WARM SPRINGS VALLEY

GROUND WATER PUMPAGE INVENTORY

WATER YEAR 1997

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PURPOSE AND SCOPE

This document is intended to quantify groundwater use in Warm Springs Valley and inventory ground water resources allocated by the Nevada Division of Water Resources (Office of the State Engineer) for that period beginning October 1, 1996 and ending September 30, 1997 (hereinafter referred to as the 1997 water year).

Warm Springs Valley (AKA: Palomino Valley) lies north and east of the Reno-Sparks area approximately 12 miles along S.R. 445 (Pyramid Lake Highway) encompassing an area of about 250 square miles. Very little dependable surface water exists at the valley floor so underground sources provide the majority of the water placed to beneficial use. Warm Springs Creek from the north and Cottonwood Creek from the south drain into the valley from the surrounding mountains and are fully appropriated before they reach the valley floor. Mullen Creek intercepts drainage that overflows from Warm Springs Valley and conveys it to Pyramid Lake Valley on the northeast. Warm Springs and Cottonwood Creeks are perennial near the mountains but only reach the valley floor during periods of heavy runoff and, on rare occasion, overflow into Mullen Creek which is ephemeral.

SUB AREAS

The sub areas herein do not represent drainage sub basins as defined by the State Engineer. The boundaries of the sub areas were determined by the intensity of water use and physical features. The sub areas are: West (W), Central (C), and South (S) (see map).

PROCEDURES AND SUMMARY

The 1997 pumpage inventory was conducted primarily during September and October of 1997. All permitted and certificated water rights were also field checked at least once during the growing season to verify culture and estimate of water use. Those areas under irrigation from multiple rights from the same

well will have the total pumpage pro-rated over the entire area under irrigation regardless of culture. This means that the pumpage is divided up amongst the valid permits and uniformly "spread out" over the place of use actually irrigated. This becomes fairly complex when temporary rights enter the picture. In any event, the total pumpage will be as accurate as the meter readings can be.

Total pumpage from all sources, including domestic wells, was estimated as **4677** acre-feet (see pg. 5). The decrease from the 1996 pumping level reflected a much better pattern of precipitation over the winter and spring. The instances of pumping in excess of the allowed duty were decreased in this water year.

Irrigation continues to represent the primary consumption of water with alfalfa, onion, garlic and turf as the major crops. A total of **4201** acre-feet was pumped to this use (see pg. 5). The greatest concentration of irrigated land lies east of the Pyramid Lake Highway in the central sub area on and near land formerly controlled by MCO Properties, Inc. The next largest area of irrigation is in the west sub area scattered along the Winnemucca Ranch Road north of Range Land Road and on the Winnemucca Ranch. Additional irrigated land lies scattered about the valley in 0.5 to 20.0 acre fields usually accompanied by single family dwellings.

Domestic pumpage was estimated from a count of domestic wells drilled in the valley as **368** acre-feet. The count was cross referenced to Washoe County Assessor's records for parcels with dwellings to increase accuracy. Since the landscaping is typically minimal unless a water right (permit) is attendant, the annual duty was estimated based upon a diversion rate of 1000 gallons per day. This yields an annual duty of 1.12 acre-feet annually per well in use.

Stock watering was estimated based upon the number of animals watered at **22** acre-feet.

Recreation accounted for just over **1** acre-foot at the Washoe County Regional Shooting Facility and at the Air Sailing, Inc.

glider strip.

Quasi-municipal use accounted for 58 acre-feet at the Reno-Sparks Indian Colony by Hungry Valley Utility District (H.V.U.D.), the volunteer fire station (T.M.F.P.D.) and Palomino Valley General Improvement District (P.V.G.I.D.).

Industrial and other uses accounted for just over 27 acre-feet with the major use being environmental remediation at the old Rocketdyne sites.

SUPPLEMENTAL RIGHTS

18.15 acres of the irrigated land on the Winnemucca Ranch are supplemental to Warm Springs Creek water in the amount of 64.60 acre-feet. 18 acres in the name of MCO Properties, Inc. which were supplemental to the waters of Piute Creek in the amount of 72.00 acre-feet were forfeited due to non-use. This is an unusual situation in that underground rights supplemental to surface rights are generally not subject to forfeiture. In this instance no use of water had occurred on the place of use from any source. There are also a few underground rights that are supplemental to other underground rights.

ERRATA

Certain lands in the central area formerly under the control of MCO Properties, Inc. have been stripped of their water rights by deed and the land sold to third parties. In subsequent years the third parties have consolidated their remaining water rights on the same lands. Although the land to which water is appurtenant under several portions of permits owned by second parties is irrigated, their water rights have not been exercised since January 15, 1992. The specific remaining certificated permits referred to are as follows: 28071, 28076, 28444, 28447, 30109, 30111, 30112, 30115, 30118 and 30119.

RECHARGE

The State Engineer maintains neither snow courses nor

precipitation gauges in the mountains surrounding Warm Springs Valley. Stream flow measurements are also not regularly performed. Subsequently, recharge to Warm Springs Valley has been estimated by empirical methods as described in Report 43[1]. That estimate, by the Eakin method, was placed at 6,000 acre-feet annually.

Runoff was estimated by D. O. Moore in Report 43 as 14,000 acre-feet annually, primarily from Warm Springs Creek and Cottonwood Creek. Whereas Mullen Creek drains the valley only in the amount of about 70 acre-feet annually. No playa exists in Warm Springs Valley which leads one to believe that actual recharge from runoff my be somewhat higher than the Eakin method would otherwise suggest.

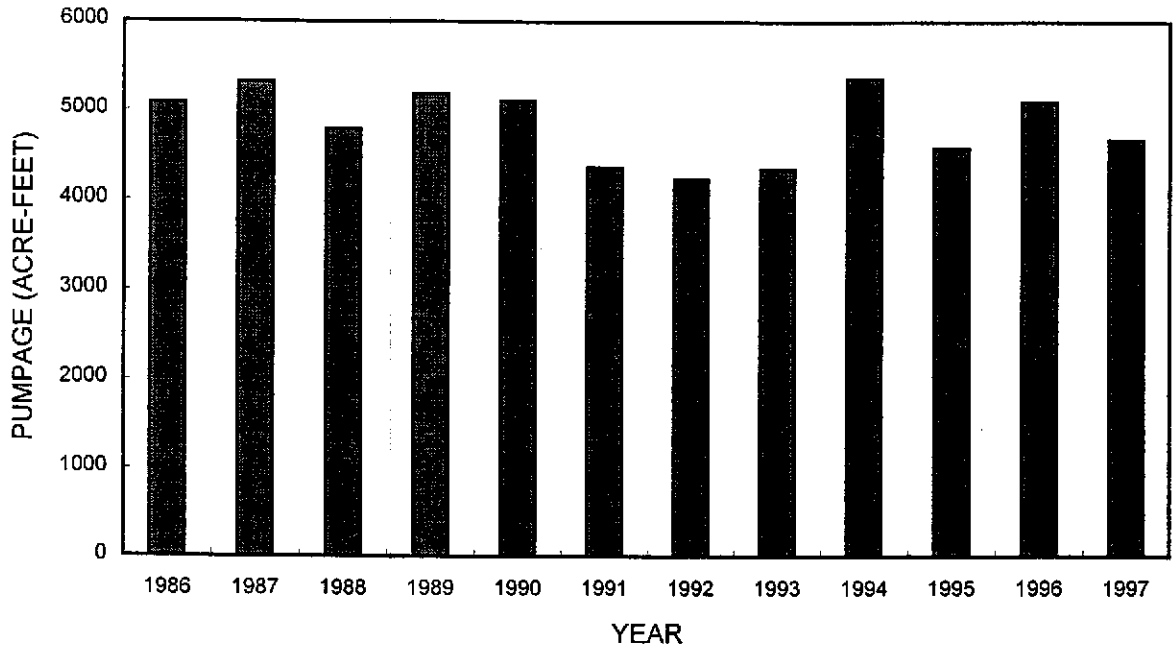
Recharge from irrigation is not readily estimated and is dependant upon several variables: rate of water application, total depth of wetting, direct evapotranspiration rates, crop type and infiltration and percolation rates which are in turn dependant upon soil type and structure. Based upon Report 43 the rate of recharge from irrigation is likely minimal.

A water budget assumes that for a steady state condition the total input of water must equal the total draw on the water. Therefore the actual recharge of the valley must not exceed the total draw on the groundwater of the valley in a steady state or "pre-development" condition. This assumption is the basis for any estimate of perennial yield from a given groundwater system. Using a water budget, Report 43 arrived at a perennial yield of **3000 acre-feet** annually due to the observed draws on the groundwater in Warm Springs Valley and the difficulty in capturing all of the water that is otherwise "lost" through natural evapotranspiration. This is the figure utilized by the State Engineer in water planning decisions.

A more recent series of studies have verified many of the assumptions that were made in Report 43 and confirmed that the methodology utilized was reasonably accurate[2].

[1] Please see entry (1) in the selected bibliography.
[2] Please see entries (2) and (3) in the selected bibliography.

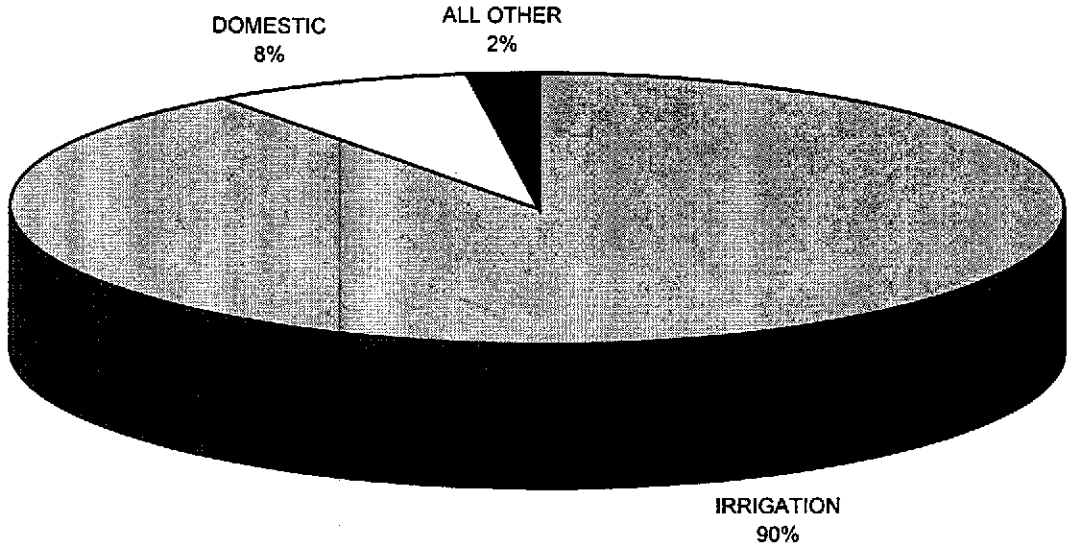
TOTAL PUMPAGE BY WATER YEAR



Perennial yield is estimated at 3,000 acre-feet

PUMPAGE BY USE TYPE

Water Year 1997



LEGEND

A number of abbreviations are used in the tables of this report. The following two pages are a brief discussion of the columns of the report and definitions of abbreviations utilized.

APPEARING IN THE WATER RIGHTS SUMMARY

COLUMN HEADING	DESCRIPTION
APP. NO.	Application number in the records of the State Engineer. If an application is issued this number becomes the permit number. AKA: File number.
STATUS	Status of the corresponding application at the end of the water year. See: Abbreviations.
DUTY	Amount of water requested in the application or allowed by the terms of the permit. All figures are in acre-feet annually (AFA).
USE	Type of beneficial use to which water is applied.
19**	Amount of water pumped under the corresponding application number. Figures are in acre-feet annually (AFA).

APPEARING IN THE PUMPAGE INVENTORY

PERMIT	See: "APP. NO." above.
STAT	See: "STATUS" above.
MOU	See: "USE" above.
PERMITTEE	Owner of record in the Office of the State Engineer. Not necessarily the actual owner of the land to which the water is appurtenant.
PLACE OF USE	Forty (40) acre subdivisions in which the water is permitted to be placed to beneficial use.
Q1 Q2 SEC T R	Abbreviation of "One quarter of one quarter of a Section in a Township and Range." AKA: Legal.
UNITS/ACRES	Number of units (head of stock, number of parcels, etc...) or acreage to be irrigated under the terms of the corresponding permit.
DUTY	Amount of water allowed to be pumped over the course of a year. All figures in acre-feet annually (AFA).
SUPP. ADJ.	Supplemental adjustment. The sum of this column is subtracted from the sum of the "DUTY" column to yield the actual committed resources. The permit corresponding to a figure in this column is considered to be supplemental to another permit in the amount indicated. Also used to account for the issuance of TEMPORARY permits changing (abrogating) existing permits during the water year.
UNITS USED	Actual number of units served or acres of land irrigated during the reported water year.
DUTY USED	Actual (metered or estimated) amount of water placed to beneficial use during the reported water year.
MCO PAR.#	Parcel number corresponding to the "Exhibit Map Supporting the Conveyance of Water Rights by MCO Properties, Inc." on file in the Office of the State Engineer. This column only pertains to certain areas in the Central area.
REMARKS/CULTURE	Self explanatory.

OTHER ABBREVIATIONS UTILIZED

CER	Certificated.
#####	Number appearing in a "STATUS" column indicates a certificate with number #####.
PER	Permitted.
RFA	Application that is Ready For Action, i.e. protest period has expired.
APP	Application prior to expiration of the protest period.
ABR	Abrogated, i.e. changed by subsequent application.
T-ABR	Abrogated by a temporary application.
WDN	Application, permit or certificate Withdrawn by applicant, agent or successor in interest.
EXP	Expired temporary permit. If used in remarks column date on which a temporary expires.
REL	Permit or certificate Relinquished to the state.
T-PER	Temporary permit. Valid for no longer than one year from date of issue.
IRR	Irrigation use.
I&D	Irrigation and domestic use.
STK	Stock watering use.
S&D	Stock watering and domestic use.
Q-M	Quasi-municipal use.
IND	Industrial use.
ENV	Environmental remediation use.
E-PER	Permitted for environmental remediation.
C-#####	Certificate number #####.
P-#####	Permit number #####.
POD	Point of diversion.
BLM	U.S.D.I. Bureau of Land Management.
GID	General Improvement District.
AF/ac.	Acre-feet per acre.
**	Quantity unable to fit format, usually extensive.

NUMERICAL LISTING BY

APPLICATION NUMBER

AND

WATER PUMPAGE SUMMARY

WARM SPRINGS VALLEY (PALOMINO VALLEY) UNDERGROUND WATER RIGHTS SUMMARY.

APP. NO.	STATUS 1997	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR 1992	1993	1994	1995	1996	1997
13630	FOR	0.00	I&D	C	0.00	0.00	0.00	0.00	0.00	0.00
23888	8283	477.80	IRR	C	335.40	475.90	536.73	161.50	385.02	357.67
24099	7599	4.00	STK	C	4.00	4.00	4.00	4.00	4.00	4.00
27395	9317	8.01	REC	W	0.50	0.60	0.56	0.35	0.86	0.49
28071	8628	6.40	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
28076	8518	9.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
28444	10632	12.12	IRR	C	370.13	0.00	0.00	0.00	0.00	0.00
28447	8634	14.00	I&D	C	0.00	0.00	0.00	0.00	0.00	0.00
30109	10579	9.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30110	FOR	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30111	10581	40.00	IRR	C	96.17	0.00	0.00	0.00	0.00	0.00
30112	10582	0.00	IRR	C	96.17	0.00	0.00	0.00	0.00	0.00
30115	T-ABR	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30116	FOR	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30118	10588	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
30119	10589	18.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
32363	12348	24.00	IRR	C	0.00	13.00	13.00	23.38	11.89	11.79
34668	10495	8.00	I&D	S	8.00	8.00	1.00	3.23	4.21	4.37
34670	9862	40.00	IRR	C	40.00	33.33	17.70	22.32	20.93	6.19
35486	10034	8.00	IRR	C	8.00	8.00	8.00	8.00	8.00	8.00
35565	11087	0.16	REC	W	0.23	0.27	0.21	0.17	0.33	0.15
39166	10496	80.00	IRR	C	80.00	66.67	35.39	44.63	32.87	11.95
39167	10457	160.00	IRR	C	100.00	160.00	160.00	160.00	160.00	160.00
39593	PER	64.60	I&D	W	64.60	12.53	0.00	0.00	0.00	0.00
39849	PER	20.00	REC	W	9.13	0.42	0.48	0.73	1.04	0.56
40587	11180	80.00	IRR	C	80.00	0.00	0.00	0.00	0.00	0.00
42403	11875	0.02	Q-M	C	0.02	0.02	0.02	0.02	0.01	0.01
43005	11238	100.00	IRR	C	69.20	100.00	100.00	100.00	40.67	66.56
43006	11181	8.00	I&D	S	8.00	8.00	8.00	8.00	7.00	3.00
45095	10798	8.00	I&D	W	8.00	8.00	8.00	8.00	9.90	9.57
46199	13137	172.00	IRR	C	172.00	108.25	59.48	75.96	62.64	0.00
47562	12057	16.00	I&D	W	10.45	11.60	13.31	10.85	11.37	10.00
47599	13820	2.00	IRR	W	8.02	6.00	4.06	1.85	1.53	0.85
48819	12354	5.20	STK	W	7.84	0.00	5.00	7.84	2.85	2.35
49262	12469	8.00	IRR	C	8.00	0.00	0.00	0.00	0.00	0.00
49445	13822	20.00	IRR	W	20.00	2.79	7.97	0.00	0.00	0.00
49530	12470	20.00	IRR	C	20.00	0.00	0.00	0.00	0.00	0.00
49669	11974	235.40	IRR	W	0.00	0.00	70.00	144.30	48.50	139.35
49670	11975	157.12	IRR	W	0.00	0.00	86.00	184.70	61.82	117.38
50021	13542	29.87	STK	C	12.00	11.90	29.87	18.74	14.10	15.69
50054	PER	10.00	I&D	S	2.19	6.06	10.65	6.26	7.37	6.93
50056	PER	4.00	I&D	S	9.50	1.83	1.45	0.41	0.54	0.50
50764	PER	24.00	I&D	S	0.00	0.00	0.00	0.00	28.65	7.84
51002	13241	12.00	I&D	W	14.81	16.74	17.30	11.47	14.85	14.36
51169	PER	8.00	I&D	C	0.00	2.49	3.70	3.70	3.80	2.61
51170	WDN	0.00	I&D	C	1.12	0.08	0.71	0.00	0.88	0.00

** NOTE: "DUTY" COLUMN IS AS OF 9-30-97. **

WARM SPRINGS VALLEY (PALOMINO VALLEY) UNDERGROUND WATER RIGHTS SUMMARY.

APP. NO.	STATUS 1997	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR 1992	1993	1994	1995	1996	1997
51474	PER	7.00	I&D	C	0.00	2.17	3.24	3.24	3.33	2.29
51883	CAN	0.00	IRR	W	4.74	5.22	2.45	5.24	4.70	5.00
52089	PER	18.38	Q-M	W	0.00	0.00	2.52	0.70	0.00	0.00
52202	13311	16.00	IRR	S	21.54	25.77	27.13	26.16	27.52	32.86
52573	RFA		IRR	W						0.00
52708	PER	4.00	IRR	C	0.00	0.00	0.00	0.00	0.00	2.87
52842	13312	4.00	I&D	S	5.39	6.44	6.78	6.54	6.88	8.21
52868	13916	52.00	I&D	S	46.13	55.89	52.00	36.15	42.65	50.95
52869	13917	28.00	I&D	S	28.00	30.10	28.00	18.93	22.96	27.43
52903	RFA		IRR	C						0.00
52904	RFA		IRR	C						0.00
53174	RFA		IRR	S						0.00
53175	RFA		IRR	S						0.00
53218	RFA		IRR	S						0.00
53242	PER	20.00	IRR	C		6.00	6.00	5.53	6.81	6.96
53243	PER	5.98	IRR	S			0.00	0.00	0.00	0.00
53263	13918	20.00	I&D	S	14.58	21.50	20.00	13.52	16.40	19.59
53275	14073	4.00	I&D	S	0.00	0.32	4.00	1.38	2.91	2.48
53277	PER	8.00	IRR	S					0.00	0.00
53278	PER	10.00	IRR	S					0.00	0.00
53279	RFA		IRR	S						0.00
53303	12897	58.80	I&D	C	89.13	134.80	139.22	178.80	88.58	63.28
53304	12898	5.59	I&D	C	2.92	3.41	3.84	4.31	3.69	3.44
53305	12899	65.20	I&D	C	43.11	65.20	67.34	86.48	98.27	70.17
53306	12900	20.40	I&D	C	10.65	15.11	17.04	19.11	16.45	15.27
53307	12901	32.12	I&D	C	16.77	23.79	26.84	30.09	25.90	24.04
53308	12902	127.88	I&D	C	66.77	94.74	106.84	119.79	103.02	95.73
53313	PER	165.32	Q-M	W	12.97	22.65	37.23	32.56	44.22	47.66
53343	PER	16.00	I&D	S	0.00	0.00	0.00	0.00	2.40	0.56
53344	ABR	0.00	IRR	S		0.00	0.00	40.00	60.62	0.00
53345	ABR	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
53346	PER	16.00	IRR	W		0.00	0.00	0.95	1.79	1.91
53347	PER	6.00	I&D	S	0.00	0.00	0.00	0.00	0.20	0.20
53674	PER	4.00	IRR	C		0.00	0.00	0.00	0.00	0.00
53676	PER	4.00	IRR	S		0.00	0.00	0.00	0.09	0.10
53677	14074	5.20	IRR	W	5.20	7.12	1.11	1.57	1.05	0.00
53678	14075	66.80	IRR	W	66.80	91.46	14.29	20.13	13.54	0.00
53694	PER	9.50	IRR	S				0.00	0.00	0.00
53864	PER	4.00	IRR	S				0.00	1.57	2.09
53865	PER	20.00	IRR	C			20.00	20.00	0.00	20.00
54164	RFA		IRR	C					0.00	0.00
54165	PER	8.00	IRR	S			0.00	0.32	0.00	0.00
54166	PER	12.00	I&D	W	0.00	0.00	0.00	0.00	0.00	0.00
54167	PER	8.00	IRR	S			0.00	0.00	0.00	0.00
54168	ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54169	PER	20.00	IRR	C			0.00	0.00	0.00	0.00

** NOTE: "DUTY" COLUMN IS AS OF 9-30-97. **

WARM SPRINGS VALLEY (PALOMINO VALLEY) UNDERGROUND WATER RIGHTS SUMMARY.

APP. NO.	STATUS 1997	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR 1992	1993	1994	1995	1996	1997
54197	ABR	0.00	IRR	S			0.00	0.00	0.00	0.00
54198	ABR	0.00	IRR	S			0.00	0.00	0.00	0.00
54199	ABR	0.00	IRR	S			0.00	0.00	0.00	0.00
54265	PER	20.00	I&D	S	0.00	0.00	0.00	0.00	0.00	0.00
54411	PER	12.00	IRR	W			0.00	0.00	0.00	0.00
54412	PER	4.00	IRR	S		0.00	0.00	0.00	0.08	0.09
54413	PER	20.00	I&D	S	0.00	0.00	0.00	0.00	0.00	0.00
54461	T-ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54462	T-ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54463	T-ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54464	T-ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54465	PER	16.00	IRR	C			0.00	0.00	0.00	0.00
54466	PER	12.00	IRR	C			0.00	0.00	0.00	0.00
54467	PER	4.00	IRR	C			0.00	0.00	0.00	0.00
54468	PER	16.00	IRR	C			0.00	0.00	0.00	0.00
54469	T-ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54470	PER	16.00	IRR	C			0.00	0.00	0.00	0.00
54471	T-ABR	0.00	IRR	C			0.00	0.00	0.00	0.00
54614	PER	6.00	IRR	W				0.00	0.01	0.00
54615	PER	6.00	I&D	W	0.00	0.00	0.00	0.00	0.00	0.00
54616	PER	4.00	I&D	W	0.00	0.00	0.00	0.00	0.00	0.00
54889	14080	10.00	IRR	W	14.77	4.63	10.06	4.17	4.98	6.42
55118	PER	16.00	IRR	C				0.00	0.00	0.00
55119	PER	16.00	IRR	C				0.00	0.00	0.00
55326	PER	8.00	IRR	S			0.00	0.00	0.00	0.00
55483	PER	4.00	IRR	S			0.00	0.00	0.00	1.14
55600	ABR	0.00	I&D	C	540.00	505.26	725.93	640.86	820.66	0.00
55603	14068	180.00	IRR	C	177.28	180.00	190.61	122.34	180.00	0.00
55604	14069	47.60	IRR	C	42.70	47.60	50.41	29.47	43.36	0.00
55605	14070	11.72	IRR	C	11.54	11.72	12.41	7.97	11.72	0.00
55606	14071	304.68	IRR	C	300.07	304.68	322.65	207.08	304.68	241.98
55607	14072	4.24	IRR	C	46.88	4.24	4.49	2.88	4.24	0.00
55608	14077	192.00	I&D	C	52.57	78.49	193.80	186.71	127.40	130.69
55653	PER	8.00	Q-M	C		0.00	0.00	0.00	7.60	10.00
55656	PER	4.00	IRR	S	0.00	2.00	2.20	2.91	2.66	3.87
55657	PER	4.00	I&D	C				0.00	0.00	0.00
55658	PER	28.00	IRR	C		0.00	0.00	0.00	0.00	0.00
55659	PER	4.00	IRR	C		0.00	0.00	0.00	0.00	0.00
55973	PER	1.12	IRR	C				0.00	0.00	0.00
55974	ABR	0.00	IRR	C				0.00	0.00	0.00
55975	PER	3.84	IRR	C				0.00	0.00	0.00
56164	PER	2.50	I&D	W	0.00	0.00	0.00	0.00	0.00	0.00
56284	PER	12.00	IRR	S			0.00	0.00	0.00	0.00
56472	PER	4.00	IRR	S		0.00	0.39	1.38	0.00	0.00
56576	PER	4.00	IRR	S		0.00	0.00	1.26	3.19	1.67
56613	ABR	0.00	Q-M	W	0.00	0.00	0.00	0.00	0.00	0.00

** NOTE: "DUTY" COLUMN IS AS OF 9-30-97. **

WARM SPRINGS VALLEY (PALOMINO VALLEY) UNDERGROUND WATER RIGHTS SUMMARY.

APP. NO.	STATUS 1997	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR 1992	1993	1994	1995	1996	1997
56927	PER	5.00	IRR	S	0.00	0.00	0.00	0.00	0.00	0.00
56928	ABR	0.00	IRR	W				0.00	0.00	0.00
56929	PER	20.00	IRR	C				0.00	0.92	0.98
56930	PER	1.20	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
56931	PER	7.20	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
56932	PER	12.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
56933	PER	17.50	IRR	C	0.00	0.00	0.00	0.00	0.00	0.00
56934	PER	3.60	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
56963	PER	8.00	IRR	W	0.00	0.00	0.00	0.00	0.00	0.00
57084	14031	409.48	IRR	C	417.29	410.46	224.88	379.69	351.73	
57085	14078	13.12	IRR	C	92.52	95.56	17.40	19.79	14.12	
57086	14032	112.40	IRR	C	112.40	116.09	149.09	169.36	120.97	
57087	14033	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	
57088	14034	9.08	IRR	C	9.08	9.38	12.04	13.69	9.77	
57089	14035	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	
57090	14036	57.32	IRR	C	58.41	57.46	31.48	53.13	49.24	
57091	14037	0.00	IRR	C	0.00	0.00	0.00	0.00	0.00	
57092	14038	68.80	IRR	C	70.11	68.97	37.78	63.79	59.10	
57093	14039	86.00	IRR	C	87.64	86.21	47.23	79.76	73.87	
57094	14040	150.60	IRR	C	153.47	150.96	82.71	139.62	129.36	
57095	14041	127.60	IRR	C	127.60	131.79	169.25	192.25	137.33	
57175	PER	4.00	IRR	C			0.00	0.00	0.00	
57202	PER	8.00	IRR	C	0.00	0.00	0.00	0.00	0.00	
57444	PER	11.20	IRR	C	8.30	11.86	7.61	11.20	0.00	
57445	PER	24.00	IRR	C	17.78	25.42	16.31	24.00	0.00	
57446	PER	20.80	IRR	C	15.41	22.03	14.14	20.80	0.00	
57447	PER	13.97	IRR	C	10.37	14.83	9.52	13.97	0.00	
57448	PER	5.50	IRR	C	4.07	5.82	3.74	5.50	0.00	
57526	PER	4.00	IRR	S	0.00	0.00	0.00	0.00	0.00	
57663	ABR	0.00	IRR	W			0.00	0.00	0.00	
57664	PER	8.00	IRR	C	0.00	2.00	4.00	3.00	3.01	
57899	E-PER	80.65	ENV	C	0.00	0.00	0.58	5.52	8.87	
57983	PER	4.00	IRR	S			0.00	0.45	0.45	
58057	PER	1.00	IRR	S	0.00	0.00	0.00	0.00	0.00	
58290	PER	10.00	IRR	S			0.00	0.00	0.00	
58359	PER	5.00	IRR	S					0.00	
58507	14042	8.96	IRR	C	5.06	9.25	11.88	13.49	9.64	
58508	14043	52.00	IRR	C	29.37	53.71	68.97	78.34	55.97	
58509	14044	2.60	IRR	C	1.47	2.69	3.45	3.93	2.80	
58566	ABR	0.00	IRR	C			0.00	0.00	0.00	
58918	PER	4.00	IRR	S					2.00	
59853	RFA		IRR	S				0.00	0.00	
59854	RFA		IRR	S				0.00	0.00	
60214	PER	0.00	Q-M	W					0.00	
60384	RFA		IND	W				0.00	0.00	
60385	RFA		IND	W				0.00	0.00	
60629	RFA		IRR	S				0.00	0.00	
60916	E-PER	322.87	ENV	C				0.00	2.55	17.12
60975	E-PER	16.13	ENV	S				0.18	0.48	0.77

** NOTE: "DUTY" COLUMN IS AS OF 9-30-97. **

WARM SPRINGS VALLEY (PALOMINO VALLEY) UNDERGROUND WATER RIGHTS SUMMARY.

APP. NO.	STATUS 1997	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR 1992	1993	1994	1995	1996	1997
61162	E-PER	16.13	ENV	C				0.00	5.80	0.00
61923	PER	40.00	I&D	C					1.00	1.00
61942	PER	20.00	IRR	C						0.00
62157	T-PER	4.50	IRR	C						4.17
62158	T-PER	60.00	I&D	C					27.28	32.72
62159	T-PER	13.16	I&D	C					5.99	7.17
62160	T-PER	6.84	I&D	C					3.11	3.73
62161	T-PER	40.00	I&D	C					18.19	21.81
62162	T-PER	20.00	I&D	C					9.10	10.90
62163	T-PER	20.00	I&D	C					9.10	10.90
62164	T-PER	47.82	I&D	C					21.74	26.08
62165	T-PER	8.08	I&D	C					3.67	4.41
62166	T-PER	255.00	IRR	C						236.13
62389	T-PER	76.00	IRR	C					6.21	69.79
62390	T-PER	79.40	IRR	C					6.49	72.91
62391	T-PER	164.60	IRR	C					13.44	151.16
62425	PER	40.00	IRR	S						141.78
62598	PER	8.00	IRR	C						0.00
62599	PER	8.00	IRR	C						0.00
62600	PER	8.00	IRR	C						0.00
62601	RFA		IRR	C						0.00
62602	RFA		IRR	C						0.00
62603	RFA		IRR	C						0.00
62604	RFA		IRR	C						0.00
62605	RFA		IRR	C						0.00
62606	RFA		IRR	C						0.00
62640	PER	2.00	IRR	C						0.00
62641	PER	10.00	IRR	C						0.00
62642	PER	2.00	IRR	W						1.00
62643	PER	5.00	IRR	S						0.00
62644	PER	10.00	IRR	S						0.00
62771	RFA		IRR	C						0.00
62772	RFA		IRR	C						0.00
62827	PER	8.00	I&D	W						4.00
62389	T-WDN	0.00	IRR	C						0.00
62389	T-WDN	0.00	IRR	C						0.00
62889	PER	80.00	IRR	C						77.59
62890	PER	540.00	IRR	C						523.72
62898	PER	4.00	I&D	C						0.00
63064	PER	8.00	I&D	C						0.00
63065	PER	11.00	I&D	C						0.00
63070	E-PER	48.39	ENV	C						0.00
63071	E-PER	48.39	ENV	C						0.00
63072	RFA		IRR	C						0.00
63074	PER	6.00	IRR	C						0.00
63139	PER	8.00	IRR	S						0.00
63203	RFA		IRR	C						0.00
63221	APP		IRR	S						0.00
63222	RFA		IRR	S						0.00
63223	RFA		IRR	S						0.00
63309	APP		IRR	W						0.00
63350	T-APP		IRR	C						0.00
63455	APP		IRR	S						0.00
63456	APP		IRR	S						0.00

** NOTE: "DUTY" COLUMN IS AS OF 9-30-97. **

WARM SPRINGS VALLEY (PALOMINO VALLEY) UNDERGROUND WATER RIGHTS SUMMARY.

APP. NO.	STATUS 1997	DUTY (AFA)	USE	SUB AREA	DUTY USED BY WATER YEAR 1992	1993	1994	1995	1996	1997

PERMITTED DUTY 7243.46 PERMITTED PUMPAGE 4309.19

Note: The "Permitted Duty" shown above is too high by about 336.5 AF due to "doubling up" of temporary permits in the given water year.

** NOTE: "DUTY" COLUMN IS AS OF 9-30-97. **

PUMPAGE BY PERMIT

PUMPAGE SUMMARY BY SUB AREA
INCLUDING DOMESTIC USE ESTIMATE

CENTRAL	3731 Acre-feet
SOUTH	522 Acre-feet
WEST	424 Acre-feet

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
13630	FOR	I&D	MCO Properties, Inc.	NE	SW	18	22	22				0.00	0.00		
13630	FOR	I&D	MCO Properties, Inc.	NW	SW	18	22	22				0.00	0.00		
13630	FOR	I&D							0.00	0.00		0.00	0.00		Forfeit, 04-02-1997
23888	8283	IRR	Tehama Holdings, Inc.	SE	SW	5	22	21	6.96			3.50	10.48		
23888	8283	IRR	Tehama Holdings, Inc.	NE	SE	5	22	21	1.69			0.60	1.80		
23888	8283	IRR	Tehama Holdings, Inc.	NW	SE	5	22	21	5.25			2.80	8.38		
23888	8283	IRR	Tehama Holdings, Inc.	SW	SE	5	22	21	39.40			38.50	115.28		
23888	8283	IRR	Tehama Holdings, Inc.	SE	SE	5	22	21	29.32			26.30	78.75		
23888	8283	IRR	Tehama Holdings, Inc.	NE	NE	8	22	21	20.88			17.50	52.40		
23888	8283	IRR	Tehama Holdings, Inc.	NW	NE	8	22	21	33.25			30.10	90.13		Portions ABR by 62391-T, exp. 09-10-97
23888	8283	IRR	Tehama Holdings, Inc.	NE	NW	8	22	21	3.85			0.15	0.45		Portions ABR by 62889, 09-17-97
23888	8283	IRR							140.60	562.40		119.45	357.67		MCO well #3; Alfalfa
24099	7599	STK	U.S.D.I. - BLM	NW	NE	7	22	21	172	4.00		172	4.00		Horses
28071	8628	IRR	Reno Sparks Indian Colony	NW	SW	4	22	21	0.97			0.00	0.00	39	
28071	8628	IRR	Washoe County	SE	NW	4	22	21	0.63			0.00	0.00	57	
28071	8628	IRR							1.60	6.40		0.00	0.00		MCO well #2
28076	8518	IRR	MCO Properties, Inc.	NE	NW	16	22	21	0.00			0.00	0.00	90	This por. Forfeit, 04-02-97
28076	8518	IRR	Messenger Molding, Inc. & Wa	NE	NW	16	22	21	1.25			0.00	0.00	91	Por. ABR by 62643, 09-03-97
28076	8518	IRR	McNaughton, Arthur Francis, III	NE	NW	16	22	21	0.00			0.00	0.00	91	This por. Forfeit, 04-02-97
28076	8518	IRR	Washoe County	NW	NW	16	22	21	0.63			0.00	0.00	91	Actually 0.625 Acres
28076	8518	IRR	Zenz, Donald J. & Donna R.	NW	NW	16	22	21	1.13			0.00	0.00	91	This por. ABR by 62157-T, exp. 10-27-97
28076	8518	IRR							3.00	12.00		0.00	0.00		MCO well #5
28444	10632	IRR	Reno Sparks Indian Colony	NE	NE	5	22	21	2.00			0.00	0.00	24	
28444	10632	IRR	Foster, Raymond A. & Bertha T	NE	NE	5	22	21	0.00			0.00	0.00	25	This por. Forfeit, 02-28-97
28444	10632	IRR	Reno Sparks Indian Colony	NW	NE	5	22	21	1.03			0.00	0.00	38	
28444	10632	IRR							3.03	12.12		0.00	0.00		MCO well #1
28447	8634	I&D	Reno Sparks Indian Colony	SW	SW	4	22	21	1.50			0.00	0.00	49	
28447	8634	I&D	MCO Properties, Inc. (McCoy ?	SW	SW	4	22	21	2.00			0.00	0.00	52	
28447	8634	I&D							3.50	14.00		0.00	0.00		MCO well #2
30109	10579	IRR	MCO Properties, Inc. (Burgess	NW	NW	5	22	21	0.00			0.00	0.00	8	This por. Forfeit, 05-01-97
30109	10579	IRR	MCO Properties, Inc. (Burgess	NE	NW	5	22	21	0.00			0.00	0.00	8	This por. Forfeit, 05-01-97
30109	10579	IRR	Seher, Ray	SW	SW	32	23	21	1.00			0.00	0.00	4	

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
30109	10579	IRR	Washoe County	SW	SW	32	23	21	1.25			0.00	0.00	4	
30109	10579	IRR							2.25	9.00		0.00	0.00		MCO well #1
30110	FOR	IRR	MCO Properties, Inc. (Carpent	NE	NW	5	22	21	0.00			0.00	0.00	12	This por. Forfeit, 04-02-97
30110	FOR	IRR	MCO Properties, Inc. (Carpent	SE	NW	5	22	21	0.00			0.00	0.00	12	This por. Forfeit, 04-02-97
30110	FOR	IRR							0.00	0.00		0.00	0.00		MCO well #1
30111	10581	IRR	Miller, Marilyn B.	NW	NW	5	22	21	6.00			0.00	0.00	101	
30111	10581	IRR	Miller, Marilyn B.	NE	NE	6	22	21	4.00			0.00	0.00	101	Supplemental to 30112
30111	10581	IRR							10.00	40.00		0.00	0.00		MCO well #1
30112	10582	IRR	Miller, Marilyn B.	NW	NW	5	22	21	6.00			0.00	0.00	101	
30112	10582	IRR	Miller, Marilyn B.	NE	NE	6	22	21	4.00			0.00	0.00	101	Supplemental to 30111; Duty under 30111
30112	10582	IRR							10.00	40.00	40.00	0.00	0.00		MCO well #1
30115	10585	IRR	Cochrane, Jack	NE	SE	9	22	21	7.98			0.00	0.00	71	This por. ABR by 62164-T, exp. 08-06-97
30115	10585	IRR	Cochrane, Jack	NW	SE	9	22	21	4.00			0.00	0.00	87	This por. ABR by 62164-T, exp. 08-06-97
30115	10585	IRR							11.98	47.81		0.00	0.00		MCO well #5; Duty = 3.99114 AF/ac.
30116	FOR	IRR	Shammas, George A. & Patrici	NE	SW	9	22	21	0.00	0.00		0.00	0.00	79	MCO well #5; This por. Forfeit, 04-02-97
30118	10588	IRR	MCO Properties, Inc.	SW	NE	9	22	21	0.00			0.00	0.00	67	This por. Forfeit, 04-03-97
30118	10588	IRR	Cochrane, Jack	SE	NE	9	22	21	2.02			0.00	0.00	69	ABR by 62165-T, exp. 08-06-97
30118	10588	IRR							2.02	8.08		0.00	0.00		MCO well #5
30119	10589	IRR	Demopoulos, Gerald & Delores	SW	SW	4	22	21	1.00			0.00	0.00	43	
30119	10589	IRR	Reno Sparks Indian Colony	SW	SW	4	22	21	3.50			0.00	0.00	48	
30119	10589	IRR	Lopez-Gonzalez, Max & Gail	SE	SW	4	22	21	0.00			0.00	0.00	55	This por. ABR by 62898, 03-07-97
30119	10589	IRR							4.50	18.00		0.00	0.00		MCO well #2
32363	12348	IRR	Fischer, George J. & Ethellou	SW	SE	10	22	21	6.00	24.00		6.00	11.79		Model Farm
34670	9862	IRR	Pepple & Stewart	NE	SW	32	23	21	10.00	40.00		10.00	6.19		Fallow, pasture & garden
35486	10034	IRR	Claypool, John G. & Susan D.	NW	SE	32	23	21	2.00	8.00		2.00	8.00		Alfalfa
39166	10496	IRR	Pepple & Stewart	NE	SW	32	23	21	15.70			15.70	9.72		
39166	10496	IRR	Pepple & Stewart	NW	SW	32	23	21	4.30			4.30	2.23		
39166	10496	IRR	Pepple & Stewart						20.00	80.00		20.00	11.95		Fallow, pasture & garden

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
39167	10457	IRR	Douglas, Brent N.	NE	SE	4	22	21	5.60			5.60	22.40		
39167	10457	IRR	Douglas, Brent N. & Washoe C	NW	SE	4	22	21	34.40			34.40	137.60		
39167	10457	IRR							40.00	160.00		40.00	160.00		Alfalfa
40587	11180	IRR	Newell, George W. & Lolita L.	NE	SE	16	22	21	20.00	80.00		0.00	0.00		
42403	11875	Q-M	Truckee Meadows Fire Prot. Di	NE	SE	6	22	21	**	0.02		**	0.01		Fire Station
43005	11238	IRR	Wells, Clifford E. & Jacquline C	SE	NE	31	23	21	17.30			17.30	46.06		
43005	11238	IRR	Wells, Clifford E. & Jacquline C	SW	NW	32	23	21	7.70			7.70	20.50		
43005	11238	IRR							25.00	100.00		25.00	66.56		Garlic
46199	13137	IRR	Claypool, John G. Susan D.	NE	SE	32	23	21	19.00			0.00	0.00		Same well as 60125-T
46199	13137	IRR	Claypool, John G. Susan D.	NW	SE	32	23	21	24.00			0.00	0.00		
46199	13137	IRR							43.00	172.00		0.00	0.00		Fallow
49262	12469	IRR	Hayes, Hayes, Titus & Davis	SE	NW	32	23	21	2.00	8.00		0.00	0.00		Fallow
49530	12470	IRR	Hayes, Edward J. & Constance	SE	NW	32	23	21	5.00	20.00		0.00	0.00		Fallow
50021	13542	STK	U.S.D.I. - BLM	NW	NE	7	22	21	1500	29.87		707	15.69		Horses - Same POD as 24099
51169	PER	I&D	Hemenway, Raymond F. & Ger	SW	SE	14	22	21	2.00	8.00		2.00	2.61		Orchard: Same POD as 51474
51170	WDN	I&D	Hemenway, Raymond F. & Ger	SE	SE	14	22	21	0.00	0.00		0.00	0.00		Withdrawn, 06-30-97
51474	PER	I&D	Hemenway, Raymond F. & Ger	SW	SE	14	22	21	1.75	7.00		1.75	2.29		Orchard: Same POD as 51169
52708	PER	IRR	Palomino Valley G.I.D.	SE	SE	16	22	21	1.00	4.00		**	2.87		Actual diversion from well under P-46199
53242	PER	I&D	Bonham, Harold F. & Sally M.	NW	NW	13	22	21				0.00	0.00		
53242	PER	I&D	Bonham, Harold F. & Sally M.	SW	NW	13	22	21				0.45	1.57		Pasture grass, alfalfa & orchard
53242	PER	I&D	Bonham, Harold F. & Sally M.	SE	NW	13	22	21				0.30	1.04		Pasture grass, alfalfa & orchard
53242	PER	I&D	Bonham, Harold F. & Sally M.	NE	SW	13	22	21				0.25	0.87		Pasture grass, alfalfa & orchard
53242	PER	I&D	Bonham, Harold F. & Sally M.	NW	SW	13	22	21				1.00	3.48		Pasture grass, alfalfa & orchard
53242	PER	I&D	Bonham, Harold F. & Sally M.	SW	SW	13	22	21				0.00	0.00		
53242	PER	I&D							5.00	20.00		2.00	6.96		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
53303	12897	I&D	Tehama Holdings, Inc.	NW	NW	4	22	21	33.70	134.80		14.70	63.28		Alfalfa; MCO well #2
															Por. ABR by 62389-T, exp. 09-10-97
53304	12898	I&D	Tehama Holdings, Inc.	SW	NE	5	22	21	1.15	5.59		1.15	3.44		Alfalfa; MCO well #3
53305	12899	I&D	Pratt, Tom & Lanette	NW	NW	4	22	21	5.90			5.90	25.40		
53305	12899	I&D	Pratt, Tom & Lanette	SW	NW	4	22	21	10.40			10.40	44.77		
53305	12899	I&D							16.30	65.20		16.30	70.17		Alfalfa; MCO well #2
53306	12900	I&D	Tehama Holdings, Inc.	SW	NE	5	22	21	5.10	20.40		5.10	15.27		Alfalfa; MCO well #3
53307	12901	I&D	Tehama Holdings, Inc.	NW	SE	5	22	21	8.03	32.12		8.03	24.04		Alfalfa; MCO well #3
53308	12902	I&D	Tehama Holdings, Inc.	NW	SE	5	22	21	11.97			11.97	35.84		
53308	12902	I&D	Tehama Holdings, Inc.	SE	SW	5	22	21	0.30			0.30	0.90		
53308	12902	I&D	Tehama Holdings, Inc.	NE	SW	5	22	21	15.70			15.70	47.01		
53308	12902	I&D	Tehama Holdings, Inc.	SE	NW	5	22	21	2.60			2.60	7.79		
53308	12902	I&D	Tehama Holdings, Inc.	SW	NE	5	22	21	1.40			1.40	4.19		
53308	12902	I&D							31.97	127.88		31.97	95.73		Alfalfa; MCO well #3
53345	ABR	IRR	Kazmerski, Dora I. Higgins	SW	SE	6	22	21							
53345	ABR	IRR	Kazmerski, Dora I. Higgins	SE	SE	6	22	21							
53345	ABR	IRR	Kazmerski, Dora I. Higgins	NE	SE	6	22	21							
53345	ABR	IRR	Kazmerski, Dora I. Higgins	NW	SE	6	22	21							
53345	ABR	IRR							0.00	0.00		0.00	0.00		ABR by 62644, 09-03-97
53674	PER	IRR	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	1.00	4.00		0.00	0.00		
53865	PER	I&D	Meade, Lester E. & Donna M.	SE	NE	31	23	21				0.00	0.00		
53865	PER	I&D	Meade, Lester E. & Donna M.	SW	NW	32	23	21				19.00	20.00		
53865	PER	I&D							5.00	20.00		19.00	20.00		Dry
54168	ABR	I&D	Dalton, Janet L.	SW	SW	16	22	21	0.00	0.00		0.00	0.00		ABR by 62827, 09-04-97
54169	PER	I&D	Baptiste, Steven L.	NW	NW	14	22	21	5.00	20.00		0.00	0.00		Meter required
54461	T-ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54461	T-ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54461	T-ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54461	T-ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
54461	T-ABR	I&D	Cochrane, Jack		SW	15	22	21							
54461	T-ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							
54461	T-ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							ABR by 62158-T, exp. 08-06-97
54461	T-ABR	I&D							15.00	60.00		0.00	0.00		Meter required
54462	T-ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54462	T-ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54462	T-ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54462	T-ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54462	T-ABR	I&D	Cochrane, Jack		SW	15	22	21							
54462	T-ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							
54462	T-ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							ABR by 62159-T, exp. 08-06-97
54462	T-ABR	I&D							3.29	13.16		0.00	0.00		Meter required
54463	T-ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54463	T-ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54463	T-ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54463	T-ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54463	T-ABR	I&D	Cochrane, Jack		SW	15	22	21							
54463	T-ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							
54463	T-ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							ABR by 62160-T, exp. 08-06-97
54463	T-ABR	I&D							1.71	6.84		0.00	0.00		Meter required
54464	T-ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54464	T-ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54464	T-ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54464	T-ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54464	T-ABR	I&D	Cochrane, Jack		SW	15	22	21							
54464	T-ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							
54464	T-ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							ABR by 62161-T, exp. 08-06-97
54464	T-ABR	I&D							10.00	40.00		0.00	0.00		Meter required
54465	PER	I&D	Washoe County	NE	SE	9	22	21							
54465	PER	I&D	Washoe County	SE	SE	9	22	21							
54465	PER	I&D	Washoe County	NW	NW	10	22	21							
54465	PER	I&D	Washoe County	SW	NW	15	22	21							
54465	PER	I&D	Washoe County		SW	15	22	21							
54465	PER	I&D	Washoe County	E2	NE	16	22	21							
54465	PER	I&D	Washoe County	E2	SE	16	22	21							

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
54465	PER	I&D							4.00	16.00		0.00	0.00		Meter required
54466	PER	I&D	Fralick, Kathleen & Washoe Co	NE	SE	9	22	21							
54466	PER	I&D	Fralick, Kathleen & Washoe Co	SE	SE	9	22	21							
54466	PER	I&D	Fralick, Kathleen & Washoe Co	NW	NW	10	22	21							
54466	PER	I&D	Fralick, Kathleen & Washoe Co	SW	NW	15	22	21							
54466	PER	I&D	Fralick, Kathleen & Washoe County		SW	15	22	21							
54466	PER	I&D	Fralick, Kathleen & Washoe Co	E2	NE	16	22	21							
54466	PER	I&D	Fralick, Kathleen & Washoe Co	E2	SE	16	22	21							
54466	PER	I&D							3.00	12.00		0.00	0.00		Meter required
54467	PER	IRR	Newell, George W. & Lolita L.	NE	SE	9	22	21							
54467	PER	IRR	Newell, George W. & Lolita L.	SE	SE	9	22	21							
54467	PER	IRR	Newell, George W. & Lolita L.	NW	NW	10	22	21							
54467	PER	IRR	Newell, George W. & Lolita L.	SW	NW	15	22	21							
54467	PER	IRR	Newell, George W. & Lolita L.		SW	15	22	21							
54467	PER	IRR	Newell, George W. & Lolita L.	E2	NE	16	22	21							
54467	PER	IRR	Newell, George W. & Lolita L.	E2	SE	16	22	21							
54467	PER	IRR							1.00	4.00		0.00	0.00		Meter required
54468	PER	IRR	Newell, George & Lolita & Was	NE	SE	9	22	21							
54468	PER	IRR	Newell, George & Lolita & Was	SE	SE	9	22	21							
54468	PER	IRR	Newell, George & Lolita & Was	NW	NW	10	22	21							Washoe County por. is 15.0 Acre-feet
54468	PER	IRR	Newell, George & Lolita & Was	SW	NW	15	22	21							
54468	PER	IRR	Newell, George & Lolita & Washoe C	SW		15	22	21							
54468	PER	IRR	Newell, George & Lolita & Was	E2	NE	16	22	21							
54468	PER	IRR	Newell, George & Lolita & Was	E2	SE	16	22	21							
54468	PER	IRR							4.00	16.00		0.00	0.00		Meter required
54469	T-ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54469	T-ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54469	T-ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54469	T-ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54469	T-ABR	I&D	Cochrane, Jack		SW	15	22	21							
54469	T-ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							
54469	T-ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							ABR by 62162-T, exp. 08-06-97
54469	T-ABR	I&D							5.00	20.00		0.00	0.00		Meter required
54470	PER	I&D	Washoe County	NE	SE	9	22	21							

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PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
54470	PER	I&D	Washoe County	SE	SE	9	22	21							
54470	PER	I&D	Washoe County	NW	NW	10	22	21							
54470	PER	I&D	Washoe County	SW	NW	15	22	21							
54470	PER	I&D	Washoe County		SW	15	22	21							
54470	PER	I&D	Washoe County	E2	NE	16	22	21							
54470	PER	I&D	Washoe County	E2	SE	16	22	21							
54470	PER	I&D							4.00	16.00		0.00	0.00		Meter required
54471	T-ABR	I&D	Cochrane, Jack	NE	SE	9	22	21							
54471	T-ABR	I&D	Cochrane, Jack	SE	SE	9	22	21							
54471	T-ABR	I&D	Cochrane, Jack	NW	NW	10	22	21							
54471	T-ABR	I&D	Cochrane, Jack	SW	NW	15	22	21							
54471	T-ABR	I&D	Cochrane, Jack		SW	15	22	21							
54471	T-ABR	I&D	Cochrane, Jack	E2	NE	16	22	21							
54471	T-ABR	I&D	Cochrane, Jack	E2	SE	16	22	21							ABR by 62163-T, exp. 08-06-97
54471	T-ABR	I&D							5.00	20.00		0.00	0.00		Meter required
55118	PER	I&D	Hess, James E. & Ann D. & Wa	S2	NW	3	22	21	4.00	16.00		0.00	0.00		Meter required; Washoe Co. Por. = 7.5 AFA
55119	PER	I&D	Hess, Timothy & Patricia & Wa	SE	NW	3	22	21	4.00	16.00		0.00	0.00		Meter required; Washoe Co. Por. = 3.5 AFA
55600	ABR	I&D	Fahnestock Enterprises, Inc.	SW	NE	8	22	21							
55600	ABR	I&D	Fahnestock Enterprises, Inc.	SE	NE	8	22	21							
55600	ABR	I&D	Fahnestock Enterprises, Inc.	SW	NW	9	22	21							
55600	ABR	I&D	Fahnestock Enterprises, Inc.	SE	NW	9	22	21							
55600	ABR	I&D	Fahnestock Enterprises, Inc.	SW	NE	9	22	21							ABR by 62890, 09-17-97
55600	ABR	I&D							0.00	0.00		0.00	0.00		Well WT-1
55603	14068	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			25.00	0.00		Turf
55603	14068	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			15.00	0.00		Turf
55603	14068	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			40.00	0.00		Garlic (actually in NE SE 09)
55603	14068	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			0.00	0.00		
55603	14068	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			35.00	0.00		Garlic

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
55603	14068	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			20.00	0.00		Garlic
55603	14068	IRR							45.00	180.00		135.00	0.00		MCO well #5; Pumpage under P-55606
55604	14069	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			25.00	0.00		Turf
55604	14069	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			0.00	0.00		
55604	14069	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			0.00	0.00		
55604	14069	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00		
55604	14069	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			15.00	0.00		Turf
55604	14069	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			0.00	0.00		
55604	14069	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			0.00	0.00		
55604	14069	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			40.00	0.00		Garlic (actually in NE SE 09)
55604	14069	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			0.00	0.00		
55604	14069	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			35.00	0.00		Garlic
55604	14069	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			20.00	0.00		Garlic: Supplemental to 55607
55604	14069	IRR							11.90	47.60		135.00	0.00		MCO well #5; Pumpage under P-55606
55605	14070	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			25.00	0.00		Turf
55605	14070	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			0.00	0.00		
55605	14070	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			0.00	0.00		
55605	14070	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00		
55605	14070	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			15.00	0.00		Turf
55605	14070	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			0.00	0.00		
55605	14070	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			0.00	0.00		
55605	14070	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			40.00	0.00		Garlic (actually in NE SE 09)
55605	14070	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			0.00	0.00		
55605	14070	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			35.00	0.00		Garlic
55605	14070	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			20.00	0.00		Garlic
55605	14070	IRR							2.93	11.72		135.00	0.00		MCO well #5; Pumpage under P-55606
55606	14071	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			25.00	44.81		Turf
55606	14071	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			0.00	0.00		
55606	14071	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			0.00	0.00		
55606	14071	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00		
55606	14071	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			15.00	26.89		Turf
55606	14071	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			0.00	0.00		
55606	14071	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			0.00	0.00		
55606	14071	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			40.00	71.70		Garlic (actually in NE SE 09)
55606	14071	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			0.00	0.00		
55606	14071	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			35.00	62.74		Garlic

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PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
55606	14071	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			20.00	35.85		Garlic
55606	14071	IRR							76.17	304.68		135.00	241.98		MCO well #5
55607	14072	IRR	Capurro, Capurro & Oppio	NE	SE	8	22	21	35.42			25.00	0.00		Turf
55607	14072	IRR	Capurro, Capurro & Oppio	NW	SE	8	22	21	1.74			0.00	0.00		
55607	14072	IRR	Capurro, Capurro & Oppio	SE	SE	8	22	21	12.05			0.00	0.00		
55607	14072	IRR	Capurro, Capurro & Oppio	NE	SW	9	22	21	40.35			0.00	0.00		
55607	14072	IRR	Capurro, Capurro & Oppio	NW	SW	9	22	21	40.39			15.00	0.00		Turf
55607	14072	IRR	Capurro, Capurro & Oppio	SW	SW	9	22	21	40.26			0.00	0.00		
55607	14072	IRR	Capurro, Capurro & Oppio	SE	SW	9	22	21	40.24			0.00	0.00		
55607	14072	IRR	Capurro, Capurro & Oppio	NW	SE	9	22	21	40.32			40.00	0.00		Garlic (actually in NE SE 09)
55607	14072	IRR	Capurro, Capurro & Oppio	SW	SE	9	22	21	40.20			0.00	0.00		
55607	14072	IRR	Capurro, Capurro & Oppio	NE	NW	16	22	21	40.18			35.00	0.00		Garlic
55607	14072	IRR	Capurro, Capurro & Oppio	NW	NW	16	22	21	27.42			20.00	0.00		Garlic: Supplemental to 55604
55607	14072	IRR							11.90	47.60	43.36	135.00	0.00		MCO well #5; Pumpage under P-55606
55608	14077	I&D	Fahnestock Enterprises, Inc.	S2	NE	8	22	21	62.13			40.00	28.57		
55608	14077	I&D	Fahnestock Enterprises, Inc.	S2	N2	9	22	21	161.81			143.00	102.12		Turf and trees
55608	14077	I&D							48.00	192.00		183.00	130.69		MCO well #6
55653	PER	Q-M	Palomino Valley G.I.D.	EXTENSIVE					**	8.00		**	10.00		Meter req; Road maint. E of Pyramid Lake Hwy
55653	PER	Q-M	Palomino Valley G.I.D.	EXTENSIVE											Actual diversion from well under P-46199
55657	PER	I&D	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	1.00	4.00		0.00	0.00		House; Same well as 55658 & 55659
55658	PER	IRR	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	7.00	28.00		0.00	0.00		House; Same well as 55657 & 55659
55659	PER	IRR	Malo, M. Daniel & Cheryl L.	NW	SE	15	22	21	1.00	4.00		0.00	0.00		House; Same well as 55657 & 55658
55973	PER	IRR	Wright, Wanda C.	SW	NE	29	23	21							
55973	PER	IRR	Wright, Wanda C.	S2	NW	29	23	21							
55973	PER	IRR	Wright, Wanda C.	NE	SW	29	23	21							
55973	PER	IRR	Wright, Wanda C.	NW	SE	29	23	21							
55973	PER	IRR							5.99	1.12		0.00	0.00		Meter required
55974	ABR	IRR	Hayes, Edward J. & Constance	SW	NE	29	23	21							
55974	ABR	IRR	Hayes, Edward J. & Constance	S2	NW	29	23	21							
55974	ABR	IRR	Hayes, Edward J. & Constance	NE	SW	29	23	21							
55974	ABR	IRR	Hayes, Edward J. & Constance	NW	SE	29	23	21							ABR by 63064, 09-03-97

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
55974	ABR	IRR							0.00	0.00		0.00	0.00		Meter required
55975	PER	IRR	Wright, Wanda C. & Hayes, et	SW	NE	29	23	21							
55975	PER	IRR	Wright, Wanda C. & Hayes, et	S2	NW	29	23	21							
55975	PER	IRR	Wright, Wanda C. & Hayes, et	NE	SW	29	23	21							
55975	PER	IRR	Wright, Wanda C. & Hayes, et	NW	SE	29	23	21							Hayes por. ABR by 63065, 09-03-97
55975	PER	IRR							0.97	3.84		0.00	0.00		Meter required
56929	PER	I&D	Pruitt, Leneaux & Home Canyo	SW	SW	33	23	21	5.00	20.00		2.00	0.98		Domestic and garden
56932	PER	IRR	Stinson, George W. & Washoe Count	NE		3	22	21							Washoe County Por. = 10.0 AFA
56932	PER	IRR	Stinson, George W. & Washoe	N2	SE	3	22	21							
56932	PER	IRR							3.13	12.50		0.00	0.00		Meter required; Actually 3.125 Ac.
56933	PER	IRR	Stinson, George W.	NW	NW	15	22	21	4.38	17.50		0.00	0.00		Meter required; Actually 4.375 Ac.
57084	14031	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	10.23			10.23	35.15		
57084	14031	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	37.13			37.13	127.57		
57084	14031	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	12.61			12.61	43.33		
57084	14031	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	0.04			0.04	0.14		
57084	14031	IRR	Tehama Holdings, Inc.	NE	SE	31	23	21	0.10			0.10	0.34		
57084	14031	IRR	Tehama Holdings, Inc.	SE	SE	31	23	21	0.86			0.86	2.95		
57084	14031	IRR	Tehama Holdings, Inc.	NW	SW	32	23	21	0.46			0.46	1.58		
57084	14031	IRR	Tehama Holdings, Inc.	SW	SW	32	23	21	36.00			36.00	123.69		
57084	14031	IRR	Tehama Holdings, Inc.	SE	SW	32	23	21	4.94			4.94	16.97		
57084	14031	IRR							102.37	409.48		102.37	351.73		MCO well #1; Alfalfa
57085	14078	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	5.38			0.66	2.84		
57085	14078	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	4.08			2.52	10.85		
57085	14078	IRR	Tehama Holdings, Inc.	SE	SW	32	23	21	6.33			0.10	0.43		
57085	14078	IRR	Tehama Holdings, Inc.	SW	SE	32	23	21	7.34			0.00	0.00		Por. ABR by 62390-T, exp. 08-06-97
57085	14078	IRR							23.13	92.52		3.28	14.12		MCO well #2; Alfalfa
57086	14032	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	7.20			7.20	31.00		
57086	14032	IRR	Tehama Holdings, Inc.	SW	NE	5	22	21	0.36			0.36	1.55		
57086	14032	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	17.60			17.60	75.77		
57086	14032	IRR	Tehama Holdings, Inc.	SE	NW	5	22	21	2.94			2.94	12.66		MCO well #2; Alfalfa
57086	14032	IRR							28.10	112.40		28.10	120.97		Supplemental to P-57087

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
57087	14033	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	7.20			7.20	0.00		
57087	14033	IRR	Tehama Holdings, Inc.	SW	NE	5	22	21	0.36			0.36	0.00		
57087	14033	IRR	Tehama Holdings, Inc.	NE	NW	5	22	21	17.60			17.60	0.00		Duty = 3.64733 AF/ac.
57087	14033	IRR	Tehama Holdings, Inc.	SE	NW	5	22	21	2.94			2.94	0.00		MCO well #2; Alfalfa
57087	14033	IRR							28.10	102.49	102.49	28.10	0.00		Supplemental to P-57086
57088	14034	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.39			0.39	1.68		
57088	14034	IRR	Tehama Holdings, Inc.	SW	SE	32	23	21	1.88			1.88	8.09		MCO well #2; Alfalfa
57088	14034	IRR							2.27	9.08		2.27	9.77		Supplemental to 57089
57089	14035	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.39			0.39	0.00		
57089	14035	IRR	Tehama Holdings, Inc.	SW	SE	32	23	21	1.88			1.88	0.00		MCO well #2; Alfalfa
57089	14035	IRR							2.27	9.08	9.08	2.27	0.00		Supplemental to 57088
57090	14036	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	1.94			1.94	6.67		
57090	14036	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	0.66			0.66	2.27		
57090	14036	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	4.62			4.62	15.87		
57090	14036	IRR	Tehama Holdings, Inc.	SE	NE	6	22	21	7.11			7.11	24.43		MCO well #1; Alfalfa
57090	14036	IRR							14.33	57.32		14.33	49.24		Supplemental to 57091
57091	14037	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	1.94			1.94	0.00		
57091	14037	IRR	Tehama Holdings, Inc.	SW	NW	5	22	21	0.66			0.66	0.00		
57091	14037	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	4.62			4.62	0.00		
57091	14037	IRR	Tehama Holdings, Inc.	SE	NE	6	22	21	7.11			7.11	0.00		MCO well #1; Alfalfa
57091	14037	IRR							14.33	57.32	57.32	14.33	0.00		Supplemental to & duty under 57090
57092	14038	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	0.19			0.19	0.65		
57092	14038	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	13.89			13.89	47.72		
57092	14038	IRR	Tehama Holdings, Inc.	SE	NE	6	22	21	3.12			3.12	10.72		
57092	14038	IRR							17.20	68.80		17.20	59.10		MCO well #1; Alfalfa
57093	14039	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	0.12			0.12	0.41		
57093	14039	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	17.51			17.51	60.16		
57093	14039	IRR	Tehama Holdings, Inc.	NW	NE	6	22	21	3.58			3.58	12.30		
57093	14039	IRR	Tehama Holdings, Inc.	SW	SE	31	23	21	0.22			0.22	0.76		
57093	14039	IRR	Tehama Holdings, Inc.	SE	SE	31	23	21	0.07			0.07	0.24		
57093	14039	IRR							21.50	86.00		21.50	73.87		MCO well #1; Alfalfa
57094	14040	IRR	Tehama Holdings, Inc.	NW	NW	5	22	21	0.57			0.57	1.96		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
57094	14040	IRR	Tehama Holdings, Inc.	NE	NE	6	22	21	3.17			3.17	10.89		
57094	14040	IRR	Tehama Holdings, Inc.	SW	SE	31	23	21	1.06			1.06	3.64		
57094	14040	IRR	Tehama Holdings, Inc.	SE	SE	31	23	21	32.22			32.22	110.70		
57094	14040	IRR	Tehama Holdings, Inc.	NE	SE	31	23	21	0.09			0.09	0.31		
57094	14040	IRR	Tehama Holdings, Inc.	SW	SW	32	23	21	0.54			0.54	1.86		
57094	14040	IRR							37.65	150.60		37.65	129.36		MCO well #1; Alfalfa
57095	14041	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	2.07			2.07	8.91		
57095	14041	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	13.61			13.61	58.59		
57095	14041	IRR	Tehama Holdings, Inc.	SW	NE	5	22	21	14.72			14.72	63.37		
57095	14041	IRR	Tehama Holdings, Inc.	SE	NE	5	22	21	1.30			1.30	5.60		
57095	14041	IRR	Tehama Holdings, Inc.	SE	NW	5	22	21	0.20			0.20	0.86		
57095	14041	IRR							31.90	127.60		31.90	137.33		MCO well #2; Alfalfa
57175	PER	I&D	Washoe County	SE	NW	3	22	21	1.00	4.00		0.00	0.00		Meter required
57202	PER	I&D	Cobb, John & Susan		SW	34	23	21							
57202	PER	I&D	Cobb, John & Susan	N2	SE	33	23	21							
57202	PER	I&D							2.00	8.00		0.00	0.00		Meter required
57444	PER	IRR	Carr, Fred M.	NW	SE	8	22	21				0.00	0.00		
57444	PER	IRR	Carr, Fred M.	NE	SE	8	22	21				25.00	0.00		Turf
57444	PER	IRR	Carr, Fred M.	SE	SE	8	22	21				0.00	0.00		
57444	PER	IRR	Carr, Fred M.	NW	SW	9	22	21				15.00	0.00		Turf
57444	PER	IRR	Carr, Fred M.	NE	SW	9	22	21				0.00	0.00		
57444	PER	IRR	Carr, Fred M.	SW	SW	9	22	21				0.00	0.00		
57444	PER	IRR	Carr, Fred M.	SE	SW	9	22	21				0.00	0.00		
57444	PER	IRR	Carr, Fred M.	NW	SE	9	22	21				40.00	0.00		Garlic (actually in NE SE 09)
57444	PER	IRR	Carr, Fred M.	SW	SE	9	22	21				0.00	0.00		
57444	PER	IRR	Carr, Fred M.	NW	NW	16	22	21				20.00	0.00		Garlic
57444	PER	IRR	Carr, Fred M.	NE	NW	16	22	21				35.00	0.00		Garlic
57444	PER	IRR							2.80	11.20		135.00	0.00		MCO well #5 (pumpage under P-55606)
57445	PER	I&D	Carr, Mark C. & Wilma F.	NW	SE	8	22	21				0.00	0.00		
57445	PER	I&D	Carr, Mark C. & Wilma F.	NE	SE	8	22	21				25.00	0.00		Turf
57445	PER	I&D	Carr, Mark C. & Wilma F.	SE	SE	8	22	21				0.00	0.00		
57445	PER	I&D	Carr, Mark C. & Wilma F.	NW	SW	9	22	21				15.00	0.00		Turf
57445	PER	I&D	Carr, Mark C. & Wilma F.	NE	SW	9	22	21				0.00	0.00		
57445	PER	I&D	Carr, Mark C. & Wilma F.	SW	SW	9	22	21				0.00	0.00		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
57445	PER	I&D	Carr, Mark C. & Wilma F.	SE	SW	9	22	21				0.00	0.00		
57445	PER	I&D	Carr, Mark C. & Wilma F.	NW	SE	9	22	21				40.00	0.00		Garlic (actually in NE SE 09)
57445	PER	I&D	Carr, Mark C. & Wilma F.	SW	SE	9	22	21				0.00	0.00		
57445	PER	I&D	Carr, Mark C. & Wilma F.	NW	NW	16	22	21				20.00	0.00		Garlic
57445	PER	I&D	Carr, Mark C. & Wilma F.	NE	NW	16	22	21				35.00	0.00		Garlic
57445	PER	I&D							6.00	24.00		135.00	0.00		MCO well #5 (pumpage under P-55606)
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NW	SE	8	22	21				0.00	0.00		
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NE	SE	8	22	21				25.00	0.00		Turf
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	SE	SE	8	22	21				0.00	0.00		
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NW	SW	9	22	21				15.00	0.00		Turf
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NE	SW	9	22	21				0.00	0.00		
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	SW	SW	9	22	21				0.00	0.00		
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	SE	SW	9	22	21				0.00	0.00		
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NW	SE	9	22	21				40.00	0.00		Garlic (actually in NE SE 09)
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	SW	SE	9	22	21				0.00	0.00		
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NW	NW	16	22	21				20.00	0.00		Garlic
57446	PER	I&D	Carr, Fred & Carr, Mark & Wilm	NE	NW	16	22	21				35.00	0.00		Garlic
57446	PER	I&D							5.20	20.80		135.00	0.00		MCO well #5 (pumpage under P-55606)
57447	PER	IRR	Carr, Mark C. & Wilma F.	NW	SE	8	22	21				0.00	0.00		
57447	PER	IRR	Carr, Mark C. & Wilma F.	NE	SE	8	22	21				25.00	0.00		Turf
57447	PER	IRR	Carr, Mark C. & Wilma F.	SE	SE	8	22	21				0.00	0.00		
57447	PER	IRR	Carr, Mark C. & Wilma F.	NW	SW	9	22	21				15.00	0.00		Turf
57447	PER	IRR	Carr, Mark C. & Wilma F.	NE	SW	9	22	21				0.00	0.00		
57447	PER	IRR	Carr, Mark C. & Wilma F.	SW	SW	9	22	21				0.00	0.00		
57447	PER	IRR	Carr, Mark C. & Wilma F.	SE	SW	9	22	21				0.00	0.00		
57447	PER	IRR	Carr, Mark C. & Wilma F.	NW	SE	9	22	21				40.00	0.00		Garlic (actually in NE SE 09)
57447	PER	IRR	Carr, Mark C. & Wilma F.	SW	SE	9	22	21				0.00	0.00		
57447	PER	IRR	Carr, Mark C. & Wilma F.	NW	NW	16	22	21				20.00	0.00		Garlic
57447	PER	IRR	Carr, Mark C. & Wilma F.	NE	NW	16	22	21				35.00	0.00		Garlic (pumpage under P-55606)
57447	PER	IRR							3.50	13.97		135.00	0.00		MCO well #5; Duty of base rt. = 3.99114 AF/ac
57448	PER	I&D	Carr, Mark C. & Wilma F.	NW	SE	8	22	21				0.00	0.00		
57448	PER	I&D	Carr, Mark C. & Wilma F.	NE	SE	8	22	21				25.00	0.00		Turf
57448	PER	I&D	Carr, Mark C. & Wilma F.	SE	SE	8	22	21				0.00	0.00		
57448	PER	I&D	Carr, Mark C. & Wilma F.	NW	SW	9	22	21				15.00	0.00		Turf
57448	PER	I&D	Carr, Mark C. & Wilma F.	NE	SW	9	22	21				0.00	0.00		
57448	PER	I&D	Carr, Mark C. & Wilma F.	SW	SW	9	22	21				0.00	0.00		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
57448	PER	I&D	Carr, Mark C. & Wilma F.	SE	SW	9	22	21				0.00	0.00		
57448	PER	I&D	Carr, Mark C. & Wilma F.	NW	SE	9	22	21				40.00	0.00		Garlic (actually in NE SE 09)
57448	PER	I&D	Carr, Mark C. & Wilma F.	SW	SE	9	22	21				0.00	0.00		
57448	PER	I&D	Carr, Mark C. & Wilma F.	NW	NW	16	22	21				20.00	0.00		Garlic
57448	PER	I&D	Carr, Mark C. & Wilma F.	NE	NW	16	22	21				35.00	0.00		Garlic (pumpage under P-55606)
57448	PER	I&D							1.38	5.50		135.00	0.00		MCO well #5; Actually 1.375 ac.
57664	PER	I&D	Cleri, Diane & Richard J.	NW	SE	16	22	21	2.00	8.00		1.00	3.01		House, garden and landscaping
57899	E-PER	ENV	Rockwell International Corporation		E2	12	22	21	**	80.65		**	8.87		Meter and monthly reporting required
58507	14042	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	1.46			1.46	6.29		
58507	14042	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.78			0.78	3.36		
58507	14042	IRR							2.24	8.96		2.24	9.64		MCO well #2; Alfalfa
58508	14043	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	8.43			8.43	36.29		
58508	14043	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	4.57			4.57	19.67		
58508	14043	IRR							13.00	52.00		13.00	55.97		MCO well #2; Alfalfa
58509	14044	IRR	Tehama Holdings, Inc.	NE	NE	5	22	21	0.37			0.37	1.59		
58509	14044	IRR	Tehama Holdings, Inc.	NW	NE	5	22	21	0.28			0.28	1.21		
58509	14044	IRR							0.65	2.60		0.65	2.80		MCO well #2; Alfalfa
58566	ABR	IRR	Maykovich, John & Minako	N2	NW	3	22	21	0.00	0.00		0.00	0.00		ABR by 62139, 09-09-97
60916	E-PER	ENV	Rockwell International Corporation			7	22	22							
60916	E-PER	ENV	Rockwell International Corporation		E2	12	22	21							
60916	E-PER	ENV	Rockwell International Corporation		SW	12	22	21							
60916	E-PER	ENV	Rockwell International Corporation		SE	11	22	21							
60916	E-PER	ENV	Rockwell International Corporation		N2	13	22	21							
60916	E-PER	ENV	Rockwell International Corporation		NE	14	22	21							
60916	E-PER	ENV							**	322.87		**	17.12		Meter and monthly reporting required
61162	E-PER	ENV	Rockwell International Corporation		SE	18	22	22	**	16.13		**	0.00		Meter and monthly reporting required
61923	PER	I&D	Cochrane, Jack	NE	SE	9	22	21							
61923	PER	I&D	Cochrane, Jack	NW	NW	10	22	21							
61923	PER	I&D	Cochrane, Jack	NE	NE	16	22	21							
61923	PER	I&D	Cochrane, Jack	SE	NE	16	22	21							

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
61923	PER	I&D	Cochrane, Jack	SW	NW	15	22	21							
61923	PER	I&D	Cochrane, Jack	NE	SW	15	22	21							
61923	PER	I&D	Cochrane, Jack	NW	SW	15	22	21							
61923	PER	I&D	Cochrane, Jack	SW	SW	15	22	21							
61923	PER	I&D	Cochrane, Jack	SE	SW	15	22	21							
61923	PER	I&D							10.00	40.00		0.00	1.00		Meter required; Pump test performed
61942	PER	I&D	Hayes, Edward J. & Constance	NE	SE	16	22	21							
61942	PER	I&D	Hayes, Edward J. & Constance	SE	SE	16	22	21							
61942	PER	I&D							5.00	20.00		0.00	0.00		Meter required
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	E2	NE	16	22	21	80.00			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NE	SE	8	22	21	35.42			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NW	SE	8	22	21	1.74			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	SE	SE	8	22	21	12.05			4.00	0.15		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NE	SW	9	22	21	40.35			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NW	SW	9	22	21	40.39			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	SW	SW	9	22	21	40.26			36.00	1.31		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	SE	SW	9	22	21	40.24			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NW	SE	9	22	21	40.32			37.50	1.36		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	SW	SE	9	22	21	40.20			37.50	1.36		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NE	NW	16	22	21	40.18			0.00	0.00		
62157	T-PER	I&D	Zenz, Donald J. and Donna R.	NW	NW	16	22	21	27.42			0.00	0.00		
62157	T-PER	I&D							1.13	4.50	4.50	115.00	4.17		MCO well #5; EXPIRES 10-27-97
62158	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62158	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	1.14		
62158	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	10.24		
62158	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	10.67		
62158	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	10.67		
62158	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		
62158	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
62158	T-PER	I&D							15.00	60.00	60.00	115.00	32.72		MCO well #5; EXPIRES 08-06-97
62159	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62159	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.25		
62159	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	2.24		
62159	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	2.34		
62159	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	2.34		
62159	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		
62159	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62159	T-PER	I&D							3.29	13.16	13.16	115.00	7.17		MCO well #5; EXPIRES 08-06-97
62160	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62160	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.13		
62160	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	1.17		
62160	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	1.22		
62160	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	1.22		
62160	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		
62160	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62160	T-PER	I&D							1.71	6.84	6.84	115.00	3.73		MCO well #5; EXPIRES 08-06-97
62161	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62161	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62161	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62161	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62161	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.76		
62161	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62161	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
62161	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	6.83		
62161	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62161	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	7.11		
62161	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	7.11		
62161	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		
62161	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62161	T-PER	I&D							10.00	40.00	40.00	115.00	21.81		MCO well #5; EXPIRES 08-06-97
62162	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62162	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.38		
62162	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	3.41		
62162	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	3.55		
62162	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	3.55		
62162	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		
62162	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62162	T-PER	I&D							5.00	20.00	20.00	115.00	10.90		MCO well #5; EXPIRES 08-06-97
62163	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		Onion
62163	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.38		
62163	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	3.41		
62163	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	3.55		
62163	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	3.55		
62163	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		
62163	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62163	T-PER	I&D							5.00	20.00	20.00	115.00	10.90		MCO well #5; EXPIRES 08-06-97
62164	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		

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PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
62164	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62164	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62164	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62164	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.91		
62164	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62164	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62164	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	8.16		
62164	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62164	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	8.50		
62164	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	8.50		
62164	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		Garlic
62164	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62164	T-PER	I&D							11.96	47.82	47.82	115.00	26.08		MCO well #5; EXPIRES 08-06-97
62165	T-PER	I&D	Cochrane, Jack	NE	SE	9	22	21	40.00			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	E2	NE	16	22	21	80.00			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	NE	SE	8	22	21	35.42			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	NW	SE	8	22	21	1.74			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	SE	SE	8	22	21	12.05			4.00	0.15		
62165	T-PER	I&D	Cochrane, Jack	NE	SW	9	22	21	40.35			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	NW	SW	9	22	21	40.39			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	SW	SW	9	22	21	40.26			36.00	1.38		
62165	T-PER	I&D	Cochrane, Jack	SE	SW	9	22	21	40.24			0.00	0.00		
62165	T-PER	I&D	Cochrane, Jack	NW	SE	9	22	21	40.32			37.50	1.44		
62165	T-PER	I&D	Cochrane, Jack	SW	SE	9	22	21	40.20			37.50	1.44		
62165	T-PER	I&D	Cochrane, Jack	NE	NW	16	22	21	40.18			0.00	0.00		Garlic
62165	T-PER	I&D	Cochrane, Jack	NW	NW	16	22	21	27.42			0.00	0.00		
62165	T-PER	I&D							2.02	8.08	8.08	115.00	4.41		MCO well #5; EXPIRES 08-06-97
62166	T-PER	I&D	Intermountain Land Company	NE	SE	9	22	21	40.00			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	E2	NE	16	22	21	80.00			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	NE	SE	8	22	21	35.42			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	NW	SE	8	22	21	1.74			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	SE	SE	8	22	21	12.05			4.00	8.21		
62166	T-PER	I&D	Intermountain Land Company	NE	SW	9	22	21	40.35			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	NW	SW	9	22	21	40.39			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	SW	SW	9	22	21	40.26			36.00	73.92		
62166	T-PER	I&D	Intermountain Land Company	SE	SW	9	22	21	40.24			0.00	0.00		
62166	T-PER	I&D	Intermountain Land Company	NW	SE	9	22	21	40.32			37.50	77.00		

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
62166	T-PER	I&D	Intermountain Land Company	SW	SE	9	22	21	40.20			37.50	77.00		
62166	T-PER	I&D	Intermountain Land Company	NE	NW	16	22	21	40.18			0.00	0.00		Garlic
62166	T-PER	I&D	Intermountain Land Company	NW	NW	16	22	21	27.42			0.00	0.00		
62166	T-PER	I&D							63.75	255.00	255.00	115.00	238.13		MCO well #5; EXPIRES 10-27-97
62389	T-PER	IRR	Tehama Holdings, Inc.	NE	NW	9	22	21	40.00			40.00	34.89		Turf
62389	T-PER	IRR	Tehama Holdings, Inc.	NW	NW	9	22	21	40.00			40.00	34.90		Turf
62389	T-PER	IRR							19.00	76.00	76.00	80.00	69.79		Well WT-1; EXPIRES 09-10-97
62390	T-PER	IRR	Tehama Holdings, Inc.	NE	NW	9	22	21	40.00			40.00	36.46		Turf
62390	T-PER	IRR	Tehama Holdings, Inc.	NW	NW	9	22	21	40.00			40.00	36.45		Turf
62390	T-PER	IRR							19.85	79.40	79.40	80.00	72.91		Well WT-1; EXPIRES 09-10-97
62391	T-PER	IRR	Tehama Holdings, Inc.	NE	NW	9	22	21	40.00			40.00	75.58		Turf
62391	T-PER	IRR	Tehama Holdings, Inc.	NW	NW	9	22	21	40.00			40.00	75.58		Turf
62391	T-PER	IRR							41.15	164.60	164.60	80.00	151.16		Well WT-1; EXPIRES 09-10-97
62598	PER	IRR	Washoe County	E2	SE	9	22	21							
62598	PER	IRR	Washoe County	NW	NW	10	22	21							
62598	PER	IRR	Washoe County	SW	NW	15	22	21							
62598	PER	IRR	Washoe County		SW	15	22	21							
62598	PER	IRR	Washoe County	E2	E2	16	22	21							
62598	PER	IRR							2.00	8.00		0.00	0.00		Meter required
62599	PER	IRR	Palomino Valley Estates & Was	E2	SE	9	22	21							
62599	PER	IRR	Palomino Valley Estates & Was	NW	NW	10	22	21							
62599	PER	IRR	Palomino Valley Estates & Was	SW	NW	15	22	21							
62599	PER	IRR	Palomino Valley Estates & Washoe		SW	15	22	21							
62599	PER	IRR	Palomino Valley Estates & Was	E2	E2	16	22	21							
62599	PER	IRR							2.00	8.00		0.00	0.00		Meter required
62600	PER	IRR	Palomino Valley Estates, Inc.	E2	SE	9	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.	NW	NW	10	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.	SW	NW	15	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.		SW	15	22	21							
62600	PER	IRR	Palomino Valley Estates, Inc.	E2	E2	16	22	21							
62600	PER	IRR							2.00	8.00		0.00	0.00		Meter required
62640	PER	IRR	Phungphiphadhana, Steph & S	NE	SE	14	22	21							

WARM SPRINGS VALLEY CENTRAL: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	MCO PAR. #	REMARKS / CULTURE
62640	PER	IRR	Phungphiphadhana, Steph & S	NW	SE	14	22	21							
62640	PER	IRR							0.50	2.00		0.00	0.00		Meter required
62641	PER	IRR	Phungphiphadhana, Steph & S	NE	SE	14	22	21							
62641	PER	IRR	Phungphiphadhana, Steph & S	NW	SE	14	22	21							
62641	PER	IRR							2.50	10.00		0.00	0.00		Meter required
62889	PER	IRR	Tehama Holdings Inc.	SW	NE	8	22	21	21.87			20.00	7.64		
62889	PER	IRR	Tehama Holdings Inc.	SE	NE	8	22	21	40.26			40.00	15.29		
62889	PER	IRR	Tehama Holdings Inc.	NE	NW	9	22	21	35.00			0.00	0.00		
62889	PER	IRR	Tehama Holdings Inc.	NW	NW	9	22	21	35.00			0.00	0.00		
62889	PER	IRR	Tehama Holdings Inc.	S2	N2	9	22	21	161.81			143.00	54.66		
62889	PER	IRR							20.00	80.00		203.00	77.59		Meter required
62890	PER	IRR	Fahnestock Enterprises, Inc.	SW	NE	8	22	21	21.87			20.00	51.60		
62890	PER	IRR	Fahnestock Enterprises, Inc.	SE	NE	8	22	21	40.26			40.00	103.20		
62890	PER	IRR	Fahnestock Enterprises, Inc.	NE	NW	9	22	21	35.00			0.00	0.00		
62890	PER	IRR	Fahnestock Enterprises, Inc.	NW	NW	9	22	21	35.00			0.00	0.00		
62890	PER	IRR	Fahnestock Enterprises, Inc.	S2	N2	9	22	21	161.81			143.00	368.93		
62890	PER	IRR							135.00	540.00		203.00	523.72		Meter required
62898	PER	I&D	Lopez-Gonzalez, Max & Gail	SW	NE	4	22	21	1.00	4.00		0.00	0.00		Meter required
63064	PER	I&D	Hayes, Edward J. & Constance	NW	NE	9	22	21	2.00	8.00		0.00	0.00		Meter required
63065	PER	I&D	Hayes, Edward J. & Constance	NW	NE	9	22	21	2.75	11.00		0.00	0.00		Meter required
63070	E-PER	ENV	Rockwell International Corporation		SE	18	22	22	**	48.39		**	0.00		Meter and reporting required
63071	E-PER	ENV	Rockwell International Corporation		SE	18	22	22	**	48.39		**	0.00		Meter and reporting required
63074	PER	IRR	Hayes, Edward J. & Constance	NW	NE	9	22	21	1.50	6.00		0.00	0.00		Meter required
				DOMESTIC WELLS					91				101.92		Duty = 1.12 acre-feet per well (1000 gal./day)
				COLUMN TOTALS						6601.80	1047.65		3731.19		
				DUTY TOTALS						5554			3731		

WARM SPRINGS VALLEY SOUTH: 1997

PERMIT	STAT	MOU	OWNER	PLACE OF USE Q1	Q2	SEC	T	R	UNITS	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
34668	10495	I&D	Gariador Brothers		NE	25	22	20	2.00	8.00		0.25	4.37	Alfalfa; ½ Ac. trees not in POU
43006	11181	I&D	Sendall Family Trust	NE	NW	34	22	21	2.00	8.00		0.75	3.00	Pasture & wheat; Meter required
50054	13051	I&D	McGuire, Kenneth L. & Sue C.	SE	NW	27	22	21	2.50	10.00		2.50	6.93	Alfalfa
50056	13610	I&D	Washoe County	SE	SE	36	22	20	1.00	4.00		0.50	0.50	Vegtables & house
50764	PER	I&D	Meredith, Marjorie	SW	NW	3	21	22						
50764	PER	I&D	Meredith, Marjorie	NW	SW	3	21	22				2.00	7.84	
50764	PER	I&D							6.00	24.00		2.00	7.84	Meter required
52202	13311	IRR	Avila, Robert J.	NW	SE	22	22	21	4.00	16.00		4.00	32.86	Alfalfa; Same well as 52842
52842	13312	I&D	Avila, Robert J.	NW	SE	22	22	21	1.00	4.00		1.00	8.21	Alfalfa; Same well as 52202
52868	13916	I&D	Wendland, Dave & Donna	NW	NE	21	22	21	13.00	52.00		13.00	50.95	Alfalfa; Same well as 52869 & 53263
52869	13917	I&D	Wendland, Dave & Donna	NW	NE	21	22	21	7.00	28.00		7.00	27.43	Alfalfa; Same well as 52868 & 53263
53243	PER	IRR	Palomino Valley GID	NE	NW	23	22	21	1.50	5.98		0.00	0.00	Meter required
53263	13918	I&D	Champion, Milton E. & Phyllis C.	NW	NE	21	22	21	5.00	20.00		5.00	19.59	Alfalfa; Same well as 52868 & 52869
53275	14073	I&D	Solari, John A. & Shella L.	NE	NW	30	22	21	1.00	4.00		1.00	2.48	Pasture grass; Same well as 56472
53277	PER	I&D	Rowe, Evelyn K. & Richard J.	SW	SW	30	22	21	2.00	8.00		0.00	0.00	Meter required
53278	PER	IRR	Gleason, Gleason & Speck	SW	SW	30	22	21	2.50	10.00		0.00	0.00	Meter required
53343	PER	I&D	Bailey, Curtiss M. & Washoe County	NW	SE	30	22	22				0.25	0.28	
53343	PER	I&D	Bailey, Curtiss M. & Washoe County	SW	SE	30	22	22				0.25	0.28	
53343	PER	I&D							4.00	16.00		0.50	0.56	Pasture
53344	ABR	I&D	Capurro, George J. & Elaine Kinerson	SW	NE	25	22	20						
53344	ABR	I&D	Capurro, George J. & Elaine Kinerson	SE	NE	25	22	20				0.00	0.00	
53344	ABR	I&D							0.00	0.00		0.00	0.00	Abrogated by 62425 8/11/97
53347	PER	I&D	Macaluso, Guiseppe & Mary	NE	NW	24	22	20						

WARM SPRINGS VALLEY SOUTH: 1997

PERMIT	STAT	MOU	OWNER	PLACE OF USE Q1	Q2	SEC	T	R	UNITS	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
53347	PER	I&D	Macaluso, Guiseppe & Mary	NW	NW	24	22	20						
53347	PER	I&D							1.50	6.00		0.00	0.20	Domestic only
53676	PER	I&D	Lee, Wallace & Clara	SE	SE	25	22	20	1.00	4.00		0.50	0.10	Same well as 54412
53694	PER	I&D	Mugni, John A.	SW	SE	24	22	20						
53694	PER	I&D	Mugni, John A.	SE	SE	24	22	20						Actually 2.375 acres
53694	PER	I&D							2.38	9.50		0.00	0.00	Meter required
53864	PER	I&D	Ohlson, John & Willmore, Pamela H.	NE	SE	19	22	22						
53864	PER	I&D	Ohlson, John & Willmore, Pamela H.	NE	SW	19	22	22						
53864	PER	I&D	Ohlson, John & Willmore, Pamela H.	NW	SW	19	22	22				0.20	2.09	
53864	PER	I&D							1.00	4.00		0.20	2.09	House, corrals and landscaping.
54165	PER	I&D	Furgason, Murray, Buxton & Casale	NW	SE	21	22	21						
54165	PER	I&D	Furgason, Murray, Buxton & Casale	NW	SE	21	22	21						
54165	PER	I&D							2.00	8.00		0.00	0.00	Meter required; Well plugged
54167	PER	I&D	Chang, Cherk H. & Jirovsky, James C.		SE	13	22	20	2.00	8.00		0.00	0.00	Meter required
54197	ABR	IRR	Palomino Valley Estates, Inc.	SE	NE	19	22	22						
54197	ABR	IRR	Palomino Valley Estates, Inc.	SW	NW	20	22	22						
54197	ABR	IRR							0.00	0.00		0.00	0.00	Abrogated by 62598 on 6/12/97
54198	ABR	I&D	Palomino Valley Estates, Inc.	SE	NE	19	22	22						
54198	ABR	I&D	Palomino Valley Estates, Inc.	SW	NW	20	22	22						
54198	ABR	I&D							0.00	0.00		0.00	0.00	Abrogated by 62599 on 6/12/97
54199	ABR	I&D	Palomino Valley Estates, Inc.	SE	NE	19	22	22						
54199	ABR	I&D	Palomino Valley Estates, Inc.	SW	NW	20	22	22						
54199	ABR	I&D							0.00	0.00		0.00	0.00	Abrogated by 62600 on 6/12/97
54265	PER	I&D	Minton, Elza Jr. & Marjorie & Washoe Co.	NW	NW	25	22	21	5.00	20.00		0.00	0.00	Meter required/ Washoe County has 1.0 Acre-foot
54412	PER	I&D	Lee, Wallace & Clara	SE	SE	25	22	20	1.00	4.00		0.50	0.09	Same well as 53676
54413	PER	I&D	Pallmino Valley Estates, Inc.	SW	SE	36	22	20						
54413	PER	I&D	Palimino Valley Estates, Inc.	NW	SE	36	22	20						
54413	PER	I&D	Palimino Valley Estates, Inc.	NE	SW	36	22	20						

WARM SPRINGS VALLEY SOUTH: 1997

PERMIT	STAT	MOU	OWNER	PLACE OF USE Q1	Q2	SEC	T	R	UNITS	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
54413	PER	I&D	Palimino Valley Estates, Inc.	SE	SW	36	22	20						Portion Abrogated by 61942 on 6/12/97
54413	PER	I&D							5.00	20.00		0.00	0.00	Meter required
55326	PER	I&D	Hallbauer, John B. & Sybal I.	NE	NE	21	22	21	2.00	8.00		0.00	0.00	Meter required
55483	PER	I&D	Brown, Donald & Carmen & Washoe Co.	SE	SW	25	22	20						
55483	PER	I&D	Brown, Donald & Carmen & Washoe Co.	SW	SE	25	22	20						
55483	PER	I&D	Brown, Donald & Carmen & Washoe Co.	NW	NE	36	22	20				0.50	1.14	
55483	PER	I&D	Brown, Donald & Carmen & Washoe Co.	NE	NW	36	22	20						Washoe County por. is 2.5 acre-feet
55483	PER	I&D							1.00	4.00		0.50	1.14	Meter required
55656	PER	IRR	Iacometti, Patrick R. Patricia A.	SW	NE	24	22	20				1.00	0.55	
55656	PER	IRR	Iacometti, Patrick R. Patricia A.	SE	NE	24	22	20				6.00	3.32	
55656	PER	IRR							1.00	4.00		7.00	3.87	Orchard & garden
56284	PER	I&D	Newell Revocable Living Trust	NW	SE	6	21	22						
56284	PER	I&D	Newell Revocable Living Trust	SW	SE	6	21	22						
56284	PER	I&D	Newell Revocable Living Trust	NW	NE	7	21	22						
56284	PER	I&D	Newell Revocable Living Trust	SW	NE	7	21	22						
56284	PER	I&D							3.00	12.00		0.00	0.00	Meter required
56472	PER	I&D	Solari, John A. & Sheila L.	NE	NW	30	22	21	1.00	4.00		0.00	0.00	Cleared for planting; Same well as 53275
56576	PER	I&D	Walkins, John L.	SW	NW	25	22	21						
56576	PER	I&D	Walkins, John L.	NW	SW	25	22	21				0.75	1.67	
56576	PER	I&D							1.00	4.00		0.75	1.67	Pasture grass
56927	PER	I&D	Washoe County	NE	NW	30	22	22						Portion owned by Realty Corner CAN 5/31/96
56927	PER	I&D	Washoe County	SE	NW	30	22	22						Portion owned by Foster CAN 7/29/96
56927	PER	I&D	Washoe County	NE	SW	30	22	22						
56927	PER	I&D							1.25	5.00		0.00	0.00	Meter required; House stables & landscaping
57526	PER	I&D	Washoe County	NE	NE	1	21	20						
57526	PER	I&D	Washoe County	NW	NE	1	21	20						
57526	PER	I&D	Washoe County	NE	NW	1	21	20						
57526	PER	I&D							1.00	4.00		0.00	0.00	Meter required
57983	PER	I&D	Shreck, James L. & Connie M.	W2	SW	9	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	SE	SW	9	21	22						

WARM SPRINGS VALLEY SOUTH: 1997

PERMIT	STAT	MOU	OWNER	PLACE OF USE Q1	Q2	SEC	T	R	UNITS	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
57983	PER	I&D	Shreck, James L. & Connie M.	SE	SE	8	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	N2	NW	16	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	SW	NW	16	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	N2	SW	16	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	NE	NE	17	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	SW	NE	17	21	22						
57983	PER	I&D	Shreck, James L. & Connie M.	SE	NE	17	21	22				1.00	0.45	
57983	PER	I&D							1.00	4.00		1.00	0.45	Pasture, several bldgs. & ranch yard
58057	PER	I&D	Washoe County	NE	NE	1	21	20						
58057	PER	I&D	Washoe County	NW	NE	1	21	20						
58057	PER	I&D	Washoe County	NE	NW	1	21	20						
58057	PER	I&D							0.25	1.00		0.00	0.00	Meter required
58290	PER	IRR	Wild, Dennis L. & Donna L.	SE	SW	6	21	22						
58290	PER	IRR	Wild, Dennis L. & Donna L.	N2	NW	7	21	22						
58290	PER	IRR							2.50	10.00		0.00	0.00	Meter required
58359	PER	IRR	Speck, Gene E.	NE	NE	20	22	21						
58359	PER	IRR	Speck, Gene E.	NW	NE	20	22	21						
58359	PER	IRR	Speck, Gene E.	NE	NW	20	22	21						
58359	PER	IRR	Speck, Gene E.	NW	NW	20	22	21						
58359	PER	IRR							1.25	5.00		0.00	0.00	Meter required
58918	PER	I&D	Walker, Ramon G., et al	NE	NE	12	21	21						
58918	PER	I&D	Walker, Ramon G., et al	SE	NE	12	21	21				1.00	2.00	
58918	PER	I&D							1.00	4.00		1.00	2.00	Pasture
60975	E-PER	ENV	Rockwell International Corporation		SW	28	22	21						
60975	E-PER	ENV	Rockwell International Corporation	NE	SE	29	22	21						
60975	E-PER	ENV							**	16.13		**	0.77	Pumpage reported quarterly
62425	PER	I&D	Capurro, George J. & Elaine Kinerson	SW	NE	25	22	20				11.00	74.27	Grass hay and stockwater
62425	PER	I&D	Capurro, George J. & Elaine Kinerson	SE	NE	25	22	20				10.00	67.51	Grass hay and stockwater
62425	PER	I&D							10.00	40.00		21.00	141.78	
62643	PER	IRR	Messenger Molding, Inc.	SW	SE	24	22	20	1.25	5.00		0.00	0.00	Meter required
62644	PER	IRR	Messenger Molding, Inc.	SW	SE	24	22	20	2.50	10.00		0.00	0.00	Meter required

WARM SPRINGS VALLEY SOUTH: 1997

PERMIT	STAT	MOU	OWNER	PLACE OF USE Q1	Q2	SEC	T	R	UNITS	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
63139	PER	IRR	Maykovich, John & Minako	NE	SE	7	21	22						
63139	PER	IRR	Maykovich, John & Minako	NW	SE	7	21	22						
63139	PER	IRR	Maykovich, John & Minako	SW	SE	7	21	22						
63139	PER	IRR	Maykovich, John & Minako	SE	SE	7	21	22						
63139	PER	IRR							2.00	8.00		0.00	0.00	Meter required
				DOMESTIC WELLS					181				202.72	Duty = 1.12 AF per well (1000 gal./day)
				COLUMN TOTALS						449.61	0.00		521.60	
				DUTY TOTALS						450			522	

WARM SPRINGS VALLEY WEST: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
27395	9317	REC	Air Sailing, Inc.	SW	SE	11	23	20		8.01		10	0.49	Travel trailers and shop (same POD as 35565).
35565	11087	REC	Air Sailing, Inc.	SW	SE	11	23	20		0.16			0.15	Same service and POD as 27395.
39593	PER	I&D	Marshall, Robert W. & Nanette	NW	SW	29	24	20						
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	SW	29	24	20						
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	NW	29	24	20						
39593	PER	I&D	Marshall, Robert W. & Nanette		E2	30	24	20						Supplemental to
39593	PER	I&D	Marshall, Robert W. & Nanette		N2	32	24	20						surface rights
39593	PER	I&D	Marshall, Robert W. & Nanette	S2	NW	33	24	20						
39593	PER	I&D	Marshall, Robert W. & Nanette		S2	33	24	20						
39593	PER	I&D	Marshall, Robert W. & Nanette	NW	NE	4	23	20						
39593	PER	I&D							850.00	64.60		0.00	0.00	
39849	PER	REC	Washoe County	NE	SE	18	23	21		20.00			0.56	Reglonal shooting facility.
45095	10798	I&D	Hildenbrand, Thomas R. & Jacqueline	NE	NE	2	22	20	2.00	8.00		2.00	9.57	Alfalfa; Same POD as 51002
47562	12057	I&D	Bailey, Wayne E.	NE	SE	35	23	20	4.00	16.00		4.00	10.00	Pasture and wood lot.
47599	13820	IRR	Polizzi, Lewis H. & Nora	NW	SW	1	22	20	3.29	2.00		3.29	0.85	Orchard, reduced duty; Por. ABR by 63074, 9/3/97
48819	12354	STK	Intermountain Land Company	SW	SW	8	21	20	350	5.20		350	2.35	Cattle: Oct. 1 to May 30.
49445	13822	IRR	Moore, Dennis R. - et.al.	NE	SE	15	22	20	5.00	20.00		0.00	0.00	Alfalfa.
49669	11974	IRR	Intermountain Land Company	NW	NE	22	23	20	5.20			0.00	0.00	Supplemental to 49670
49669	11974	IRR	Intermountain Land Company	SW	NE	22	23	20	33.26			33.26	56.50	Alfalfa
49669	11974	IRR	Intermountain Land Company	SE	NE	22	23	20	2.40			2.40	4.08	Alfalfa
49669	11974	IRR	Intermountain Land Company	NE	NW	22	23	20	46.62			0.00	0.00	
49669	11974	IRR	Intermountain Land Company	SE	NW	22	23	20	46.37			46.37	78.77	Alfalfa
49669	11974	IRR							133.85	235.40		82.03	139.35	Certificated duty = 1.7587 AF/ac.
49670	11975	IRR	Intermountain Land Company	NW	NE	22	23	20	5.20			0.00	0.00	Supplemental to 49669
49670	11975	IRR	Intermountain Land Company	SW	NE	22	23	20	33.26			30.50	51.81	Alfalfa; Por. ABR by 62166-T, exp. 10-27-97
49670	11975	IRR	Intermountain Land Company	SE	NE	22	23	20	2.40			2.40	4.08	Alfalfa
49670	11975	IRR	Intermountain Land Company	NE	NW	22	23	20	46.62			0.00	0.00	
49670	11975	IRR	Intermountain Land Company	SE	NW	22	23	20	46.37			36.20	61.49	Alfalfa
49670	11975	IRR							133.85	300.00		69.10	117.38	Certificated duty = 2.2413 AF/ac.

WARM SPRINGS VALLEY WEST: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
51002	13241	I&D	Hildenbrand, Thomas R. & Jacqueline	NE	NE	2	22	20	3.00	12.00		3.00	14.36	Same POD as 45095
51883	CAN	IRR	York, Earl E.	NE	SW	2	22	20	30.00			10.00	1.00	Tree farm
51883	CAN	IRR	York, Earl E.	NW	SW	2	22	20	40.00			40.00	4.00	Tree farm
51883	CAN	IRR							70.00	0.00		50.00	5.00	Duty estimated; CAN 12/31/96
52089	PER	Q-M	Reno-Sparks Indian Colony	SE	NW	4	21	20		18.38		149	0.00	Supplemental to 53313 & 60214
53313	PER	Q-M	Reno-Sparks Indian Colony	NE	NW	4	21	20		183.70	18.38	149	47.66	Supplemental to 52089 & 60214
53346	PER	I&D	Washoe County, et.al.	NE	SW	12	22	20						
53346	PER	I&D	Washoe County, et.al.	NW	SW	12	22	20						
53346	PER	I&D							4.00	16.00		0.50	1.91	Landscaping, no crop
53677	14074	IRR	Wyatt, Dennis D.	SW	SW	26	23	20	1.30	5.20		0.00	0.00	No crop, alligator cribs; Same POD as 53678
53678	14075	IRR	Wyatt, Dennis D.	SW	SW	26	23	20	16.70	66.80		0.00	0.00	No crop, alligator cribs; Same POD as 53677
54166	PER	I&D	Guidera, Leslie C.	SE	SE	35	23	20	3.00	12.00		0.00	0.00	Meter required
54411	PER	I&D	Mazza, Thomas C. & Marie E.	SE	NW	30	23	21						
54411	PER	I&D	Mazza, Thomas C. & Marie E.	NE	SW	30	23	21						
54411	PER	I&D	Mazza, Thomas C. & Marie E.	SE	SW	30	23	21						
54411	PER	I&D							3.00	12.00		0.00	0.00	Meter required
54614	PER	I&D	Herold, Carl & Lurinda	E2	NE	14	23	20	1.50	6.00		0.00	0.01	Shed with some landscaping.
54615	PER	I&D	Fischer, Frances J.	NE	NE	14	23	20						
54615	PER	I&D	Fischer, Frances J.	SE	NE	14	23	20						
54615	PER	I&D							1.50	6.00		0.00	0.00	Meter required
54616	PER	I&D	Fischer, Frances J.	NE	NE	14	23	20						
54616	PER	I&D	Fischer, Frances J.	SE	NE	14	23	20						
54616	PER	I&D							1.00	4.00		0.00	0.00	Meter required
54889	14080	IRR	Dennis, Gregory E. & Michele C.	SW	NE	36	23	20	2.50	10.00		2.50	6.42	House and landscaping
56164	PER	I&D	Washoe County	SE	SW	12	22	20						

WARM SPRINGS VALLEY WEST: 1997

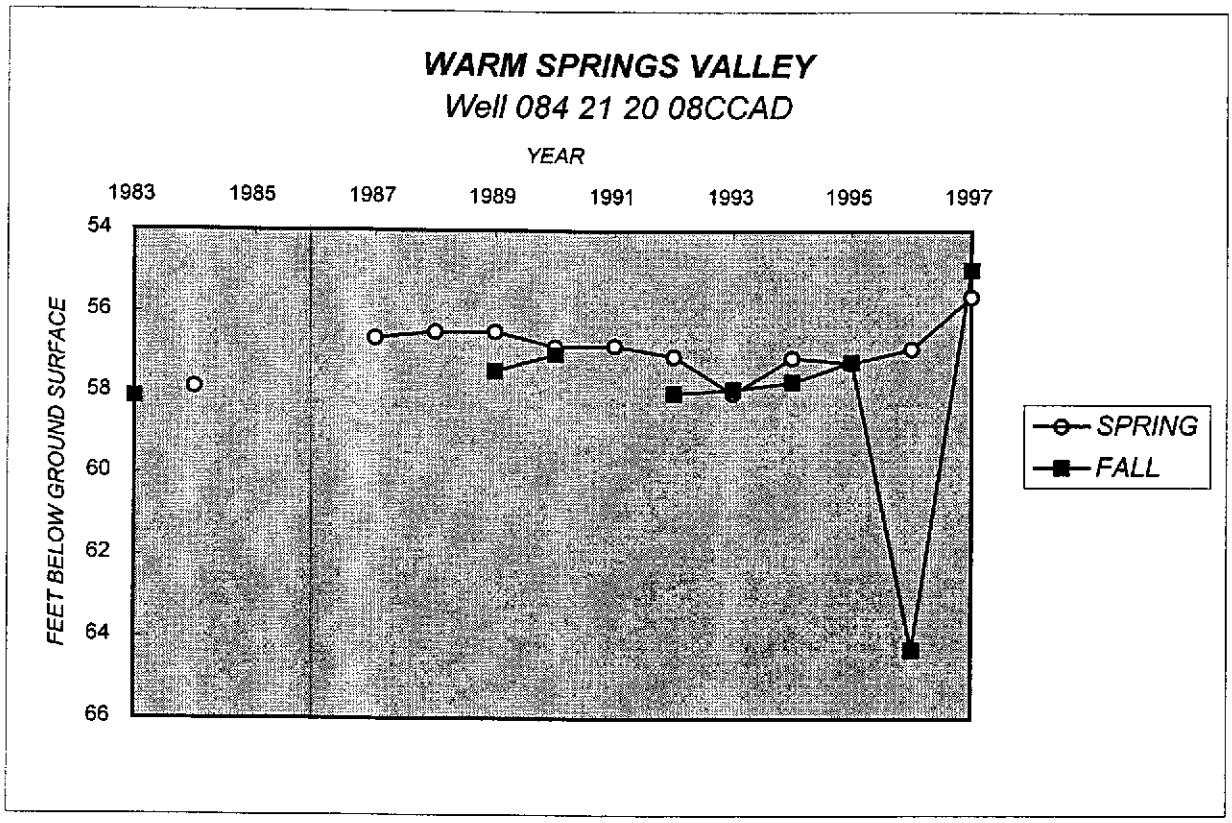
PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
56164	PER	I&D	Washoe County	SW	SW	12	22	20						
56164	PER	I&D	Washoe County	SW	SE	12	22	20						
56164	PER	I&D	Washoe County	SE	SE	12	22	20						
56164	PER	I&D							0.63	2.50		0.00	0.00	Meter required
56613	ABR	Q-M	Reno-Sparks Indian Colony	SE	SW	33	22	20		0.00	0.00		0.00	ABR by 60124, 10/28/96
56928	ABR	IRR	Shackelton, Sarah J.	SE	NE	35	23	20		0.00		0.00	0.00	Domestic only; ABR by 62640, 6/12/97 and ABR by 62642, 6/24/97
56930	PER	IRR	Stinson, George W.	NW	NE	6	22	21						
56930	PER	IRR	Stinson, George W.	SW	NE	6	22	21						
56930	PER	IRR	Stinson, George W.	NE	NW	6	22	21						
56930	PER	IRR	Stinson, George W.	SW	NW	6	22	21						
56930	PER	IRR	Stinson, George W.	SE	NW	6	22	21						
56930	PER	IRR							0.30	1.20		0.00	0.00	Meter required
56931	PER	IRR	Stinson, George W.	NW	NE	6	22	21						
56931	PER	IRR	Stinson, George W.	SW	NE	6	22	21						
56931	PER	IRR	Stinson, George W.	NE	NW	6	22	21						
56931	PER	IRR	Stinson, George W.	SW	NW	6	22	21						
56931	PER	IRR	Stinson, George W.	SE	NW	6	22	21						
56931	PER	IRR							1.80	7.20		0.00	0.00	Meter required
56934	PER	IRR	Stinson, George W.	NW	NE	6	22	21						
56934	PER	IRR	Stinson, George W.	SW	NE	6	22	21						
56934	PER	IRR	Stinson, George W.	NE	NW	6	22	21						
56934	PER	IRR	Stinson, George W.	SW	NW	6	22	21						
56934	PER	IRR	Stinson, George W.	SE	NW	6	22	21						
56934	PER	IRR							0.90	3.60		0.00	0.00	Meter required
56963	PER	IRR	Stinson, George W.	NW	NE	6	22	21						
56963	PER	IRR	Stinson, George W.	SW	NE	6	22	21						
56963	PER	IRR	Stinson, George W.	NE	NW	6	22	21						
56963	PER	IRR	Stinson, George W.	SW	NW	6	22	21						
56963	PER	IRR	Stinson, George W.	SE	NW	6	22	21						
56963	PER	IRR							2.00	8.00		0.00	0.00	Meter required
57663	ABR	IRR	Shackelton, Sarah & McClain, John	SE	NE	35	23	20		0.00		0.00	0.00	Domestic only; ABR by 62641, 6/12/97

WARM SPRINGS VALLEY WEST: 1997

PERMIT	STAT	MOU	PERMITTEE	PLACE OF USE Q1	Q2	SEC	T	R	UNITS/ ACRES	DUTY (AF)	SUPP ADJ.	UNITS USED	DUTY USED	REMARKS
60214	PER	**Q-M**	Reno-Sparks Indian Colony	NE	NW	4	21	20		165.32	165.32	149	0.00	Supplemental to 52089 & 53313
62642	PER	**IRR**	Jorgensen, Jerry R. & Laury R.	NE	NW	1	22	20						
62642	PER	**IRR**	Jorgensen, Jerry R. & Laury R.	NW	NW	1	22	20						
62642	PER	**IRR**	Jorgensen, Jerry R. & Laury R.	SW	NW	1	22	20						
62642	PER	**IRR**	Jorgensen, Jerry R. & Laury R.	SE	NW	1	22	20						
									0.50	2.00		0.10	1.00	Shop & landscaping; Estimate, no meter yet.
62827	PER	**I&D**	Dalton, Janet L.	SE	SW	36	23	20	2.00	8.00		1.00	4.00	Trees, domestic & greenhouse; Estimate, no meter yet
				DOMESTIC WELLS					56				62.72	Duty = 1.12 AF per well (1000 GPD)
				COLUMN TOTALS						1229.27	183.70		423.78	
				DUTY TOTALS						1046			424	

HYDROGRAPHS OF SELECTED WELLS

(1983 TO PRESENT)


WARM SPRINGS VALLEY
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YEAR
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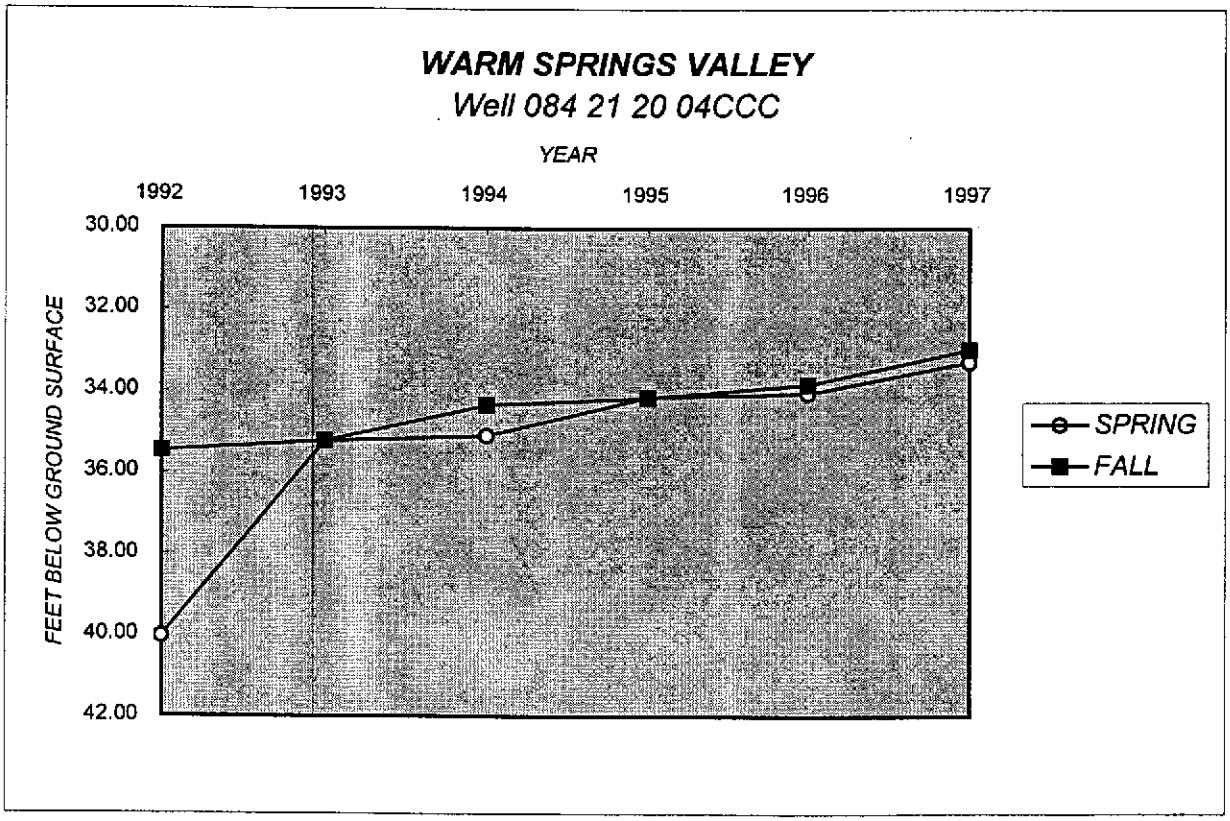
1985
1987
1989
1991
1993
1995
1997
54
56
58
60
62
64
66
FEET BELOW GROUND SURFACE
SPRING
FALL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1993
1994
1995
1996
1997
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34.00
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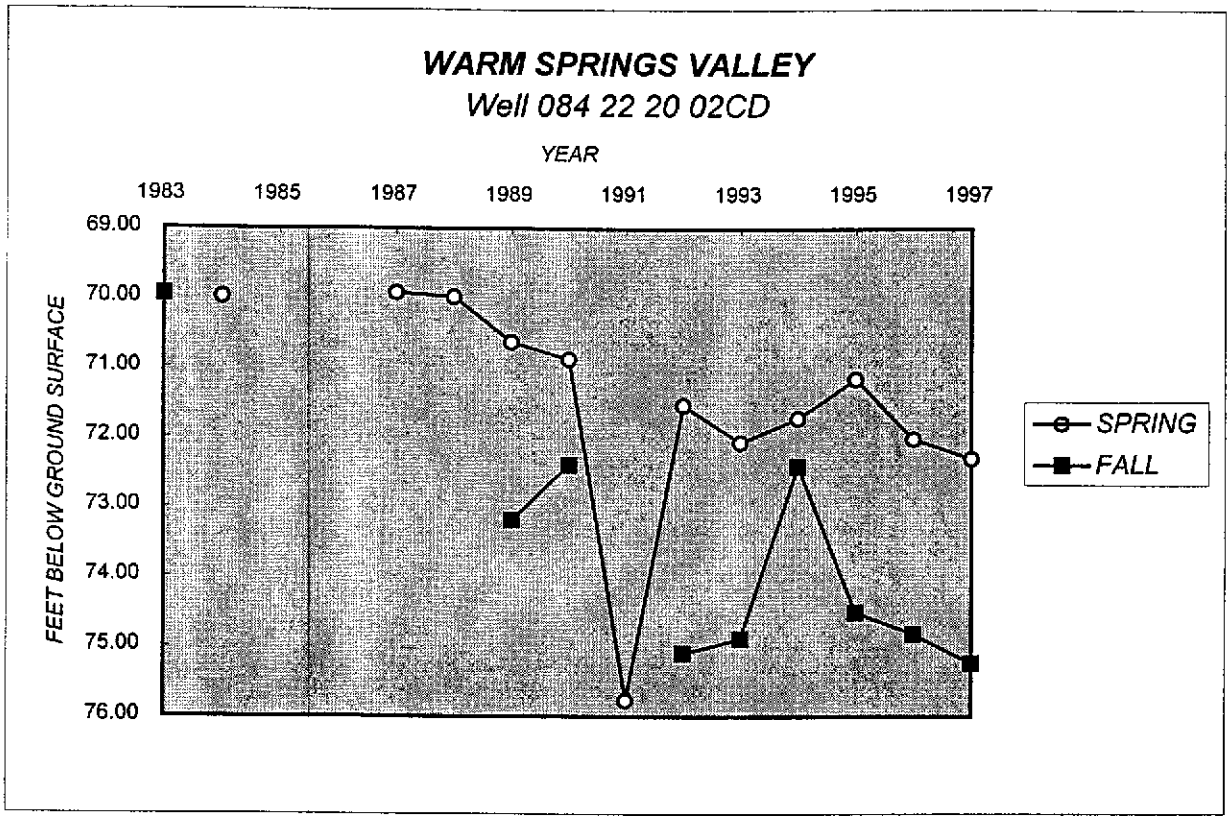
38.00
40.00
42.00
FEET BELOW GROUND SURFACE
SPRING
FALL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1987
1989
1991
1993
1995
1997
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72.00
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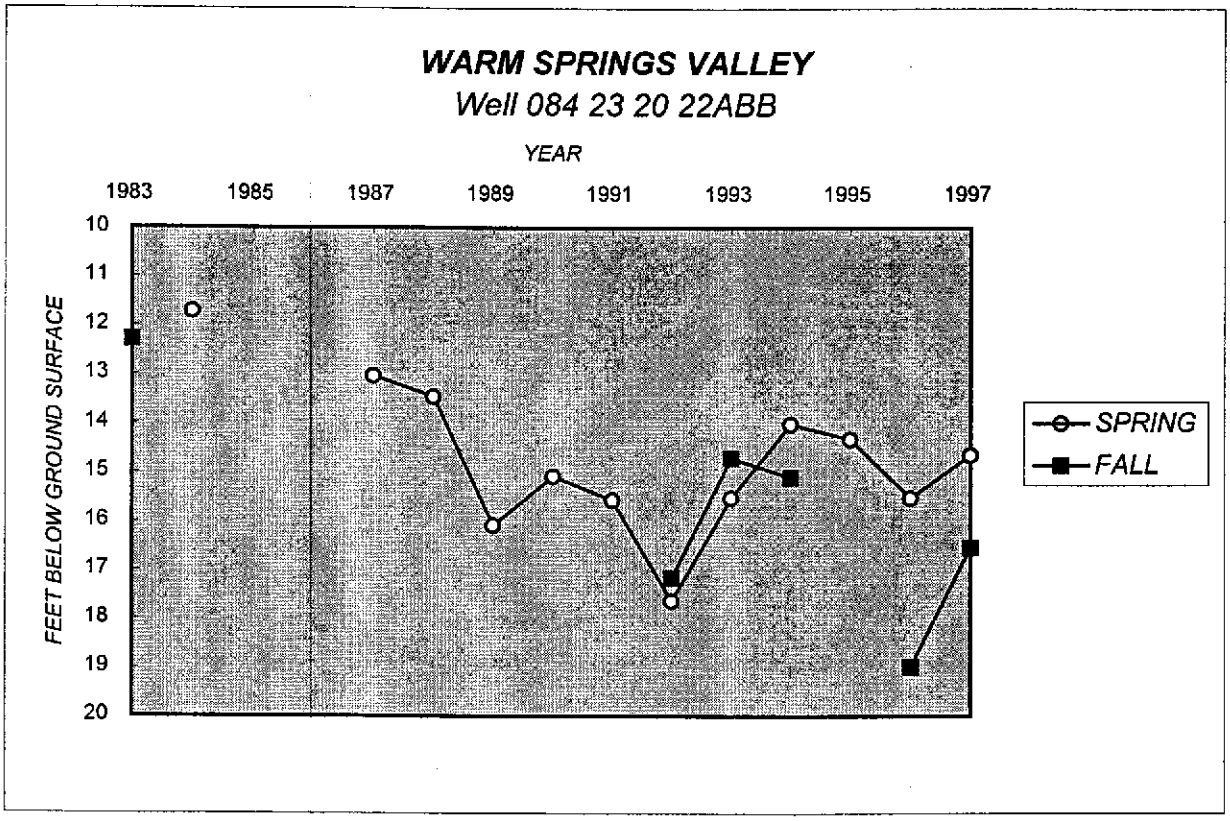
76.00
FEET BELOW GROUND SURFACE
SPRING
FALL


WARM SPRINGS VALLEY
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YEAR
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1987
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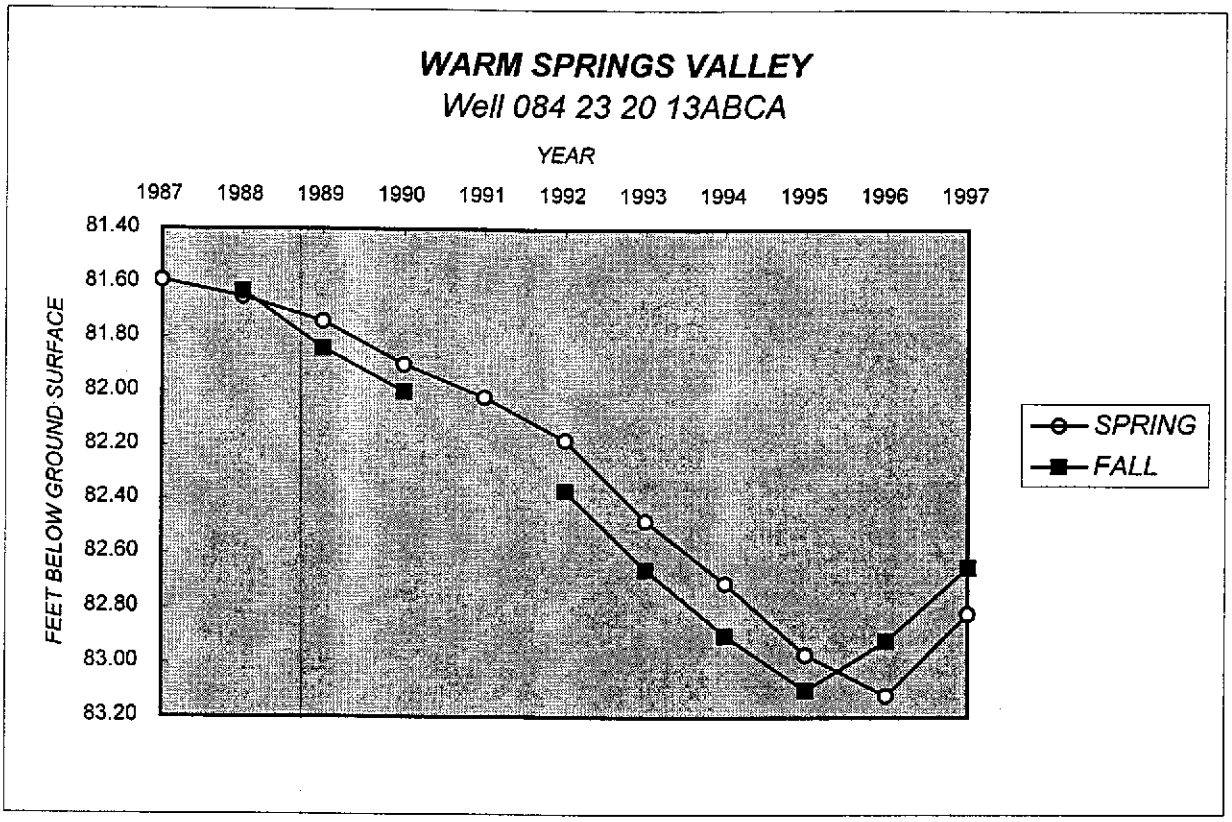
16
17
18
19
20
FEET BELOW GROUND SURFACE
SPRING
FALL


WARM SPRINGS VALLEY
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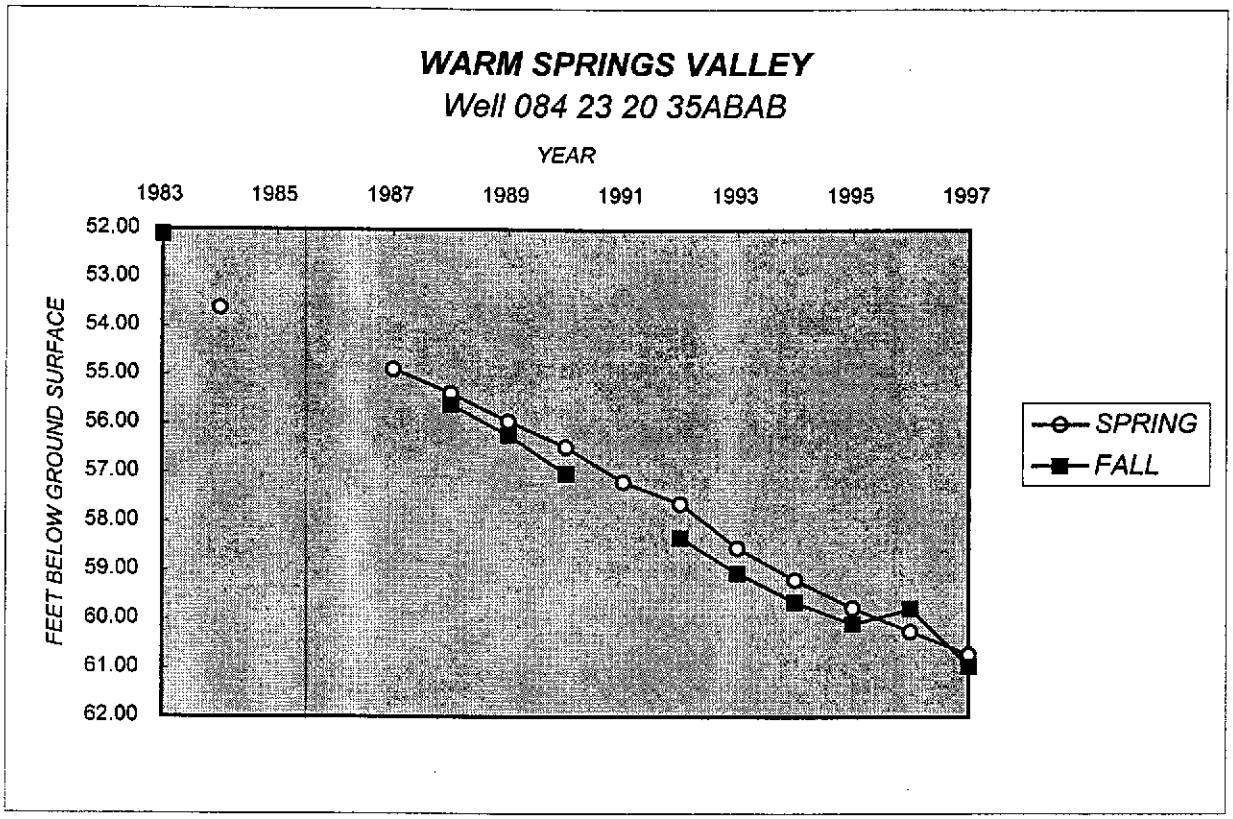
YEAR
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997
81.40
81.60
81.80
82.00
82.20
82.40
82.60
82.80
83.00
83.20
FEET BELOW GROUND SURFACE
SPRING
FALL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53.00
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58.00
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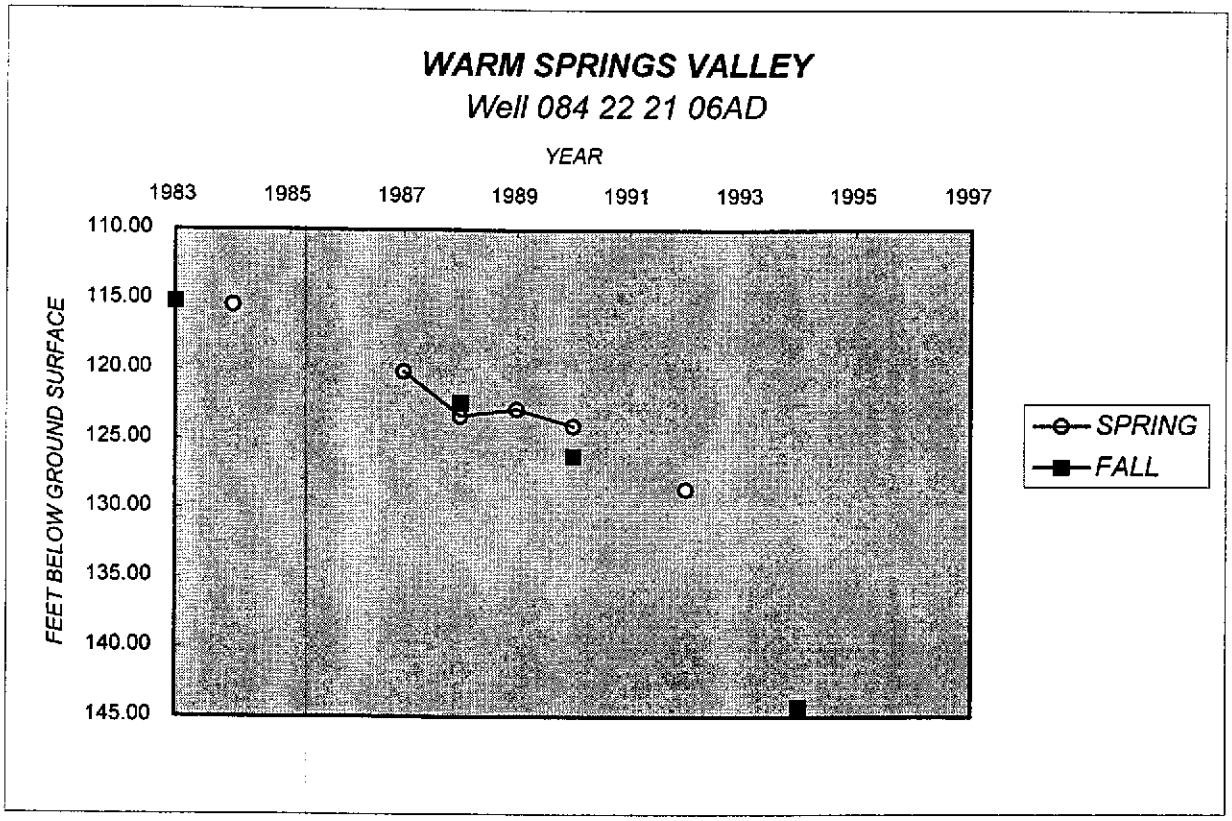
FEET BELOW GROUND SURFACE
SPRING
FALL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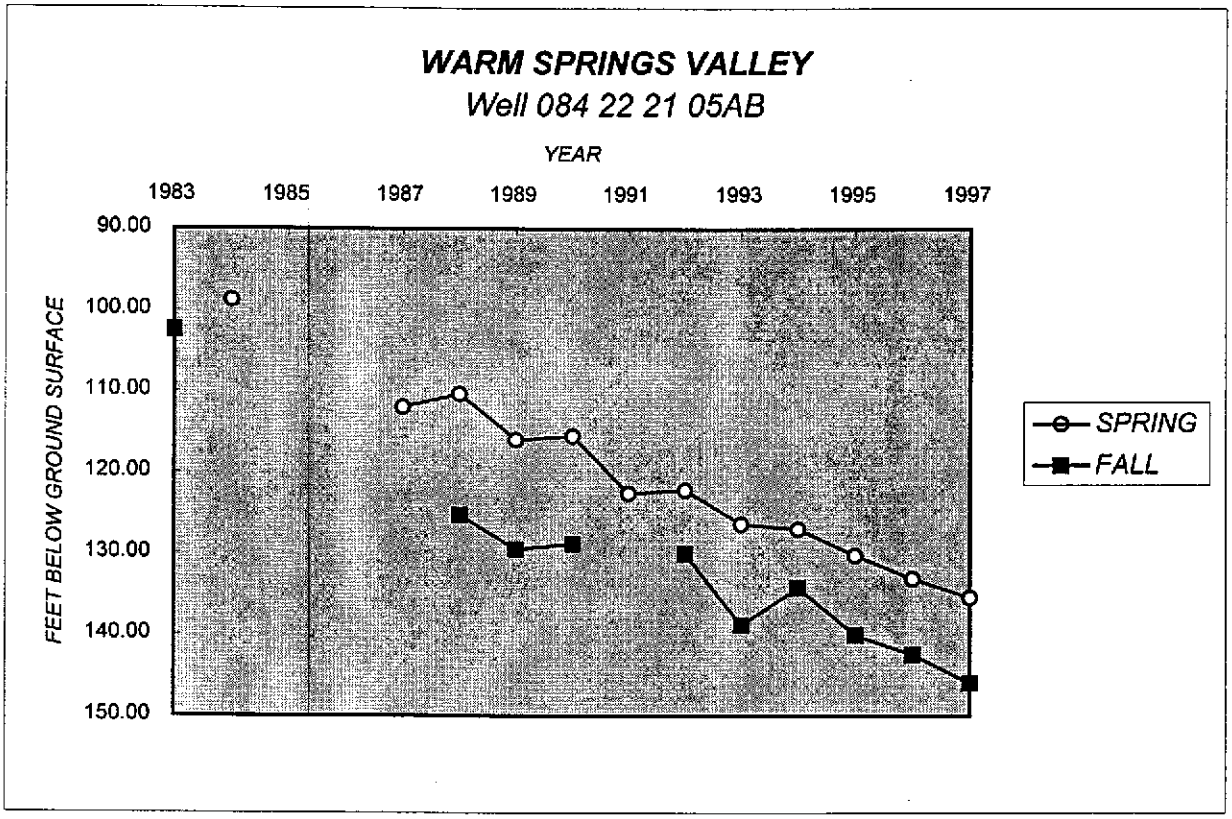
FEET BELOW GROUND SURFACE
SPRING
FALL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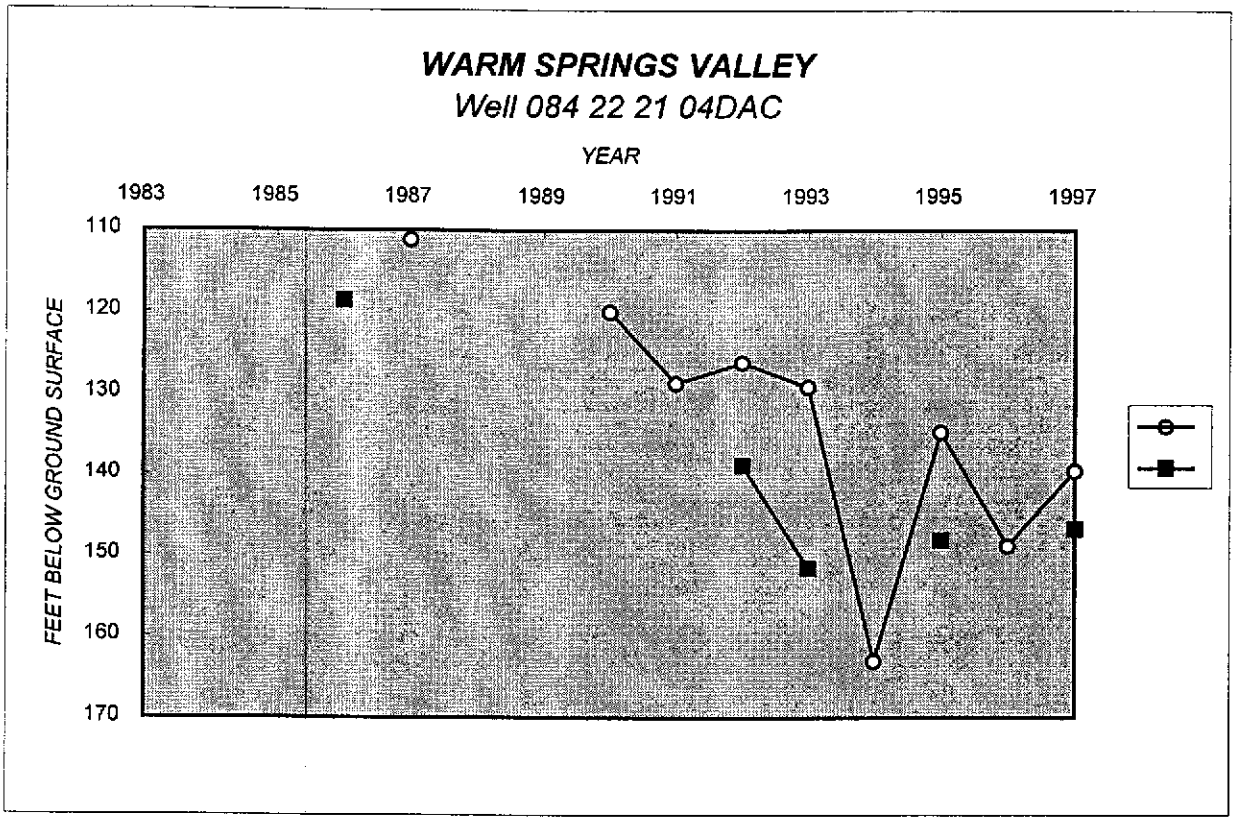
FEET BELOW GROUND SURFACE
SPRING
FALL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1997
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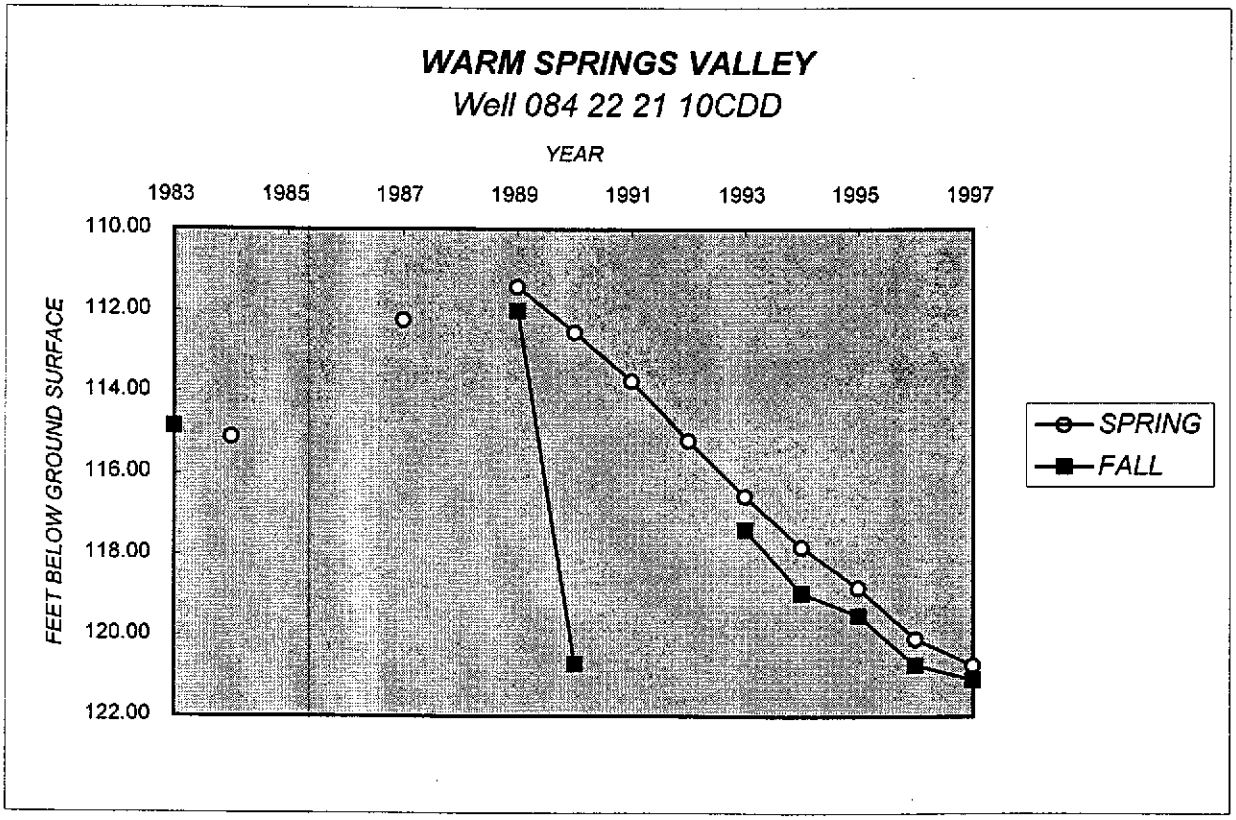
170
FEET BELOW GROUND SURFACE


WARM SPRINGS VALLEY
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YEAR
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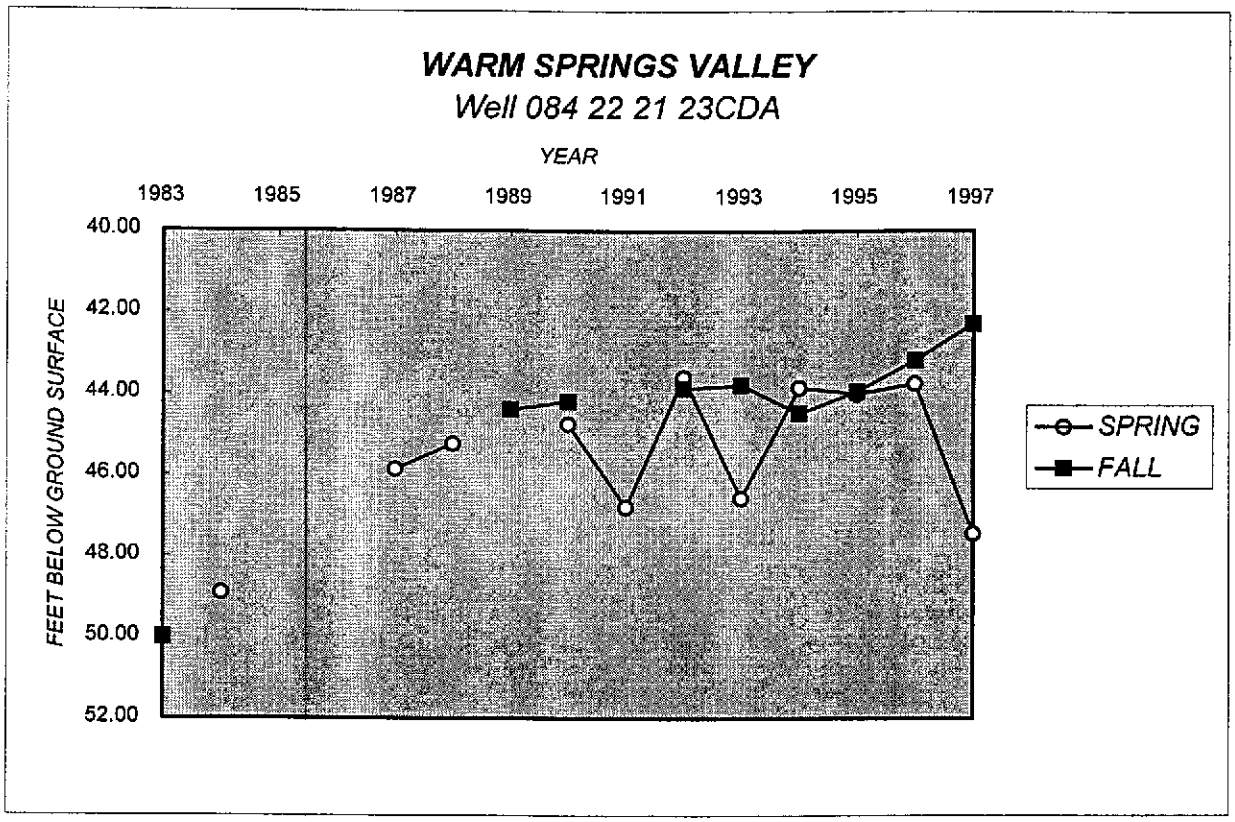
FEET BELOW GROUND SURFACE
SPRING
FALL


WARM SPRINGS VALLEY
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YEAR
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1987
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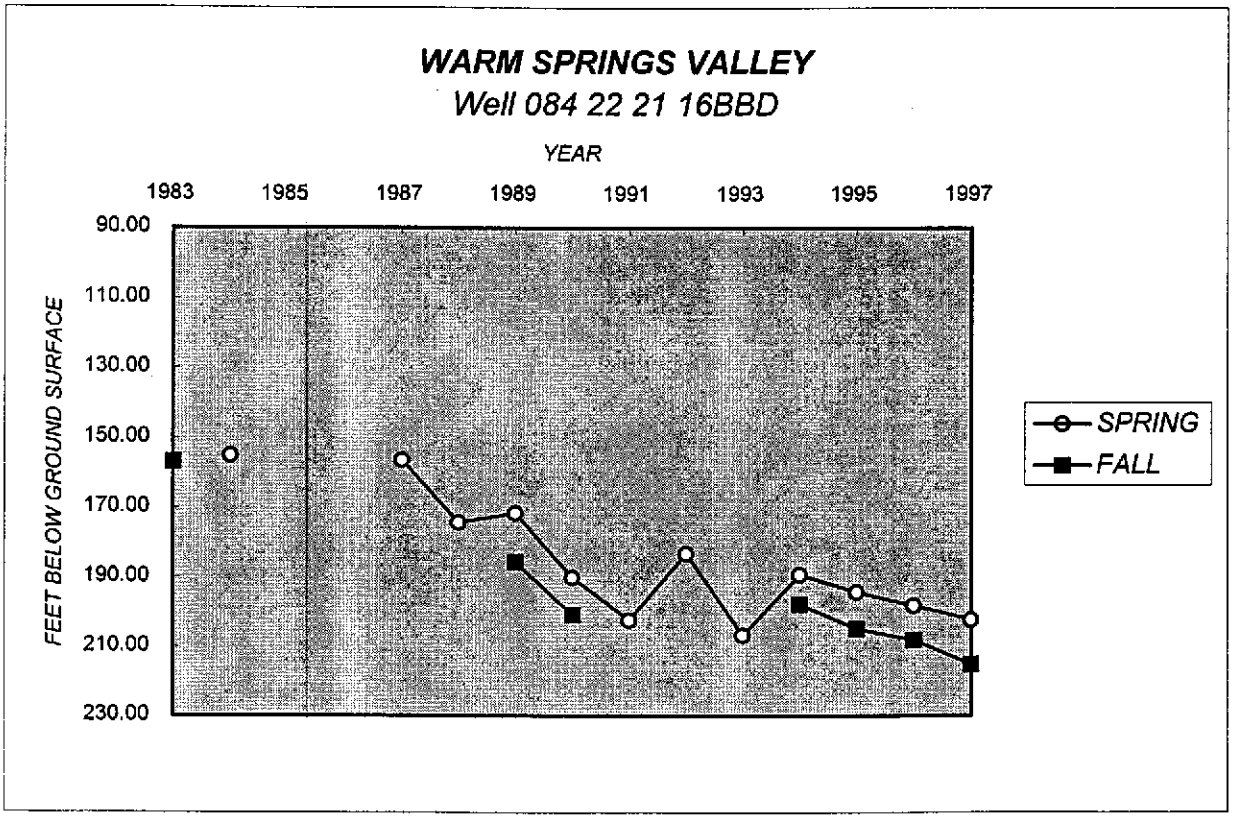
48.00
50.00
52.00
FEET BELOW GROUND SURFACE
SPRING
FALL


WARM SPRINGS VALLEY
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1991
1993
1995
1997
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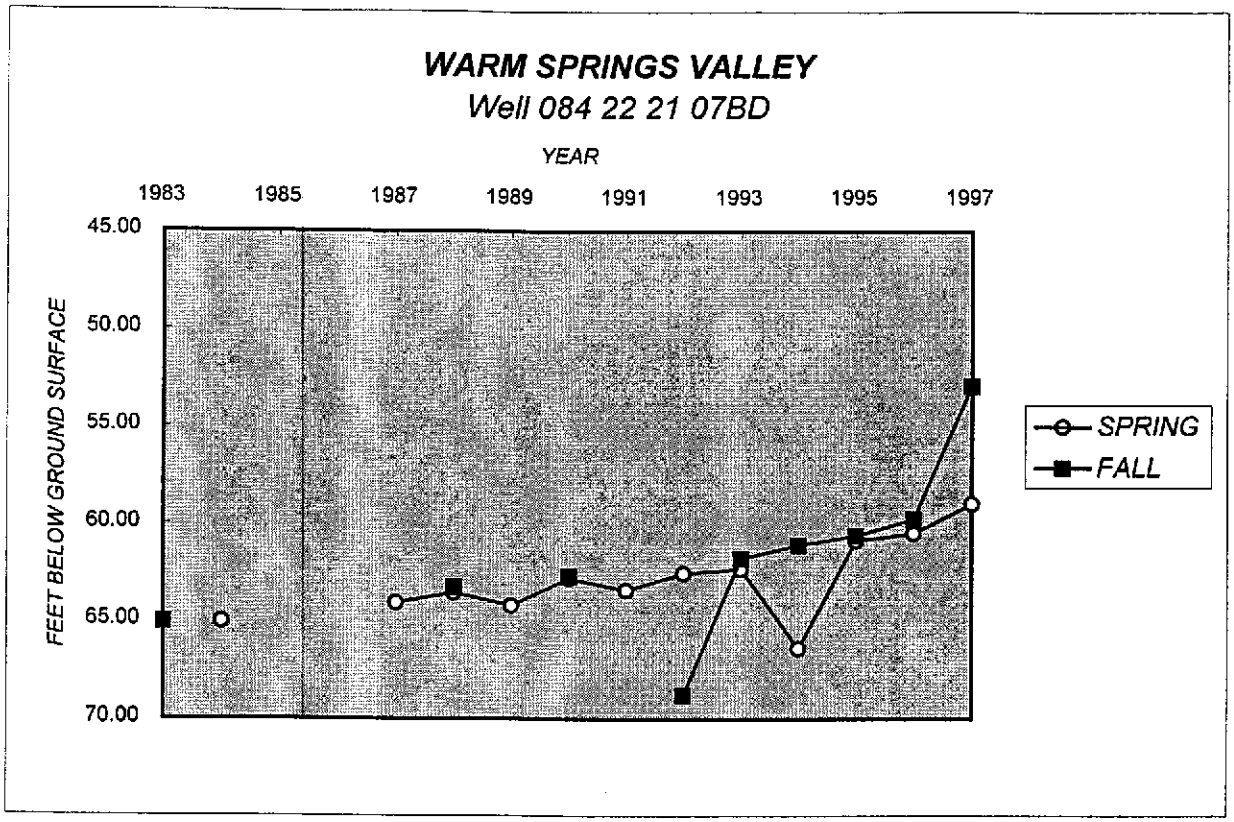
230.00
FEET BELOW GROUND SURFACE
SPRING
FALL


WARM SPRINGS VALLEY
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1989
1991
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1995
1997
45.00
50.00
55.00
60.00
65.00
70.00
FEET BELOW GROUND SURFACE
SPRING
FALL

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3) Katzer, T., 1997, Hydrogeology of Warm Springs Valley and Feasibility of Aquifer Recharge, Storage, and Recovery with Emphases (sic.) on the Marshall and Winnemucca Ranch Areas, Washoe County, Nevada: Prepared for Robert W. Marshall.