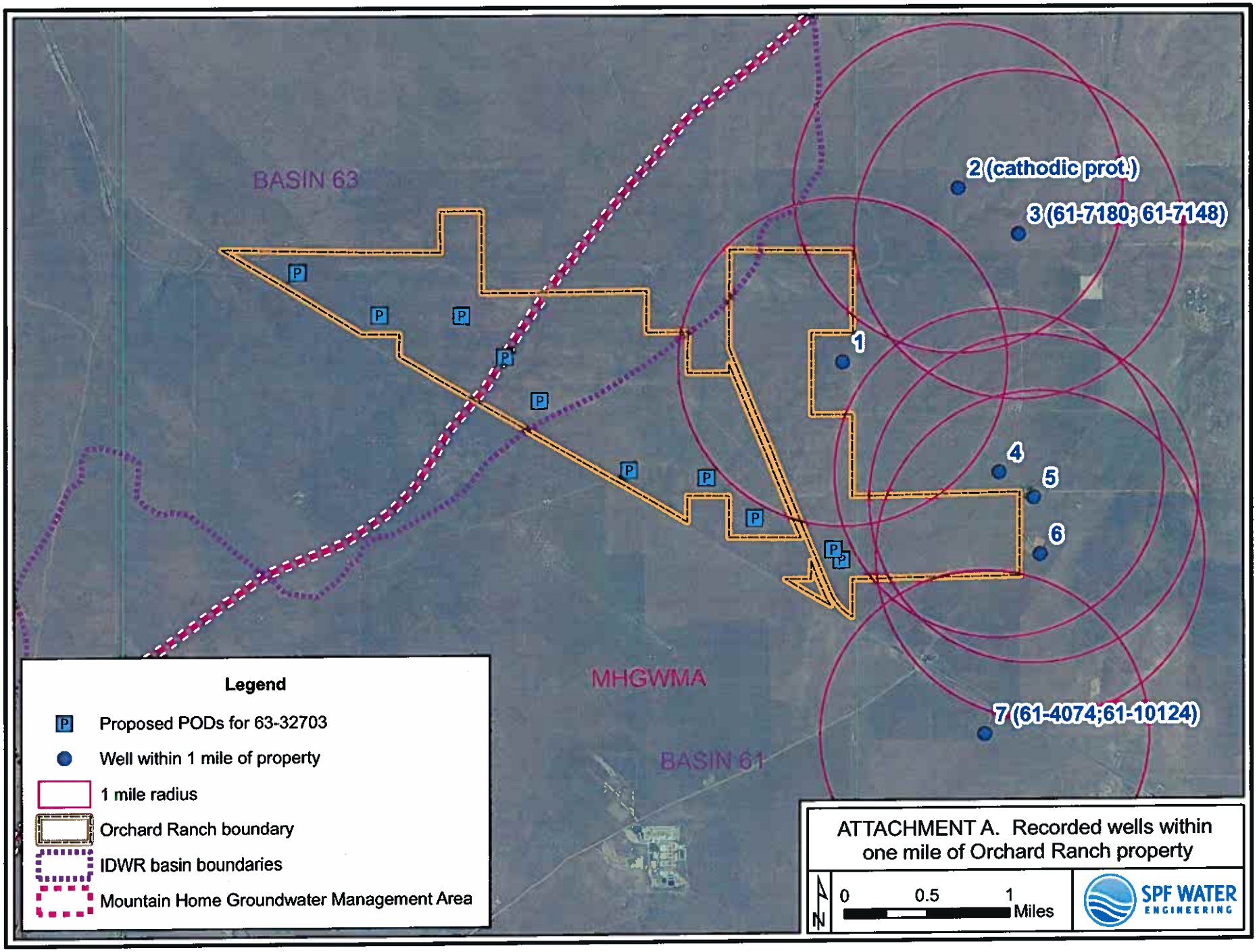
Roxanne Brown

cc: Norm Semanko
Jason Elrod, Circle Partners, LLC
SPF File No. 539.0030

Attachments

Attachment A Wells and springs within 1 mile of Orchard Ranch property
Attachment B Community Services and Utility Plan, Water Supply System
Attachment C *Ground-water Resource Evaluation of the Orchard Ranch Property, May 30, 2007*
Attachment D Monitoring Plan
Attachment E Warranty Deeds
Attachment F Planned Community Application
Attachment G Infrastructure and Financing Plan

ATTACHMENT A. WELLS AND SPRINGS WITHIN
1 MILE OF ORCHARD RANCH PROPERTY


BASIN 63
2 (cathodic prot.)
3 (61-7180; 61-7148)
1
4
5
6
7 (61-4074;61-10124)
MHGWMA
BASIN 61
Legend
Proposed PODs for 63-32703
Well within 1 mile of property
1 mile radius
Orchard Ranch boundary
IDWR basin boundaries
Mountain Home Groundwater Management Area
ATTACHMENT A. Recorded wells within one mile of Orchard Ranch property
N
0
0.5
1
Miles
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ATTACHMENT A. RECORDED WELLS LOCATED WITHIN 1 MILE OF ORCHARD RANCH PROPERTY

Well No.	Owner	Use	Township	Range	Section	Tract	Well Address	Production Rate (gpm)	Static Water Level (ft)	Total Depth (ft)	Casing Depth (ft)	Casing Diameter (in)	Construction Date
1	BONESSA, FRANK	Domestic-Single Residence	01S	03E	13	SENENE	1 MI W OF ORHCARD ACCESS RD ON ORCHARD RANCH RD	9.7	500	633	124	8	6/1/1999
2	WILLIAM PIPELINE WEST	Cathodic Protection	01S	04E	7	NWNE	EXIT 71 1/4 MILE FROM COMPRESSER STATEION TURN WEST ON 2 TRACK TO ROW NEAR CORRAL 500 FT NORTH OF PI			500	500	10	1/23/2003
3	WEIMER, JOHNNY	Stockwater	01S	04E	7	NESE		25	540	695	695	10	6/8/1973
4	HAUG, SHERRY	Domestic-Single Residence	01S	04E	18	SESE	E ORCHARD ACCESS RD	15	520	704	702	6	7/9/1997
5	CLARK, JOHN W	Domestic-Single Residence	01S	04E	20	NWNWNW	30221 S ORCHARD ACESS RD	10	505	699	682	6	5/7/2008
6	MC EACHERN, BILL	Domestic-Single Residence	01S	04E	20	SWNW	30000 ORCHARD ACCESS RD, AIRPORT, 4.5 MILES S OF STAGE STOP	50	499	744	734	6	10/5/2001, modified 4/21/2006
7	UNION PACIFIC RAILROAD CO	Industrial	01S	04E	30	NWSE	OWYHEE RAILROAD SECTION		480	729		8	

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IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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PAGE 1 OF 3 PAGES 95106

1. DRILLING PERMIT NO. 61-98-W-0075-000
Other IDWR No. D000 7483

2. OWNER:
Name FRANK [redacted] BONESSA
Address 1979 BORCHERS DRIVE
City SAN JOSE State CA Zip 95124

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

T. 1S North ☐ or South ☑
R. 3E East ☑ or West ☐
Sec. 13, SE 1/4 (10 acres) NE 1/4 (40 acres) NE 1/4 (160 acres)
Gov't Lot ____ County ADA

Address of Well Site 1 MILE WEST OF ORCHARD ACCESS RD ON ORCHARD RANCH LANE; THEN 1 MILE NORTH
(Give at least Direction + Distance to Road or Landmark)
Lot No. ____ Block No. ____ Subd. Name ____

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☑ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☑ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
NEAT CEMENT [redacted]	124.64	17	17 EA	DISPLACED THROUGH 8"
GROUT	5	115	94 lb BAGS	CASING
BENTONITE	115	4	16 BAGS	SLURRY PIT
NEAT CEMENT GROUT	0	4'	1 BAG	POURED

Was drive shoe seal tested? Yes ☐ No ☑ How? ____

8. CASING/LINER:

Diameter	From	To	Guage	Casting	Liner	Steel	Plastic	Welded	Threaded
8 5/8	+1.83	124.64	0.322	✓		☑	☐	☑	☐
6 5/8	1	551	0.28	✓		☐	☐	☑	☐
5 9/16	514	629.7	0.188		✓	☑	☐	☑	☐
4 1/2	560.2	581.4	0.237		✓	☑	☐	☑	☐

Final location of shoes 8" SHOE @ [redacted] 124.64'
Top Packer or Headpipe 514 Bottom Tailpipe 629.7F

9. PERFORATIONS/SCREENS
☑ Perforations Method SAWED IN PVC, TORCH
☑ Screens Type JOHNSON Material CONTINUOUS SLOT WIRE WOUND

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
410	550	3/32	1064	6 5/8	PIPE	☑	☐
560.2	570.45	.020	N.A	5 9/16	(6" TELESCOPING)	☑	☐
560.2	581.4	1/32	78	4 1/2	PIPE	☐	☑

10. WELL TESTS:
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time
9.7	< 1 FT	500.8	12 HRS

Temperature of water 66°F Was a water analysis done? Yes ☐ No ☑
By whom? ____
Water Quality (odor, etc.) EXCELLENT
Bottom Hole Temperature 66°F

11. STATIC WATER LEVEL:
500 ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port 8" CASING [redacted]: BY REMOVING WELL CAP

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	WATER YES	WATER NO
8	0	551'			
6	551	634			
	0	2	SOIL		
	2	6	SOIL, SUBSOIL, CLAYEY HARDPAN		
	6	8	SANDY CLAY		
	8	16	CLAY		
	16	18	SAND		
	18	34.5	SANDY CLAY		
	34.5	35	ROCK		
	35	63	[redacted] CLAYEY SAND		
	63	64	GRAVEL		
	64	69	CLAYEY SAND		
	69	70	GRAVEL		
	70	96	CLAYEY SAND		
	96	107	GRAVEL		
	107	116	CLAY		
	116	122	GRAVEL		
	122	194	BASALT		
	194	197	RUBBLE & CINDERS		
	197	216	BASALT		
	216	217	BASALT, CREVICED, RED IN SEAMS		
	217	255	BASALT		
	255	257	BOULDERS, HARD, RED MATRIX		
	257	272	BASALT, RED IN SEAMS		
	272	273	RUBBLE & CINDERS		
	273	311	BASALT		
	311	312	RUBBLE & CINDERS		

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Date: Started Nov 20, 1998 Completed SEE PAGE 3

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 ARTESIAN CO Firm No. 318
Firm Official HUGH HARDEN Date 7 June 1999
and
Supervisor or Operator Hugh Harden Date 7 June 1999
(Sign once if Firm Official & Operator)

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WELL DRILLER'S REPORT

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PAGE 2 OF 3 PAGES

95107

1

1. DRILLING PERMIT NO. 61-98-W-0075-000
Other IDWR No. D 000 7483

2. OWNER:
Name FRANK [redacted] BONESSA
Address
City ______ State ____ Zip ____

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

OFFICE USE ONLY

Twp. 01S North ☐ or South ☐
Rge. 02E East ☐ or West ☐
Sec. 13, ____ 1/4 ____ 1/4 ____ 1/4
Gov't Lot 1 County ______
SE 1/4 NE 1/4 NE 1/4

Address of Well Site ______
(Give at least Direction + Distance to Road or Landmark)

Lot No. ____ Block No. ____ Subd. Name ____

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

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

8. CASING/LINER:

Diameter	From	To	Guage	Casing	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Final location of shoes 6" PVC COUPLING @ 551FT
Top Packer or Headpipe ____ Bottom Tailpipe ____

9. PERFORATIONS/SCREENS
☐ Perforations Method ____
☐ Screens Type ____ Material ____

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casting	Liner
						☐	☐
						☐	☐
						☐	☐

10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water ____ Was a water analysis done? Yes ☐ No ☐
By whom? ____
Water Quality (odor, etc.) ____
Bottom Hole Temperature ____

11. STATIC WATER LEVEL:
____ ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port ____
Describe Controlling Devices: ____

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

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	312	317	BASALT SOFTER, BROWN		✓
	317	320	BASALT HARD, GREY		✓
	320	327	BASALT SOFTER, BROWN		✓
	327	330.5	BASALT MED, HARD, GREY		✓
	330.5	334	RUBBLE & CINDERS, BROWN		✓
	334	336	CLAY, BROWN		✓
	336	342	BASALT, HARD, BROWN		✓
	342	379	SANDSTONE, TAN		✓
	379	383	CLAY, TAN		✓
	383	401	SAND, TAN		✓
	401	403	CLAY, TAN		✓
	403	434	CLAYEY SAND, TAN		✓
	434	435	CLAY, TAN		✓
	435	438	SANDY CLAY, TAN		✓
	438	439	CONGLOMERATE, TAN		✓
	439	471	CLAYEY SAND, TAN		✓
	471	472	CONGLOMERATE TAN		✓
	472	479	CLAYEY SAND, TAN		✓
	479	482	CLAY, TAN		✓
	482	484	SAND, TAN		✓
	484	487	CLAYEY SAND, TAN		✓
	487	487.2	SAND TAN		✓
	487.2	500	CLAYEY SAND TAN		✓
	500	500.2	SAND TAN		✓
	500.2	514	CLAYEY SAND & CLAY		✓
	514	514.2	SAND TAN	✓	
	514.2	517	CLAYEY SAND TAN		✓

Date: Started PAGE 1 Completed PAGE 3

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were compiled with at the time the rig was removed.

Firm Name ARTESIAN CO Firm No. 318

Firm Official [signature] Date 7 June 1999
and
Supervisor or Operator ____ Date ____
(Sign once if Firm Official & Operator)

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WELL DRILLER'S REPORT

PAGE 3 of 3 PAGES 95108

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1

1. DRILLING PERMIT NO. 61-98-W-0075-000
Other IDWR No. D 0000 7483

2. OWNER:
Name FRANK [redacted] BONESSA
Address 1979 BORCHERS DRIVE
City SAN JOSE State CA Zip 95124

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

OFFICE USE ONLY
Inspected by
Twp 01 S Rge 02E Sec 13
SE 1/4 NE 1/4 NE 1/4

N / W / S

T. ___ North ☐ or South ☐
R. ___ East ☐ or West ☐
Sec. ___ ___ 1/4 ___ 1/4 ___ 1/4 (10 acres, 40 acres, 160 acres)
Gov't Lot ___ County ___

Address of Well Site ___
(Give at least Direction + Distance to Road or Landmark)

Lot No. ___ Block No. ___ Subd. Name ___

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ___

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other ___

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

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

8. [redacted]/LINER: 4½ OD HANGER 5" OD COUPLING CUT OFF, BEVELED TO INSIDE HARDFACED, & GROUND SMOOTH

Diameter	From	To	Guage	Casting	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Final location of shoes — 4" LINER ~ NO SHOE
Top Packer or Headpipe ___ Bottom Tailpipe ___
BOTTOM END CUT ANGLE = 54.2° FROM PIPE AXIS, CHAMFERED INTERNALLY & GROUND

9. PERFORATIONS/SCREENS
☑ ~~Perforations~~ ~~Method~~ INTERNALLY & GROUND
☐ ~~Screens~~ ~~Type~~ ~~Material~~

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water ___ Was a water analysis done? Yes ☐ No ☐
By whom? ___
Water Quality (odor, etc.) ___
Bottom Hole Temperature ___

11. STATIC WATER LEVEL:
___ ft. below surface Depth artesian flow found ___
Artesian pressure ___ lb. Describe access port ___
Describe Controlling Devices: ___

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	WATER Y	WATER N
	517	518	SAND TAN	✓	
	518	524	CLAYEY SAND, TAN		✓
	524	543	SAND, TAN	✓	
	543.5	544	CLAYEY SAND, TAN		✓
	544	546	SAND, TAN	✓	
	546	559	ROCK BASALT ? BAILS DRY		✓
	559	562	SAND, TAN		✓
	562	567	SANDY CLAY, TAN		✓
	567	568	SAND, TAN	✓	
	568	572	ROCK CONGLOMERATE ? TAN		✓
	572	573	CLAY, TAN		✓
	573	575.5	CONGLOMERATE? TAN		✓
	575.5	578	CLAYEY GRAVEL	✓	✓
	578	581	CLAYEY SAND TAN	✓	✓
	581	601	ALTERNATING LAYERS SAND & CLAY	✓	✓
	601	602	CLAYEY GRAVEL, TAN		✓
	602	604	CLAY, TAN	[redacted]	✓
	604	605	SAND, TAN	✓	
	605	633	ALTERNATING LAYERS SAND & CLAY	✓	✓
			~~RECEIVED~~		
			~~JUN 14 1999~~		
			Department of Water Resources		

Date: Started SEE PAGE 1 Completed JUNE 1, 1999

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 ARTESIAN CO Firm No. 318
Firm Official Hugh Harden Date JUNE 7, 1999
and
Supervisor or Operator ___ Date ___
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

4

874817

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

Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO 874817 - 789255
Other IDWR No. D0025927 CPS# 1675

2. OWNER:
Name Williams Pipeline West
Address 5821 Industrial Way
City American Falls State ID Zip 83202

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

N / W / E / S — X

Twp. 1 North ☐ or South X
Rge. 4 East X or West ☐
Sec. 7 1/4 (10 acres) NW 1/4 (40 acres) NE 1/4 (160 acres)

Gov't lot ____ County Ada

Lat: : : Long: : :

Address of Well Site Exit 71, ¼ mile from Compressor Station City Boise
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection X Other Cathodic

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	18	1200 lbs	Overbore
Coke	300	500	206	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10.750	0	74	.365	Steel	X	☐	X	☐
8.625	125	500	.322	Steel	☐	X	X	☐
					☐	☐	☐	☐

Length of Headpipe N/A Length of Tailpipe N/A

9. PERFORATIONS/SCREENS
X Perforations Method Trochs
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
300	100	.250	80	4	Steel	☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
-0- ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
14"	0	8	Top Soil		X
14"	8	18	Sand		X
10.75	18	74	Sand & Clay Seam		X
10.75	74	300	Gray Lava		X
10.75	300	500	Decomposed Granite		X

RECEIVED
FEB 0 7 2003
WATER RESOURCES
WESTERN REGION

Completed Depth: 500' (Measurable)
Date: Started 11-26-02 Completed 1-23-03

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official _____ Date 2-4-03
Supervisor or Operator John H Smith Date 2-4-03
(Sign once if Firm Official & Operator)

USE TYPEWRITER OR BALL POINT PEN

5

State of Idaho
Department of Administration

WELL DRILLER'S REPORT

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

Received 6-27-77 D

3

1. WELL OWNER

Name JOHN WEIMER

Address

Owner's Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☒ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 695 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
[redacted] inches	10" inches	[redacted] feet	290 feet
3/4 inches	8" inches	0 feet	673 feet
3/4 inches	6" inches	665 feet	695 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 inches by inches

Number	From	To
perforations	673 feet	695 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

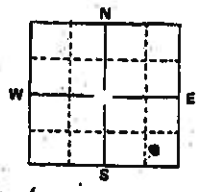
Surface seal? ☒ Yes ☐ No To what depth 290 feet

Material used in seal ☒ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

61



County Ada

NE¼ SE¼ Sec. 7 T. 1S N/S, R. 4E E/W

7. WATER LEVEL

Static water level 540 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

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
25	12'	15 BAILED

028862

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
10"	0	3	TOP SOIL		X
10"	3	51	SANDY CLAY		X
10"	51	80	COURSE SAND GRAVEL		X
10"	80	84	SOFT LAVA		X
10"	84	102	VERY HARD BLK. LAVA		X
10"	102	136	LAVA GRAY NOT SO HARD		X
10"	136	138	RED CLAY		X
10"	138	168	GRAY LAVA HARD		X
10"	168	173	RED AND BLK CINDERS		X
10"	173	180	HARD GRAY LAVA		X
10"	180	206	RED LAVA		X
10"	206	235	BLK LAVA HARD		X
10"	235	254	RED LAVA		X
10"	254	322	GRAVEL AND BRN CLAY		X
8"	202	345	SANDY GRAVEL		X
8"	345	400	SANDY CLAY		X
8"	400	502	DRY SAND		X
8"	502	570	SANDY CLAY GRAVEL		X
8"	570	640	SANDY CLAY	X	
8"	[redacted]	[redacted]			
8"	640	665	BLUE CLAY	X	
8"	665	673	FINE SAND	X	
8"	673	695	COURSE SAND GRAVEL	X	

10.

Work started 27 APRIL finished JUNE 8th

11. DRILLER'S CERTIFICATION USGS

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

Russel Crowe
Driller's or Firm's Name Number

Boise
Address

Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

3

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

12/22/2008

WATER RIGHT NO. 61-7148

Owner Type	Name and Address
Current Owner	JOHNNY WEIMER 3400 DALTON LN BOISE, ID 83704 (208)322-6440

Priority Date: 02/27/1973
Basis: Decreed
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
STOCKWATER	1/01	12/31	0.04 CFS	1.4 AFA
Total Diversion			0.04 CFS	

Location of Point(s) of Diversion:

GROUND WATER	SENE	Sec. 07	Township 01S	Range 04E	ADA County

Place(s) of use:

Place of Use Legal Description: STOCKWATER ADA County

3

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
01S	04E	7		SENE										

Conditions of Approval:

1.	N13	THE QUANTITY OF WATER UNDER THIS RIGHT SHALL NOT EXCEED 13,000 GALLONS PER DAY.
2.	N11	THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.
3.		PARCEL NO. S2707111000 STOCKWATER, 100 RANGE CATTLE

Dates:
Licensed Date:
Decreed Date: 01/30/1998
Permit Proof Due Date:
Permit Proof Made Date:
Permit Approved Date:
Permit Moratorium Expiration Date:
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Water Supply Bank Enrollment Date Accepted:
Water Supply Bank Enrollment Date Removed:
Application Received Date:
Protest Deadline Date:
Number of Protests: 0

Other Information:
State or Federal: S
Owner Name Connector:
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Civil Case Number:
Old Case Number:
Decree Plantiff:
Decree Defendant:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:
Mitigation Plan: False

Close

3

June 10, 1974

Johnny Weimer
7109 Folk Drive
Boise, Idaho 83704

Dear Mr. Weimer:

A representative of this Department has made an examination of the works covered by your Permit No. 61-7148 and has found the following:

Quantity of water diverted: 0.04 cfs

Amount of water that can be recognized as beneficially used under Idaho law: 0.04 cfs

The maximum quantity diverted shall not exceed 1.4 acre feet per year.

Beneficial use: For stockwater purposes within the NE¼, Sec. 7, Twp. 1 S, Rge. 4 E

Point of diversion: SE¼NE¼, Sec. 7, Twp. 1 S, Rge. 4 E, B.M.

Priority date established: February 27, 1973

If you do not concur with these findings, please advise us within 10 days; otherwise, a license will be issued as set forth in this letter.

Sincerely,

BOBBY D. FLEENOR
Assistant Director

BDF:JFR

DEPARTMENT OF WATER ADMINISTRATION
FIELD REPORT

3

1 Name of permit holder Johnny Weimer

Post office address 7109 Folk Dr., Boise, Idaho Phone

Person to contact Phone

2. Source of water supply Groundwater ☒ Surface water ☐

(name spring, stream, etc.)

Tributary to

3 Water will be used for the following purposes

Amount .04 c.f.s. for domestic
AF/Annum (nature of use)

Period of Use from Jan. 1 to Dec. 31
(mo.-day) inclusive (mo.-day)

Amount .04 c.f.s. for stockwater (per head)
AF/Annum (nature of use)

Period of Use from Jan.1 to Dec. 31
(mo.-day) inclusive (mo.-day)

Amount c.f.s. for
AF/Annum (nature of use)

Period of Use from to
(mo.-day) inclusive (mo.-day)

Other uses.

Permit No. 61-7148

Examination for b/u

4 Total amount to be appropriated

Max Rate of Diversion .08 cubic feet per second and annual volume AF/Annum

5 Location of Point(s) of Diversion

Township 1S N/S, Range 4E E/W, B.M., Section 7, Subdivision SE ¼ NE ¼ Ada County

Township N/S, Range E/W, B.M., Section, Subdivision ¼ ¼, County

Township N/S, Range E/W, B.M., Section, Subdivision ¼ ¼, County

Other Points of Diversions

Description of diverting works 8" well, 695', 3 hp Barrest ½suction. Direct flow.

Measuring device required yes ☐ no ☒

6 Lands to be irrigated or place of use

TWP	RANGE	SEC	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
1S	4E	7	X	X	X	X													

TOTAL ACREAGE

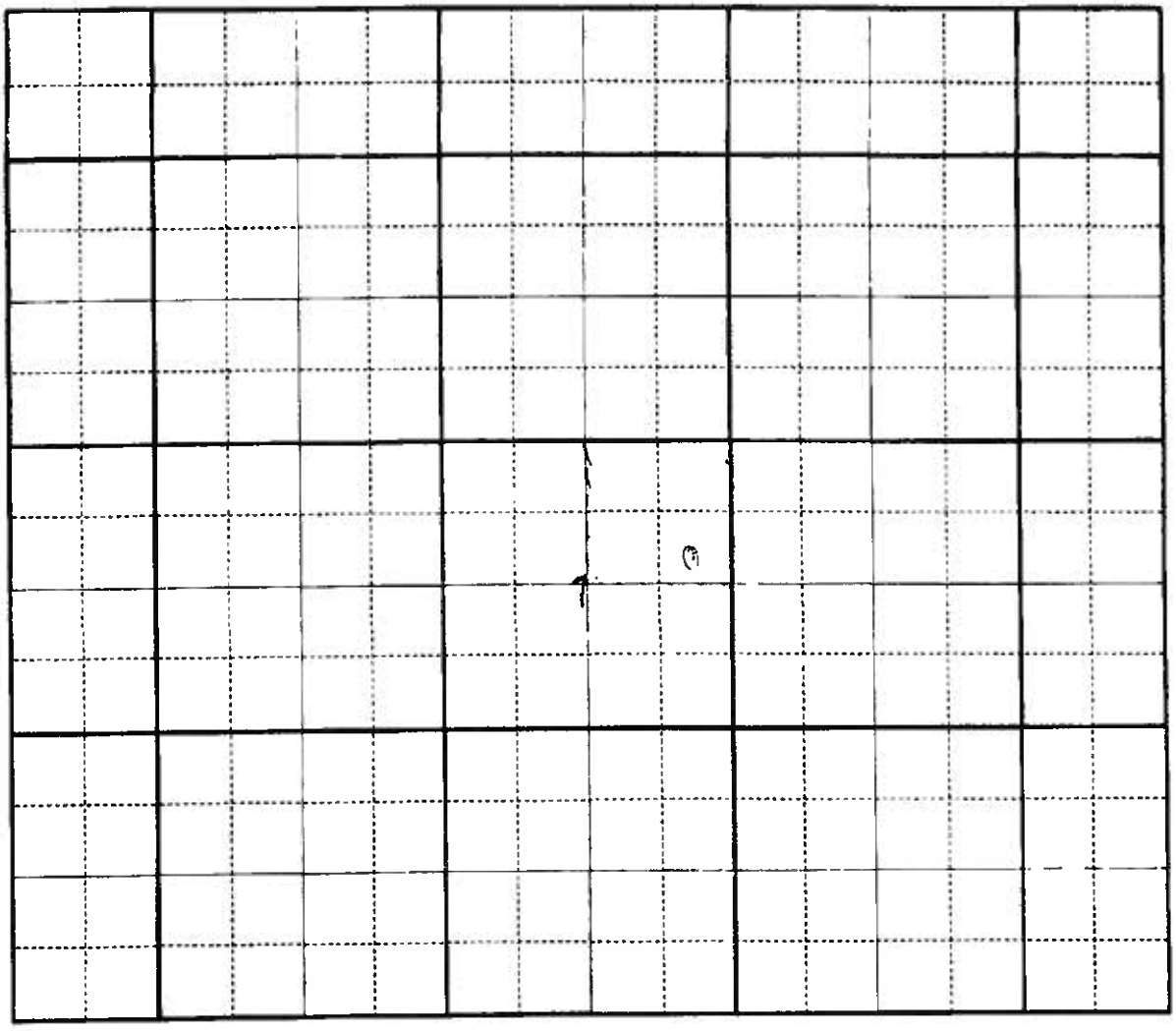


Diagram of System

DATE OF EXAM 5/24/24

ACREAGE
Found —
Recommended —

Irrigation Requirement — Ac Ft/Ac

USE
Irrigation Q=_____ c f.s. V=_____ AF/Ann from _____ to _____
Domestic Q=_____ c.f.s. V=_____ AF/Ann. from _____ to _____
Livestock Q=.04 c.f.s. V=1.4 AF/Ann. from Jan 1 to Dec 31

Is water co-mingled? yes_____ no N

Name source: Ground water
twp. 1 N/S Rge 4 E/W, B.M., Sec. 7, Sub. SE ¼ NE ¼ Ada County

Exchange? yes_____ no_____

Name source exchanged with: _____
twp._____N/S, Rge_____E/W, B.M., Sec _____, Sub._____¼_____¼_____ County

Point of injection
twp _____N/S, Rge_____E/W, B M , Sec._____, Sub._____¼_____¼_____ County

Point of exchange
twp._____N/S, Rge_____E/W, B.M., Sec._____, Sub._____¼_____¼_____ County

Total Q measured .04 cfs Method of measurement Est

Total Q recommended .04cfs Meter No._____ Type_____ Condition _____

Total V recommended 1.4 acFt/AN

Recommended Amendments:

P D. _____
Place of Use _____
Other _____
None

MEASUREMENT CALCULATION.

Allow .04 cfs for Stockwater
No domestic at the present time
V= 1.4 AcFt

SYSTEM DESCRIPTION:

Submersed Pump 8" well Source around well to keep animals out 3 HP motor for Stocktanks for animal service

REMARKS:

Examiner's Signature _____ Date 5/31/24

Checked by _____ Date _____

Approved by _____ Date _____

POSTED

3

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

12/22/2008

WATER RIGHT NO. 61-7180

Owner Type	Name and Address
Current Owner	JOHNNY WEIMER 3400 DALTON LN BOISE, ID 83704 (208)322-6440

Priority Date: 04/05/1974
Basis: License
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
STOCKWATER	1/01	12/31	0.02 CFS	1.3 AFA
Total Diversion			0.02 CFS	

Location of Point(s) of Diversion:

GROUND WATER	SENE	Sec. 07	Township 01S	Range 04E	ADA County

Licensed Diversion Capacity: 0.02

Place(s) of use:

Place of Use Legal Description: STOCKWATER ADA County

3

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
01S	04E	7		SENE										

Conditions of Approval:

1.	Stockwater use is for 100 range cattle.

Dates:
Licensed Date: 03/02/1992
Decreed Date:
Permit Proof Due Date: 5/1/1988
Permit Proof Made Date: 3/11/1988
Permit Approved Date: 5/6/1974
Permit Moratorium Expiration Date:
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Water Supply Bank Enrollment Date Accepted:
Water Supply Bank Enrollment Date Removed:
Application Received Date: 04/05/1974
Protest Deadline Date:
Number of Protests: 0

Other Information:
State or Federal:
Owner Name Connector:
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Civil Case Number:
Old Case Number:
Decree Plantiff:
Decree Defendant:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:
Mitigation Plan: False

Close

Form 219
6/86

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 61-07180

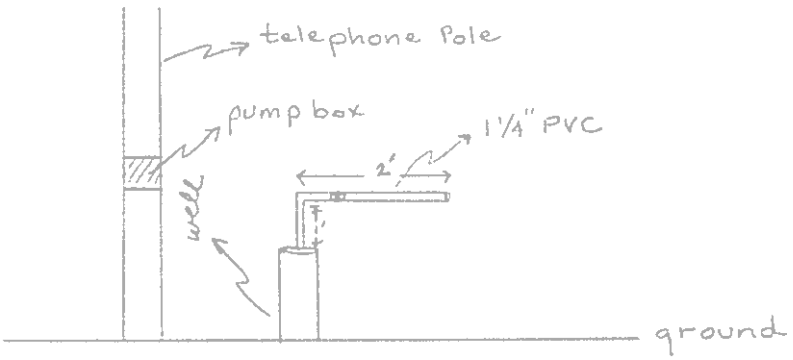
1. Owner: Johnny Weimer — Phone No. 322-6440
   Current Address: 3400 Dalton Lane, Boise, Id. 83704
2. Accompanied by: owner — EXAM. DATE: 7-2-91
   Address: _____ Phone No. _____
   Relationship to Permit Holder: _____
3. Source: groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with same place of use: 61-07148
   _____ ☐ Copies Attached
2. Other water rights with same point of diversion: 61-07148
   _____ ☐ Copies Attached ☐ Copies of Field Exam's Attached

C. SYSTEM DESCRIPTION

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



RECEIVED
MAR 06 1992

Scale: 1" = NOT TO scale

2. ☑ Copy of U.S.G.S. Quadrangle Attached
   Showing location(s) of point(s) of diversion and place(s) of use (required).
   ☐ Aerial Photo Attached
   (required for irrigation of 10 acres or more).
   ☑ Photo of Diversion and System Attached
   (required for all but single household domestic groundwater, and stockwater.

System Description (continued)

3. **Narrative:** Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

System consists of a 700' deep well with static level of 400'. There is a 1 1/4" PVC 2" foot length of pipe coming out of the top of the well. A 50' length of same size pipe will be installed this Summer along with 2 700 gal. troughs. Casing for well is 8".

☐ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Franklin	2	283011201	Peabody	

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

5. **Point(s) of Diversion:**

Ident. No.	Gov't. Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
			SE	NE	7	1S	4E	Ada	7.5' USGS topo.

6. **Place(s) of Use:** Indicate Method of Determination Diagram

Twp.	Rge.	Sec.	NE¼				NW¼				SW¼				SE¼				Totals
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
1S	4E	7				S													

1992

Do not use this space

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

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

2. Measurements:

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

1. Measured Method: $\frac{5 \text{ gal.} \quad \Delta\text{sec} \;/\; 1 \text{ cfs}}{31 \text{ sec.} \quad 7.48 \text{ gal.}} = .02 \text{ cfs.}$

2 Alternate Method for Checking Purposes:

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: _____ psi x 2.31 = _____ ft (1); Dynamic pumping level: _____ ft (2)
Total Head: (1) + (2) = _____ (3) . Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)
Meter Input KW: 3.6 x _____ KH x _____ CTR or _____ MULT x _____ PTR x _____ N/ _____ T = _____ (6)
Meter Input HP (6) x 1.34 = _____ (7)
Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Ampsx .001732 = _____ (6)
Panel Input HP: (6) x 1.34 = _____ (7) Efficiency (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

V_{IR} = (Acres Irrigated) x (Irrigation Requirement) = _____

V_{DR} = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = _____

V = Smaller of V_{IR} and V_{DR} = _____

G 6 1992

2. Volume Calculations for Other Uses:

Stock

$V_{req.} = \frac{(100)(12)(122)}{325850} = .4$ afa vs. $V_{div.} = (.02)(122)(1.9835) = 4.8$ afa

Since $V_{req.} < V_{div.}$ recommend

.4 afa

H. REMARKS AND OVERLAP REVIEW ANALYSIS

Upon exam, owner indicated neither domestic nor irrigation component of permit will not be utilized.

overlaps do not affect systems.

I. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From	To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
Stockwater	7/1	10/31	.02	.4
Totals:			.02 cfs	.4 afa

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 Recommend stockwater instead of domestic & irrigation.

J. AUTHENTICATION

Field Examiner's Name: SARA WEST

Signature: S. Y. West

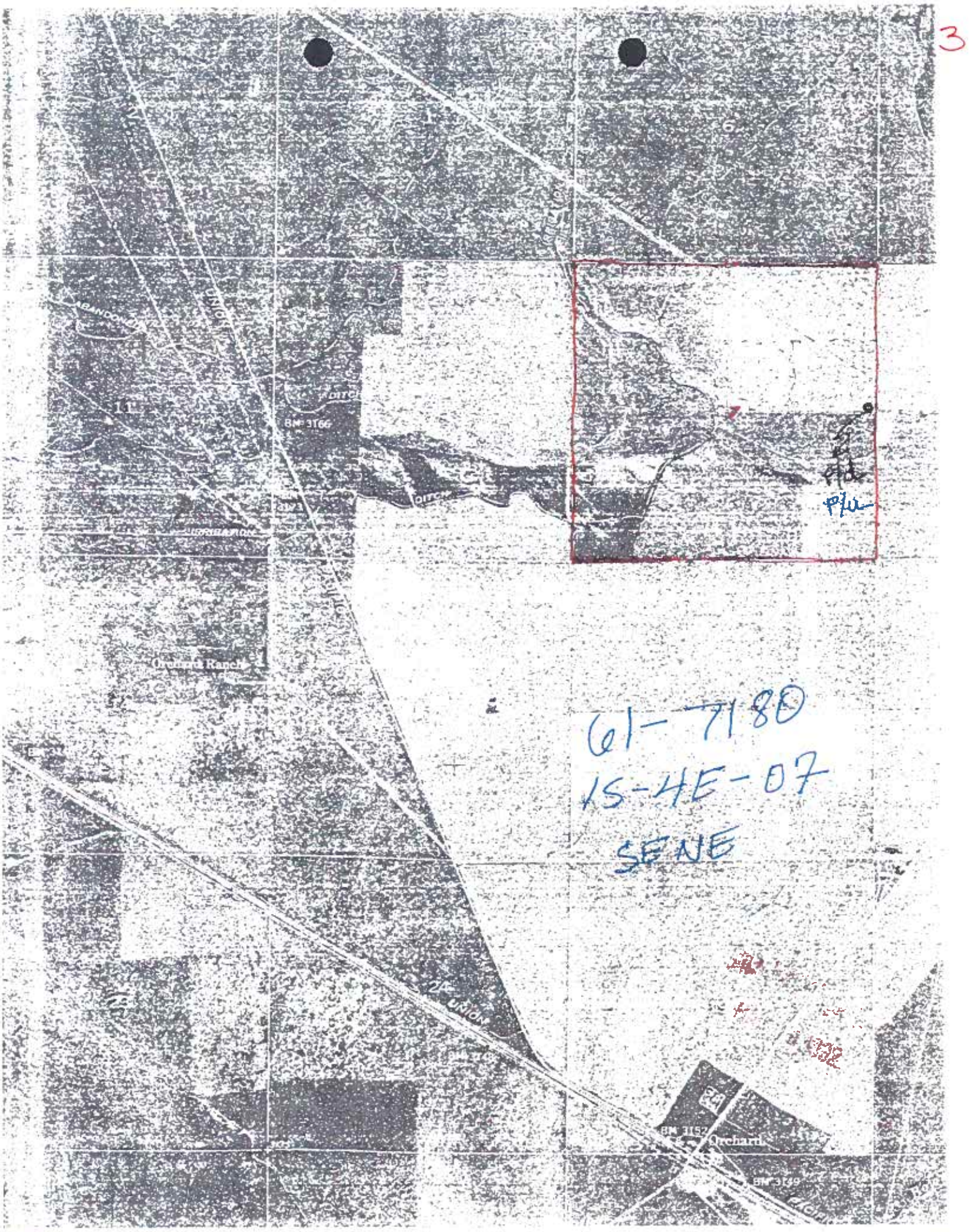
Certification Date:

Field Report Preparation Date: 8/14/91

CONSULTANT SEAL

PROFESSIONAL ENGINEER REGISTERED David R. Tuthill 3909 12/20/91 STATE OF IDAHO DAVID R. TUTHILL, JR.

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.



61-7180
15-4E-07
SE NE

Permit 61-07180 Photos taken 7-2-91 Pg 1 of 2

3

→ P/d

PHOTO ONE--

→ pump box & electrical set up

PHOTO TWO--

Permit 61-07180 Photos taken 7-2-91 Pg 2 of 2

3

→ owner will put troughs here ≈ 50' from P/d

PHOTO THREE-

>

PHOTO FOUR-

6-1

pg. 1 of 2

Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 66557

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

1. DRILLING PERMIT NO. 61 -97 -W -0029 -000
Other IDWR No. _____

2. OWNER:
Name Sherry Haug
Address 28901 HC 34
City Boise State ID Zip 83704

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

N / W / E / S

Twp. 1 North ☐ or South ☒
Rge. 4 East ☒ or West ☐
Sec. 18 1/4 (10 acres) SE 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot _____ County Ada
Lat: : : Long: : :
Address of Well Site E. Orchard Access Rd.
City Mnt. Home/Bois
(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 Material	From	To	AMOUNT Sacks or Pounds	METHOD
bentonite	0	520	65	overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	702	250	steel	☒	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
520 ft. below ground Artesian Pressure _____ lb
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
15+		700'	5 hrs.

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered 530

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
10"	0	3	brown top soil		☒
10"	3	5	brown clay		☒
10"	5	16	brown sand		☒
10"	16	73	brown clay w/strps course brn sand		☒
10"	73	116	course brown sand w/strips brn clay		☒
10"	116	121	black lava		☒
8"	121	125	black lava		☒
8"	125	127	brown clay		☒
8"	127	136	black lava		☒
8"	136	138	broken black lava		☒
8"	138	152	black lava		☒
8"	152	155	broken black lava		☒
8"	155	175	black lava		☒
8"	175	177	broken black lava		☒
8"	177	205	black lava		☒
8"	205	225	red/black lava		☒
8"	225	227	crack		☒
8"	227	245	lava		☒
8"	245	247	crack		☒
8"	247	280	broken lava		☒
8"	280	460	lava		☒
8"	460	475	solid lava		☒
8"	475	478	broken lava		☒
8"	478	512	solid lava		☒
8"	512	522	broken lava		☒
8"	522	525	white sand		☒
6"	525	546	white clay & sand		☒
6"	546	554	brown clay & sand		☒
6"	554	575	brown clay		☒
6"	575	609	med. white sand	☒	

RECEIVED
AUG 15 1997
WATER RESOURCES
WESTERN REGION
PLUGGED

Completed Depth: 703 (Measurable)
Date: Started 06/12/97 Completed 07/09/97

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 SOS Welldrilling & Pump Co Firm No. 212
Firm Official SIGNED ON pg. 2 Date _____
Supervisor or Operator SIGNED ON pg. 2 Date _____
(Sign once if Firm Official & Operator)

Date: 07/28/97 Time: 12:45 PM

6-2

19-242

Form 238-7
3/95-C96
Page 2

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 66558

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

1. DRILLING PERMIT NO. 61 -97 -W -0029 -000
Other IDWR No. _____

2. OWNER:
Name Sherry Haug
Address 28901 HC 34
City Boise State ID Zip 83704

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

N
W E
S

Twp. 1 North ☐ or South ☒
Rge. 4 East ☒ or West ☐
Sec. 18 1/4 (10 acres) SE 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot _____ County ADA
Lat: : : Long: : :
Address of Well Site _____
City _____
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

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

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

6. DRILL METHOD
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	

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
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
_____ ft. below ground Artesian Pressure _____ lb
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
6"	609	647	brown sandy clay		☒
6"	647	667	brown & white sand	☒	
6"	667	694	brown sandy clay		☒
6"	694	696	brown & white sand	☒	
6"	696	702	brown clay		☒
6"	702	704	white & brown sand	☒	

RECEIVED
AUG 15 1997
WATER RESOURCES WESTERN REGION
RECEIVED
AUG 26 1997
Department of Water Resources
MICROFILMED

Completed Depth: 703 (Measurable)
Date: Started 06/12/97 Completed 07/09/97

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 SOS Welldrilling & Pump Co Firm No. 212
Firm Official Tony Hackett Date 7-31-97
Supervisor or Operator Tony Hackett Date 7-31-97
(Sign once if Firm Official & Operator)

Date: 07/28/97 Time: 12:45 PM

7-3

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT --Page 1 of 2 Pages

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

5

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

2. OWNER:
Name O. D. Kueneman
Address Orchard Access Rd at Orchard Ranch Rd
City Orchard State ID Zip _____

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 1S North ☐ or South ☑
Rge. 4E East ☑ or West ☐
Sec. 20 NW 1/4 (10 acres) NW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot _____ County _____
Lat: : : Long: : :
Address of Well Site _____
Orchard Access Rd @ Orchard Ranch Rd (Give at least name of road + Distance to Road or Landmark) City Orchard
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

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

6. DRILL METHOD:
☐ Air Rotary ☑ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method

Was drive shoe used? ☑ Y ☐ N Shoe Depth(s) 675.4 ft
Was drive shoe seal tested? ☑ Y ☐ N How? Seated in clay--Hole quit heaving

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6 5/8	+1.0	675.4	0.280	Steel	☑	☐	☐	☑
					☐	☐	☐	☐
					☐	☐	☐	☐

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

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method _____
Screen Type & Method of Installation _____

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

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
557 ft. below ground Artesian pressure _____ lb./sq.in.
Depth flow encountered _____ ft. Describe access port or control devices: _____
Casing I.D. by removing well cap.

12. WELL TESTS:
☐ Pump ☑ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
5	10 ft	567	

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments _____
_____ Depth first Water Encounter _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
12"	0	22			
10"	22	117			
8"	117	504			
6"	504	0+BH			
	0	3	Topsoil		
	3	30	Clay w/ some Gravel		
	30	33	Rock		
	33	46	Clay w/ some Gravel		
	46	49	Rock		
	49	68	Clay & Rock		
	68	106	Clay & Gravel		
	106	117	Gravel & Clay--Caves		
	117	146	Basalt, Medium Hard,Grey		
	146	146+	Crevice		
	146	158	Basalt, Medium Hard,Grey		
	158	203	Basalt, Very Hard,Blue-Grey to Blue		
	203	215	Red Rock		
	215	227	Basalt, Medium Hard,Grey		
	227	276	Red Rock		
	276	286	Rock, Red & Grey		
	286	298	Basalt, Medium Hard,Grey		
	298	340	Clay, Red w/Small Gravel		
	340	455	Clay, Yellow w/ small Gravel		
	455	473	Clay & Coarse Sand		
	473	489	Basalt, Medium Hard,Grey		
	489	489+	Cavern		
	489	491	Basalt, Medium Hard,Grey		
	491	503	Basalt, Porous		
	503	504	Clay & Sand--Hole Swells Shut		
	504	532	Basalt, Medium Hard,Grey		
	532	560	Clay		
	560	566	Sand, very fine, Water & Clay, raises 25', caves	x	
	566	575	Clay		x

Completed Depth 682 ft (Measurable)
Date: Started October 30, 1950 Completed January 26, 1951

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 Harden & Co. Firm No. 1
Principal Driller Harvey Stone Date Jan 26, 1951
and
Driller or Operator II Harvey Stone Date Jan 26, 1951
Operator I (excerpted by Hugh Harden) Date Mar 9, 2008
Principal Driller and Rig Operator *Required.*
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

7-4

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT --Page 2 of 2 Pages

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

5

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

2. OWNER:
Name O. D. Kueneman
Address Orchard Access Rd at Orchard Ranch Rd
City Orchard State ID Zip

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 1S North ☐ or South ☑
Rge. 4E East ☑ or West ☐
Sec. 20 NW 1/4 (10 acres) NW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot _____ County _____
Lat: : : Long: : :
Address of Well Site _____
Orchard Access Rd @ Orchard Ranch Rd City Orchard
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

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

6. DRILL METHOD:
☐ Air Rotary ☑ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method

Was drive shoe used? ☑ Y ☐ N Shoe Depth(s) 675.4 ft
Was drive shoe seal tested? ☑ Y ☐ N How? Seated in clay--hole quit heaving

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6 5/8	+1.0	675.4	0.280	Steel	☑	☐	☐	☑
					☐	☐	☐	☐
					☐	☐	☐	☐

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

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method _____
Screen Type & Method of Installation _____

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

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
557 ft. below ground Artesian pressure _____ lb./sq. in.
Depth flow encountered _____ ft. Describe access port or control devices:
Casing I.D. by removing well cap.

12. WELL TESTS:
☐ Pump ☑ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
5	10 ft	567	

Water Temp. _____ Bottom hole temp _____
Water Quality test or comments _____
Depth first Water Encounter 560 ft

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
12"	0	22			
10"	22	117			
8"	117	504			
6"	504	576+BH			
	576	578	Sand, little water, Caves	x	
	578	587	Clay		x
	587	588	Shale Rock		x
	588	595	Sand & Clay		x
	595	595	Heaving sand	x	
	595	682	Sand & Clay Layers, Heaving	x	x
	682	682+	Sand, Water--Bottom Stays down	x	
	682				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
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	0				
	0				
	0				
	0				
	0				
	0				
	0				

Completed Depth 682 ft (Measurable)
Date: Started October 30, 1950 Completed January 26, 1951

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 Harden & Co. Firm No. _____
Principal Driller Harvey Stone Date Jan 26, 1951
and
Driller or Operator II Harvey Stone Date Jan 26, 1951
Operator I (excerpted by Hugh Harden) Date Mar 9, 2008
Principal Driller and Rig Operator *Required.*
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

01 7-1 850958

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Well ID No. 420769
Inspected by
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

5

1. WELL TAG NO. D 0052733
DRILLING PERMIT NO. 903951-850958
Water Right or Injection Well No.

2. OWNER:
Name John W. Clark
Address PO Box 711
City Mountain Home State ID Zip 83647

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 1 North ☐ or South ☑
Rge. 4 East ☑ or West ☐
Sec. 20 NW 1/4 (10 acres) NW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot ____ County Ada
Lat: N43 : 19 : 42.5 Long: W116 : 00 : 46.9
Address of Well Site 30221 Orchard Access Rd
SW Corner of Orchard Ranch & Orchard Access City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name ____

4. USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

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

6. DRILL METHOD:
☐ Air Rotary ☑ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
Neat Cement Grout & Fine Silica	-?	?	2000#/15 bag	Placed into gopher hole
8-20 Mesh crumb Bentonite	-7	?	1150#/23 bag	Poured into gopher hole

Was drive shoe used? ☑ Y ☐ N Shoe Depth(s) 682 ft on Original Casing
Was drive shoe seal tested? ☐ Y ☑ N How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6 5/8	+1.0	6.2	0.250	Steel	☑	☐	☑	☐
6 5/8	6.2	682	0.280	Steel	☐	☐	☐	☐
4.95	11.25	681.5	0.291	SDR17 PVC	Ref top of 6" ☑		Certa-Lok Splined	

Length of Headpipe 673.17 Length of Tailpipe No Tailpipe
Packer ☐ Y ☑ N Type ____

9. PERFORATIONS/SCREENS PACKER TYPE
~~Perforations~~ This Screen Section is Referenced to top of 6" Casing
Screen Type & Method of Installation Wire-Wound--Bailed Down

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
681.46	684.42	4.5 OD Sch	40 Glued	into 4.95 SDR	26--Total Wall 0.528	(Glue Coupling Above)	
684.42	700.04	0.010	4.5 OD	~4" ID	Stainless Steel	☐	☑
All one	Assembly	with	Head	Pipe		☐	☑

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
505.2 ft. below ground Artesian pressure ____ lb./sq.in.
Depth flow encountered ____ ft. Describe access port or control devices: 1/2" Pex Tubing just above Pump through Sanitary Well Seal by removing Rubber Stopper

12. WELL TESTS:
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal /min.	Drawdown	Pumping Level	Time
9.97	16.3 ft	522.46 Ref Grade	2.6 hr 5/5/2008
10.42	15.5 ft	521.75	2.25 hr 5/6/2008
Stayed Sand Free	thru numerous cycles	& Relaxation Periods.	

Water Temp. 66 deg F Bottom hole temp. 66 F
Water Quality test or comments: ____
Depth first Water Encounter ____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
6"	604	685	Clean out Sand & Corrosion Products	Y	
4.5"	685	694	Sand, Yellow	Y	
4.5"	694	699	Sand, Yellow, slightly more Grey	Y	
	699				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
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	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0				
	0		Caution Tag Bolted to Well Cap		
	0		1 1/2 x 6 Metal Tag		
	0		Engraved with Liner & Screen Depths		
	0				

RECEIVED
MAY 23 2008
WATER RESOURCES
WESTERN REGION

Completed Depth of Screen=699 ft; 693 top of Sand Plug (Measurable)
Date: Started Feb 27, 2008 Completed May 7, 2008

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 Artesian Co Firm No. 318
Principal Driller Hugh Harden Date May 19, 2008
and
Driller or Operator II Hugh Harden Hugh Harden Mountain Home 2008.05.22 07:13:05 -06'00' Date May 21, 2008
Operator I ____ Date ____
Principal Driller and Rig Operator *Required.*
Operator I must have signature of Driller/Operator II.

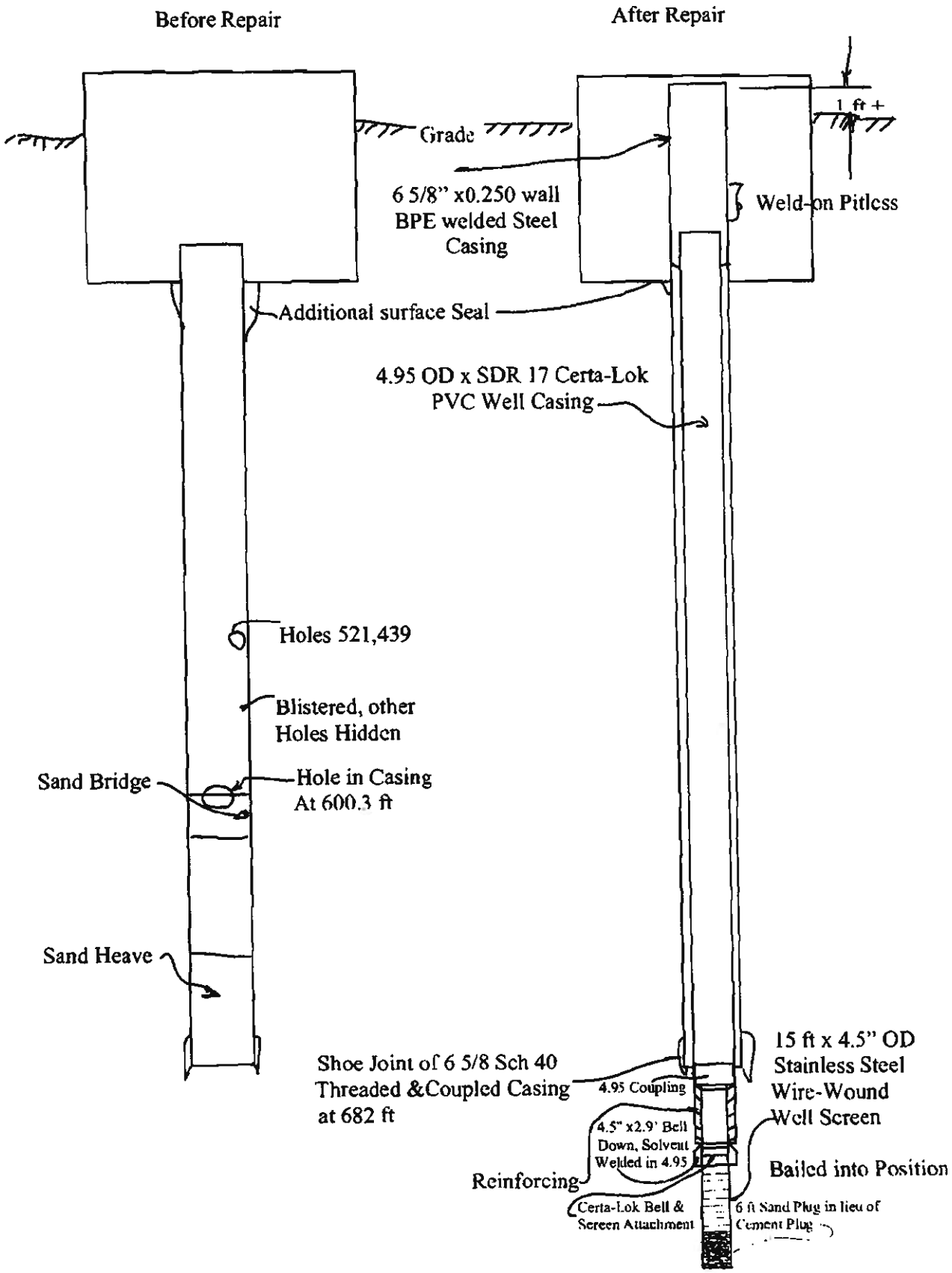
FORWARD WHITE COPY TO WATER RESOURCES

7-2

D0052155

5

As-Built Repair of John W. Clark Well--Old Kueneman Homesite
30221 Orchard Access Road--Orchard, Ada County



Form 238-7
3/95-C96

8

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

6

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO. __-__-__-____-____
Other IDWR No. **D0046449**

2. OWNER:
Name **Bill McEachern**
Address **30000 Orchard Access Road**
City **Boise** State **ID** Zip **83705**

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

N
W X E
S

Twp. **1** North ☐ or South **X**
Rge. **4** East **X** or West ☐
Sec. **20** 1/4 (10 acres) SW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't lot _____ County **Ada**
Lat: : : Long: : :
Address of Well Site **30000 Orchard Access Rd**
City **Boise**
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
X 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
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	120	40scks	overbore

Was drive shoe used? X Y ☐ N Shoe Depth(s) 737'
Was drive shoe seal tested? X Y ☐ N How? Air

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8.625	+1	120	332	Steel	X	☐	X	☐
6.625	+2	737	250	Steel	X	☐	X	☐
5	718	734	1.99	Steel	☐	☒	☒	☐

Length of Headpipe 15' Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
X Screens Screen Type **Johnson Stainless Steel**

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
734	744	.20		5"	SS	☐	☒
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
499 ft. below ground Artesian Pressure _____ lb
Depth flow encountered _____ Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
50-60			1 hr

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered **610'**

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
10	0	2	Topsoil		X
10	2	60	Sand & gravel		X
10	60	65	Brown clay		X
10	65	89	Sand & gravel		X
10	89	93	Brown clay		X
10	93	120	Sand & gravel		X
10	120	300	Gray lava		X
8	300	320	Red sandstone		X
8	320	340	Coarse sand		X
8	340	400	Fine sand		X
8	400	580	Gray lava		X
6	580	610	Brown clay		X
6	610	680	Fine sand	X	
6	680	684	Brown clay		X
6	684	715	Coarse sand		X
6	715	718	Brown clay		X
6	718	730	Coarse sand		X
6	730	736	Brown clay		X
6	736	745	Sand, coarse	X	

RECEIVED
MAY 01 2006
WATER RESOURCES
WESTERN REGION

Completed Depth: **744'** (Measurable)
Date: Started **04/18/06** Completed **04/21/06**

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 **Hiddleston & Son, Inc., Boise** Firm No. **35**
Firm Official _____ Date **4-28-06**
Supervisor or Operator _____ Date **04-28-06**
(Sign once if Firm Official & Operator)

Form 238-7
3/95-C96

9

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

771187

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO. __ - __ - __ - ____ - ____
Other IDWR No. **D0018592**

2. OWNER:
Name **Linda McFain**
Address **250 S. Bobwhite Ct., Ste #350**
City **Boise** State **ID** Zip **83706**

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

N
W E
S

Twp. **1** North ☐ or South **X**
Rge. **4** East **X** or West ☐
Sec. **20** 1/4 (10 acres) SW1/4 (40 acres) NW1/4 (160 acres)

Gov't lot _____ County **Ada**
Lat: : : Long: : :
Address of Well Site **30000 Orchard Access Rd**
City **Boise**
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	**0**	**120**	**40scks**	**overbore**

Was drive shoe used? **X** Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? **X** Y ☐ N How? **Air**

8. CASING/LINER:

Diameter	From	To	Gauge	Materia	Casing	Liner	Welded	Threaded
8.625	**+1**	**120**	**332**	**Steel**	**X**	☐		☐
6.625	**+2**	**736**	**250**	**Steel**	**X**	☐		☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
505ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer **X** Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
50+			**1 hr**

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered **610'**

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

Bore Dia	From	To	Remarks:Lithology, Water Quality & Temp.	Water Y	Water N
10	**0**	**2**	**Topsoil**		**X**
10	**2**	**60**	**Sand & gravel**		**X**
10	**60**	**65**	**Brown clay**		**X**
10	**65**	**89**	**Sand & gravel**		**X**
10	**89**	**93**	**Brown clay**		**X**
10	**93**	**120**	**Sand & gravel**		**X**
10	**120**	**300**	**Gray lava**		**X**
8	**300**	**320**	**Red sandstone**		**X**
8	**320**	**340**	**Coarse sand**		**X**
8	**340**	**400**	**Fine sand**		**X**
8	**400**	**580**	**Gray lava**		**X**
6	**580**	**610**	**Brown clay**		**X**
6	**610**	**680**	**Fine sand**	**X**	
6	**680**	**684**	**Brown clay**		**X**
6	**684**	**715**	**Coarse sand**		**X**
6	**715**	**718**	**Brown clay**		**X**
6	**718**	**730**	**Coarse sand**		**X**
6	**730**	**736**	**Brown clay**		**X**
6	**736**	**745**	**Sand, coarse**	**X**	

RECEIVED
NOV 14 2001
WATER RESOURCES
WESTERN REGION

Completed Depth: **736'** (Measurable)
Date: Started **09/20/01** Completed **10/05/01**

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 **Hiddleston & Son, Inc --Boise** Firm No. **35**
Firm Official _____ Date 11/12/01
Supervisor or Operator _____ Date _____
(Sign once if Firm Official & Operator)

7

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

12/22/2008

WATER RIGHT NO. 61-4074

Owner Type	Name and Address
Current Owner	UNION PACIFIC RAILROAD CO REAL ESTATE DEPT 1800 FARNAM ST OMAHA, NE 68102 (402)997-3600
Representative	UNION PACIFIC RAILROAD CO REAL ESTATE DEPT 1800 FARNAM ST OMAHA, NE 68102 (402)997-3600
Original Owner	OREGON SHORT LINE RAILROAD CO C/O UNION PACIFIC RAILROAD CO PO BOX 1592 POCATELLO, ID 83201

Priority Date: 09/01/1945
Basis: Decreed
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
DOMESTIC	1/01	12/31	0.15 CFS	0.31 AFA
DOMESTIC STORAGE	1/01	12/31		0.31 AFA
DOMESTIC FROM STORAGE	1/01	12/31		0.31 AFA

Total Diversion			0.15 CFS	

Location of Point(s) of Diversion:

GROUND WATER	SENE	Sec. 30	Township 01S	Range 04E	ELMORE County

Place(s) of use:

Place of Use Legal Description: DOMESTIC ELMORE County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
01S	04E	19		SESW										
		30		NWNE										
				NENW										

Place of Use Legal Description: DOMESTIC FROM STORAGE ELMORE County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
01S	04E	19		SESW										
		30		NWNE										
				NENW										

Conditions of Approval:

1.	C18	THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.
2.		DOMESTIC USE IS TWO HOMES, ONE SCHOOL HOUSE, ONE OUT BUILDING, ONE SPIGOT FILL-UP POINT FOR DUST CONTROL.
3.	C15	THE FOLLOWING WATER RIGHTS FROM THE FOLLOWING SOURCES OF WATER IN BASIN 61 SHALL BE ADMINISTERED SEPARATELY FROM ALL OTHER WATER RIGHTS IN BASIN 61: WATER RIGHT NO. SOURCE NONE NONE THE FOLLOWING WATER RIGHTS FROM THE FOLLOWING SOURCES OF WATER IN BASIN 61 SHALL BE ADMINISTERED SEPARATELY FROM ALL OTHER WATER RIGHTS IN THE SNAKE RIVER BASIN: WATER RIGHT NO. SOURCE NONE NONE ALL WATER RIGHTS WITHIN BASIN 61 ARE FROM CONNECTED SOURCES OF WATER IN THE

		SNAKE RIVER BASIN AND SHALL BE ADMINISTERED CONJUNCTIVELY.
4.	N11	THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.
5.		RIGHT NO. 61-10124 IS ALSO DIVERTED THROUGH POINT OF DIVERSION DESCRIBED ABOVE.

Dates:
Licensed Date:
Decreed Date: 10/26/2000
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Water Supply Bank Enrollment Date Accepted:
Water Supply Bank Enrollment Date Removed:
Application Received Date:
Protest Deadline Date:
Number of Protests: 0

Other Information:
State or Federal: S
Owner Name Connector: OR
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Civil Case Number:
Old Case Number:
Decree Plantiff:
Decree Defendant:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:
Mitigation Plan: False

Close

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

12/22/2008

WATER RIGHT NO. 61-10124

Owner Type	Name and Address
Current Owner	STATE OF IDAHO MILITARY DIVISION ATTN LTC DAVID DAHLE 4040 GUARD ST BLDG 600 BOISE, ID 83705-5004 (208)422-5474
Representative	STATE OF IDAHO MILITARY DIVISION ATTN MAJ EUGENE P GUSSENHOVEN 4715 S BYRD ST BOISE, ID 83705

Priority Date: 03/01/1954
Basis: Decreed
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
DOMESTIC	3/01	11/01	0.18 CFS	87.47 AFA
Total Diversion			0.18 CFS	

Location of Point(s) of Diversion:

GROUND WATER	NWSENE	Sec. 30	Township 01S	Range 04E	ADA County

Place(s) of use:

Place of Use Legal Description: DOMESTIC ADA County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
01S	04E	30		NENW										

Conditions of Approval:

1.	C18	THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.
2.		USE IS FOR NATIONAL GUARD UNITS PERFORMING ANNUAL TRAINING AT RANGE LOCATIONS.
3.	C15	THE FOLLOWING WATER RIGHTS FROM THE FOLLOWING SOURCES OF WATER IN BASIN 61 SHALL BE ADMINISTERED SEPARATELY FROM ALL OTHER WATER RIGHTS IN BASIN 61: WATER RIGHT NO. SOURCE NONE NONE THE FOLLOWING WATER RIGHTS FROM THE FOLLOWING SOURCES OF WATER IN BASIN 61 SHALL BE ADMINISTERED SEPARATELY FROM ALL OTHER WATER RIGHTS IN THE SNAKE RIVER BASIN: WATER RIGHT NO. SOURCE NONE NONE ALL WATER RIGHTS WITHIN BASIN 61 ARE FROM CONNECTED SOURCES OF WATER IN THE SNAKE RIVER BASIN AND SHALL BE ADMINISTERED CONJUNCTIVELY.
4.		RIGHT NO. 61-04074 IS ALSO DIVERTED THROUGH POINT OF DIVERSION DESCRIBED ABOVE.

Dates:
Licensed Date:
Decreed Date: 10/26/2000
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Water Supply Bank Enrollment Date Accepted:
Water Supply Bank Enrollment Date Removed:
Application Received Date:
Protest Deadline Date:
Number of Protests: 0

Other Information:

7

State or Federal: S
Owner Name Connector:
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Civil Case Number:
Old Case Number:
Decree Plantiff:
Decree Defendant:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:
Mitigation Plan: False
Close

Orchard

Form No. 243
7/7

Claim No. 61-4074

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

CLAIM TO A WATER RIGHT

Under the provisions of Section 42-243, Idaho Code, any person using or claiming rights to the public waters of Idaho established by diversion and application to a beneficial use must file a claim with the Department of Water Resources on or before June 30, 1983. Exempted from this filing are single family domestic uses as defined in Section 42-230(d), Idaho Code. Also exempted are rights represented by a permit, license, decree, adjudicated right, or a previously filed claim.

The filing of this claim does not confirm the water right claimed but failure to file may result in forfeiture of a water right.

Notice is hereby given that Oregon Short Line Railroad Company
Union Pacific Railroad Company - Lessee
(Name of Claimant)

P. O. Box 1592, Pocatello, Idaho 83204 Telephone No. 236-5514
(Mailing Address) (Zip Code)

claims a right to the diversion and beneficial use of the surface or ground water. The extent and nature of said claim is as follows:

(1) Date of priority: (When was the water first applied to a beneficial use) September 1, 1945

A claim is not acceptable on a ground water source with a priority later than March 25, 1963 or on a surface water source with a priority later than May 20, 1971. An exception is that a claim may be filed on single family domestic use from a ground water source.

(2) Describe the source of water: (Name of stream, lake, spring, etc., or ground water)
Ground Water tributary to _____

(3) Describe the purpose for which the water has been used and the time during the year when you have used the right claimed:

	(cfs, gpd, AFA)	(Domestic, Irrigation, Stock, Etc.)		(Both dates inclusive) (Mo., Day)		(Mo., Day)
Quantity	0.18 cfs	Use Domestic	Period of Use From	1-1	To	12-31
Quantity		Use	Period of Use From		To	
Quantity		Use	Period of Use From		To	
Quantity		Use	Period of Use From		To	
Quantity		Use	Period of Use From		To	

(4) 0.18 cfs (cfs, gpd, AFA) TOTAL QUANTITY USED.

(5) A) Point of diversion. (Location of point where water is diverted from its source)
SE ¼ NE ¼, Sec. 30 Twp. 1 S. Rge. 4 E., B.M., County of Ada
Additional points of diversion: _____

B) Describe means of diversion of water: (Pump and pipeline, well, diversion dam, reservoir, length of ditch and field, etc.). Give sizes and capacities be as specific as possible. Describe any changes in the system and give the date of the change. 10" x 729' deep well with a 20 HP submersible pump with approximately 3800' of 6" CIP pipe line to section facilities. Changed from steam locomotive use to domestic use in 1954.

(6) A) Describe location of use by listing number of irrigated acres within each 40-acre tract in appropriate box. If use is not for irrigation, place an "X" in appropriate box to show location.

T	R	SEC.	NE¼				NW¼				SW¼				SE¼				TOTAL
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
1 S.	4 E.	30		X			X												
1 S.	4 E.	19												X					

No. of acres _____

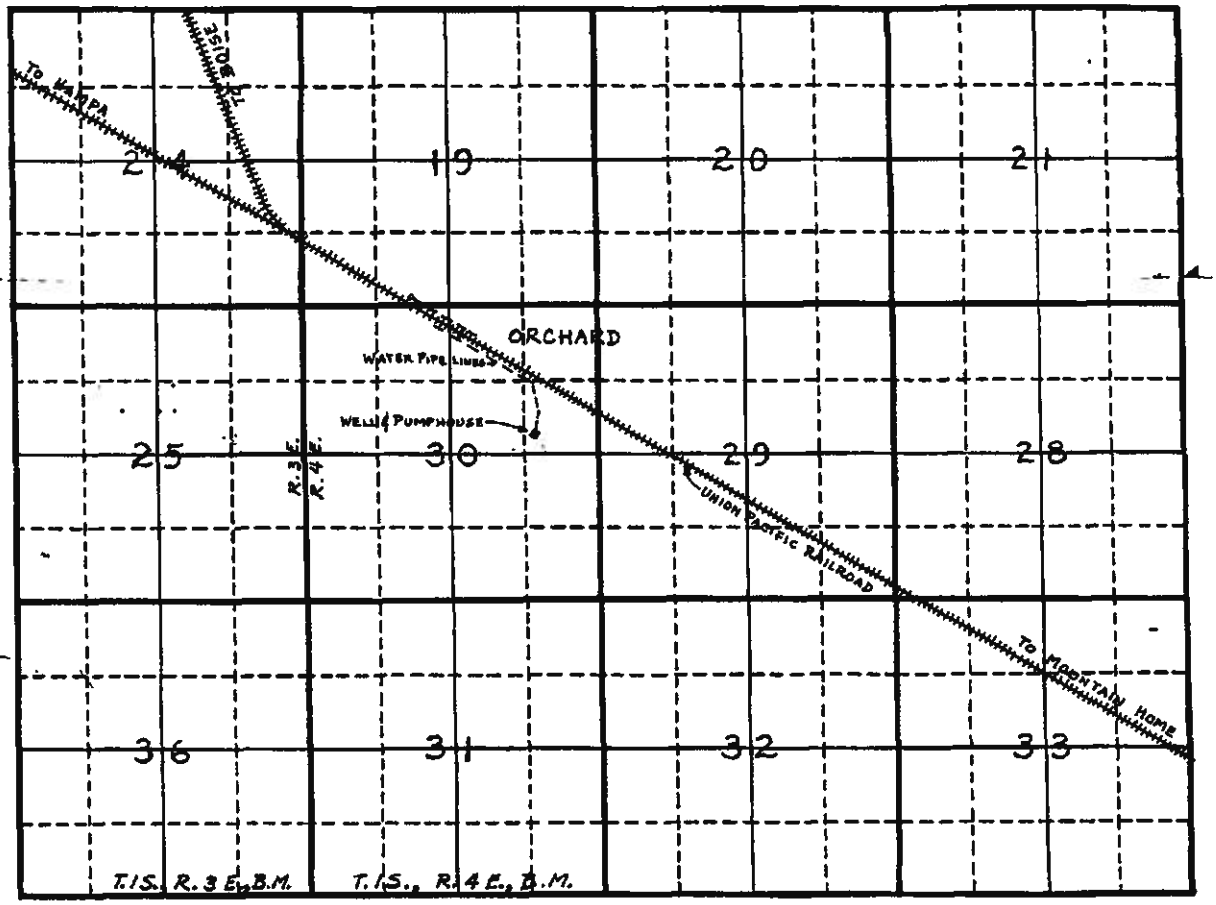
B) If water is used for other than irrigation, fully describe that use, being as specific as possible: Water is furnished to railroad company houses, maintenance section crew, traveling maintenance crews and to one individual by an agreement.

NOTE: Include here the type and number of stock watered: _____

(7) If you are claiming water as a member of an organization, list name of organization: Union Pacific Railroad Company

MICROFILMED

(8) Remarks _____



Scale: 2 inches equal 1 mile.

Map should show the location of the point of diversion and the place of use of the water by 40-acre subdivisions, section, township and range of the public land survey system.

State of ~~Idaho~~ Nebraska)
) ss.
County of Douglas)

Be it known that the undersigned, being duly sworn, deposes and says that he, she, they subscribed the foregoing claim to a water right, together with all attached information, and that the matters and facts therein are true to the best of the affiant's knowledge.

UNION PACIFIC RAILROAD COMPANY

J. P. Logan
Assistant Vice President (Claimant)

Sworn to before me this 8th day of February 19 83.

A A Holdorf
Notary Public
Residing at Omaha Neb.

GENERAL NOTARY-State of Nebraska
A. A. HOLDORF
My Comm. Exp. Mar. 24, 1985

My commission expires _____

4-19-83

FOR DEPARTMENT USE ONLY

Received by AW for AW Date 4-14-83 Exception filed by: Fowarded to claimant by: Date
Prelim. check by HWT Date 4-18-83
$20.00 fee received by CWL Date 4-18-83 #28059
Published in the Idaho Statesman
Dates 4/28 & 5/5/83

ATTACHMENT B. COMMUNITY SERVICES AND UTILITY PLAN
WATER SUPPLY SYSTEM

SUB ELEMENT F-6, COMMUNITY SERVICES & UTILITY PLAN

F6.1 Water Supply System

Overview

Domestic water service for Orchard Ranch will be provided by a stand-alone water treatment and distribution system. This system will either by owned and operated by a new private water utility to be created, or can be owned and operated as part of United Water Idaho's existing system.

Basic system components will consist of wells as a source, storage tanks, booster pump station, and a distribution network. At minimum water will be treated by disinfection. Water quality will determine if additional treatment is necessary.

Water System Planning

During the water system planning process, it will be necessary to first secure water rights for the development through the Idaho Department of Water Resources. In addition, a report will need to be prepared which demonstrates that the owner of the facilities to be constructed has the adequate technical, financial, and managerial capacity to control the proposed system. Again, who the ultimate owner and operator of the system will be will need to be decided. If the system is to be phased, it will be necessary to describe the phasing at this point. Given the ultimate size of the development, at least two and possibly three phases should be considered. Areas for wells, treatment, storage, and major transmission lines are indicated on the Water Supply Plan.

A Water System Master Plan will act as a blue print for creating the ultimate system and will include a description of each phase, water distribution system sizing, treatment, and amount of storage required.

Irrigation

Irrigation for open space and common areas is planned to be provided by non-potable sources. These sources include untreated well water and treated wastewater effluent. Lot irrigation will be provided by the potable system. A system of ponds will be utilized to act as reservoirs for the non-potable system. These ponds will be located in common areas and incorporated into the amenities associated with each area.

The size and location of these ponds will be determined during the Irrigation Master Plan stage.

Components of the System

Based on the size the system will ultimately be, it is suggested that a three-phase approach be considered. Phasing will be determined during the Water Master Plan.

Wells

Ground water wells can vary in depth from a couple of hundred feet to over a thousand feet. It will be necessary to do testing and research to determine the production on the site at the various depths. Well pumps can be submersible or located in the control building.

Water Storage

Water storage will provide for both a reserve for high flow periods as well as fire protection. Water storage can be elevated storage, in the form of water towers or at-grade storage tanks. In some instances the tanks may be below grade. At-grade tanks are generally steel or reinforced concrete.

Well Control & Treatment Building

A control building will be needed for chemical addition for disinfection and to house the well pump controls. Upon completion of well tests and research, it will be determined if additional treatment will be required such as Arsenic removal, or Total Dissolved Solids. The treatment equipment would be housed in this building along with a laboratory testing area and office for maintaining records.

Water Demand

Approximate water demands are based upon Idaho Department of Environmental Quality estimates. Were multipliers were not available national average numbers were used.

A. RESIDENTIAL DEVELOPMENT

SF - 7,682 units @ 400 gpd/unit = 3,072,800 gpd/av. Usage

MF – 1,077 units @ 325 gpd/unit = 350,025 gpd/av. Usage

B. NON-RESIDENTIAL

Office - 1,851,735 sqft @ 0.164 gpd/sqft = 303,685 gpd/av. Usage

Retail – 1,234,219 sqft @ 0.16 gpd/sqft = 197,475 gpd/av. Usage

Restaurant – 6,857 seats @ 55.2 gpd/seat = 378,493 gpd/av. Usage

Total Daily Av. Usage 4,302,491 ~~3,930,841~~ (gal/day)
~~2,730~~ 2,990 (gal/min)

Total Daily Maximum Usage = Av. Daily Usage x 1.5
~~3,930,841~~ gal/day x 1.5 = ~~5,896,262~~ gpd/max. usage[1]
4,302,491
~~4,094~~ 4480 gpm[v]/max. usage

Peak Hourly Usage = Max. Daily Usage x 2.0/1440 = Peak Hourly Usage (GPM)

~~5,896,262~~ x 2.0 =11,792,524 gpd/1,440 =~~4,421~~ ~~8,189~~ 8960 gpm

ATTACHMENT C. *GROUND-WATER RESOURCE EVALUATION OF THE ORCHARD RANCH PROPERTY*, MAY 30, 2007

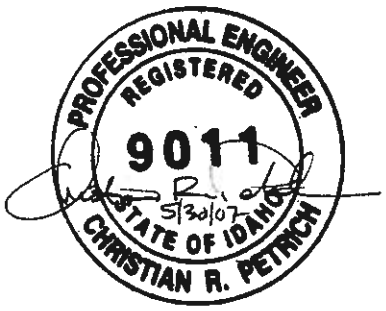
GROUND-WATER RESOURCE EVALUATION OF THE ORCHARD RANCH PROPERTY

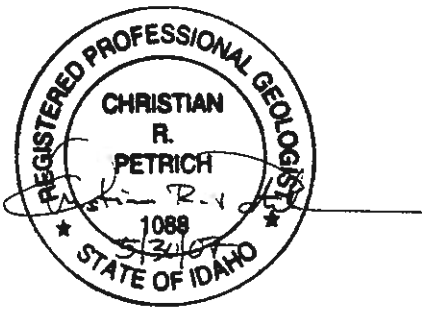
Prepared for

Knorr Development
c/o Rob Knorr
P.O. Box 1260
Maricopa, AZ 85239

Prepared by

SPF Water Engineering, LLC
600 East River Park Lane
Boise, ID 83706





May 30, 2007 (Updated)

SPF Water Engineering, LLC
water resource consultants

Executive Summary

The proposed Orchard Ranch Planned Community is located near the Orchard Ranch town site about 12 miles southeast of Boise, Idaho in southeastern Ada County. The planned community will encompass approximately 2,750 acres. SPF Water Engineering, LLC (SPF) conducted a ground-water resource evaluation to determine water availability for the proposed community.

The target aquifers underlying the proposed Orchard Ranch Planned Community include a series of saturated sand layers (with minor amounts of gravel) at depths ranging from 600 feet to over 800 feet. Wells penetrating these zones will likely extend to depths ranging from 700 to 900 feet or more. Volcanic materials in some portions of the property may extend to these depths, in which case target aquifers will include broken basalt or cinder zones.

The short-term aquifer capacity in these zones will likely be moderate, with short-term production rates ranging from about 500 to 1,000 gpm or more. Ground-water quality in this area will likely be good, based on available water-quality data.

Ground-water levels in the Orchard Ranch vicinity have been relatively stable water levels over the last 30 to 40 years. However, two wells located south or southeast of the property show water level declines ranging from approximately 1 foot per year to approximately 2.5 feet per year.

The long-term sustainable production capacity in this area is unknown. Large increases in ground-water production will likely be constrained by low recharge in upgradient areas. Structural controls (e.g., faulting) may limit ground-water flow into the general Orchard Ranch area. The long-term sustainability of aquifers in the Orchard Ranch area will best be determined through increased ground-water pumping and careful water-level monitoring. Pumping and static water levels in this area should be monitored over the aquifer development period to prevent over-pumping and evaluate sustainable yield.

It may be possible to transfer water rights from the Lone Pine Dairy to the Orchard Ranch area, but the extent of ground water withdrawals from Orchard Ranch wells will still be determined by available recharge. Ultimately, water from other areas (e.g., surface water from the Snake River or ground water from the Lone Pine Dairy) will be required if local ground water resources are insufficient for full project buildout.

1. INTRODUCTION

1.1. Background

The Orchard Ranch property is located near the Orchard Ranch town site about 12 miles south of Boise, Idaho in southeastern Ada County (Figure 1 and Figure 2). The Orchard Ranch property encompasses approximately 2,750 acres in portions of Sections 19, 20 and 29 of Township 1 South, Range 4 East, and Sections 9, 10, 11,12, 13, 14, 15, 23 and 24 of Township 1 South, Range 3 East (Figure 1). The property ranges in elevation from approximately 3,190 feet to 3,120 feet.

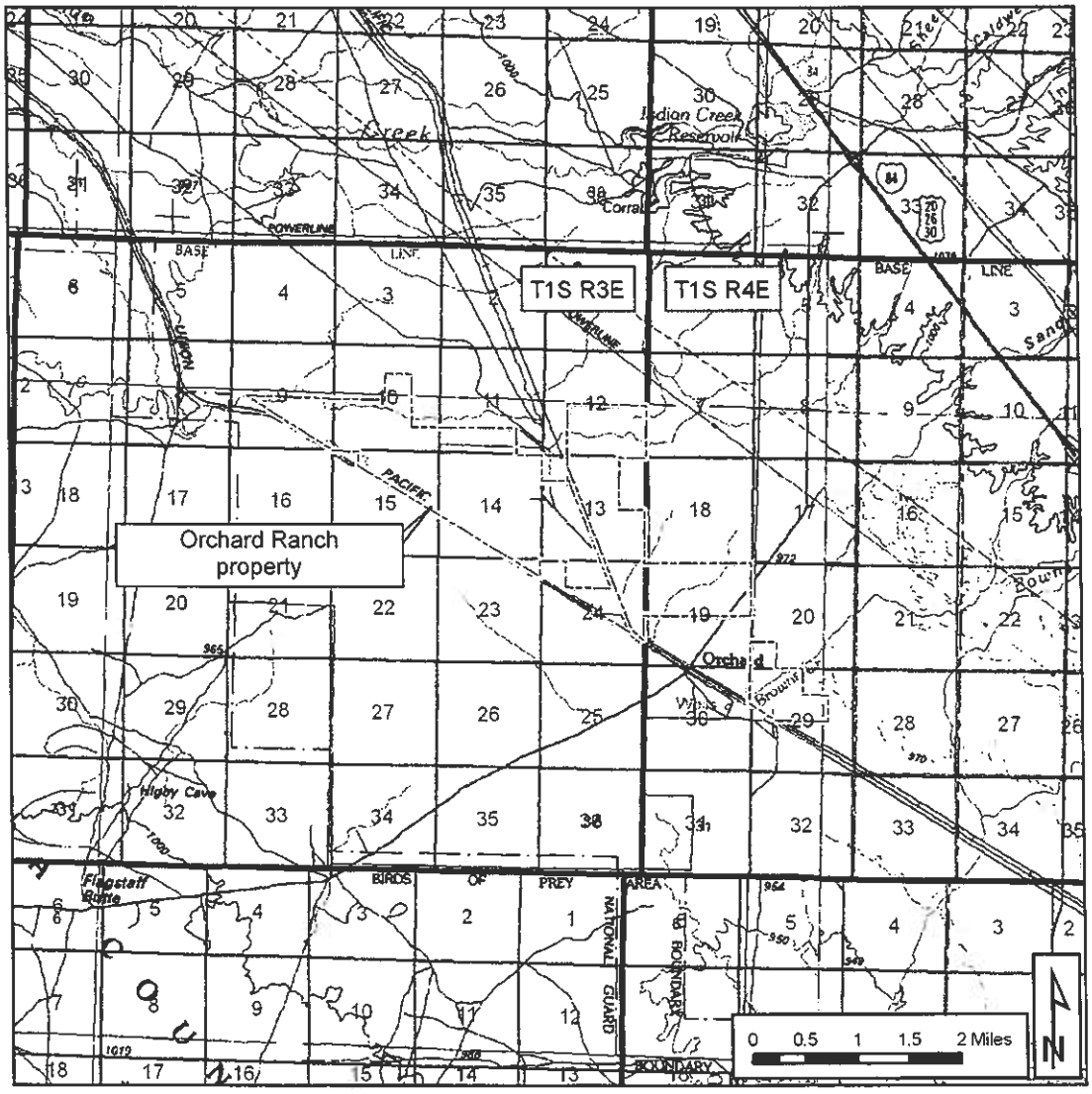


Figure 1. Vicinity map of the proposed Orchard Ranch property.

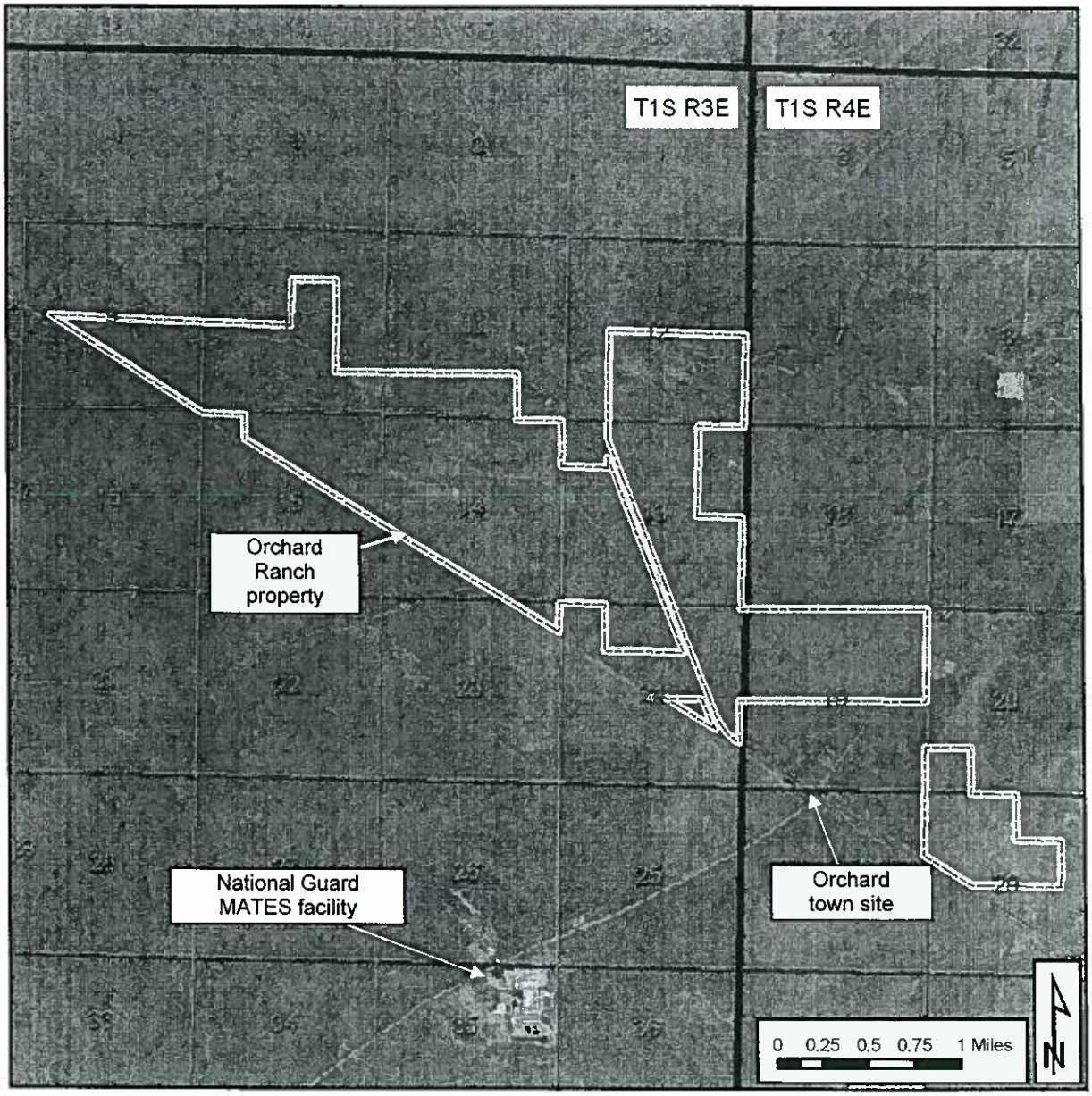


Figure 2. Location map of the proposed Orchard Ranch property.

1.2. Purpose and Objectives

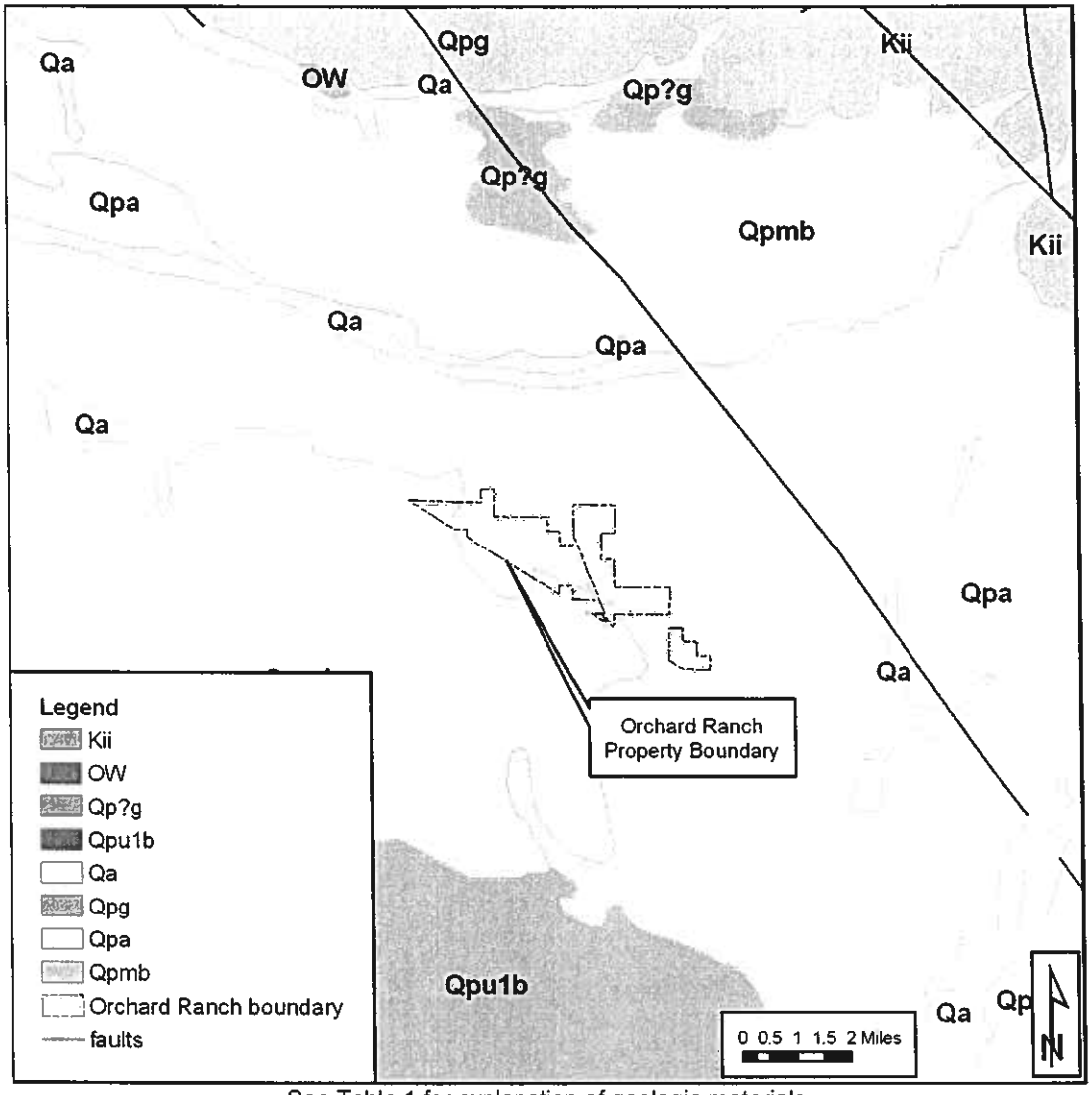
The purpose of this ground-water assessment was to evaluate the potential availability and quality of ground water for a central public water system to serve a planned community on the Orchard Ranch property. Specific objectives included:

1. Reviewing general geology in the vicinity of the Orchard Ranch property;
2. Obtaining and reviewing Idaho Department of Water Resources (IDWR) drillers' reports for wells in the vicinity of the Orchard Ranch property;

2. HYDROGEOLOGIC CONDITIONS

2.1. Geologic Setting

Surficial geology (Figure 3 and Table 1) in the Orchard Ranch area consists of Pleistocene-age alluvium, Middle Pleistocene-age basalt, and Quaternary alluvium (based on 1:500,000 mapping, Bond and Wood, 1978). Sediments in this area (Wood, 1996) are mostly alluvial fan sediments interfingered (Whitehead, 1986) with basalt flows (Figure 4, page 6) from the Mountain Home – Kuna Lava Field. Subsurface basalts thin to the north. Deeper fine-grained sediments consisting of tan and/or blue clay reflect a lacustrine (lake) depositional environment.



See Table 1 for explanation of geologic materials.

Figure 3. General geology in the vicinity of the Orchard Ranch property (Bond and Wood, 1978).

Code	Explanation
Kii	Cretaceous granodiorite
OW	Open water
Qp?g	Pleistocene outwash, fanglomerate, flood and terrace gravels
Qpu1b	Upper Pleistocene Snake Plain lava flows
Qa	Quaternary alluvium
Qpg	Pleistocene outwash, fanglomerate, flood and terrace gravels
Qpa	Plesitocene waterlaid detritus
Qpmb	Middle Pleistocen plateau and canyon-filling basalt

Table 1: Explanation of geologic materials.

A series of normal faults have been inferred along the northern boundary of the Western Snake River Plain in the Ada Elmore area, although the youngest sediment and volcanic units do not appear to be faulted (Wood, 1996). Normal faulting along the northern boundary of the Western Snake River Plain is typically distributed over a zone several miles wide. Two general fault zones are noted in Figure 3 (Bond and Wood, 1978).

2.2. Drillers' Report Review

2.2.1. Drillers' Reports

Wells within five miles of the Orchard Ranch property were identified from the IDWR well construction database[1]. The well search yielded 48 wells located within five miles of the property (Figure 5). Drillers' reports were available for all but one of these wells. There are no records for wells located on the Orchard Ranch property. A summary of drillers' reports is provided in Appendix A. Copies of drillers' reports for wells located within four miles of the property are provided in Appendix B.

2.2.2. Construction

Most wells in the immediate vicinity of the Orchard Ranch property range in depth from 600 to 800 feet (with a median depth of approximately 650 feet). Most wells are cased to water bearing zones and either uncased or screened within the producing zones.

[1] Drillers' reports for wells in the IDWR database are catalogued based on locations provided by the driller. Some wells may have been omitted from this search because of incorrectly listed well locations, and some wells listed in this search area may be incorrectly located. Furthermore, existing wells for which drillers' reports were not submitted to IDWR are generally not identified in the IDWR well construction database.

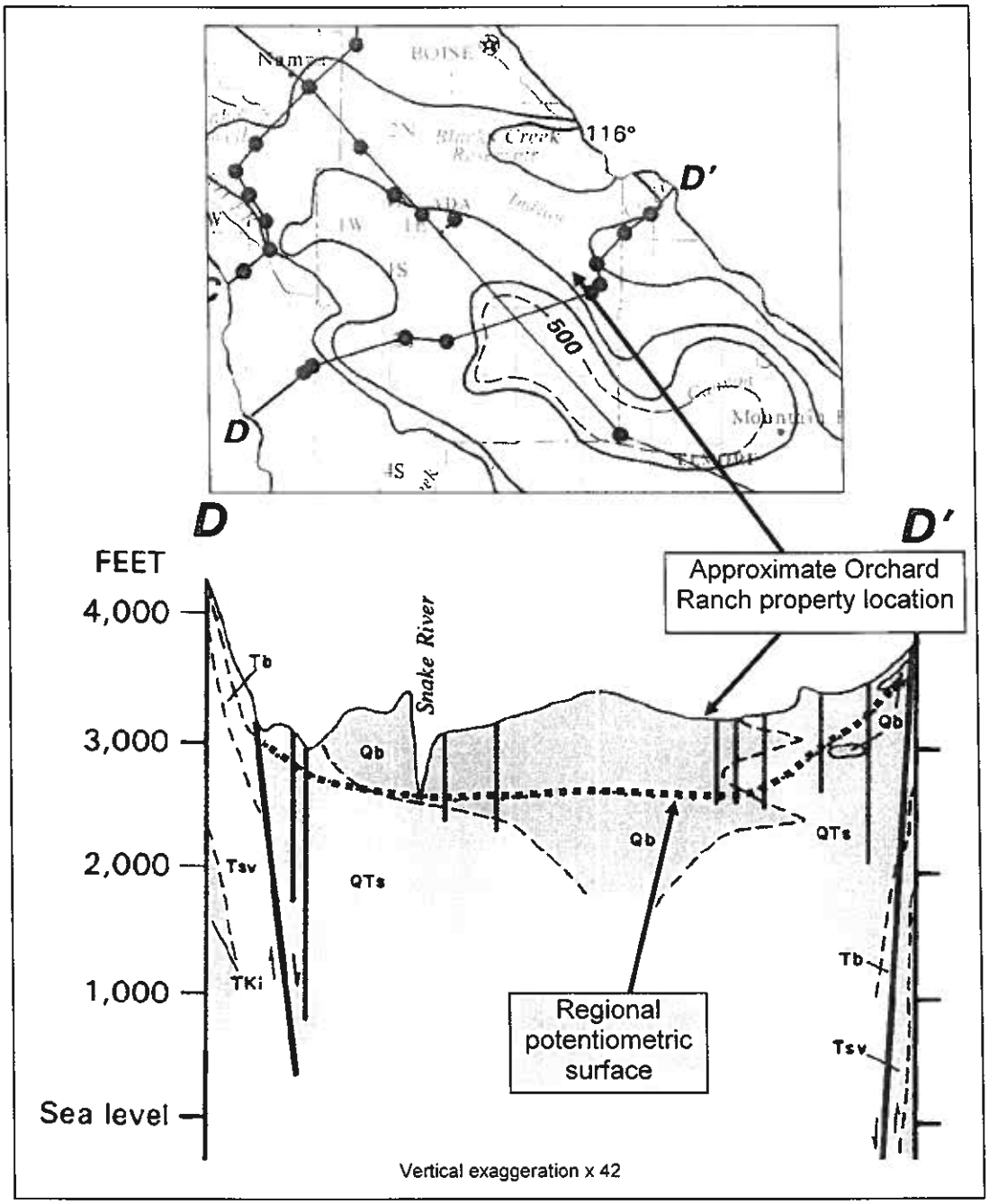


Figure 4: Geologic cross-section (adapted from Whitehead, 1986).

2.2.3. Static Water Levels

Static water levels listed on the drillers' reports ranged from approximately 450 to 550. Water levels in most of the deeper wells rise above the zone in which ground water was encountered, indicating confined or partially confined conditions. For

example, the screened interval in Well No. 45 was below 680 feet but the static water level was recorded at a depth of 479 feet.

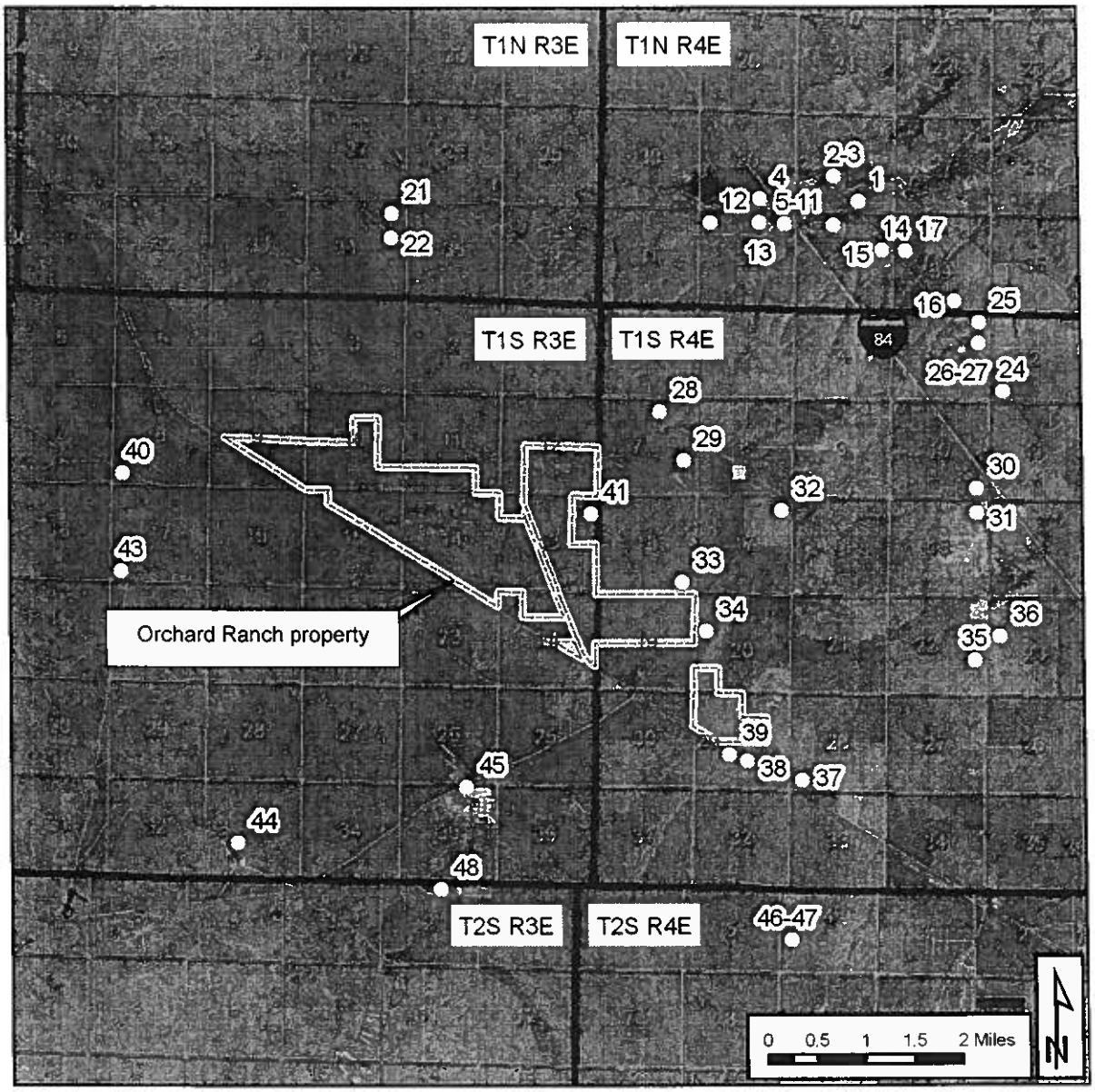


Figure 5. Wells within 5 miles of the Orchard Ranch property.

2.2.4. Lithology

Most, but not all, wells penetrated a sequence of sediments, volcanic materials (described in the drillers' reports as basalt, lava, and/or cinders), and continued sediments. Water-bearing zones in most wells are found below the volcanic rocks. Volcanic rocks are thinner north of the Orchard Ranch property and are thicker in wells located in the southern portion of the study area (e.g., volcanic materials in

wells 45, 46, and 47 extended to depths greater than 600 feet, and to greater than 800 feet in Well 48).

Three of the drillers' reports for wells located northeast of the Orchard Ranch property list blue clay occurring at depths ranging from 400 to 665 feet below ground surface. A transition from brown to underlying blue or gray sediments is noted in many drillers' reports throughout the Western Snake River Plain (Petrich and Urban, 2004). The blue-gray sediments generally consist of clay and/or silt that may include interbedded sand or even pea gravels. The bluish color probably reflects chemically-reducing conditions associated with an oxygen-poor depositional environment.

2.2.5. Primary Aquifers

With one exception, the primary water-bearing zones in the immediate vicinity of the Orchard Ranch property are fine- to coarse-grained sand zones interbedded with tan (or, in one case, blue) clay or cinders. This "sand-silt" unit was described by Ralston and Chapman (adapted from 1970) as consisting primarily of granitic sand and silt with small amounts of gravel. This unit underlies the Pleistocene-age basalt in the Orchard Ranch area. Aquifer zones were noted at depths ranging from about 450 to over 700 feet. One well (the 800-foot deep Well No. 48) did not extend beyond volcanic rocks; primary water producing zones were noted between about 450 and 800 feet.

2.2.6. Initial Production Rates

The median production rate for wells in the immediate vicinity of the Orchard Ranch property is approximately 30 gpm. One of the M.A.T.E.S. wells in the area was initially tested at a flow of 815 gpm (well 45 on Figure 5). Initial production estimates are often based on short-term testing (frequently by airlifting) and as such provide only a general indication of well capacity. Also, initial production rates reflect well use (i.e., many domestic wells and pumps are not designed to produce high flow rates) and/or testing limitations (i.e., air-lift pumping from wells with deep static water levels is highly inefficient).

2.3. Ground-Water Flow

Regional ground water flow directions in the Orchard Ranch area (Figure 6) are in a west to southwest direction (Lindholm et al., 1988). Local ground-water level contours in the vicinity of the Orchard Ranch property were interpolated based on water-level data from IDWR's Well_Log database[2]. These data indicated ground-water flow in a southwesterly direction[3] toward the Snake River (Figure 7).

---

[2] Courtesy of Shane Bendixsen, IDWR).

[3] This map was prepared using only water levels collected since 2000 and during the months of March or April (to minimize the effect of seasonal variability).

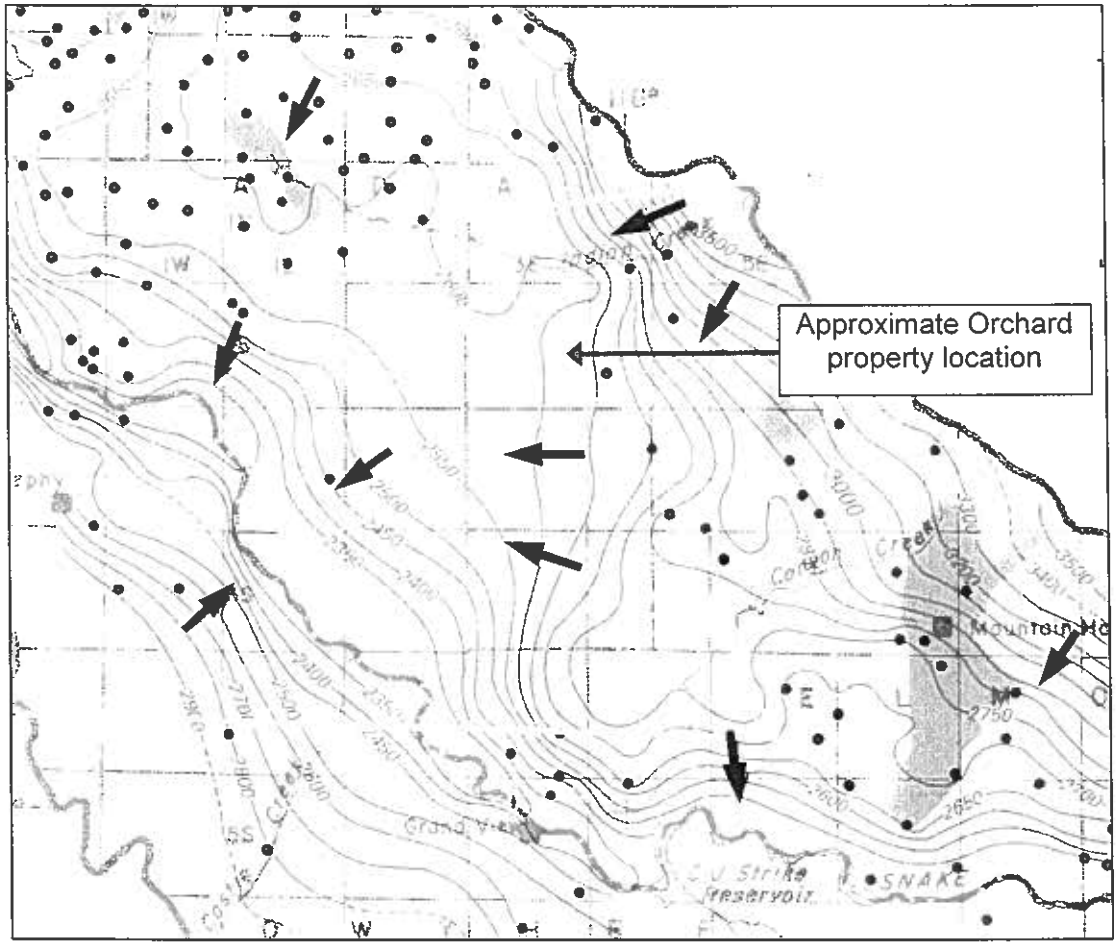


Figure 6: Regional ground-water level contours and flow directions (adapted from Lindholm et al., 1988).

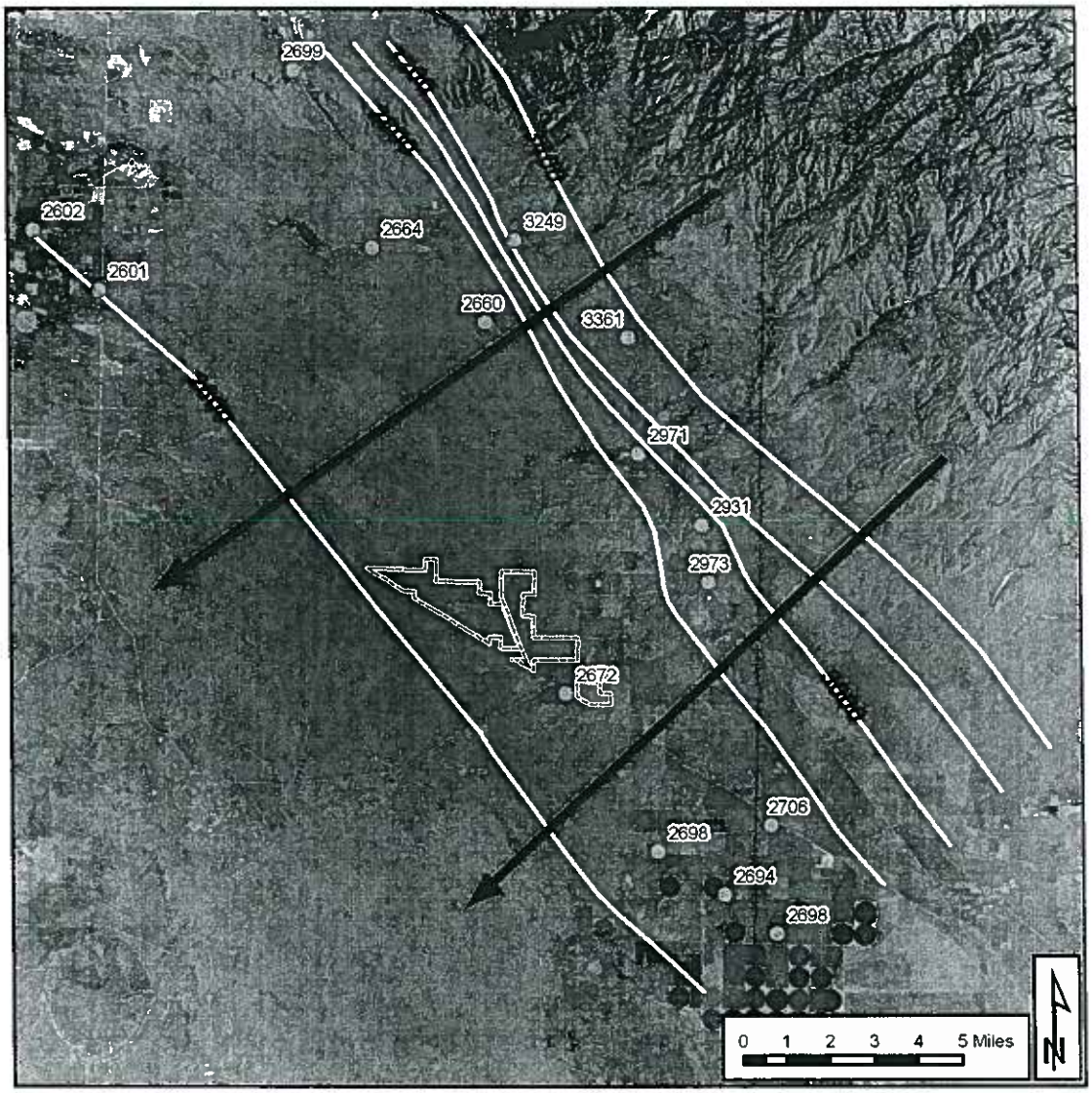


Figure 7. Ground-water level contours and interpreted flow directions in the vicinity of Orchard Ranch.

2.5. Water Level Trends

Water-level data for wells in the vicinity of the Orchard Ranch property were downloaded from IDWR's well log database (courtesy of Shane Bendixsen, IDWR). Water levels for 10 wells with at least 10 measurements in the deeper aquifer zone and located within 8 miles of the Orchard Ranch property (see Figure 8) are plotted in Figure 9.

Water levels from seven of the 11 wells appear to be relatively stable. The remaining three wells (02S04E-14CDD1, 02S04E-20DDD1, and 02S04E-22CCC1, which are the three southernmost wells in Figure 8) show water level declines ranging from approximately 1 foot per year to approximately 2.5 feet per year. These

ground-water level declines likely reflect local ground-water pumping over the last several decades and/or losses to lower zones via borehole leakage. Two of the wells with observed declines are located within the Cinder Cone Butte Critical Ground Water Area (Figure 8). Three additional monitoring wells are located within the critical ground water area; Well 02S04E-09DDD2 appears to have stable water levels and recent water-level data are not available for wells 02S04E-11BCD1, and 02S04E-02BBD1.

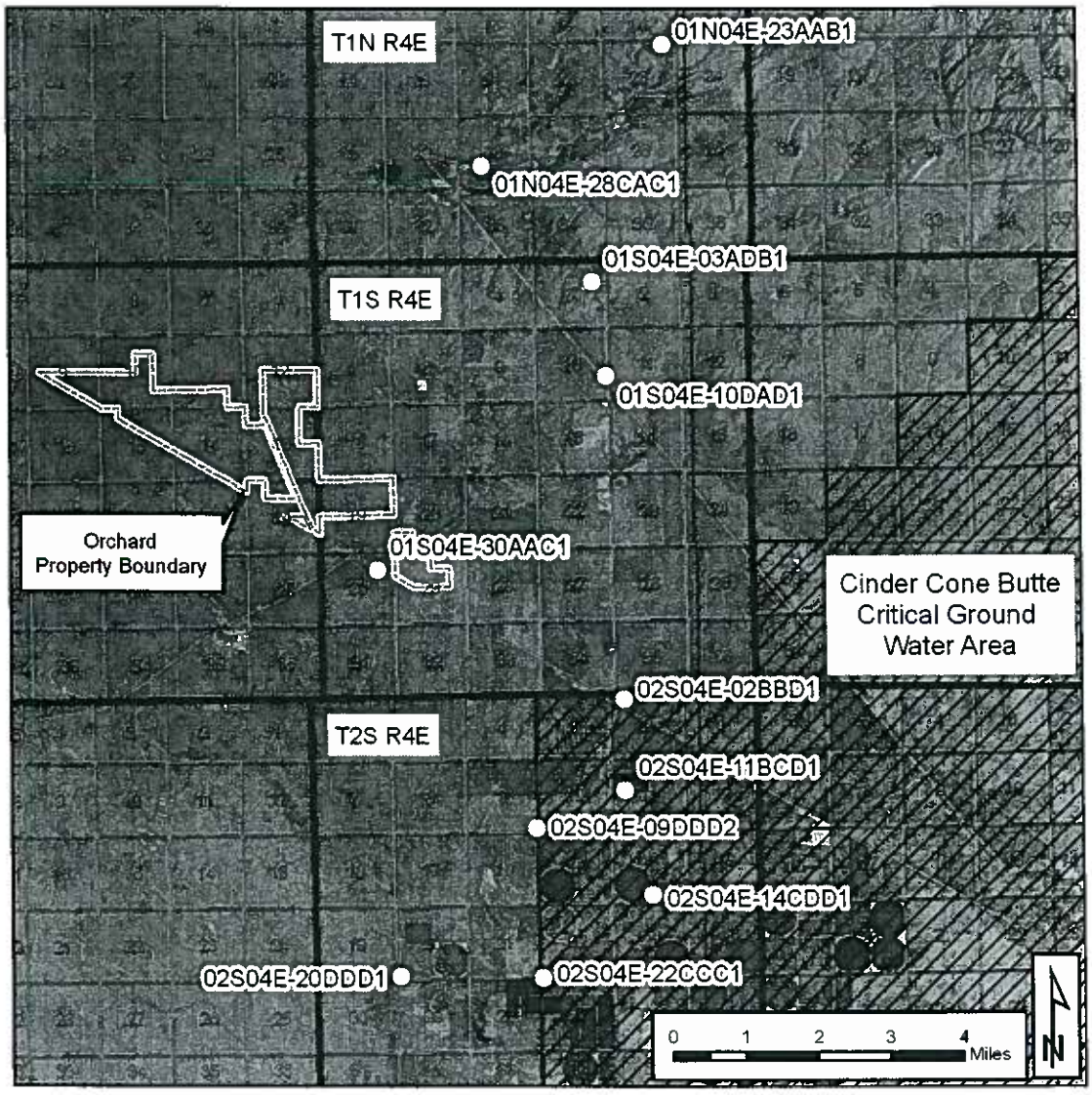


Figure 8. Locations of wells with publicly-available water-level data.

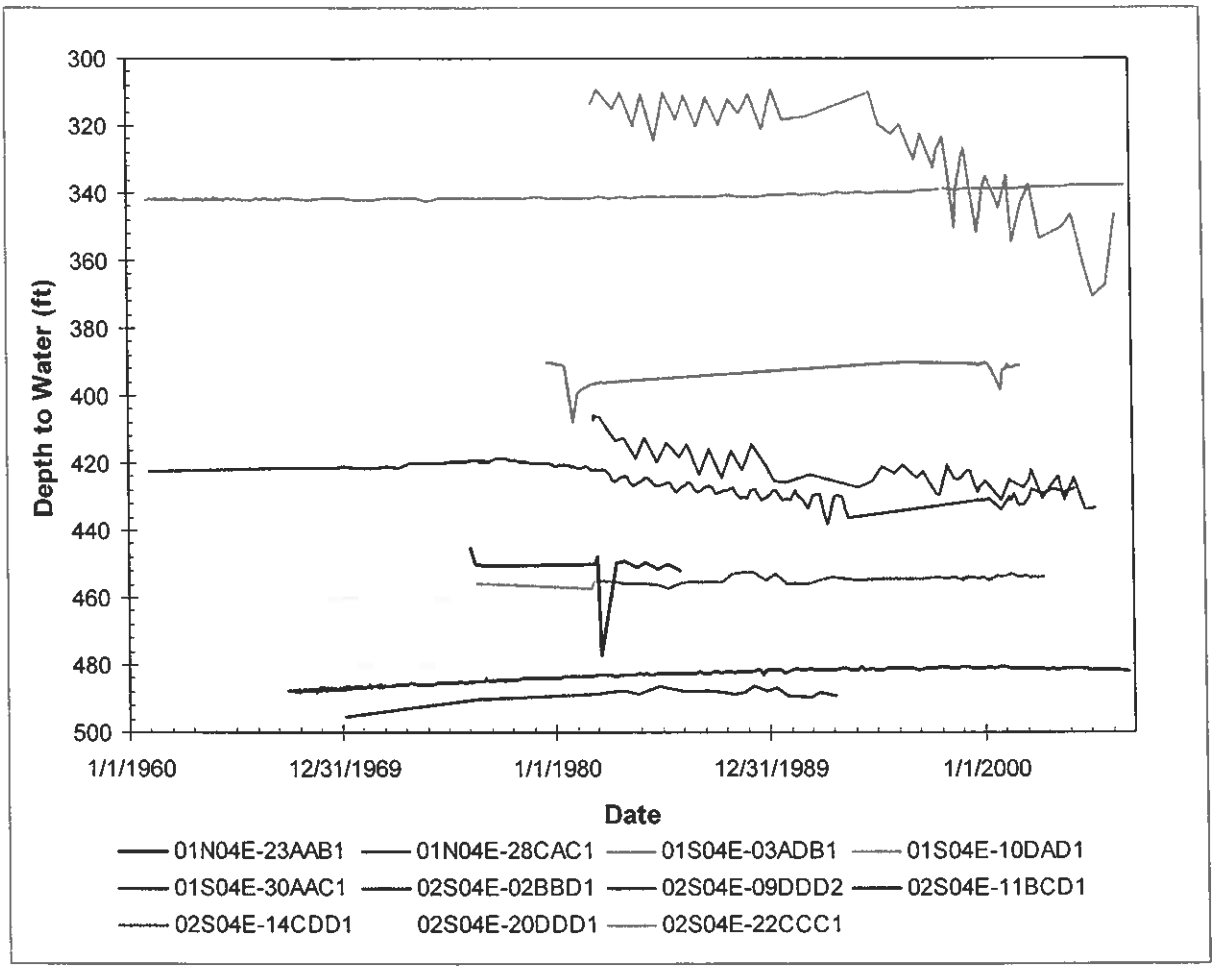


Figure 9. Water levels for wells in the vicinity of the Orchard Ranch property.

2.6. Water Quality

The U.S. Environmental Protection Agency has established primary maximum concentration limits (MCLs) and secondary maximum concentration limits (SMCLs) for public water systems. Primary MCLs are legally enforceable standards for public water systems to protect public health. Secondary standards represent non-enforceable guidelines for substances that may cause cosmetic or aesthetic effects in drinking water.

Water-quality data, collected as part of the Idaho Ground Water Quality Monitoring Program, were obtained from IDWR. Water-quality data (Table 2 and Appendix C) were available from seven wells located within six miles of the Orchard Ranch property (Figure 10). Between one and four samples were collected from each well. The wells range in depth from 62 to 960 feet. Driller's reports for three of these wells are provided in Appendix D.

Water quality in the vicinity of the Orchard Ranch property appears to be good based on these data. Fecal coliform bacteria were detected in one of the four samples collected from each of three different wells (stations 01S 04E 30ADC1, 01S 04E 23BBB1, and 01S 04E 17CCC2). However, this is probably not indicative of regional ground-water contamination but more likely reflects well construction, sample contamination, and/or local conditions. No other primary MCLs or secondary standards were exceeded in any of the seven wells examined.

				Range of Values[a]			
Analyte	**Units**	**Primary MCL**	**Secondary Standard**	**02S 04E 02BBD1**	**01S 04E 34ADDA1**	**01S 04E 30ADC1**	**01S 04E 23BBB1**
Arsenic	µg/L	10	---	5 (1)	3.3 (1)	6 - 8 (4)	2 - 3 (4)
Nitrate	mg/L	10	---	1.3 (1)	0.722 (1)	0.586 - 0.72 (4)	0.765 - 0.79 (4)
Fluoride	mg/L	4	2	0.4 (1)	0.5 (1)	0.4 - 0.6 (4)	0.4 - 0.5 (4)
Alpha, Gross	pCi/l	15	---	0.3 ± 1.4 (1)	1.9 ± 1.7 (1)	0.2 ± 1.6 - 0.3 ± 1.3 (2)	0.4 ± 1 - 0.6 ± 1.3 (2)
Beta, Gross	pCi/l	50	---	3.2 ± 1.3 (1)	4 ± 1 (1)	4.2 ± 1.3 - 4.4 ± 1.3 (2)	3.7 ± 1.2 - 3.9 ± 1.2 (2)
Fecal Coliform	col/100 ml	0	---	<1 (1)	<1 (1)	<1 - 1110 (4)	<1 - 45 (4)
Iron	µg/L	---	300	<3 (1)	60 (1)	<3 - 67 (4)	<3 - <10 (4)
Manganese	µg/L	---	50	<1 (1)	<3 (1)	<1 - 3 (4)	<0.8 - <2.2 (4)
Solids	mg/L	---	500	174 (1)	184 (1)	160 - 191 (3)	134 - 163 (4)

				Range of Values[a]		
Analyte	**Units**	**Primary MCL**	**Secondary Standard**	**01S 04E 17CCC2**	**01N 04E 32AAB1**	**01N 04E 27CBD1**
Arsenic	µg/L	10	---	2 - 3 (4)	2 - 3 (4)	2 - 3 (3)
Nitrate	mg/L	10	---	0.6 - 0.64 (4)	0.086 - 0.11 (4)	0.45 - 4.6 (3)
Fluoride	mg/L	4	2	0.2 - 0.23 (4)	0.4 - 0.5 (4)	0.3 - 0.3 (3)
Alpha, Gross	pCi/l	15	---	0.7 ± 1.4 - 3 ± 2.1 (2)	0.2 ± 1.1 - 2.6 ± 1.5 (2)	0.5 ± 1.6 - 1.1 ± 1.3 (2)
Beta, Gross	pCi/l	50	---	4.4 ± 1.3 - 4.8 ± 1.8 (2)	0.7 ± 1 - 2.1 ± 1 (2)	1.9 ± 1 - 2.6 ± 1.1 (2)
Fecal Coliform	col/100 ml	0	---	<1 - 22 (4)	<1 - <1 (4)	<1 - <1 (3)
Iron	µg/L	---	300	E5.3 - 176 (4)	6 - <10 (4)	10 - 42 (3)
Manganese	µg/L	---	50	<1 - 9.8 (4)	<0.8 - <3.0 (4)	1.2 - 2 (2)
Solids	mg/L	---	500	176 - 182 (4)	147 - 153 (4)	162 - 185 (3)

a - The number of samples collected is in parentheses.
Note: Values highlighted in red exceed the primary MCL.
Values highlighted in blue exceed the secondary standard.

Table 2. Water-quality data from wells near the Orchard Ranch property.

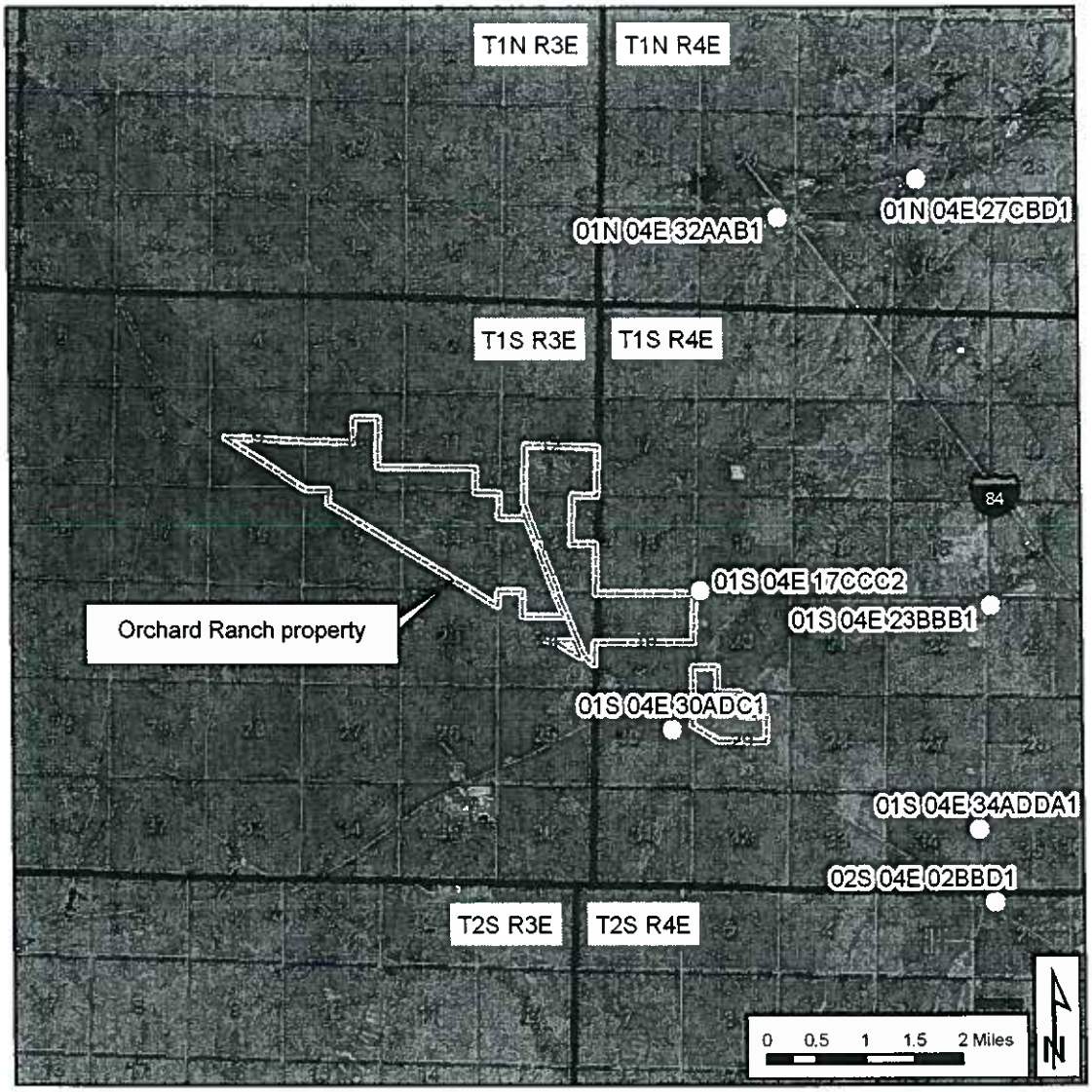


Figure 10. Wells with water-quality data within six miles of the Orchard Ranch property.

Water-quality data collected from a public water system well at the Idaho National Guard M.A.T.E.S. facility (located south of the Orchard Ranch property) were obtained from IDEQ. This well is identified as well 45 on Figure 5. Sampling results submitted since 1997 were examined; no primary MCLs were exceeded in any of these samples.

3. WATER SUPPLY ASSESSMENT

3.1. Target Aquifer

The target aquifers underlying the proposed Orchard Ranch Planned Community include a series of sand layers (with minor amounts of gravel) underlying Pleistocene volcanic rocks. Water-bearing zones will likely be found at depths beginning at 450 feet below ground surface, although primary water-producing zones will likely be at depths greater than about 600 feet. Volcanic materials in some portions of the property may extend to these depths, in which case target aquifers will include broken basalt or cinder zones.

3.2. Wells

New wells for the Orchard Ranch Planned Community will likely extend to depths ranging from about 700 to over 1,000 feet. Water levels will likely be between 450 and 550 feet below ground surface for wells drilled on the property. Potential well completion intervals should be identified based on lithologic descriptions, cuttings samples, and borehole geophysics. Although ground-water quality in the area appears to be good, zone-testing of discrete zones within the sand and gravel aquifer are recommended to test production capacity and avoid any poor-quality zones. Completion intervals for well screens should be based on water quality results and likely production capacity. Well completion in sand or gravel zones should include well screens and a sand filter pack to prevent sand production. Screen sizing, screen intervals, and filter pack specifications should be determined based on aquifer sediment characteristics and zone-testing results.

3.3. Anticipated Production Rates

Aquifer capacity in the Orchard Ranch area will likely be moderate, with potential discharge rates ranging from about 500 to 1,000 gpm. One of the M.A.T.E.S. wells in the area was initially tested at a flow of 815 gpm (well 45 on Figure 5). Drillers' reports for other wells in this area reported relatively low yields, but most of these wells and/or pumps were not designed for higher flows.

3.4. Water Levels

Water level monitoring from wells in the Orchard Ranch vicinity mostly indicates stable water levels over the last 30 to 40 years. Two wells located south or southeast of the property show water level declines ranging from approximately 1 foot per year to approximately 2.5 feet per year (Section 2.5). These declines are likely a natural response to local pumping over the last several decades.

4. REFERENCES

Bond, J.G. and Wood, C.H., 1978. Geologic map of Idaho. Idaho Department of Lands, Bureau of Mines and Geology, 1:500,000 scale.

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.

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Whitehead, R.L., 1986. Geohydrologic framework of the Snake River Plain, Idaho and eastern Oregon. U.S. Geologic Survey Hydrologic Investigations Atlas HA-681, Scale 1:1,000,000.

Wood, S.H., 1996. Cross Sections of the Southeast Boundary of the Treasure Valley Groundwater Study Area: Notes on the Geology of the Mayfield-Orchard Ranch Area, Ada and Elmore County, Idaho, Boise State University Geosciences, prepared for the Treasure Valley Hydrologic Project.

Appendix A:
Summary of Well Drillers' Reports

Well ID	Contact	Use	TWP	RNG	SEC	Tract	Gov. Lot	Well Address	Sub	Bl	L	Gallons Per Minute	Static Water Level	Total Depth	Casing Depth	CSG. DIA.	Construction Date	Permit Number	Tag Number
1	VAN BEEK, GUY		01N	04E	28	SWSE							160	375			5/17/1978	776251	
2	AGENBROAD, KEN D	Irrigation	01N	04E	28	NESW							390	763			9/4/1979	776260	
3	AGENBROAD, KEN D	Irrigation	01N	04E	28	NESW								85			4/28/1979	820312	
4	WINJE, GEORGE	Domestic-Single Residence	01N	04E	29	SWSE		ORCHARD/MAYFIELD EXIT						202	46	6	6/10/1994	728344	
5	BOISE STAGE STOP	Domestic-Single Residence	01N	04E	32	NENE		BOISE STAGE STOP				3	115	130	57	8	10/1/1996	721744	
6	BOISE STAGE STOP	Domestic-Single Residence	01N	04E	32	NENE		I-84 EXIT 71, BOISE STAGE STOP					115	180	56	8	10/2/1996	721745	
7	BOISE STAGE STOP	Domestic-Single Residence	01N	04E	32	NENE		I-84 EXIR 71, BOISE STAGE STOP				15	80	140	120	8	10/8/1996	721748	
8	BOISE STAGE STOP	Domestic-Single Residence	01N	04E	32	NENE		I-84 EXIT 71				20	40	66	54	8	5/17/1999	721925	D0009418
9	KINGS MEN	Domestic-Single Residence	01N	04E	32	NENE						20	636	811	810	6	5/7/1982	721990	
10	BOISE STAGE STOP	Industrial	01N	04E	32	NENE		I-84 EXIT 71				20	58	130	130	6	5/31/2002	776954	D0019974
11	BOISE STAGE STOP	Domestic	01N	04E	32	NENE						20	34	92			11/14/1986	818250	
12	BRAVO, ROBERT	Domestic-Single Residence, Domestic-Single Residence	01N	04E	32	NWNW		1/4 MILE BEHIND STAGE STOP				2	24	160	160	6	11/10/2001	770361	D0020068
13	WESTERN TRUCK STOPS INC	Fire Protection	01N	04E	32	NWNE		I-84 / EXIT 71				20	641	884	884	8	5/5/2005	832570	D0039002
14	ANDERSON, TIM	Domestic-Single Residence	01N	04E	33	SENE		24601 S OLD HWY 30				20	528	665	-660	6	11/9/2000	767235	D0015796
15	PHAGAN, JIM	Domestic-Single Residence, Domestic-Single Residence	01N	04E	33	NENW		NORTH OF 23735 DESERT WIND	REGINA HGTS			17	481	569	560	6	11/17/2001	772052	D0019379
16	MILLER, RONALD L, MILLER, PAMELA K	Domestic-Single Residence	01N	04E	34	SWSE		MAYFIELD RD					450	620	596	5	9/23/1999	721957	D0012097
17	STEWART, BLACKIE	Irrigation	01N	04E	34	SWNW						80	89	260			5/10/1976	817181	
18	WELL DOES NOT EXIST IN THIS LOCATION																		
19	WELL DOES NOT EXIST IN THIS LOCATION																		
20	WELL DOES NOT EXIST IN THIS LOCATION																		
21	NORTHWEST PIPELINE CORP	Cathodic Protection	01N	03E	34	NENE		PIPELINE RIGHT AWAY						516	61	12	8/18/1993	727275	
22	EL PASO NATURAL GAS PRODUCTS CO	Other	01N	03E	34	SENE								502			10/31/1972	829167	
23	WELL DOES NOT EXIST IN THIS LOCATION																		
24	JORGENSEN, GLEN, JORGENSEN, JANET	Domestic-Single Residence	01S	04E	2	SWSW		Baseline Rd				20	388	633	-608	6	11/17/2000	767572	D0015631
25	MORTON, JERRY	Domestic-Single Residence	01S	04E	3	NENE						25	460	586	584	6	11/11/1989	721253	
26	CASTLE, ROSANNA K, CASTLE, RONALD B	Commercial	01S	04E	3	SENE		HC 34 MAYFIELD STAGE BOX 100				30	338	535	490	8	7/28/1993	721499	
27	CASTLE, RONALD B, CASTLE, ROSANNA K	Commercial	01S	04E	3	SENE		HC 34, MAYFIELD STAGE, BOX 100				40	435	678	550	6	4/25/1996	721699	
28	WILLIAM PIPELINE WEST	Cathodic Protection	01S	04E	7	NWNE		EXIT 71 1/4 MILE FROM COMPRESSER STATEION TURN WEST ON 2 TRACK TO ROW NEAR CORRAL 500 FT NORTH OF PI						500	500	10	1/23/2003	789255	D0025927
29	WEIMER, JOHNNY	Stockwater	01S	04E	7	NESE						25	540	695			6/8/1973	792733	
30	HISEL, JIM	Domestic-Single Residence	01S	04E	10	SESE		MAYFIELD STAGE HC -34				10	350	545	541	6	9/23/1998	721877	D0007514

Well ID	Contact	Use	TWP	RNG	SEC	Tract	Gov. Lot	Well Address	Sub	Bl	L	Gallons Per Minute	Static Water Level	Total Depth	Casing Depth	CSG. DIA.	Construction Date	Permit Number	Tag Number
31	EISEMAN, LEONARD	Domestic-Single Residence	01S	04E	15	NENE		SIMCO RD/I-84				35	335	467	448	8	6/26/1994	721567	
32	EL PASO NATURAL GAS CO	Other	01S	04E	17	NENE							450	571			4/30/1973	792735	
33	HAUG, SHERRY	Domestic-Single Residence	01S	04E	18	SESE		E ORCHARD ACCESS RD				15	520	704	702	6	7/9/1997	721798	
34	MC EACHERN, BILL	Domestic-Single Residence	01S	04E	20	SWNW		ORCHARD RD, AIRPORT, 4 5 MILES S OF STAGE STOP				50	505	736	736	6	10/5/2001	771187	D0018592
35	EISMAN, MIKE	Domestic-Single Residence	01S	04E	22	NESE		1639 S SIMCO ROAD				40	464	640	625	6	6/20/2002	778010	D0025092
36	WILLIAM PIPELINE WEST	Cathodic Protection, Cathodic Protection	01S	04E	23	SWNW		3 MILES SOUTH ON SIMCO ROAD						500	500	10	10/30/2001	771970	D0019345
37	HOLIDAY, DAN	Domestic-Single Residence, Domestic-Single Residence, Domestic-Single Residence	01S	04E	28	SWSW		EXIT 74 OFF I-84 5 MILES S ON ORCHARD 2 5 M SE TO 15222 MONROE				50	450	660	600	6	11/19/1999	721965	D0012473
38	LANGE, KENNETH	Domestic	01S	04E	29	SWNWSE		15888 E MONROE AVE				13	485	619	608	6	9/3/2002	774532	D0019724
39	GANGLER, GLORIA	Domestic-Single Residence	01S	04E	29	NESW		14600 E MONROE DRIVE				35	477	600	572	6	7/2/2002	779607	D0025130
40	WHITE, NORRIS	Domestic	01S	03E	8	SWSW						25	10	227			8/16/1978	813219	
41	BONESSA, FRANK	Domestic-Single Residence	01S	03E	13	SENENE		1 MI W OF ORRCARD ACCESS RD ON ORCHARD RANCH RD				9.7	500	633	124	8	6/1/1999	721893	D0007483
42								WELL DOES NOT EXIST IN THIS LOCATION									4/22/1982	804174	
43	STEWART, C W	Domestic	01S	03E	17	SWSW						20	516	760			11/10/1989	721261	
44	STATE OF IDAHO	Industrial	01S	03E	33	NESW						25	605	825	825	8			
45	IDAHO MILITARY DIVISION-AIR NATIONAL GUARD, MATES	Domestic-Single Residence	01S	03E	35	NWNE						815	479	753	680	16	4/2/1992	721391	
46	WATKINS, ARTHUR DONALD	Domestic-Single Residence	02S	04E	4	NWSW		2 MI W SIMPES, NEAR POWERLINE				50	445	620	617	8	1/23/1992	721377	
47	WATKINS, ARTHUR DONALD	Domestic-Single Residence	02S	04E	4	NWSW		W OF SIMCO RD/S OF RR TRACKS/E OF ORCHARD					456	621	610	5	7/15/1996	721732	
48	EWING CO INC, MATES	Domestic-Single Residence	02S	03E	2	NWNE		MAYFIELD ROAD				30	521	800	800	10	10/29/1992	721402	

Appendix B:
Copies of Well Drillers' Report

4

Form 238-7
1/94

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter
or
Ball Point Pen

1. DRILLING PERMIT NO. 63-94-W-0489 - 000
Other IDWR No.

2. OWNER:
Name GEORGE WINJE
Address HC34/MAYFIELD STG.52
City BOISE State ID Zip 83706

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

N / W / E / S

Twp. 1 North ☒ or South ☐
Rge. 4 East ☒ or West ☐
Sec. 29 . 1/4 SW 1/4 SE 1/4
Gov't Lot ____ County ADA

Address of Well Site
ORCHARD/MAYBER EXIT City
(One of least name of road + Distance to Road or Landmark)

Lt. Blk. Sub. Name

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

5. TYPE OF WORK
☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
BENT	0	18	2S	OVERBORE

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	46	250	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Screen Type NONE USED

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

FEB 08 1995

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
NO ft. below ground Artesian pressure lb.
Depth flow encountered ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
NO		NO	NO

Water Temp. Bottom hole temp.
Water Quality test or comments: 091183

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
9"	0	1	TOPSOIL	NO	
9"	1	7	BLACK HARD LAVA	NO	
9"	7	12	YELLOW SOAP STONE	NO	
9"	12	18	BEIGE COARSE SANDSTONE	NO	
6"	18	25	BEIGE COARSE SANDSTONE	NO	
6"	25	30	BRN CLAY	NO	
6"	30	41	GRAY PEA GRAVEL	YES	
6"	41	46	BRN SOFT CLAY	NO	
6"	46	68	BLACK LAVA	NO	
6"	68	72	GRAY PACKED FINE SAND	NO	
6"	72	80	RUSTY BRN CLAY	NO	
6"	80	87	PACKED GRAY SAND COARSE	NO	
6"	87	95	BRN CLAY	NO	
6"	95	110	PACKED BRN COARSE SAND	NO	
6"	110	120	BRN CLAY	NO	
6"	120	130	BRN SANDY CLAY	NO	
6"	130	140	BRN CLAY	NO	
6"	140	150	PACKED BRN SAND	NO	
6"	150	160	BRN SAND	NO	
6"	160	162	BRN CLAY	NO	
6"	162	180	BRN COARSE SAND	NO	
6"	180	185	BRN CLAY	NO	
6"	185	202	BRN COARS SAND	NO	

RECEIVED
SEP 15 1994
Department of Water Resources

RECEIVED
JUN 21 1994
WATER RESOURCES
WESTERN REGION

Completed Depth 203 'FROM TOP OF CASING (Measurable)
Date: Started 6/8/94 Completed 6/10/94

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

Firm Name S.O.S.WELLDRILLING Firm No. 212
Firm Official Frank Shuma Date 6-14-94
and
Supervisor or Operator Tony Hackett Date 6-14-94
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

721744

Form 238-7
3/95-C96

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. DRILLING PERMIT NO. 61 -96 -W -0054 -000
Other IDWR No. _____

2. OWNER:
Name Boise Stage Stop
Address I-84 Exit 71
City Boise State ID Zip 83709

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

N
W E
S

Twp. 1 North X or South ☐
Rge. 4 East X or West ☐
Sec. 29 1/4 (10 acres) SW 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot _____ County Ada
Lat: : : Long: : :
Address of Well Site I-84 Eixt 71
City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	57	900 lbs	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8.625	3	57	250	Steel	X	☐	X	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
115 ft. below ground Artesian Pressure ___ lb
Depth flow encountered ___ ft Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
3 gpm			

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
10.75	0	2	Top Soil		X
10.75	2	57	Sand		X
10-8	57	63	Gray Lava		X
8	63	66	Brown Cinder	X	
8	66	75	Gray Lava		X
8	75	80	Brown Cinder & Clay		X
8	80	140	Decomposed Granite		X

RECEIVED
JUN 25 2002
WATER RESOURCES
WESTERN REGION

Completed Depth: 130' (Measurable)
Date: Started 10-01-96 Completed 10-01-96

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official Kevin D. Kael Date 6-18-02
Supervisor or Operator John Smith Date 10-26-96
(Sign once if Firm Official & Operator)

721745 6

Form 238-7
3/95-C96

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. DRILLING PERMIT NO. 61 -96 -W -0055 -000
Other IDWR No. _____
2. OWNER:
Name Boise Stage Stop
Address I-84 Exit 71
City Boise State ID Zip 83709
3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location

N
W E
S

Twp. 1 North X or South ☐
Rge. 4 East X or West ☐
Sec. 29 1/4 (10 acres) SW 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot _____ County Ada
Lat: : : Long: : :
Address of Well Site I-84 Eixt 71
City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____
5. TYPE OF WORK check all that apply (Replacement etc.)
X New Well ☐ Modify ☐ Abandonment ☐ Other _____
6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____
7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	56	900 lbs	Overbore

Was drive shoe used? X Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y X N How? _____
8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8.625	4	56	250	Steel	X	☐	X	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____
9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
115 ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
N/A			

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered _____
12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Y	N
10.75	0	2	Top Soil		X
10.75	2	18	Sand & Seam Gravels		X
10.75	18	50	Sand		X
10.75	50	56	Tan Clay		X
10.75	56	70	Gray Lava & Black Clay		X
8	70	75	Brown Clay & Brown Cinders		X
8	75	85	Gray Lava		X
8	85	92	Gray Lava & Brown Cinders		X
8	92	115	Decomposed Granite		X
8	115	130	Green Sand Stone		X
8	130	150	Green & Brown Clay		X
8	150	180	Decomposed Granite & Clay Seams		X

RECEIVED
JUL 12 2002
WATER RESOURCES WESTERN REGION
RECEIVED
JUN 25 2002
WATER RESOURCES WESTERN REGION

Completed Depth: 180' (Measurable)
Date: Started 10-02-96 Completed 10-02-96

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official Kenneth Kal Date 6-18-02
Supervisor or Operator John Smith Date 10-26-96
(Sign once if Firm Official & Operator)

7

721748

Form 238-7
3/95-C96

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. DRILLING PERMIT NO. 61 -96 -W -0058 -000
Other IDWR No. _____

2. OWNER:
Name Boise Stage Stop
Address I-84 Exit 71
City Boise State ID Zip 83709

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

N
W E
S

Twp. 1 North X or South ☐
Rge. 4 East X or West ☐
Sec. 29 1/4 (10 acres) SW 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot _____ County Ada
Lat: : : Long: : :
Address of Well Site I-84 Eixt 71
City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	44.6	650 lbs	Overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8.625	2	44.6	250	Steel	X	☐	X	☐
4	-10	120	40	PVC	☐	X	☐	X
					☐	☐	☐	☐

Length of Headpipe 110' Length of Tailpipe 2"

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
X Screens Screen Type Johnson

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
120	140	.020		4"	PVC	☐	X
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
80 ft. below ground Artesian Pressure ___ lb
Depth flow encountered ___ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
15 gpm			

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
10.75	0	2	Top Soil		X
10.75	2	44.6	Sand		X
10-8	44.6	62	Gray Lava		X
8	62	66	Brown Cinder & Gray Lava	X	
8	66	74	Gray Lava		X
8	74	80	Brown Cinder & Clay		X
8	80	160	Decomposed Granite		X

RECEIVED
JUN 25 2002
WATER RESOURCES
WESTERN REGION

Completed Depth: 140' (Measurable)
Date: Started 10-07-96 Completed 10-08-96

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official Kenneth Hall Date 6-18-02
Supervisor or Operator John Smith Date 10-21-96
(Sign once if Firm Official & Operator)

8

C

Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 95988

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

1. DRILLING PERMIT NO. 61-99-W-0024-000
Other IDWR No. D0009418

2. OWNER:
Name Boise Stage Stop
Address I-84 Exit 71
City Boise State ID Zip 83716

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

N / W / E / S

Twp. 1 North X or South ☐
Rge. 4 East X or West ☐
Sec. 32 1/4 (10 acres) NE 1/4 (40 acres) NE 1/4 (160 acres)
Gov't lot ____ County Ada
Lat: . . Long: . .
Address of Well Site ____
City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name ____

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	54	1000 lbs	overbore

Was drive shoe used? X Y ☐ N Shoe Depth(s) ____
Was drive shoe seal tested? ☐ Y X N How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8 5/8	+2	54	.250	Steel	X	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe N/A Length of Tailpipe N/A

9. PERFORATIONS/SCREENS
☐ Perforations Method ____
☐ Screens Screen Type ____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
40 ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ Describe access port or control devices: ____

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
20+			

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: ____
Depth first Water Encountered ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
12	0	2	Top Soil	☐	X
12	2	16	Sand	☐	X
12	16	22	Tan Clay	☐	X
8	22	54	Decon Granite	☐	X
8	54	65	Gray Lava	☐	X
8	65	66	Gravels	X	☐

RECEIVED
JUN 04 1999
WATER RESOURCES WESTERN REGION

Completed Depth: 65' (Measurable)
Date: Started 5/17/99 Completed 5/17/99

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official Ron Date 6/3/99
Supervisor or Operator John A Smith Date 5/27/99
(Sign once if Firm Official & Operator)

MICROFILMED
AUG 25 1999

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT 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.

RECEIVED
MAY 20 1982
Department of Water Resources
Western Regional Office

1. WELL OWNER

Name King's MEN (STREEPER Realty)

Address Ktn Home, Id

Owner's Permit No. _____

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☑ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	6 5/8 inches	+ 1 feet	810 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

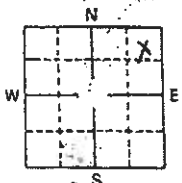
Was casing drive shoe used? ☑ Yes ☐ No
Was a packer or seal used? ☐ Yes ☑ No
Perforated? ☐ Yes ☑ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

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

Well screen installed? ☐ Yes ☑ No
Manufacturer's name _____
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 ☐ Puddling clay ☐ Well cuttings
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 _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Ada
NE ¼ NE ¼ Sec. 32 T. 1 N/S, R. 4 E/W.

7. WATER LEVEL

Static water level 636 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 _____

8. WELL TEST DATA

☐ Pump ☐ Bailer ☑ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
20		2.0

9. LITHOLOGIC LOG 85689

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	710	740	Clay & Fine Sand (CAVING)	✓	
6	740	805	Sand (COARSE) HEAVING	✓	
6	805	807	COARSE SAND & GRAVEL	✓	
6	807	811	WHITE COARSE SAND & G.	✓	

RECEIVED
MAY 27 1982
Department of Water Resources

10. Work started 26 Apr 82 finished 7 May 82

11. DRILLERS CERTIFICATION

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

Firm Name Hiddlestan Firm No. 35
Address Mountain Home Date 10 May 82
Signed by (Firm Official) _____
and
(Operator) _____

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

10

776954

Form 238-7
3/95-C96

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. DRILLING PERMIT NO. __ - __ - __ - ____ ____
Other IDWR No. D0019974

2. OWNER:
Name Boise Stage Stop – George Winge
Address I-84 Exit 71
City Boise State ID Zip 83716

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

N
W [X] E
S

Twp. 1 North X or South ☐
Rge. 4 East X or West ☐
Sec. 32 1/4 (10 acres) NW 1/4 (40 acres) NE 1/4 (160 acres)
Gov't lot _____ County Emore
Lat: : : Long: : :
Address of Well Site I-84 Exit 71
City Mtn Home
(Give at least name of road – Distance to Road or Landmark)
Lt _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection X Other Industrial

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/PILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	1	18		

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
6.625	+2	69	250	Steel	☐	X	X	☐
4	-10	130	Sch40	PVC	☐	X	☐	X
					☐	☐	☐	☐

Length of Headpipe 60' Length of Tailpipe 10

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
70	120	020		4"	PVC	☐	X
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
58 ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
20			1 hr

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
6	67	89	Gravel		X
6	69	90	Gray Lava & Some Clay		X
6	90	104	Red Cinder & Quartz Sand		X
6	104	107	Quartz Sand		X
6	107	130	Quartz Sand & Some Clay		X
6	130		Fine Sand		X

RECEIVED
JUN 04 2002
WATER RESOURCES
WESTERN REGION

Completed Depth: 130' (Measurable)
Date: Started 5 30 02 Completed 5 31 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 Hiddleston & Son, Inc. Firm No. 35
Firm Official _____ Date _____
Supervisor or Operator _____ Date _____
(Sign once if Firm Official & Operator)

11

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

MICROFILMED

USE TYPEWRITER OR BALLPOINT 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.

9

1. WELL OWNER

Name Boise Stage Stop

Address

Owner's Permit No.

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☑ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	8⅝ inches +	2 feet	53 feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

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

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

Well screen installed? ☐ Yes ☑ No
Manufacturer's name _____
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 53 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 _____

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name _____
Lot No. _____ Block No. _____
County Ada
NE ¼ NE ¼ Sec. 32, T. 1 N/S, R. 4 E/W

7. WATER LEVEL

Static water level 34 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.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☑ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
20		2

9. LITHOLOGIC LOG 87169

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	8	Soil + Hard Pan		
	8	35	Sand + Gravel		
	35	45	Sand + Clay		
	45	52	Clay		
10-8	52	65	Gray Lava		
8	65	69	Gray + Brown cinder	X	
	69	72	Gray Lava		
	72	74	Gray Lava clay + cinder		
	74	82	Gray Lava		
	82	83	Brown cinder		
	83	84	Gray Lava		
	84	88	Brown cinder + Clay		
	88	89	Red clay		
	89	92	Sand		

RECEIVED
DEC 8 1986
Department of Water Resources

RECEIVED
MAR 11 1987
Department of Water Resources
Western Regional Office

RECEIVED
Department of Water Resources

10.

Work started 11-7-86 finished 11-14-86

11. DRILLERS CERTIFICATION

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

Firm Name Middleton Drilling Firm No. 35
Address Mt Home Date 11-24-86
Signed by (Firm Official) _____
and
(Operator) Ken Kral

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

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

770361

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

1. WELL TAG NO. D 0020068
DRILLING PERMIT NO. ____
Other IDWR No. ____

2. OWNER:
Name Robert Bravo
Address 00000 South Orchard Street
City Boise State ID Zip 83716

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

N / W / E / S

Twp. 1 North [X] or South [ ]
Rge. 4 East [X] or West [ ]
Sec. 32 NW 1/4 (10 acres) NW 1/4 (10 acres) ____ 1/4 (150 acres)
Gov't Lot ____ County Ada
Lat: : : Long: : :
Address of Well Site ¼ mile behind Stage Stop City Boise
(Give at least name of road + Distance to Road or Crossroad)

Lt. ____ Blk. ____ Sub. Name ____

4. USE:
[X] Domestic [ ] Municipal [ ] Monitor [ ] Irrigation
[ ] Thermal [ ] Injection [ ] Other ____

5. TYPE OF WORK check all that apply (Replacement etc.)
[X] New Well [ ] Modify [ ] Abandonment [ ] Other ____

6. DRILL METHOD
[X] Air Rotary [ ] Cable [ ] Mud Rotary [ ] Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Pentonite	0	20	15	overbore

Was drive shoe used? [X] Y [ ] N Shoe Depth(s) 20
Was drive shoe seal tested? [X] Y [ ] N How? Air test

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	20	250	steel	[X]	[ ]	[X]	[ ]
4½	19	160		PVC	[ ]	[X]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
Perforations Method ____
Screens Screen Type ____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
19	160	40		4½	PVC	[ ]	[X]
						[ ]	[ ]
						[ ]	[ ]

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
24 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: Well Cap

11. WELL TESTS:
[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
2	160		3Hrs.

Water Temp. 65 Bottom hole temp. 65
Water Quality test or comments: Good
Depth first Water Encountered 56

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10"	0	3	overburden		X
10"	3	7	hard pan		X
10"	7	16	gravel		X
10"	16	26	clay		X
6"	26	56	lava		X
6"	56	68	cinders	X	
6"	68	100	decomposed granite		X
6"	100	110	red cinders		X
6"	110	123	decomposed granite		X
6"	123	140	clay		X
6"	140	160	granite		X

RECEIVED
AUG 15 2001
Department of Water Resources
RECEIVED
AUG 06 2001
WATER RESOURCES
WESTERN REGION

Completed Depth 160 (Measurable)
Date: Started 11/06/2000 Completed 11/10/2000

13. DRILLER'S CERTIFICATION
We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Ed L. Holder Drilling Firm No. 578
Firm Official Ed L. Holder Date 11/10/2000
and
Driller or Operator ____ Date ____
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

12

13

63

832570

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

Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO _____
Other IDWR No. D0039002

2. OWNER:
Name Boise Stage Stop
Address 23801 S Orchard Access RD.
City Boise State ID Zip 83716

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

N
W E
S

Twp. 1 North ☒ or South ☐
Rge. 4 East ☒ or West ☐
Sec. 32 1/4 (10 acres) NW 1/4 (40 acres) NE 1/4 (160 acres)

Gov't lot _____ County Ada
Lat: : : Long: : :
Address of Well Site 184 & exit 71
City Boise
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

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

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 Material	From	To	AMOUNT Sacks or Pounds	METHOD
bentonite	0	60	5000 pds	overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
5 5/8	+6	500	322	steel	☒	☐	☒	☐
6 5/8	+2	884	250	steel	☒	☐	☒	☐
					☐	☐	☐	☐

Length of Headpipe n/a Length of Tailpipe n/a

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type n/a

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
641 ft. below ground Artesian Pressure ___ lb
Depth flow encountered ___ ft Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
20			

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
12	0	4	topsoil		☒
12	4	26	sand brown		☒
12	26	60	clay		☒
8	60	250	tan sand		☒
8	250	300	tan clay		☒
8	300	348	tan sand		☒
8	348	375	tan clay		☒
8	375	438	tan sand		☒
8	438	500	tan clay		☒
6	500	546	tan sand		☒
6	546	580	tan clay		☒
6	580	623	blue clay		☒
6	623	651	tan sand		☒
6	651	720	blue clay		☒
6	720	800	tan sand		☒
6	800	850	tan clay		☒
6	850	880	fine tan sand	☒	
6	880	884	coarse black & white sand		☒

RECEIVED
JUN 17 2005
WATER RESOURCES
WESTERN REGION

Completed Depth: 884 (Measurable)
Date: Started 04-25-05 Completed 05-05-05

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official _____ Date 6-10-05
Supervisor or Operator _____ Date 6-13-05
(Sign once if Firm Official & Operator)

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

LL

WELL DRILLER'S REPORT

775

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.

1. WELL OWNER

Name El Paso Natural Gas

Address

Owner's Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

Not a Water Well

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test Not a Water Well
☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 10 inches Total depth 580 feet
Casing schedule: ☐ Steel ☐ Concrete

Thickness	Diameter	From	To
1/4 inches	12 inches	+ 1 feet	19 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 ____ inches by ____ inches

Number	From	To
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

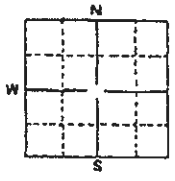
Well screen installed? ☐ Yes ☒ No
Manufacturer's name
Type Model No.
Diameter ___ Slot size ___ Set from ____ feet to ____ feet
Diameter ___ Slot size ___ Set from ____ feet to ____ feet

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

Surface seal? ☒ Yes ☐ No To what depth 18 feet
Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



6 3/4 1/4 3

County Ada

SE ¼ NE ¼ Sec. 34 T. 1 N/S R. 3 E/W

7. WATER LEVEL

Static water level 0 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

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped

108030

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
12	0	19	Surface		
10	19	70	Layers Clay & Cemented Sand		✓
10	70	105	BLACK BASALT Hard		
10	105	120	Red LAVA		✓
10	130	155	Gray Basalt		✓
10	155	175	Broken Gray Basalt		✓
10	175	185	Red LAVA Lost WATER Cemented		✓
10	185	220	Red Lava (Solid)		✓
	220	270	Black Basalt		✓
10	270	296	Red LAVA		✓
10	296	326	BLACK BASALT & Fine Clay THIN LAYER of Clay		✓
10	326	365	Clay & Sand Mixed		✓
	365	395	Sand & Clay		✓
	395	460	Clay & Layers Sand		✓
	460	490	Layers Sand & Clay		✓
	490	502	Sand		✓

10. Work started 7 Sept 1972 finished 31 Oct 1972

11. DRILLER'S CERTIFICATION

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

Eugene Walker 15
Driller's or Firm's Name Number

624 Pierce St Twin Falls
Address

Eugene Walker 14 Dec 73
Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

28

874817

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

Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO 874817 - 789255
Other IDWR No. D0025927 CPS# 1675

2. OWNER:
Name Williams Pipeline West
Address 5821 Industrial Way
City American Falls State ID Zip 83202

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

N

W [X] E

Twp. 1 North ☐ or South X
Rge. 4 East X or West ☐
Sec. 7 1/4 (10 acres) NW 1/4 (40 acres) NE 1/4 (160 acres)

S

Gov't lot ____ County Ada
Lat: : : Long: : :
Address of Well Site Exit 71. ¼ mile from Compressor Station City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name ____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection X Other Cathodic

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	18	1200 lbs	Overbore
Coke	300	500	206	Overbore

Was drive shoe used? ☐ Y X N Shoe Depth(s) ____
Was drive shoe seal tested? ☐ Y X N How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10.750	0	74	.365	Steel	X	☐	X	☐
8.625	125	500	.322	Steel	☐	X	X	☐
					☐	☐	☐	☐

Length of Headpipe N/A Length of Tailpipe N/A

9. PERFORATIONS/SCREENS
X Perforations Method Trochs
☐ Screens Screen Type ____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
300	100	.250	80	4	Steel	☐	☒
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
-0- ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ ft. Describe access port or control devices: ____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: ____
Depth first Water Encountered ____

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
14"	0	8	Top Soil		X
14"	8	18	Sand		X
10.75	18	74	Sand & Clay Seam		X
10.75	74	300	Gray Lava		X
10.75	300	500	Decomposed Granite		X

RECEIVED
FEB 07 2003
WATER RESOURCES
WESTERN REGION

Completed Depth: 500' (Measurable)
Date: Started 11-26-02 Completed 1-23-03

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 Hiddleston & Son, Inc. Firm No. 35
Firm Official [signature] Date 2-4-03
Supervisor or Operator John H Smith Date 2-4-03
(Sign once if Firm Official & Operator)

47

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Administration

WELL DRILLER'S REPORT

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

Received 6-27-73 D WD

1. WELL OWNER

Name JOHN WEIMER

Address

Owner's Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☒ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 8 inches Total depth 695 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
[redacted] inches	10" inches	[redacted] feet	290 feet
[redacted] inches	8" inches	0 feet	673 feet
[redacted] inches	6" inches	665 feet	695 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 inches by inches

Number		From	To
	perforations	673 feet	695 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 290 feet

Material used in seal ☒ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.

61

N / W / E / S

County Ada

NE ¼ SE ¼ Sec. 7 T. 1S N/S, R. 4E E/W

7. WATER LEVEL

Static water level 540 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

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
25	12'	15 BAILED

028862

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
10"	0	3	TOP SOIL		X
10"	3	51	SANDY CLAY		X
10"	51	80	COURSE SAND GRAVEL		X
10"	80	84	SOFT LAVA		X
10"	84	102	VERY HARD BLK. LAVA		X
10"	102	136	LAVA GRAY NOT SO HARD		X
10"	136	138	RED CLAY		X
10"	138	164	GRAY LAVA HARD		X
10"	164	173	RED AND BLK. CINDER		X
10"	173	180	HARD GRAY LAVA		X
10"	180	206	RED LAVA		X
10"	206	235	BLK LAVA HARD		X
10"	235	254	RED LAVA		X
10"	254	322	GRAVEL AND BRN CLAY		X
8"	202	345	SANDY GRAVEL		X
8"	345	400	SANDY CLAY		X
8"	400	502	DRY SAND		X
8"	502	570	SANDY CLAY GRAVEL		X
8"	570	640	SANDY CLAY	X	
8"	[redacted]	[redacted]			
8"	640	665	BLUE CLAY	X	
8"	665	673	FINE SAND	X	
6"	673	695	COURSE SAND GRAVEL	X	

10. Work started 27 APR. 1 finished JUNE 8th

11. DRILLER'S CERTIFICATION USGS

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

Russell Coure
Driller's or Firm's Name Number

Boise
Address

Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Administration

5L

WELL DRILLER'S REPORT 1150

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 El Paso Natural Gas

Address

Owner's Permit No.

2. NATURE OF WORK Anode Bed

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

Not a Water Well

3. PROPOSED USE

☐ Domestic ☐ Irrigation ☐ Test Not a Water Well

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotory ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 12 inches Total depth 570 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
1/4 inches	10¾ inches	+1 feet	508 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 ____ 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

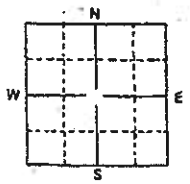
Placed from feet to feet

Surface seal? ☒ Yes ☐ No To what depth 18 feet

Material used in seal ☐ Cement grout ☒ Puddling clay

6. LOCATION OF WELL

Sketch map location must agree with written location.



County Ada

NE ¼ NE ¼ Sec. 17 T. 1 ☐ N ☒ S, R. 4 ☐ E ☒ W

7. WATER LEVEL

Static water level 450 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

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
None		
Was Not Tested		

9. LITHOLOGIC LOG 028863

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
12	0	8	Sy R Face		✓
12	8	114	Clay Fine gravel Red		✓
12	114	118	Gravel		✓
12	118	177	Blue Basalt		✓
12	177	187	Red Basalt		✓
12	187		Caving		✓
12	187	197	Red Basalt		✓
12	197	233	Blue Basalt		✓
12	233	237	Red BASALT		✓
12	237	277	Fine gravel Red Clay Shells & Sand		✓
12	277	284	Gravel & Sand Caving Run Casing		✓
10	284	288	gravel & Sand		✓
10	288	360	LOWER Tertiary Lithic Sand & Clay		✓
	360	450	Sand & Clay		
		450	Water Caving	✓	
	450	550	Clay with Layers Sand Could be Water at 350 ? Caving 550-558		
	550	571	Clay		
			Clay Was Sticky Sand with Water Quartz Blue Fine Formation		
			Water		
			& a		
			Not Well		
			Could Not Drive Pipe Further		

10. Work started 14 Feb 73 finished 30 April 1973

11. DRILLER'S CERTIFICATION

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

USGS

Fuge Lee Walker 15

Driller's or Firm's Name Number

624 Pierce St Twin Falls

Address

Eugene Walker 14 June 1973

Signed By Date

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

55-1
pg. 1 of 2

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Form 238-7
3/95-C96

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 66557

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

1. DRILLING PERMIT NO. 61 -97 -W -0029 -000
Other IDWR No.

2. OWNER:
Name Sherry Haug
Address 28901 HC 34
City Boise State ID Zip 83704

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

N / W / E / S

Twp. 1 North ☐ or South ☒
Rge. 4 East ☒ or West ☐
Sec. 18 1/4 (10 acres) SE 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot County Ada
Lat: : : Long: : :
Address of Well Site E. Orchard Access Rd.
City Mnt. Home/Bois
(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 Material	From	To	AMOUNT Sacks or Pounds	METHOD
bentonite	0	520	65	overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
6"	+1	702	.250	steel	☒	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe Length of Tailpipe

9. PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Screen Type

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
520 ft. below ground Artesian Pressure lb
Depth flow encountered ft. Describe access port or control devices:

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
15+		700'	5 hrs.

Water Temp. Bottom hole temp.
Water Quality test or comments:
Depth first Water Encountered 530

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
10"	0	3	brown top soil		☒
10"	3	5	brown clay		☒
10"	5	16	brown sand		☒
10"	16	73	brown clay w/strps course brn sand		☒
10"	73	116	course brown sand w/strips brn clay		☒
10"	116	121	black lava		☒
8"	121	125	black lava		☒
8"	125	127	brown clay		☒
8"	127	136	black lava		☒
8"	136	138	broken black lava		☒
8"	138	152	black lava		☒
8"	152	155	broken black lava		☒
8"	155	175	black lava		☒
8"	175	177	broken black lava		☒
8"	177	205	black lava		☒
8"	205	225	red/black lava		☒
8"	225	227	crack		☒
8"	227	245	lava		☒
8"	245	247	crack		☒
8"	247	280	broken lava		☒
8"	280	460	lava		☒
8"	460	475	solid lava		☒
8"	475	478	broken lava		☒
8"	478	512	solid lava		☒
8"	512	522	broken lava		☒
8"	522	525	white sand		☒
6"	525	546	white clay & sand		☒
6"	546	554	brown clay & sand		☒
6"	554	575	brown clay		☒
6"	575	609	med. white sand	☒	

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WATER RESOURCES
WESTERN REGION

CONTINUED

Completed Depth: 703 (Measurable)
Date: Started 06/12/97 Completed 07/09/97

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 SOS Welldrilling & Pump Co Firm No. 212
Firm Official SIGNED ON pg. 2 Date
Supervisor or Operator SIGNED ON pg. 2 Date
(Sign once if Firm Official & Operator)

Date: 07/28/97 Time: 12:45 PM

35-2

19-282

Form 238-7
3/95-C96
Page 2

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT 66558

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

1. DRILLING PERMIT NO. 61 -97 -W -0029 -000
Other IDWR No. _____

2. OWNER:
Name Sherry Haug
Address 28901 HC 34
City Boise State ID Zip 83704

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

N
W E
S

Twp. 1 North ☐ or South ☒
Rge. 4 East ☒ or West ☐
Sec. 18 1/4 (10 acres) SE 1/4 (40 acres) SE 1/4 (160 acres)
Gov't lot _____ County ADA
Lat: : : Long: : :
Address of Well Site _____
City _____
(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 Material	From	To	AMOUNT Sacks or Pounds	METHOD

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

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
_____ ft. below ground Artesian Pressure _____ lb
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time

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

12. LITHOLOGIC LOG: (Describe repair or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
6"	609	647	brown sandy clay		☒
6"	647	667	brown & white sand	☒	
6"	667	694	brown sandy clay		☒
6"	694	696	brown & white sand	☒	
6"	696	702	brown clay		☒
6"	702	704	white & brown sand	☒	

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AUG 15 1997
RECEIVED WATER RESOURCES WESTERN REGION
AUG 26 1997
Department of Water Resources
MODESTO

Completed Depth: 703 (Measurable)
Date: Started 06/12/97 Completed 07/09/97

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 SOS Welldrilling & Pump Co Firm No. 212
Firm Official Tony Hackett Date 7-31-97
Supervisor or Operator Tony Hackett Date 7-31-97
(Sign once if Firm Official & Operator)

Date: 07/28/97 Time: 12:45 PM

Form 238-7
3/95-C96

34

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Twp _____ Rge _____ Sec _____
_____ 1/4 _____ 1/4 _____ 1/4
Lat: : Long:

77187

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. DRILLING PERMIT NO. ___-___-___-____-____
Other IDWR No. D0018592

2. OWNER:
Name Linda McFain
Address 250 S. Bobwhite Ct., Ste #350
City Boise State ID Zip 83706

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

N
W X E
S

Twp. 1 North ☐ or South X
Rge. 4 East X or West ☐
Sec. 20 1/4 (10 acres) SW1/4 (40 acres) NW1/4 (160 acres)
Gov't lot _____ County Ada
Lat: : : Long: : :
Address of Well Site 30000 Orchard Access Rd
City Boise
(Give at least name of road + Distance to Road or Landmark)
Lt. _____ Blk. _____ Sub. Name _____

4. USE:
X Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

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

6. DRILL METHOD
X Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	120	40sacks	overbore

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

8. CASING/LINER:

Diameter	From	To	Gauge	Materia	Casing	Liner	Welded	Threaded
8.625	+1	120	332	Steel	X	☐		☐
6.625	+2	736	250	Steel	X	☐		☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
505ft. below ground Artesian Pressure ____ lb
Depth flow encountered ____ Describe access port or control devices: _____

11. WELL TESTS:
☐ Pump ☐ Bailer X Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
50+			1 hr

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encountered 610'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temp.	Water Y	Water N
10	0	2	Topsoil		X
10	2	60	Sand & gravel		X
10	60	65	Brown clay		X
10	65	89	Sand & gravel		X
10	89	93	Brown clay		X
10	93	120	Sand & gravel		X
10	120	300	Gray lava		X
8	300	320	Red sandstone		X
8	320	340	Coarse sand		X
8	340	400	Fine sand		X
8	400	580	Gray lava		X
6	580	610	Brown clay		X
6	610	680	Fine sand	X	
6	680	684	Brown clay		X
6	684	715	Coarse sand		X
6	715	718	Brown clay		X
6	718	730	Coarse sand		X
6	730	736	Brown clay		X
6	736	745	Sand, coarse	X	

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WATER RESOURCES
WESTERN REGION

Completed Depth: 736' (Measurable)
Date: Started 09/20/01 Completed 10/05/01

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 Hiddleston & Son, Inc --Boise Firm No. 35
Firm Official _____ Date 11/12/01
Supervisor or Operator _____ Date _____
(Sign once if Firm Official & Operator)

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Form 238-7
11/97 JGE

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 0012473
DRILLING PERMIT NO.
Other IDWR No.

2. OWNER:
Name Dan Holiday
Address 2215 Scyene Way
City Boise State ID Zip 83712

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

N / W / E / S

Twp. 1 North ☐ or South ☒
Rge. 4 East ☒ or West ☐
Sec. 28 ____ 1/4 (10 acres) SW 1/4 (40 acres) SW 1/4 (160 acres)
Gov't Lot ____ County Ada
Lat: Long:
Address of Well Site Exit I-84, 5 m. s on Orchard, 2.5 m. SE to 15222 Monroe (Give at least name of road + Distance to Road or Landmark) City Boise
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 Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	20	400 lbs	Pour

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 600
Was drive shoe seal tested? ☒ Y ☐ N How? Pressure

8. CASING/LINER:

Diameter	From	To	Guage	Material	Casing	Liner	Welded	Threaded
6	+2	600	250	Steel	☒	☐	☒	☐
4.5	580	662	250	PVC	☐	☒	☒	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

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Department of Wate

9. PERFORATIONS/SCREENS:
☒ Perforations Method
☐ Screens Screen Type

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
600	660	1/4	100	4.5	PVC	☐	☒
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
450 ft. below ground Artesian pressure ____ lb.
Depth flow encountered 600-660 ft. Describe access port or control devices: Cap

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50	600	600	4 hours

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: ____
Depth first Water Encounter 460

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	4	Top Soil		
10	4	165	Sand & clay strips		
8	165	335	Lava		
8	335	350	Cinders & gravel		
8	350	405	Lava		
8	405	410	Broken lava		
8	410	430	Lava		
8	430	440	Broken lava		
8	440	460	Lava		
8	460		Brown clay & sandstone		
		625	strips	X	
6	625	650	Lava	X	
6	650	656	Brown clay		
6	656	660	Sand & pea gravel	X	

Completed Date: Start (urable)

Kathy, I had the well location Completely wrong on this well - I was over the county line on the east instead of west - So this is the correct legal - thanks, Gina

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 Treasure Valley Drilling Firm No. 560
Firm Official [signature] Date 12/7/99
and
Driller or Operator [signature] Date 12/7/99
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

38-1

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774532

Form 238-7
11/97

OCT 17 2002

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Page 1 of 2 Pages

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

1. WELL TAG NO. D 0019724
DRILLING PERMIT NO. ____-____-____-____
Other IDWR No. _____

2. OWNER:
Name Kenneth W. Lange
Address 15888 E. Monroe Ave. —HC34
City Boise State ID Zip 83716

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

Twp. 1 S. North ☐ or South ☐
Rge. 4 E. East ☐ or West ☐
Sec. 29 SW 1/4 NW 1/4 SE 1/4
Gov't Lot ____ County Elmore
Lat: : : Long: : :

Address of Well Site 15888 E. Monroe Ave—Look SE of Orchard Town Site (NE Side of RR tracks)
City Orchard
(Give at least name of road - Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

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WESTERN REGION

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 Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite &	4	168.6	550 lb	Open hole maintained
Native clays	4	168.6	2700 lb	with slurry—overbore—
				Casing Run into full hole

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 168.6
Was drive shoe seal tested? ☒ Y ☐ N How? Slurry did not leak into well

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8 5/8	+ 1.4	168.6	0.250	Steel	X			
6 5/8	+ 1.75	563.0	0.250	Steel	X			
5 9/16	537.1	574.17	0.188	Steel Lap pipe			X	
5 9/16	574.17	608.28	0.258	Steel			X	

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OCT 18 2002
Department of Water Resources

Length of Headpipe 71.18 ft Length of Tailpipe 0.97

9. PERFORMATIONS/SCREENS
Perforations Method _____
Screens Screen Type Continuous Slot Wire Wound

From	To	Slot Size	Number	Diameter	Material	Casing	Liner	Assbly
608.28	618.53	0.025 inch		5 9/16	Stainless		X	

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
485.0 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: 6" I.D. of casing by removing well cap.

11. WELL TESTS:
☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
130	1.2 ft	486.2	4.5 hours

Water Temp. Excellent Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encounter 526

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	175 ft			N
8	175	426 ft			N
6	426	620 ft			
	0	78	Sandy Clays & Clayey Sands, Tan		N
	78	80	Sand, Caving, Tan		
	80	88	Silty Sand, Tan		
	88	118	Sand, Caving, Tan		N
	118	119	Boulder and Sand		
	119	171	Silty Sand & Sandy Silt Layers, Tan		
	171	173	Sand, Caving, Tan		
	173	175	Silty Sand, Tan		
	175	178	Basalt, Grey		N
	178	179	Boulder		
	179	196	Basalt, Hard, Grey		
	196	197	Basalt, Soft, Grey		
	197	206	Basalt, Medium Hard, Grey		N
	206	209	Basalt, Very Hard, Creviced, w/Cinders		
	209	227	Rubble w/ Cinders, Grey		
	227	252	Basalt, Very Hard, Grey		
	252	253	Basalt, Broken, Soft, Reddish-Brown		N
	253	262	Basalt, Medium Hard, Brown		
	262	266	Rubble, w/ Cinders, Medium Hard, Brown		
	266	267	Basalt, Fractured, Brown		
	267	282	Basalt, Medium Hard, Grey		N
	282	282.3	Basalt, Fractured, Grey		
	282.3	288	Basalt, Hard, Grey		
	288	292	Basalt Boulders, Grey		
	292	322	Basalt, Very Hard, Grey		N
	322	326	Rubble, w/ Cinders		
	326	331	Basalt, Medium Hard, Grey		
	331	334	Basalt, Creviced, w/Cinders, Grey		
	331	334	Basalt, Creviced, w/ Cinders		N
	334	336	Clay, Red Burnt		

Completed Depth 619.5 ft (Measurable)
Date: Started March 11, 2002 Completed Sept. 3, 2002

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 Artesian Co. Firm No. 318
Firm Official Hugh Harden Date 10/18/02
and
Driller or Operator Hugh Harden Date October 8, 2002

38-2

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT
Page 2 of 2 Pages

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

1. WELL TAG NO. D 0019724
DRILLING PERMIT NO. ____-____-__-_____-_____
Other IDWR No. _____

2. OWNER:
Name Kenneth W. Lange
Address 15888 E. Monroe Ave. —HC34
City Boise State ID Zip 83716

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

N / W / E / S

Twp 1 S. North or South
Rge. 4 E. East or West
Sec. 29 SW 1/4 NW 1/4 SE 1/4
Gov't Lot ____ County Elmore
Lat: : : Long: : :
Address of Well Site 15888 E. Monroe Ave—1 mile SE of Orchard
Orchard Town Site (NE Side of RR tracks) City Orchard
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name _____

4. USE:
X Domestic Municipal Monitor Irrigation
Thermal Injection Other _____

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

6. DRILL METHOD
Air Rotary X Cable Mud Rotary Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite &	4	168.6	550 lb	Open hole maintained
Native clays	4	168.6	2700 lb	with slurry—overbore—Casing Run into full hole

Was drive shoe used? X Y N Shoe Depth(s) 168.6
Was drive shoe seal tested? X Y N How? Slurry did not leak into well

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8 5/8	+ 1.4	168.6	0.250	Steel	X			
6 5/8	+ 1.75	563.0	0.250	Steel	X			
~~5 9/16~~	~~537.1~~	~~574.17~~	~~0.188~~	~~Steel Lap pipe~~		X		
5 9/16	574.17	608.28	0.258	Steel		X		

Length of Headpipe 71.18 ft Length of Tailpipe 0.97

9. PERFORATIONS/SCREENS
Perforations Method _____
Screens Screen Type Continuous Slot Wire Wound

From	To	Slot Size	Number	Diameter	Material	Casing	Liner-Assbly
608.28	618.53	0.025 inch		5 9/16	Stainless		X

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
485.0 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: 6" I.D. of casing by removing well cap.

11. WELL TESTS:
X Pump Bailer Air Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time
13.0	1.2 ft	486.2	4.5 hours

Water Temp. Excellent Bottom hole temp. ____
Water Quality test or comments: _____
Depth first Water Encounter 526

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	175 ft			N
8	175	426 ft			N
6	426	620 ft		Y	N
	336	357	Sands and Silts, Caving, Tan		N
	357	386	Basalt, Medium Hard, Grey		N
	386	401	Granitic Sand and Clay, Red Brown		N
	401	424	Basalt, Medium Hard, Grey		N
	424	523	Sandy Silts & Silty Sands, Brown-Tan		N
	523	526	Clay, Gravelly & Sandy, Brown		N
	526	532	Sand, Clayey, Brown	Y	
	532	534	Clay, Gravelly, Grey		N
	534	537	Clay, Gravelly, Brown		N
	537	547	Sand, Clayey, Brown	Y	
	547	562.5	Sandy Silts & Silty Sands, Brown	Y	N
	562.5	588	Basalt, Brown		N
	588	597	Cinders, Sand, then Clay, Brown	Y	
	597	609	Clay, Gravelly, Brown		N
	609	619	Sand, Coarse, Poorly Sorted	Y	
	619	619.5	Clay, Brown		N

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OCT 18 2002
Department of Water Resources

Completed Depth 619.5 ft (Measurable)
Date: Started March 11, 2002 Completed Sept. 3, 2002

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 Artesian Co. Firm No. 318
Firm Official Hugh Harden Date 10/8/02
and
Driller or Operator Hugh Harden Date October 8,2002

39

779607

Form 238-7
11/97 JGE

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 0025130
DRILLING PERMIT NO.
Other IDWR No.

2. OWNER:
Name Glora Gangler
Address 14600 E Monroe Dr.
City Boise State ID Zip 83716

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

N / W / E / S

Twp. 1 North ☐ or South ☒
Rge. 4 East ☒ or West ☐
Sec. 29 10 acres 1/4 NE 40 acres 1/4 SW 160 acres 1/4
Gov't Lot ____ County Ada
Lat: Long:
Address of Well Site 14600 E Monroe
(Give at least name of road + Distance to Road or Landmark) City Boise
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 Material	From	To	AMOUNT Sacks or Pounds	METHOD
Bentonite	0	38	1000	overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 572
Was drive shoe seal tested? ☒ Y ☐ N How? Air

8. CASING/LINER:

Diameter	From	To	Guage	Material	Casing	Liner	Welded	Threaded
6	+2	572	.250	steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS:
☐ Perforations Method ____
☐ Screens Screen Type ____

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

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
477 ft. below ground Artesian pressure ____ lb.
Depth flow encountered 600 ft. Describe access port or control devices: cap

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
35	580	580	1 hr

Water Temp. 56 Bottom hole temp. 56
Water Quality test or comments:
Depth first Water Encounter 560

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	0	4	Top Soil		
10	4	38	Brown Clay		
8	38	170	Brown Clay		
8	170	410	Lava		
8	410	490	Clay		
8	490	493	Lava		
6	493	560	Clay Brown		
6	560	561	Sand Stone	X	
6	561	570	Brown Clay		
6	570	600	Lava Broken	X	
6	600		Sand	X	

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WESTERN REGION

Completed Depth 600 (Measurable)
Date: Started 6/28/2002 Completed 7/2/2002

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 Treasure Valley Drilling Firm No. 560
Firm Official ____ Date 7/2/2002
and
Driller or Operator Monte Pool Date 7/2/2002
(Sign once if Firm Official & Operator)

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WATER RESOURCES
WESTERN REGION

Form 238-7
6/93

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IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

 95106

1. DRILLING PERMIT NO. 61-98-W-0075-000
Other IDWR No. D000 7483

2. OWNER:
Name FRANK [redacted] BONESSA
Address 1979 BORCHERS DRIVE
City SAN JOSE State CA Zip 95124

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

T. 1S North ☐ or South ☑
R. 3E East ☑ or West ☐
Sec. 13, SE 1/4 NE 1/4 NE 1/4 (10 acres, 40 acres, 160 acres)
Gov't Lot ____ County ADA

Address of Well Site 1 MILE WEST OF ORCHARD ACCESS RD ON ORCHARD RANCH LANE; THEN 1 MILE NORTH
(Give at least Direction + Distance to Road or Landmark)
Lot No. ____ Block No. ____ Subd. Name ____

4. PROPOSED USE:
☑ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☑ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☑ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	DISPLACED
NEAT CEMENT [redacted]	124.64	?	17 EA	THROUGH 8"
GROUT	To	115	94# BAGS	CASING
BENTONITE	115	4	16 BAGS	SLURRY PIT
NEAT CEMENT GROUT	0-4'		1 BAG	POURED

Was drive shoe seal tested? Y☐ N☑ How? ____

8. CASING/LINER:

Diameter	From	To	Guage	Casing	Liner	Steel	Plastic	Welded	Threaded
8 5/8	+1.83	124.64	1/4 wall	✓		☑	☐	☑	☐
6 5/8	1	551	0.28	✓		☐	☑	☑	☐
5 9/16	514	629.7	0.188		✓	☑	☐	☑	☐
4 1/2	560.2	581.4	0.237		✓	☑	☐	☑	☐

Final location of shoes 8" SHOE at [redacted] 124.64'
Top Packer or Headpipe 514 Bottom Tailpipe 629.7 F

9. PERFORATIONS/SCREENS
☑ Perforations Method SAWED IN PVC, TORCH
☑ Screens Type JOHNSON Material CONTINUOUS SLOT WIRE WOUND

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
410	550	3/32	1064	6 5/8	PIPE	☑	☐
560.2	570.45	.020	N.A	5 9/16	(6" TELESCOPING)		☑
560.2	581.0	3/32	78	4 1/2	PIPE	☐	☑

10. WELL TESTS:
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time
9.7	< 1 FT	500.8	12 HRS

Temperature of water 66°F Was a water analysis done? Yes ☐ No ☑
By whom? ____
Water Quality (odor, etc.) EXCELLENT
Bottom Hole Temperature 66°F

11. STATIC WATER LEVEL:
500 ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port 8" CASING
[redacted]: BY REMOVING WELL CAP

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Yes	Water No
8	0	551'			↓
6	557	634			
	0	2	SOIL		↑
	2	6	SOIL, SUBSOIL, CLAYEY HARDPAN		
	6	8	SANDY CLAY		
	8	16	CLAY		
	16	18	SAND		
	18	34.5	SANDY CLAY		
	34.5	35	ROCK		
	35	63	[redacted] CLAYEY SAND		
	63	64	GRAVEL		
	64	69	CLAYEY SAND		
	69	70	GRAVEL		
	70	96	CLAYEY SAND		
	96	107	GRAVEL		
	107	116	CLAY		
	116	122	GRAVEL		
	122	194	BASALT		
	194	197	RUBBLE & CINDERS		
	197	216	BASALT		
	216	217	BASALT, CREVICED, RED IN SEAMS		
	217	235	BASALT		
	235	257	BOULDERS, HARD, RED MATRIX		
	257	272	BASALT, RED IN SEAMS		
	272	273	RUBBLE & CINDERS		
	273	311	BASALT		
	311	312	RUBBLE & CINDERS		↓

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Date: Started NOV 30, 1998 Completed SEE PAGE 3

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 ARTESIAN CO Firm No. 318

Firm Official HUGH HARDEN Date 7 June 1999
and
Supervisor or Operator Hugh Harden Date 7 June 1999
(Sign once if Firm Official & Operator)

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IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

(PAGE 2 OF 3 PAGES)

61-98-W 0075-000

95107

1. DRILLING PERMIT
Other IDWR No. D 000 7483

2. OWNER:
Name FRANK [redacted] BONESSA

Address

City State Zip

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

OFFICE USE ONLY

T. North ☐ or South ☐

R. East ☐ or West ☐

Twp 01S Rge 03E Sec 13

1/4 1/4 1/4 1/4

Gov't Lot County

SE NE NE 1/4 NE 1/4

Address of Well Site

(Give at least Direction + Distance to Road or Landmark)

Lot No. Block No. Subd. Name

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

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	

Was drive shoe seal tested? YO NO How?

8. CASING/LINER:

Diameter	From	To	Guage	Casing	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Final location of shoes 6" PVC COUPLING @ 551FT

Top Packer or Headpipe Bottom Tailpipe

9. PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Type Material

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐

MICROFILMED AUG 25 1999

10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water Was a water analysis done? Yes ☐ No ☐

By whom?

Water Quality (odor, etc.)

Bottom Hole Temperature

11. STATIC WATER LEVEL:
ft. below surface Depth artesian flow found

Artesian pressure lb. Describe access port

Describe Controlling Devices:

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	WATER Sand	WATER Clay
	312	317	BASALT SOFTER, BROWN		✓
	317	320	BASALT HARD, GREY		✓
	320	327	BASALT SOFTER, BROWN		✓
	327	330.5	BASALT MED, HARD, GREY		✓
	330.5	334	RUBBLE & CINDERS, BROWN		✓
	334	336	CLAY, BROWN		✓
	336	342	BASALT, HARD, BROWN		✓
	342	379	SANDSTONE, TAN		✓
	379	383	CLAY, TAN		✓
	383	401	SAND, TAN		✓
	401	403	CLAY, TAN		✓
	403	434	CLAYEY SAND, TAN		✓
	434	435	CLAY, TAN		✓
	435	438	SANDY CLAY, TAN		✓
	438	459	CONGLOMERATE, TAN		✓
	459	471	CLAYEY SAND, TAN		✓
	471	472	CONGLOMERATE TAN		✓
	472	479	CLAYEY SAND, TAN		✓
	479	482	CLAY, TAN		✓
	482	484	SAND, TAN		✓
	484	487	CLAYEY SAND, TAN		✓
	487	487.2	SAND TAN		✓
	487.2	500	CLAYEY SAND TAN		✓
	500	500.2	SAND TAN		✓
	500.2	5M	CLAYEY SAND & CLAY		✓
	5M	5M.2	SAND TAN	✓	
	5M.2	517	CLAYEY SAND TAN	✓	

Date: Started PAGE 1 Completed PAGE 3

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 ARTESIAN CO Firm No. 318

Firm Official Hugh Harden Date 7 June 1999

and

Supervisor or Operator Date

(Sign once if Firm Official & Operator)

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WESTERN REGION

Form 238-7
6/93

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

PAGE 3 OF 3 PAGES 95108

1. DRILLING PERMIT NO. 61-98-W-0075-000
Other IDWR No. D 0000 7483

2. OWNER:
Name FRANK [redacted] BONESSA
Address 1979 BORCHERS DRIVE
City SAN JOSE State CA Zip 95124

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

OFFICE USE ONLY
Twp 01 S Rge 02E Sec 13
SE 1/4 NE 1/4 NE 1/4

Twp. ___ North ☐ or South ☐
Rge. ___ East ☐ or West ☐
Sec. ___ 1/4 ___ 1/4 ___ 1/4 (10 acres, 40 acres, 160 acres)
Gov't Lot ___ County ___

Address of Well Site ___
(Give at least Direction + Distance to Road or Landmark)

Lot No. ___ Block No. ___ Subd. Name ___

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ___

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other ___

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

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

8. [redacted]/LINER: 4 1/2 OD HANGER 5" OD COUPLING CUT OFF, BEVELED TO INSIDE HARDFACED, & GROUND SMOOTH

Diameter	From	To	Guage	Casting	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Final location of shoes — 4" LINER — NO SHOE
Top Packer or Headpipe ___ Bottom Tailpipe ___
BOTTOM END CUT ANGLE = 54.2° FROM PIPE AXIS, CHAMFERED INTERNALLY & GROUND

9. PERFORATIONS/SCREENS
☐ ~~Perforations~~ ~~Method~~
☐ ~~Screens~~ ~~Type~~ ~~Material~~

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Depth	Time

Temperature of water ___ Was a water analysis done? Yes ☐ No ☐
By whom? ___
Water Quality (odor, etc.) ___
Bottom Hole Temperature ___

11. STATIC WATER LEVEL:
___ ft. below surface Depth artesian flow found ___
Artesian pressure ___ lb. Describe access port ___
Describe Controlling Devices: ___

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	WATER Y	WATER N
	517	518	SAND TAN	✓	
	518	524	CLAYEY SAND, TAN		✓
	524	543.5	SAND, TAN	✓	
	543.5	544	CLAYEY SAND, TAN		✓
	544	546	SAND, TAN	✓	
	546	559	ROCK BASALT? BAILS DRY		✓
	559	562	SAND, TAN		✓
	562	567	SANDY CLAY, TAN		✓
	567	568	SAND, TAN	✓	
	568	572	ROCK CONGLOMERATE ? TAN		✓
	572	573	CLAY, TAN		✓
	573	575.5	CONGLOMERATE? TAN		✓
	575.5	578	CLAYEY GRAVEL	✓	✓
	578	581	CLAYEY SAND TAN	✓	✓
	581	601	ALTERNATING LAYERS SAND & CLAY	✓	✓
	601	602	CLAYEY GRAVEL, TAN		✓
	602	604	CLAY, TAN	[redacted]	✓
	604	605	SAND, TAN	✓	
	605	633	ALTERNATING LAYERS SAND & CLAY	✓	✓

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~~JUN 14 1999~~
Department of Water Resources

Date: Started SEE PAGE 1 Completed JUNE 1, 1999

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 ARTESIAN CO Firm No. 318

Firm Official Hugh Harden Date JUNE 7, 1999
and
Supervisor or Operator ___ Date ___
(Sign once if Firm Official & Operator)

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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.

USE TYPEWRITER OR BALLPOINT PEN

1. WELL OWNER

Name MATES / Idaho Nt'l. Gaurd

Address Gowen Field Boise, ID 83705

Drilling Permit No. 61-91-W-009-000

Water Right Permit No. _____

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness		Diameter		From		To	
.375	inches	16	inches +	0	feet	56	feet
.375	inches	12	inches	2	feet	680	feet
	inches		inches		feet		feet
	inches		inches		feet		feet

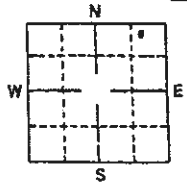
Was casing drive shoe used? ☐ Yes ☒ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation _____ inches by _____ inches

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

Well screen installed? ☒ Yes ☐ No
Manufacturer's name Johnson Filtration System
Type Stainless Steel Model No. 304
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 56 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 2" Pipe

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Ada
NW ¼ NE ¼ Sec. 35 , T. 1 N ☐ S ☒ R. 3 E ☐ W ☒

7. WATER LEVEL

Static water level 479' feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 71 °F. Quality _____
Describe artesian or temperature zones below.

8. WELL TEST DATA

☒ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
815	592	6HRS

9. LITHOLOGIC LOG 80194

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
20	0	23	Top soil and sand		
"	23	35	Broken rock		
20	35	60	Firm brown lava		
15	60	106	Gray lava		
"	106	108	Brown lava		
"	108	109	Gray lava		
"	109	115	Black cinder & broken lava		
"	115	166	Gray lava, w/gravel in broken zon		
"	166	192	Gray lava (firm)		
"	192	194	Broken brown lava		
"	194	195	Gray lava		
"	195	206	Brown & black cinders w/red clay		
"	206	222	Gray lava		
"	222	225	Broken lava		
"	225	230	Brown lava		
"	230	235	Brown & black cinders		
"	235	265	Gray lava		
"	265	268	Gray cinders		
"	268	275	Brown lava		
"	275	280	Gray lava		
"	280	289	Brown lava		
"	289	291	Gray cinders		
"	291	293	Gray lava		
"	293	296	Gray cinders		
"	296	300	Brown cinders		
"	300	305	Brown lava		
"	305	350	Gray lava		
"	350	358	Brown cinders		
"	358	360	Brown lava		
"	360	364	Red cinders		
"	364	375	Brown lava and cinders		
"	375	377	Brown cinders		
"	377	421	Gray lava w/cinders		
"	421	430	Brown lava		
"	430	462	Gray lava		
15	462	465	Brown lava and cinders		

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10.

Work started 1-29-92 finished 4-2-92

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11. DRILLERS CERTIFICATION

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

Firm Name Hiddleston & Son, Inc Firm No. 35
Address Rt. 3, Box 610-D Mtn Home, ID 83647 Date 4-28-92

Signed by (Firm Official) _____
and
(Operator) _____

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Department of Water Resources

7) - 2

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT 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 MATES / Idaho Ntl. Gaurd

Address Gowen Field Boise, ID 83705

Drilling Permit No. 61-91-W-009-000

Water Right Permit No. ______

2. NATURE OF WORK

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

3. PROPOSED USE

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

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

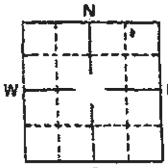
Was casing drive shoe used? ☐ Yes ☐ No
Was a packer or seal used? ☐ Yes ☐ No
Perforated? ☐ Yes ☐ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation ____ inches by ____ inches

Number	From	To
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet
____ perforations	____ feet	____ feet

Well screen installed? ☐ Yes ☐ No
Manufacturer'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 depth
Method 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 Name ______

Lot No. ____ Block No. ____

County Ada

NW ¼ NE ¼ Sec. 35, T. 1 N☐ S☒, R. 3 E☒ W☐

7. WATER LEVEL

Static water level 479' feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow ______
Artesian closed-in pressure ____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature 71 °F. Quality ______
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other ______

Discharge G.P.M.	Pumping Level	Hours Pumped

9. LITHOLOGIC LOG 89192

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
15	465	480	Gray lava and cinders		
"	480	503	Brown lava w/cinders		
"	503	507	Brown cinders		
"	507	514	Gray cinders		
"	514	530	Gray lava		
"	530	540	Olivine or green lava		
"	540	543	Broken green lava w/talc		
"	543	550	Olivine		
"	550	552	Broken olivine w/talc		
"	552	562	Gray lava		
"	562	566	Red and black cinders		
"	566	569	Black cinders		
"	569	607	Gray lava		
"	607	610	Brown & black cinders	X	
"	610	612	Brown lava		
"	612	615	Brown lava and cinders		
"	615	630	Gray lava		
"	630	647	Black cinders		
"	647	651	Brown lava and cinders		
"	651	663	Gray lava		
15	663	684	Olivine		
12	684	687	Courser sand (brown)	X	
"	687	699	Hard packed silty sand		
"	699	701	Course sand trace of clay	X	
"	701	708	Brown clay		
"	708	718	Course sand trace of clay	X	
"	718	724	Hard packed sand & clay		
"	724	732	Brown clay		
"	732	746	Brown course sand w/traces	X	
12	746	753	Hard packed silty sand		

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Department of Water Resources
Western Regional Office

Work started 1-29-92 finished 4-2-92

11. DRILLERS CERTIFICATION

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

Firm Name Hiddleston & Son, Inc Firm No. 35

Address Rt. 3, Box 610-D Mtn Home, ID 83647 Date 4-28-92

Signed by (Firm Official) ______

and

(Operator) [signature]

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

Form 238-7
8/80

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.

C (46) R-2

USE TYPEWRITER OR BALLPOINT PEN

1. WELL OWNER

Name Arthur Donald Watkins

Address 8828 Clovis Dr., Boise, ID 83709

Drilling Permit No. 61-91-Z-052

Water Right Permit No. _____

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	8 5/8 inches	+ 1 feet	80 feet
.250 inches	6 inches	1'8" feet	617 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'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 ~~80~~ feet to _____ feet
Surface seal depth 80 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 _____

6. LOCATION OF WELL

Sketch map location must agree with written location

N / W / E / S

Subdivision Name _____

Lot No. ____ Block No. ____

County Ada

NW ¼ SW ¼ Sec. 4, T. 2 S R. 4 E ☒ W ☐

7. WATER LEVEL

Static water level 445 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.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
50		2

9. LITHOLOGIC LOG 023286

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	78	Decomposed granite Brn Clay		
10	78	80	Gray lava		
8	80	119	Gray lava		
"	119	150	Decomposed granite Brn Clay		
"	150	220	Gray lava		
"	220	226	Red cinders		
"	226	260	Gray lava		
"	260	320	Hard broken up		
"	320	340	Medium		
"	340	410	Hard		
"	410	413	Soft		
"	413	436	Medium		
"	436	445	Soft		
"	445	460	Medium		
"	460	468	Medium broken up		
"	468	508	Hard		
"	508	510	Hard Broken up		
"	510	534	Hard		
"	534	536	Medium		
"	536	543	Medium broken up		
"	543	545	Hard		
"	545	553	Hard		
"	553	557	Medium		
"	557	565	Medium broken up		
"	565	579	Hard		
"	579	581	Soft		
"	581	584	Hard		
"	584	596	Medium		
"	596	618	Soft	X	
8	618	620	Soft caving sand coarse	X	

10.

Work started 1/13/92 finished 1/23/92

11. DRILLERS CERTIFICATION

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

Firm Name Hiddleston & Son, Inc Firm No. 35
Address Rt.3, Box 610-D Mtn Home, ID 83647 Date 1/24/92
Signed by (Firm Official) _____
and
(Operator) John K Smith

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Form 238-7
6/93

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

47

Use Typewriter or Ball Point Pen

091402

1. DRILLING PERMIT NO. 61 - 96 - W - 00040 - 100
Other IDWR No.

2. OWNER:
Name Arthur Donald Watkins
Address P.O. Box 32
City Kuna, ID State ID Zip 83634

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

N / W / E / S

T. 2 S. North ☐ or South ☒
R. 4 E. East ☒ or West ☐
Sec. 4 ____ 10 acres 1/4 NW 40 acres 1/4 SW 160 acres 1/4
Gov't Lot ____ County ~~Ada~~ Elmore

Starting @ R.R. Tracks & Simco Rd.—
Address of Well Site S.-1/2 mi,W-2mi,N-1mi,E-1/8 mi.
(Give at least Direction + Distance to Road or Landmark)

Lot No. ____ Block No. ____ Subd. Name ____

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

5. TYPE OF WORK Deepen
☐ New Well ☒ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☒ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

Was drive shoe seal tested? YES NO How? ____

8. CASING/LINER:

Diameter	From	To	Guage	Casing	Liner	Steel	Plastic	Welded	Threaded
5 9/16	[redacted]					☐	☐	☐	☐
	589.6					☐	☐	☐	☐
		610.7				☐	☐	☐	☐
		0.258			x	☐	☐	☒	☐

Final location of shoes No shoe--bare 1 1/2" long Weld ring
Top Packer or Headpipe 589.6 Bottom Tailpipe —none

9. PERFORATIONS/SCREENS
☐ Perforations Method ____
☒ Screens Type Wire Wound Material Stainless steel

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
610.8						☐	☑
	620.9					☐	☑
		0.020		5 9/16	6"	☐	☑
						☐	☐

10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water ____ Was a water analysis done? Yes ☐ No ☐
By whom? ____
Water Quality (odor, etc.) Excellent
Bottom Hole Temperature ____

11. STATIC WATER LEVEL:
456 ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port 6" well cap
Describe Controlling Devices: ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL
5.6	620				
THCH		621	Coarse yellow sand		
	621				
V		621+	Gravelly Clay	0	

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Department of Water Resources

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JUL 29 1996
WATER RESOURCES
WESTERN REGION

OCT 09 1996

Date: Started July 3, 1996 Completed July 15,1996

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 Artesian Co Firm No. 318
Firm Official Hugh Harden Date 7-23-96
and
Supervisor or Operator Hugh Harden Date ~~July 23,1996~~
(Sign once if Firm Official & Operator)

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Form 238-7
4/92

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

NOV 27 1992
Department of Water Resources
Southern Regional Office

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 M.A.T.E.S. / Ewing Co., Inc.
Address Mayfield Rd., Boise, ID 83704
Drilling Permit No. 61-92-C-0072-000
Water Right Permit No. _____

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.)

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
Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.375 inches	10 5/8 inches +	6"	34.5 feet
.250 inches	6 5/8 inches	16"	800 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? 1/8 inches by 3 inches

Number		From	To
240	perforations	760 feet	780 feet
240	perforations	660 feet	680 feet
_____	perforations	_____ feet	_____ feet

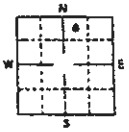
Well screen installed? ☐ Yes ☒ No
Manufacturer _____ Type _____
Top Packer or Headpipe _____
Bottom of Tailpipe _____

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 34. 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 _____

6. LOCATION OF WELL
Sketch map location must agree with written location.



Subdivision Name _____
Lot No. _____ Block No. _____
County Ada
Address of Well Site Mayfield Rd.
(give at least name of road)
NW ¼ NE ¼ Sec. 2, T. 2 N ☐ or S ☒, R. 3 E ☒ or W ☐

AMENDED
AUG 09 1993

7. WATER LEVEL
Static water level 521 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.

8. WELL TEST DATA
☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
30		1

9. LITHOLOGIC LOG 103663

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
12	0	25	Top Soil		
"	25	29.5	Gray Lava		
"	29.6	31	Void		
"	31	34.5	Gray Lava		
10	34.5	60	Gray Lava		
"	60	64	Brown Cinders		
"	64	158	Gray Lava		
"	158	164	Brown Lava		
"	164	168	Gray Lava		
"	168	180	Brown Lava & Cinders		
"	180	214	Gray Lava		
"	214	218	Brown Cinders		
"	218	249	Gray Lava		
"	249	254	Brown Lava		
"	254	398	Gray lava		
"	398	399	Void Lost REturn		
"	399	447	Med hard		
"	447	455	Soft		
"	455	538	Gray lava		
"	538	539	Brown Cinders	X	
"	539	549	Gray Lava		
"	549	553	Soft Lost Return		
"	553	624	Med Hard		
"	624	625	Soft		
"	625	627	Med Hard		
"	627	630	Soft		
"	630	697	Med Hard		
"	697	702	Brown Cinders	X	
"	702	717	Gray Lava		
"	717	720	Red Cinders	X	
10	720	800	Gray Lava with soft spots	X	

10.
Work started 10-6-92 finished 10-29-92

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 Middleston & Son, INC Firm No. 35
Address Rt 3, Box 610-D Mtn Home, ID 83647 Date 11-16-92
Signed by Drilling Supervisor _____
and
(Operator) _____
(If different than the Drilling Supervisor)

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Appendix C:
IDWR Water Quality Data

Station	Analyte	Units	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
02S 04E 02BBD1	Arsenic	ug/L					5										
	Nitrate	mg/L					1.3										
	Fluoride	mg/L					0.4										
	Alpha, Gross (as Americium)	pCi/l					0.3 ± 1.4										
	Alpha, Gross (as Thorium)	pCi/l															
	Beta, Gross	pCi/l					3.2 ± 1.3										
	Uranium	ug/L															
	Fecal Coliform	col/100 ml					<1										
	Iron	ug/L					<3										
	Manganese	ug/L					<1										
	Solids	mg/L					174							3.3			
01S 04E 34ADDA1	Arsenic	ug/L												0.722			
	Nitrate	mg/L												0.5			
	Fluoride	mg/L															
	Alpha, Gross (as Americium)	pCi/l															
	Alpha, Gross (as Thorium)	pCi/l												1.9 ± 1.7			
	Beta, Gross	pCi/l												4 ± 1			
	Uranium	ug/L															
	Fecal Coliform	col/100 ml												<1			
	Iron	ug/L												60			
	Manganese	ug/L												<3			
	Solids	mg/L												184			
01S 04E 30ADC1	Arsenic	ug/L	6		8				6				6.4				
	Nitrate	mg/L	0.6		0.67				0.72				0.586				
	Fluoride	mg/L	0.4		0.5				0.6				0.6				
	Alpha, Gross (as Americium)	pCi/l			0.3 ± 1.3				0.2 ± 1.6								
	Alpha, Gross (as Thorium)	pCi/l															
	Beta, Gross	pCi/l			4.2 ± 1.3				4.4 ± 1.3								
	Uranium	ug/L															
	Fecal Coliform	col/100 ml	<1		<1				1110				<1				
	Iron	ug/L	7		<3				67				<10				
	Manganese	ug/L	<1		<1				3				<3				
	Solids	mg/L			160				191				191				

Station	Analyte	Units	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
01S 04E 23BBB1	Arsenic	ug/L		3				3				2					2.7
	Nitrate	mg/L		0.79				0.79				0.765					0.79
	Fluoride	mg/L		0.4				0.4				0.44					0.5
	Alpha, Gross (as Americium)	pCi/l		0.4 ± 1				0.6 ± 1.3									
	Alpha, Gross (as Thorium)	pCi/l															
	Beta, Gross	pCi/l		3.7 ± 1.2				3.9 ± 1.2									
	Uranium	ug/L															
	Fecal Coliform	col/100 ml		<1				45				<1					<1
	Iron	ug/L		<3				<3				<10					<6
	Manganese	ug/L		<1				<1				<2.2					<0.8
	Solids	mg/L		134				163				161					147
01S 04E 17CCC2	Arsenic	ug/L		3				2				2					2
	Nitrate	mg/L		0.64				0.61				0.633					0.6
	Fluoride	mg/L		0.2				0.2				0.23					0.2
	Alpha, Gross (as Americium)	pCi/l		3 ± 2.1				0.7 ± 1.4									
	Alpha, Gross (as Thorium)	pCi/l															
	Beta, Gross	pCi/l		4.8 ± 1.8				4.4 ± 1.3									
	Uranium	ug/L															
	Fecal Coliform	col/100 ml		22				<1				<1					<1
	Iron	ug/L		16				7				E5.3					176
	Manganese	ug/L		2				<1				<3.0					9.8
	Solids	mg/L		182				178				181					176
01N 04E 32AAB1	Arsenic	ug/L		3				2				2					2.3
	Nitrate	mg/L		0.11				0.11				0.086					0.09
	Fluoride	mg/L		0.5				0.5				0.41					0.4
	Alpha, Gross (as Americium)	pCi/l		0.2 ± 1.1				2.6 ± 1.5									
	Alpha, Gross (as Thorium)	pCi/l															
	Beta, Gross	pCi/l		0.7 ± 1				2.1 ± 1									
	Uranium	ug/L															
	Fecal Coliform	col/100 ml		<1				<1				<1					<1
	Iron	ug/L		6				6				<10					E6
	Manganese	ug/L		<1				<1				<3.0					<0.8
	Solids	mg/L		150				153				151					147

Station	Analyte	Units	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
01N 04E 27CBD1	Arsenic	ug/L				2				3					3		
	Nitrate	mg/L				4.6				2.92					0.45		
	Fluoride	mg/L				0.3				0.3					0.3		
	Alpha, Gross (as Americium)	pCi/l				1.1 ± 1.3											
	Alpha, Gross (as Thorium)	pCi/l								0.5 ± 1.6							
	Beta, Gross	pCi/l				1.9 ± 1				2.6 ± 1.1							
	Uranium	ug/L															
	Fecal Coliform	col/100 ml				<1				<1					<1		
	Iron	ug/L				10				10					42		
	Manganese	ug/L				2				1.2					E1.2		
	Solids	mg/L				185				185					182		

Appendix D:
Drillers' Reports for IDWR Water Quality Monitoring Wells

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Reclamation

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 J. R. Simplot
Soilbuilder Division
Address Pocatello, Idaho

Owner's Permit No. _____

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test

☐ Municipal ☐ Industrial ☐ Stock

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 10 inches Total depth 535 feet
Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
3/16 inches	10 inches	0 feet	170 feet
1/4 inches	8 inches	0 feet	370 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 _____ inches by _____ inches

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

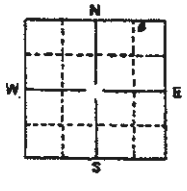
Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet

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

Surface seal? ☒ 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 Elmore

NE ¼ NE ¼ Sec. 2, T. 2 N/S, R. 1 E/W
Block H Sunnyside Townsite

7. WATER LEVEL

Static water level 195 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

8. WELL TEST DATA

☐ Pump ☒ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped

9. LITHOLOGIC LOG 104258

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	2	Soil		
	2	16	Sand and clay.		
	16	30	Sand, clay and gravel.		
	30	47	Clay and fine sand.		
	47	53	Sand and clay.		
	53	75	Clay and fine sand.		
	75	103	Sand and clay.		
	103	155	Clay and sand.		
	155	170	Clay, sand and pea gravel.		
	170	195	Black lava.		
	195	218	Black lava.		
	218	220	Black lava, red cinders.		
	220	236	Red cinders.		
	236	242	Black lava.		
	242	268	Black lava.		
	268	296	Black lava, pink and brown tint.		
	296	324	Gray lava.		
	324	335	Black muddy lava.		
	335	353	Brown lava.		
	353	363	Muddy black lava.		
	363	370	Clay, sand, pea gravel.		
	370	395	Black lava.		
	395	412	Black lava.		
	412	440	Brown lava.		
	440	455	Hardblack lava.		
	455	476	Grey lava.		
	476	485	Brown lava.		
	485	506	Red lava.		
	506	515	Brown lava.		
	515	528	Black lava.		
	528	535	Gray sand, some small rock.	yes	

0505

10.
Work started 1/29/70 finished 2/20/70

11. DRILLER'S CERTIFICATION

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

C. L. Middleston & Son 35
Driller's or Firm's Name Number
Dick Monnson --Driller
Address
Signed By C. L. Middleston Date 2/25/70

USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE, BLUE, AND PINK COPIES TO THE DEPARTMENT

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT 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 Carl Agenbroad
Hayfield Stage
Address Boise, Idaho 83706

Owner's Permit No. _____

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness		Diameter		From		To	
.250	inches	10	inches +	1	feet	19	feet
.250	inches	10	inches	48	feet	52	feet
	inches		inches		feet		feet
	inches		inches		feet		feet

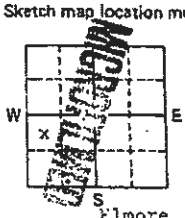
Was casing drive shoe used? ☐ Yes ☒ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

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 10" Slot size .80 Set from 19 feet to 48 feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☒ Yes ☐ No ☐ Size of gravel 3/8 Minus
Placed from 18 feet to 62 feet
Surface seal depth 18' Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings
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 2"

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____
Lot No ____ Block No. ____
County Elmore
NW ¼ SW ¼ Sec. 27, T. 1N N/S, R. 4E E/W.

7. WATER LEVEL

Static water level 72 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 _____

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped

9. LITHOLOGIC LOG 83355

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
24"	0	10	2' Topsoil-5' Sand Clay-3' Sand		
	10	15	Sharp Sand w/ Brn. Clay Streeks		
	15	25	Multi-Colored & Wht. Crse. Shrp. Sand		
	25	50	Crse. Sand w/ Clay Streaks		
	50	56	Brn. Clay		
	56	62	Cemented Form of Clay - Decomposed Granite & Traces of Lava Chip		

RECEIVED
JUL 1 1982
Department of Water Resources
Western Regional Office

RECEIVED
DEC 15 1982
Department of Water Resources

10.

Work started May 10,1982 finished May 12,1982

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. 213
6505 West Chinden Blvd.
Address Meridian, Idaho 82642 Date May 15, 1982

Signed by (Firm Official) _____
and
(Operator) _____

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

Form 238-7
8/90

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

RECEIVED OCT 29 1992 R-2

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 Mark Miller

Address PO Box 7275, Boise, ID 83707

Drilling Permit No. 61-91-E-053-MO

Water Right Permit No. _____

7. WATER LEVEL

Department of Water Resources
Western Regional Office

Static water level 500 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
☐ Well diameter increase
☐ 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
15		3

3. PROPOSED USE

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

9. LITHOLOGIC LOG 89193

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
10	0	2	Top soil		
"	2	110	Sand-clay		
10	110	136	Gray lava		
8	136	295	Gray lava		
"	295	308	Brown lava & water talc		
"	308	321	Gray lava		
"	321	333	Brown lava		
"	333	350	Gray lava		
"	350	354	Brown lava		
"	354	400	Gray lava		
"	400	410	Brown lava		
"	410	438	Gray lava		
8	438	440	Sand		
6	440	504	Brown sandy clay		
"	504	515	Sand and clay		
"	515	520	Brown clay		
"	520	535	Brown clay and sand		
"	535	536	Brown clay		
"	536	540	Brown clay and sand	X	
"	540	550	Brown sand	X	
"	550	555	Brown clay		
"	555	565	Brown sand	X	
6	565	570	White & brown sand & gravel	X	

RECEIVED NOV 2 1 1991 Department of Water Resources

RECEIVED OCT 26 1992 Department of Water Resources

RECEIVED DEC 04 1992 Department of Water Resources

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	8 5/8 inches	+ 1 feet	138 feet
.250 inches	6 1/4 inches	3 feet	566 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

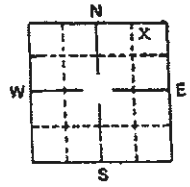
Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Diameter ___ Slot size ___ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 136 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 _____

10.

Work started 11/4/91 finished 11/14/91

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County Elmore

NE ¼ NE ¼ Sec. 34, T. 1 N ☐ S ☒ R. 4 E ☒ W ☐

11. DRILLERS CERTIFICATION

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

Firm Name Hiddleston & Son, Inc Firm No. 35
Address Rt. 3, Box 610-D Mtn Home, ID 83647 Date 11/15/91

Signed by (Firm Official) Paul S Hiddleston

and

(Operator) Gordon H. Smith

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

Form 238-7
1/78

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT 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 David Allen

Address Rte 4 Nampa

Owner's Permit No. _____

2. NATURE OF WORK

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

3. PROPOSED USE

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

4. METHOD DRILLED

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

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter		From	To
.250 inches	6 inches	+ 1/2 feet	764½ feet
_____ inches	_____ inches		_____ feet	_____ feet
_____ inches	_____ inches		_____ feet	_____ feet
_____ inches	_____ inches		_____ feet	_____ feet

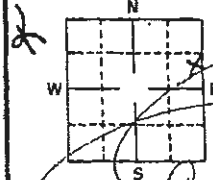
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

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

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
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 20 Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings
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 _____

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name None
Lot No. _____ Block No. _____
County Canyon
SE ¼ NE ¼ Sec. 36, T. 1 N/S, R. 3 E/W

7. WATER LEVEL

Static water level 342 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____°F. Quality _____

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
	0	3	Topsoil + driveway fill		X
	3	9	Sand + gravel		X
	9	18	Sandy clay		X
	18	135	Fine sand		X
	135	180	Sandy clay		X
	180	240	Yellow clay		X
	240	300	Yellow shale + sand		X
	300	360	Yellow clay		X
	360	400	Blue clay		X
	400	420	Blue shale	X	
	420	425	Blue sandy shale	X	
	425	516	Blue shale		X
	516	523	Blue sandy shale	X	

051875

RECEIVED
JUN 19 1979
Department of Water Resources
Western Regional Office

10.

Work started 12/15/78 finished 1/10/79

11. DRILLERS CERTIFICATION

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

Firm Name Davis Well Drilling Firm No. 101
Address 4150 Pratt Lane Date 3/15/79
Signed by (Firm Official) Charles Davis
and
(Operator) _____

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

42

USE TYPEWRITER OR BALL POINT PEN

State of Idaho
Department of Water Resources

WELL DRILLER'S REPORT

JUN 29 1978

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.

Eastern District Office

1. WELL OWNER

Name Watter Mines [illegible]

Address FIRTH IDAHO

Owner's Permit No. ______

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

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 6 inches Total depth 80 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	6 inches	+ 1 feet	80 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was casing drive shoe used? ☒ Yes ☐ No

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☐ Yes ☒ No

How perforated? ☐ Factory ☐ Knife ☐ Torch

Size of perforation ______ inches by ______ inches

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

Well screen installed? ☐ Yes ☒ No

Manufacturer's name ______

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 18 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. 35

N / W / E / S

Subdivision Name ______

Lot No. ______ Block No. ______

County BINGHAM

NW ¼ SE ¼ Sec. 13, T. 1 N/S, R. 36 E/W

7. WATER LEVEL

Static water level 19 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

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped

9. LITHOLOGIC LOG

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
6	0	10	CLAY		
	10	24	GRAY BASALT		
	24	31	CINDERS		
	31	62	SAND @ GRAVEL		
	62	68	SAND		
	68	70	SAND @ GRAVEL		
	70	73	SAND		
	73	80	SAND @ GRAVEL	X	

2f
W

10.

Work started 8-?-77 finished 8-19-77

11. DRILLERS CERTIFICATION

Firm Name BARRUS DRILLING & PUMP Firm No. 25

Address P.O. BOX 140 Basalt IDA Date ______

Signed by (Firm Official) LaMar N Barrus

and (Operator) Herb Butler

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

ATTACHMENT D. MONITORING PLAN

ATTACHMENT D. WATER-LEVEL MONITORING PROGRAM, ORCHARD RANCH PLANNED COMMUNITY

The purpose of the water-level monitoring program is to monitor water levels during development of groundwater for municipal use within the Orchard Ranch Planned Community. Data will be used to evaluate long-term sustainable diversion rates for the development. If data indicate that local groundwater resources and available recharge are not sufficient to sustain the annual water demand of the Planned Community, water from other sources (i.e. surface water from the Snake River and/or groundwater piped from other areas) will need to be delivered to the site from other areas to supplement the municipal water supply.

The water-level monitoring program will consist of periodic water-level measurements at Orchard Ranch municipal wells. Measurements during the first year of monitoring will occur on a bi-monthly basis to determine the magnitude of seasonal water-level fluctuations. After the first year of monitoring, water levels would be obtained in the spring (April) and fall (October) so that the annual high and low water levels can be documented. Water level monitoring would occur for a 10-year period. The water-level monitoring program would be terminated if the water right permit is denied or withdrawn by the applicant. The responsibility for the program shall be with the permit holder in the event that the permit is assigned to another entity.

Water levels would be measured with electric-line well probes or steel tapes. The tips of these instruments that would contact the well water will be sanitized before each measurement. Measurement tubes (1-inch diameter PVC pipes) will be installed in each municipal well to provide access for measuring equipment.

A summary of the monitoring data will be prepared annually by the permit holder. The costs of installing monitoring equipment, collecting, summarizing, and distributing the information collected by the monitoring program will be paid for by the permit holder. Monitoring data and annual reports will be submitted to IDWR if requested or required by permit approval conditions.

ATTACHMENT E. WARRANTY DEEDS

FA-15564

RECORDATION REQUESTED BY AND
WHEN RECORDED MAIL TO:

Orchard Ranch, LLC
Attn: Robert Knorr, Manager
P.O. Box 1260
Maricopa, AZ 85329

Instrument # 391344
Elmore County, Idaho
12:01pm Sep.21,2007
For: FIRST AMERICAN TITLE COMPAN
No. of Pages: 4 Fee: $12.00
MARSA GRIMMETT, Recorder
Deputy: DLE

SPACE ABOVE THIS LINE IS FOR RECORDER'S USE ONLY

SPECIAL WARRANTY DEED

FOR VALUE RECEIVED, Lone Pine Farms, LLC, an Idaho limited liability company (the "Grantor") hereby GRANTS, BARGAINS, SELLS AND CONVEYS the real property situated in the County of Elmore, State of Idaho, legally described on Exhibit A attached hereto and made a part hereof ("Premises") to Orchard Ranch, LLC, an Arizona limited liability company and Kristi Corbett, a single woman (the "Grantees"), with the Grantees taking ownership of the Premises as tenants-in-common owning undivided interests in the Premises as follows: Orchard Ranch, LLC, an Arizona limited liability company: 82.75% and Kristi Corbett, a single woman: 17.25%.

To have and to hold the said Premises together with their appurtenances (inclusive of all water and ditch rights, including without limitation, water right nos. 61-7263, 61-7264A, and 61-7264B) and all rents, remainders and reversions, hereditaments, issues and profits, improvements and fixtures, easements, all other permits, licenses, mineral rights to the extent owned by Grantor and appurtenant to the Premises and rights in any way appertaining to the Premises unto the said Grantees, its successors and assigns forever. The said Grantor does hereby covenant to and with the said Grantees, their successors and assigns, that it is the owner in fee simple of said Premises; that said Premises are free from all encumbrances, except for tax assessments for the year 2007 and all subsequent years, rights, easements, covenants, reservations, restrictions, and encumbrances of record (excluding liens) and that it will warrant and defend the same from all lawful claims done, made, suffered or arising by or through Grantor forever.

The Grantees' current address is P.O. Box 1260, Maricopa, Arizona 85329.

DATED this 20th day of September, 2007.

GRANTOR: LONE PINE FARMS, LLC

By: Stephen T. Boschma
Its: Manager

STATE OF IDAHO)
) ss.
County of Ada)

On this 20th day of September, in the year 2007, before me, a Notary Public, personally appeared Stephen T. Boschma, known or identified to me (or proved to me on oath of _____) to be the manager of the limited liability company that executed the instrument or the person who executed the instrument on behalf of said limited liability company, and acknowledged to me that such company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

NOTARY PUBLIC FOR IDAHO
My Commission Expires: 3-3-2012

SHANNON M. CRAWFORD NOTARY PUBLIC STATE OF IDAHO

EXHIBIT A
Legal Description

Parcel ONE:

A parcel of land being portions of the NE¼, SE¼ and SW¼ of Section 31 and the West Half of the NW¼ of Section 32, Township 2 South, Range 5 East, Boise Meridian, Elmore County, Idaho, being more particularly described as follows.

Commencing at the Southwest corner of the SW¼ of Section 31, T.2S., R.5E., B.M.; thence N. 00°18'16" E. 30.00 feet along the West line of the SW¼ of said Section 31 to the Real Point of Beginning of this Description:

Thence N. 00°18'16" E. 2613.70 feet to the Northwest corner of the SW¼ (West ¼ corner) of said Section 31;

Thence N. 89°59'30" E. 2642.38 feet to the Northeast corner of the SW¼ (Center ¼ corner) of said Section 31;

Thence N. 00°18'02" E. 2642.48 feet to the Northwest corner of the NE¼ (North ¼ corner) of said Section 31;

Thence N. 89°59'21" E. 2642.79 feet to the Northeast corner of said Section 31;

Thence S. 89°59'26" E. 1290.70 feet along the North line of the West Half of the Northwest ¼ of Section 32, T.2S., R.5E., B.M. to a point on a line 30.00 feet West of and parallel to the East line of said West ½;

Thence S. 00°17'56" W. 2641.61 feet along said line to a point on the South line of the West Half of the NW¼ of said Section 32;

Thence S. 89°59'38" W. 1290.70 feet to the Southwest corner of said West ½ (The West ¼ corner) of said Section 32;

Thence S. 00°18'49" W. 2740.23 feet to a point on a line 30.00 feet North of and parallel to the South line of the SE¼ of Section 31, T.2S., R.5E., B.M.;

Thence N. 88°38'39" W. 2642.96 feet along said line to a point on the West line of the SE¼ of said Section 31;

Thence N. 88°38'35" W. 2642.66 feet to the Real Point of Beginning.

Parcel TWO:

A parcel of land being a portion of the NW¼ of Section 6; Township 3 South, Range 5 East, Boise Meridian, Elmore County, Idaho, being more particularly described as follows:

Commencing at the Northwest corner of Section 6, T.3S., R.5E., B.M., Thence S. 00°00'59" W. 30.00 feet along the west line of the NW¼ of said Section 6 to a point on a line 30.00 feet South of and Parallel to the North line of said Section 6, the Real Point of Beginning of this description;

Thence S. 88°38'35" E. 2641.96 feet along said line to a point;

Thence S. 88°38'39" E. 224.71 feet to a point on the East line of the NW¼ of said Section 6;

Thence S. 00°15'08" W. 2558.69 feet to the Southeast corner of the NW¼ of said Section 6;

Thence N. 89°34'08" W. 2655.42 feet to the Southwest corner of the NW¼ of said Section 6;

Thence N. 00°00'59" E. 2605.06 feet to the Real Point of Beginning.

FA-16996

RECORDATION REQUESTED BY .
AND WHEN RECORDED MAIL TO:

Wayne A. Smith
Jennings, Strouss & Salmon, P.L.C.
201 E. Washington St., 11th Floor
Phoenix, AZ 85004-2385

Instrument # 394014
Elmore County, Idaho
03:42pm Dec.14,2007
For: FIRST AMERICAN TITLE COMPAI
No. of Pages: 3 Fee: $9.00
MARSA GRIMMETT, Recorder
Deputy: DLE

SPECIAL WARRANTY DEED

FOR VALUE RECEIVED, Kristi Corbett, a single woman (the "Grantor") hereby GRANTS, BARGAINS, SELLS AND CONVEYS to RODGER JOHNSON, a single man (the "Grantee"), whose current address is P.O. Box 114, Walhalla, North Dakota 58282, the following-described real property situated in the County of Elmore, State of Idaho, legally described as:

An undivided 17.25% interest in the real property described on Exhibit A attached hereto and made a part hereof ("Premises");

To have and to hold the said Premises together with their appurtenances (inclusive of all water and ditch rights, including without limitation water right nos. 61-7263, 61-7264A, and 61-7264B) and all rents, remainders and reversions, hereditaments, issues and profits, improvements and fixtures, easements, all other permits, licenses, mineral rights to the extent owned by Grantor and appurtenant to the Premises and rights in any way appertaining to the Premises unto the said Grantee, his successors and assigns forever. The said Grantor does hereby covenant to and with the said Grantee, his successors and assigns, that she is the owner in fee simple of said Premises; that said Premises are free from all encumbrances, except for tax assessments for the year 2007 and all subsequent years, rights, easements, covenants, reservations, restrictions, and encumbrances of record (excluding liens), and that she will warrant and defend the same from all lawful claims done, made, suffered or arising by or through Grantor forever.

DATED this 8th day of October, 2007.

GRANTOR:

Kristi Corbett

STATE OF North Dakota)
) ss.
County of Pembina)

On this 8th day of October, in the year 2007, before me, a Notary Public, personally appeared Kristi Corbett, known or identified to me (or proved to me on the oath of _____) to be the person who executed the foregoing instrument, and acknowledged to me that she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificated first above written.

COLLEEN K. GRATTON
Notary Public
State of North Dakota
My Commission Expires Feb. 16, 2012

Colleen K. Gratton
NOTARY PUBLIC for Pembina Co, ND

My Commission Expires: Feb 16, 2012

Parcel ONE:

A parcel of land being portions of the NE¼, SE¼ and SW¼ of Section 31 and the West Half of the NW¼ of Section 32, Township 2 South, Range 5 East, Boise Meridian, Elmore County, Idaho, being more particularly described as follows:

Commencing at the Southwest corner of the SW¼ of Section 31, T.2S., R.5E., B.M.; thence N. 00°18'16" E. 30.00 feet along the West line of the SW¼ of said Section 31 to the Real Point of Beginning of this Description:

Thence N. 00°18'16" E. 2613.70 feet to the Northwest corner of the SW¼ (West ¼ corner) of said Section 31;

Thence N. 89°59'30" E. 2642.38 feet to the Northeast corner of the SW¼ (Center ¼ corner) of said Section 31;

Thence N. 00°18'02" E. 2642.48 feet to the Northwest corner of the NE¼ (North ¼ corner) of said Section 31;

Thence N. 89°59'21" E. 2642.79 feet to the Northeast corner of said Section 31;

Thence S. 89°59'26" E. 1290.70 feet along the North line of the West Half of the Northwest ¼ of Section 32, T.2S., R.5E., B.M. to a point on a line 30.00 feet West of and parallel to the East line of said West ½;

Thence S. 00°17'56" W. 2641.61 feet along said line to a point on the South line of the West Half of the NW¼ of said Section 32;

Thence S. 89°59'38" W. 1290.70 feet to the Southwest corner of said West ½ (The West ¼ corner) of said Section 32;

Thence S. 00°18'49" W. 2740.23 feet to a point on a line 30.00 feet North of and parallel to the South line of the SE¼ of Section 31, T.2S., R.5E., B.M.;

Thence N. 88°38'39" W. 2642.96 feet along said line to a point on the West line of the SE¼ of said Section 31;

Thence N. 88°38'35" W. 2642.66 feet to the Real Point of Beginning.

Parcel TWO:

A parcel of land being a portion of the NW¼ of Section 6; Township 3 South, Range 5 East, Boise Meridian, Elmore County, Idaho, being more particularly described as follows:

Commencing at the Northwest corner of Section 6, T.3S., R.5E., B.M., Thence S. 00°00'59" W. 30.00 feet along the west line of the NW¼ of said Section 6 to a point on a line 30.00 feet South of and Parallel to the North line of said Section 6, the Real Point of Beginning of this description;

Thence S. 88°38'35" E. 2641.96 feet along said line to a point;

Thence S. 88°38'39" E. 224.71 feet to a point on the East line of the NW¼ of said Section 6;

Thence S. 00°15'08" W. 2558.69 feet to the Southeast corner of the NW¼ of said Section 6;

Thence N. 89°34'08" W. 2855.42 feet to the Southwest corner of the NW¼ of said Section 6;

Thence N. 00°00'59" E. 2605.06 feet to the Real Point of Beginning.

25E

14

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:

Orchard Ranch, LLC
P.O. Box 1260
Maricopa, AZ 85239

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 42.00 14
BOISE IDAHO 05/30/07 04:33 PM
DEPUTY Bonnie Oberbillig
RECORDED-REQUEST OF
Title One
107077007

(Space Above For Recorder's Use)

Order No. A0659073 ST1650
Parcels 1-13

WARRANTY DEED

For good and valuable consideration, the receipt of which is hereby acknowledged, Halliday Limited, an Idaho limited partnership, as to an undivided 62.5% interest, Geo. A. Weitz, Inc., an Idaho corporation, as to an undivided 12.5% interest, and Ballantyne Family Trust C, Mary Ballantyne and U.S. Bank, N.A., Co-Trustees, as to an undivided 25% interest, as tenants in common (collectively "Grantors"), convey, grant and warrant to Orchard Ranch, LLC, an Arizona limited liability company ("Grantee"), whose address is P.O. Box 1260, Maricopa, Arizona 85239, and its successors and assigns forever, all of Grantor's right, title and interest in and to that certain real property located in Ada County, Idaho, which is described on Exhibit A attached hereto (the "Property"),

> SUBJECT TO (i) taxes and assessments for the year 2007 and all subsequent years, (ii) all easements, restrictions, and encumbrances of public record, excluding liens, and (iii) the exceptions set forth on Exhibit B attached hereto.

This conveyance shall include any and all estate, right, title, interest, appurtenances, tenements, hereditaments, reversions, remainders, easements, rents, issues, profits, rights-of-way and water rights in anywise appertaining to the Property herein described as well in law as in equity.

The Grantors covenant to the Grantee that Grantors are the owners in fee simple of the Property, that the Property is free from all encumbrances, excepting those as described herein above, and that Grantors will warrant and defend the same from all lawful claims.

IN WITNESS WHEREOF, the Grantors have executed this instrument on this 30th day of May, 2007.

Ballantyne Family Trust C

BY: Mary Ballantyne
Mary Ballantyne,
Co-Trustee

State of Idaho)
) ss:
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Mary Ballantyne, known or identified to me to be the person whose name is subscribed to the within instrument, as Co-Trustee of Ballantyne Family Trust C and acknowledged to me that she executed the same as Co-Trustee and that such Trust executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public
Commission Expires

SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Ballantyne Family Trust C

By: US Bank, N.A., Co-Trustee

By: Shelley Ross
Its: Assistant Vice President

STATE OF Idaho)
) ss.
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Shelley Ross, known or identified to me to be the Assistant V.P. of US Bank, N.A., said corporation known to me to be the Co-Trustee of the Trust that executed the instrument and acknowledged to me that She executed the same for and on behalf of said corporation and that said corporation executed on behalf of said Trust and that said Trust executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

NOTARY PUBLIC
My Commission Expires: SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Geo. A. Weitz, Inc., an Idaho corporation

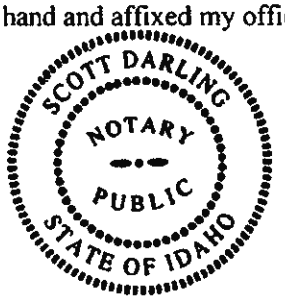
BY: _____
George W. Weitz
President

State of Idaho)
) ss.
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared George W. Weitz, known or identified to me to be the President, of the corporation that executed the within instrument and acknowledged to me that he executed the same for and on behalf of said corporation and that such corporation executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
NOTARY PUBLIC
My Commission Expires: SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07



Halliday Limited, an Idaho limited partnership

BY _____
Robert W. Halliday
General Partner

State of Idaho)
) ss.
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Robert W. Halliday, known or identified to me to be the General Partner of the partnership that executed the instrument and acknowledged to me that he executed the same for and on behalf of said partnership and that said partnership executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public
Commission Expires: _____

SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

EXHIBIT "A"

PARCEL 1:

THAT PORTION OF EAST HALF OF THE SOUTHWEST QUARTER AND SOUTHEAST QUARTER LYING NORTHEASTERLY OF THE RAILROAD RIGHT OF WAY DESCRIBED IN WARRANTY DEED RECORDED MAY 16, 1978 AS INSTRUMENT NO. 7826004 OF SECTION 9 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO. S2609417800

PARCEL 2:

WEST HALF OF THE SOUTHEAST QUARTER; SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER; SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; AND THE SOUTHWEST QUARTER, EXCEPTING THE RAILROAD RIGHT OF WAY, OF SECTION 10 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO. S2610131000

PARCEL 3:

SOUTH HALF OF THE SOUTHWEST QUARTER; SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 11 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO. S2611331000

PARCEL 4:

THAT PORTION OF THE NORTHEAST QUARTER, EAST HALF OF THE NORTHWEST QUARTER, AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER LYING NORTHEASTERLY OF THE RAILROAD RIGHT OF WAY OF SECTION 15 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2615110000

PARCEL 5:

ALL THAT PORTION LYING NORTHEASTERLY OF THE RAILROAD RIGHT OF WAY, EXCEPT THE EAST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 14 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2614110000

PARCEL 6:

THAT PORTION OF THE NORTH HALF OF THE NORTHEAST QUARTER LYING NORTHEASTERLY OF THE RAILROAD RIGHT OF WAY, EXCEPT THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2623112000

PARCEL 7:

THAT PORTION OF THE NORTH HALF OF THE SOUTHEAST QUARTER LYING NORTHEASTERLY OF THE RIGHT OF WAY OF THE ORCHARD-KUNA BRANCH OF THE UNION PACIFIC RAILROAD OF SECTION 24 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY BARGAIN AND SALE DEED RECORDED OCTOBER 22, 1923 AS INSTRUMENT NO. 107962, BOOK 165 OF DEEDS AT PAGE 401, RECORDS OF ADA COUNTY, IDAHO.

FURTHER EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY WARRANTY DEED RECORDED APRIL 7, 1924 AS INSTRUMENT NO. 110453, BOOK 167 OF DEEDS AT PAGE 304, RECORDS OF ADA COUNTY, IDAHO.

PARCEL NO.: S2624411000

PARCEL 8:

THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER, EXCEPT THE RIGHT OF WAY DEEDED TO OREGON SHORT LINE RAILROAD CO, OF SECTION 24 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY BARGAIN AND SALE DEED RECORDED OCTOBER 22, 1923 AS INSTRUMENT NO. 107963, BOOK 165 OF DEEDS AT PAGE 403, RECORDS OF ADA COUNTY, IDAHO.

FURTHER EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY WARRANTY DEED RECORDED APRIL 7, 1924 AS INSTRUMENT NO. 110452, BOOK 166 OF DEEDS AT PAGE 112, RECORDS OF ADA COUNTY, IDAHO.

PARCEL NO.: S2624140000

PARCEL 9:

THE SOUTHEAST QUARTER AND THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 12 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2612310000

PARCEL 10:

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER, EXCEPTING RAILROAD RIGHT OF WAY, OF SECTION 13 IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY BARGAIN AND SALE DEED RECORDED OCTOBER 22, 1923 AS INSTRUMENT NO. 107966, BOOK 165 OF DEEDS AT PAGE 409, RECORDS OF ADA COUNTY, IDAHO.

PARCEL NO.: S2613121000

PARCEL 11:

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 20 IN TOWNSHIP 1 SOUTH, RANGE 4 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2720330000

PARCEL 12:

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER AND THAT PORTION OF THE NORTHWEST QUARTER LYING NORTHEASTERLY OF THE RAILROAD RIGHT OF WAY OF SECTION 29 IN TOWNSHIP 1 SOUTH, RANGE 4 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2729130000

PARCEL 13:

THE NORTH ONE-HALF OF SECTION 19 IN TOWNSHIP 1 SOUTH, RANGE 4 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2719110000

EXHIBIT "B"

EXCEPTIONS

(THE FOLLOWING AFFECTS PARCEL 1)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 135

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 2)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 134

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 135

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: April 22, 1896
Book 3 of Patents at Page 147

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 3)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: April 22, 1896
Book 3 of Patents at Page 147

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 4)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 134

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 136

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 5)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 16, 1895
Book 3 of Patents at Page 125

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 136

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: August 24, 1896
Book 3 of Patents at Page 153

An easement for the purpose shown below and rights incidental thereto as set forth in a document.
Granted to: Idaho Power Company
Purpose: Public Utilities
Recorded: April 14, 1953
Instrument No.: 344569
Book 25 of Miscellaneous Records at Page 611

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 6)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 16, 1895
Book 3 of Patents at Page 125

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 7)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 23, 1895
Book 3 of Patents at Page 137

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

(THE FOLLOWING AFFECTS PARCEL 8)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: August 24, 2006
Instrument No.: 106137010

(THE FOLLOWING AFFECTS PARCEL 9)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: June 7, 1913
Book 5 of Patents at Page 45

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: July 27, 1921
Book 6 of Patents at Page 114

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: August 24, 2006
Instrument No.: 106137011

(THE FOLLOWING AFFECTS PARCEL 10)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: July 27, 1921
Book 6 of Patents at Page 114

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: August 24, 2006
Instrument No.: 106137011

(THE FOLLOWING AFFECTS PARCEL 11)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: June 7, 1898
Book 3 of Patents at Page 183

(THE FOLLOWING AFFECTS PARCEL 12)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 11, 1895
Book 3 of Patents at Page 121

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 11, 1895
Book 3 of Patents at Page 123

(THE FOLLOWING AFFECTS PARCEL 13)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 16, 1895
Book 3 of Patents at Page 126

An easement for the purpose shown below and rights incidental thereto as set forth in a document.
Granted to: Idaho Power Company
Purpose: Public Utilities
Recorded: June 2, 1925
Instrument No.: 116163
Book 173 of Deeds at Page 9

An easement for the purpose shown below and rights incidental thereto as set forth in a document.
Granted to: Idaho Power Company
Purpose: Public Utilities
Recorded: April 14, 1953
Instrument No.: 344569
Book 25 of Miscellaneous Records at Page 611

Exceptions and reservations contained in a Deed from the State of Idaho to T.H. Eberle and Dale O. Morgan.
Recorded: May 15, 1967
Instrument No.: 664143
Wherein mineral rights are reserved to the state (47-701 Idaho Code).

25F

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:

Orchard Ranch, LLC
P.O. Box 1260
Maricopa, AZ 85239

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 42.00 14
BOISE IDAHO 05/30/07 04:33 PM
DEPUTY Bonnie Oberbillig
RECORDED-REQUEST OF
Title One
107077008

(Space Above For Recorder's Use)

Order No. A0659073 ST/CSO
Parcels 14-16

WARRANTY DEED

For good and valuable consideration, the receipt of which is hereby acknowledged, Ballantyne Family Trust C, Mary Ballantyne and U.S. Bank, N.A., Co-Trustees, Paul B. Larsen and Iretta N. Larsen, husband and wife, G. Taft Benson, IV, Mardi Benson Hill, Brian Harris Benson, and Maureen Benson Clayton, as tenants in common (collectively "Grantors"), convey, grant and warrant to Orchard Ranch, LLC, an Arizona limited liability company ("Grantee"), whose address is P.O. Box 1260, Maricopa, Arizona 85239, and its successors and assigns forever, that certain real property located in Ada County, Idaho, which is described on Exhibit A attached hereto (the "Property"),

> SUBJECT TO (i) taxes and assessments for the year 2007 and all subsequent years, (ii) all easements, restrictions, and encumbrances of public record, excluding liens, and (iii) the exceptions set forth on Exhibit B attached hereto.

This conveyance shall include any and all estate, right, title, interest, appurtenances, tenements, hereditaments, reversions, remainders, easements, rents, issues, profits, rights-of-way and water rights in anywise appertaining to the Property herein described as well in law as in equity.

The Grantors covenant to the Grantee that Grantors are the owners in fee simple of the Property; that the Property is free from all encumbrances, excepting those as described herein above, and that Grantors will warrant and defend the same from all lawful claims.

IN WITNESS WHEREOF, the Grantors have executed this instrument on this 30th day of May, 2007.

Ballantyne Family Trust C

BY: Mary Ballantyne
Mary Ballantyne,
Co-Trustee

State of Idaho)
) ss:
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Mary Ballantyne, known or identified to me to be the person whose name is subscribed to the within instrument, as Co-Trustee of Ballantyne Family Trust C and acknowledged to me that she executed the same as Co-Trustee and that such Trust executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public
Commission Expires SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Ballantyne Family Trust C

By: US Bank, N.A., Co-Trustee

By: Shelley Ross
Its: Assistant Vice President

STATE OF Idaho)
) ss.
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Shelley Ross, known or identified to me to be the Assistant V. P. of US Bank, N.A., said corporation known to me to be the Co-Trustee of the Trust that executed the instrument and acknowledged to me that SU executed the same for and on behalf of said corporation and that said Corporation executed on behalf of said Trust and that said Trust executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

NOTARY PUBLIC
My Commission Expires: ~~SCOTT DARLING~~
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

G. Taft Benson, IV

State of Idaho)
) ss:
County of Ada)

On this 24th day of May, 2007, before me, the undersigned a Notary Public in and for said state personally appeared G. Taft Benson, IV, known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF I have set my hand and official seal on the date shown above.

Notary Public
Commission Expires: _____

SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Mardi Benson Hill

Mardi Benson Hill

State of Idaho)
) ss:
County of Ada)

On this 24 day of May, 2007, before me, the undersigned a Notary Public in and for said state personally appeared Mardi Benson Hill, known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same.

IN WITNESS WHEREOF I have set my hand and official seal on the date shown above.

Notary Public
Commission Expires: ~~SCOTT DARLING~~
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING
NOTARY
PUBLIC
STATE OF IDAHO

Brian Harris Benson by Mardi B. Hill-his Atty in fact
Brian Harris Benson

State of Idaho)
County of Ada)

On this 24th day of May, in the year of 2007, before me, the undersigned notary public, who being by me duly sworn (affirmed), did say that he/she is the attorney-in-fact of Brian Harris Benson, and that said instrument was signed on behalf of said Brian Harris Benson, by authority, and said Mardi B. Hill acknowledged to me that he/she as such attorney-in-fact, executed the same.

Resided at:
Expires: SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Maureen Benson Clayton by Mardi B. Hill her Atty, in fact
Maureen Benson Clayton

State of Idaho)
County of Ada)

On this 30th day of May, in the year of 2007, before me, the undersigned notary public, who being by me duly sworn (affirmed), did say that he/she is the attorney-in-fact of Maureen Benson Clayton, and that said instrument was signed on behalf of said Maureen Benson Clayton, by authority, and said Mardi B. Hill acknowledged to me that he/she as such attorney-in-fact, executed the same.

Resided at: SCOTT DARLING ESCROW OFFICER
Expires: RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Iretta N. Larsen, By [signature], her atty in fact
Iretta N. Larsen

State of Idaho)
County of Ada)

On this 29th day of May, in the year of 2007, before me, the undersigned notary public, who being by me duly sworn (affirmed), did say that he is the attorney-in-fact of Iretta N. Larsen, and that said instrument was signed on behalf of said Iretta N. Larsen, by authority, and said Per B. Larsen acknowledged to me that he as such attorney-in-fact, executed the same.

[signature]
Resided at:
Expires: SCOTT DARLING
~~ESCROW OFFICER~~
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Paul B. Larsen, By Rex R. Larsen, His Atty in Fact
Paul B. Larsen

State of Idaho)
County of Ada)

On this 24th day of May, in the year of 2007, before me, the undersigned notary public, who being by me duly sworn (affirmed), did say that he is the attorney-in-fact of Paul B. Larsen, and that said instrument was signed on behalf of said Paul B. Larsen, by authority, and said Rex R Larsen acknowledged to me that he as such attorney-in-fact, executed the same.

Resided at:
Expires: SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

EXHIBIT "A"

PARCEL 14:

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE SOUTHWEST QUARTER OF SECTION 13; THE EAST HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 14 OF TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, STATE OF IDAHO.

EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY BARGAIN AND SALE DEED RECORDED OCTOBER 22, 1923 AS INSTRUMENT NO. 107964, BOOK 165 OF DEEDS AT PAGE 405, RECORDS OF ADA COUNTY, IDAHO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A STRIP OF LAND 100 FEET WIDE, BEING 50 FEET ON EACH SIDE OF THE CENTER LINE OF THE MAIN TRACK OF THE ORCHARD-BOISE LINE ON THE OREGON SHORT LINE RAILROAD COMPANY, AS THE SAME IS NOW LOCATED OVER AND ACROSS THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 13, AND THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, ALL IN TOWNSHIP 1 SOUTH, RANGE 3 EAST OF THE BOISE MERIDIAN, THE LOCATION OF SAID CENTER LINE OF MAIN TRACK BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTH AND SOUTH CENTERLINE OF SAID SECTION 13, A DISTANCE OF 1360 FEET, MORE OR LESS, NORTH OF THE SOUTH QUARTER SECTION CORNER THEREOF; THENCE NORTH 23°14' WEST, 1412 FEET, MORE OR LESS, TO A POINT IN THE EAST AND WEST CENTER LINE OF SAID SECTION 13, 552 FEET, MORE OR LESS, WEST OF THE CENTER OF SAID SECTION 13,

ALSO EXCEPT BEGINNING AT A POINT IN THE SOUTH LINE OF THE SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, A DISTANCE OF 172 FEET, MORE OR LESS, WEST OF THE SOUTHEAST CORNER THEREOF:
THENCE NORTH 23°14' WEST, A DISTANCE OF 1443 FEET, MORE OR LESS, TO A POINT IN THE NORTH LINE OF SAID SECTION 24, A DISTANCE OF 2065 FEET, WEST OF THE NORTHEAST CORNER THEREOF.

PARCEL NO.: S2613300000

PARCEL 15:

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, STATE OF IDAHO.

EXCEPTING THEREFROM RAILROAD RIGHT OF WAY

PARCEL NO.: S2623111000

PARCEL 16:

THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER, THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER, SECTION 24; ALL IN TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, STATE OF IDAHO.

EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY BARGAIN AND SALE DEED RECORDED OCTOBER 22, 1923 AS INSTRUMENT NO. 107964, BOOK 165 OF DEEDS AT PAGE 405, RECORDS OF ADA COUNTY, IDAHO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A STRIP OF LAND 100 FEET WIDE, BEING 50 FEET ON EACH SIDE OF THE CENTER LINE OF THE MAIN TRACK OF THE ORCHARD-BOISE LINE ON THE OREGON SHORT LINE RAILROAD COMPANY, AS THE SAME IS NOW LOCATED OVER AND ACROSS THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 13, AND THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, ALL IN TOWNSHIP 1 SOUTH, RANGE 3 EAST OF THE BOISE MERIDIAN, THE LOCATION OF SAID CENTER LINE OF MAIN TRACK BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTH AND SOUTH CENTERLINE OF SAID SECTION 13, A DISTANCE OF 1360 FEET, MORE OR LESS, NORTH OF THE SOUTH QUARTER SECTION CORNER THEREOF; THENCE NORTH 23°14' WEST, 1412 FEET, MORE OR LESS, TO A POINT IN THE EAST AND WEST CENTER LINE OF SAID SECTION 13, 552 FEET, MORE OR LESS, WEST OF THE CENTER OF SAID SECTION 13,

ALSO EXCEPT BEGINNING AT A POINT IN THE SOUTH LINE OF THE SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, A DISTANCE OF 172 FEET, MORE OR LESS, WEST OF THE SOUTHEAST CORNER THEREOF:

THENCE NORTH 23°14' WEST, A DISTANCE OF 1443 FEET, MORE OR LESS, TO A POINT IN THE NORTH LINE OF SAID SECTION 24, A DISTANCE OF 2065 FEET, WEST OF THE NORTHEAST CORNER THEREOF.

PARCEL NO.: S2624120000

EXHIBIT "B"

EXCEPTIONS

(THE FOLLOWING AFFECTS PARCEL 14)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 16, 1895
Book 3 of Patents at Page 125

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 12, 1895
Book 3 of Patents at Page 133

An easement for the purpose shown below and rights incidental thereto as set forth in a document.
Granted to: Idaho Power Company
Purpose: Public Utilities
Recorded: April 14, 1953
Instrument No.: 344568
Book 25 of Miscellaneous Records at Page 610

An easement for the purpose shown below and rights incidental thereto as set forth in a Grant of Communications Sytem Easement/Release.
Granted to: AT&T Corp., a New York corporation
Purpose: operate, maintain, reconstruct, replace, and remove its present telecommunication cable system, which system includes without limitation underground and/or surface cables, conduits, wires, pipes, ducts, waveguides, surface testing terminals, manholes, markers, regeneration huts
Recorded: April 30, 2007
Instrument No. 107061303

(THE FOLLOWING AFFECTS PARCEL 15)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: September 16, 1895
Book 3 of Patents at Page 125

An easement for the purpose shown below and rights incidental thereto as set forth in a Grant of Communications Sytem Easement/Release.
Granted to: AT&T Corp., a New York corporation
Purpose: operate, maintain, reconstruct, replace, and remove its present telecommunication cable system, which system includes without limitation underground and/or surface cables, conduits, wires, pipes, ducts, waveguides, surface testing terminals, manholes, markers, regeneration huts
Recorded: April 30, 2007
Instrument No. 107061303

(THE FOLLOWING AFFECTS PARCEL 16)

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: November 12, 1895
Book 3 of Patents at Page 133

An easement for the purpose shown below and rights incidental thereto as set forth in a Grant of Communications Sytem Easement/Release.
Granted to: AT&T Corp., a New York corporation
Purpose: operate, maintain, reconstruct, replace, and remove its present telecommunication cable system, which system includes without limitation underground and/or surface cables, conduits, wires, pipes, ducts, waveguides, surface testing terminals, manholes, markers, regeneration huts
Recorded: April 30, 2007
Instrument No. 107061303

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8

RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:

Orchard Ranch, LLC
P.O. Box 1260
Maricopa, AZ 85239

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 24.00 8
BOISE IDAHO 05/30/07 04:33 PM
DEPUTY Bonnie Oberbillig
RECORDED - REQUEST OF
Title One
107077009

(Space Above For Recorder's Use)

Order No. A0659073 SF/LSD
Parcels 17-18

WARRANTY DEED

For good and valuable consideration, the receipt of which is hereby acknowledged, Halliday Limited, an Idaho limited partnership, Ballantyne Family Trust C, Mary Ballantyne and U.S. Bank, N.A., Co-Trustees, and Paul B. Larsen and Iretta N. Larsen, husband and wife, as tenants in common (collectively "Grantors"), convey, grant and warrant to Orchard Ranch, LLC, an Arizona limited liability company ("Grantee"), whose address is P.O. Box 1260, Maricopa, Arizona 85239, and its successors and assigns forever, that certain real property located in Ada County, Idaho, which is described on Exhibit A attached hereto (the "Property"),

> SUBJECT TO (i) taxes and assessments for the year 2007 and all subsequent years, (ii) all easements, restrictions, and encumbrances of public record, excluding liens, and (iii) the exceptions set forth on Exhibit B attached hereto.

This conveyance shall include any and all estate, right, title, interest, appurtenances, tenements, hereditaments, reversions, remainders, easements, rents, issues, profits, rights-of-way and water rights in anywise appertaining to the Property herein described as well in law as in equity.

The Grantors covenant to the Grantee that Grantors are the owners in fee simple of the Property; that the Property is free from all encumbrances, excepting those as described herein above, and that Grantors will warrant and defend the same from all lawful claims.

IN WITNESS WHEREOF, the Grantors have executed this instrument on this 30th day of May, 2007.

Halliday Limited, an Idaho limited partnership

BY: Robert W Halliday
Robert W. Halliday
General Partner

State of Idaho)
) ss.
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Robert W. Halliday, known or identified to me to be the General Partner of the partnership that executed the instrument and acknowledged to me that he executed the same for and on behalf of said partnership and that said partnership executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public
Commission Expires: ~~SCOTT DARLING~~
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

Ballantyne Family Trust C

By: US Bank, N.A., Co-Trustee

By: Shelley Ross
Its: Assistant Vice President

STATE OF Idaho)
) ss.
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Shelley Ross, known or identified to me to be the Assistant V.P. of US Bank, N.A., said corporation known to me to be the Co-Trustee of the Trust that executed the instrument and acknowledged to me that She executed the same for and on behalf of said corporation and that said corporation executed on behalf of said Trust and that said Trust executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

NOTARY PUBLIC
My Commission Expires: SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Ballantyne Family Trust C

BY: Mary Ballantyne
Mary Ballantyne,
Co-Trustee

State of Idaho)
) ss:
County of Ada)

On this 30th day of May, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Mary Ballantyne, known or identified to me to be the person whose name is subscribed to the within instrument, as Co-Trustee of Ballantyne Family Trust C and acknowledged to me that she executed the same as Co-Trustee and that such Trust executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Notary Public
Commission Expires SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Paul B. Larsen, by Rex B. Larsen, his Atty in Fact
Paul B. Larsen

State of Idaho)
County of Ada)

On this 29th day of May, in the year of 2007, before me, the undersigned notary public, who being by me duly sworn (affirmed), did say that he is the attorney-in-fact of Paul B. Larsen, and that said instrument was signed on behalf of said Paul B. Larsen, by authority, and said Rex B. Larsen acknowledged to me that he as such attorney-in-fact, executed the same.

Resided at:
Expires:
SCOTT DARLING
ESCROW OFFICER -
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

SCOTT DARLING NOTARY PUBLIC STATE OF IDAHO

Iretta N. Larsen, By Rex B. Larsen Its Atty in Fact
Iretta N. Larsen

State of Idaho)
County of Ada)

On this 24th day of May, in the year of 2007, before me, the undersigned notary public, who being by me duly sworn (affirmed), did say that he is the attorney-in-fact of Iretta N. Larsen, and that said instrument was signed on behalf of said Iretta N. Larsen, by authority, and said Rex B. Larsen acknowledged to me that he as such attorney-in-fact, executed the same.

Resided at:
Expires: SCOTT DARLING
ESCROW OFFICER
RESIDING: EAGLE, ID
COMMISSION EXPIRES: 11-28-07

EXHIBIT "A"

PARCEL 17:

THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER AND ALL OF THE SOUTHEAST QUARTER OF SECTION 13, TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, STATE OF IDAHO.

EXCEPTING THEREFROM:

THAT PORTION CONVEYED TO THE OREGON SHORT LINE RAILROAD COMPANY BY BARGAIN AND SALE DEED RECORDED OCTOBER 22, 1923 AS INSTRUMENT NO. 107965, BOOK 165 OF DEEDS AT PAGE 407, RECORDS OF ADA COUNTY, IDAHO.

PARCEL NO.: S2613130000

PARCEL 18:

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, TOWNSHIP 1 SOUTH, RANGE 3 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO.

PARCEL NO.: S2624110000

EXHIBIT "B"

EXCEPTIONS

(THE FOLLOWING AFFECTS PARCEL 17)

An easement for the purpose shown below and rights incidental thereto as set forth in a document.
Granted to: Idaho Power Company
Purpose: Public Utilities
Recorded: April 14, 1953
Instrument No.: 344567
Book 25 of Miscellaneous Records at Page 609

Terms, provisions, covenants, conditions, and, restrictions, contained in a Easement Agreement with Covenants.
Grantor: James H. Ballantyne and Mary Ballantyne, husband and wife; Halliday Limited, an Idaho Limited Partnership
Grantee: Frank A. Bonessa, Jr
Recorded: August 2, 2005
Instrument No.: 105106585

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: August 24, 2006
Instrument No.: 106137009

(THE FOLLOWING AFFECTS PARCEL 18)

An easement for the purpose shown below and rights incidental thereto as set forth in a document.
Granted to: Idaho Power Company
Purpose: Public Utilities
Recorded: April 14, 1953
Instrument No.: 344567
Book 25 of Miscellaneous Records at Page 609

Reservations and exceptions in a United States Patent, and in the act authorizing the issuance thereof.
Recorded: August 24, 2006
Instrument No.: 106137009

ATTACHMENT F. PLANNED COMMUNITY APPLICATION

PLANNED COMMUNITY APPLICATION

ADA COUNTY DEVELOPMENT SERVICES
200 W. Front Street, Boise, Idaho 83702
www.adaweb.net phone: (208) 287-7900 fax: (208) 287-7909

SITE INFORMATION:

Location:	Quarter(s):	Section(s): Portions of Sections 9, 10, 11, 12, 13, 14, 15, 19, 20, 23, 24, & 29	Township(s): Portions of 1 South	Range(s): Portions of 3 & 4 East	Total Acres: approximately 2,554

Site Address: S. Orchard Road, Ada County, Idaho (Approx. address grid: 13600 East, 31800 South) City: Orchard

Tax Parcel Number(s): S2609417800; S2610131000; S2611331000; S2612310000; S2613121000; S2613130000; S2613300000; S2614110000; S2615110000; S2623111000; S2623112000; S2624411000; S2624110000; S2624140000; S2624120000; S2719110000

Current Zoning: RP-Rural Preservation

PRINCIPAL CONTACT:

Name: Bruce Tully

Address: 14505 N. Hayden Road, Suite 340

City: Scottsdale State: AZ Zip: 85260

Telephone: 480-946-5550 Fax: 480-946-5599

Email: btully@manhard-bellatrix.com

SECONDARY CONTACT:

Name: Mike Hoffacker

Address: 14505 N. Hayden Road, Suite 340

City: Scottsdale State: AZ Zip: 85260

Telephone: 408-946-5550 Fax: 480-946-5599

Email: Mhoffacker@manhard.com

SUMMARY OF PURPOSED PLANNED COMMUNITY DEVELOPMENT

Orchard Ranch, a proposed 2,554-acre Planned Community Development, is poised to set the new gold standard for development in Ada County. The property owners have gone through a very intensive process to create an interconnected, pedestrian-friendly community where residents can balance living, working and playing. The design team, working extensively with Ada County Development Services Staff, has succeeded in creating a visionary plan for a successful, mixed-use community that also thoughtfully considers future transit options and future neighboring development. Orchard Ranch will be a community with an overall quality of life and harmony with its surroundings as yet unseen in Ada County.

One of the most unique features of the Orchard Ranch design is that it is planned with mass-transit in mind. In fact, in working with the Development Services Staff, the owners have designed a unique and completely integrated transit-oriented development. The property is bisected by the railroad spur line that goes directly into the heart of Boise and has preliminarily been planned for light rail. As traveling exclusively by car becomes less feasible in the future, this rail line could easily serve as a light rail commuter line, bringing Orchard Ranch residents into Boise, and helping to make Orchard Ranch a destination development for the region. It is this kind of foresight that differentiates Orchard Ranch from other developments and Planned Communities. Many communities, especially in the west, have experienced explosive growth that has completely outpaced infrastructure planning and development. However, Ada County has a unique opportunity to stay ahead of growth by implementing forward thinking mixed-use, transit-oriented developments such as Orchard Ranch.

The center of Orchard Ranch is designed around a future mass transit stop. Surrounding the train station will be mixed-use, office, and high density residential. This plan places the residents most likely to use transit (high density, urban) near the train station, and it also creates a unique mixed-use district that will be a destination for other residents of the region. This core district will contain a beautifully landscaped commons that will be home to community-wide social activities, convenience shops and entertainment, as well as serving as a parkway connector to the community trail system. While Orchard Ranch is planned around the future rail station, even if it never comes to fruition the core area will still serve as an effective center for the community and will be the heart and soul of Orchard Ranch.

Radiating out from this mixed-use core will be increasingly lower-density residential "boroughs", which will each have a unique theme and sense of place. In order to make the community more pedestrian friendly, each borough will have a mixed-use node at the center, which will include small commercial shops, such as convenience stores, coffee shops, etc., as well as a landscape garden, pocket park, or parkway connector to the community trail system. The following borough names and themes will be used: Winston Borough, patterned after the western farmstead ranches of the late 1890's; Baldwin Borough, themed around the western railroad town; Melrose Borough, designed around a neo-traditional block pattern; and Parkland Borough, themed as single-family Estate lots. These boroughs will be interconnected via arterial and collector streets and community trail corridors, both of which are designed for connections with future development on adjacent properties.

The entire community will also feature parks and open space ranging from small neighborhood pocket parks and natural trail corridors up to large developed athletic fields and community parks. The community trail system will provide a perimeter trail of several miles as well as a network of interconnected trails connecting neighborhood hubs and parks distributed throughout each of the borough neighborhoods. Furthermore, a significant portion of open space has been reserved adjacent to the main Union Pacific rail line to serve as a buffer for the residential and mixed-use areas.

Orchard Ranch will not just be a bedroom community. It will also contain regional commercial districts. The regional commercial area is logically planned southeast of the residential districts along the main access road from interstate 84.

The owners are pleased to present this innovatively designed Planned Community development to Ada County. It presents the region with a unique opportunity for residents to live, work and play in the same community. Orchard Ranch will create truly interconnected, pedestrian friendly neighborhoods with the perfect balance of uses that will serve the residents of Ada County and make the region a better place to live now and in the future.

SUMMARY OF IDENTIFIED OPPORTUNITIES AND CONSTRAINTS

Orchard Ranch offers Ada County an important opportunity to develop and grow responsibly. The proposed 2,554-acre planned community is designed with present constraints and the future of the region in mind.

Working with the Ada County Development Services staff, the owners have created a plan that builds off the future plans for light rail along the unused rail line running through the property to create an opportunity for transit-oriented development that has thus far been unseen in Ada County. This will not only create a unique, mixed-use, walkable development, but it also considers the future of transportation in Ada County. While Orchard Ranch has been developed with this opportunity in mind, the design is such that it is functional with or without a future light-rail station.

Orchard Ranch is located in the ideal area for future development in Ada County. Developing in this area is the perfect solution to traffic problems permeating the northwestern portion of the County and this development will act to take the pressure off the more environmentally sensitive areas to the north.

By creating a transit-oriented, pedestrian friendly community, Orchard Ranch will also be in harmony with its environment. This will be further aided by the unique variety of parks and open space within the development.

Additionally, Orchard Ranch will provide its own water and wastewater solutions on site, avoiding the undesired environmental consequences of septic sites.

Overall, Orchard Ranch has relatively few constraints on development. The land is flat and vacant, and surrounded by vast expanses of vacant property. This planned community will provide Ada County with a unique example of how to grow for the future while providing its residents with an incredible new place to live work and play.

APPLICANT:
Name: Bruce Tully Address: 14505 N. Hayden Road, Suite 340 City: Scottsdale State: AZ Zip: 85260 Telephone: 480-946-5550 Fax: 480-946-5599 Email: btully@manhard-bellatrix.com
I certify this information is correct to the best of my knowledge. Signature: (Applicant) Date 12/16/06

OWNER(s):

Name: Halliday Limited, an Idaho Limited Partnership

Address: 4604 Hillcrest View Dr.

City: Boise State: ID Zip: 83705

Telephone: 208-344-2595 Fax: 208-344-2599

Email: Bobhalli@AOL.com

I consent to this application and allow Development Services staff to enter the property for site inspectio related to this application

Robert C. Halliday - General Partner - Halliday Limited

Signature: (Applicant) Date 11/24

OWNER(s):

Name: GEO. A. Weitz, Inc, an Idaho Corporation

Address: 1006 WEST EASY ST.

City: CALDWELL State: IDA Zip: 83605

Telephone: 208-459-8361 Fax: JWEITZ 1006 @AOL.COM

Email:

I consent to this application and allow Development Services staff to enter the property for site inspections related to this application

[signature] 11-22-06

Signature: (Applicant) Date

OWNER(s):

Name: Ballantyne Family Trust C, Mary Ballantyne & US Bank, N.A. Co-Trustees

Address: 950 S. Fifth St.

City: Boise State: ID Zip: 83702

Telephone: 208-947-0831 Fax: 208-947-0866

Email:

I consent to this application and allow Development Services staff to enter the property for site inspections related to this application

Mary Ballantyne
Signature (Applicant)

11/23/06
Date

OWNER(s):

Name: Ballantyne Family Trust C, Mary Ballantyne & US Bank, N.A. Co-Trustees

Address: 101 S. Capitol Blvd. Ste 905

City: Boise State: ID Zip: 83712

Telephone: 383-7184 Fax: 383-7171

Email: Shelley.ross@usbank.com

I consent to this application and allow Development Services staff to enter the property f
related to this application

U.S. Bank N.A., Trustee of the Ballantyne

By: Shelley Ross

Signature: (Applicant) D

OWNER(s):

Name: G. Taft Benson, IV 573-6078

Address: 512 Bayhill DR.

City: Nampa State: ID Zip: 83686

Telephone: 466-6405 Fax:

Email: tbenson2@msn.com

I consent to this application and allow Development Services staff to enter the property for site related to this application

G. Taft Benson IV 12.

Signature: (Applicant) Date

OWNER(s):

Name: Mardi Benson Hill

Address: 1035 E. McMillan Rd

City: ~~Boise~~ Meridian State: ~~ID~~ Zip: 83642

Telephone: 888-5515 Fax:

Email:

I consent to this application and allow Development Services staff to enter the property for site inspections related to this application

Mardi Benson Hill 12-1-06

Signature: (Applicant) Date

OWNER(s):

Name: Maureen Benson Clayton

Address: 10005 Harpoon Circle

City: Las Vegas State: Nv Zip: 89117

Telephone: 702-363-1966 Fax: same

Email: paulandmaureen@hotmail.com

I consent to this application and allow Development Services staff to enter the property for site inspections related to this application

Maureen Benson Clayton — Signature: (Applicant)

Nov 29, 2006 — Date

OWNER(s):	
Name: Brian Harris Benson	
Address: 8140 Millview Dr.	
City: Cincinnati	State: OH Zip: 45249
Telephone: 513-489-4899	Fax: 513-489-1075
Email:	bbenson@cinci.rr.com

I consent to this application and allow Development Services staff to enter the property for site inspections related to this application

Brian Harris Benson — 11/28/06

Signature: (Applicant) — Date

OWNER(s):

Name: Paul B. Larsen & Iretta N. Larsen

Address: 747 E. Parkcenter Blvd

City: Boise State: ID Zip: 83706

Telephone: 344-1509 Fax: N/A

Email: N/A

I consent to this application and allow Development Services staff to enter the property for s related to this application

Paul B. Larsen 11

Signature: (Applicant) Date

Iretta N. Larsen

ATTACHMENT G. INFRASTRUCTURE AND FINANCING PLAN

ELEMENT E, ECONOMIC IMPACT ANALYSIS

ELEMENT E, ECONOMIC IMPACT ANALYSIS
ORCHARDS PLANNED COMMUNITY, ADA COUNTY, IDAHO

Table of Contents

ELEMENT E, ORCHARD RANCH PLANNED COMMUNITY

Executive Summary

Knorr Development ("Developer") is in the predevelopment stages of constructing a 2,554 acre master-planned community currently named the Orchard Ranch Planned Community ("Project"). The Project is located southeast of Boise, Idaho within the boundaries of Ada County ("County").

The Developer has retained the Development, Planning & Financing Group, Inc. ("DPFG") to prepare a report ("Report") to fulfill certain requirements outlined in Title 8, Chapter 2, Article A of the Ada County Code ("County Code"). The County Code requires the preparation and delivery of three fiscal related components which include: (i) an Economic Feasibility Study ("Economic Study", "Element E-1"); (ii) an Infrastructure and Financing Plan ("Infrastructure Plan", "Element E-2"); and (iii) a Fiscal Impact Analysis ("Fiscal Analysis", "Element E-3"). This Report presents the findings related to the Project in relation to the aforementioned requirements.

The Developer and/or DPFG have provided estimates using the best information currently available to prepare the information provided within the Report. The results represented in this Report, although based upon the best information currently available, are subject to change. This Report includes information relating to the impacts the Project's home sales, absorption, and resulting population will have on the County's General Fund ("General Fund"), Special Revenue Funds ("Special Revenue Funds"), and other affected taxing districts ("Special Districts").

The findings of this Report indicate that the development of the Project is anticipated to have a positive fiscal impact on the County's General Fund, Special Revenue Funds and Special Districts. The Project will generate both one-time and recurring revenues to the County through property taxes, sales taxes, state shared revenues, licenses and permits, impact fees, and charges for services, which will exceed the additional operational department expenses anticipated to be incurred by the County as the result of the development of the Project.

The following table provides a summary of the findings of this Report, and represents the Project's fiscal impact on the affected County Funds and Special Districts at various time periods over a thirty (30) year analysis period.

Summary of Net Annual Fiscal Impacts						
County Revenues	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
General Fund Revenues	$ 1,345,339	$ 2,783,426	$ 4,362,571	$ 6,198,932	$ 7,501,379	$ 141,934,241
Special Revenue Fund Rev.	122,573	389,827	726,528	1,050,511	$ 1,456,249	22,985,198
Total County Revenues	$ 1,467,912	$ 3,173,253	$ 5,089,098	$ 7,249,443	$ 8,957,629	$ 164,919,439
Cumulative Revenues	$ 4,490,731	$ 16,791,134	$ 41,121,617	$ 73,485,326	$ 164,919,439	$ 164,919,439
County Expenses	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
General Fund Expenditures	$ 509,567	$ 1,210,385	$ 1,957,942	$ 2,738,531	$ 3,386,871	$ 59,801,449
Special Revenue Fund Exp.	155,949	428,814	738,545	1,036,489	1,349,647	22,598,411
Total County Expenditures	$ 665,516	$ 1,639,198	$ 2,696,487	$ 3,775,020	$ 4,736,518	$ 82,399,860
Cumulative Expenses	$ 1,795,038	$ 7,922,442	$ 19,393,617	$ 36,076,401	$ 82,399,860	$ 82,399,860
County Funds	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
General Fund	$ 835,772	$ 1,573,041	$ 2,404,629	$ 3,460,401	$ 4,114,509	$ 82,132,792
Special Revenue Funds	(33,376)	(38,987)	(12,017)	14,022	106,602	386,787
Surplus/(Deficiency)	$ 802,396	$ 1,534,054	$ 2,392,611	$ 3,474,423	$ 4,221,111	$ 82,519,579
Cumulative	$ 2,695,692	$ 8,868,692	$ 21,728,000	$ 37,408,926	$ 82,519,579	$ 82,519,579
Special Districts	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Ada County Sheriff's Department	$ 20,289	$ 192,973	$ 475,632	$ 747,783	$ 1,203,308	$ 16,514,505
Kuna Fire District	(24,912)	35,561	169,929	299,372	563,981	6,686,983
Ada County Pest Extermination Dis	(4,443)	920	15,305	29,167	59,966	656,099
Boise Independent School District N	-	-	-	-	-	-
Ada County Highway District	478,806	929,313	1,263,024	1,676,903	1,802,877	37,910,673
Ada County Free Library District	(68,598)	10,918	175,848	320,285	591,407	6,433,325
Total Taxing Districts	$ 401,141	$ 1,169,685	$ 2,099,739	$ 3,073,509	$ 4,221,539	$ 68,201,586
Cumulative	$ 1,069,275	$ 5,345,242	$ 14,288,651	$ 27,539,366	$ 68,201,586	$ 68,201,586
Note: Values subject to change.						

The results of our analyses indicate that the Project will have a substantial cumulative net positive impact on the County's General Fund, and Special Revenue Funds over the thirty (30) year time-frame examined. As indicated above, each Special District that will provide services to the Project is anticipated to have a cumulative net positive impact over the thirty (30) year time-frame as well.

Detailed explanations of the methodology employed in the Report as well as information sources and assumptions utilized in the estimation of the revenue and expense items may be found as follows: Appendix A (Project Assumptions), Appendix B (General Fund), Appendix C (Special Revenue Funds), Appendix D (Special Tax Districts), Appendix E (Correspondence with Impacted Agencies).

Project Overview

The Project is a 2,554 acre master-planned community which upon build-out will include approximately 8,173 residential units and 155 acres of commercial uses. The Project is anticipated to be developed (vertical construction) over an estimated 22-year time frame. A table depicting the anticipated land use components is provided below.

Project Land Use Schedule		
Residential Use		
Use	**Acres (1)**	**Units**
Low Density	346.1	813
Medium-Low Density	1,025.1	2,552
Medium Density	773.3	2,823
Medium-High Density	147.8	696
High Density	107.4	1,289
Total Residential	2,399.7	8,173
Non-Residential Use		
Use	**Acres**	**Units**
Village Gateway Commercial Mixed-Use (VGC) (2)	126.5	-
Borough Commercial Commons (BCC)	28.1	-
Total Non-Residential	154.6	-
Project Total	2,554.3	8,173

Footnotes:

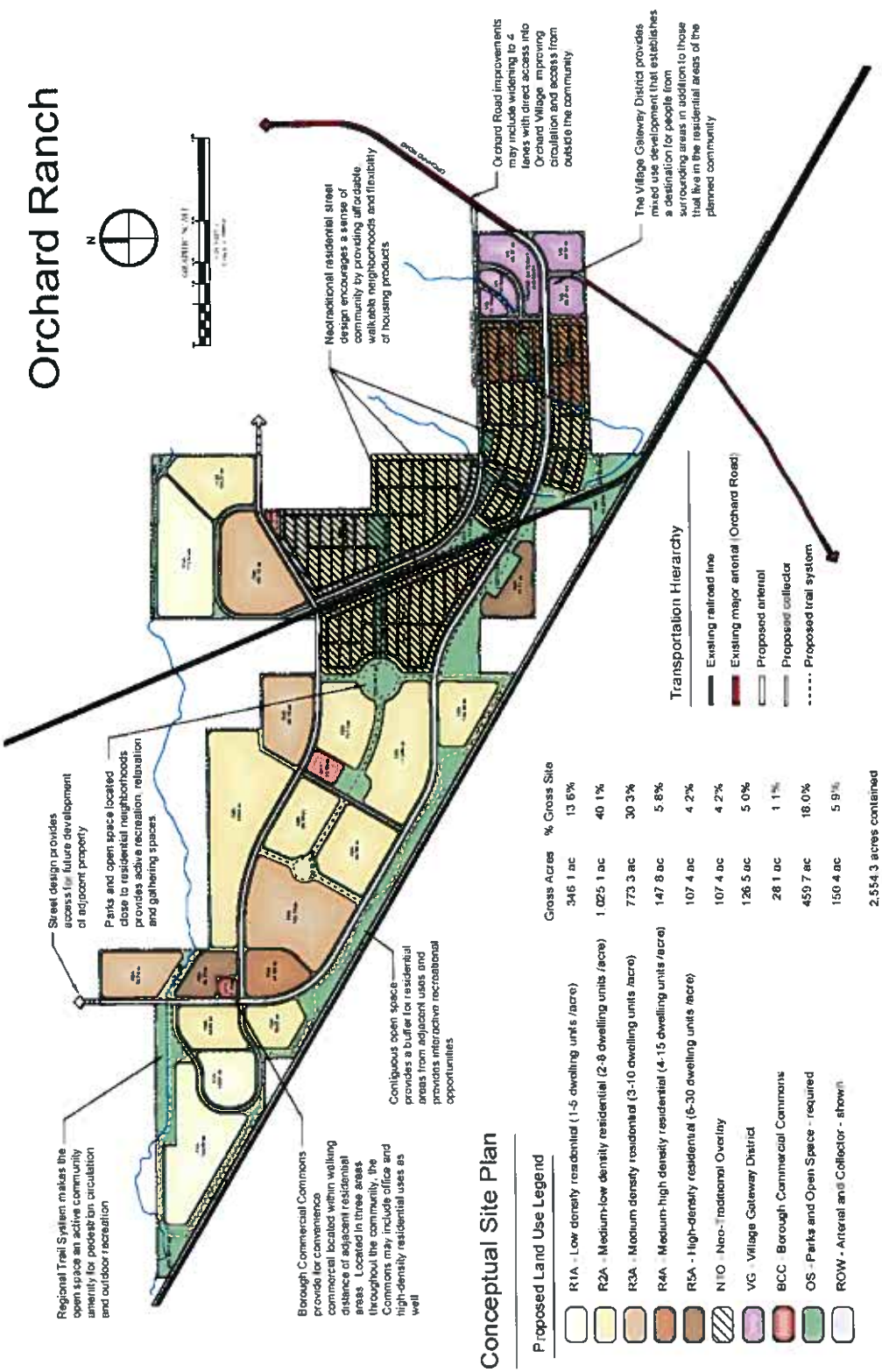
(1) Residential acreage includes acreage for parks, open space, and right-of-way.

(2) A 126.5 Village Gateway District has been established that will contain a combination of commercial, office and other mix uses.

Note: Current plan subject to change.

Source: Developer.

A conceptual land-use plan for the Project has been included on the following page.


Orchard Ranch
N
Conceptual Site Plan
Proposed Land Use Legend
R1A - Low density residential (1-5 dwelling units /acre)
R2A - Medium-low density residential (2-8 dwelling units /acre)
R3A - Medium density residential (3-10 dwelling units /acre)
R4A - Medium-high density residential (4-15 dwelling units /acre)
R5A - High-density residential (6-30 dwelling units /acre)
NTO Neo-Traditional Overlay
VG Village Gateway District
BCC Borough Commercial Commons
OS - Parks and Open Space - required
ROW - Arterial and Collector - shown
Gross Acres
% Gross Site
346 1 ac 13 6%
1 025 1 ac 40 1%
773 3 ac 30 3%
147 8 ac 5 8%
107 4 ac 4 2%
107 4 ac 4 2%
126 5 ac 5 0%
28 1 ac 1 1%
459 7 ac 18 0%
150 4 ac 5 9%
2,554 3 acres contained
Transportation Hierarchy
Existing railroad line
Existing major arterial (Orchard Road)
Proposed arterial
Proposed collector
Proposed trail system
Regional Trail System makes the open space an active community amenity for pedestrian circulation and outdoor recreation
Street design provides access for future development of adjacent property
Parks and open space located close to residential neighborhoods provides active recreation, relaxation and gathering spaces
Borough Commercial Commons provide for convenience commercial located within walking distance of adjacent residential areas Located in three areas throughout the community, the Commons may include office and high-density residential uses as well
Contiguous open space provides a buffer for residential areas from adjacent uses and provides interactive recreational opportunities
Neotraditional residential street design encourages a sense of community by providing affordable walkable neighborhoods and flexibility of housing products
Orchard Road improvements may include widening to 4 lanes with direct access into Orchard Village improving circulation and access from outside the community
The Village Gateway District provides mixed use development that establishes a destination for people from surrounding areas in addition to those that live in the residential areas of the planned community

ELEMENT E, ECONOMIC IMPACT ANALYSIS

SUB-ELEMENT E-1; ECONOMIC FEASIBILITY STUDY

SUB-ELEMENT E-1, ECONOMIC FEASIBILITY STUDY

E-1; Requirement (a)
Planned unit counts, build-out/absorption and occupancy by phase.

The following table illustrates the current land-use plan and illustrates the anticipated build-out and absorption of the Project by phase.

Residential Phasing													
Land Use	**Totals**	**Ph. 1**	**Ph. 2**	**Ph. 3**	**Ph. 4**	**Ph. 5**	**Ph. 6**	**Ph. 7**	**Ph. 8**	**Ph. 9**	**Ph. 10**	**Ph. 11**	**Ph. 12**
Low Density	813	-	-	-	264	-	-	-	-	-	-	-	549
Medium-Low Density	2,553	-	625	-	165	-	-	553	565	394	-	-	251
Medium Density	2,823	440	-	337	369	710	-	-	-	227	533	207	-
Medium-High Density	696	270	-	232	-	-	-	-	-				
High Density	1,288	-	-	-	-	-	853	-	-				
Totals	8,173	710	625	569	798	710	853	553	565	621	727	642	800
Phase Start (Year)	1	1	4	6	8	10	12	14	16	26	19	21	22
Phase End (Year)	22	3	5	7	9	11	13	15	17	26	20	21	22
Source: Developer Estimate.													
Note: Current plan subject to change.													

Currently, the Developer anticipates that residential development will occur in twelve phases as illustrated above. A detailed annual build-out, absorption and occupancy schedule can be found under Appendix A.

E-1; Requirements (b), (c)
Expected household demographics, including household sizes, household age and incidence of school-aged children; Likely price ranges suitable for development in the planned community as a function of prevailing market conditions and likely target households.

The following table represents the estimated average home price within the Project, as well as the anticipated household size, the resulting population, and the number of school aged children.

Household Demographics at Buildout			
Detail	**Amount**	**Calculation**	**Source**
Home Price Range	$265,739	A	Developer, Intermountain MLS
Residential Units	8,173	B	Developer
Avg Occupancy Rate	95.0%	C	US Census Bureau
Total Occupied Homes	7,764	B * C = D	Calculation
Average Household Size	2.50	E	US Census Bureau
Projected Population	19,411	D * E = F	Calculation
Total Occupied Homes	7,764	G	Developer
School Children/Hhld (Public Only)	0.60	H	Boise School District
Total Children	4,659	G * H = I	Calculation
Note: Current plan subject to change.			

The average home price in 2008 dollars is anticipated to be approximately $265,000 for the estimated 8,173 residential units, with homes anticipated to range in price from the $100,000's to

more than $300,000. This pricing estimate is consistent with the sales price of new homes in the County based on the Ada County Association of Realtors and Intermountain Multiple Listing Services' most recent economic and market watch report (2Q-2008). While individual homebuilders will determine the ultimate residential product types and pricing based upon market conditions at the time of construction; it is anticipated that the residential products within the Project will be marketed to and purchased by a broad range of households. Homes within the Project are anticipated to be affordable for households which earn approximately 70 to 150 percent of the median household income within the County, as reported by the US Census Bureau's 2006 Consumer Expenditure Survey, and spend no more than 28 percent of their income on mortgage payments. Information from the US Census Bureau was utilized in estimating the household size. It is estimated that the Project will have a population of 19,411 people, of which 4,659 will be school-aged children. Annual estimates related to the findings in the table above can be found under Appendix A.

E-1; Requirement (d)
Planned commercial buildings, gross space and build-out/absorption by phase.

The following table represents an estimate of the commercial development that will occur within the Project.

Commercial Phasing							
Land Use	**Acres**	**Sq. Ft.**	**Ph. 2**	**Ph. 6**	**Ph. 8**	**Ph. 11**	**Ph. 12**
Retail	70	757,617	31,853	309,957	68,117	37,734	309,957
Mixed-Use - Office/Other	85	925,977	38,932	378,836	83,254	46,119	378,836
Total Retail & Mixed-Use	155	1,683,594	70,785	688,793	151,371	83,853	688,793
Phase Start (Year)		1	4	12	16	21	22
Phase End (Year)		22	5	13	17	21	22
Notes: (1) Current plan, subject to change; (2) square feet are estimated using a floor to area ratio of 25%; (3) Phases 1, 3, 4, 5, 7, 9 and 10 are not currently anticipated to include commercial development, and have been excluded from this table.							
Sources: Developer Estimate.							

The construction of commercial uses within the Project is anticipated to occur as demand from the residential development dictates. As the Project is located approximately nineteen (19) miles from the City of Boise, it is anticipated that initially, residents of the Project will likely work and shop within the Boise area. As build-out of the Project continues, and a population base develops, the market for retail and mixed uses is anticipated to increase, and will be supported by the local population. It is currently anticipated that approximately 1,684,000 square feet of retail and mixed uses will be supported within the Project and will be constructed on approximately 155 acres. Approximately 757,600 square feet is anticipated to be developed as retail space, while the remaining approximately 926,000 square feet will be developed for mixed uses. Annual estimates related to the findings in the table above can be found under Appendix A.

E-1; Requirements (e), (f)

Probable commercial retail and service uses reasonably supported by locally-captured community resident spending; Probable commercial retail and service uses supported by capture of spending by visitors and other non-residential of the planned community:

The following table represents an estimate of the commercial development that will occur within the Project, the resulting sales per square foot, and the retail sales purchases anticipated to be generated by Project residents and visitors to the Project. It is anticipated that the retail space to be constructed within the Project will include a mix of inline shops, small retailers, restaurants and other retail outlets.

Retail Development - Local Capture			
Land Use	**Retail**	**Calculation**	**Calculation**
Retail Acres	69.6	A	Developer
FAR Ratio	25%	B	Estimate
Commercial Square Feet	757,617	A*B*43,560 = C	Calculation
Occupancy	92%	D	Colliers International
Occupied Square Feet	695,493	C * D = E	Calculation
Average Sales Per Square Foot	$ 250	F	ULI, Dollars and Cents 2006
Total Sales at Buildout	$ 173,873,170	E * F = G	Calculation
Local Capture	85%	H	Estimate
Local Capture	$ 147,792,195	G * H = I	Calculation
Visitor Capture	15%	J	Estimate
Visitor Capture	$ 26,080,976	G * J = K	Calculation
Note: Current plan subject to change.			

As illustrated in the previous table, the Project's retail space is anticipated to generate approximately $173.9 million in annual sales. Based on our professional judgment, it is anticipated that approximately 85 percent of annual retail sales will be generated by Project residents, and the remaining 15 percent of annual sales will be generated by non-residents of the Project given its distance from the Boise Primary Trade Area and its location along highway 84. Residents will rely on local retail options for most day-to-day shopping needs yielding a relatively high capture for these households. There may be limited destination retail within the Project, however most retail capture from visitors will result from pass-by traffic.

E-1; Requirement (g)

Probable annual employment and wage levels for employment occurring in commercial retail/services space at the planned community.

The following table illustrates the estimated volume of retail space to be constructed upon build-out of the Project, and the resulting jobs and wage generation estimates. The Project is anticipated to include 69.6 acres of retail uses which will yield 757,617 gross square feet of building area. This assumes that a 25 percent floor-to-area ratio ("FAR") factor is used with the intent of exercising caution in analyzing the Project's fiscal impacts.

Retail Development			
Description	**Retail**	**Calculation**	**Source**
Acres	69.6	A	Developer
FAR Ratio	25%	B	Estimate
Developed Sq. Ft.	757,617	A*B*43,560 = C	Calculation
Vacancy Rate	8.30%	D	Colliers International
Total Occupied Sq. Ft.	694,735	C * (1-D) = E	Calculation
Sq. Ft. / Worker (1)	1,021	F	See Footnote (1)
Total Employees	680	E / F = G	Calculation
Average Annual Salary	$ 37,420	H	ID Commerce & Labor
Total Salaries	$ 25,462,278	G * H = I	Calculation

Footnote:

(1) Based on national averages provided by the National Energy Consumption Survey, U.S. Dept. of Energy.

Notes: Current plan subject to change.

The projected 694,735 square feet of retail uses is anticipated to result in the creation of more than 680 jobs, and approximately $25.5 million in annual salaries.

E-1; Requirement (h)

Probable industries, annual employment and wage levels for employment occurring in non-retail commercial development, including office, business park, industrial or other similar development types.

Approximately 85 of the Project's 2,554 acres will be developed for mixed uses. It is estimated that 925,977 gross building square feet of mixed uses will be constructed upon complete build-out of the Project. We have assumed a 25 percent FAR factor in estimating the gross building square footage in the projection of fiscal impacts caused by the Project. At present, the specific mix of uses within this area has not been determined. It may include some combination of office, medical office, public service, and limited retail uses. Compared to retail-only areas, it is anticipated that this area will generate a higher employment density, per the Energy Information Administration, and higher average wages, per the Idaho Department of Commerce and Labor. Additionally, this area is expected to offer high quality employment opportunities comparable to those presently only found in and near Boise which will reduce commute times and will diminish the impact on roadways caused by individuals who live and work in the area.

The following table illustrates an estimate of the mixed use space anticipated to be constructed within the town center overlay upon build-out, as well as the resulting job creation, and wages generated due to the construction of the mixed uses space within the Project.

Mixed-Use Development			
Description	**Mixed Use**	**Calculation**	**Source**
Acres	85.0	A	Developer
FAR Ratio	25%	B	Estimate
Developed Sq. Ft.	925,977	A*B*43,560 = C	Calculation
Vacancy Rate	12.1%	D	Colliers International
Total Occupied Sq. Ft.	813,934	C * (1-D) = E	Calculation
Sq. Ft. / Worker (1)	823	F	See Footnote (1)
Total Employees	989	E / F = G	Calculation
Average Annual Salary	$ 53,730	H	ID Commerce & Labor
Total Salaries	$ 53,138,090	G * H = I	Calculation

Footnote:

(1) Based on national averages provided by the National Energy Consumption Survey, U.S. Dept. of Energy.

Notes: Current plan subject to change.

The projected 813,934 square feet of mixed use development are anticipated to result in the creation of more than 989 jobs, and more than $53.1 million in annual salaries, as estimated utilizing information provided from local and national data sources.

ELEMENT E, ECONOMIC IMPACT ANALYSIS

SUB-ELEMENT E-2; INFRASTRUCTURE AND FINANCING PLAN

SUB-ELEMENT E-2, INFRASTRUCTURE AND FINANCING PLAN

E-2; Requirements (a), (b)

Documentation of the extent to which infrastructure serving the planned community will be funded by the applicant, the timing of construction and the financial assurances for funding that infrastructure; Proposed Project Financing Plan for each phase and component of the planned community, with financial assurances from the applicant regarding uncertainty of future phases, to maintain the integrity of the entire planned project.

The current infrastructure and financing plan is identified in the following tables. It is currently anticipated that the Developer will construct all in-tract electrical utilities, wet utilities, parks, and roadway infrastructure necessary to service the Project's twelve phases of vertical construction. The exact timing of each of these infrastructure improvement phases will depend on the pace of build-out for the Project's residential and commercial components.

The roadway, water, and sewer infrastructure improvements are anticipated to be financed by the Developer. It is anticipated that electrical improvements will also be financed by the Developer, while cable, gas and telecommunication infrastructure will be financed by each respective service provider. The specific financing plan for schools, libraries, fire, and emergency medical services capital improvements will be determined pending final negotiations with these service providers, although it is anticipated that the Developer will be providing adequate mitigation to assure the maintenance of existing levels of service and pursuant to any negotiated agreements.

The Developer is committed to working with the County and other applicable public service agencies to identify and implement the appropriate financial assurances which may include but are not necessarily limited to surety bonds. Alternative methods of financing and reimbursements may be considered and explored in the future.

Infrastructure and Financing Plan			
Service/Service Provider	**Identified Infrastructure/Cost**	**Proposed Financing Plan**	**Unresolved/Unmitigated Impacts**
General Fund Ada County	No hard infrastructure costs identified.	Public provision; financed via tax revenue and fees.	None--Impacts are typical of incremental development in Ada County.
Special Revenue Fund Ada County	No hard infrastructure costs identified.	Public provision; financed via tax revenues, fees, fines, and permits.	None--Impacts are typical of incremental development in Ada County.
Law Enforcement Ada County Sheriff's Office	Payment of a one-time mitigation fee of $310.87 for each residential lot.	Public provision; financed via tax revenues and mitigation fees.	None--per agreement with district.
Emergency Medical Service & Emergency Fire Kuna Rural Fire District	No hard infrastructure costs identified.	Public provision; financed via tax revenues, service fees and mitigation fees.	Developer is in the process of negotiating an agreement with the district.
Pest Control Ada County Pest Extermination District	No hard infrastructure costs identified.	Public provision; financed via tax revenues and fees.	None--Impacts are typical of incremental development in Ada County.
Schools Boise Independent School District No.1	No hard infrastructure costs identified.	School site donation; public provision; financed via tax revenues and agreement (as applicable).	Developer is in the process of negotiating an agreement with the district.
Streets Ada County Highway District	56.9 lane miles of roads constructed by the Developer ($26.2 million).	Public maintenance; road construction financed with private debt & equity; and impact fees.	None--Impacts are typical of incremental development in Ada County.
Library Ada County Free Library District	No hard infrastructure costs identified.	Public provision; financed via tax revenue and mitigation fees.	Developer is in the process of negotiating an agreement with the district.
Parks, Trails & Open Space Ada County Parks & Waterways	Parks, facilities, trails, natural open space improved by the Developer ($6.7 million).	Private management; financed with private debt & equity.	None
Solid Waste Management	No hard infrastructure costs identified.	No need identified; fee-for-service	None
Notes: (1) DPFG made numerous requests to obtain information related to capital infrastructure improvement needs and associated costs that are anticipated to be generated by the Project from the affected districts as documented in Appendix E. The Developer is committed to working with these districts to ensure that any potential adverse impacts related to capital improvement needs will be mitigated appropriately. The Developer is continuing to negotiate and finalize agreements with all districts to provide adequate mitigation to assure the maintenance of existing levels of service. The Developer is prepared to update this chart as new agreements are reached. (2) Current plan, subject to change.			

Service/Service Provider	Identified Infrastructure/Cost	Proposed Financing Plan	Unresolved/Unmitigated Impacts
Potable Water	On-site and off-site distribution lines; constructed by Developer ($17.1 million).	Private provision; infrastructure financed with private debt & equity	None
Sanitary Sewer	On-site collection lines & waste water treatment facility; constructed by Developer ($18.1 million).	Private provision; infrastructure financed with private debt & equity	None
Electrical Service	On-site and off-site improvements; constructed by Developer.	Private provision; infrastructure financed with private debt & equity	None
Natural Gas Service	Intermountain Gas	No need identified; fee-for-service	None
Telecommunications	On-site extension not anticipated to create upfront Developer costs.	No need identified; fee-for-service	None

Notes: (1) DPFG made numerous requests to obtain information related to capital infrastructure improvement needs and associated costs that are anticipated to be generated by the Project from the affected districts as documented in Appendix E. The Developer is committed to working with these districts to ensure that any potential adverse impacts related to capital improvement needs will be mitigated appropriately. The Developer is continuing to negotiate and finalize agreements with all districts to provide adequate mitigation to assure the maintenance of existing levels of service. The Developer is prepared to update this chart as new agreements are reached. (2) Current plan, subject to change.

The following tables indicate the anticipated costs and phasing program for infrastructure required by the Project.

Anticipated Project Infrastructure - Costs and Phasing Assumptions							
Roadways / Streets	**Total Costs**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**
Orchard Access Road	$ 6,500,000	$ 650,000	$ -	$ -	$ 3,250,000	$ -	$ -
Major Arterials*	14,004,000	3,501,000	1,400,400	-		2,100,600	-
Collectors**	5,684,000	1,136,800	-	-	1,705,200	-	-
Total Roadways	$ 26,188,000	$ 5,287,800	$ 1,400,400	$ -	$ 4,955,200	$ 2,100,600	$ -
Dry Utilities	**Total Costs**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**
Electrical Service -Offsite	$ 731,000	$ 731,000	$ -	$ -	$ -	$ -	$ -
Electrical -Onsite Distribution	6,104,000	915,600	610,400	305,200	610,400	610,400	305,200
Total Dry Utilities	$ 6,835,000	$ 1,646,600	$ 610,400	$ 305,200	$ 610,400	$ 610,400	$ 305,200
Wet Utilities	**Total Costs**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**
Wastewater System -WWTP	$ 10,180,000	$ 2,545,000	$ -	$ 1,527,000	$ -	$ 1,527,000	$ -
Wastewater System -Onsite Collection	7,920,000	1,188,000	792,000	396,000	792,000	792,000	396,000
Water System - Wells/Storage/Boosters	7,500,000	3,000,000	-	-	1,500,000	-	-
Water System - Onsite Distribution	9,626,000	2,406,500	481,300	385,040	481,300	1,925,200	288,780
Total Wet Utilities	$ 35,226,000	$ 9,139,500	$ 1,273,300	$ 2,308,040	$ 2,773,300	$ 4,244,200	$ 684,780
Parks, Trails, Open Space	**Total Costs**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**
Parks, Facilities, Trails, Natural OS	$ 6,730,000	$ 673,000	$ 538,400	$ 538,400	$ 403,800	$ 538,400	$ 673,000
Total Parks	$ 6,730,000	$ 673,000	$ 538,400	$ 538,400	$ 403,800	$ 538,400	$ 673,000
Total Infrastructure Costs	**Total Costs**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**
Total Infrastructure	$ 74,979,000	$16,746,900	$ 3,822,500	$ 3,151,640	$ 8,742,700	$ 7,493,600	$ 1,662,980

Notes: (1) Current plan, subject to change; (2) Infrastructure will coincide with the absorption and construction of homes.
Source: Developer.

Anticipated Project Infrastructure - Costs and Phasing Assumptions Continued							
Roadways / Streets	**Phase 7**	**Phase 8**	**Phase 9**	**Phase 10**	**Phase 11**	**Phase 12**	**Total Costs**
Orchard Access Road	$ -	$ -	$ 2,600,000	$ -	$ -	$ -	$ 6,500,000
Major Arterials*	1,400,400	2,100,600	700,200	1,400,400	1,400,400	-	14,004,000
Collectors**	1,136,800	568,400	-	-	-	1,136,800	5,684,000
Total Roadways	$ 2,537,200	$ 2,669,000	$ 3,300,200	$ 1,400,400	$ 1,400,400	$ 1,136,800	$ 26,188,000
Dry Utilities	**Phase 7**	**Phase 8**	**Phase 9**	**Phase 10**	**Phase 11**	**Phase 12**	**Total Costs**
Electrical Service -Offsite	$ -	$ -	$ -	$ -	$ -	$ -	$ 731,000
Electrical -Onsite Distribution	488,320	427,280	427,280	488,320	305,200	610,400	6,104,000
Total Dry Utilities	$ 488,320	$ 427,280	$ 427,280	$ 488,320	$ 305,200	$ 610,400	$ 6,835,000
Wet Utilities	**Phase 7**	**Phase 8**	**Phase 9**	**Phase 10**	**Phase 11**	**Phase 12**	**Total Costs**
Wastewater System -WWTP	$ 1,527,000	$ -	$ 1,527,000	$ -	$ 1,527,000	$ -	$ 10,180,000
Wastewater System -Onsite Collection	633,600	554,400	554,400	633,600	396,000	792,000	7,920,000
Water System - Wells/Storage/Boosters	1,500,000	-	-	1,500,000	-	-	7,500,000
Water System - Onsite Distribution	481,300	481,300	1,443,900	481,300	288,780	481,300	9,626,000
Total Wet Utilities	$ 4,141,900	$ 1,035,700	$ 3,525,300	$ 2,614,900	$ 2,211,780	$ 1,273,300	$ 35,226,000
Parks, Trails, Open Space	**Phase 7**	**Phase 8**	**Phase 9**	**Phase 10**	**Phase 11**	**Phase 12**	**Total Costs**
Parks, Facilities, Trails, Natural OS	$ 673,000	$ 538,400	$ 538,400	$ 538,400	$ 403,800	$ 673,000	$ 6,730,000
Total Parks	$ 673,000	$ 538,400	$ 538,400	$ 538,400	$ 403,800	$ 673,000	$ 6,730,000
Total Infrastructure Costs	**Phase 7**	**Phase 8**	**Phase 9**	**Phase 10**	**Phase 11**	**Phase 12**	**Total Costs**
Total Infrastructure	$ 7,840,420	$ 4,670,380	$ 7,791,180	$ 5,042,020	$ 4,321,180	$ 3,693,500	$ 74,979,000

Notes: (1) Current plan, subject to change; (2) Infrastructure will coincide with the absorption and construction of homes.
Source: Developer.

ELEMENT E, ECONOMIC IMPACT ANALYSIS

SUB-ELEMENT E-3; FISCAL IMPACT STUDY

SUB-ELEMENT E-3, FISCAL IMPACT STUDY

It is anticipated that the Project will affect the County's General Fund, Special Revenue Funds, and various Special Districts. The following narratives and tables illustrate the estimated effects that the Project will have on the respective funds. Correspondence with the various affected agencies is included in this report as Appendix E.

General Fund; Requirements (a), (b)

The County's General Fund expense categories, as illustrated on pages three and four of the County's 2008 Annual Financial Report, are anticipated to be affected if the Project is developed within the County's boundaries. General Fund expenditures will be influenced by the construction of additional public infrastructure as well as the increased population resulting from the development of the Project. The increase in the County's population will require additional County Services from certain departments, while construction of the Project may affect other departments. The following table itemizes the General Fund expense categories, and provides an estimate of the anticipated expenses to be incurred as the result of the Project's development within the County's boundaries.

Impact on General Fund - Expense Summary						
Project Expense Category	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Clerk, Auditor	$ 24,416	$ 67,136	$ 115,628	$ 162,274	$ 211,303	$ 3,538,045
Assessor	2,464	6,776	11,670	16,378	21,326	357,077
Treasurer	3,244	8,919	15,361	21,558	28,071	470,026
Motor Vehicle	8,551	23,514	40,498	56,835	74,007	1,239,166
Prosecuting Attorney	34,071	93,685	161,354	226,448	294,865	4,937,202
Public Information	570	1,567	2,699	3,788	4,932	82,589
Commisioners	2,298	6,320	10,884	15,275	19,890	333,045
Operations	37,492	103,092	177,555	249,184	324,471	5,432,927
Development Services	124,498	151,561	134,332	179,239	54,332	4,001,617
Information Technology	19,261	52,963	91,218	128,017	166,695	2,791,125
Public Defender	20,052	55,137	94,963	133,273	173,539	2,905,722
Adminstration Services	5,302	14,578	25,108	35,238	45,884	768,282
General	12,242	33,661	57,973	81,361	105,943	1,773,904
Sheriff	185,936	511,268	880,555	1,235,789	1,609,162	26,943,710
Coroner	4,668	12,835	22,105	31,022	40,395	676,376
Juvenile	24,503	67,375	116,039	162,852	212,055	3,550,638
Annual Expense	$ 509,567	$ 1,210,385	$ 1,957,942	$ 2,738,531	$ 3,386,871	$ 59,801,449
Cumulative Expense	$ 1,427,459	$ 5,994,514	$ 14,386,863	$ 26,522,185	$ 59,801,449	$ 59,801,449

General Fund expenses have been primarily estimated on a per capita basis, using the per capita expenses from the County's 2008 Annual Financial Report as a basis to estimate the Project-related expenses going forward. There are exceptions to this methodology, and several funds, when appropriate, have been estimated using other factors, including the utilization of building permits as a measure to estimate expenses of the Development Services Department. The methodology utilized in the preparation of the expense estimates, as well as the resulting annual estimates are illustrated in Appendix B.

General Fund; Requirement (c)

The Project will make a significant impact on the County's assessed valuation. The increase in assessed valuation resulting from build-out of the Project is estimated as follows:

Estimation of Assessed Valuation			
Residential AV	**Amount**	**Calculation**	**Source**
Homes at Buildout	8,173	A	Developer
Average Market Value	$ 265,739	B	Estimate
Homeowner's Exemption (Avg) (1)	94,880	C	Idaho State Tax Commission
Average Assessed Valuation	170,858	B - C = D	Calculation
Total Residential Assessed Value	$ 1,396,424,703	A * D = E	Calculation
Mixed / Multi Commercial AV	**Amount**	**Calculation**	**Source**
Estimated Commercial SF at Buildout	1,683,594	F	Developer/Estimate
Construction Value / SF	$ 200	G	DPFG Estimate
Assessed Value / SF	200	G = H	Idaho State Tax Commission
Total Commercial Assessed Value	$ 336,718,800	F * H = I	Calculation
Total AV	**Amount**	**Calculation**	**Source**
Total Additional Project Assessed Value	$ 1,733,143,503	E + I = J	Calculation

Footnote:

(1) At present, the maximum homeowner exemption is $100,938, as there are various housing types in the Project, the figure presented represents the average for all housing types.

Note: Values, subject to change.

The growth in assessed valuation at certain points in time over the development of the Project is illustrated in the following table:

Estimation of Assessed Valuation						
Residential AV	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Homes on Tax Roll	660	2,203	4,140	5,933	$ 8,173	8,173
Average Market Value	246,337	274,119	250,766	264,724	265,739	265,739
Homeowner's Exemp. (Avg)	100,938	100,938	94,503	95,412	94,880	94,880
Average Assessed Valuation	145,399	173,181	156,263	169,312	170,858	170,858
Total Residential AV	$ 96,008,850	$ 381,560,864	$ 646,870,909	$ 1,004,529,584	$ 1,396,424,703	$ 1,396,424,703
Mixed / Multi Com AV	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Estimated Commercial SF	35,393	70,785	759,578	910,949	1,683,594	1,683,594
Construction Value / SF	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200
Assessed Value / SF	200	200	200	200	200	200
Total Commercial AV	$ 7,078,500	$ 14,157,000	$ 151,915,500	$ 182,189,700	$ 336,718,800	$ 336,718,800
Total AV	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Total Additional Project AV	$ 103,087,350	$ 395,717,864	$ 798,786,409	$ 1,186,719,284	$ 1,733,143,503	$ 1,733,143,503

Note: Values, subject to change.

The County has levied a property tax of $2.30 of each $1,000 of assessed valuation for the year 2008. Assuming that this property tax levy remains the same throughout the build-out of the Project, and allocating total tax collections in the same proportions indicated within the County's 2008 Annual Financial Report, which results in a General Fund allocation of approximately 79.6 percent of total collections, total tax collections for the County, relating to the Project can be estimated as follows:

Property Taxes - General Fund				
Description		**Amount**	**Calculation**	**Source**
Total Assessed Valuation		$ 1,733,143,503	A	Appendix A
Total Property Tax Rate		$ 0.00229945	B	Ada County Recorder ('08)
Total County Property Taxes		$ 3,985,268	A * B = C	Calculation
County General Fund	**Allocation**	**Amount**	**Calculation**	**Source**
Total General Fund	79.6%	$ 3,170,303	C * Allocation = D	2008 Financials / Calc.
Note: Values, subject to change.				

General Fund; Requirement (d)

The following table represents a summary of our findings related to the Project's anticipated impact on the revenues of the County's General Fund. Each of the following five revenue categories will experience increases due to the development of the Project.

General Fund - Revenue Summary						
Revenue Source	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Property Taxes	$ 188,570	$ 723,856	$ 1,461,157	$ 2,170,772	$ 3,170,303	$ 47,644,388
Sales Tax Allocation	93,086	255,958	440,836	618,679	805,602	13,488,957
State Shared Revenues	24,132	80,521	151,289	216,831	298,696	4,702,646
Licenses and Permits	666,703	697,869	543,552	714,579	-	22,069,248
Charges for services	372,848	1,025,222	1,765,737	2,478,072	3,226,779	54,029,003
Annual Revenue	$ 1,345,339	$ 2,783,426	$ 4,362,571	$ 6,198,932	$ 7,501,379	$ 141,934,241
Cumulative Revenue	$ 4,225,716	$ 15,124,816	$ 36,465,927	$ 64,284,621	$ 141,934,241	$ 141,934,241
Note: Values, subject to change.						

In the initial years of development, the majority of added General Fund revenues will be in the form of licenses and building permits, while in the latter years, and upon build-out, Project related property taxes, and charges for services are anticipated to generate the majority of Project related revenues for the County's General Fund. The Project is anticipated to generate approximately $7.5 million in annual revenues for the County's General Fund upon build-out of the Project, and approximately $141.9 million over the initial 30 years. Further details relating to the methodology of the findings as well as annual detailed revenues may be found under Appendix B to this Report.

General Fund; Requirement (e)

General Fund Summary						
General Fund Revenues	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Property Taxes	$ 188,570	$ 723,856	$ 1,461,157	$ 2,170,772	$ 3,170,303	$ 47,644,388
Sales Tax Allocation	93,086	255,958	440,836	618,679	805,602	13,488,957
State Shared Revenues	24,132	80,521	151,289	216,831	298,696	4,702,646
Licenses and Permits	666,703	697,869	543,552	714,579	-	22,069,248
Charges for services	372,848	1,025,222	1,765,737	2,478,072	3,226,779	54,029,003
Annual Revenue	$ 1,345,339	$ 2,783,426	$ 4,362,571	$ 6,198,932	$ 7,501,379	$ 141,934,241
Cumulative Revenue	$ 4,225,716	$ 15,124,816	$ 36,465,927	$ 64,284,621	$ 141,934,241	$ 141,934,241
General Fund Expenses	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Clerk, Auditor	$ 24,416	$ 67,136	$ 115,628	$ 162,274	$ 211,303	$ 3,538,045
Assessor	2,464	6,776	11,670	16,378	21,326	357,077
Treasurer	3,244	8,919	15,361	21,558	28,071	470,026
Motor Vehicle	8,551	23,514	40,498	56,835	74,007	1,239,166
Prosecuting Attorney	34,071	93,685	161,354	226,448	294,865	4,937,202
Public Information	570	1,567	2,699	3,788	4,932	82,589
Commisioners	2,298	6,320	10,884	15,275	19,890	333,045
Operations	37,492	103,092	177,555	249,184	324,471	5,432,927
Development Services	124,498	151,561	134,332	179,239	54,332	4,001,617
Information Technology	19,261	52,963	91,218	128,017	166,695	2,791,125
Public Defender	20,052	55,137	94,963	133,273	173,539	2,905,722
Adminstration Services	5,302	14,578	25,108	35,238	45,884	768,282
General	12,242	33,661	57,973	81,361	105,943	1,773,904
Sheriff	185,936	511,268	880,555	1,235,789	1,609,162	26,943,710
Coroner	4,668	12,835	22,105	31,022	40,395	676,376
Juvenile	24,503	67,375	116,039	162,852	212,055	3,550,638
Annual Expense	$ 509,567	$ 1,210,385	$ 1,957,942	$ 2,738,531	$ 3,386,871	$ 59,801,449
Cumulative Expense	$ 1,427,459	$ 5,994,514	$ 14,386,863	$ 26,522,185	$ 59,801,449	$ 59,801,449
Total General Fund	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Annual Surplus (Loss)	$ 835,772	$ 1,573,041	$ 2,404,629	$ 3,460,401	$ 4,114,509	$ 82,132,792
Cumulative Surplus (Loss)	$ 2,798,258	$ 9,130,302	$ 22,079,063	$ 37,762,436	$ 82,132,792	$ 82,132,792
Note: Values, subject to change.						

Detailed explanations of the methodology employed in the Report as well as information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the County's General Fund may be found in Appendix B.

General Fund; Requirement (f)

Our findings indicate a positive fiscal impact on the County's General Fund. Although not anticipated, any negative balances that occur will be addressed with appropriate mitigation solutions.

General Fund; Summary

The following table illustrates a summary of the findings related to the E-3 requirements, and the anticipated impacts to the General Fund at various points throughout the development of the Project. In each year of the analysis period, a positive net impact is anticipated to occur.

Ada County General Fund							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Population)	2,243	6,167	10,622	14,907	19,411	19,411
(b)	Resulting Expense (Annual)	$ 509,567	$ 1,210,385	$ 1,957,942	$ 2,738,531	$ 3,386,871	$ 59,801,449
(c)	Assessed Value (Total)	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Property Tax Revenue (Annual)	188,570	723,856	1,461,157	2,170,772	3,170,303	47,644,388
(d)	Fee Revenue (Annual)	1,156,769	2,059,571	2,901,414	4,028,160	4,331,077	94,289,853
(e)	Net Fiscal Impact (Annual)	835,772	1,573,041	2,404,629	3,460,401	4,114,509	82,132,792
(f)	Mitigation (None)	-	-	-	-	-	-
Note: Values, subject to change.							

Given the preceding analysis, it is concluded that the Project will have a positive fiscal impact on Ada County's General Fund with regard to both the incremental costs (operations) and marginal costs (capital facilities) of development.

Special Revenue Funds; Requirements (a), (b)

The Project will impact the County's various Special Revenue Funds, as identified on page 5 through 7 of the County's Annual Financial Report. The methodology utilized for estimating the annual service demand on the Special Revenue Funds is illustrated in the following table.

Special Revenue Funds - Expenditures					
Description		**Amount**	**Calculation**	**Source**	
Ada County Population		359,035	A	US Census Bureau	
Project Population at Buildout		19,411	B	Dev. Estimate, US Census	
Calculation (source below)	**C**	**D**	**C * D = E**	**E / A = F**	**B * F = G**
Special Revenue Fund	**Expenditures**	**Portion Inc.**	**Applicable**	**Per Capita**	**Project Totals**
Special Revenue Fund Exp.	$ 33,285,154	75%	$ 24,963,866	$ 69.53	$ 1,349,647
Sources: C - Ada County 2008 Financials. D - Estimate, See Appendix C. Note: Values, subject to change.					

The following table illustrates a summary of the Special Revenue Fund's expenses to be incurred as the result of the Project's development within the County's boundaries. Additional information and detail relating to the methodology employed for the table below, as well as detailed annual estimates, can be found in Appendix C.

Special Revenue Funds - Expense Items						
Summary	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Total Expenses	$ -	$ 428,814	$ 738,545	$ 1,036,489	$ 1,349,647	$ 22,598,411
Cumulative Expenses	$ 367,580	$ 1,927,928	$ 5,006,754	$ 9,554,216	$ 22,598,411	$ 22,598,411
Note: Values, subject to change.						

Special Revenue Funds; Requirement (c)

The Project will make a significant impact on the County's assessed valuation. The portion of the assessed valuation which has been allocated to the various Special Revenue Funds, as indicated in the County's 2008 Annual Financial Report, is approximately 20.4 percent. The following table illustrates the methodology employed to estimate the tax revenues of the Special Revenue Funds.

Property Taxes - Special Revenue Funds				
Description		**Amount**	**Calculation**	**Source**
Total Assessed Valuation		$ 1,733,143,503	A	Appendix A
Total Property Tax Rate		$ 0.00229945	B	Ada County Recorder ('08)
Total County Property Taxes		$ 3,985,268	A * B = C	Calculation
County Special Funds	**Allocation**	**Amount**	**Calculation**	**Source**
Total General Fund	20.4%	$ 814,965	C * Allocation = D	2008 Financials / Calc.

The estimated assessed valuation and the distribution of the tax funds generated by the Project to the Special Revenue Funds for various years during the development of the Project, as indicated below:

Special Revenue Funds - AV & Tax Collections						
	Year 5	Year 10	Year 15	Year 20	Year 30	Totals
Assessed Valuation	$ 103,087,350	$ 395,717,864	$ 798,786,409	$ 1,186,719,284	$ 1,733,143,503	$ 1,733,143,503
Total Tax Rate	0.002299445	0.002299445	0.002299445	0.002299445	0.002299445	0.002299445
Total Tax Collections	237,044	909,931	1,836,765	2,728,796	3,985,268	59,891,965
Allocation to Special Funds	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%
Special Funds Tax Collections	48,474	186,076	375,608	558,024	814,965	$ 12,247,576
Note: Values, subject to change.						

Special Revenue Funds; Requirement (d)

Although tax revenues are anticipated to provide the majority of funds to the Special Revenue Funds, other revenue sources will be contributed to the funds as well. The following table indicates the total property taxes anticipated to be generated as well as the methodology utilized in determining other funds that are anticipated to be contributed to the Special Revenue Funds as a result of the Project.

Special Revenue Funds - Revenues							
Description	**Amount**	**Calc.**	**Source**				
Ada County Population	359,035	A	US Census Bureau				
Project Population at Buildout	19,411	B	Developer Estimate, US Census Bureau				
Project County Taxes at Buildout	$ 3,985,268	C	Ada County 2008 Financials, Dev. Estimate				
Calculation	**D**	**E**	**F**	**E * F = G**	**G / A = H**	**B * H = I**	**D + I = J**
Special Revenue Fund	**Prop Tax**	**Other Rev**	**Applic.**	**Applic.**	**Rev/person**	**Total**	**Total**
All Special Revenue Funds	$ 814,965	$ 11,861,566	100.0%	$ 11,861,566	$ 33.04	$ 641,284	$ 1,456,249
Sources:							
D - Allocation represented in Ada County 2008 Financials.							
E - Ada County 2008 Financials.							
F - Estimate, See Appendix C.							
Note: Values, subject to change.							

The following table presents a summary of our findings related to the Project's anticipated impact on the revenues of the County's Special Revenue Funds, separated both by Fund as well as by revenue item for various time periods as well as totals for the thirty (30) year time period.

Special Revenue Funds - Revenue Items						
Summary	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Total Revenues	$ -	$ 203,751	$ 350,919	$ 492,487	$ 641,284	$ 10,737,622
Cumulative Revenues	$ 174,655	$ 916,054	$ 2,378,956	$ 4,539,680	$ 10,737,622	$ 10,737,622
Note: Values, subject to change.						

Further details and methodology of these findings relating to the revenues of the County's Special Revenue Funds as well as annual detailed estimates may be found under Appendix C to this Report.

Special Revenue Funds; Requirement (e)

The following table illustrates the anticipated net impacts on the County's Special Revenue Funds at various points throughout the development of the Project.

County Special Revenue Funds						
Revenues	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Property Tax Collections	$ 48,474	$ 186,076	$ 375,608	$ 558,024	$ 814,965	$ 12,247,576
Revenue Other Than Taxes	74,099	203,751	350,919	492,487	641,284	10,737,622
Total Revenues	$ 122,573	$ 389,827	$ 726,528	$ 1,050,511	$ 1,456,249	$ 22,985,198
Expenses	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Total Expenses	$ -	$ 428,814	$ 738,545	$ 1,036,489	$ 1,349,647	$ 22,598,411
Total Special Revenue Funds	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Total Net Impact	$ 122,573	$ (38,987)	$ (12,017)	$ 14,022	$ 106,602	$ 386,787
Note: Values, subject to change						

As illustrated above, the Project is anticipated to generate positive fiscal impacts to the County's Special Revenue Funds throughout the development of the Project and on a continuing basis once development is complete. Detailed explanations of the methodology employed in this Report as well as information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the County's Special Revenue Funds may be found in Appendix C.

Special Revenue Funds; Requirement (f)

Our findings indicate a positive fiscal impact on the County's Special Revenue Funds. Although not anticipated, any negative balances that may occur will be addressed with appropriate mitigation solutions.

Special Revenue Funds; Summary

The following table illustrates a summary of the findings related to the anticipated net impacts to the Special Revenue Funds at various points throughout the development of the Project.

Ada County Special Revenue Funds							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Population)	2,243	6,167	10,622	14,907	19,411	19,411
(b)	Resulting Expense	$ 155,949	$ 428,814	$ 738,545	$ 1,036,489	$ 1,349,647	$ 22,598,411
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Resulting Property Tax Revenue	48,474	186,076	375,608	558,024	814,965	12,247,576
(d)	Growth in Fee Revenue	74,099	203,751	350,919	492,487	641,284	10,737,622
(e)	Net Fiscal Impact (Annual)	(33,376)	(38,987)	(12,017)	14,022	106,602	386,787
(f)	Mitigation (None)	-	-	-	-	-	-
Note: Values, subject to change							

Given the preceding analysis, it is concluded that the Project will have a positive fiscal impact on Ada County's Special Funds with regard to both the incremental costs (operations) and marginal costs (capital facilities) of development.

Ada County Sheriff's Office, Requirements (a) – (f)

The Ada County Sheriff's Office ("ACSO") provides law enforcement services to unincorporated areas of the County as well as to the municipalities of Eagle, Kuna, and Star, which contract with the ACSO for law enforcement services. The ACSO operates the County jail, emergency communications and dispatch center, and a County driver license bureau. It also provides law enforcement records retention and evidence storage for itself and other law enforcement agencies in the area. The ACSO has stated in a letter to DPFG that it wishes to maintain its ratio of 0.88 patrol deputies per 1,000 residents, or approximately one (1) deputy per 460 households.

In addition to the services mentioned above, the ACSO also provides patrol services to construction zones. The ACSO does not charge additional fees for these services and no major additional costs are anticipated to be incurred. Lt. Dana Borgquist (ACSO) has stated that deputies patrol areas that are under construction as often as possible.

The County's current tax rate is $2.30 of which approximately 53 percent is allocated to the ACSO. The revenues that will be generated by the Project include the contractual cost amount requested, property taxes and fees and service tax revenues. Incremental expenses projected to result from the Project are anticipated to be consistent with current ACSO and County expenses.

The cost of a patrol deputy includes wages, benefits, equipment, and the costs of supporting services of the other ACSO bureaus, such as the jail. As a result of its calculations, and desire to maintain equity among Developers, the ACSO has entered into an arrangement with the Developer for the Developer to contribute a one-time service fee of $310.87 per residential building permit to be paid to ACSO on a quarterly basis based on the number of building permits issued by the County. The $310.87 fee represents the ACSO's estimate of 18 months of expenses which implies that an annual expense for ACSO to service one household is $207.25 ($310.87 x 12/18).

The ACSO has indicated that the contract arrangement with the Developer and the resulting revenue of $310.87 per residence is expected to be sufficient to cover anticipated ACSO incremental and marginal expenses caused by the Project. No additional mitigation is anticipated or expected by the ACSO for the Developer.

Detailed explanations of the methodology employed in the Report as well as information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the ACSO may be found in Appendix D. Correspondence documentation with the ACSO may be found in Appendix E.

Ada County Sheriff's Department							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Deputies)	2	5.36	9.24	12.96	16.88	16.88
(b)	Annual Incremental Expense	$ 185,936	$ 511,268	$ 880,555	$ 1,235,789	$ 1,609,162	$ 26,943,710
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Annual Incremental Tax Revenue	125,978	483,586	976,155	1,450,228	2,117,984	31,829,791
(d)	Annual Incremental Fee Revenues	80,247	220,654	380,032	533,344	694,485	11,628,424
(e)	Annual Net Fiscal Impact	20,289	192,973	475,632	747,783	1,203,308	16,514,505
(f)	Mitigation Contribution (Fee/Unit)	83,891	116,211	98,270	101,482	-	2,413,703
-	Ann. Net Fiscal Impact (inc. mitig.)	104,180	309,184	573,902	849,265	1,203,308	18,928,209
Note: Values, subject to change.							

Given the preceding analysis, it is concluded that the Project will have a positive fiscal impact on ACSO with regard to both the incremental costs (operations) and marginal costs (capital facilities) caused by its development. The Developer is committed to working with ACSO to ensure that the Project has a neutral or positive impact on ACSO even in the case that circumstances change in the future. We have submitted these findings to the ACSO which has preliminarily acknowledged them.

Ada County Emergency Medical Services District, Requirements (a) – (f)

The Project is located within the Ada County Emergency Medical Service District ("ACEMSD"), which has provided service to the County since 1975. ACEMSD provides life support services to 361,500 residents of Boise, Meridian, Garden City, Eagle, Star, Kuna and rural portions of the County and could possibly provide services to the Project. However, at this time the ACEMSD has indicated that they will not provide medical service to the Project. It is anticipated that the Kuna Rural Fire District ("KRFD") will be providing both fire and emergency services for the Project. In the event that this fact changes, we have explored the Project's potential impacts in two scenarios; (1) Scenario One – KFRD and (2) Scenario Two – ACEMSD.

Scenario One – KRFD

Kuna Fire District, Requirements (a) – (f)

The Project is currently not in the Kuna Rural Fire District ("KRFD"); however, the Developer and the KRFD are currently in negotiations to annex the Project into the KRFD which will provide both emergency and fire services to the Project. An annexation hearing is currently scheduled for November 12, 2008. The KRFD has undertaken a master planning effort which will address future capital facilities requirements and level-of-service standards. At this time, however, no specific capital facilities plans have been established. Chief Doug Rosin stated that currently the KRFD's level-of-service standards provide for a maximum response time of 10 minutes and currently seeks to provide a station within 10 miles of development in all areas served by the District.

KRFD policy requires that new areas served by the District achieve no net fiscal impact as a condition of annexation. Therefore, KRFD will seek mitigation measures to offset potential capital and operational shortfalls. The Developer will provide adequate mitigation to assure the maintenance of existing levels of service.

The Developer and KRFD are currently negotiating a Memorandum of Understanding ("MOU") to set forth terms for implementing mitigation measures. A final agreement is pending determination of the specific costs of the aforementioned mitigation measures, and the timing of when they will be implemented. It is anticipated that mitigation may include land donations and assistance for a fire station. The Developer anticipates final agreement will be reached in the near future.

The current revenues for the KRFD consist of property taxes and service fees. The current property tax rate for KRFD is $0.93, while incremental fee and service revenues amount to $41.39 per household (2008 dollars). It is estimated that, at build-out, the annual property taxes and service fee revenue generated by the Project will be approximately $1.6 million.

Incremental expenses which will result from the Project are anticipated to be generally consistent with KRFD's current expenses at build-out. The Project may cause a fiscal shortfall related to operations and maintenance expenses during the early years of development, which will be

mitigated pursuant to the terms of the agreement currently under negotiation by KRFD and the Developer.

The following table illustrates a summary of the findings related to the impacts that the Project will have on the KRFD at various points throughout the development of the Project. This table reflects stabilized revenues and expenses. Detailed annual results, as well as explanations of the methodology employed in the Report, and information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the KFRD may be found in Appendix D. Correspondence documentation with the KRFD may be found in Appendix E.

Kuna Fire District							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Households)	6	6	6	6	6	6
(b)	Annual Incremental Expense	$ 157,602	$ 433,359	$ 746,373	$ 1,047,476	$ 1,363,952	$ 22,837,943
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Annual Incremental Tax Revenue	95,560	366,823	740,461	1,100,067	1,606,593	24,144,423
(c)	Annual Incremental Fee Revenues	37,130	102,097	175,842	246,780	321,340	5,380,503
(d)	Annual Net Fiscal Impact	(24,912)	35,561	169,929	299,372	563,981	6,686,983
(f)	Mitigation Contribution	-	-	-	-	-	-
Note: Values, subject to change.							

Given the preceding analysis, it is concluded that the Project will have a net positive fiscal impact on KRFD with regard to the incremental costs (operations) caused by its development upon stabilization.

The Developer is committed to working with KRFD to ensure that the Project has a neutral or positive impact on KRFD even in the case that circumstances change in the future. We have submitted these findings to the KRFD which has preliminarily acknowledged them.

Scenario Two- ACEMSD

The ACEMSD has indicated that its current emergency response time is 8.59 minutes or less, and that one (1) ambulance is necessary for every 3,000 residents to maintain its current levels of service. The Project is anticipated to have a population of approximately 19,411 residents at build-out, which applied to the current ratio of ambulances to residents, indicates a need for six (6) additional ambulances (19,411 / 3,000) to serve the Project's residents.

The ACEMSD is currently working on a Capital Facilities Plan which will be completed in the near future; however, the ACEMSD has been unable to predict where new stations will be needed due to the rapid pace of growth within the District's boundaries. Darby Weston (ACEMSD) indicated that future EMS stations will be constructed where population growth occurs first. Projects that are anticipated to accommodate 20,000 or more residents are expected to donate one (1) acre of land near the main entrance of the Project that provides ingress/egress to the nearest major roadway. The ACEMSD has requested that staff be apprised of development that would affect population growth within its service areas, and would like to keep the development team informed of the ACEMSD's evolving capital facilities plans.

The Project would be responsible for contributing its pro rata share of the cost of building new capital facilities for ACEMSD in the area and/or mitigating any potential shortfalls. However, the types, quantities, and costs of on-site or off-site capital improvements that would be caused by the Project are currently unknown according to the ACEMSD.

The current revenues for ACEMSD include property tax revenues (tax rate of $0.11) and fee and service revenues of approximately $20.90 per resident (2008 dollars). Annual expenses will consist of both fixed expenditures, which would exist with or without the addition of any new development, and incremental expenditures would increase as new development increases. Potential incremental expenses projected to result from the Project would be anticipated to be consistent with current district expenses.

The Developer does not foresee any permanent incremental shortfalls that would occur from the development. Therefore, no mitigation is expected and/or is necessary from the Developer. The following table illustrates a summary of the findings related to the potential impacts that the Project would have on the ACEMSD at various points throughout the development of the Project. Detailed annual results, as well as explanations of the methodology employed in the Report, and information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the ACEMSD may be found in Appendix D. Correspondence documentation with the ACEMSD may be found in Appendix E.

Ada County Ambulance District							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Ambulances)	1	2	4	5	6	6
(b)	Annual Incremental Expense	$ 67,576	$ 185,813	$ 320,026	$ 320,026	$ 320,026	$ 6,969,912
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Annual Incremental Tax Revenue	11,125	42,707	86,207	128,074	187,046	2,810,992
(d)	Annual Incremental Fee Revenues	46,871	128,880	221,970	311,518	405,637	6,791,970
(e)	Annual Net Fiscal Impact	(9,580)	(14,226)	(11,848)	119,566	272,658	2,633,050
(f)	Mitigation	-	-	-	-	-	-
-	Ann. Net Fiscal Impact (inc. mitig.)	(9,580)	(14,226)	(11,848)	119,566	272,658	2,633,050
Note: Values, subject to change							

Given the preceding analysis, it is concluded that the Project would have a positive fiscal impact on ACEMSD with regard to the incremental costs (operations) caused by its development. The Developer would be committed to working with ACEMSD to ensure that the Project would have a neutral or positive impact on ACEMSD even in the case that circumstances change in the future. The results of the ACEMSD analysis are not included in the total impact of the Project, it has been provided for informational purposes in the event service providers change.

At this time no mitigation is necessary and/or expected from the ACEMSD from the Developer.

Ada County Pest Extermination District, Requirements (a) – (f)
The Ada County Pest Extermination District ("ACPED") has several crews that control pocket gophers, and yellow-bellied marmots outside of the city limits. This service is provided, without further charge, to those who pay into the pest control levy in their respective tax districts. The ACPED currently serves approximately 57,644 residents. Residents of the Project will also be served by ACPED. The ACPED may also be hired by schools and irrigation companies for a fee; however individuals within city limits may not hire ACPED at this time because they do not pay into the ACPED.

Revenues for the ACPED are generated through property taxes; the current tax levy is $0.12. Annual expenses will consist of both fixed expenditures, which would exist with or without the addition of the Project, and incremental expenditures which will increase as development within the Project increases. Incremental expenses projected to result from the Project are anticipated to be consistent with current district expenses.

In the initial years of the Project, the annual incremental expenses may exceed the incremental revenues; however the Project is anticipated to have an annual net positive impact after the initial years. As such, no mitigation is necessary and no requests have been made by ACPED.

The following table illustrates a summary of the findings related to the impacts that the Project will have on the ACPED at various points throughout the development of the Project. Detailed annual results, as well as explanations of the methodology employed in the Report, and information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the ACPED may be found in Appendix D. Correspondence documentation with the ACPED may be found in Appendix E.

Ada County Pest Extermination District							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Population)	2,243	6,167	10,622	14,907	19,411	19,411
(b)	Annual Incremental Expense	$ 16,701	$ 45,923	$ 79,094	$ 111,002	$ 144,539	$ 2,420,157
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Annual Incremental Tax Revenue	12,064	46,309	93,478	138,876	202,821	3,048,065
(d)	Annual Incremental Fee Revenues	195	535	921	1,293	1,684	28,192
(e)	Annual Net Fiscal Impact	(4,443)	920	15,305	29,167	59,966	656,099
(f)	Mitigation Contribution	-	-	-	-	-	-
Note: Values, subject to change.							

Given the preceding analysis, it is concluded that the Project will have a positive fiscal impact on ACPED with regard to both the incremental costs (operations) and marginal costs (capital facilities) caused by its development. The Developer is committed to working with ACPED to ensure that the Project has a neutral or positive impact on ACEPED even in the case that circumstances change in the future. We have submitted these findings to the ACPED which has preliminarily acknowledged them.

Boise School District #1, Requirements (a) – (f)

The Project is currently located within both the Boise School District No.1 ("BSD") and the Meridian School District No.2 ("MSD"); however, it is anticipated that the portion located within MSD will be annexed into BSD, which will become the Project's only school district. The BSD currently serves the City of Boise and parts of the unincorporated areas of Ada County. The BSD enrolls approximately 25,000 students of which approximately 53 percent are of Elementary School age, and 47 percent are of Secondary School age. The BSD has indicated that the average number of school age students per household is estimated to be 0.60. In August 2006, legislation was passed which made changes to school district funding in Idaho. School districts no longer rely as heavily on property tax funds for their expenditures as they previously did and now receive fund distributions from the State upon enrollment.

The Project is anticipated to have 7,764 households occupied upon build-out, which would indicate a need for school services to serve approximately 4,659 students, at ratios anticipated to be representative of the current student distribution among different grade levels. Utilizing the BSD's FY 08-09 budget, it is estimated that BSD's current operating revenues consist of the State subsidy of approximately $4,970 per individual pupil enrolled. Operational expenses for the BSD are limited to the amount of revenues received from the State because the BSD does not have the ability to raise operational revenues from other sources.

In the initial years of the Project, transportation costs per pupil housed within the Project may be higher than the current average transportation costs per student. However, the school facilities which will serve the Project have not yet been identified and as such it can not be determined whether operational shortfalls will result from increased transportation costs to service the Project. To the extent that a shortfall may exist, the Developer is committed to and is currently working with the BSD to address capital facilities and incremental costs associated with student transportation as needed.

The BSD and the Developer are currently in negotiations to establish adequate mitigation to assure the maintenance of existing levels of service. It is anticipated that potential mitigation measures may consists of land donations and transportation cost supplements. The BSD will formally be requesting three to five elementary school sites and one junior-high site in the near future; however, the location of the sites have not been determined yet. All mitigation measures will be detailed in the MOU currently under negotiation. To assist with capital facilities and equipment, the BSD currently imposes property taxes, which will also apply to the Project.

The following table illustrates a summary of the findings related to the impacts that the Project will have on the BSD at various points throughout the development of the Project. Detailed annual results, as well as explanations of the methodology employed in the Report, and information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the BSD may be found in Appendix D. Correspondence documentation with the BSD may be found in Appendix E.

Boise Independent School District No.1							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Students)	538	1,480	2,549	3,578	4,659	4,659
(b)	Annual Incremental Expense	$ 2,767,907	$ 7,610,921	$ 13,108,267	$ 18,396,417	$ 23,954,580	$ 401,094,135
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(d)	Ann. Inc. Fee Rev. (State Funds)	2,767,907	7,610,921	13,108,267	18,396,417	23,954,580	401,094,135
(e)	Annual Net Fiscal Impact	-	-	-	-	-	-
(f)	Mitigation Contribution (Bond Debt)	63,914	245,345	495,248	735,766	1,074,549	16,148,687
Note: Values, subject to change.							

Given the preceding analysis, it is currently anticipated that the Project will have a neutral fiscal impact on BSD with regard to the incremental costs (operations) caused by its development. The Developer is committed to working with BSD to identify the needed capital facilities and to provide adequate mitigation to assure the maintenance of existing levels of service.

The Developer is committed to working with BSD to ensure that the Project has a neutral or positive impact on BSD even in the case that circumstances change in the future. We have submitted these findings to the BSD which has preliminarily acknowledged them.

Ada County Highway District, Requirements (a) – (f)

The Project will be located within the Ada County Highway District ("ACHD"), which services all roadways within Ada County except those roadways that are part of the State or Federal Highway Systems. The ACHD has 2,130 lane miles of roads and streets in its jurisdiction. It is estimated that approximately 56.9 lane miles of roadways will be constructed and funded by the Developer to service the Project.

A one-time development impact fee of $1,422 (2008 dollars) per house will be assessed at the time of issuing a building permit on behalf of the ACHD. The ACHD's on-going sources of revenue include a district property levy and State Highway Distribution Account (i.e. gasoline tax and vehicle registration fees). It is anticipated that upon build-out, the Project will generate annual property tax revenues of approximately $1.6 million (2008 dollars), while the operating expenses of the roadways installed within the Project are estimated to cost $11,960 per lane mile, per year to maintain. This surplus, in addition to additional State Highway distributions resulting from the increased population of the Project may be utilized to maintain off site roadways that will service residents of the Project.

It is possible that prior to the construction of the planned commercial and retail components of the Project, that new residents will travel on county roads at an above average rate, potentially increasing the ACHD's costs to operate and maintain existing roads. However, the table below illustrates that a new homeowner within the Project will, on average, pay more per year in taxes than the typical existing homeowner within the ACHD which is anticipated to be adequate to offset any additional costs. In addition newly installed roads generally need minor maintenance and require fewer costs than roadways that have been in service for a number of years.

Comparison of ACHD Property Tax Revenues				
Average Residential Tax Bill	**Ada County**	**Project**	**Calculation**	**Source**
Average Home Value	$ 219,900	$ 265,739	A	Intermountain MLS, Estimate.
Homeowner's Exemption (1)	100,938	100,938	B	Idaho State Tax Commission
Average Assessed Valuation	118,962	164,801	A - B = C	Calculation
MHHD Tax Levy (2008)	0.000909533	0.000909533	D	Ada County Highway Dist.
Average Annual Tax Bill	$ 108.20	$ 149.89	C * D = E	Calculation
Footnote:				
(1) Maximum homeowner exemption is $100,938.				
Note: Values subject to change.				

The ACHD has not requested any form of mitigation, which is appropriate given that the project will contribute is pro rata share with taxes, service fees and impact fees.

Ada County Highway District							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Lane Miles)	13	26	39	52	57	57
(b)	Annual Incremental Expense	$ 123,647	$ 278,205	$ 432,763	$ 587,321	$ 680,056	$ 12,581,045
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Annual Incremental Tax Revenue	93,761	359,918	726,523	1,079,360	1,576,351	23,689,942
(d)	Annual Incremental Fee Revenues	104,754	288,042	496,094	696,229	906,583	15,179,770
(e)	Annual Net Fiscal Impact	478,806	929,313	1,263,024	1,676,903	1,802,877	37,910,673
(f)	Mitigation Contribution	-	-	-	-	-	-
Note: Values, subject to change.							

Given the preceding analysis, it is concluded that the Project will have a positive fiscal impact on ACHD with regard to both the incremental costs (operations) and marginal costs (capital facilities) of development.

The Developer is committed to working with ACHD to ensure that the Project has a neutral or positive impact on ACHD even in the case that circumstances change in the future. We have submitted these findings to the ACHD which has preliminarily acknowledged them.

Ada County Free Library District, Requirements (a) – (f)

The Project will be located within the jurisdiction of the Ada County Free Library District ("ACFLD"). The ACFLD estimates that it provides library services to approximately 43,000 residents in the City of Boise, Star City, and Hidden Springs including some rural areas. It is the goal of the ACFLD to maintain current standards of service with respect to facilities, book collection, availability and other criteria.

The ACFLD's current property tax rate is $0.58. It is estimated that at build-out, the annual property tax revenue generated by the Project will be approximately $1.0 million (2008 dollars). Incremental expenses projected to result from the Project are estimated to be consistent with the incremental property tax revenues which will be generated by the Project and collected by ACFLD.

The Developer is currently negotiating a MOU with the ACFLD to identify adequate mitigation to assure the maintenance of existing levels of service. At this time, it is anticipated that mitigation may consist of a one time fee per household.

The following table illustrates a summary of the findings related to the impacts that the Project will have on the ACFLD at various points throughout the development of the Project. Detailed annual results, as well as explanations of the methodology employed in the Report, and information sources and assumptions utilized in the estimation of the revenue and expense items employed to estimate the net fiscal impact on the ACFLD may be found in Appendix D. Correspondence documentation with the ACFLD may be found in Appendix E.

Ada County Free Library District							
Sub Element E-3 Requirements		**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
(a)	Public Service Need (Population)	2,243	6,167	10,622	14,907	19,411	19,411
(b)	Annual Incremental Expense	$ 167,227	$ 325,595	$ 471,941	$ 627,053	$ 751,463	$ 14,320,434
(c)	Growth in Assessed Value	103,087,350	395,717,864	798,786,409	1,186,719,284	1,733,143,503	1,733,143,503
(c)	Annual Incremental Tax Revenue	59,978	230,235	464,747	690,452	1,008,371	15,154,136
(d)	Annual Incremental Fee Revenues	38,651	106,278	183,042	256,885	334,499	5,599,622
(e)	Annual Net Fiscal Impact	(68,598)	10,918	175,848	320,285	591,407	6,433,325
(f)	Mitigation Contribution (None)	-	-	-	-	-	-
Note: Values, subject to change.							

Given the preceding analysis, it is anticipated that the Project will have a positive fiscal impact on the ACFLD with regard to the incremental costs (operations) caused by its development. The Developer is committed to working with the ACFLD to identify needed capital facilities and associated costs, and implementing appropriate measures to mitigate any potential adverse impact.

The Developer is committed to working with ACFLD to ensure that the Project has a neutral or positive impact on ACFLD even in the case that circumstances change in the future. We have submitted these findings to the ACFLD which has preliminarily acknowledged them.

ELEMENT E; CONCLUSION

The results of our analysis indicate that the Project will have a substantial cumulative net positive impact on the County's General Fund, and Special Revenue Funds over the thirty (30) year time-frame examined. Each Special District that will provide services to the Project is anticipated to have a cumulative net positive impact over the thirty (30) year time-frame as well, as indicated below.

Summary of Net Annual Fiscal Impacts						
County Revenues	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
General Fund Revenues	$ 1,345,339	$ 2,783,426	$ 4,362,571	$ 6,198,932	$ 7,501,379	$ 141,934,241
Special Revenue Fund Rev.	122,573	389,827	726,528	1,050,511	$ 1,456,249	22,985,198
Total County Revenues	$ 1,467,912	$ 3,173,253	$ 5,089,098	$ 7,249,443	$ 8,957,629	$ 164,919,439
Cumulative Revenues	$ 4,490,731	$ 16,791,134	$ 41,121,617	$ 73,485,326	$ 164,919,439	$ 164,919,439
County Expenses	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
General Fund Expenditures	$ 509,567	$ 1,210,385	$ 1,957,942	$ 2,738,531	$ 3,386,871	$ 59,801,449
Special Revenue Fund Exp.	155,949	428,814	738,545	1,036,489	1,349,647	22,598,411
Total County Expenditures	$ 665,516	$ 1,639,198	$ 2,696,487	$ 3,775,020	$ 4,736,518	$ 82,399,860
Cumulative Expenses	$ 1,795,038	$ 7,922,442	$ 19,393,617	$ 36,076,401	$ 82,399,860	$ 82,399,860
County Funds	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
General Fund	$ 835,772	$ 1,573,041	$ 2,404,629	$ 3,460,401	$ 4,114,509	$ 82,132,792
Special Revenue Funds	(33,376)	(38,987)	(12,017)	14,022	106,602	386,787
Surplus/(Deficiency)	$ 802,396	$ 1,534,054	$ 2,392,611	$ 3,474,423	$ 4,221,111	$ 82,519,579
Cumulative	$ 2,695,692	$ 8,868,692	$ 21,728,000	$ 37,408,926	$ 82,519,579	$ 82,519,579
Special Districts	**Year 5**	**Year 10**	**Year 15**	**Year 20**	**Year 30**	**Totals**
Ada County Sheriff's Department	$ 20,289	$ 192,973	$ 475,632	$ 747,783	$ 1,203,308	$ 16,514,505
Kuna Fire District	(24,912)	35,561	169,929	299,372	563,981	6,686,983
Ada County Pest Extermination Dis	(4,443)	920	15,305	29,167	59,966	656,099
Boise Independent School District N	-	-	-	-	-	-
Ada County Highway District	478,806	929,313	1,263,024	1,676,903	1,802,877	37,910,673
Ada County Free Library District	(68,598)	10,918	175,848	320,285	591,407	6,433,325
Total Taxing Districts	$ 401,141	$ 1,169,685	$ 2,099,739	$ 3,073,509	$ 4,221,539	$ 68,201,586
Cumulative	$ 1,069,275	$ 5,345,242	$ 14,288,651	$ 27,539,366	$ 68,201,586	$ 68,201,586
Note: Values subject to change.						

ELEMENT E, ECONOMIC IMPACT ANALYSIS

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