

RECEIVED

JUL 13 2009

DEPARTMENT OF
WATER RESOURCES

A. GENERAL INFORMATION

Permit No. 63-31933

1. Owner: Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter Day Saints Phone No.: 801-240-4074

Current Address: 50 East North Temple Street, Salt Lake City, UT 84150

2. Accompanied by: Darrin Heaps EXAM DATE: 6/24/2009

Address: 142 Smith Avenue, Suite B, Nampa, ID 83651-2355 Phone No. 208-467-2421

Relationship to Permit Holder: Facilities Manager

3. Source: Ground Water tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 63-31933, 63-32046, 63-32094, 63-32100

2. Other water rights with the same point of diversion: 63-32046, 63-32094, 63-32100

C. DIVERSION AND DELIVERY SYSTEM

- 1. Point(s) of Diversion:**

[illegible]

- 2. Place(s) of Use:** Indicate Method of Determination Exam, 2006 Photo

[illegible]

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe id as applicable. See Attachment D

Scale: 1" = _____

☒ Copy of USGS 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)

☒ Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
6-inch	Franklin	7.5	Submersible	Myers S Series 75 gpm	2-inch

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Totalizer	Sensus		65628649	2-inch	unknown

2. **Measurements:** _____ 160 gal in 120 seconds = 80 gpm Discharge pressure 50 psi _____

E. NARRATIVE/REMARKS/COMMENTS

A 7.5-hp submersible well pump supplies water for domestic use (this permit) and landscape irrigation (licenses 63-32046, 63-32094, and 63-32100) at The Church of Jesus Christ of Latter Day Saints' Caldwell Stake Center on Farmway Road. The well is 6-inch diameter with a completed depth of 185 feet. The well pump discharges through a pitless adapter to a well house located approximately 150 feet to the southwest from the well. Mechanical components in the well house include hydropneumatic tanks (4), pressure relief valve, backflow preventers, flow meter, sample taps, and pressure switches. The pump cycles between 40 and 60 psi. Underground piping extends to the Stake Center building located to the west of the well house.

The domestic use is regulated by Idaho Department of Environmental Quality and Southwest District Health Department (SWDHD) as a public water system. The domestic use within the Church facility include 14 toilets/urinals, 13 faucets, and 4 drinking fountains.

A separate well, pump, and distribution piping provides water for fire protection under water right permit 63-31933. The domestic water system is connected to the fire system (with backflow prevention) to maintain fire system pressure and to provide water for fire sprinklers.

Attachment A is a copy of the permit and the proof of beneficial use.

Attachment B is the well driller's report and pump performance curve.

Attachment C is a topographical map and aerial photo.

Attachment D is a diagram of the discharge system obtained from SWDHD.

Attachment E are photos of the place of use, point of diversion, and mechanical piping in the pump house.

Permitted water bearing zone was 50 to 300 feet. Water bearing zone developed is 165 to 185 feet.

Have conditions of permit approval been met? ☒ yes ☐ no

F. FLOW CALCULATIONS

Y Additional Computation Sheets Attached
Pump Curve (Attachment B)

Measured Method:

Flow Meter: 80 gpm (0.18 cfs) @ 50 psi

Pump Curve: 80 gpm at 210 feet TDH.

Static water level = 64 feet (well driller's report)

Specific Capacity = 8.75 gpm/ft (well driller's report)

Drawdown = 80 gpm / 8.75 gpm/ft = 9 feet

Discharge Pressure = 50 psi (115 feet)

Friction loss = 22 feet (assumed)

TDH = static water level + drawdown + discharge pressure + friction loss = 64 + 9 + 115 + 22 = 210 feet

Limit flow rate to permit rate of 0.04 cfs.

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses: 5 gpd/parishioner based on department standards for church facilities

Internal domestic uses for church: 52 Sundays x 800 members x 5 gpd/person = 208,000 gal/yr

313 other days x 200 members x 5 gpd/person = 313,000 gal/yr

521,000 total gal/yr/325850 gal/afa = 1.6 afa

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
Domestic	1/1 12/31	0.04 cfs	1.6 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

I. AUTHENTICATION

Field Examiner's Name Terry M. Scanlan, P.E., Certified Water Right Examiner 10-129 Date June 25, 2009

Field Examiner's Signature 

Reviewer _____ Date _____

SEAL





ATTACHMENT A
PERMIT RECORD AND PROOF OF BENEFICIAL USE

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-31933

Priority: April 20, 2004

Maximum Diversion Rate: 0.04 CFS

This is to certify, that CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS
50 E NORTH TEMPLE ST
SALT LAKE CITY UT 84150-6321

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
DOMESTIC	01/01 to 12/31	0.04 CFS

LOCATION OF POINT OF DIVERSION:

GROUND WATER NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, Twp 03N, Rge 03W, B.M., CANYON County

PLACE OF USE: DOMESTIC

Twp Rge Sec	NE				NW				SW				SE				
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
03N 03W 16						X											

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before June 01, 2009.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.
4. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
5. Water bearing zone to be appropriated is from 50 to 300 feet.
6. Domestic use is for 1 church meeting house and does not include lawn, garden, landscape, or other types of irrigation.
7. The domestic use authorized under this right shall not exceed 2,500 gallons per day.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 24th day of June, 2004.


for KARL J DREHER, Director

MICROFILMED

JUL 15 2004

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COMPLETION
FOR SUBMITTING PROOF OF BENEFICIAL USE

FOR OFFICE USE ONLY

Amt. of Fee \$: _____
Receipt No. _____
Receipt By: _____
Date Received: _____

The Idaho Department of Water

Resources considers this form a statement by the permit holder(s) that development of a water right has been completed and that water has been applied to beneficial use to the extent described below. This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner. Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an Assignment of Permit form. If you wish to relinquish your permit because you have not established the authorized use of the water and are not applying for an extension, please notify the Department in writing.

1. Permit No. 63-31933 Telephone No. 801-240-4074

2. Name of Permit Holder(s): The Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter Day Saints

3. Mailing Address: 50 E. N. Temple St. 12th Flr East COB City Salt Lake City

State UT Zip 84150 Email: johnsondw@lds church.org

4. Source of Water: Ground Water If **GROUND WATER** (well), Date Drilled: mo. May / yr. 2005

Well Driller: _____ Drilling Permit Number: 832114

5. Extent of use(s) completed (as authorized by the water right permit):

Domestic (No. of households): 1 church Stockwater (No. and type of stock): _____

Irrigation (No. of acres): _____ Other: _____

6. Total rate of diversion or storage volume for which proof is submitted: 0.04 cfs OR _____ acre-feet.

7. Compliance with a Measuring Device requirement and/or other Conditions of Permit: *(Refer to the approval conditions on your permit and respond accordingly.)*

Measuring Device: Is a measuring device required?

If yes, has the measuring device been installed?

Yes ☐ or No ☒
Yes ☐ or No ☐

Conditions of Permit: Does your permit require you to submit additional information in connection with your proof of beneficial use? (If yes, please list the conditions below and provide documents if necessary.)

NA

Completed?

Yes ☐ or No ☐

NA

Completed?

Yes ☐ or No ☐

8. Fee Enclosed: \$ NA (See Fee Schedule on back of the instructions for filing proof of beneficial use. Proofs filed without an appropriate fee, will be considered incomplete.)

9. Person to contact to accompany the Department representative during field examination of the water system.

Name: Darin Heaps Telephone Number: (208) 467-2421

Mailing Address: 142 Smith Ave. Ste B City Nampa

State ID Zip 83651 Email: Heaps WD@lds church.org

10. The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder:

W. F. Ridd AUTHORIZED AGENT
(include your title, if on behalf of company or organization)
Corporation of the Presiding Bishop of The Church of
Jesus Christ of Latter-day Saints, a Utah corporation sole.

Date: 7-6-09



ATTACHMENT B
WELL LOG AND PUMP CURVE

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

832114

Office Use Only

Well ID No. 402707

Inspected by _____

Twp _____ Rge _____ Sec _____

_____ 1/4 _____ 1/4 _____ 1/4

Lat: _____ Long: _____

1. WELL TAG NO. D 0038981
DRILLING PERMIT NO. 887749-832114
Water Right or Injection Well No. 63-31933

2. OWNER:

Name CHURCH OF JESUS CHRIST & LATTER DAY SAINTS
Address 50 E NORTH TEMPLE STREET
City SALT LAKE CITY State UT Zip 84150-6321

3. LOCATION OF WELL by legal description:

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

Twp. 3 North ☒ or South ☐
Rge. 3 East ☐ or West ☒
Sec. 16 1/4 NW 1/4 NW 1/4
Gov't Lot _____ County CANYONLat: _____ Long: _____
Address of Well Site FARMWAY ROAD, 1/8 MILE SOUTH OF
KARCHER ROAD City CALDWELL
(Give at least name of road - Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other PUBLIC WATER SYSTEM

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

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☐ Air Rotary ☐ Cable ☐ Mud Rotary ☒ Other REVERSE

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>3/4" BENTONITE</u>	<u>0</u>	<u>150</u>	<u>15,000*</u>	<u>DRY POUR</u>

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
<u>6"</u>	<u>+2</u>	<u>165</u>	<u>332</u>	<u>STEEL</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe 5'Packer ☐ Y ☒ N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method _____

Screen Type & Method of Installation JOHNSON WIRE WRAP

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>165</u>	<u>185</u>	<u>.030</u>		<u>6"</u>	<u>S.S</u>	☒	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
<u>#8-12 CSSISAND</u>	<u>150</u>	<u>193</u>	<u>9,000</u>	<u>DRY POUR</u>

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

74 ft. below ground Artesian pressure _____ ft.
Depth flow encountered _____ ft. Describe access port or control devices:
SANITARY WELL CAP

12. WELL TESTS:

☒ Pump ☐ Baller ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>175 gpm.</u>	<u>20'</u>	<u>164'</u>	<u>8 hrs</u>

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	N
<u>20"</u>	<u>0</u>	<u>5</u>	<u>TOP SOIL</u>			
	<u>5</u>	<u>11</u>	<u>CLECHY</u>			
	<u>11</u>	<u>13</u>	<u>BURNT CLAY</u>			
	<u>13</u>	<u>65</u>	<u>SAND, GRAVEL</u>			
	<u>65</u>	<u>87</u>	<u>BRN CLAY</u>			
	<u>87</u>	<u>89</u>	<u>MED SAND</u>			
	<u>89</u>	<u>97</u>	<u>BRN CLAY</u>			
	<u>97</u>	<u>112</u>	<u>FINE-MED SAND</u>			
	<u>112</u>	<u>127</u>	<u>BRN CLAY</u>			
	<u>127</u>	<u>130</u>	<u>FINE SAND</u>			
	<u>130</u>	<u>153</u>	<u>BRN CLAY</u>			
	<u>153</u>	<u>163</u>	<u>FINE SAND</u>			
	<u>163</u>	<u>187</u>	<u>FINE-COARSE SAND</u>			
	<u>187</u>	<u>193</u>	<u>BRN CLAY</u>			

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MAY 25 2005

WATER RESOURCES
WESTERN REGIONCompleted Depth 190' (Measurable)Date: Started 4-20-05 Completed 5-20-05

14. DRILLER'S CERTIFICATION

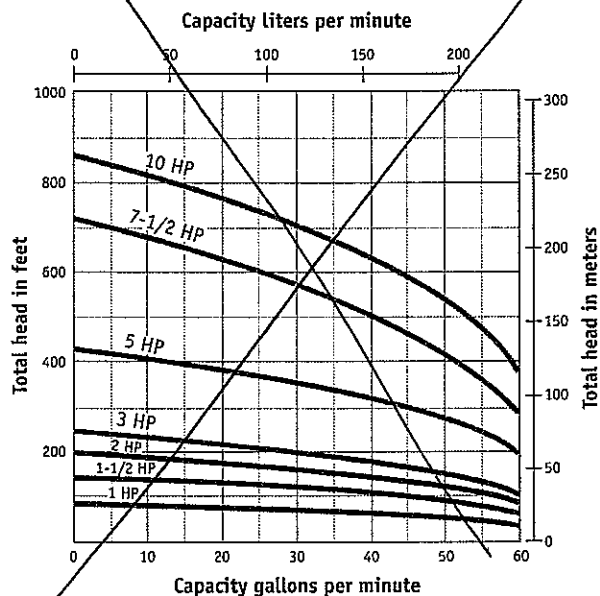
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name RIVERSIDE INC Firm No. 333

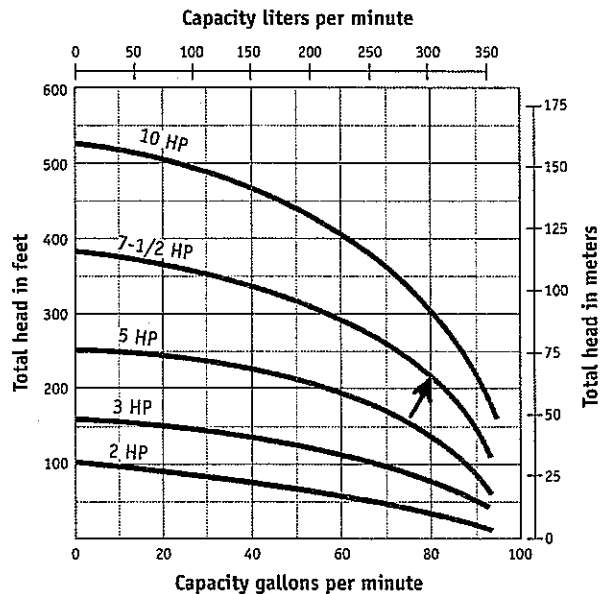
Principal Driller _____ Date _____

and Driller or Operator I _____ Date 5-23-05Operator Jeff Hash Date 5-23-05Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

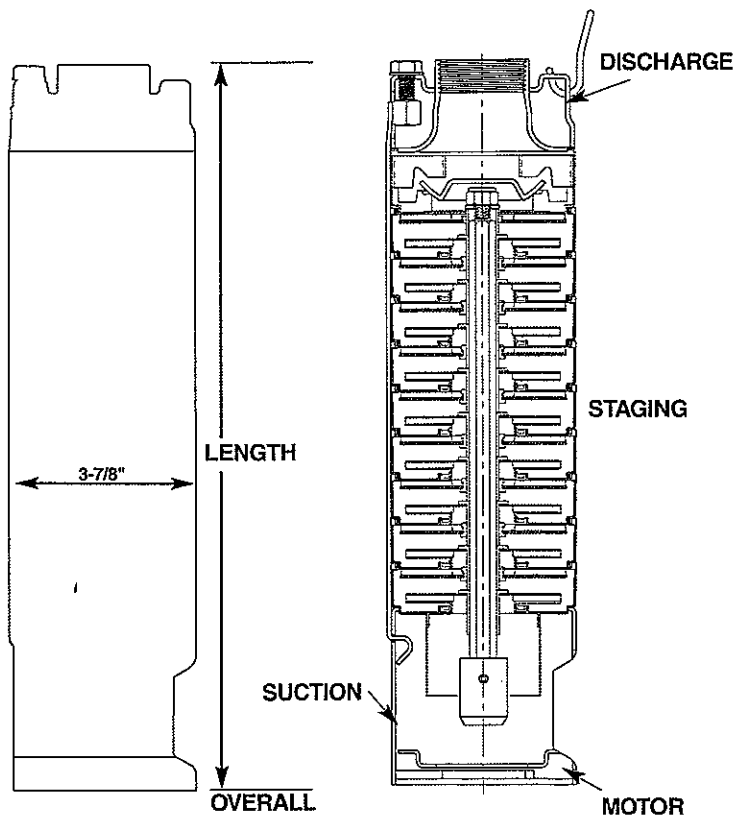
PUMP PERFORMANCE - 40 GPM



PUMP PERFORMANCE - 75 GPM



OUTLINE DIMENSIONS



DISCHARGE	
GPM	NPT
5	1-1/4
10	1-1/4
16	1-1/4
25	1-1/2
40	2
75	2

Dimensions (in inches) are for estimating purposes only.

PUMP PERFORMANCE

HP	2-Wire Cat. No.	3-Wire Cat. No.	Tank Pres.	Pump End Only	Pumping Depth in Feet																											
					0	20	40	60	80	100	120	140	160	180	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900			
25 GALLONS PER MINUTE																																
1/2	2S52-25-P4	3S52-25-P4	30	S5-25	15.0																											
3/4	2S72-25-P4	3S72-25-P4		S7-25	28.0	24.0	17.0																									
1	2S102-25-P4	3S102-25-P4		S10-25		33.0	30.0	27.0	22.5	17.0																						
1-1/2	2S152-25-P4	3S152-25-P4		S15-25				32.0	30.0	28.0	23.0	20.0	14.5																			
2		3S202-25		S20-25						31.0	28.0	27.0	23.5	20.0	15.0																	
3		3S302-25		S30-25								33.0	31.0	30.0	28.0	22.5	15.0															
5		3S502-25		S50-25														31.5	29.0	26.0	23.0	19.0										
7-1/2		3S752-25	S75-25																	32.0	30.0	29.0	27.5	25.5	23.0	20.5	19.0	14.5				
40 GALLONS PER MINUTE																																
1/2	2S52-25-P4	3S52-25-P4	40	S5-25																												
3/4	2S72-25-P4	3S72-25-P4		S7-25	24.0	18.0																										
1	2S102-25-P4	3S102-25-P4		S10-25		30.5	27.5	23.0	16.0																							
1-1/2	2S152-25-P4	3S152-25-P4		S15-25				30.5	28.0	24.5	19.5	14.0																				
2		3S202-25		S20-25					31.0	29.0	26.5	23.5	20.0	15.5																		
3		3S302-25		S30-25								31.0	29.5	28.0	26.0	19.5	14.0															
5		3S502-25		S50-25														30.5	28.0	25.0	21.5	17.0										
7-1/2		3S752-25	S75-25																	30.5	28.5	27.0	25.0	22.5	20.0	16.5						
40 GALLONS PER MINUTE																																
1	2S102-40-P4	3S102-40-P4	30	S10-40	30.0																											
1-1/2	2S152-40-P4	3S152-40-P4		S15-40		48.0	36.0	17.0																								
2		3S202-40		S20-40			52.0	45.0	35.0	20.0																						
3		3S302-40		S30-40					50.0	44.0	35.0	22.0																				
5		3S502-40		S50-20									55.0	53.0	49.0	41.0	22.0															
7-1/2				S75-40												54.0	49.5	45.5	39.5	31.0	19.0											
10				S100-40															51.0	47.0	43.5	36.0	27.0	18.0								
1	2S102-40-P4	3S102-40-P4	40	S10-40																												
1-1/2	2S152-40-P4	3S152-40-P4		S15-40	47.0	35.0	16.0																									
2		3S202-40		S20-40		52.5	45.5	35.5	20.5																							
3		3S302-40		S30-40				50.0	44.0	35.0	28.0																					
5		3S502-40		S50-40							55.0	53.0	50.0	41.0	22.5																	
7-1/2				S75-40												54.5	50.5	45.5	39.5	31.0	19.0											
10				S100-40															51.0	47.0	43.5	36.0	27.0	18.0								
75 GALLONS PER MINUTE																																
2			30	S20-75	37.0																											
3				S30-75	77.5	65.5	55.0	40.0																								
5				S50-75			86.0	82.0	76.5	70.0	60.5	45.0																				
7-1/2				S75-75					88.0	85.0	82.0	77.0	73.5	67.0	45.0																	
10				S100-75								88.0	86.0	84.0	77.5	67.5	54.0	35.0														
2			40	S20-75																												
3				S30-75	67.0	55.0	39.0																									
5				S50-75	89.0	86.0	81.5	76.5	69.5	60.0	44.0																					
7-1/2				S75-75					88.0	85.0	81.5	77.0	73.0	66.5	58.0	34.0																
10				S100-75								88.0	86.0	83.5	81.5	74.0	62.5	45.5														

ATTACHMENT C

TOPO MAP AND 2006 AERIAL PHOTO

T3N R3W

9

17

16

Legend

-  POD
-  POU
-  Sections

Permit 63-31933



0 175 350
Feet



T3N R3W

8

9

10

17

16

15

21

Legend

-  POD
-  POU
-  Sections

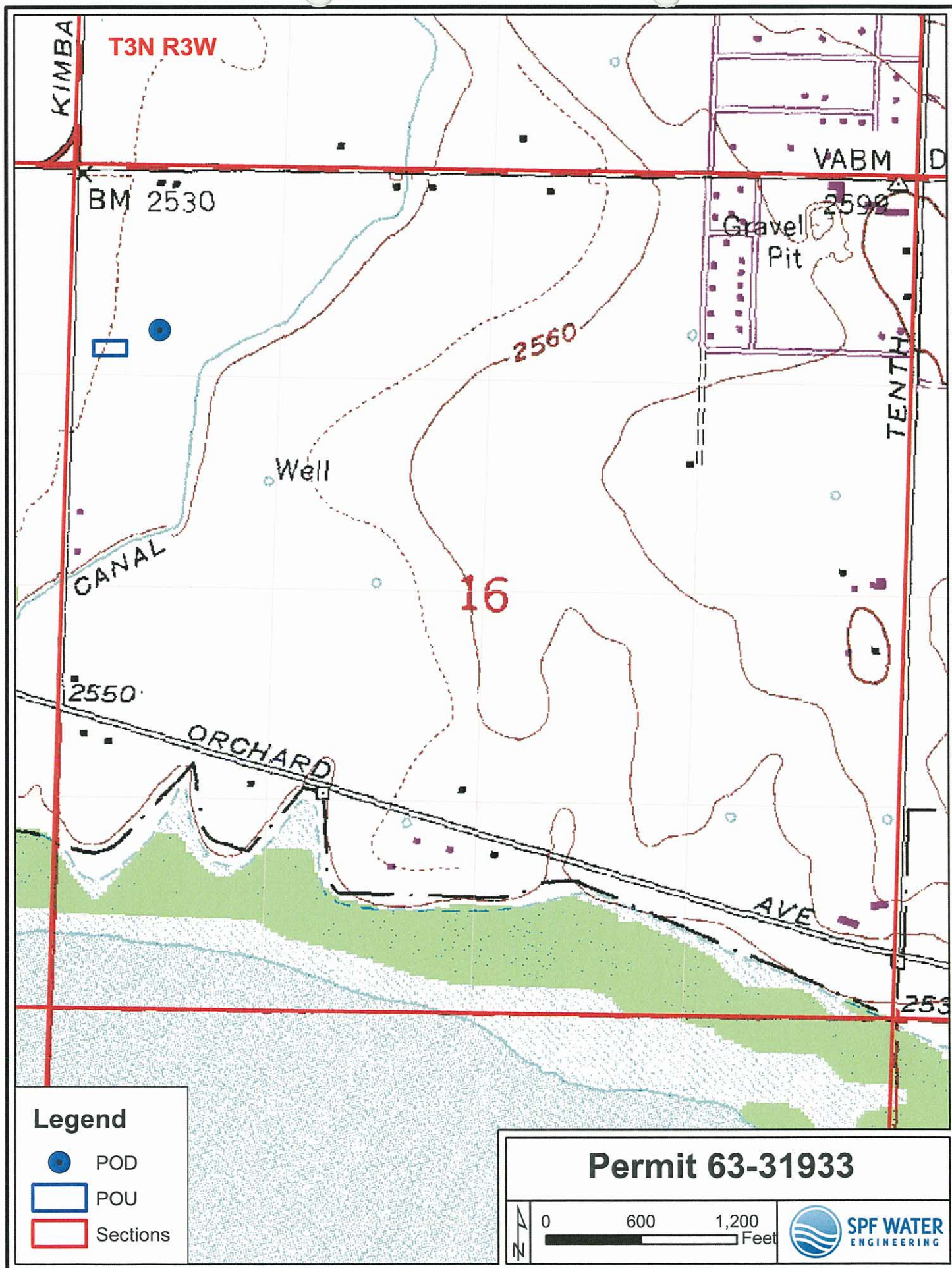
Permit 63-31933



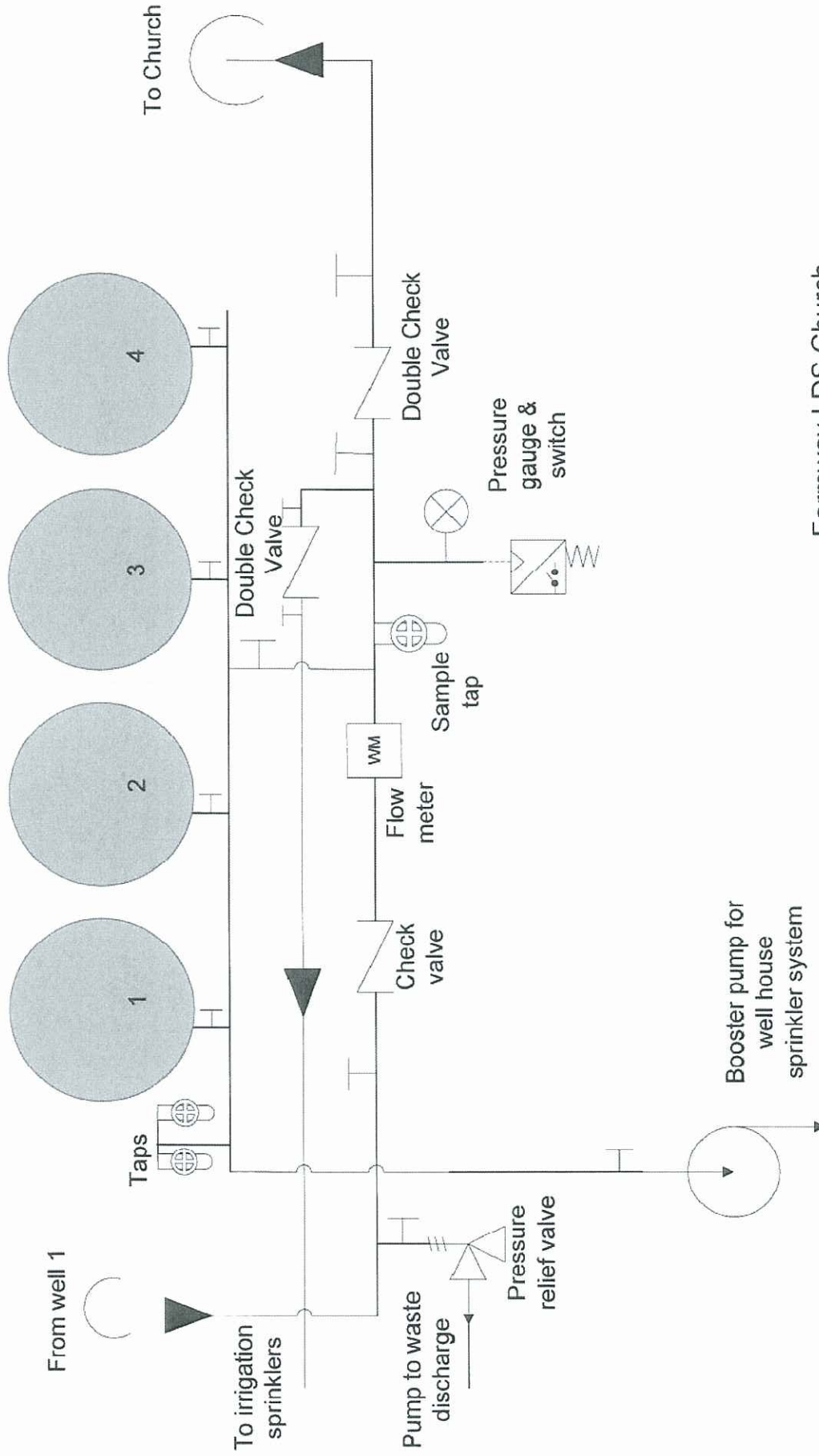
0 625 1,250 Feet



SPF WATER
ENGINEERING



ATTACHMENT D
SYSTEM DIAGRAM



Farmway LDS Church
 PWS # 3140241
 March 28, 2006

Fire protection well
 and plumbing

Diesel-fueled
 generator

ATTACHMENT E
PHOTOS



Point of Diversion and Place of Use



Domestic Storage Tanks and Pipe System



Flowmeter