

# WATER LEVELS IN ALLUVIAL AQUIFERS OF THE LOWER SOUTH PLATTE RIVER BASIN, COLORADO

JULY, 1998



by  
CHUCK ROBERTS

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1998

*By Chuck Roberts*

The purpose of this report is to provide water level data for 61 wells within the Lower South Platte Alluvium for the period of Spring of 1988 through the Spring of 1998. The data presented in this report is a result of cooperation between well owners, the Central Colorado Water Conservancy District, and the Colorado Division of Water Resources. Funding for this project is supplied in part from well permit fees collected and managed by the Colorado Division of Water Resources as a result of the passage of Senate Bill 200 during the 1987 legislative session.

The following body of this report includes up to 20 water level measurements for the indicated period in addition to a water level measurement taken at the time of construction of the well, if available. Measurements are usually taken twice yearly, typically in the spring before irrigation pumping commences and in the fall after irrigation pumping has ceased. The measurement values in this report are expressed in feet below ground surface to water surface and were obtained utilizing an electric sounder device or steel tape. All measurements were done by Division 1 Water Commissioners (DWR) or the Central Colorado Water Conservancy District (CCWC) as indicated for each well. All of the wells are completed in unconsolidated gravel, sand, silt and clay deposits predominantly of alluvial origin. The column entitled AQUIF/TRIB in the main body of the report delineates the geologic unit and stream reach for each well as explained on page 4. Figure 1 is a map showing the approximate location of the wells measured for this report. The South Platte River is shown in blue. The approximate outline of the South Platte River alluvial aquifers is depicted in red.

The observation wells can be subdivided into two types: those which lie within or very near the South Platte River floodplain, and those located in tributary valleys. The number of observation wells in tributary valleys exceeds the number along the South Platte floodplain by 19.

An evaluation of the data of beginning water levels as compared to Spring 1998 levels reveals that approximately 50.8% of the wells have experienced a water level decline which compares to a 60.3% decline in the 1997 report. By comparison, 24.5% of the wells experienced a rise in the Spring 1998 as compared to the Spring 1988 water level. This percentage is slightly less than the 1997 report value (27%). Declines of Spring 1988 to Spring 1998 range from -0.04' to -12.3' as compared to the range of -0.23' to -18.63' in the 1997 report. Declines on the order of 0.01' are insignificant in that such changes can be caused by wind, earth movement, and the effect of evapotranspiration and phreatic consumption or maybe errors in data recording. The table following this narrative entitled "Table of Water Level Trends of the South Platte Alluvium through Spring 1998" recaps the statistics to date for this ongoing report in terms of all wells, tributary valleys, and the South Platte main stem/floodplain.

These data also reveal that the averages of the water level changes from Spring 1988 to Spring 1998 wells within the tributary valleys (both rises and declines) are greater than the averages of the South Platte floodplain alluvium. By comparison, in 1997 the average rise and declines of Spring 1988 vs. Spring 1997 changes in the tributary valleys were also greater than those in the South Platte floodplain.

The average annual water level change compared to the previous year over the past ten years has averaged -0.08 ft/yr in the South Platte floodplains and -0.18 ft/yr in the tributary valleys.

Both the tributary valleys and the South Platte floodplain experienced less annual rise overall in 1998 than in 1997. Annual declines in the tributary valleys and the South Platte floodplain likewise were less in 1998 than 1997.

The reader is advised that these data are based upon the measurements of only 61 wells. This represents only 2 to 4 percent of the total nonexempt wells along the South Platte system between Kassler and the Colorado-Nebraska state line.

## WATER LEVELS IN THE LOWER SOUTH PLATTE NETWORK

### Explanation

#### Geologic Units

All of the monitoring wells in this report are completed in unconsolidated gravel, sand silt, and clay of predominantly alluvial origin. The following subdivision is based upon location of the wells with respect to modern stream channels, floodplains, terraces, and interstream divides.

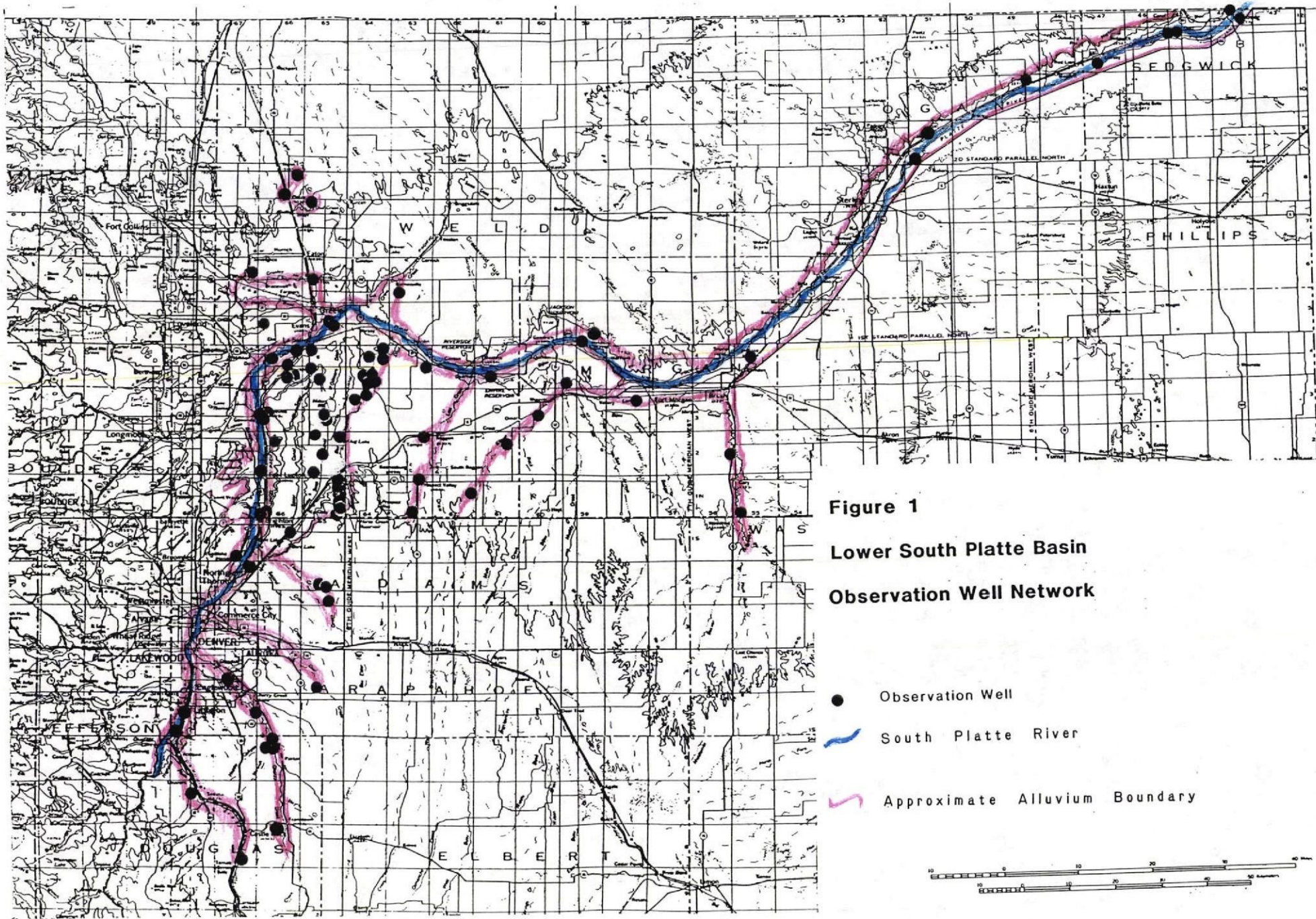
- Qal - Recent stream alluvium and floodplain deposits.
- Qoav - Alluvium of areas not within a distinct floodplain; upland areas along interstream divides; includes deposits of eolian origin.
- Qt - Alluvium underlying terraces identified and mapped by other investigators.

#### Stream Reach

Each of the monitoring wells included in this report has a code following the Geologic Unit indicating the stream reach or tributary reach of the well (e.g. Qal/BIA).

<u>Code</u>	<u>Reach of Stream</u>
SPA	Mainstem of South Platte from Greeley downstream
USP	Upper South Platte: Platte Canyon to Greeley
PCA	Plum Creek drainage
CCA	Coal Creek drainage
CLP	Cache La Poudre drainage
BVA	Beaver Creek drainage
BIA	Bijou Creek drainage
LCA	Lost Creek drainage
BEC	Box Elder Creek drainage
LTC	Lone Tree Creek drainage
TCA	Third Creek drainage
CHC	Cherry Creek drainage





**Figure 1**  
**Lower South Platte Basin**  
**Observation Well Network**

- Observation Well
- South Platte River
- Approximate Alluvium Boundary

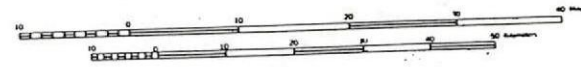


Table of Water Level Trends of the South Platte Alluvium  
through Spring 1998\*

\*All signed values in feet; (-) is decline, (+) is rise  
Unsigned values are number of wells  
(x) is % of group

COMPARISON:	INITIAL WATER LEVELS TO SPRING '98			SPRING '88 TO SPRING '98 WATER LEVELS			SPRING '97 TO SPRING '98 WATER LEVELS		
GROUP	RISES	DECLINES	NO CHANGE/ UNRECORDED	RISES	DECLINES	NO CHANGE/ UNRECORDED	RISES	DECLINE	NO CHANGE/ UNRECORDED
<u>ALL WELLS</u>									
Number	18 (29.5)	31 (50.8)	12 (19.7)	15 (24.5)	20 (32.8)	26 (42.7)	31 (50.8)	20 (32.8)	10 (16.4)
Ranges of values	+0.77 to +14.42	- 0.10 to - 36.30	-	+0.17 to +4.91	- 0.04 to - 12.3	-	+0.04 to +12.07	- 0.02 to - 6.77	-
Average	+4.68	- 7.87	-	+1.58	- 2.51	-	+1.30	- 1.05	-
<u>TRIBUTARY VALLEYS</u>									
Number	13 (32.5)	19 (47.5)	8 (20.0)	11 (27.5)	13 (32.5)	16 (40.0)	20 (50.0)	12 (30.0)	8 (20.0)
Ranges	+0.40 to 30.60	- 0.10 to - 36.36	-	+0.30 to +4.91	- 0.10 to - 12.30	-	+0.10 to +12.07	- 0.03 to - 3.07	-
Average	+5.98	- 9.46	-	+1.78	- 2.77	-	+1.52	- 0.91	-
<u>MAINSTEM</u> or } So. Platte <u>FLOODPLAIN</u>									
Number	5 (23.8)	12 (57.1)	4 (19.1)	4 (19.1)	7 (33.3)	10 (47.6)	11 (52.4)	8 (38.1)	2 (9.5)
Ranges	+0.77 to +2.47	- 0.30 to - 19.61	-	+0.17 to +2.57	- 0.04 to - 8.56	-	+0.04 to 2.57	- 0.02 to - 6.77	-
Average	+1.28	- 5.35	-	+1.02	- 2.02	-	+0.91	- 1.24	-

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS	
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO		
							SURF						SPRING	S98	S98		
													1998				
T01N	R55W	31	SWSESW	Uhlenhopp,S.& R.	11802 R	Qa1	4465	28.80	04/17/42	35.14	11/05/95	DWR	-3.56	-0.21	1.24	AVG. SWL=	
						/BVA		33.60	03/21/88	33.30	03/27/96					34.13	
								36.00	03/21/89	35.24	10/18/96						
								34.70	12/17/89	32.15	03/27/97						
								34.70	03/14/90	35.58	10/15/97						
								37.80	10/25/90	32.36	03/27/98						
								33.70	03/12/91								
								0.00	/ /								
								0.00	/ /								
								0.00	/ /								
								35.20	03/17/93								
								35.33	11/03/93								
								33.26	03/18/94								
								34.17	11/25/94								
								33.33	03/20/95								
T01N	R62W	13	SESENE	Roark,C.M.	4874 F	Qa1	4821	20.90	03/11/42	37.73	11/05/95	DWR	-19.25	-1.55	4.91	AVG. SWL=	
						/BIA		45.06	03/21/88	37.40	03/27/96					38.89	
								43.95	03/21/89	39.71	10/18/96						
								43.75	12/17/89	38.60	03/27/97						
								42.70	03/14/90	40.58	10/15/97						
								0.00	/ /	40.15	03/27/98						
								41.15	03/12/91								
								41.95	10/24/91								
								39.58	04/05/92								
								40.00	11/04/92								
								38.72	03/17/93								
								37.20	11/03/93								
								35.56	03/18/94								
								37.00	11/25/94								
								36.30	03/20/95								



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TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T01N	R63W	34	NWNWNW	Blood,C.	14860 R	Qoa /LCA	4963	109.00	03/09/60	100.91	11/05/95	DWR	10.20	0.23	-1.13	AVG. SWL= 101.63
								97.67	03/21/88	108.80	03/27/96					
								99.20	03/21/89	100.80	10/18/96					
								100.00	12/17/89	99.03	03/27/97					
								99.80	03/14/90	100.82	10/15/97					
								100.06	10/25/90	98.80	03/27/98					
								99.19	03/12/91							
								103.50	10/24/91							
								100.29	04/05/92							
								105.10	11/04/92							
								100.45	03/17/93							
								101.30	11/03/93							
								103.99	03/18/94							
								102.52	11/25/94							
								102.90	03/20/95							
T01N	R65W	01	SWSWSE	Taoka Bros.	11709 F	Qoav/ BEC	4959	30.00	11/30/37	10.00	11/22/95	CCWC	0.00	0.00	0.00	Well E9 AVG. SWL= 11.83
								0.00	/ /	10.20	04/11/96					
								8.80	04/20/89	10.61	11/19/96					
								9.04	10/13/89	11.43	05/05/97					
								8.90	04/10/90	10.76	12/15/97					
								9.88	10/17/90	0.00	04/30/98					
								15.65	04/18/91							
								12.10	10/24/91							
								0.00	/ /							
								0.00	/ /							
								10.21	03/23/93							
								10.95	11/22/93							
								8.75	05/05/94							
								12.00	10/25/94							
								11.98	04/25/95							

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TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T01N	R65W	25	SESWSW	Hoffner, F.	11875 F	Qoa	5045	34.60	05/08/41	44.22	11/05/95	DWR	-6.84	-0.80	-4.28	AVG. SWL=
						/BEC		37.16	03/21/88	41.40	03/27/96					41.80
								42.35	03/21/89	44.57	10/18/96					
								50.50	12/17/89	40.64	03/27/97					
								41.75	03/14/90	44.20	10/15/97					
								41.75	10/25/90	41.44	03/27/98					
								39.60	03/12/91							
								43.49	10/24/91							
								40.00	04/05/92							
								42.19	11/04/92							
								40.20	03/17/93							
								42.00	11/03/93							
								40.30	03/18/94							
								43.42	11/25/94							
								41.93	03/20/95							
T01N	R66W	30	NESWNE	Saski, T.	18769 R	Qt	4951	18.40	03/27/89	0.00	/ / /	DWR	0.00	0.00	0.00	MEAS.
						/USP		20.30	03/24/88	0.00	/ / /					TEMP.
								20.10	03/24/89	0.00	/ / /					SUSPENDED
								17.55	10/30/89	0.00	/ / /					
								20.50	03/20/90	0.00	/ / /					
								15.80	11/12/90	0.00	/ / /					
								20.25	03/13/91							
								18.00	12/17/91							
								0.00	/ / /							
								0.00	/ / /							
								20.40	06/01/93							
								0.00	/ / /							
								0.00	/ / /							
								0.00	/ / /							
								0.00	/ / /							

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TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T02N	R56W	13	NWSWSE	Peterson,C.	8822 F	Qoa	4320	32.10	04/04/62	40.82	11/05/95	DWR	-8.40	-0.03	1.58	AVG. SWL=
						/BIA		42.08	03/21/88	40.40	03/27/96					40.70
								41.70	03/21/89	40.76	10/18/96					
								42.50	12/17/89	40.47	03/27/97					
								41.70	03/14/90	39.75	10/15/97					
								41.85	10/25/90	40.50	03/27/98					
								41.10	03/12/91							
								42.05	10/24/91							
								41.65	04/05/92							
								42.25	11/04/92							
								41.79	03/17/93							
								40.38	11/03/93							
								40.14	03/18/94							
								40.58	11/25/94							
								40.23	03/20/95							
T02N	R61W	11	SWSWSW	Calvert,R.	8309 R	Qa1	4670	23.40	03/30/62	51.02	11/05/95	DWR	-24.55	12.07	-6.56	AVG. SWL=
						/BIA		41.39	03/21/88	47.80	03/27/96					46.46
								42.20	03/21/89	51.36	10/18/96					
								43.00	12/17/89	60.02	03/27/97					
								44.90	03/14/90	48.12	10/15/97					
								44.80	10/25/90	47.95	03/27/98					
								43.75	03/12/91							
								51.89	10/24/91							
								45.40	04/05/92							
								49.17	11/04/92							
								46.25	03/17/93							
								48.18	11/03/93							
								45.98	03/18/94							
								51.80	11/25/94							
								47.25	03/20/95							

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TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T02N	R63W	01	NWSESE	Sargent, B.	13963 R	Qoa LCA	4715	13.20	03/29/62	19.50	11/05/95	DWR	-6.30	0.00	1.00	AVG. SWL= 19.86
								20.50	03/21/88	19.50	03/27/96					
								20.05	03/21/89	19.50	10/18/96					
								21.10	12/17/89	19.50	03/27/97					
								20.75	03/14/90	19.50	10/15/97					
								23.00	10/25/90	19.50	03/27/98					
								20.50	03/12/91							
								23.94	10/24/91							
								19.20	04/05/92							
								20.50	11/04/92							
								19.39	03/17/93							
								19.50	11/03/93							
								19.50	03/18/94							
								19.50	11/28/94							
								19.50	03/20/95							
T02N	R65W	04	NWNWSW	Hill, O.	5 R	Qoav/ BEC	4880	50.00	04/01/49	44.35	01/11/96	CCWC	1.92	-1.73	0.00	Well D1, AVG. SWL= 43.80
								0.00	/ /	0.00	/ /					
								39.30	03/29/89	47.95	11/19/96					
								40.27	10/19/89	46.35	03/21/97					
								39.48	03/27/90	48.00	12/16/97					
								42.66	10/17/90	48.08	04/30/98					
								42.55	04/10/91							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								42.39	03/24/93							
								40.82	10/29/93							
								39.55	04/15/94							
								45.25	11/02/94							
								0.00	/ /							

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TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T02N	R65W	32	NENWNE	Bergstom, R.	12683 R	Qoav/ BEC	4920	38.00	06/01/35	41.45	11/03/95	CCWC	-2.50	2.15	0.00	Well D2
								0.00	/ /	40.90	04/25/96					AVG. SWL=
								27.00	03/23/89	42.57	11/19/96					37.91
								38.13	10/19/89	42.65	03/21/97					
								32.65	03/27/90	40.50	10/07/97					
								32.65	10/17/90	40.50	04/30/98					
								34.25	04/10/91							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								34.20	03/24/93							
								40.15	10/29/93							
								34.70	04/15/94							
								44.96	11/02/94							
								39.27	04/25/95							
T02N	R66W	31	SESWNE	Sakata, B.	6818 R	Qt /USP	4894	17.00	05/01/35	17.50	10/31/95	CCWC	-1.50	1.40	0.00	Well F4
								0.00	/ /	0.00	/ /					AVG.
								21.60	04/06/89	19.35	11/14/96					SWL=19.13
								17.99	10/13/89	19.90	04/14/97					
								19.65	03/26/90	19.80	10/15/97					
								19.57	10/09/90	18.50	04/29/98					
								20.05	04/01/91							
								18.43	10/24/91							
								0.00	/ /							
								0.00	/ /							
								18.90	03/16/93							
								20.70	10/06/93							
								18.45	04/27/94							
								18.85	11/02/94							
								18.98	04/12/95							

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TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T03N	R58W	11	SWSWSW	Shepard,D.	6256	R Qoa /SPA	4365	53.20	05/27/41	62.95	11/05/95	DWR	-7.74	-0.21	-1.54	AVG. SWL= 60.98
								59.40	03/21/88	60.98	03/27/96					
								60.74	03/21/89	63.24	10/18/96					
								62.10	12/17/89	60.73	03/27/97					
								61.12	03/14/90	59.37	10/15/97					
								62.10	10/25/90	60.94	03/27/98					
								60.50	03/12/91							
								63.19	10/24/91							
								60.80	04/05/92							
								62.10	11/04/92							
								60.57	03/17/93							
								61.46	11/03/93							
								59.31	03/18/94							
								63.30	11/25/94							
62.39	03/20/95															
T03N	R60W	22	SWSWSW	Holden,B.A.	4422	R Qal /BIA	4568	79.00	04/11/38	109.72	11/05/95	DWR	-36.30	-3.07	-12.30	AVG. SWL= 109.79
								103.00	03/22/88	113.95	03/27/96					
								104.40	03/21/89	112.23	10/18/96					
								0.00	/ /	112.23	03/27/97					
								0.00	/ /	111.15	10/15/97					
								0.00	/ /	115.30	03/27/98					
								106.80	03/12/91							
								108.80	10/24/91							
								0.00	/ /							
								108.80	11/04/92							
								108.56	03/17/93							
								141.95	11/03/93							
								110.42	03/18/94							
								110.25	11/25/94							
0.00	/ /															

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LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T03N	R64W	04		SWSW Seldin , E. D.	7067 R	Qoa/B	4725	9.00	09/01/53	0.00	/ /	CCWC	-12.47	0.00	0.00	Well E-15, replaces E-06
					EC			0.00	/ /	0.00	/ /					
								0.00	/ /	0.00	/ /					
								0.00	/ /	0.00	/ /					
								0.00	/ /	0.00	/ /					
								0.00	/ /	21.47	04/30/98					
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
T03N	R66W	18		SWNESW Boulter,Wm.	0	Qt	4805	0.00	/ /	19.48	10/31/95	CCWC	0.00	0.00	0.00	
					/USP			0.00	/ /	22.00	05/09/96					
								23.00	05/11/89	20.48	11/14/96					
								21.51	10/16/89	0.00	/ /					
								22.20	03/26/90	19.30	10/15/97					
								21.52	10/10/90	21.55	04/27/98					
								22.88	04/01/91							
								20.30	10/18/91							
								0.00	/ /							
								0.00	/ /							
								21.15	03/16/93							
								20.70	10/06/93							
								21.62	04/27/94							
								20.40	11/02/94							
								21.55	04/25/95							



WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS												
T03N	R66W	18	SWNESE	Boulter,W.	0	Qt /USP	4805	0.00	/ /	20.15	10/31/95	CCWC	0.00	-0.48	0.00	WELL F6 AVG. SWL= 21.88												
								0.00	/ /	22.30	05/09/96																	
								23.30	05/11/89	20.62	11/13/96																	
								21.43	10/16/89	22.40	04/14/97																	
								22.64	03/26/90	20.45	10/15/97																	
								21.77	10/10/90	22.88	04/29/98																	
								23.25	04/01/91																			
								21.10	10/18/91																			
								0.00	/ /																			
								0.00	/ /																			
								22.62	03/16/93																			
								21.21	10/16/94																			
								22.35	04/27/94																			
								21.22	11/02/94																			
								22.40	04/25/95																			
								T04N	R55W	09	SWSWE	Schooley,R.					0	Qa1 /SPA	4175	11.10	04/23/30	25.38	11/05/95	DWR	-17.02	-0.87	0.58	AVG. SWL= 27.33
																				28.70	03/18/88	28.87	03/27/96					
29.25	03/21/89	27.33	10/18/96																									
29.80	12/17/89	27.25	03/27/97																									
29.60	03/14/90	28.45	10/15/97																									
27.80	10/25/90	28.12	03/12/98																									
28.80	03/12/91																											
27.51	10/24/91																											
28.80	04/05/92																											
27.42	11/04/92																											
29.04	03/17/93																											
25.30	11/03/93																											
26.91	03/18/94																											
30.67	11/25/94																											
27.75	03/20/95																											

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T04N	R59W	31	SESENE	Frank, E.	13994 F	Qoav/ BIA	4505	97.00	04/28/45	0.00	/ /	CCWC	-17.90	-1.85	0.00	Well A1
								0.00	/ /	113.45	03/12/96					AVG.
								111.20	04/11/89	113.48	11/19/96					SWL=113.20
								113.30	10/16/89	113.05	03/27/97					
								111.14	04/10/90	114.15	01/13/98					
								113.90	10/22/90	114.90	03/31/98					
								111.65	04/01/91							
								115.40	10/17/91							
								0.00	/ /							
								0.00	/ /							
								112.82	03/03/93							
								115.90	10/01/93							
								119.12	03/25/94							
								117.66	09/28/94							
								116.21	05/10/95							
T04N	R61W	28	NWNWNW	Eqqus Farms	0	Qa1 /SPA	4480	30.30	03/02/48	31.45	11/05/95	DWC	-12.26	-6.77	-8.56	AVG. SWL=
								34.00	03/21/88	36.21	03/27/96					33.33
								35.30	03/21/89	31.49	10/18/96					
								32.60	12/17/89	35.79	03/27/97					
								35.75	03/14/90	31.46	10/15/97					
								29.35	10/25/90	42.56	03/12/98					
								35.45	03/12/91							
								28.05	10/24/91							
								27.87	04/05/92							
								0.00	/ /							
								35.68	03/17/93							
								30.87	11/03/93							
								34.28	03/18/94							
								32.03	11/25/94							
								36.02	03/20/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T04N	R63W	13	SWNE	USGS Obs. Well	0	Qa1	4510	5.60	03/21/67	6.45	11/05/95	DWR	1.17	0.04	0.17	AVG. SWL=
						/BEC		4.60	03/22/88	4.35	03/27/96					5.24
								6.90	03/21/89	4.12	10/18/96					
								7.00	12/17/89	4.47	03/27/97					
								6.20	03/14/90	4.02	10/15/97					
								6.90	10/25/90	4.43	03/27/98					
								3.65	03/12/91							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								6.72	03/17/93							
								5.30	11/03/93							
								4.54	03/18/94							
								3.92	11/25/94							
								5.22	03/20/95							
T04N	R64W	01	SWSW	Amigo Farms	6230 R	Qoav/	4615	18.00	01/01/46	9.27	11/22/95	CCWC	8.72	0.00	0.00	Well E2
						BEC		0.00	/ /	7.20	04/09/96					AVG. SWL=
								8.40	03/30/89	8.69	10/08/96					9.76
								10.04	10/20/89	0.00	/ /					
								9.08	03/27/90	8.98	12/15/97					
								9.25	10/18/90	9.28	04/01/98					
								12.60	04/17/91							
								8.60	10/18/91							
								0.00	/ /							
								0.00	/ /							
								9.33	03/23/93							
								9.44	11/22/93							
								8.61	03/28/94							
								9.30	10/25/94							
								9.79	05/10/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T04N	R64W	10	SESESE	Dwyer, T.E.	13072	R Qoav/ BEC	4637	22.56	06/13/57	9.40	11/05/95	DWR	13.68	0.90	0.64	AVG. SWL= 10.59
								9.52	03/21/88	9.50	03/27/96					
								10.10	03/21/89	9.68	10/18/96					
								10.10	12/17/89	9.78	03/27/97					
								0.00	/ /	9.04	10/15/97					
								12.10	10/25/90	8.88	03/27/98					
								10.75	03/12/91							
								10.42	10/24/91							
								9.20	04/05/92							
								10.35	11/04/92							
								9.37	03/17/93							
								9.95	11/03/93							
								9.55	11/03/94							
								10.91	11/25/94							
								10.65	03/20/95							
T04N	R64W	12	SWSWSW	Watkins Trust	12912	R Qoav/ BEC	4635	21.00	05/23/77	18.90	01/11/96	CCWC	4.00	0.10	0.00	Well E4 AVG. SWL=18.19
								0.00	/ /	20.30	04/09/96					
								17.50	03/30/89	17.41	10/08/96					
								16.97	10/20/89	17.10	05/05/97					
								16.67	03/27/90	17.40	12/15/97					
								18.50	10/18/90	17.00	04/30/97					
								18.70	04/17/91							
								19.40	10/18/91							
								0.00	/ /							
								0.00	/ /							
								17.16	03/23/93							
								18.82	11/22/93							
								17.05	03/28/94							
								19.90	10/25/94							
								17.58	04/24/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T04N	R64W	22	SESWSE	Herbst,E.	0	Qoav/ BEC	4668	0.00	/ /	8.55	11/22/95	CCWC	0.00	9.49	0.00	Well E5
								0.00	/ /	10.43	04/09/96					AVG.
								9.90	03/30/89	6.90	10/08/96					SWL=9.40
								8.01	10/20/89	9.50	05/05/97					
								9.40	03/27/90	9.45	12/15/97					
								9.05	10/18/90	0.01	04/30/98					
								10.48	04/17/91							
								9.30	10/18/91							
								0.00	/ /							
								0.00	/ /							
								9.22	03/23/93							
								9.42	11/22/93							
								9.37	03/28/94							
								10.30	10/25/94							
								11.09	04/24/95							
T04N	R65W	18	NENESE	Root,S.	14189	Qt /USP	4710	0.00	/ /	9.40	10/30/95	CCWC	0.00	1.63	0.00	Well C2
								0.00	/ /	14.00	05/10/96					AVG. SWL=
								9.20	03/29/89	6.40	11/19/96					9.24
								6.64	10/16/89	10.20	03/27/97					
								7.88	03/26/90	10.80	11/05/97					
								6.13	10/10/90	8.57	03/27/98					
								9.78	04/09/91							
								10.70	10/18/91							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								10.83	10/05/93							
								8.67	04/07/94							
								9.00	11/01/94							
								9.65	04/16/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T04N	R66W	09	SWSESW	Monfort Feed Lots	12010 R	Qt	4735	25.30	04/28/47	32.85	10/27/95	DWR	-7.35	0.20	-0.45	AVG. SWL=
						/USP		32.20	03/16/88	33.80	03/19/96					31.68
								33.00	03/11/89	31.30	10/22/96					
								32.00	10/15/89	32.85	03/19/97					
								32.70	03/12/90	32.05	10/17/97					
								30.75	10/22/90	32.65	03/12/98					
								32.30	03/05/91							
								31.50	10/16/91							
								0.00	03/24/92							
								0.00	/ /							
								30.20	03/12/93							
								30.75	10/25/93							
								32.40	03/29/94							
								31.20	10/27/94							
								32.20	03/15/95							
T04N	R66W	14	NENENW	Ewing, W.H.	12040 R	Qoav/	4725	16.00	04/01/51	25.18	10/30/95	CCWC	-13.82	-0.32	0.00	Well C3
						USP		0.00	/ /	30.18	05/09/96					AVG. SWL=
								28.70	03/29/89	28.18	11/13/96					27.29
								27.69	10/16/89	29.50	03/31/97					
								28.33	03/26/90	27.60	11/05/97					
								27.04	10/10/90	29.82	03/31/98					
								28.60	04/09/91							
								27.30	10/15/91							
								0.00	/ /							
								0.00	/ /							
								26.92	03/16/93							
								27.42	10/07/93							
								28.30	05/03/94							
								26.40	11/01/94							
								28.08	05/10/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T04N	R66W	27		SESENE Lorenz,J.O.	0	Qoav/ USP	4755	0.00	/ /	7.60	01/11/96	CCWC	0.00	-0.39	0.00	Well C4
								0.00	/ /	7.05	05/08/96					AVG.
								6.90	03/29/89	6.26	11/13/96					SWL=5.90
								5.88	10/16/89	7.30	03/31/97					
								5.48	03/26/90	6.72	12/16/97					
								5.67	10/10/90	7.69	03/31/98					
								0.00	/ /							
								5.90	10/18/91							
								0.00	/ /							
								0.00	/ /							
								5.42	03/16/93							
								4.82	10/05/93							
								4.75	04/27/94							
								6.10	11/01/94							
								6.69	04/16/95							
T05N	R59W	34		NWSESW Williams,G.	0	Qa1 /SPA	4360	14.10	03/02/48	12.80	11/05/95	DWR	-1.33	-0.10	-0.33	AVG. SWL=
								15.10	03/21/88	15.95	03/27/96					14.70
								17.20	03/21/89	12.08	10/18/96					
								15.00	12/17/89	15.33	03/27/97					
								17.25	03/14/90	10.81	10/15/97					
								13.40	10/25/90	15.43	03/27/98					
								16.80	03/12/91							
								12.49	10/24/91							
								16.33	04/05/92							
								14.44	11/04/92							
								17.29	03/17/93							
								12.60	11/03/93							
								15.41	03/18/94							
								13.80	11/25/94							
								15.15	03/20/95							



WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T05N	R65W	14		Lorenz Farms	0	Qoav/ USP	4612	0.00	/ /	0.00	/ /	CCWC	0.00	-0.02	0.00	Well B4
								0.00	/ /	3.72	05/13/96					AVG. SWL=
								4.90	03/29/89	4.80	10/08/96					4.62
								0.00	/ /	4.78	03/27/97					
								3.05	03/27/90	4.80	12/10/97					
								0.00	/ /	4.80	03/31/98					
								0.00	/ /							
								4.90	10/17/91							
								0.00	/ /							
								0.00	/ /							
								5.08	03/10/93							
								4.75	10/01/93							
								3.95	03/25/94							
								5.59	09/28/94							
								5.00	04/25/95							
T06N	R63W	29	NWNWNW	Wells,J.	12768 R	Qoav/ SPA	4655	11.30	03/21/62	13.85	10/27/95	DWR	-0.73	0.35	-2.43	AVG. SWL=
								9.60	03/16/88	12.95	03/19/96					12.52
								11.80	03/11/89	13.18	10/22/96					
								10.80	10/15/89	12.38	03/19/97					
								12.40	03/12/90	13.33	10/17/97					
								11.40	10/22/90	12.03	03/12/98					
								12.35	03/05/91							
								0.00	/ /							
								13.05	03/24/92							
								13.30	10/23/92							
								13.90	03/12/93							
								12.13	10/25/93							
								11.93	03/29/94							
								14.63	10/27/94							
								14.18	03/15/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T06N	R65W	17	SWNWNW	Farr.H.W.	13423 R	Qoa /USP	4763	25.20	04/21/36	27.20	10/27/95	DWR	1.20	-0.25	-0.40	AVG. SWL= 25.42
								23.60	03/16/88	25.80	03/19/96					
								27.00	03/11/89	24.15	10/22/96					
								22.90	10/15/89	23.75	03/19/97					
								25.80	03/12/90	24.80	10/17/97					
								26.50	10/22/90	24.00	03/12/98					
								25.50	03/05/91							
								26.20	10/16/91							
								25.20	03/24/92							
								26.90	10/23/92							
								25.70	03/12/93							
								26.00	10/25/93							
								24.80	03/29/94							
								27.40	10/27/94							
								25.60	03/15/95							
T06N	R67W	12	NWNWNW	Felte,F.	11267 RF	Qoav/ USP	4850	9.70	03/24/42	5.40	10/27/95	DWR	2.80	-0.55	1.50	AVG. SWL= 8.21
								8.40	03/16/88	7.10	03/19/96					
								9.40	03/11/89	4.80	10/22/96					
								13.10	10/15/89	6.35	03/19/97					
								10.50	03/12/90	5.15	10/17/97					
								9.75	10/22/90	6.90	03/12/98					
								10.25	03/05/91							
								9.60	10/16/91							
								9.70	03/24/92							
								7.90	10/23/92							
								9.75	03/12/93							
								6.00	10/25/93							
								7.30	03/29/94							
								7.50	10/27/94							
								7.90	03/15/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T08N	R65W	29	NENWNW	Pettit,L.	9127 F	Qa1	4983	8.40	03/07/76	8.50	10/29/95	DWR	3.70	0.70	3.70	AVG. SWL=
						/LTC		8.40	03/16/88	8.65	03/19/96					8.56
								9.60	03/11/89	4.90	10/22/96					
								10.40	10/15/89	5.40	03/19/97					
								11.20	03/12/90	4.75	10/17/98					
								8.75	10/22/90	4.70	03/12/98					
								10.50	03/05/91							
								10.70	10/16/91							
								10.90	03/24/92							
								8.20	10/23/92							
								9.40	03/12/93							
								8.70	10/25/93							
								8.70	03/29/94							
								9.70	10/27/94							
								9.30	03/15/95							
T08N	R66W	01	NWENW		0	Qoa	5123	20.10	05/22/57	23.60	10/27/95	DWR	-2.50	1.90	0.30	AVG. SWL=
						/LTC		22.90	03/16/88	23.40	03/19/96					23.31
								23.80	03/11/89	24.15	10/22/96					
								24.70	10/15/89	24.50	03/19/97					
								24.60	03/12/90	24.00	10/17/97					
								25.00	10/22/90	22.60	03/12/98					
								24.70	03/05/91							
								25.00	10/16/91							
								21.95	03/24/92							
								20.90	10/23/92							
								21.70	03/12/93							
								22.20	10/25/93							
								22.90	03/29/94							
								23.15	10/27/94							
								23.70	03/15/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T08N	R66W	22		NENENE Jones, T.	11303 R	Qoa /LTC	5070	20.20	04/13/51	21.73	10/27/95	DWR	0.77	1.55	-2.93	AVG. SWL= 21.06
								16.50	03/16/88	21.73	03/19/96					
								20.00	03/11/89	20.88	10/22/96					
								20.90	10/15/89	20.98	03/19/97					
								21.20	03/12/90	21.63	10/17/97					
								21.35	10/22/90	19.43	03/12/98					
								21.60	03/05/91							
								21.60	10/16/91							
								21.30	03/24/92							
								22.10	10/23/92							
								22.60	03/12/93							
								21.33	10/25/93							
								21.78	03/29/94							
								21.63	10/27/94							
21.88	03/15/95															
T09N	R51W	10		SWSWSW Stieb Bros. Inc.	5316 F	Qa1 /SPA	3830	8.00	03/01/64	9.11	10/31/95	DWR	-1.73	0.14	0.00	AVG. SWL= 8.98
								0.00	/ /	0.00	/ /					
								0.00	/ /	8.03	10/14/96					
								0.00	/ /	9.87	04/29/97					
								0.00	/ /	0.00	/ /					
								0.00	/ /	9.73	04/21/98					
								9.45	03/28/91							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								8.10	07/24/94							
8.86	10/31/94															
9.65	04/13/95															

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T09N	R51W	31	NWNW	MacNiel, N.	9322 F	Qa1	3865	4.50	03/18/48	5.78	10/31/95	DWR	-1.88	0.40	-0.68	AVG. SWL=
						/SPA		5.70	03/18/88	5.60	04/22/96					6.27
								7.20	03/30/89	5.70	10/14/96					
								6.00	11/14/89	6.78	04/29/97					
								7.80	04/02/90	5.87	11/05/97					
								7.00	10/31/90	6.38	04/21/98					
								5.82	03/29/91							
								6.80	11/08/91							
								7.53	03/25/92							
								7.10	11/16/92							
								6.25	06/08/93							
								5.78	11/08/93							
								6.05	04/07/94							
								6.30	10/31/94							
								5.81	04/13/95							
T10N	R49W	02	SWWSW	Longman, M. & E.	11125 R	Qa1	3711	7.00	03/07/60	6.08	10/31/95	DWR	0.96	1.08	-0.04	AVG. SWL=
						/SPA		6.00	01/18/88	6.38	04/22/96					6.62
								7.00	03/30/89	5.67	10/14/96					
								8.00	11/14/89	7.12	04/29/97					
								6.70	04/02/90	6.08	11/05/97					
								7.25	10/31/90	6.04	04/21/98					
								6.33	03/28/91							
								6.70	11/08/91							
								7.42	03/25/92							
								7.05	11/16/92							
								6.75	06/08/93							
								6.47	11/08/93							
								6.45	04/07/94							
								6.43	10/31/94							
								6.20	04/13/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T11N	R45W	05	NENWNW	Hilderman,F.G.	8325 R	Qal	3540	15.50	03/22/59	16.60	10/31/95	DWR	-3.42	-1.09	-2.92	AVG. SWL=
						/SPA		16.00	03/18/88	16.90	04/22/96					17.21
								17.40	03/31/89	15.00	10/14/96					
								17.80	10/31/89	17.83	04/29/97					
								18.00	04/02/90	15.37	11/05/97					
								17.75	10/31/90	18.92	04/21/98					
								17.03	03/28/91							
								18.40	11/08/91							
								17.64	03/25/92							
								17.10	11/16/92							
								17.43	06/08/93							
								16.53	11/08/93							
								17.05	04/07/94							
								18.47	10/31/94							
								18.60	04/13/95							
T11N	R45W	06	NWNE	Williamson,L.	2087 F	Qal	3542	20.00	05/04/59	19.43	10/31/95	DWR	1.02	0.63	-0.28	AVG. SWL=
						/SPA		18.70	03/18/88	19.72	04/22/96					19.80
								19.96	03/31/89	18.91	10/14/96					
								19.90	11/14/89	19.61	04/29/97					
								20.45	04/02/90	19.01	11/05/97					
								20.20	10/31/90	18.98	04/21/98					
								19.25	03/28/91							
								20.65	11/08/91							
								21.03	03/25/92							
								19.30	11/16/92							
								19.81	06/08/93							
								19.12	11/08/93							
								18.70	04/07/94							
								21.80	10/31/94							
								21.20	04/13/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T11N	R47W	28	NWNWNW	Davidson,W.C.	7034 R	Qa1 /SPA	3624	3.70	03/02/49	3.94	10/31/95	DWR	-0.95	0.40	-1.35	AVG. SWL= 4.88
								3.30	03/18/88	4.62	04/22/96					
								5.20	03/31/89	3.30	10/14/96					
								7.45	11/14/89	5.05	04/29/97					
								6.00	04/02/90	3.67	11/05/97					
								5.50	10/31/90	4.65	04/21/98					
								3.90	03/28/91							
								5.70	11/08/91							
								4.63	03/25/92							
								5.60	11/16/92							
								4.71	06/08/93							
								5.30	11/08/93							
								4.60	04/07/94							
								6.80	10/31/94							
								4.85	04/13/95							
T12N	R44W	22	SWNESE	USGS Obs.Well	0	Qa1 /SPA	3450	9.20	03/20/68	8.23	10/31/95	DWR	2.47	0.44	2.57	AVG. SWL= 7.65
								9.30	03/18/88	7.45	04/22/96					
								7.80	03/31/89	6.81	10/14/96					
								8.05	11/14/89	7.17	04/29/97					
								8.20	03/22/90	6.66	11/05/97					
								7.95	10/31/90	6.73	04/21/98					
								9.71	03/28/91							
								9.00	11/08/91							
								6.53	03/25/92							
								6.55	11/16/92							
								6.48	06/08/93							
								6.63	11/08/93							
								6.55	04/07/94							
								8.25	10/31/94							
								7.36	04/13/95							



WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T12N	R44W	26	NESESW	Tranel, L.	2574 F	Qal	3465	0.00	/ /	26.73	10/31/95	DWR	0.77	2.57	0.77	AVG. SWL=
						/SPA		26.70	03/18/88	26.35	04/22/96					25.90
								27.40	03/31/89	25.78	10/14/96					
								28.40	11/14/89	28.50	04/29/97					
								27.20	03/22/90	25.96	11/05/97					
								29.35	10/31/90	25.93	04/21/98					
								26.70	03/29/91							
								28.50	11/08/91							
								27.59	03/25/92							
								27.10	11/16/92							
								28.40	06/08/93							
								26.74	11/08/93							
								26.44	04/07/94							
								27.75	10/31/94							
								26.45	04/13/95							
T01S	R66W	11	SWSWSE	Wenzel	0	Qoav/ USP	5050	0.00	/ /	12.35	11/03/95	CCWC	0.00	0.00	0.00	Well D4
								0.00	/ /	13.20	04/25/96					AVG. SWL=
								13.40	04/20/89	15.45	11/19/96					13.47
								16.59	10/16/89	16.50	03/21/97					
								14.42	04/12/90	14.85	10/07/97					
								13.35	10/17/90	0.00	03/21/98					
								13.70	04/10/91							
								14.77	10/24/91							
								0.00	/ /							
								0.00	/ /							
								14.40	03/24/93							
								13.83	11/22/93							
								13.35	04/27/94							
								15.03	11/02/94							
								13.75	04/25/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T01S	R67W	34	SWNE	USGS Obs.Well	0	Qa1 /USP	5015	7.71	10/31/67	18.76	10/31/95	CCWC	-19.61	-0.37	0.00	Well E7
								0.00	/ /	22.85	05/09/96					AVG. SWL=
								10.50	03/30/89	25.10	11/19/96					18.03
								9.69	10/13/89	26.95	04/16/97					
								10.45	03/26/90	26.15	10/15/97					
								11.71	10/09/90	27.32	04/02/98					
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								17.28	03/22/93							
								16.33	10/06/93							
								16.07	04/27/94							
								19.75	11/02/94							
								21.90	04/12/95							
T02S	R65W	23	SWSE	Stapleton Airport	18380 F	Qa1 /TCA	5300	0.00	/ /	14.45	01/11/96	CCWC	0.00	1.60	0.00	Well E7
								0.00	/ /	12.30	05/13/96					AVG. SWL=
								17.00	04/20/89	15.46	11/19/96					15.32
								17.79	10/13/89	15.42	05/16/97					
								17.42	04/10/90	13.62	12/15/97					
								16.70	10/17/90	13.82	04/30/98					
								16.90	04/18/91							
								17.47	10/24/91							
								0.00	/ /							
								0.00	/ /							
								14.27	03/22/93							
								14.20	10/27/93							
								0.00	/ /							
								14.66	11/07/94							
								13.76	04/25/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T02S	R65W	35	SESWSE	Stapleton Airport	18380 R	Qa1	5360	0.00	/ /	20.25	01/11/96	CCWC	0.00	6.55	0.00	Well E8
						/TCA		0.00	/ /	20.30	05/13/96					AVG. SWL=
								20.20	04/20/89	20.96	11/19/96					20.74
								22.07	10/13/89	27.00	05/16/97					
								18.08	04/10/90	22.40	12/15/97					
								19.83	10/17/90	20.45	04/30/98					
								22.48	04/18/91							
								19.75	10/24/91							
								0.00	/ /							
								0.00	/ /							
								17.29	03/22/93							
								20.80	10/27/93							
								0.00	/ /							
								20.34	11/07/94							
								19.68	04/25/95							
T02S	R67W	01	SENWNW	Squires,G.	14784 R	Qoav/	5065	29.00	06/23/53	0.00	/ /	CCWC	-1.86	-0.26	0.00	Well F71
						USP		0.00	/ /	0.00	/ /					AVG. SWL=
								33.40	04/06/89	27.06	11/19/96					28.91
								31.26	10/13/89	30.60	04/15/97					
								33.90	03/26/90	27.10	11/05/97					
								32.60	10/09/90	30.86	04/15/98					
								31.90	04/10/91							
								28.77	10/24/91							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								0.00	/ /							
								23.98	04/12/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T04S	R65W	28	NESEW	USGS Obs. Well	0	Qal /CCA	5640	5.80 9.50 12.70 13.40 12.80 13.70 10.46 14.10 0.00 12.05 14.25 13.41 13.41 13.91 13.71	05/01/75 03/25/88 03/15/89 10/24/89 03/22/90 10/25/90 03/21/91 10/23/91 / / 11/01/92 04/22/93 10/28/93 04/14/94 10/31/94 04/03/95	13.66 0.00 13.96 14.08 12.73 11.33	10/24/95 / / 10/23/96 05/09/97 10/17/97 05/01/98	DWR	-5.53	2.75	-1.83	AVG. SWL= 12.58
T04S	R67S	28	NESENW	Denver Water Dept.	27286 F	Qal /CHC	5410	0.00 0.00 0.00 0.00 0.00 28.56 20.60 0.00 20.15 20.85 17.96 18.71 17.67 17.59	/ / / / / / / / / / 03/21/91 10/23/91 / / 11/01/92 04/22/93 10/28/93 04/14/94 10/31/94 04/03/95	18.25 20.38 18.59 18.80 17.47 17.77	10/24/95 04/25/96 10/23/96 05/09/97 10/17/97 05/01/98	DWR	0.00	1.03	0.00	AVG. SWL= 19.53

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T05S	R66W	18	SESWSE	Colo. Div. Parks	0	Qal	5632	35.50	03/07/57	22.41	10/24/95	DWR	16.52	0.85	0.32	AVG. SWL=
						/CHC		19.30	03/25/88	19.79	04/25/96					22.73
								19.80	03/15/89	22.29	10/23/96					
								24.20	10/24/89	19.83	05/09/97					
								22.50	03/22/90	21.58	10/17/97					
								24.44	10/25/90	18.98	05/01/98					
								25.52	03/21/91							
								25.75	10/23/91							
								0.00	/ /							
								23.33	11/01/92							
								21.50	04/22/93							
								23.33	10/28/93							
								19.71	04/14/94							
								23.66	10/31/94							
								21.08	04/03/95							
T05S	R68W	17	NESESW	Denver Water Dept.	11555	R Qal	5313	11.00	04/12/52	12.91	10/24/95	DWR	-0.30	1.45	0.00	AVG. SWL=
						/USP		0.00	/ /	13.50	04/25/96					12.92
								0.00	/ /	12.67	10/23/96					
								0.00	/ /	12.75	05/09/97					
								0.00	/ /	12.60	10/17/97					
								0.00	/ /	11.30	05/01/98					
								13.20	03/21/91							
								14.10	10/23/91							
								0.00	/ /							
								14.05	11/01/92							
								13.92	04/22/93							
								13.00	10/28/93							
								12.58	04/14/94							
								13.00	10/31/94							
								13.25	04/03/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T05S	R68W	31	NENWNE	Denver Water Dept.	2188 F	Qal /USP	5351	14.00	08/02/59	17.75	10/24/95	DWR	-2.37	1.47	0.00	AVG. SWL=
								0.00	/ /	19.71	04/25/96					17.77
								0.00	/ /	17.42	10/23/96					
								0.00	/ /	17.84	05/09/97					
								0.00	/ /	17.07	10/17/97					
								0.00	/ /	16.37	05/01/98					
								17.88	03/21/91							
								19.90	10/23/91							
								0.00	/ /							
								19.90	11/01/92							
								19.08	04/22/93							
								17.17	10/28/93							
								17.13	04/14/94							
								17.55	10/31/94							
								17.84	04/03/95							
T06S	R66W	04	SESWNW	Cottonwood Est.	0	Qal /CHC	5715	0.00	/ /	6.38	10/24/95	DWR	-0.10	0.57	-0.10	AVG. SWL=
								6.00	03/25/88	6.38	04/25/96					6.30
								5.80	03/15/89	6.58	10/23/96					
								6.30	10/24/89	6.67	05/09/97					
								5.78	03/22/90	6.90	10/17/97					
								6.38	10/25/90	6.10	05/01/98					
								6.00	03/21/91							
								6.40	10/23/91							
								0.00	/ /							
								6.15	11/01/92							
								6.08	04/22/93							
								6.25	10/28/93							
								6.29	04/14/94							
								6.75	10/31/94							
								6.42	04/03/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T06S	R66W	08		NENENE Cottonwood Est.	0	Qa1	5748	0.00	/ /	27.33	10/24/95	DWR	2.62	3.32	2.62	North Well
						/CHC		26.80	03/25/88	24.29	04/25/96					AVG.
								28.00	03/15/89	25.75	10/23/96					SWL=26.96
								28.50	10/24/89	27.50	05/09/97					
								26.50	03/22/90	26.28	10/17/97					
								27.83	10/25/90	24.18	05/01/98					
								27.27	03/21/91							
								28.85	10/23/91							
								0.00	/ /							
								27.50	11/01/92							
								27.75	04/22/93							
								26.75	10/28/93							
								26.79	04/14/94							
								27.83	10/31/94							
								26.50	04/03/95							
T06S	R66W	08		NENENE Cottonwood Est.	0	Qa1	5748	0.00	/ /	27.33	10/24/95	DWR	1.77	0.15	1.77	South Well
						/CHC		27.70	03/25/88	24.29	04/25/96					AVG.
								29.00	03/15/89	27.46	10/23/96					SWL=27.75
								29.30	10/24/89	26.08	05/09/97					
								27.30	03/22/90	26.93	10/17/97					
								28.18	10/25/90	25.93	05/01/98					
								28.02	03/21/91							
								29.65	10/23/91							
								0.00	/ /							
								29.25	11/01/92							
								28.83	04/22/93							
								27.50	10/28/94							
								27.58	04/14/94							
								28.50	10/31/94							
								28.33	04/03/95							



WATER LEVELS IN THE ALLUVIAL AQUIFERS  
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LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV LAND SURF	WATER LEVEL	DATE	WATER LEVEL	DATE	MEAS. BY	CHANGE 1ST TO SPRING 1998	CHANGE S97 TO S98	CHANGE S88 TO S98	REMARKS
T07S	R68W	10	NENESE	Clapp, F.	0	Qa1 /PCA	5680	4.00	03/14/80	5.92	10/24/95	DWR	-1.40	0.60	0.00	AVG. SWL=
								5.40	03/25/88	4.96	04/25/96					5.59
								5.40	03/15/89	6.21	10/23/96					
								5.80	10/24/89	6.00	05/09/97					
								5.50	03/22/90	5.90	10/17/97					
								5.83	10/25/90	5.40	05/01/98					
								5.71	04/21/91							
								5.80	10/23/91							
								0.00	/ /							
								5.90	11/01/92							
								5.08	04/22/93							
								5.42	10/28/93							
								5.50	04/14/94							
								6.33	10/31/94							
								5.71	04/03/95							
T08S	R66W	03	NWESE	CENTENNIAL MATL'S	20706 R	Qa1 /CHC	6120	8.99	06/01/56	11.46	10/24/95	DWR	-2.59	0.67	-0.53	AVG. SWL=
								11.05	03/25/88	11.42	04/25/96					11.78
								0.00	/ /	13.58	10/23/96					
								0.00	/ /	12.25	05/09/97					
								0.00	/ /	11.68	10/17/97					
								0.00	/ /	11.58	05/01/98					
								12.15	04/12/91							
								12.50	10/23/91							
								0.00	/ /							
								11.75	11/01/92							
								12.50	04/22/93							
								11.75	10/28/93							
								12.63	04/14/94							
								11.66	10/31/94							
								11.58	04/03/95							

WATER LEVELS IN THE ALLUVIAL AQUIFERS  
OF THE  
LOWER SOUTH PLATTE RIVER BASIN, CO  
1998

TWN	RNG	SEC	QTR	OWNER	PERMIT	AQUIF	ELEV	WATER	DATE	WATER	DATE	MEAS.	CHANGE	CHANGE	CHANGE	REMARKS
							LAND	LEVEL		LEVEL		BY	1ST TO	S97 TO	S88 TO	
							SURF						SPRING	S98	S98	
													1998			
T08S	R67W	27	SESWNE	Lowell,J.	7262 P	Qa1	6340	17.80	06/03/76	8.50	10/24/95	DWR	9.90	0.00	-1.50	AVG. SWL=
						/PCA		6.40	03/25/88	11.83	04/25/96					8.14
								7.00	03/15/89	0.00	/ /					
								7.30	10/24/89	0.00	/ /					
								7.00	03/22/90	8.40	10/17/97					
								6.50	10/25/90	7.90	05/01/98					
								7.56	04/12/91							
								6.35	10/23/91							
								0.00	/ /							
								5.20	11/01/92							
								5.33	04/22/93							
								8.25	10/28/93							
								8.04	04/14/94							
								8.58	10/31/94							
								8.63	04/03/95							