

BANCROFT - LUND IRRIGATION WELLS
1998 ESTIMATES OF VOLUME WITHDRAWALS USING POWER RECORDS

NAME	DIVERSION NAME	WATER RIGHT NUMBER	STG	DIV. RATE	OTHER RIGHTS	TOTAL	MAX.	TOTAL	TOTAL	98 PCC	VOL.	MEAS
						WR RT CFC		KWH 1998	W. RT AC.FT	MEAS AC.FT	QUAL.	AC.FT.
CAMPBELL, JOSEPH		29-07000A	D	0.09		0.00	0.00	0	0.0	0.0	2	4
CHRISTENSEN, BART	LINEAR PIVOT	13-02269	D	4.42		4.42	2.03	89100	711.0	102.1	1	2
CHRISTENSEN, BART	ANDERSON WELL	13-07099	L	4.79		4.79	2.21	112000	918.0	149.6	2	2
CHRISTENSEN, BART	HEGSTROM WELL	13-07147	L	5.01	13-07099	4.79	3.71	66400	939.0	152.8	7	1
CITY OF BANCROFT	MAIN WELL	29-00560	D	2.00		2.00	0.00	0	0.0	0.0		1
CITY OF BANCROFT	RR WELL/BACK-UP WELL	29-00561	D	0.36		0.36	0.00	0	0.0	0.0		1
DIAMOND G FARMS	CRP WELL	29-07253	D	2.55		2.55	0.00	0	942.0	0.0	2	4
ELIASON & SONS INC		29-02347	D	1.20		1.20	0.00	0	285.0	0.0		
GEM VALLEY FARMS	PAULS	13-02203	D	3.14		3.14	1.71	76389	465.0	183.1	5	2
GEM VALLEY FARMS	HANSEN WELL	13-02259	D	2.10	13-07198C	3.76	2.06	73975	792.0	164.8	3	2
GEM VALLEY FARMS	DEEP WELL	13-07165	L	3.12	13-07261, 13-07198B	5.12	3.71	200000	927.0	277.2	3	2
GEM VALLEY FARMS	DWAIN CHRISTENSEN PLA	13-07198	P	5.23		5.23	3.92	83200	345.0	193.6	1	2
GEM VALLEY FARMS	HOME PLACE	29-02352	D	2.50		2.50	2.55	98080	687.0	222.9	2	2
GEM VALLEY FARMS	STANTON PLACE	29-07000B	D	4.41		4.41	3.14	128325	897.0	274.1	1	2
GEM VALLEY FARMS	HIGHWAY WELL	29-07070	D	4.68		4.68	4.57	84489	918.0	182.4	3	2
GIBSON, GRANT H	CRP	13-07068	L	3.20		3.20	0.00	0	480.0	0.0	2	4
GILBERT, J HARRIS		29-02467	D	1.90		1.90	0.00	34320	714.0	0.0	q	2
GILBERT, J HARRIS		29-07172	L	3.41	29-07371	3.41	0.00	32116	1144.5	0.0	q	2
GILBERT, J HARRIS	DIESEL PUMP	29-07172	L	3.41	29-07371	3.41	0.00	0	1144.5	0.0		1
GILBERT, MILTON L&YOST		29-07308	D	2.64		0.00	2.12	50025	0.0	93.3	1	2
GILBERT, MILTON L&YOST		29-07324	D	8.08		8.08	4.33	149964	1212.0	324.2	2	2
HOLSTEN, MARK	HOLSTEN OBS. WELL	13-07118		0.00	NON-USE WELL	0.00	0.00	0	0.0	0.0		6
JENKINS, JAY DELL	WAIVED	29-07352A	D	0.10		0.00	0.00	0	0.0	0.0		5
JORGENSEN, CARL	Jorgensen North Well	13-07161	D	4.54		4.54	3.50	30600	690.0	50.7	1	2
JORGENSEN, TERRY	Jorgensen South Well	13-02198	D	2.88	13-07005	3.82	2.22	42240	1065.0	74.0	5	2
JORGENSEN, TERRY(SMITH)	SMITH PLACE	13-07010	D	0.68		0.68	0.00	0	108.6	0.0	N	2
LLOYD, BEN & DAVID	MCNEIL PLACE	13-02278	D	5.45		5.45	3.96	177300	924.0	275.9	2	2
LLOYD, KEITH E		13-02312	D	3.00		3.00	2.00	0	690.0	0.0		1
LLOYD, WARREN P		13-02313	L	3.68		3.68	3.30	43808	829.5	91.0	5	1
MODERSITZKI, DAVID		29-02313	D	2.34	29-00580	4.68	1.93	43808	1002.0	87.4	1	2
OREGON SHORT LINE RAIL	WAIVED	29-04330	S	0.27		0.00	0.00	0	0.0	0.0		5
RIGBY, DON C	CHESTERFIELD WELL	29-02548	D	3.12	29-07061	5.86	5.03	120840	942.0	286.1	5	2
RIGBY, DON C	OLD FAITHFUL #1	29-07001	D	5.97		5.97	5.81	460160	1320.0	1047.0	8	2

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NAME	DIVERSION NAME	WATER RIGHT NUMBER	STG	DIV. RATE	OTHER RIGHTS	TOTAL	TOTAL	TOTAL	98 PCC	VOL.	MEAS	
						WR RT CFC	MAX. CFS	KWH	W. RT AC.FT	MEAS AC.FT	AC.FT	QUAL.
RIGBY, DON C	OLD FAITHFUL #2	29-07636	P	1.60	29-7637* (PD NOT ON	14.40	4.92	229840	2160.0	505.8	8	2
RIGBY, DON C	POND WELL	29-07636	P	1.60	29-7637* (PD NOT ON	14.40	0.26	0	2160.0	0.0	2	2
RIGBY, DON C	#1	29-07637	P	17.04	29-07636*	14.40	1.08	87400	2160.0	95.0	8	2
RIGBY, MAX D	LANDFILL WELL	29-02536	D	3.14		3.14	0.00	0	600.0	0.0	2	4
RIGBY, MAX D	CRP WELL	29-02537	D	1.90		1.90	0.00	0	285.0	0.0	2	4
RINDLISBAKER, LEON G		29-00534	D	0.28		0.00	0.00	0	0.0	0.0	2	4
RINDLISBAKER, TERRY G	LLOYD WELL	29-07098	D	4.79		4.79	3.52	139840	876.0	235.7	5	2
RINDLISBAKER, TERRY G	HANSEN/RUPP	29-07102	D	5.39	29-07264	6.68	4.65	116664	1384.0	163.5	8	2
RINDLISBAKER, TERRY G	LONGENBOHN WELL	29-07365A	L	2.74		2.74	2.51	79920	411.0	155.8	5	2
RINDLISBAKER, TERRY G	CHRISTENSEN WELL	29-07365B	L	1.54	29-07387	4.74	2.25	142050	711.0	186.8	1	2
SIMONSON, VON OR ERIC		13-07084	D	4.36	13-07259	4.36	4.12	143000	1110.0	259.9	2	2
SMITH, MARVIN (BEN&DAV		13-02197	D	3.48		3.48	1.96	91680	954.0	165.0	1	2
STODDARD FARMS OF GRAC		29-07434	D	3.34		3.34	3.31	152200	921.0	343.6	5	2
WELCH, CLIFFORD		29-02315	D	2.14	29-07443	2.81	3.22	70880	840.0	171.3	1	2
WISTISEN LIVESTOCK CO		29-07394	D	0.98		0.00	1.09	21472	0.0	60.4	1	2
WISTISEN, RAOUL		29-07041	D	4.68	29-7305	4.68	4.52	96160	2404.0	226.4	5	2
WISTISEN, STANLEY		29-07392	L	1.65		0.00	0.00	0	0.0	0.0	ND	1
YOST, GORDON R.	SCHENK WELL SOUTH	29-07352C	L	1.27	13-07419A	0.00	0.00	165850	0.0	0.0	Q	2
YOST, GORDON R.	SCHENK WELL NORTH	29-07419A	L	6.62	13-07352C	0.00	0.00	56800	0.0	0.0	Q	2
YOST, GORDON RAY		29-07080	D	2.53	29-07131, 29-07358,	0.00	2.27	111680	0.0	160.1	2	2
YOST, GORDON RAY		29-07131	L	2.24	29-07080, 29-07358,	0.00	0.00	49562	0.0	0.0	Q	2
YOST, GORDON RAY		29-07132	D	1.09		1.09	0.00	29494	273.0	0.0	Q	2
YOST, PHIL	Home Well	13-07097	D	4.46		4.46	4.12	91120	930.0	154.2	3	2
YOST, PHIL	Kim Welch West	13-07163	D	4.37	13-07225	4.37	2.51	95960	1356.0	142.0	3	2
YOST, PHIL	Kim Welch East	13-07163	D	4.37	13-07225	4.37	1.72	72238	1356.0	137.4	1	2
YOST, PHIL		29-02540	D	3.14		3.14	2.42	37584	471.0	100.6	1	2
YOST, PHIL	WAYNE PERKINS WELL	29-07446	D	1.89	29-07253	1.89	1.69	0	477.0	0.0	2	2
				192.90		211.81	115.98	4278533	42931.1	7495.7		

BANCROFT-LUND COMPARISON OF ACRE-FEET VOLUME
1996, 1997, 1998

NAME	POD	DIVERSION NAME	SITE_TAGNO	TOT_WR_AF	PCC_AF_96	PCC_AF_97	PCC_AF_98	OP_NUM	
CAMPBELL, JOSEPH	09S 39E 14	SWNE	A0000147	0.0	0.0	0.0	0.0	4	
CHRISTENSEN, BART	09S 40E 29	NESE	HEGSTROM WELL	A0004058	939.0	0.0	122.4	152.8	1
CHRISTENSEN, BART	09S 40E 21	SESW	ANDERSON WELL	A0004059	918.0	164.9	102.0	149.6	2
CHRISTENSEN, BART	09S 40E 23	SESW	LINEAR PIVOT	A0004060	711.0	128.6	115.6	102.1	2
CITY OF BANCROFT	08S 39E 22	NWNE	MAIN WELL	A0000145	0.0	0.0	0.0	0.0	1
CITY OF BANCROFT	08S 39E 22	SENW	RR WELL/BACK-UP WELL	A0000144	0.0	0.0	0.0	0.0	1
DIAMOND G FARMS	08S 39E 27	NWNE	CRP WELL	A0004905	942.0	0.0	0.0	0.0	4
ELIASON & SONS INC	08S 39E 8	SENW		285.0	0.0	0.0	0.0		
GEM VALLEY FARMS	09S 40E 20	NENW	HANSEN WELL	A0004130	792.0	178.9	133.3	164.8	2
GEM VALLEY FARMS	09S 40E 19	NENW	PAULS	A0004118	465.0	151.1	187.5	183.1	2
GEM VALLEY FARMS	09S 39E 13	NWSW	STANTON PLACE	A0004117	897.0	0.0	164.5	274.1	2
GEM VALLEY FARMS	09S 40E 18	SWSE	HOME PLACE	A0004119	687.0	0.0	223.2	222.9	2
GEM VALLEY FARMS	09S 40E 18	NENE	HIGHWAY WELL	A0004131	918.0	301.1	239.2	182.4	2
GEM VALLEY FARMS	09S 40E 29	SENW	DWAIN CHRISTENSEN PLA	A0004128	345.0	0.0	0.0	193.6	2
GEM VALLEY FARMS	09S 40E 20	SWSW	DEEP WELL	A0004129	927.0	278.8	193.6	277.2	2
GIBSON, GRANT H	10S 40E 7	SENE	CRP	A0007552	480.0	0.0	0.0	0.0	4
GILBERT, J HARRIS	08S 39E 5	SWNE		A0000140	714.0	0.0	0.0	0.0	2
GILBERT, J HARRIS	08S 39E 5	NWSE		A0000139	1144.5	0.0	0.0	0.0	2
GILBERT, J HARRIS	08S 39E 5	SENE	DIESEL PUMP	A0000141	1144.5	0.0	0.0	0.0	1
GILBERT, MILTON L&YOST	08S 39E 10	SESW		A0004064	0.0	0.0	91.3	93.3	2
GILBERT, MILTON L&YOST	08S 40E 30	NESE		A0004065	1212.0	0.0	286.5	324.2	2
HOLSTEN, MARK	09S 39E 24	SWSENE L2	HOLSTEN OBS. WELL	A0004100	0.0	0.0	0.0	0.0	6
JENKINS, JAY DELL	08S 39E 34	NESE	WAIVED		0.0	0.0	0.0	0.0	5
JORGENSEN, CARL	09S 40E 32	NWNW	Jorgensen North Well	A0003599	690.0	126.9	50.2	50.7	2
JORGENSEN, TERRY	10S 40E 5	SENW	Jorgensen South Well	A0003600	1065.0	64.1	43.3	74.0	2
JORGENSEN, TERRY(SMITH	10S 40E 5	SWSE	SMITH PLACE	A0004099	108.6	0.0	0.0	0.0	2
LLOYD, BEN & DAVID	09S 40E 22	NWNW	MCNEIL PLACE	A0003584	924.0	0.0	189.0	275.9	2
LLOYD, KEITH E	09S 39E 25	NWNW		A0004132	690.0	0.0	72.8	0.0	1
LLOYD, WARREN P	09S 39E 23	NENE		A0004116	829.5	0.0	105.2	91.0	1
MODERSITZKI, DAVID	08S 39E 15	NESW		A0000149	1002.0	91.5	120.4	87.4	2
OREGON SHORT LINE RAIL	08S 39E 22	NWNE	WAIVED		0.0	0.0	0.0	0.0	5
RIGBY, DON C	08S 40E 29	SENE	#1	A0004106	2160.0	14.0	72.0	95.0	2
RIGBY, DON C	08S 40E 21	NESE	OLD FAITHFUL #2	A0004104	2160.0	655.6	400.2	505.8	2
RIGBY, DON C	08S 40E 21	NESE	OLD FAITHFUL #1	A0004103	1320.0	1151.1	863.5	1047.0	2
RIGBY, DON C	08S 39E 10	SENE	CHESTERFIELD WELL	A0004107	942.0	344.0	319.0	286.1	2
RIGBY, DON C	08S 40E 16	NWSE	POND WELL	A0004101	2160.0	6.2	0.0	0.0	2
RIGBY, MAX D	08S 39E 16	NESW	CRP WELL		285.0	0.0	0.0	0.0	4

BANCROFT-LUND COMPARISON OF ACRE-FEET VOLUME
1996, 1997, 1998

NAME	POD	DIVERSION NAME	SITE_TAGNO	TOT_WR_AF	PCC_AF_96	PCC_AF_97	PCC_AF_98	OP_NUM
RIGBY, MAX D	08S 39E 16	SENE	LANDFILL WELL	A0004906	600.0	0.0	0.0	0.0 4
RINDLISBAKER, LEON G	09S 39E 3	SWNW			0.0	0.0	0.0	0.0 4
RINDLISBAKER, TERRY G	09S 40E 17	NENE	LONGENBOHN WELL	A0004109	411.0	79.9	69.0	155.8 2
RINDLISBAKER, TERRY G	09S 40E 15	SWNW	LLOYD WELL	A0004110	876.0	316.8	149.9	235.7 2
RINDLISBAKER, TERRY G	09S 40E 8	NWSE	CHRISTENSEN WELL	A0004108	711.0	0.0	69.5	186.8 2
RINDLISBAKER, TERRY G	09S 40E 15	NWSE	HANSEN/RUPP	A0004111	1384.0	370.6	197.7	163.5 2
SIMONSON, VON OR ERIC	09S 40E 27	SWNW		A0000148	1110.0	313.0	210.8	259.9 2
SMITH, MARVIN (BEN&DAV	10S 40E 8	NWNW		A0004908	954.0	0.0	76.3	165.0 2
STODDARD FARMS OF GRAC	09S 39E 14	NENW		A0004115	921.0	0.0	232.8	343.6 2
WELCH, CLIFFORD	09S 39E 2	SESE		A0004182	840.0	0.0	124.3	171.3 2
WISTISEN LIVESTOCK CO	08S 39E 14	SWSW		A0000143	0.0	0.0	75.7	60.4 2
WISTISEN, RAOUL	08S 39E 4	SWSE		A0000142	2404.0	0.0	279.5	226.4 2
WISTISEN, STANLEY	08S 39E 21	NWNE		A0000146	0.0	0.0	0.0	0.0 1
YOST, GORDON R.	08S 39E 34	NESE	SCHENK WELL SOUTH	A0004112	0.0	0.0	0.0	0.0 2
YOST, GORDON R.	08S 39E 34	SESE	SCHENK WELL NORTH	A0004067	0.0	0.0	0.0	0.0 2
YOST, GORDON RAY	09S 39E 10	NWNW		A0004068	0.0	0.0	0.0	0.0 2
YOST, GORDON RAY	09S 39E 2	SESW		A0004114	273.0	0.0	0.0	0.0 2
YOST, GORDON RAY	09S 39E 10	NENE		A0004113	0.0	0.0	278.6	160.1 2
YOST, PHIL	08S 39E 22	SESW	WAYNE PERKINS WELL	A0004066	477.0	0.0	72.5	0.0 2
YOST, PHIL	09S 40E 19	SENE	Kim Welch East	A0004061	1356.0	136.3	88.7	137.4 2
YOST, PHIL	09S 40E 19	NESW	Kim Welch West	A0004062	1356.0	109.5	89.5	142.0 2
YOST, PHIL	09S 40E 28	NENE	Home Well	A0004127	930.0	340.7	168.6	154.2 2
YOST, PHIL	08S 39E 34	NESE		A0004063	471.0	0.0	98.1	100.6 2
					42931.1	5323.6	6376.2	7495.7

VOLUME DATA QUALIFIERS

The following are data qualifiers for reported diversion volume information. They identify the status of the reported volume quantity. Different sets of qualifiers are used for volumes measured by (1) power consumption records, (2) permanent totalizing flow measuring devices and time clocks, or (3) open channel devices (weirs, flumes, rated sections, etc) and non-totalizing devices. Use these qualifiers in conjunction with reported diversion volume quantities in Appendix A.

This is a condensed version of the data qualifiers. See the *Summary of Data Collected, Volume Qualifiers* section of this report for greater detail and examples.

PCC Measurements

The following qualifiers apply to diversion volumes estimated with power records and may give data users an indication of the general degree of accuracy of calculated volumes as follows:

<u>Qualifier</u>	<u>Description</u>
Z	Zero pumpage based on zero energy consumption.
1	Simple systems with only one operating condition and minimal water level fluctuations where power records should work well. This includes systems where the flow rate and power consumption do not fluctuate significantly.
2	Systems with multiple operating conditions, all of which were measured and PCC varied ten percent or less, or varied more than ten percent but tracking is not required due to consistent changes (pivots with corner systems and/or end guns); estimate accuracy should be close to #1.
3	Systems with multiple operating conditions, all measured, PCC varied more than ten percent, tracking is required and owner reported percent of time at each condition; volume estimate accuracy may be similar to or slightly less than qualifiers 1 & 2 (above).
4	Systems with multiple operating conditions, all measured, PCC varied more than ten percent, tracking is required but was not reported by the owner or considered inaccurate and unreliable. Use the low PCC to calculate volume. Volume estimate may therefore be higher than actual diversions.
5	Systems with multiple operating conditions that were not all measured but can be measured so that a 2, 3, or 4 qualifier could be assigned in the future; or a system that needs re-measured (possibly due to system changes or incorrect initial measurements). Estimate accuracy less than qualifiers 1, 2 & 3.
6	Known problem with reported kwh data (e.g. CT's were out on power meter for part of year). Estimate is likely low because not all kwh consumed were reported.

- 7 Measured PCC during flowmeter check. Calculated PCC volume may not be as accurate, especially if system operation changes significantly.
- 8 PCC measured on a complex system where flowmeters or time clocks should probably be used. The PCC measurement used for calculating volume should be at high flow (low PCC) condition. Calculated volume estimates will usually be high since these systems are usually measured at capacity or additional loads were on the power meter.
- 9 PCC not measured, but may have been estimated based on system characteristics, location, results from other near by measurements, etc.
- N No PCC measurements made.
- Q The above qualifiers are not applicable, see comments or memo field for additional explanation.

Meters and Time Clocks

The following qualifiers apply to diversion volumes measured with permanently installed totalizing measuring devices or with time recording devices.

<u>Qualifier</u>	<u>Description</u>
PM	Partial year Measurement: Flowmeter not installed or not working properly for complete season, actual diversions greater than reported amount.
FE	Full year Estimate: An estimate for the full year based on partial data when flowmeter data is not available for the full season.
MR	Monthly Recordings: Owner reported flowmeter measurements, monthly readings recorded.
NM	No Monthly recordings: Owner reported flowmeter measurements, monthly readings NOT recorded.
EM	Erroneous measurement: Owner reported flowmeter measurements are obviously incorrect, usually because flowmeter is not accurate or operating properly. Actual amount could be higher or lower.
ND	No Device: Flowmeters or time clocks have not been installed or the user's annual report did not include any meter readings. Diversions have likely occurred and the reported volume of zero is erroneous.
Z	Zero pumpage: Non-use of a diversion per flowmeter and/or confirmation from the operator.
OW	Other Well: One flowmeter is used to measure more than one well, the volume entered for this well is zero, and the volume measured by the flowmeter is in another record. See database field VIWAW for reference to record with measurement data.

Bancroft - Lund Area
Water Level Measurement Wells

Date: 4/15/99

Keith Lloyd Well -A0004132				Warren Lloyd Well - A0004116				Holsten Observation Well (A0004100)			
Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:
06/11/68	42.1		USGS	05/01/96	71.8	S	DWR	07/09/96	74.4		DWR
10/25/83	41.2		USGS	06/06/96	73.8	S	DWR	09/11/96	66.38	S	DWR
05/01/96	49.5		DWR	06/10/96	92.3	P	WM	10/10/96	67.2	S	WM
06/20/96	64.0	S	WM	06/20/96	92.3	P	WM	06/16/97	69.50	S	WM
07/02/96	74.0	P	WM	06/27/96	92.7	P	WM	06/20/97	68.30	S	WM
07/10/96	80.0	P	WM	07/02/96	89.7	P	WM	06/25/97	69.50	S	WM
07/15/96	73.0	S	WM	07/06/96	76.8	S	WM	07/08/97	69.05	S	DWR
08/02/96	52.0	S	WM	07/09/96	102.2	P	DWR	07/21/97	69.30	S	WM
08/22/96	60.2	S	DWR	07/11/96	104.0	P	DWR	06/08/98	69.47	S	WM
10/10/96	50.0	S	WM	07/12/96	103.5	P	DWR	06/26/98	69.30	S	WM
10/11/96	50.0	S	WM	07/16/96	93.7	P	WM	07/01/98	69.05	S	WM
06/06/97	46.3	S	WM	07/24/96	101.5	P	WM	07/04/98	72.13	S	WM
06/13/97	46.3	S	WM	07/30/96	80.30	S	WM	07/09/98	71.22	S	WM
06/27/98	46.33	S	WM	08/12/96	105.0	P	WM	07/14/98	67.80	S	WM
07/01/98	44.0	S	WM	08/21/96	78.7	S	WM	07/16/98	68.30	S	WM
07/04/98	45.0	S	WM	09/11/96	77.1	S	WM	07/21/98	65.80	S	WM
07/21/98	44.0	S	WM	10/10/96	73.4	S	DWR	09/18/98	66.62	S	DWR
11/03/98	44.0	S	WM	06/06/97	67.3	S	WM	11/03/98	65.80	S	DWR
				06/25/97	67.8	S	WM	04/08/99	67.77	S	DWR
				07/12/97	68.3	S	WM				
Calvin Lloyd Well (Stoddard Farms) - A0004115				06/08/98	67.3	S	WM	Don Rigby- by Pond Well - A0004102(Abandoned)			
Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:
06/06/96	77.0	S	DWR	06/26/98	67.3	S	WM	05/21/96	74.4	S	Hudson Engin
10/10/96	80.4	S	DWR	07/09/98	67.8	S	WM	05/21/96	106.0	P@ 4101	Hudson Engin
06/06/97	70.2	S	WM	09/18/98	70.43	S	DWR	06/05/96	109.0	P@ 4101	DWR
06/13/97	70.2	S	WM	04/08/99	65.33	S	DWR	06/10/96	109.4	P@ 4101	DWR
06/25/97	76.8	P	WM					07/11/96	74.4	S	Hudson Engin
06/08/98	79.0	P	WM	Warren Lloyd Well -A0004116(Abandoned)				10/11/96	103.8	S	DWR
07/01/98	70.25	S	WM	Date	Water Level	P=Pumping S=Static	Measured by:	06/24/97	70.25	S	WM
07/09/98	76.83	P	WM	06/06/97	65.7	S	WM	06/29/98	70.25	S	WM
07/21/98	81.5	P	WM	06/25/97	66.0	S	WM	07/13/98	71.17	S	WM
11/03/98	72.0	S	WM	06/26/98	66.2	S	WM	04/09/99	70.11	S	DWR
				07/09/98	66.03	S	WM	Rindlsbaker - Christensen Well-A0004108			
				07/21/98	64.2	S	WM	Date	Water Level	P=Pumping S=Static	Measured by:
Carl Jorgensen North Well - A0003599				09/18/98	67.08	S	DWR	10/11/96	130.0	S	
Date	Water Level	P=Pumping S=Static	Measured by:	11/03/98	64.2	S	WM	07/09/97	146.6	P	
07/02/96	113.90		WM	04/08/99	Well plugged @33'		DWR				
07/11/96	113.4		WM								
08/01/96	112.4		WM								
06/13/97	112.7	S	WM	Yost Well - A0004067				Rindlsbaker-Longenbohn Well-A0004109			
06/27/98	112.65	S	WM	Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:
07/13/98	112.65	S	WM	06/25/97	126.6	S		06/05/96	139.0	S	DWR
04/09/99	113.01	S	DWR					10/11/96	134.8	S	DWR
								04/09/99	136.76	S	DWR
				Chad Neibaur Well - A0004119							
				Date	Water Level	P=Pumping S=Static	Measured by:				
				06/16/97	101.0	S					
				06/29/98	101.0	S					

BANCROFT-LUND GROUND WATER MANAGEMENT AREA

Ground Water Hydrographs

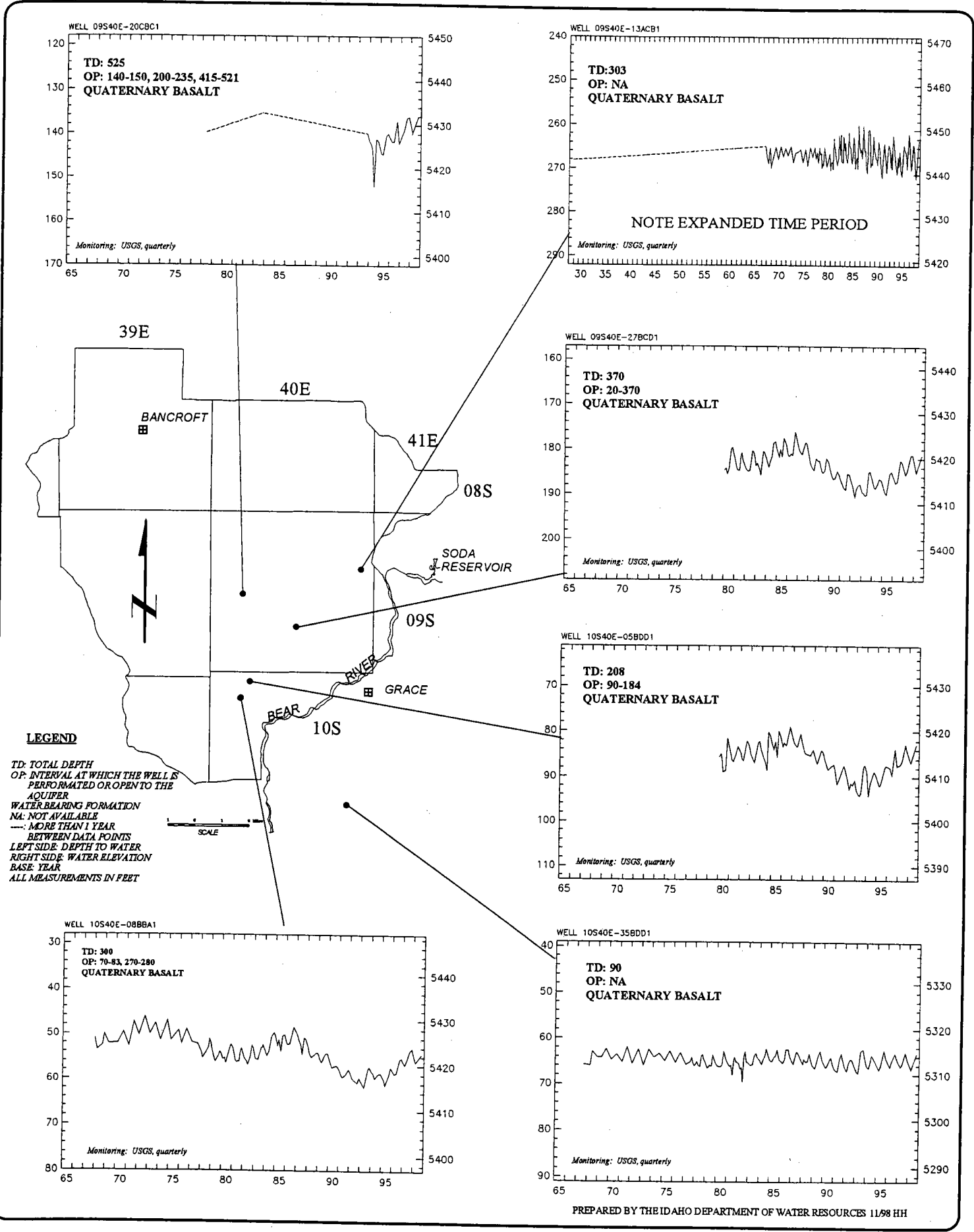


Figure ___

08S39E

08S40E

A0004107

A0004064

A0004906

A0004101

A0004103

A0004066

A0004905

A0004065

A0004106

A0004063

A0004112

A0004067

09S40E

A0004112

A0004068

A0004113

A0004114

A0004108

A0004108

A0004109

A0004131

A0004110

A0004111

09S39E

A0004115

A0004117

A0004119

A0004118

A0004116

A0004130

A0003584

A0004105

A0004082

A0004129

A0004083

A0004127

A0004600

A0004132

A0004128

A0004658

A0003599

A0003600

A0004099

A0004908

A0007552

10S39E

10S40E

BANCROFT - LUND IRRIGATION WELLS
1998 ESTIMATES OF VOLUME WITHDRAWALS USING POWER RECORDS

NAME	DIVERSION NAME	WATER RIGHT NUMBER	STG	DIV. RATE	OTHER RIGHTS	TOTAL WR RT CFC	MAX. CFS	TOTAL KWH 1998	TOTAL W. RT AC.FT	98 PCC MEAS AC.FT	VOL. AC.FT. QUAL.	MEAS OP NO.
CAMPBELL, JOSEPH		29-07000A	D	0.09		0.00	0.00	0	0.0	0.0	Z	④
CHRISTENSEN, BART	LINEAR PIVOT	13-02269	D	4.42		4.42	2.03	89100	711.0	102.1	1	2
CHRISTENSEN, BART	ANDERSON WELL	13-07099	L	4.79		4.79	2.21	112000	918.0	149.6	2	2
CHRISTENSEN, BART	HEGSTROM WELL	13-07147	L	5.01	13-07099	4.79	3.71	66400	939.0	152.8	7	1
CITY OF BANCROFT	MAIN WELL	29-00560	D	2.00		2.00	0.00	0	0.0	0.0		1
CITY OF BANCROFT	RR WELL/BACK-UP WELL	29-00561	D	0.36		0.36	0.00	0	0.0	0.0		1
DIAMOND G FARMS (SIRGELINS CRP WELL)		29-07253	D	2.55	(ALL PAID)	2.55	0.00	0	942.0	0.0	Z	④
ELIASON & SONS INC		29-02347	D	1.20		1.20	0.00	0	285.0	0.0		
GEM VALLEY FARMS	PAULS	13-02203	D	3.14		3.14	1.71	76389	465.0	183.1	5	2
GEM VALLEY FARMS	HANSEN WELL	13-02259	D	2.10	13-07198C	3.76	2.06	73975	792.0	164.8	3	2
GEM VALLEY FARMS	DEEP WELL	13-07165	L	3.12	13-07261, 13-07198B	5.12	3.71	200000	927.0	277.2	3	2
GEM VALLEY FARMS	DWAIN CHRISTENSEN PLA	13-07198	P	5.23		5.23	3.92	83200	345.0	193.6	1	2
GEM VALLEY FARMS	HOME PLACE	29-02352	D	2.50		2.50	2.55	98080	687.0	222.9	2	2
GEM VALLEY FARMS	STANTON PLACE	29-07000B	D	4.41		4.41	3.14	128325	897.0	274.1	1	2
GEM VALLEY FARMS	HIGHWAY WELL	29-07070	D	4.68		4.68	4.57	84489	918.0	182.4	3	2
GIBSON, GRANT H	CRP	13-07068	L	3.20		3.20	0.00	0	480.0	0.0	Z	④
GILBERT, J HARRIS		29-02467	D	1.90		1.90	0.00	34320	714.0	0.0	Q	2
GILBERT, J HARRIS		29-07172	L	3.41	29-07371	3.41	0.00	32116	1144.5	0.0	Q	2
GILBERT, J HARRIS	DIESEL PUMP	29-07172	L	3.41	29-07371	3.41	0.00	0	1144.5	0.0		1
GILBERT, MILTON L&YOST		29-07308	D	2.64		0.00	2.12	50025	0.0	93.3	1	2
GILBERT, MILTON L&YOST		29-07324	D	8.08		8.08	4.33	149964	1212.0	324.2	2	2
HOLSTEN, MARK	HOLSTEN OBS. WELL	13-07118		0.00	NON-USE WELL	0.00	0.00	0	0.0	0.0		6
JENKINS, JAY DELL	WAIVED	29-07352A	D	0.10		0.00	0.00	0	0.0	0.0		⑤
JORGENSEN, CARL	Jorgensen North Well	13-07161	D	4.54		4.54	3.50	30600	690.0	50.7	1	2
JORGENSEN, TERRY	Jorgensen South Well	13-02198	D	2.88	13-07005	3.82	2.22	42240	1065.0	74.0	5	2
JORGENSEN, TERRY(SMITH	SMITH PLACE	13-07010	D	0.68		0.68	0.00	0	108.6	0.0	N	2
LLOYD, BEN & DAVID	MCNEIL PLACE	13-02278	D	5.45		5.45	3.96	177300	924.0	275.9	2	2
LLOYD, KEITH E		13-02312	D	3.00		3.00	2.00	0	690.0	0.0		1
LLOYD, WARREN P		13-02313	L	3.68		3.68	3.30	43808	829.5	91.0	5	1
MODERSITZKI, DAVID		29-02313	D	2.34	29-00580	4.68	1.93	43808	1002.0	87.4	1	2
OREGON SHORT LINE RAIL	WAIVED	29-04330	S	0.27		0.00	0.00	0	0.0	0.0		⑤
RIGBY, DON C	CHESTERFIELD WELL	29-02548	D	3.12	29-07061	5.86	5.03	120840	942.0	286.1	5	2
RIGBY, DON C	OLD FAITHFUL #1	29-07001	D	5.97		5.97	5.81	460160	1320.0	1047.0	8	2

BANCROFT - LUND IRRIGATION WELLS
1998 ESTIMATES OF VOLUME WITHDRAWALS USING POWER RECORDS

NAME	DIVERSION NAME	WATER RIGHT NUMBER	STG	DIV. RATE	OTHER RIGHTS	TOTAL WR RT CFC	MAX. CFS	TOTAL KWH 1998	TOTAL W. RT AC.FT	98 PCC MEAS AC.FT	VOL. AC.FT. QUAL.	MEAS OP NO.
RIGBY, DON C	OLD FAITHFUL #2	29-07636	P	1.60	29-7637* (PD NOT ON	14.40	4.92	229840	2160.0	505.8	8	2
RIGBY, DON C	POND WELL	29-07636	P	1.60	29-7637* (PD NOT ON	14.40	0.26	0	2160.0	0.0	2	2
RIGBY, DON C	#1	29-07637	P	17.04	29-07636*	14.40	1.08	87400	2160.0	95.0	8	2
RIGBY, MAX D	LANDFILL WELL	29-02536	D	3.14		3.14	0.00	0	600.0	0.0	2	④
RIGBY, MAX D	CRP WELL	29-02537	D	1.90		1.90	0.00	0	285.0	0.0	2	④
RINDLIBAKER, LEON G		29-00534	D	0.28		0.00	0.00	0	0.0	0.0	2	④
RINDLIBAKER, TERRY G	LLOYD WELL	29-07098	D	4.79		4.79	3.52	139840	876.0	235.7	5	2
RINDLIBAKER, TERRY G	HANSEN/RUPP	29-07102	D	5.39	29-07264	6.68	4.65	116664	1384.0	163.5	8	2
RINDLIBAKER, TERRY G	LONGENBOHN WELL	29-07365A	L	2.74		2.74	2.51	79920	411.0	155.8	5	2
RINDLIBAKER, TERRY G	CHRISTENSEN WELL	29-07365B	L	1.54	29-07387	4.74	2.25	142050	711.0	186.8	1	2
SIMONSON, VON OR ERIC		13-07084	D	4.36	13-07259	4.36	4.12	143000	1110.0	259.9	2	2
SMITH, MARVIN (BEN&DAV		13-02197	D	3.48		3.48	1.96	91680	954.0	165.0	1	2
STODDARD FARMS OF GRAC		29-07434	D	3.34		3.34	3.31	152200	921.0	343.6	5	2
WELCH, CLIFFORD		29-02315	D	2.14	29-07443	2.81	3.22	70880	840.0	171.3	1	2
WISTISEN LIVESTOCK CO		29-07394	D	0.98		0.00	1.09	21472	0.0	60.4	1	2
WISTISEN, RAOUL		29-07041	D	4.68	29-7305	4.68	4.52	96160	2404.0	226.4	5	2
WISTISEN, STANLEY		29-07392	L	1.65		0.00	0.00	0	0.0	0.0	ND	1
YOST, GORDON R.	SCHENK WELL SOUTH	29-07352C	L	1.27	13-07419A	0.00	0.00	165850	0.0	0.0	Q	2
YOST, GORDON R.	SCHENK WELL NORTH	29-07419A	L	6.62	13-07352C	0.00	0.00	56800	0.0	0.0	Q	2
YOST, GORDON RAY		29-07080	D	2.53	29-07131, 29-07358,	0.00	2.27	111680	0.0	160.1	2	2
YOST, GORDON RAY		29-07131	L	2.24	29-07080, 29-07358,	0.00	0.00	49562	0.0	0.0	Q	2
YOST, GORDON RAY		29-07132	D	1.09		1.09	0.00	29494	273.0	0.0	Q	2
YOST, PHIL	Home Well	13-07097	D	4.46		4.46	4.12	91120	930.0	154.2	3	2
YOST, PHIL	Kim Welch West	13-07163	D	4.37	13-07225	4.37	2.51	95960	1356.0	142.0	3	2
YOST, PHIL	Kim Welch East	13-07163	D	4.37	13-07225	4.37	1.72	72238	1356.0	137.4	1	2
YOST, PHIL		29-02540	D	3.14		3.14	2.42	37584	471.0	100.6	1	2
YOST, PHIL PERKINS	(Diamond G. WAYNE PERKINS WELL)	29-07446	D	1.89	29-07253	1.89	1.69	0	477.0	0.0	2	2
						192.90	211.81	115.98	4278533	42931.1	7495.7	

BANCROFT-LUND COMPARISON OF ACRE-FEET VOLUME
1996, 1997, 1998

NAME	POD	DIVERSION NAME	SITE_TAGNO	TOT_WR_AF	PCC_AF_96	PCC_AF_97	PCC_AF_98	OP_NUM	
CAMPBELL, JOSEPH	09S 39E 14	SWNE	A0000147	0.0	0.0	0.0	0.0	4	
CHRISTENSEN, BART	09S 40E 29	NESE	HEGSTROM WELL	A0004058	939.0	0.0	122.4	152.8	1
CHRISTENSEN, BART	09S 40E 21	SESW	ANDERSON WELL	A0004059	918.0	164.9	102.0	149.6	2
CHRISTENSEN, BART	09S 40E 23	SESW	LINEAR PIVOT	A0004060	711.0	128.6	115.6	102.1	2
CITY OF BANCROFT	08S 39E 22	NWNE	MAIN WELL	A0000145	0.0	0.0	0.0	0.0	1
CITY OF BANCROFT	08S 39E 22	SESW	RR WELL/BACK-UP WELL	A0000144	0.0	0.0	0.0	0.0	1
<u>PERKINS</u> DIAMOND G FARMS	08S 39E 27	NWNE	<u>CRP WELL</u>	A0004905	942.0	0.0	0.0	0.0	4
ELIASON & SONS INC	08S 39E 8	SESW		285.0	0.0	0.0	0.0	0.0	
GEM VALLEY FARMS	09S 40E 20	NENW	HANSEN WELL	A0004130	792.0	178.9	133.3	164.8	2
GEM VALLEY FARMS	09S 40E 19	NENW	PAULS	A0004118	465.0	151.1	187.5	183.1	2
GEM VALLEY FARMS	09S 39E 13	NWSW	STANTON PLACE	A0004117	897.0	0.0	164.5	274.1	2
GEM VALLEY FARMS	09S 40E 18	SWSE	HOME PLACE	A0004119	687.0	0.0	223.2	222.9	2
GEM VALLEY FARMS	09S 40E 18	NENE	HIGHWAY WELL	A0004131	918.0	301.1	239.2	182.4	2
GEM VALLEY FARMS	09S 40E 29	SESW	DWAIN CHRISTENSEN PLA	A0004128	345.0	0.0	0.0	193.6	2
GEM VALLEY FARMS	09S 40E 20	SWSW	DEEP WELL	A0004129	927.0	278.8	193.6	277.2	2
GIBSON, GRANT H	10S 40E 7	SENE	CRP	A0007552	480.0	0.0	0.0	0.0	4
GILBERT, J HARRIS	08S 39E 5	SWNE		A0000140	714.0	0.0	0.0	0.0	2
GILBERT, J HARRIS	08S 39E 5	NWSE		A0000139	1144.5	0.0	0.0	0.0	2
GILBERT, J HARRIS	08S 39E 5	SENE	DIESEL PUMP	A0000141	1144.5	0.0	0.0	0.0	1
GILBERT, MILTON L&YOST	08S 39E 10	SESW		A0004064	0.0	0.0	91.3	93.3	2
GILBERT, MILTON L&YOST	08S 40E 30	NESE		A0004065	1212.0	0.0	286.5	324.2	2
HOLSTEN, MARK	09S 39E 24	SWSENE L2	HOLSTEN OBS. WELL	A0004100	0.0	0.0	0.0	0.0	6
JENKINS, JAY DELL	08S 39E 34	NESE	WAIVED		0.0	0.0	0.0	0.0	5
JORGENSEN, CARL	09S 40E 32	NWNW	Jorgensen North Well	A0003599	690.0	126.9	50.2	50.7	2
JORGENSEN, TERRY	10S 40E 5	SESW	Jorgensen South Well	A0003600	1065.0	64.1	43.3	74.0	2
JORGENSEN, TERRY(SMITH	10S 40E 5	SWSE	SMITH PLACE	A0004099	108.6	0.0	0.0	0.0	2
LLOYD, BEN & DAVID	09S 40E 22	NWNW	MCNEIL PLACE	A0003584	924.0	0.0	189.0	275.9	2
LLOYD, KEITH E	09S 39E 25	NWNW		A0004132	690.0	0.0	72.8	0.0	1
LLOYD, WARREN P	09S 39E 23	NENE		A0004116	829.5	0.0	105.2	91.0	1
MODERSITZKI, DAVID	08S 39E 15	NESW		A0000149	1002.0	91.5	120.4	87.4	2
OREGON SHORT LINE RAIL	08S 39E 22	NWNE	WAIVED		0.0	0.0	0.0	0.0	5
RIGBY, DON C	08S 40E 29	SENE	#1	A0004106	2160.0	14.0	72.0	95.0	2
RIGBY, DON C	08S 40E 21	NESE	OLD FAITHFUL #2	A0004104	2160.0	655.6	400.2	505.8	2
RIGBY, DON C	08S 40E 21	NESE	OLD FAITHFUL #1	A0004103	1320.0	1151.1	863.5	1047.0	2
RIGBY, DON C	08S 39E 10	SENE	CHESTERFIELD WELL	A0004107	942.0	344.0	319.0	286.1	2
RIGBY, DON C	08S 40E 16	NWSE	POND WELL	A0004101	2160.0	6.2	0.0	0.0	2
RIGBY, MAX D	08S 39E 16	NESW	CRP WELL		285.0	0.0	0.0	0.0	4

BANCROFT-LUND COMPARISON OF ACRE-FEET VOLUME
1996, 1997, 1998

NAME	POD	DIVERSION NAME	SITE_TAGNO	TOT_WR_AF	PCC_AF_96	PCC_AF_97	PCC_AF_98	OP_NUM
RIGBY, MAX D	08S 39E 16	SENE LANDFILL WELL	A0004906	600.0	0.0	0.0	0.0	4
RINDLIBAKER, LEON G	09S 39E 3	SWNW		0.0	0.0	0.0	0.0	4
RINDLIBAKER, TERRY G	09S 40E 17	NENE LONGENBOHN WELL	A0004109	411.0	79.9	69.0	155.8	2
RINDLIBAKER, TERRY G	09S 40E 15	SWNW LLOYD WELL	A0004110	876.0	316.8	149.9	235.7	2
RINDLIBAKER, TERRY G	09S 40E 8	NWSE CHRISTENSEN WELL	A0004108	711.0	0.0	69.5	186.8	2
RINDLIBAKER, TERRY G	09S 40E 15	NWSE HANSEN/RUPP	A0004111	1384.0	370.6	197.7	163.5	2
SIMONSON, VON OR ERIC	09S 40E 27	SWNW	A0000148	1110.0	313.0	210.8	259.9	2
SMITH, MARVIN (BEN&DAV	10S 40E 8	NWNW	A0004908	954.0	0.0	76.3	165.0	2
STODDARD FARMS OF GRAC	09S 39E 14	NENW	A0004115	921.0	0.0	232.8	343.6	2
WELCH, CLIFFORD	09S 39E 2	SESE	A0004182	840.0	0.0	124.3	171.3	2
WISTISEN LIVESTOCK CO	08S 39E 14	SWSW	A0000143	0.0	0.0	75.7	60.4	2
WISTISEN, RAOUL	08S 39E 4	SWSE	A0000142	2404.0	0.0	279.5	226.4	2
WISTISEN, STANLEY	08S 39E 21	NWNE	A0000146	0.0	0.0	0.0	0.0	1
YOST, GORDON R.	08S 39E 34	NESE SCHENK WELL SOUTH	A0004112	0.0	0.0	0.0	0.0	2
YOST, GORDON R.	08S 39E 34	SESE SCHENK WELL NORTH	A0004067	0.0	0.0	0.0	0.0	2
YOST, GORDON RAY	09S 39E 10	NWNW	A0004068	0.0	0.0	0.0	0.0	2
YOST, GORDON RAY	09S 39E 2	SESW	A0004114	273.0	0.0	0.0	0.0	2
YOST, GORDON RAY	09S 39E 10	NENE	A0004113	0.0	0.0	278.6	160.1	2
YOST, PHIL	08S 39E 22	SESW WAYNE PERKINS WELL	A0004066	477.0	0.0	72.5	0.0	2
YOST, PHIL	09S 40E 19	SENE Kim Welch East	A0004061	1356.0	136.3	88.7	137.4	2
YOST, PHIL	09S 40E 19	NESW Kim Welch West	A0004062	1356.0	109.5	89.5	142.0	2
YOST, PHIL	09S 40E 28	NENE Home Well	A0004127	930.0	340.7	168.6	154.2	2
YOST, PHIL	08S 39E 34	NESE	A0004063	471.0	0.0	98.1	100.6	2
				42931.1	5323.6	6376.2	7495.7	

VOLUME DATA QUALIFIERS

The following are data qualifiers for reported diversion volume information. They identify the status of the reported volume quantity. Different sets of qualifiers are used for volumes measured by (1) power consumption records, (2) permanent totalizing flow measuring devices and time clocks, or (3) open channel devices (weirs, flumes, rated sections, etc) and non-totalizing devices. Use these qualifiers in conjunction with reported diversion volume quantities in Appendix A.

This is a condensed version of the data qualifiers. See the *Summary of Data Collected, Volume Qualifiers* section of this report for greater detail and examples.

PCC Measurements

The following qualifiers apply to diversion volumes estimated with power records and may give data users an indication of the general degree of accuracy of calculated volumes as follows:

<u>Qualifier</u>	<u>Description</u>
Z	Zero pumpage based on zero energy consumption.
1	Simple systems with only one operating condition and minimal water level fluctuations where power records should work well. This includes systems where the flow rate and power consumption do not fluctuate significantly.
2	Systems with multiple operating conditions, all of which were measured and PCC varied ten percent or less, or varied more than ten percent but tracking is not required due to consistent changes (pivots with corner systems and/or end guns); estimate accuracy should be close to #1.
3	Systems with multiple operating conditions, all measured, PCC varied more than ten percent, tracking is required and owner reported percent of time at each condition; volume estimate accuracy may be similar to or slightly less than qualifiers 1 & 2 (above).
4	Systems with multiple operating conditions, all measured, PCC varied more than ten percent, tracking is required but was not reported by the owner or considered inaccurate and unreliable. Use the low PCC to calculate volume. Volume estimate may therefore be higher than actual diversions.
5	Systems with multiple operating conditions that were not all measured but can be measured so that a 2, 3, or 4 qualifier could be assigned in the future; or a system that needs re-measured (possibly due to system changes or incorrect initial measurements). Estimate accuracy less than qualifiers 1, 2 & 3.
6	Known problem with reported kwh data (e.g. CT's were out on power meter for part of year). Estimate is likely low because not all kwh consumed were reported.

- 7 Measured PCC during flowmeter check. Calculated PCC volume may not be as accurate, especially if system operation changes significantly.
- 8 PCC measured on a complex system where flowmeters or time clocks should probably be used. The PCC measurement used for calculating volume should be at high flow (low PCC) condition. Calculated volume estimates will usually be high since these systems are usually measured at capacity or additional loads were on the power meter.
- 9 PCC not measured, but may have been estimated based on system characteristics, location, results from other near by measurements, etc.
- N No PCC measurements made.
- Q The above qualifiers are not applicable, see comments or memo field for additional explanation.

Meters and Time Clocks

The following qualifiers apply to diversion volumes measured with permanently installed totalizing measuring devices or with time recording devices.

<u>Qualifier</u>	<u>Description</u>
PM	Partial year Measurement: Flowmeter not installed or not working properly for complete season, actual diversions greater than reported amount.
FE	Full year Estimate: An estimate for the full year based on partial data when flowmeter data is not available for the full season.
MR	Monthly Recordings: Owner reported flowmeter measurements, monthly readings recorded.
NM	No Monthly recordings: Owner reported flowmeter measurements, monthly readings NOT recorded.
EM	Erroneous measurement: Owner reported flowmeter measurements are obviously incorrect, usually because flowmeter is not accurate or operating properly. Actual amount could be higher or lower.
ND	No Device: Flowmeters or time clocks have not been installed or the user's annual report did not include any meter readings. Diversions have likely occurred and the reported volume of zero is erroneous.
Z	Zero pumpage: Non-use of a diversion per flowmeter and/or confirmation from the operator.
OW	Other Well: One flowmeter is used to measure more than one well, the volume entered for this well is zero, and the volume measured by the flowmeter is in another record. See database field VIWAW for reference to record with measurement data.

Bancroft - Lund Area
Water Level Measurement Wells

Date: 4/15/99

Keith Lloyd Well -A0004132				Warren Lloyd Well - A0004116				Holsten Observation Well (A0004100)			
Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:
06/11/68	42.1		USGS	05/01/96	71.8	S	DWR	07/09/96	74.4		DWR
10/25/83	41.2		USGS	06/06/96	73.8	S	DWR	09/11/96	66.38	S	DWR
05/01/96	49.5		DWR	06/10/96	92.3	P	WM	10/10/96	67.2	S	WM
06/20/96	64.0	S	WM	06/20/96	92.3	P	WM	06/16/97	69.50	S	WM
07/02/96	74.0	P	WM	06/27/96	92.7	P	WM	06/20/97	68.30	S	WM
07/10/96	80.0	P	WM	07/02/96	89.7	P	WM	06/25/97	69.50	S	WM
07/15/96	73.0	S	WM	07/06/96	76.8	S	WM	07/08/97	69.05	S	DWR
08/02/96	52.0	S	WM	07/09/96	102.2	P	DWR	07/21/97	69.30	S	WM
08/22/96	60.2	S	DWR	07/11/96	104.0	P	DWR	06/08/98	69.47	S	WM
10/10/96	50.0	S	WM	07/12/96	103.5	P	DWR	06/26/98	69.30	S	WM
10/11/96	50.0	S	WM	07/16/96	93.7	P	WM	07/01/98	69.05	S	WM
06/06/97	46.3	S	WM	07/24/96	101.5	P	WM	07/04/98	72.13	S	WM
06/13/97	46.3	S	WM	07/30/96	80.30	S	WM	07/09/98	71.22	S	WM
06/27/98	46.33	S	WM	08/12/96	105.0	P	WM	07/14/98	67.80	S	WM
07/01/98	44.0	S	WM	08/21/96	78.7	S	WM	07/16/98	68.30	S	WM
07/04/98	45.0	S	WM	09/11/96	77.1	S	WM	07/21/98	65.80	S	WM
07/21/98	44.0	S	WM	10/10/96	73.4	S	DWR	09/18/98	66.62	S	DWR
11/03/98	44.0	S	WM	06/06/97	67.3	S	WM	11/03/98	65.80	S	DWR
				06/25/97	67.8	S	WM	04/08/99	67.77	S	DWR
				07/12/97	68.3	S	WM				
Calvin Lloyd Well(Stoddard Farms) - A0004115				06/08/98	67.3	S	WM	Don Rigby- by Pond Well - A0004102(Abandoned)			
Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:
06/06/96	77.0	S	DWR	06/26/98	67.3	S	WM	05/21/96	74.4	S	Hudson Engin
10/10/96	80.4	S	DWR	07/09/98	67.8	S	WM	05/21/96	106.0	P@ 4101	Hudson Engin
06/06/97	70.2	S	WM	09/18/98	70.43	S	DWR	06/05/96	109.0	P@ 4101	DWR
06/13/97	70.2	S	WM	04/08/99	65.33	S	DWR	06/10/96	109.4	P@ 4101	DWR
06/25/97	76.8	P	WM					07/11/96	74.4	S	Hudson Engin
06/08/98	79.0	P	WM	Warren Lloyd Well -A0004116(Abandoned)				10/11/96	103.8	S	DWR
07/01/98	70.25	S	WM	Date	Water Level	P=Pumping S=Static	Measured by:	06/24/97	70.25	S	WM
07/09/98	76.83	P	WM	06/06/97	65.7	S	WM	06/29/98	70.25	S	WM
07/21/98	81.5	P	WM	06/25/97	66.0	S	WM	07/13/98	71.17	S	WM
11/03/98	72.0	S	WM	06/26/98	66.2	S	WM	04/09/99	70.11	S	DWR
				07/09/98	66.03	S	WM	Rindlsbaker - Christensen Well-A0004108			
				07/21/98	64.2	S	WM	Date	Water Level	P=Pumping S=Static	Measured by:
Carl Jorgensen North Well - A0003599				09/18/98	67.08	S	DWR	10/11/96	130.0	S	
Date	Water Level	P=Pumping S=Static	Measured by:	11/03/98	64.2	S	WM	07/09/97	146.6	P	
07/02/96	113.90		WM	04/08/99	Well plugged @33'		DWR				
07/11/96	113.4		WM								
08/01/96	112.4		WM								
06/13/97	112.7	S	WM	Yost Well - A0004067				Rindlsbaker-Longenbohn Well-A0004109			
06/27/98	112.65	S	WM	Date	Water Level	P=Pumping S=Static	Measured by:	Date	Water Level	P=Pumping S=Static	Measured by:
07/13/98	112.65	S	WM	06/25/97	126.6	S		06/05/96	139.0	S	DWR
04/09/99	113.01	S	DWR					10/11/96	134.8	S	DWR
								04/09/99	136.76	S	DWR
				Chad Neibaur Well - A0004119							
				Date	Water Level	P=Pumping S=Static	Measured by:				
				06/16/97	101.0	S					
				06/29/98	101.0	S					

BANCROFT-LUND GROUND WATER MANAGEMENT AREA

Ground Water Hydrographs

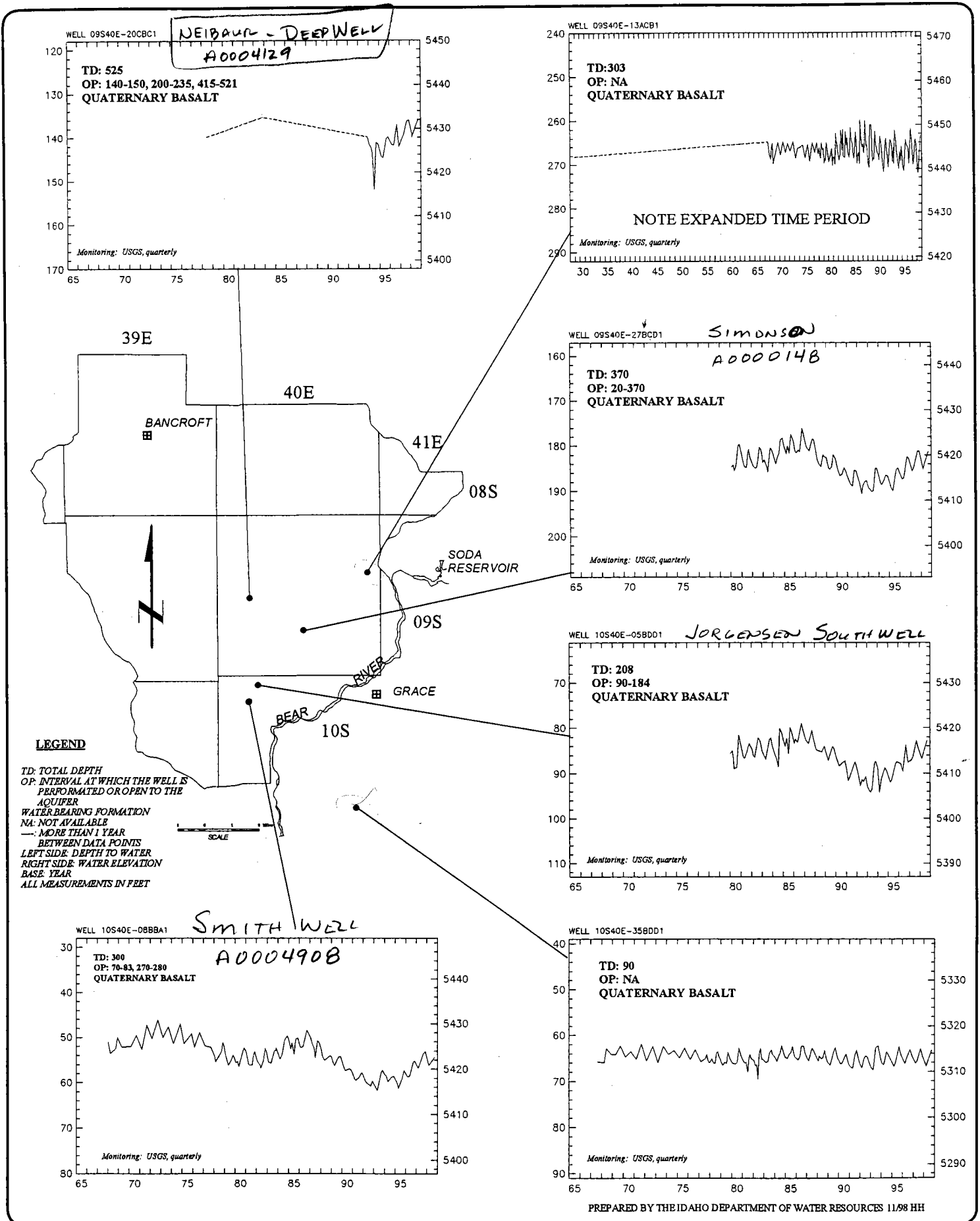


Figure __

08S39E

A0004107

A0004064

A0004906

A0004066

A0004905

A0004063

A0004112

YOST
A0004067

A0004182

A0004113

A0004068

STODDARD
A0004115

A0004117

WARRIS
A0004116

HULST
A0004100

KEITH
A0004132

A0004132

08S40E

POND
A0004101

A0004101

OLD FAITHFUL
1 & 2

A0004104

ARTESIAN
A0004105

A0004065

A0004106

09S40E

A0004108

A0004109

A0004131

A0004110 A0004111

A0004117

HOMERIDGE

PAUL

WELCH

WEST

WELCH

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A0004140

A0004141

A0004142

A0004143

A0003584

A0004060

A0004061

USGS
Simonsen

A0004127

A0000142

A0004128

A0004058

A0003599

USGS
SOUTH
A0003600

SMITH
USGS
A0004099

A0004908

A0007552

10S39E

10S40E