

IRRIGATION ON

UPPER VERDE RIVER WATERSHED

FROM

SURFACE WATERS



T. A. Hayden - 1940

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C O N T E N T S

Map - Verde River Watershed.

Introduction:-

Maps, Profiles, Well Logs, etc.

Table I - List of Lands - by Section, Township and Range.

Table II - List of Lands - by Source of Water.

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A - Water Right Filings - Yavapai County Records.

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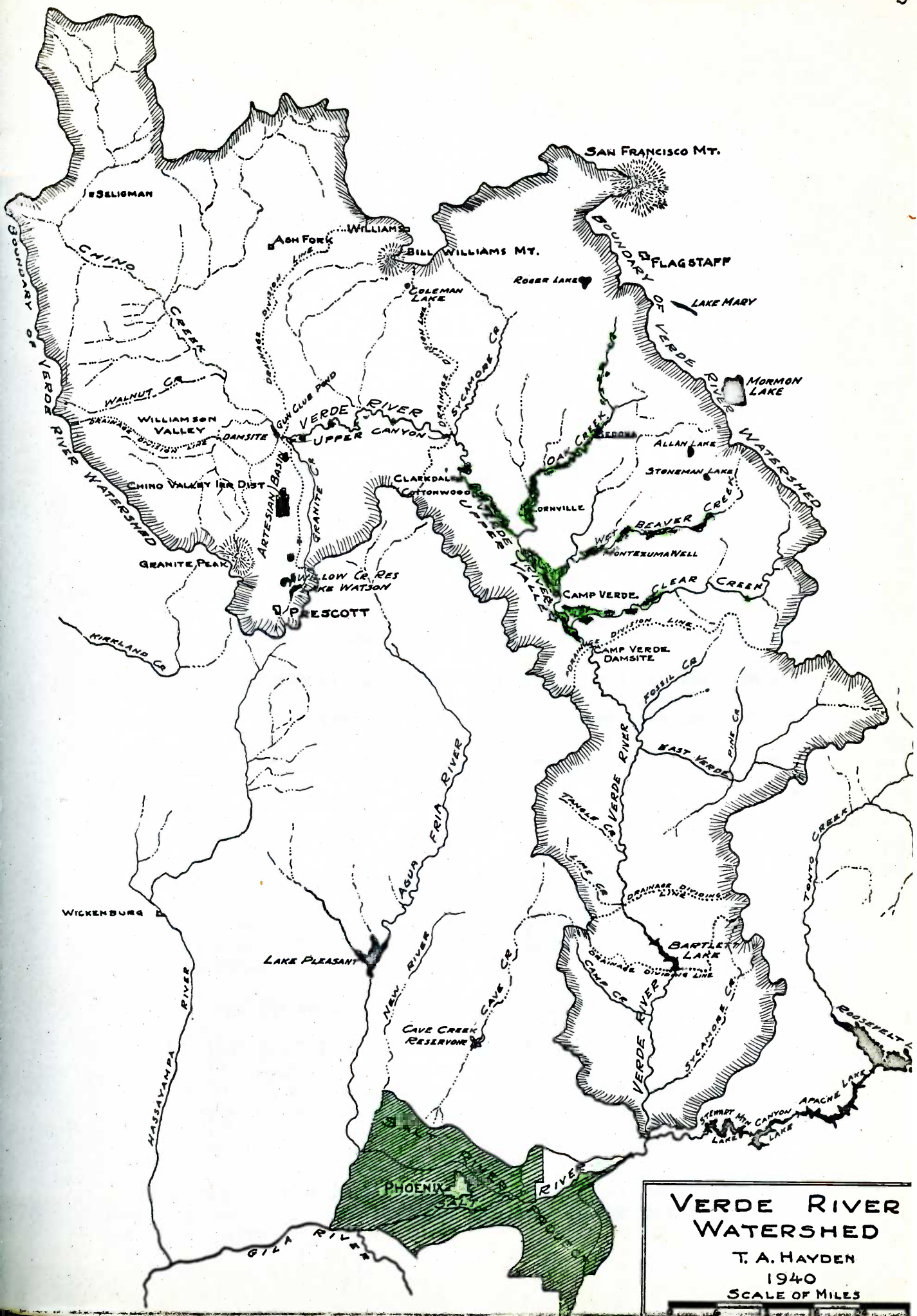
C - Copy Report by Robinson & Woolf - 1895.
C' - " " " Fowler & Frankenberg - 1896.

D - Copy Report by Stroud & Prothero - 1899.

E - Copy Report by O. A. Turney - 1901.

F - Copy Report by H. L. Hancock - 1914.

G - Map Irrigated Lands covered by this
report - T. A. Hayden - 1940
(In envelope)



**VERDE RIVER
WATERSHED**
T. A. HAYDEN
1940
SCALE OF MILES

IRRIGATION ON THE UPPER VERDE RIVER
WATERSHED
From
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INTRODUCTION

The following report gives the results of investigations made by the writer in January, May, June and July, 1940 and in the year 1925.

The area covered consists of the entire Verde River watershed above the Camp Verde damsite, excepting only very small uses such as individual domestic consumption, stock-watering, and the irrigation of small home plots, mostly in the mountains.

There was sought to be determined from the best evidence available, the location and areas of all lands now or formerly irrigated, the dates and manner of appropriation of water, and, in the case of land no longer irrigated, the dates when water was last used. In addition some study was made of the water supply, both surface and underground.

SUMMARY

There are 10,000 acres of land now under irrigation from surface waters of the Verde above the Camp Verde damsite. 3,700 acres of this area have water rights in the Seventies or earlier, and 3,700 acres, 1910 and later. 1,300 acres formerly irrigated are abandoned or irrigated from other sources.

There are six natural geographic divisions:

- (1) Chino Valley, near Prescott.
- (2) Upper Verde Canyon.
- (3) Upper Verde Valley - The Clarkdale - Camp Verde area.
- (4) Oak Creek, Upper & Lower.
- (5) Beaver Creek.
- (6) Clear Creek.

The main streams in divisions 3, 4, 5 & 6 are fed along their course by many springs and artesian pressure exists in the main Verde and Chino Valleys.

The irrigation season is approximately five months - May-Sept. inclusive.

Consumptive use of water is approximately two acre-feet per acre for the season in divisions 3, 4, 5 & 6, aggregating 7,000 acres, but approximately 250 second-feet continuous flow (or 75,000 acre-feet for the season) is diverted to supply the 14,000 acre-feet consumptively used, a ratio of 5 to 1.

In Chino Valley the water supply is adequate for only a small part of the land. On the main Verde and on Oak, Beaver and Clear Creeks water is run continuously in all canals and ditches and all lands take unrestricted quantities as they elect, without regard to the rights of older lands.

Increase in water available for Salt River Project from the Upper Verde might be achieved by:

- (1) Improved irrigation practice and facilities to reduce waste.
- (2) Restriction of diversions to water beneficially used.
- (3) Fixing a reasonable duty of water by Court or other competent authority.
- (4) Adjudication of water rights by priority of appropriation and regulation of use in accordance therewith.
- (5) A periodic check of areas irrigated and effective opposition to revival of lapsed water rights and to initiation or perfection of new ones or extension of old.
- (6) Development of artesian or other underground water by pumping in dry seasons in the Upper Verde Valley and running the water down the river channel to the Salt River Project.

* * *

The foregoing summary is briefed from the results of the field investigations by the writer previously mentioned and of a mass of engineering reports, maps and public records later enumerated, some of which are reproduced here.

The investigation made by me in 1925 related solely to the area then being irrigated without regard to date of water right. The determination of areas offered no difficulty except the mere physical problem of checking so many small irregular tracts extending over so large a territory. Very little original field surveying was necessary. Areas were determined from surveys and reports by various agencies listed below, checked by comparing one with the other and by inspecting

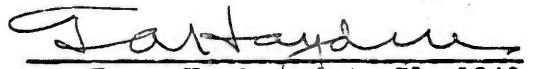
the individual tracts in the field in 1925 and in 1940. In a few cases small areas were estimated or recorded as given by the owner, by forest rangers or someone in a position to know.

The fixing of dates of appropriation of water was a tedious and at times uncertain task, especially as to the older lands. Since much of the land was under irrigation in the early Sixties, testimony of living witnesses with personal knowledge concerning dates of original cultivation is now indefinite or entirely lacking. However, much evidence of this character is recorded in previous engineering reports and surveys, and is in the files pertaining to a number of law suits in the Yavapai County District Court. Water right filings on which many of the developments were made are on file in the office of the Yavapai County Recorder and some of the early ditches and farms are shown on U. S. General Land Office township plats and on U. S. Geological Survey quadrangles. Early land filings are shown by the U. S. Land Office records. All this documentary evidence was carefully studied to determine water right priorities and the results are recorded herein in detail.

Fowler & Frankenberg - 1896, herewith, Exhibit "C-1"

This report was discovered in the secretary's files, Salt River Valley Water Users' Association, after the 1940 report was finished, and a copy was made and inserted for reference and to make the list of exhibits complete. A careful check of data concerning each tract and ditch listed disclosed the omission of ditches and of large areas of irrigated land, the existence of which at the time is proved by documentary evidence elsewhere herein cited. The dates given for construction of ditches are almost invariably later than those given by other authorities and proved by old maps and testimony, court decrees, etc. Nothing was found in the report requiring or justifying any change in the text or tabulations in the 1940 report.

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T. A. Hayden, Oct. 31, 1940.

Robinson & Woolf - Sept. 1, 1895, herewith Exhibit "C".

Stroud & Prothero - Nov. 2, 1899, herewith Exhibit "D".

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Sources of data are as follows:

Dates of Water Rights

U.S. Land Office: Township plats giving early ditches and irrigated land. Also tract books giving entries.

U.S. Geological Survey Quadrangles, giving early ditches and irrigated land.

Water Right Filings, Yavapai County Records. Complete list, briefed, herewith, Exhibit "A".

Water Suits, Yavapai County Court Records. List, briefed, herewith - Exhibit "B".

Land Areas. Also Water Rights

Robinson & Woolf - Sept. 1, 1895, herewith Exhibit "C".

Stroud & Prothero - Nov. 2, 1899, herewith Exhibit "D".

Land Areas. Also Water Rights (Cont'd.)

O. A. Turney - July 1901, herewith Exhibit "E" omitting parts not pertaining to this area.

Park W. Latimer, County Surveyor, Yavapai County, May 1908 - map. Copy in Yavapai County Assessor's office and copy in Salt River Valley Water Users' Association's files.

H. L. Hancock, July-Oct., inclusive, 1914, herewith, Exhibit "F".

H. D. Phelps Feb.-June, inclusive, 1920, map in 26 sheets, originals in Phelps-Dodge Mining Corporation files, - copies in files Salt River Valley Water Users' Association.

U.S. Bureau of Reclamation - Survey completed April, 1934 by F. N. Holmquist. Map in 37 sheets - original in U.S. Bureau of Reclamation files. Copies in F.N. Holmquist and Salt River Valley Water Users' Association's files.

Copies of the above mentioned reports not accessible in official public files are included here to preserve them for future reference in the event of the only other known copies being lost. In the case of the Hancock report, a number of typographical errors in the printed edition from which the accompanying copy was made have been corrected. These corrections were checked and verified by Mr. Hancock.

Most of the data as to year of the respective appropriations of water was obtained from the early engineering reports here reproduced. These were compared with each other and checked as far as possible with recorded water right filings, G.L.O. township plats, Court decrees, etc. Each ditch and tract of land has been listed with the earliest priority of appropriation definitely given by any of the authorities quoted. Certain tracts, such, for instance, as parts of the areas under the Hickey, Cottonwood, O.K., Eureka, Pioneer, Wood and other ditches, have been conceded priorities as of the years of completion of the respective ditches. This obviously results in giving some of the lands earlier priorities than they are actually entitled to, unless all the land under the several ditches was brought under cultivation in the respective years

the ditches were built, which is highly improbable. From a practical standpoint, however, no material difference results, because in the case of these very old ditches a matter of even ten years margin would still give them water rights older than the bulk of the land on the watershed, and leave them in the period of time for which even the lowest flow of the river is adequate.

The evidence regarding later lands, whose rights do not date back to years when the irrigated area was small enough to be supplied by low-stage flows, is sufficiently definite to fix their priorities within fairly narrow limits.

Therefore this record, while admittedly approximate in the time factor for the early lands, is believed to afford a fair foundation for any control of use of water which might be attempted on the basis of priorities.

USE AND DUTY OF WATER

Determination of the amount of water running in streams and ditches and used on the land was attempted only in an approximate way and to a sufficient extent to give a comprehensive general picture of conditions as a whole.

Water is used for approximately five months from May to September inclusive - the period being shorter in the higher elevations around Prescott and on Upper Oak Creek and longer in and near the main Verde Valley. A rough estimate was made in July of the continuous flow of water running simultaneously in the main ditches of the Verde area as follows:-

Main Verde Ditches

Allen Ditch	10	Sec.-ft.	
P-D Pumps	9	" "	
Hickey Ditch	20	" "	
Cottonwood Ditch	45	" "	
Pete's Ditch	5	" "	
O.K. Ditch	30	" "	
Wood Ditch	35	" "	
Eureka Ditch	15	" "	
Eaman Ditch	10	" "	
Pumps	<u>5</u>	" "	184 Sec.-ft.
Oak Creek Ditches	.....	35	" "
Beaver Creek Ditches	.....	17	" "
Clear Creek Ditches	.....	<u>17</u>	" "
Total	.....	253	Sec.-ft.

This is 1.45 Miners' Inch continuous flow diverted for each of the 7,000 acres of land irrigated, or 230 Miners' Inches per 1/4-Section of land, compared to the amount of 48 Miners' Inches per 1/4-Section allowed at the farm headgates (equivalent to an average of about 65 Miners' Inches diverted) to Salt River Project lands under the Kent Decree. The only record found of an attempt to fix duty of water was in the judgment by Judge R. E. Sloan dated September 7, 1900, in favor of plaintiffs in Case 3013, Yavapai County District Court, Wilber et al, vs. Head, et al, in which it was decreed that plaintiffs had just right to the use of 475 Miners' Inches for their lands, of which 325 acres were then under irrigation. The duty of water computed from these figures is 1.46 Miners' Inch per acre, or 234 Miners' Inches per 1/4-Section, which coincides closely with the amount of 230 Miners' Inches arrived at by the approximate estimates previously given above.

The amount of diverted water on the Verde is higher compared to delivered water than in the canal systems of the Salt River Valley, owing to the small size of the ditches, their proximity to the main streams, with consequent high seepage losses, and the number of leaky wooden flumes and structures. Out of a total of 83 independent ditches

only about ten carry 10 or more second-feet of water. As far as could be ascertained, water is diverted and run continuously during the irrigation season in all canals and ditches, with the possible exception of the Allen, or Tunnel ditch, which has a permanent steel and concrete diversion dam and wooden headgate, by which the diversion may be controlled.

There are provisions under Court decrees for the distribution of water by a Water Master or Commissioner to be appointed by the Court, on the Cottonwood, Wood, and Beaver Creek ditches and water rights were adjudicated as of 1900 by year of priority on Clear Creek. With the exception of the latter, where all the flow is diverted for most of the irrigation season, there is no restriction on use of water except as to rotation among individuals on the same ditch. On the basis of 250 sec.-ft. flow in all ditches, 500 acre-feet daily, or 75,000 acre-feet annually, is being diverted over a five-months period for 7,000 acres of land in Upper Verde Valley, Oak, Beaver & Clear Creeks. Assuming two acre-feet per acre applied to the land as a reasonable consumptive use under the soil and climatic conditions, around 14,000 acre-feet at the lands would give them an adequate water supply with no restriction whatever due to prior rights of older users. The diversion of 75,000 acre-feet to give net water use of only 14,000 (a ratio of more than 5 to 1) is believed excessive. It is impossible from data available to make even an approximate estimate of how much, if any, of this excess could be saved and made available for use of lands in Salt River Valley.

PHYSIOGRAPHY AND HYDROLOGY, UPPER VERDE

Surface flow in the Verde River occurs in such a manner as to make its measurement in conjunction with the numerous diversions and the return seepage, with contributions from natural ground water and springs,

a highly complex and difficult problem.

A brief touch on the conditions as observed in June and July 1940 over the 40-mile course of the river below Sycamore Canyon will give a general idea of the great number of indefinite factors to be considered. Starting out with an estimated flow of 75 sec.-ft. below Sycamore Creek, this stream was observed to have diminished to not over 10 or 15 sec.-ft. six miles below, near Tapco. A mile or so lower down, at Clarkdale, 20 sec.-ft. was diverted and about the same flow remained in the river. The Hickey Ditch, 1/2 or 3/4-mile downstream diverted 20 sec.-ft. and the Cottonwood, 1/4-mile below that, 45 sec.-ft. In the 35-mile course of the river to Clear Creek an estimated total of 184 sec.-ft. was being taken out, with approximately 25 sec.-ft. coming in at Oak Creek and none visible from Beaver or Clear Creeks. Yet below Clear Creek there still remained a flow estimated at 50 sec.-ft. These figures give a total of 144 sec.-ft. excess observed diversions over observed inflow, which, added to the 50 sec.-ft. in the river below Clear Creek gives a total of 234 sec.-ft. ^{for} the main Verde flow, which, had there been no diversions, would have been in the river below Clear Creek, less, of course, the amount of contributions which came from canal and land losses. It is not admitted locally that any system of control would result in a net saving of water over a period of years or even temporarily. It is claimed that due to the location of the irrigated lands and ditches close to the streams in the long narrow Valleys of the main Verde and its tributaries, all water not consumptively used is returned directly to the stream.

That a considerable portion of this diverted water does find its way back to its natural channel is a certainty, unless the absurd claim be made that this district is unlike all others known. Also it is true that

physical conditions are such as to favor the speedy return of seepage or leakage to the stream beds. Only bottom lands are irrigated and at no place do they extend over a half-mile from the main channel. The live flow of streams and springs at all times keeps porous underground beds saturated, and the limited storage space between the permanent water table and the ground surface leaves no room for accumulated reserves.

No evidence of any such accumulations was found in the entire basin to an extent which would threaten the land with waterlogging and the natural drainage is such that continuous irrigation in the same manner for periods from 40 to 75 years has disturbed but little, if any, the balance between inflow and outflow.

The main Verde river channel may be considered as a fairly deep drain extending down the approximate center of a narrow basin 40 miles long and from 1/4-mile to a mile wide, with three secondary and similar drains (Oak, Beaver and Clear Creeks) and basins entering from the east. The Valley is from 3,300 to 3,500 ft. above sea level. On the west mountains rise to a height of over 7,000 ft. in less than 10 miles, giving an area of about 200 square miles draining toward the Valley. On the east, after the first comparatively low benches and foot-hills the rise is more gradual, until the slope is reversed on the Colorado River side of the watershed at altitudes of 5,000 to 12,000 ft. The area sloping toward the Verde from the east and northeast is around 1,400 square miles. This makes a total of 1,600 square miles of high steeply sloping mountain land, the surface run-off from which enters the Verde. The superficial conditions are such as to lead anyone (at least a layman without a technical knowledge of geology) to the conclusion that most underground water as well as all surface flow from this area and possibly some from outside must eventually all reach the Verde. The great number and large flow of springs is striking evidence of the truth of this conclusion.

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Flowing artesian wells have been in operation in the Upper Verde Valley for many years, and the manner in which water alternately rises in and is absorbed by the river channel, as before described, furnishes positive evidence of free inflow from many lateral sources and of the freedom of movement through the underground structure which enables the underflow to maintain fairly uniform slopes regardless of local differences in grade of the river bottom or local seepage from irrigation. The large flow of some of the springs mentioned, which range up to as much as 40 sec.-ft. (1,600 Miners' Inches) is thought to have its origin in open channels or caverns dissolved in the "Verde limestone" which is peculiar to this region. This formation consists of a white lime rock of all degrees of hardness, occurring in sedimentary beds, mostly level, but sometimes tilted, folded and faulted, alternating with sandstone, agglomerates and volcanic flows and intrusions, over and surrounding the entire area. Logs of artesian wells show these alternate strata to exist for hundreds of feet below the river plane. The existence of extensive caverns, pot-holes and sinks is common. Notable among the caverns is a little known one on the north side of the Main Verde above Sycamore Creek which has been explored for a half-mile. Montezuma Well, a Sink over 300 ft. in diameter and of unknown depth, located on Beaver Creek, is the outstanding feature of its class. Exposed faces of lime ledges everywhere are honeycombed with pot-holes. These open passages permit free movement of any water present and this is true to a lesser degree of the deep porous beds of sandstone. Where enclosing caps, blankets or barriers of volcanic rock, clay, etc., prevent easy escape of water, artesian pressure is created as in the Little Chino and Upper Verde Valleys. The Chino basin is limited and has recently been developed by at least 18 wells. The extent of the Verde basin and its possibilities of production are not known. With a steeply sloping area of

over 1,500 square miles draining directly towards it, these possibilities may well be worth investigation.

WATER CONSERVATION ON UPPER VERDE

✓The manner in which irrigation is practised in the Verde Valley and on Oak, Beaver and Clear Creeks, and the absence of discrimination between old and late water rights suggests that changes might be made resulting in more water reaching the lower lands on the Salt River Project. Such changes would fall into two general classes:-

- (1) Changes to reduce waste.
- (2) Enforcing prior rights of old lands.

Under the first heading would be included (a) the better maintenance of flumes and other structures to prevent unnecessary spread of water over beds of washes and waste land, and (b) restricting the amount of water diverted to the amount beneficially used. This would entail, among other things, determination of seepage losses in ditches and the reasonable duty of water. Since there are over 80 ditches in all, only a few carrying as much as 10 sec.-ft. of water, most of them being short and close to the main stream channel, and since they are distributed over a large geographical area, it is obvious that effective supervision and control of water would constitute a major problem in administration. Water is now distributed on the Cottonwood and Wood ditches and on the Beaver Creek and Clear Creek lands under Court decrees, (See Exhibit B - "Water Suits") the first three by a ditch master or Commissioner appointed by the Court. However, since the quantity of water available and diverted is more than enough to permit practically unrestricted irrigation, little, if any attempt is made to measure the water. No system of complete control could be carried out without some method of measuring the water and the physical difficulties involved in doing this on so many widely scattered farms and ditches would

be great and would require a number of men continuously for over five months out of each year. The expense would be a relatively high charge per acre of local land affected, unless such expense should be spread out over the entire acreage interested, including the Salt River Valley lands.

The net amount of water (if any) which may be saved by such regulation is, as before stated, uncertain. Local water users, (among whom there is a well defined feeling of uneasiness that a legal controversy may some day arise with Salt River Valley lands over use of Verde water) are quick to assert that no amount of control would affect the flow reaching the lower river, since they claim that all leakage and seepage is returned quickly to the natural stream channels, and that, over the entire year, all surplus diversion above the water consumptively used is automatically accounted for in this manner. This contention has much to support it and the question arises as to whether or not the physical difficulties and expense of regulation would be warranted by the uncertainty of the savings. To establish and enforce such control would require first a legal determination of the questions involved and machinery to carry out Court orders. This also is a prerequisite to the adjudication and enforcement of prior rights of old Salt River Project lands as against late upper Verde lands. Of the 7,000 acres of land irrigated on the upper Verde, Oak, Beaver and Clear Creeks, 3,400 acres is prior to ¹⁸⁸⁰ 1,880 and would but seldom be out of water. The use of water on the remaining 3,600 acres is all that would be involved in any practical regulation attempted. The benefits from such regulation would be limited to low-flow periods only, but the expense would be a continuing charge. Assuming roughly that as much as a third of the water used by these lands is taken at times when older lands have a prior right to it, and assuming further a 100 percent

control, the saving would amount to 1/3 of 7,200 acre-feet, or 2,400 acre-feet a year. To effect this saving there would first be required Court action to determine and enforce the regulation aimed at, which action would have to be preceded or accompanied by elaborate and expensive Engineering work.

Following the establishment of the basis and machinery for regulation would be the cost of maintaining it. This is estimated at not less than three men for five or six months a season, costing probably \$5,000, more or less, including incidental expense, each year, or \$2.00 per acre-foot for all water saved.

CHINO DISTRICT

The foregoing concerns the Verde Valley, Oak, Beaver and Clear Creek areas. The Chino Valley area is separated from it about 50 miles by road and constitutes a distinctly separate problem. The main factor in the latter area is the Chino Valley Irrigation District, claiming water right for 2,538 acres under 1911 water filings under the old law and later filings, permits and water right certificates under the 1919 State water code. (See accompanying maps)

They depend solely on water stored in Lake Watson (4,800 acre-feet) and Willow Creek Reservoir (6,000 acre-feet) supplemented lately by artesian wells. The combined drainage area above these reservoirs is less than 70 square miles and the total water available is adequate for only a part of the lands. The practice is to leave some areas fallow or "dry-farmed" and double up available water on the remainder. Since the earliest date which can be claimed for any of the land is that of the first water filings in 1911, most of the water is stored at times when older lands below on the Salt River Project have a prior right to it. To this extent there is a continuing infringement on Salt River Project water rights, in

effect since the lands were first irrigated in 1916. So far no action has been prosecuted in defense of these rights.

It is currently proposed to increase the height of the Watson dam so as to add to the storage capacity of the reservoir and raise the water high enough to spill surplus over into the adjacent Willow Creek reservoir, which has a large excess capacity over the run-off from its watershed. An attempt was made to connect the two reservoirs by an open earth cut through the low ridge separating them, but due to an error in determining levels, the cut as made was found to be actually over eight feet higher than the Granite Creek (Lake Watson) dam - and would either have to be deepened about 15 feet or the dam raised 15 feet. (See diagrams of reservoirs)

The problem of fixing respective water rights here is simple, as the filings and various steps of development are matters of public record. To enforce such rights it would only be necessary to require the turning back to the stream of any water stored to which older lands had a prior right.

The effect of the assertion, establishment and enforcement of such older rights would undoubtedly be to almost eliminate the practical storage of water in these reservoirs, since it is only in rare floods that water flowing in Granite or Willow Creeks may be stored without taking water which might be claimed and used on the older land. The artesian wells now used to supplement the general District supply are only two in number and are privately owned. Water must be pumped 80 ft. in one and 150 ft. in the other. Additional wells might be developed and, in fact, it is understood such wells are proposed. Something of the sort would have to be done if the attempt to cultivate more than a small fraction of the present area were to be continued in face of the practical value of their storage rights being nullified as above described.

The total area of watershed draining into the Chino artesian basin is

approximately 200 square miles (about 130,000 acres). Eighteen wells were noted in operation in 1940, of which fourteen were free flowing. The Del Rio Springs near the north, or low rim of the basin, flow about 175 Miners' Inches (4-1/2 second-feet) which is used for irrigation of about 140 acres. These springs are the natural overflow or spill from the basin and roughly represent the excess over the exact amount of water which must be fed into the basin to maintain the present water level and pressure. (See maps and profiles of Chino District and logs of wells) From 600 to 800 acres outside the Chino Valley Irrigation District are said to be irrigated from the wells now operated. This would mean a draft of 1,500 to 2,000 acre-feet annually above the discharge of Del Rio Springs and it must eventually affect the natural water level and pressure and the flow of the springs.

These factors will have a definite bearing on the success of future attempts to expand artesian development here. The Chino Irrigation District is in the least favorable situation of any lands in this area as any water from wells would have to be pumped from 80 to 225 feet or more. (See profile of artesian basin)

This matter is of interest to the Salt River Project only from the fact that all of this water not intercepted would otherwise find it's way to the Verde.

An irrigation project in this vicinity now dormant but very active in 1925 is the plan once proposed and still talked of to build a dam on Williamson Valley Wash. This would store 17,000 acre-feet of water from approximately 185 square miles of mountain watershed. Efforts are being made to revive this development either privately or as a Bureau of Reclamation development, which, if made, would amount to a serious infringement on project water supply.

NEW DEVELOPMENT

The idea has been suggested by Mr. Lee L. Smart, who now lives in Phoenix but formerly owned the old Packard ranch at the mouth of Sycamore Creek, that relief for the time being from acute water shortage in dry seasons in Salt River Valley might be obtained by development work, pumps, etc., to increase the flow of Montezuma Well and other large springs on the Upper Verde. This idea is sufficiently plausible to warrant consideration and in July the writer made a trip over the entire upper Verde area in company with Mr. S. F. Turner, Associate Engineer, U.S. Geological Survey, in charge of underground water investigations in Arizona. The purpose of the trip was to note the general topography and geology of the region and to learn something of the occurrence and origin of surface and underground water. The main Verde and its tributaries were covered from Prescott down to the lower canyon above the Camp Verde damsite. Data were obtained on springs, wells and surface streams and samples of water taken and analyzed (See Table IV). The time available and area covered in such a preliminary reconnaissance did not furnish an adequate basis for any conclusive report. This would require much field work and study by technical geologists trained in this work. It was hoped that the importance and interesting nature of the problem and of the factors involved would result in such a study being included in the program of work going on or proposed under Mr. Turner's direction and this is being seriously considered. As to the likelihood of developing immediate new water from this area for relief of Salt River Valley lands, it was my personal conclusion based on such data as were available that the results of such an attempt are too uncertain to warrant the Salt River Valley Water Users' Association committing itself to any contract or proposition whereby it would be bound to take and pay for water developed by any such operation. Such a commitment would involve determination of the net quantity of water added to the Salt River Project

supply, a matter of the greatest practical difficulty, if not in fact impossible. All surplus water, whether percolating or flowing from the surrounding high country or seeping back from local irrigation, now finds its way into the river and down to the Salt River Project.

Intercepting any part of this flow before it reaches its natural channel must necessarily at some time, whether immediately or in the more remote future, decrease the later flow by approximately the amount of the present increase. In addition to absorption of rainfall into the soil, springs and streams are fed from the accumulated underground storage of thousands of years and it may be that such storage is large enough to be drawn on indefinitely without making any noticeable immediate difference in the ordinary surface run-off or the flow of springs or yield of wells. The existence of artesian pressure in the Verde and Chino Valleys is cited in support of this view. Only the actual tapping of these subterranean reservoirs and observation of the effect over a period of years can give the answer to this question. The effect of drawing water from any underground source faster than it comes in is always to lower the water table and lessen artesian pressure, where such exists. When this balance is upset and the accumulations of ages are removed by pumping or releasing water through free-flowing wells, the surplus thus "mined" from the ground is not replaced within a time when it could be useful to human beings now living. However, where such accumulated storage is sufficiently great, large drafts may be made on it for long periods of time without material effect. Especially is this true when such drafts are made only intermittently, at periods of extreme drought.

The foregoing does not consider land and water rights in the vicinity which would be affected by any such proposition as Mr. Smart's, which would undoubtedly be an expensive and highly complex factor, in addition to the practical impossibility of determining to the satisfaction of both parties

whether a net increase in water actually results.

My judgment is that from a practical standpoint the most favorable plan for a temporary increase in Salt River Project water supply from underground sources in the upper Verde region would be the drilling of wells in the main valley close to the river and discharge of the water directly into the live stream. It is my understanding that this is possible under existing State law without incurring the danger of legal complications. Such an attempt on a large scale is not recommended, but the drilling of an experimental well and observation of results might be worth consideration. A test of the extent and prospective yield of the artesian basin could thus be started and operations terminated or continued as found to be warranted by conditions disclosed by the investigation.


Reference is made to the maps, profiles, etc., immediately following:

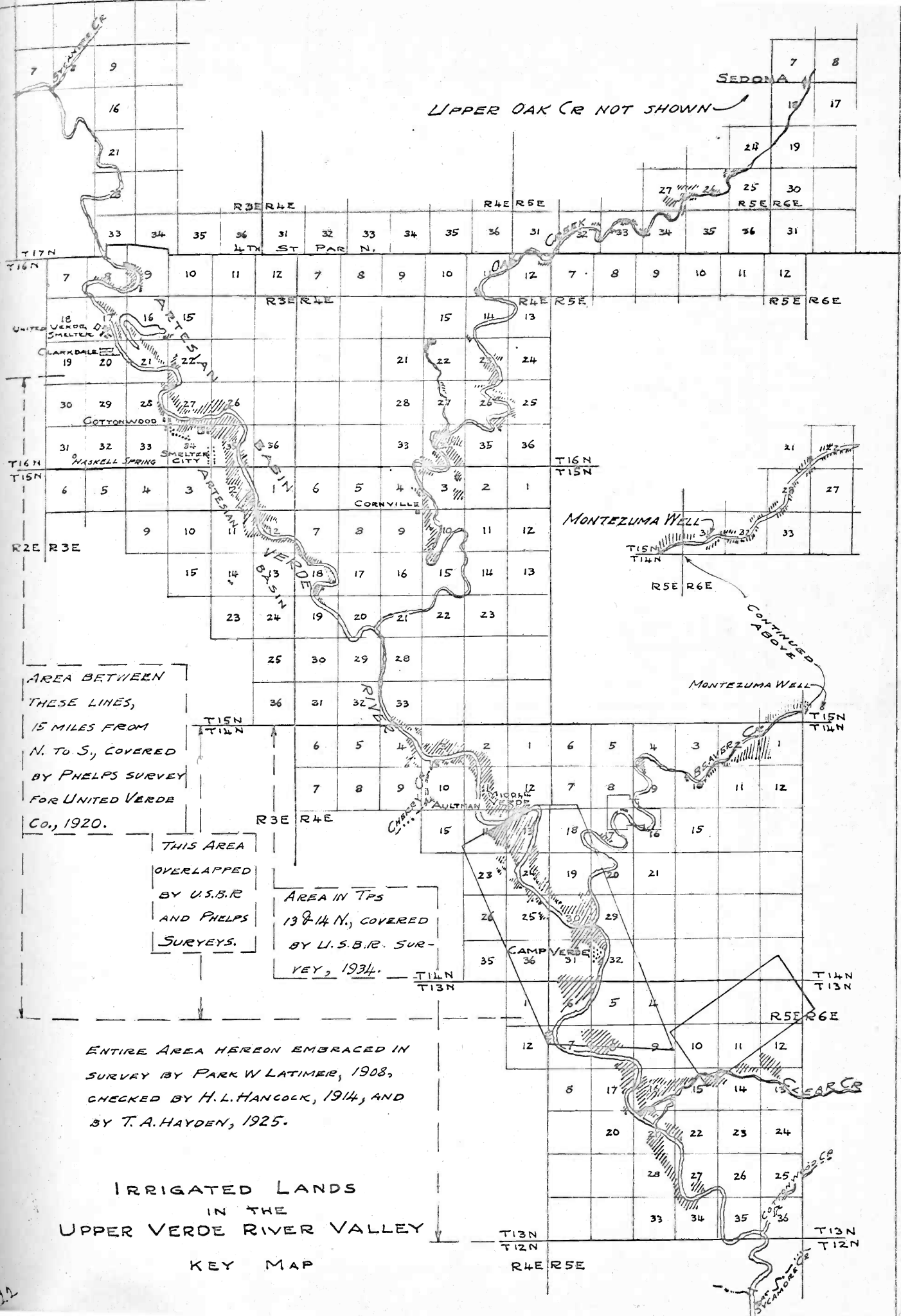
Key Map of Upper Verde Valley	8½ x 11
Key Map of Chino District	8½ x 11
Map of Chino Valley Irrigation District	8½ x 11
Map of Watson & Willow Creek Reservoirs	11 x 14
Profile Chino Artesian Basin & diagrams of artesian wells.	
Logs of Artesian Wells.	

* * *

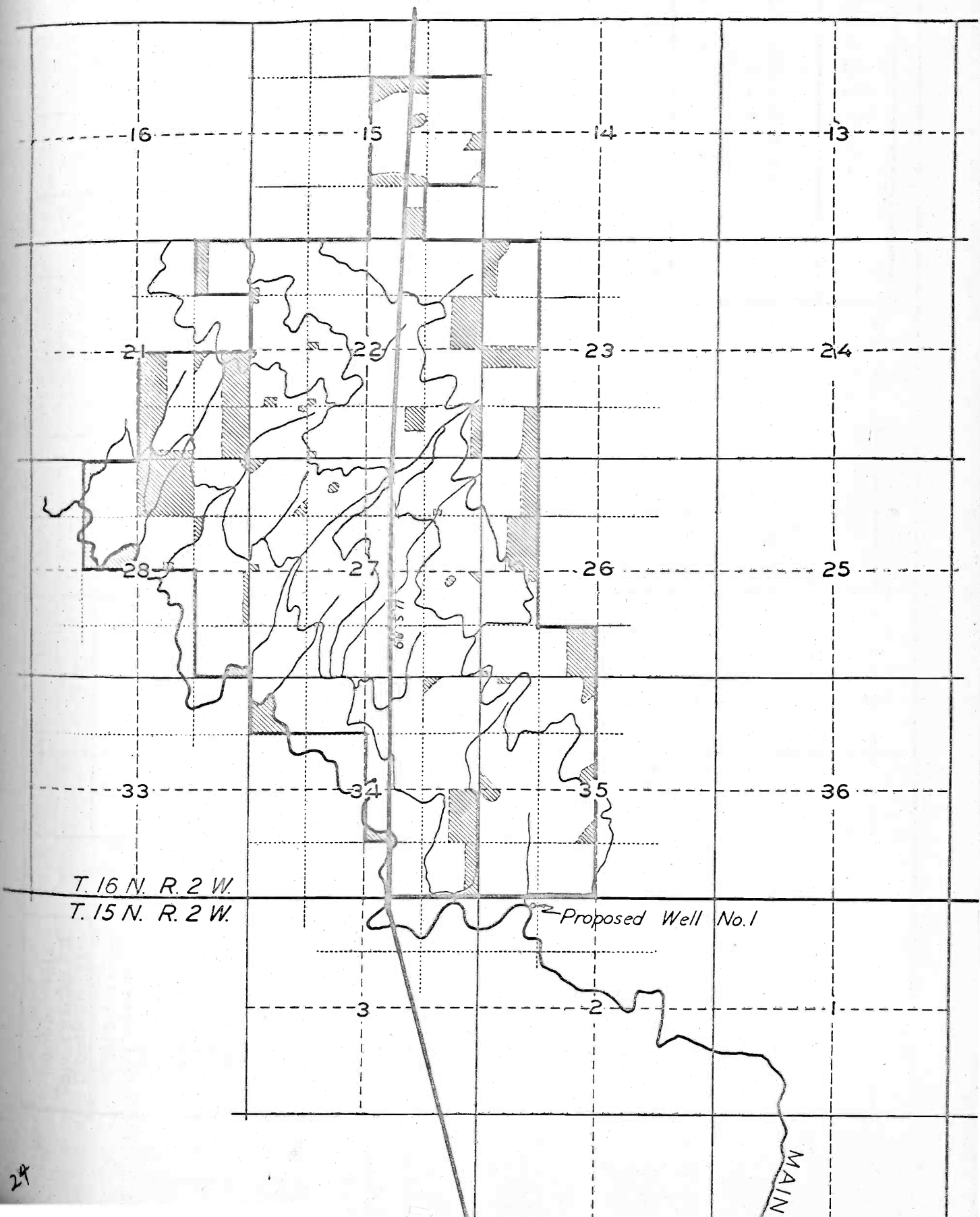
Reference is also made to general map of area covered by this report, in envelope at back.

* * *

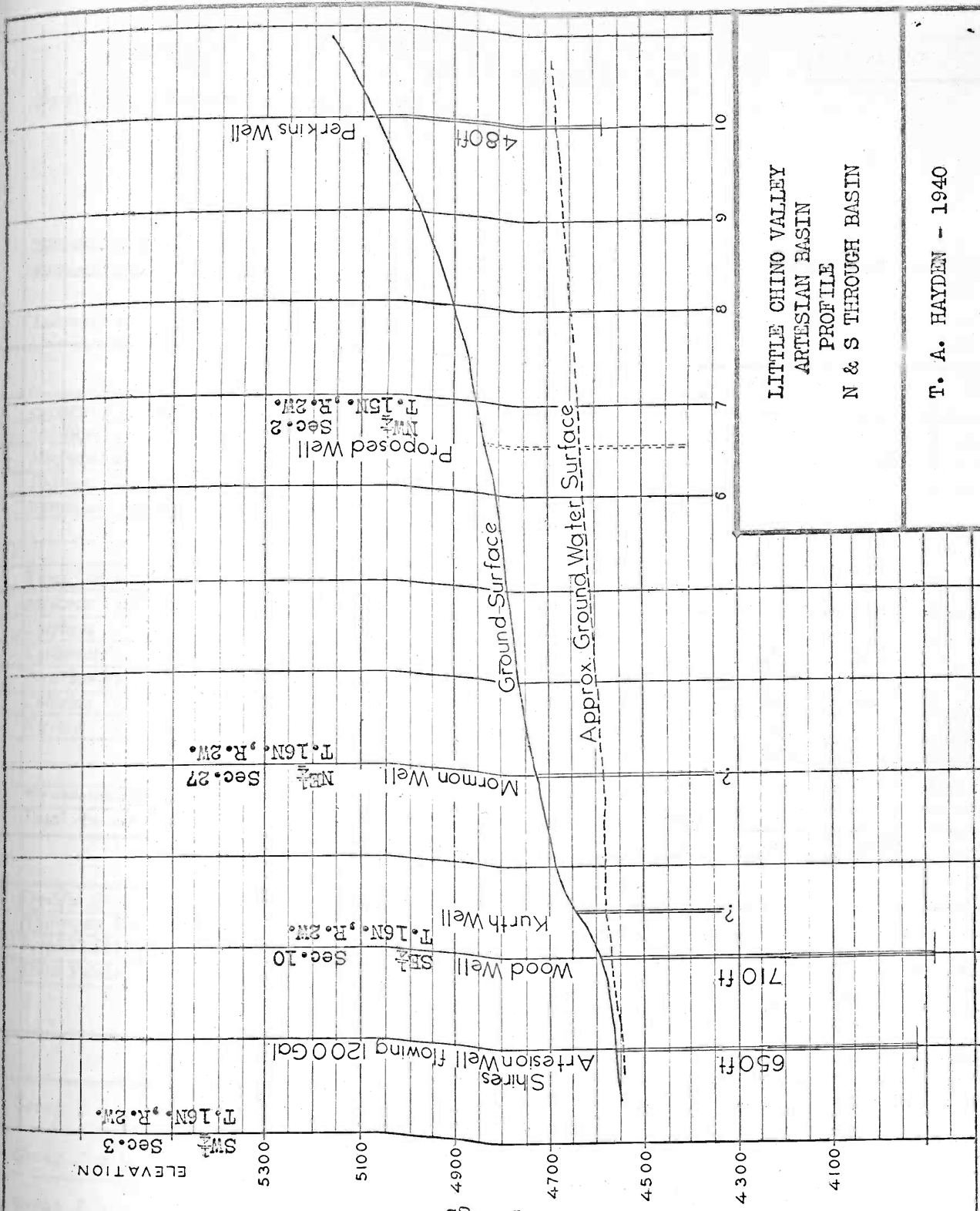
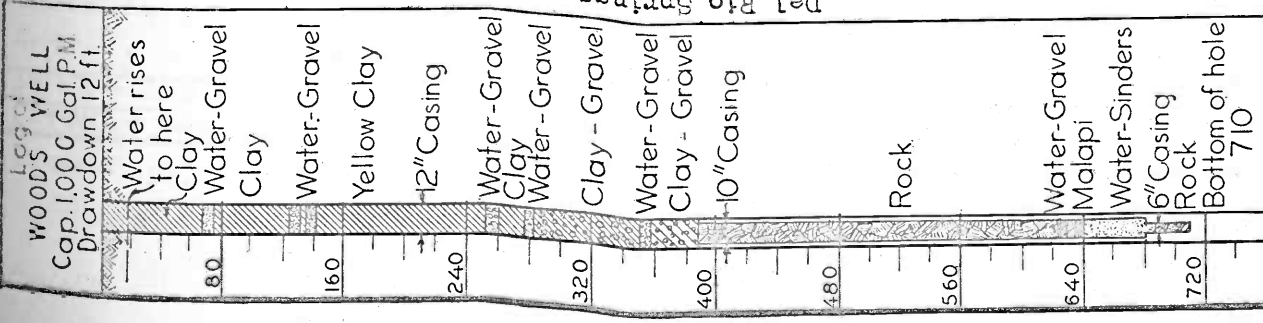

T. A. HAYDEN 10/23/40



CHINO VALLEY IRRIGATION DISTRICT
(Shaded areas are excluded)
Net Area 2,538 Acres



WOODS WELL
Cap. 1000 Gal PM
Drowdown 12 ft



LITTLE CHINO VALLEY
ARTESIAN BASIN
PROFILE
N & S THROUGH BASIN

T. A. HAYDEN - 1940

WATER ANALYSIS

Description of Sample: Springs - Del Rio Farm
Secs. 26 & 35, T.16N., R.2W.

Analysis obtained by..... Date Sampled..... Feb. 1, 1938
Prepared by..... R. V. Leeson from S.F. R.R. Date.....
Date Reported.....
Laboratory: S.F. R.R. Laboratory No. Date.....

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.04	28	20.04	1.40	41.3
Magnesium	Mg	0.02	17	12.16	1.40	41.3
Sodium	Na	0.02	14	23.00	0.59	17.4
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	3.39	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.02	12	48.03	0.24	7.1
Carbonate	CO ₃	* 0	0	30.00	0	0
Bicarbonate	HCO ₃	* 0.23	171	61.01	2.80	82.6
Chloride	Cl	0.02	12	35.46	0.35	10.3
Nitrate	NO ₃	0	0	62.02	0	0
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	3.39	100.0

OTHER DETERMINATIONS

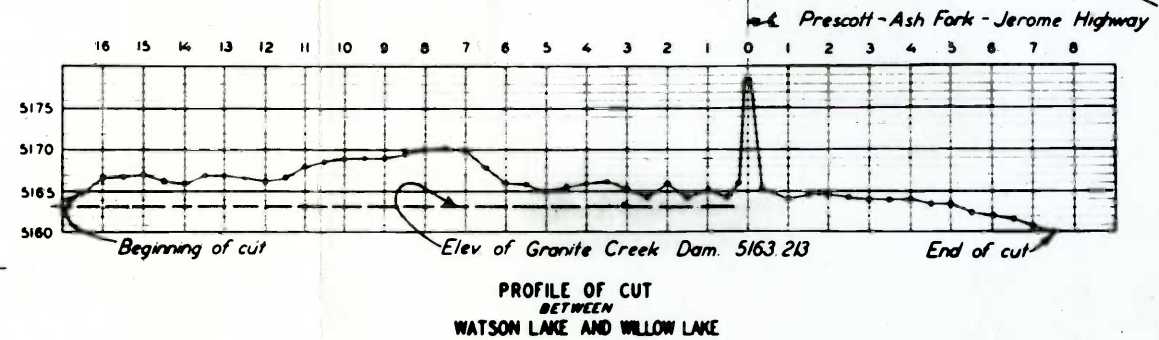
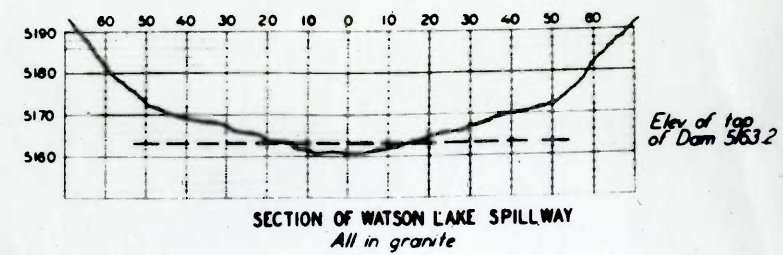
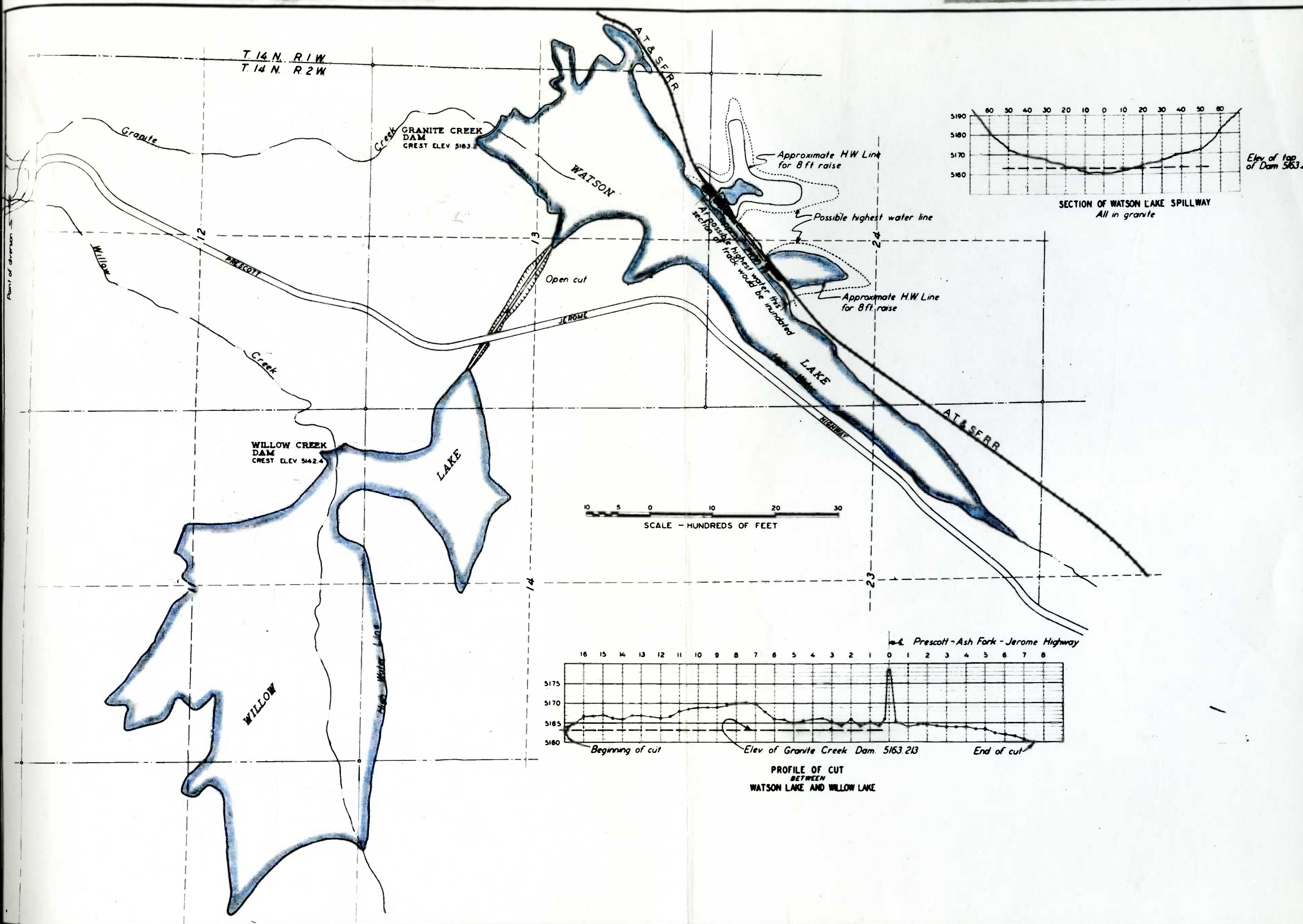
Specific Electrical Conductance @ 25°C K = × 10⁻⁵
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 169 ppm; 0.23 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	10.3 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	7.1 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	82.6 %
Na + K ÷ Total Cations	17.4 %	TYPE II
Cl + NO ₃ ÷ Total Anions	10.3 %		100%

Remarks: Recomputation of original analysis given in terms of hypothetical combinations.

Copied by..... Analyzed by.....
 Checked by..... Reported by.....
 Signatures and Dates Signatures and Dates



LOG OF WOOD WELL

CHINO VALLEY

In SB₂ Section 10
T.16N., R.2W.

--

0 - 390 Valley fill, clay, gravel, etc.
390 - 635 Rock
635 - 640 Gravel
640 - 685 Cinders
685 - 710 Rock

--

Water rises to within 18 ft. of surface.

Capacity 1,000 g.p.m. with 12 ft. drawdown.

LOG 8" ARTESIAN WELL

CHINO VALLEY

SE Cor. NE $\frac{1}{4}$ Sec. 4,
T.16N., R.2W.

* *

0 Ft. to 614 Ft. - Valley Fill.

614 " to 765 " - Malpai, agglomerate & Clay

* *

Flow 1000 g.p.m. (est. min.)

Struck flow at 614 Ft. which
rose to surface.

* *

Furnished by R. V. Leeson,

Obtained from W. J. McKee 8/8/40.

LOG OF
 OPERATING ARTESIAN WELL
 PHELPS-DODGE CORPORATION
 Clarkdale, Ariz.
 NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 17, T.16N., R.3E.

- - -
 Drilled Feb. 25, 1920
 - - -

Ground Elev. 3357
 Elev. WS in river 20 ft. dist., 3,351
 - - -

Pumping lift 44 ft. at 25 g.p.m. (38 ft. below river level)
 Recovered 10 ft. in 10 min. after shutdown.
 - - -

0 - 15	.....	Soil
15 - 25	.....	Sand & Gravel
25 - 30	.....	Soft lime
30 - 33	.....	Clay
33 - 37	.....	Sand & gravel
37 - 46	.....	Clay & sand
46 - 50	.....	Lime
50 - 60	.....	Clay & sand
60 - 65	.....	White Lime
65 - 80	.....	Clay & sand
80 - 90	.....	Soft white lime
90	.....	Water started to flow.
90 - 100	.....	Clay
100 - 115	.....	Lime
115 - 120	.....	Sandstone
120 - 140	.....	Clay
140 - 151	.....	Soft white lime & clay
151 - 154	.....	White clay & fine red sand
154 - 155	.....	Red clay
155 - 165	.....	White limestone
165 - 167	.....	Brown limestone
167 - 170	.....	Red clay
170 - 180	.....	Brown limestone
180 - 190	.....	Red clay
190 - 200	.....	Brown limestone
200 - 205	.....	Red clay
205 - 207	.....	Brown limestone
207 - 235	.....	Red clay
235 - 240	.....	White limestone
240 - 252	.....	Red clay
252	.....	Struck large flow of water
252 - 254	.....	limestone
254 - 256	.....	Sandstone
256 - 259	.....	Limestone
259 - 262	.....	Sandstone
262 - 265	.....	Limestone

TABLE I

IRRIGATED LANDS

ON

UPPER VERDE RIVER WATERSHED

T. A. Hayden
1940

* * *

List by Township, Range &
Section.

(Areas in red are abandoned)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
12	(Lot 1	16.9	Verde	Lower Verde	1889	See Canal history -	John Davie)	1891	2	224
	(			of			John Wood)			
	(			Wood			James Brown)			
	(Lot 2	0.8	"	"	1889	" "	" "	"	"	"
	(
	(Lot 3	16.6	"	"	1889	" "	" "	"	"	"
	(
	(NE-SE	7.8	"	"	1889	" "	" "	"	"	"
		<u>42.1</u>								

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
5		Lot 4	9.0	Verde	Wood)	1868	See History				
)						
)						
)						
6		Lot 1) (NE - NE)	39.0	"	")	1868	" "				
		Lot 2) (NW - NE)	39.0	"	")	1868	" "				
		Lot 9) (SW - NE)	38.0	"	")	1868	" "				
		Lot 9) (SE - NE)	17.2	"	")	1868	" "				
)						
)						
		Lot 3) (NE - NW)	29.0	"	")	1868	" "				
		SE - NW	27.2	"	")	1868	" "				
)						
)						
		Lot 8) (NE - SW)	29.0	"	")	1868	" "				
		Lot 7) (SE - SW)	0.6	"	")	1868	" "				

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
7		Lot 5 (W ₂ - NW)	20.8	Verde	Wood	1889	See history				
		Lot 9 (NW - SW)	16.7	"	"	1889	" "				
		NE - NE	6.3	"	Diamond	1892	See history	Jos. Melvin	1877	1-P	298
				or	Eaman			1892	" "	Head, et al	1892	2	298
		SE - NE	19.0	"	"			"	"	"	"
		SE-NE	5.0	"	"	1892	" "	"	"	"	"
		NE - SE	1.5	"	"	1892	" "	"	"	"	"
	Lot 13 (SE - SE)	6.4	"	Wood	1889	" "					
8		SW - NE	25.0	"	Diamond	1892	See history	Jos. Melvin	1877	1-P	298
				OR	Eaman			1892	" "	Head, et al	1892	2	298
		NW - NE	0.1	"	"	1892	" "	"	"	"	"
		NE - NW	19.5	"	"	1892	" "	"	"	"	"
		NW - NW	25.2	"	"	1892	" "	"	"	"	"
		SW - NW	32.0	"	"	1892	" "	"	"	"	"
		SE - NW	27.7	"	"	1892	" "	"	"	"	"
		Lot 3 & 5 (NE - SW)	11.1	"	"	1892	" "	"	"	"	"
		Lot 4 (NW - SW)	19.2	"	"	1892	" "	"	"	"	"
		SW - SW	2.7	"	Wood	1889	See history				
		SE - SW	12.8	"	"	1889	" "				
		Lot 7 (NE - SE)	3.7	"	Diamond	1892	"	Melvin	1877	1-P	298
				OR	Eaman			1892	" "	Head, et al.	1892	2	298
		Lot 1 (Pt. NE-SE)	0.3	"	"	1892	" "	"	"	"	"
	Lot 6 (NW - SE)	15.2	"	"	1892	" "	"	"	"	"	
	Lot 2 (Pt. NW-SE)	4.8	"	"	1892	" "	"	"	"	"	
	SW - SE	8.8	"	Wood	1889	See history					
	SE - SE	5.0	"	"	1889	" "					

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
9		SE - SW	0.4	Clear Cr.	Pioneer	1865					
11		Lot 2 (Pt. W ₂ -SE) Inside FVGR	2.7	"	Heath	1872	H.L.H.	Built by Glen	1872		
		Lot 2 Outside FVGR (Pt. W ₂ -SE)	12.9	"	"		"	"			
		SE - SE	3.5	"	"		"	"			
		Lot 6 Inside FVGR (Pt. SE-SW)	15.3	"	"		"	"			
		Lot 3 Outside FVGR (Pt. SE -SW)	1.8	"	"		"	"			
12		SW - SW	25.0	"	(Wingfield No. 1	1875	H.L.H. & Latimer	Built by Tom Smith	1874 1875)		
		SW - SW	8.0	"	"	1908	" "	" "			
		SE - SW	5.0	"	"	1875	" "	" "			
		SE - SW	2.0	"	"	1908	" "	" "			
13		NE - NW	15.0	"	"	1875	" "	" "			
		NE - NW	5.0	"	"	1908	" "	" "			
		NW - NW	15.0	"	"	1875	" "	" "			
		NW - NW	5.0	"	"	1908	" "	" "			
		NE - SW	10.0	"	Wingfield No. 2	1872	" "	" "			
		NW - SE	5.0	"	"	1872	" "	" "			
14		NE - NE	5.2	"	Heath 25 Ac.) in Secs.) 11 & 14)		H.L.H.	Built by Glen	1872		
		NW - NE	0.4	"	"	1872) and 16.8) added) after 1914)	"	"	"		
		SW - NW	7.6	"	Wingfield No. 3	1871	H.L.H.	John Martin	1871		

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WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
17		NE-NE	41.2	Verde	Wood	1889	See history	R. Campbell			
		NW-NE	5.0	"	"	1889	" "	" "			
		NW-NE	15.3	"	"	1914	" "	" "			
		SW-NE	3.7	"	"	1889	" "	John Davis			
		SE-NE	33.0	"	"	1914	" "	" "			
		SE-NE	43.1	"	"	1889	" "	" "			
		NE-SE	20.3	"	"	1889	" "	John Davis			
		NW-SE	8.5	"	"	1914	" "	" "			
		SE-SE	0.7	"	"	1889	" "	" "			
	20		NE-NE	1.5	"	"	1889	" "	" "		
21		NE-NE	20.6	Clear Creek	Wingfield No.4	1868	See history				
		NW-NE	3.1	"	"	1868	" "				
		NW-NE	0.3	"	Strahan Pump	1914	H.L.H.	David Strahan			
		SW-NE	6.1	"	Wingfield No.4	1868	See history				
		SW-NE	0.3	"	Strahan Pump	1914	H.L.H.				
		SE-NE	38.6	"	Wingfield No.4	1868	See history				
		NE-NW	16.0	"	Strahan Pump	1914	H.L.H.	David Strahan			
		NW-NW	19.5	"	Strahan Ditch	1909	H.L.H.	" "			
		SE-NW	5.3	"	Strahan Pump	1914	H.L.H.	" "			
		NE-SW	32.0	Verde	Wood	1889	See history	John Wood			
		SE-SW	9.5	"	"	1889	" "	" "			
		NE-SE	1.7	Clear Creek	Wingfield No.4	1868	See history				
		NW-SE	27.5	Verde	Wood	1889	" "	John Wood			
		SW-SE	31.2	"	"	1889	" "	" "			
22		NW-NW	6.5	Clear Creek	Wingfield No.4	1868	See history				
		SW-NW	33.2	"	"	1868	" "				
		NW-SW	7.2	"	"	1868	" "				
27		NW-SW	13.0	Verde	Wood	1889	See history	James Brown			
		SW-SW	11.8	"	"	1889	" "	" "			
		SE-SW	5.0	Verde	Newman	1870	H.L.H. & G.L.O. Plat	(Built abt. 1870)	HLH		
	SW-SE	20.0	"	"	1870	" "	" "	" "	" "	" "	

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 13 N., R 5E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	* Book	Page
28	NE-NE	16.6	Verde	Wood	1889	See history	Brown			
	NW-NE	28.7	"	"	1889	" "	"			
	SW-NE	18.2	"	"	1889	" "	"			
	SE-NE	36.1	"	"	1889	" "	"			
	NE-SE	29.5	"	"	1889	" "	"			
	NW-SE	1.1	"	"	1889	" "	"			
	SE-SE	7.5	"	"	1889	" "	"			
34	NE-NW	20.0	"	"	1889	" "	Hance			
	NW-NW	5.0	"	"	1889	" "	Brown			
	NW-NW	10.0	"	"	1889		Brown			
	SW-NW	1.3	"	"	1889		Hance			
	SW-NW	8.0	"	"	1889		Hance			
	SE-NW	27.0	"	"	1889		Hance			
	Total		<u>1,600.4</u>							
	Total		<u>120.0</u>							

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
2		SW-SW	6.0	Clear Creek	Jones & Thompson	1894	Stroud & Prothero O.A.T.& H.L.H.	W. A. Jones			
								Isaac Jones & Wm. Hutchinson as successor of Jas. Thompson decreed water for 10 acres (1900 - Sept. 17)			
								Case 3013 Yavapai County (Wilber, Head, et al) (vs.) (Jones, et al)			
3		SE-SE	1.0	"	"	1894					
11		NW-NW	3.0	"	"	1894					
		Total	<u>10.0</u>								

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
1	E $\frac{1}{2}$ - NE	50.0	Granite Creek & Willow Creek	Chino Valley	1898	H.L.H.	(John Duke	1894	2	403
							(" "	1894	2	404
							(John Duke &	1910	6	266
							(John Bianconi	1910	6	267
							(Mary A. Duke	1911	6	313
	E $\frac{1}{2}$ - SE	20.0	"	"	1916	"	"	"	"	"
	W $\frac{1}{2}$ - SE) E $\frac{1}{2}$ - SW)	35.0	"	Bianconi & Chino Valley	1868	H.L.H.	John Bianconi			
12	SE $\frac{1}{4}$	1.0	Granite Creek	Granite Dells	1879	H.L.H.	Mrs. Marshall Payne			
"	SE $\frac{1}{4}$	39.0	"	"	1879	"	"			
	Total	<u>106.0</u>								
	Total	<u>39.0</u>								

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 14N., R4E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
2	NW-SW	13.1	VERDE	O.K.	1873	O.A.T.	(REPORT BUILT 1873)				
	NE-SW	15.1	"	"	1873	"	P. W. BURFORD	1877	1-P	254	
	SE-SW	14.1	"	"	1873	"	"	"	"	"	
								(NOTE: FILING 9/11/88 REFERRED TO BY ROBINSON & WOLF IS NOT O.K. DITCH BUT FOR PROPOSED DITCH EAST OF O.K.)			
	SW-SW	3.4	"	C.V.& PUMP	1913	PHELPS	FORMERLY C.V.	(1884) (1894) (1913)		SEE HISTORY	
	SW-SW	15.4	"	C.V.	1913	PHELPS	"	"			
	NW-SE	2.4	"	O.K.	1873	O.A.T.	REPORTED BUILT 1873			SEE ABOVE	
	SW-SE	17.3	"	"	1873	"	"	"	"	"	
	3	SE-NW	10.5	"	"	1873	"	SEE ABOVE			
		SW-NW	2.7	"	"	1873	"	"			
NW-SW		28.5	"	"	1873	"	"				
NE-SW		42.7	"	"	1873	"	"				
SE-SW		1.0	"	"	1873	"	"				
SW-SW		3.3	"	C.V. & PUMP	1913	"					
SW-SW		1.0	"	"	1925	T.A.H.	FORMERLY FROM C.V.			SEE ABOVE	
SW-NE		20.6	"	O.K.	1873	O.A.T.	"				
SE-NE		8.1	"	"	1873	"	"				
NW-SE		36.2	"	"	1873	"	SEE ABOVE				
NE-SE		28.1	"	"	1873	"	"				
SW-SE		5.7	"	PUMP & POND	1913	PHELPS	SEE CANAL HISTORY				
SW-SE		5.4	"	"	1913	"	"	"	"	"	
SE-SE		24.0	"	"	1913	PHELPS	"	"	"	"	
NE-NE		22.7	"	PUMP & O.K.	1914	PHELPS	SEE ABOVE				
NW-NE		9.0	"	O.K.	1873	O.A.T.	SEE ABOVE				
SE-NE	15.0	"	O.K. & PUMP	1914	PHELPS	"	"				
NE-SE	15.0	"	PUMP & POND	1878	MACK DAVID	SEE CANAL HISTORY					
SE-SE	5.0	"	"	1878	"	"	"	"	"		
SW-SE	12.2	"	C.V. & PUMP	1913	PHELPS	"	"	"	"		
SE-SE	2.7	"	C.V.	1878	"	"	"	"	"		

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 14N., R 4E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS										
						First Cultiv.		Recorded Filings								
						Year	Source of data	Name of Locator	Year	* Book	Page					
11	NW-NE	SW-NE	8.5	VERDE	O.K.	1873	O.A.T.	P. W. BURFORD	1877	1-P	254					
			2.3			1873			"		"	"	"			
	NE-NW	SE-NW	7.8	"	"	1873	"	"	"	"	"					
			0.2			1873			"		"	"	"			
	NW-NW	SW-NW	6.5	"	C.V.	1913	PHELPS	SEE CANAL HISTORY	"	"	"					
			3.0			1913			"		"	"	"			
	NE-SW	SE-SW	7.3	"	O.K.	1873	O.A.T.	P. W. BURFORD	1877	1-P	254					
			4.4			1873			"		"	"	"			
	NW-SE	SW-SE	18.7	"	"	1873	"	"	"	"	"					
			34.4			1873			"		"	"	"			
			37.4			1873			"		"	"	"			
12	NW-SW	SW-SW	1.0	"	"	1873	"	"	"	"	"					
			37.8			1873			"		"	"	"			
	SE-SW	SE-SW	7.0	"	"	1873	"	"	"	"	"					
			0.6			1893			SEE CANAL HISTORY		1892	2	294			
13	NE-NW	NE-NW	2.3	VERDE	EUREKA	1893	SEE CANAL HISTORY	PHELPS	SEE HISTORY OF CANAL	"	"					
			2.3			1878						SEE HISTORY OF CANAL	NEW IRRIGATED FROM WELL.			
	NW-NW	NW-NW	10.7	"	O.K.	1873	O.A.T.	P. W. BURFORD	1877	1-P	254					
			1.2			1878			PHELPS		NEW WATERED FROM WELL.					
	NW-NW	SW-NW	11.2	"	EUREKA	1893	SEE "EUREKA" ABOVE	"	"	"	"					
			24.2			1878						PHELPS	SEE CANAL HISTORY			
	SW-NW	SE-NW	6.3	"	"	1913	"	"	"	"	"					
			32.4			1878			PHELPS		NEW WATERED BY PUMP.					
	NE-SW	NE-SW	28.1	"	C.V. BY PUMP	1913	PHELPS	SEE CANAL HISTORY	"	"	"					
			2.7			1868						SEE HISTORY				
	NE-SW	NW-SW	5.2	"	"	1868	"	"	"	"	"					
			38.4			1913						PHELPS	SEE CANAL HISTORY			
	SW-SW	SW-SW	33.0	"	"	1913	"	"	"	"	"					
			1.2			1868						SEE HISTORY				
	SE-SW	SE-SW	1.1	"	C.V. BY PUMP	1913	PHELPS	SEE CANAL HISTORY	"	"	"					
			3.0			1868						SEE HISTORY				
SE-SW	SE-SW	0.5	"	"	1868	"	"	"	"	"						
		0.4			1893						HISTORY	1892	2	294		
NW-SE	SW-SE	"	EUREKA	"	1893	"	"	"	"	"	452					
											11.3	1893	"	1894	2	498
											11.3	1893	"	1895	2	498

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T14 N., R4E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	* Book	Page
14	NE-NE	22.5	VERDE	O.K.	1873	O.A.T.	P. W. BURFORD	1877	1-P	254
	NW-NE	17.1	"	"	1873	"	"	"	"	"
	SW-NE	9.9	"	FONA	1913	PHILPS	SEE CANAL HISTORY	"	"	"
	SE-NE	27.7	"	"	1913	"	"	"	"	"
	NE-SE	26.0	"	"	1913	PHILPS	"	"	"	"
	NW-SE	15.9	"	"	1913	"	"	"	"	"
	SW-SE	8.3	"	"	1913	"	"	"	"	"
	SE-SE	24.8	"	"	1913	"	"	"	"	"
23	NE-NE	23.8	"	C.V.	1898	ROBINSON & WOOLF & G.L.G. PLATS.	ABANDONED PRIOR TO 1908. REVIVED 1920			294
	SE-NE	3.0	"	"	1898	"	"			
	SE-NE	18.0	"	"	1898	ROBINSON & WOOLF & G.L.G. PLAT	ABANDONED BEFORE 1908.			
	NE-SE	5.0	"	"	1898	"	"			
24	NW-NE	22.3	VERDE	EUREKA	1893	SEE CANAL HISTORY		(1892 1894 1895)	2 2 2	294 459 498
	SW-NE	30.2	"	"	1893	"	"			
	NE-NW	0.5	"	"	1893	"	"			
	NE-NW	0.4	"	WOOD	1868	SEE HISTORY				
	NW-NW	15.7	"	"	1868	"	"			
	NW-NW	14.5	"	C.V.	1898	ROBINSON & WOOLF & G.L.G. PLAT	ABANDONED BEFORE 1908. REVIVED 1920.			
	SW-NW	1.5	"	"	1898	"	"			
	SW-NW	20.0	"	"	1898	R & W & G.L.G. ABANDONED BEFORE 1908.				
	SW-NW	2.1	"	WOOD	1868	SEE HISTORY				
	NE-SE	33.8	"	EUREKA	1893	SEE CANAL HISTORY		(1892 1894 1895)	2 2 2	294 459 498
	NW-SE	12.8	"	"	1893	"	"			
	SE-SE	22.6	"	"	1893	"	"			
	NW-SW	16.0	"	C.V.	1898	ROBINSON & WOOLF & G.L.G. PLAT. ABANDONED	BEFORE 1908. REVIVED 1920. ABANDONED 1925.			
	NW-SW	8.0	"	"	1898	R & W & G.L.G. ABANDONED BEFORE 1908.				
SW-SW	3.0	"	"	1898	"	"				
SW-SW	10.9	"	"	1898	R & W & G.L.G. ABANDONED BEFORE 1908.	REVIVED 1920. ABANDONED 1925.				
SE-SW	16.2	"	WOOD	1868	SEE HISTORY					
SE-SW	5.0	"	C.V.	1898	ROBINSON & WOOLF & G.L.G. PLAT	ABANDONED 1908. REVIVED 1920.				

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 14N., R 4E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	* Book	Page
25	NW-NE	11.2	VERDE	WOOD	1868	SEE HISTORY				
	NW-NE	3.0	"	C.V.	1898	ROBINSON & WOLF & G.L.O. ABANDONED BEFORE 1908.				
	SW-NE	2.4	"	WOOD	1868	SEE HISTORY				
	SW-NE	33.0	"	C.V.	1898	SEE (C.V.) ABOVE.				
	SE-NE	14.8	"	WOOD	1868	SEE HISTORY				
	SE-NE	2.0	"	C.V.	1898	SEE (C.V.) ABOVE.				
	NE-NW	5.7	"	WOOD	1868	SEE HISTORY				
	NE-NW	4.9	"	C.V.	1898	R & W & G.L.O. ABANDONED 1908 - REVIVED 1920 - ABANDONED 1925.				
	NE-NW	15.0	"	"	1898	R & W & G.L.O. ABANDONED 1908.				
	SE-NW	8.0	"	"	1898	"				
	NE-SE	15.0	"	WOOD	1898	LATIMER				
	NE-SE	25.0	"	C.V.	1898	R & W & G.L.O. ABANDONED 1908.				
	NW-SE	35.0	"	"	1898	"				
	SW-SE	18.0	"	"	1898	"				
	SE-SE	30.0	"	"	1898	"				
36	NE-NE	20.0	"	"	1898	"				
	NW-NE	10.0	"	"	1898	"				
	TOTAL	<u>7,006.8</u>								
	TOTAL	<u>450.1</u>								

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
19		Lot 3 (NW-SW)	2.8	Verde	Eureka	1893	See Canal history		1892	2	294
		Lot 4 (SW-SW)	15.8	"	"	1893	" " "		1894	2	459
									1895	2	498
	SE-SE	10.9	"	"	1893	" " "	"		"	"	
	SW-SE	0.3	"	"	1893	" " "	"		"	"	
29		NW-NW	7.0	"	"	1893	" " "	"	"	"	
		SW-NW	10.0	"	"	1893	" " "	"	"	"	
30		SW-SW	34.0	"	Wood	1868	See history				
		SE-SW	7.4	"	"	1868	" "				
	NE-NE	34.0	"	Eureka	1893	See Canal history	1892		2	294	
							1894		"	459	
							1895		"	498	
	NW-NE	19.0	"	"	1893	" " "	"		"	"	
	SW-NE	37.5	"	"	1893	" " "	"		"	"	
	SE-NE	38.0	"	"	1893	" " "	"		"	"	
	Lot 1 (NW-NW)	24.0	"	"	1893	" " "	"		"	"	
		SE-NW	19.5	"	"	1893	" " "		"	"	"
	NE-SW	3.3	"	"	1893	" " "	"		"	"	
	NW-SW	10.0	"	Wood	1868	Latimer	History - Abandoned prior to 1908. R & W & G.L.O. Abandoned prior to 1908. History - Abandoned prior to 1908. R & W & G.L.O. Abandoned prior to 1908. Part formerly from Enterprise.				
	SW-SW	10.0	"	"	1868						
	SW-SW	25.0	"	C.V.	1898						
	SE-SW	20.0	"	Wood	1868						
SE-SW	10.0	"	C.V.	1898							
NE-SE	20.7	"	Eureka	1893	See canal history	1892	2	294			
						1894	2	459			
						1895	2	498			
NW-SE	26.4	"	"	1893	" " "	"	"	"			
SW-SE	29.4	"	Wood	1868	History	"	"	"			
SE-SE	33.8	"	"	1868	"	"	"	"			

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
30		S 3/4	100	Granite Creek	Chino Valley	1916	T.A.H.				
		Total	<u>100</u>								

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS							
						First Cultiv.		Recorded Filings					
						Year	Source of data	Name of Locator	Year	Book	Page		
1	SW-SW	8.0	Verde	Willard	1878	G.L.O.	(Built by U.S.A. Wingfield et al	1869	P-1	317			
	SW-SW	3.0	"	or Pete's	1914	H.L.H.& Phelps	C.D. Willard (Scott, Carroll et al	1877		1	293		
	SE-SW	2.0	"	"	1914	Phelps	Wallace Willard	1885		2	491		
2	NW-NE	20.7	"	C.W.	1878	G.L.O.	(Built by U.S.A.	1869	P-1	317			
	SW-NE	37.0	"	"	1878	"	(Wingfield et al	1877			1	293	
	SE-NE	22.0	"	"	1878	"	(C. D. Willard	1885			2	491	
								(Scott, Carroll et al			1895	2	484
	NE-NW	6.8	"	"	1878	"	" "	"			"	"	
	SE-NW	6.7	"	"	1878	"	" "	"			"	"	
	NE-SE	35.5	"	"	1878	"	" "	"			"	"	
	NW-SE	31.5	"	"	1878	"	" "	"			"	"	
	SW-SE	13.3	"	"	1878	"	" "	"			"	"	
	SE-SE	34.9	"	"	1878	"	" "	"			"	"	
11	NE-NE	36.4	"	"	1878	"	" "	"	"	"			
	NW-NE	2.0	"	"	1878	"	" "	"	"	"			
	SE-NE	25.6	"	"	1878	"	" "	"	"	"			
	NE-SE	3.7	"	"	1878	"	" "	"	"	"			
12	NE-NW	38.1	"	Pete's or Willard	1914	H.L.H.& Phelps	Wallace Willard	1913	6	589			
	NW-NW	19.7	"	C.W.	1869	G.L.O.	Barney & Willard						
	NW-NW	5.7	"	Pete's or Willard	1914	H.L.H.& Phelps	Wallace Willard	1913	6	589			
	SW-NW	27.8	"	C.W.	1869	G.L.O.	Barney & Willard						
	SE-NW	9.9	"	Pete's or Willard	1914	H.L.H.& Phelps	Wallace Willard	1913	6	589			
	NW-NE	15.2	"	"	1914	"	" "	"	"	"			
	SW-NE	3.3	"	"	1914	"	" "	"	"	"			
	NE-SW	14.2	"	C.W.	1880	S & P	Anderson						
	NW-SW	4.7	"	"	1869	G.L.O. Plat & Tr.Bk.	See above.						
	NE-SE	1.9	"	"	1880	S & P	Anderson						
NW-SE	1.2	"	"	1880	"	"							
SW-SE	10.0	"	"	1880	"	"							
SE-SE	8.0	"	"	1880	"	Anderson							
Total		<u>448.8</u>											

* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
3	NE-NE	25.0	Oak Cr.	Oak Cr.	1894	Latimer & H.L.H.	J.D.Tipton	1871	P-1	348)
	SE-NE	10.0	" "	" "	1894	" "	Relates back to A. Jackson, P. Hough & J.D. Tipton, Van Deren, Dickinson et al, also relates back to same	1890	3	458	
	NW-NE	5.0	" "	Holden	1913	"	No record				
	NE-SE	35.0	" "	Oak Cr.	1894	"	(Tipton, Jackson et al	1876	P-1	348)
	SE-SE	10.0	" "	" "	1894	"	(Van Deren, Dickinson et al	1890	3	458	
	SW-SE	7.0	" "	" "	1914	T.A.H. (Frank & Helen Petschauer		1914	6	633)
	NW-SE	13.0	" "	" "	1925	"	" " "	1930	8	90	
	NE-NW	5.0	" "	Holden	1913	Latimer & H.L.H.	No record				
	NW-NW	25.0	" "	Sayers	1877	"	No record				
	NW-SW	8.0	" "	Fain	1876	G.L.O. Plat	G.W. Hull & Co.	1878	P-1	355)
	SW-SW	20.0	" "	"	1876	"	Wm. Fain & J.W. Muse	1895	3	2	
	SW-SW	15.0	" "	"	1913	H.L.H.	Chick, Fain et al	1904	5	216)
						Claims rights from 1876					
4	NE-NE	25.0	" "	Sayers	1877	"	No record) See above
	SE-NE	8.0	" "	Fain	1876	"	Hull, Fain, Chick et al	1876			
							See above	1878			
	NE-SE	9.0	" "	"	1876	"	See above	1895			
7	SW-SW	7.7	Verde	C.W.	1908	Latimer & H.L.H.	See history				
10	NE-NW	5.0	Oak Cr.	Fain	1914	O.A.T. H.L.H.	Hull, Fain, Chick, et al	1876)
	NW-NW	5.0	" "	"	1914	"		1878			
	NW-NW	15.0	" "	"	1876	"	"	1895			
	SW-NW	20.0	" "	"	1876	"	"	1904			
	SE-NW	5.0	" "	"	1876	"	"				
	NE-SW	25.0	" "	"	1876	"	"				
	NW-SW	15.0	" "	"	1876	"	"				
	SW-SW	30.0	" "	"	1876	"	"				
	SE-SW	10.0	" "	"	1876	"	"				
	NW-SE	6.0	" "	Hart	1929	J. Warlopp	State Cert. of W.R.	1932			
NE-SE	5.0	" "	Pump	1925	T.A.H.	Rogers - No filing					

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
14		SW-SW	10.0	Oak Cr.	Pump	1935	F.F. Williams	Elmer H. Rogers	1914	7	6
15		NE-SE	5.0	" "	"	1935	"	E. H. Rogers	1915	7	152
		SE-SE	25.0	" "	"	1935	"	" "	"	"	"
		SW-NE	5.0	" "	"	1925	T.A.H.	Jas. T. Morris E. H. Rogers	1915	7	90
		NE-NW	20.0	" "	Hart	1897	H.L.H.	David F. Hart David E. Hart states ditch built	1900	3	487
		NW-NW NW-NW	10.0 5.0	" "	" Pain	1897 1876	" C.L.O.	" See History	1898-99	"	"
17		NW-SW	5.0	Verde	Pump	1934	E.W. Putnam	No record			
		SW-SW	3.0	"	"	1934	"	" "			
18		NW-NE	3.5	"	Pump	1914	H.L.H. & Phelps	O.M. Andrews	1911	6	328
		SW-NE	4.5	"	Pump	1914	H.L.H. & Phelps	Doo Fok	"	6	349
		SE-NE	3.7	"	"	1914	"	" "	"	"	"
		NE-SE	12.7	"	"	1913	"	Dea Me Get Dea Hong	{ 1913 1915	6 7	581 102
		SW-SE	10.3	"	"	1912	"	L. Tissaw	1914	6	624
		SW-SE	12.0	"	"	1912	"	Plans to increase area	1940.	"	"
		NW-NW	6.7	Verde	C.W.	1880	S & P	U.S.A. Wingfield et al Scott et al	1869 1877 1895	No record P-1 2	
19		NE-NW	14.6	"	Pump	1914	H.L.H. & Phelps	O.M. Andrews	1911	6	328
		NW-NE	4.4	"	"	1912	" "	L. Tissaw Plans to increase area - 1940	1914	6	624
		NW-NE	15.0	Oak Cr.	Pump	1925	F.F. Williams	John Smith & Atwood Aims	1900	3	495
33		SE-SW	4.2	Verde	O.K.	1873	O.A.T.	P.W. Burford (Ditch built abt. 1873)	1877	1-P	254
		SW-SE	1.5	"	"	1873	"	" " "	"	"	"
		Total	532.8								
		Total	17.0								

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
21	SE-SE		15.0	Beaver Creek	Skaggs	1889	Court Decree Case 3583 Yavapai County Mahan vs. Schroeder et al	-Decreed 15 Acres 1889 Water right to John Skaggs			
	SE-SE		5.0	"	"	1901	H.L.H.		- No recorded filing		
22	NW-SW		1.0	"	Skaggs	1901	" "	" record			
	SW-SW		4.0	"	"	1901	" "	" "			
	SW-SW		1.0	"	Landers	1901	Latimer	No Record			
	NE-SW		10.0	"	Casner & Springs	1884	Decree	Case 3583 above described			
	NE-SW		4.0	"	Skaggs	1906	H.L.H.				
	NW-SE		1.0	"	"	1906	"				
	NW-SE		5.0	"	Casner & Springs	1884	Decree	Case 3583 above described.			
	NE-SE		3.0	"	"	1884	"	" " " "			
	NE-SE		3.0	"	"	1883	"	" " " "			
27	NW-NW		2.0	"	Landers	1901	Latimer	No Record			
28	NE-NE		2.0	Beaver Creek	Skaggs	1901	O.A.T. & H.L.H.	No recorded filing			
	NE-NE		4.0	"	Landers	1901	Latimer	No record			
	SW-NE		4.0	"	Hollings-head	1898	Decree 3583	Yavapai Co. before described.			
	NW-SE		2.0	"	"	1898	"	" " " "			
	NE-SW		3.0	"	"	1898	"	" " " "			
	SE-SW		1.0	"	"	1898	"	" " " "			
	SE-SW		4.0	"	Hutchin-son	1897	"	" " " "			
	SE-SW		2.0	"	Clift	1901	Latimer	N. Hutchinson - 8 Ac.			
	SW-SW		4.0	"	"	1901	"	C. T. Hawkins " " "			

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings					
						Year	Source of data	Name of Locator	Year	*	Book	Page	
31	NE-SW		2.0	Beaver Creek	Back	1870	Decree	Case 3583 before described					
								Back	1890	2		132	
								Arnold	1900	5		3	
	NW-SW		17.0	"	"	1870	"	"	"	"	"	"	
								"	"	"	"	"	
								"	"	"	"	"	
								"	"	"	"	"	
	SE-SW		1.0	"	"	1890	"	B.F. Taylor	14 acres	1890		water.	
	NW-SE		6.0	"	"	1890	"	"	"	"	"	"	
	SW-SE		7.0	"	"	1890	"	"	"	"	"	"	
	SE-NE		2.0	"	Private	1901	Latimer	No Record					
32	SW-NW		6.0	"	"	1901	"	"	"				
	NW-SW		2.0	"	"	1901	"	"	"				
	NW-SW		8.0	Beaver R. Creek	Finney	1879	Decree	Case 3583 before described					
								30 Ac. 1879 to Robt. Finney					
	NW-SW		2.0	"	"	1906	H.L.H.	No record.					
	NE-SW		10.0	"	"	1879	Decree	Case 3583 above described					
								Robt. Finney 30 acres	1879.				
	NW-SE		10.0	"	"	1879	"	"	"	"	"	"	
	NW-SE		5.0	"	"	1906	H.L.H.	No record					
	SW-NE		2.0	"	"	1879	Decree	Case 3583 above described.					
								Robt. Finney 30 acres	1879.				
	NE-NE		8.0	"	Clift	1880	(Case Elizabeth Clift.)						
	NW-NE		7.0	"	"	1880	(3583 Decreed 15 ac.)						
33	NW-NW		1.0	"	"	1901	Latimer	- C. T. Hawkins					
	NE-NW		4.0	"	Hutchinson	1897	Decree	3583 above described.					
								N. Hutchinson 8 Ac.					
								1897 water.					
	E-1/2-SE		10.0	Walker Creek	Lorenzo Landers	1894	H.L.H.	Lorenzo Landers	1911	6		339	
34	W-1/2-SW		10.0	"	"	1894	"	"	"	"	"	"	
	Total		143.0										
	Total		57.0										

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS						
						First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	Book	Page	
CHINO VALLEY IRRIGATION DISTRICT												
								D.M. & M.A. Wynkoop	1911	6	274	
								Geo. A. Thayer	1911	6	273	
								" " "	1912	6	475	
								" " "	1912	6	476	
								Ariz. Land & Irr.Co. by Geo. A. Thayer	1913	6	548	
								Chino Valley Irr. District	1928	8	33	
								(Proof of app'n. of water under State Permit E-9 App'n. E-15				
								Chino Valley Irr. District	1935	8	162	
								((Priority date 1922) (State Cert. of W.R. No. 593, dated 3/14/35				
15		(Tracts 55 & 56)		Willow & Granite Creeks	Chino Valley	1916	See history (Priority 1911)		W.R. Cert.		593	
		SW-NE)										
		SE-NE)										
		NE-SE)	164.0									
		NW-SE)										
		SW-SE)										
21		NE-NE	20.0	"	"	1916	" "	"	"	"	"	
		NE-NE	12.0	"	"	1916	" "	"	W.R. Cert.		594	
		NE-SE	20.0	"	"	1916	" "	"	W.R. Cert.		593	
		NW-SE	20.0	"	"	1916	" "	"	W.R. Cert.		594	
		SW-SE	20.0	"	"	1916	" "	"	W.R. Cert.		593	
		SE-SE	20.0	"	"	1916	" "	"	"	"	"	
22		NE-NE	40.0	"	"	1916	" "	"	"	"	"	
		NW-NE	38.0	"	"	1916	" "	"	"	"	"	
		NW-NE	3.0	"	"	1916	" "	"	"	"	594	
		SW-NE	40.0	"	"	1916	" "	"	W.R. Cert.		593	
		SE-NE	20.0	"	"	1916	" "	"	"	"	"	
		NE-NW	41.0	"	"	1916	" "	"	"	"	"	
		NW-NW	40.0	"	"	1916	" "	"	"	"	"	
		SW-NW	20.0	"	"	1916	" "	"	"	"	"	
		SW-NW	20.0	"	"	1916	" "	"	"	"	594	
		SE-NW	40.0	"	"	1916	" "	"	W.R. Cert.		593	

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
Chino Valley Irr. Dist., Cont'd.											
22	(Cont'd.)			Willow	Chino						
		NE-SW	40.0	& Gr.Cr.	Valley	1916	History	1911 Priority	W.R. Cert.	593	
		NW-SW	38.0	"	"	1916	"	"	"	"	
		SW-SW	40.0	"	"	1916	"	"	"	"	
		SE-SW	40.0	"	"	1916	"	"	"	"	
		NE-SE	40.0	"	"	1916	"	"	"	"	
		NW-SE	40.0	"	"	1916	"	"	"	"	
		SW-SE	35.0	"	"	1916	"	"	"	"	
		SE-SE	35.0	"	"	1916	"	"	"	"	
23		NW-NW	30.0	"	"	1916	"	"	"	"	
		SW-NW	35.0	"	"	1916	"	"	"	"	
		NW-SW	30.0	"	"	1916	"	"	"	"	
		SW-SW	30.0	"	"	1916	"	"	"	"	
26		NW-NW	30.0	"	"	1916	"	"	"	"	
		SW-NW	20.0	"	"	1916	"	"	"	"	
		NW-SW	20.0	"	"	1916	"	"	"	"	
		NW-SW	20.0	"	"	1916	"	"	"	594	
		SW-SW	40.0	"	"	1916	"	"	W.R. Cert.	593	
		SE-SW	20.0	"	"	1916	"	"	"	"	
27		NE-NE	40.0	"	"	1916	"	"	"	"	
		NW-NE	40.0	"	"	1916	"	"	"	"	
		SW-NE	40.0	"	"	1916	"	"	"	"	
		SE-NE	41.0	"	"	1916	"	"	"	"	
		NE-NW	40.0	"	"	1916	"	"	"	"	
		NW-NW	35.0	"	"	1916	"	"	"	"	
		SW-NW	40.0	"	"	1916	"	"	"	"	
		SE-NW	40.0	"	"	1916	"	"	"	"	
		NE-SW	41.0	"	"	1916	"	"	"	"	
		NW-SW	41.0	"	"	1916	"	"	"	"	
		SW-SW	40.0	"	"	1916	"	"	"	"	
		SE-SW	41.0	"	"	1916	"	"	"	"	
		NE-SE	37.0	"	"	1916	"	"	"	"	
		NW-SE	40.0	"	"	1916	"	"	"	"	
		SW-SE	41.0	"	"	1916	"	"	"	"	
		SE-SE	40.0	"	"	1916	"	"	"	"	

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
Chino Valley Irr. Dist., - Cont'd.										
28				Willow & Chino	Gr. Cr. Valley	1916	History	1911 Priority	W.R. Cert.	593
		NE-NE	40.0	"	"	1916	"	"	"	"
		SW-NE	40.0	"	"	1916	"	"	"	"
		SE-NE	40.0	"	"	1916	"	"	"	"
		NE-NW	30.0	"	"	1916	"	"	"	"
		SE-NW	30.0	"	"	1916	"	"	"	"
		SE-SE	38.0	"	"	1916	"	"	"	"
34		NE-NE	34.0	"	"	1916	"	"	"	"
		NW-NW	34.0	"	"	1916	"	"	"	"
		NW-NW	1.0	"	"	1916	"	"	"	594
		NE-SE	20.0	"	"	1916	"	"	W.R. Cert.	593
		NW-SE	32.0	"	"	1916	"	"	"	"
		NW-SE	2.0	"	"	1916	"	"	"	594
		SW-SE	20.0	"	"	1916	"	"	"	593
35		SE-SE	33.0	"	"	1916	"	"	"	"
		NE-NW	37.0	"	"	1916	"	"	"	"
		NW-NW	40.0	"	"	1916	"	"	"	"
		SW-NW	35.0	"	"	1916	"	"	"	593
		SW-NW	3.0	"	"	1916	"	"	"	594
		SE-NW	36.0	"	"	1916	"	"	"	593
		NE-SW	35.0	"	"	1916	"	"	"	"
		NE-SW	2.0	"	"	1916	"	"	W.R. Cert.	594
		NW-SW	38.0	"	"	1916	"	"	"	593
		SW-SW	40.0	"	"	1916	"	"	"	"
	SE-SW	40.0	"	"	1916	"	"	"	"	
Total			<u>2,538.0</u>							

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
8		SE-NE	4.0	Verde	Duff	1879	O.A.T.& H.L.H.	J. C. Duff & J. H. Muse	1895	3	61
								Not cult. since 1937.			
		SE-NE	1.0	"	Sullivan or Dykstra	1893	H.L.H.& O.A.T.	Antonia Bird	1895	3	4
		NE-SE	5.0	"	"	1893	"	" "	"	"	"
		SE-SE	5.0	"	"	1893	"	" "	"	"	"
		SE-SE	3.0	"	E.L. Jordan	1881	"	See history			
		SW-SE	17.0	"	"	1881	"	" "			
		NW-SE	3.0	"	"	1881	"	" "			
		NE-SW	20.0	"	"	1881	"	" "			
	SE-SW	2.0	"	"	1881	"	" "				
	NW-SW	5.0	"	"	1881	"	" "				
9		SW-NW	2.0	"	Sullivan or Dykstra	1893	O.A.T.& H.L.H.	See above			
		NW-SW	30.0	"	"	1893	"	" "			
		SW-SW	7.0	"	"	1893	"	" "			
		SW-NW	20.0	"	Duff	1879	"	Duff & Muse	1895	3	61
								Not cult. since 1937			
		SE-NW	4.0	"	"	1879	"	" " " " " "	"	"	"
		NE-SW	12.0	"	"	1879	"	Duff & Muse	1895	3	61
							Not cult. since prior to 1925.				
	SE-SW	2.0	"	"	1879	"	" " " " " "	"	"	"	
15		NW-SW	4.0	"	Allen or W.S. Hawkins	1896	"	Rich, et al	1895	3	1
		SW-SW	38.0	"	"	1896	"	" "	"	"	"
		SE-SW	3.0	"	"	1896	"	" "	"	"	"
16		SE-SE	30.0	"	"	1896	"	Rich, Brewer Shea & Keefe	1895	3	1
		SW-SE	2.0	"	"	1896	"	" " "	"	"	"
		NW-SW	28.0	"	"	1896	"	} - Golf Course			
		SW-SW	12.0	"	"	1896	"				
		SW-SW	3.0	"	"	1925	T.A.H				
		SE-SW	2.0	"	"	1925	"				

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
17		NE-NW	6.0	Verde	W.A. Jordan	1880	H.L.H.	Built by Thompson	1880		
		NW-NE	4.0	"	"	1880	)	All abandoned prior to 1925.			
		SW-NE	25.0	"	"	1880					
		SE-1/4	Smelter	"	Pump	1920	or prior	Pumping 320 M.I. for smelter			
		NE-SE	17.0	Verde	Allen or Hawkins	1896	O.A.T. & H.L.H.	Rich, Brewer, Shea & Keefe	1895	3	1
		SE-SE	15.0	"	"	1896	"	" " "	"	"	"
20	Clarkdale		20.0	"	Haskell Spring	1913	Filings	- See Secs. 31 & 32			
20 & 21											
21	-		5.0	"	Humbert	1898	H.L.H. & O.A.T.	Humbert	1896	3	81
								All land in Sec. 21 under this ditch is now tailings pond for smelter. Water is pumped from river in Section 17 as above noted.			
		NW-NW	6.0	Verde	Allen	1880	S & P	Rich, Brewer, Shea & Keefe	1895	3	1
		NE-NW	25.0	"	"	1880	O.A.T. & H.L.H.	" "	"	"	"
		SE-NW	18.0	"	"	1880	"	" "	"	"	"
		SW-NE	35.0	"	Allen or Hawkins	1880	S & P	" "	"	"	"
		NW-NE	3.0	"	"	1880	S & P	" "	"	"	"
		SE-NE	15.0	"	"	1880	S & P	" "	"	"	"
		NE-SE	3.0	"	"	1876	H.L.H. & O.A.T.	" "	"	"	"
		NW-SE	32.0	"	"	1876	"	" "	"	"	"
21	SE-SE		2.8	Verde	C.W.	1914	H.L.H. & Phelps	Built by U.S.A. Enlargement filing by Wingfield et al	1869	-No	Record
							Later	Scott et al	1877	P-1	317
								Carroll	1895	2	491
									1895	2	484
22	NW-NW		16.0	"	Allen or Hawkins	1896	O.A.T. & H.L.H.	Rich, Brewer, Shea & Keefe	1895	3	1
	NE-NW		3.0	"	"	1896	"	" " "	"	"	"
	SE-NW		20.0	"	"	1896	"	" " "	"	"	"
	SW-NW		20.0	"	"	1896	"	" " "	"	"	"
	NW-SW		20.0	"	"	1896	"	" " "	"	"	"
	SW-SW		20.4	"	Hickey	1908	H.L.H.	See Sec. 26, below			

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
26	SW-NW	2.6	Verde	Hickey	1874	H.L.H.	Irrigates same land as Jones & Pleasants ditch filed by R.W. Pleasants & I. C. Jones	1876	P-1	324
	NE-SW	7.2	"	"	1874	"	" "	"	"	"
	NW-SW	30.9	"	"	1874	"	" "	"	"	"
	SW-SW	20.5	Verde	C.W.	1869	G.L.O. Plat	See history			
	SE-SW	33.0	"	"	1869	"	" "			
27	SW-SE	9.6	"	"	1869	"	" "			
	SE-NE	2.5	"	Hickey	1874	H.L.H.	Jones & Pleasants	1876	P-1	324
	NE-SW	11.9	"	"	1874	"	" "	"	"	"
	NW-SW	1.8	"	"	1874	"	" "	"	"	"
	SW-SW	9.5	"	C.W.	1869	G.L.O. Plat	See history			
	SE-SW	16.5	"	"	1869	"	" "			
	NW-NW	9.3	"	"	1873	S & P	" "			
	NW-NW	3.0	"	Hickey	1874	H.L.H.	Jones & Pleasants	1876	P-1	324
	SW-NW	31.1	"	"	1874	"	" "	"	"	"
	SE-NW	9.8	"	"	1874	"	" "	"	"	"
	NW-SE	17.5	"	"	1874	"	" "	"	"	"
	NE-SE	27.8	"	"	1874	"	" "	"	"	"
	SW-SE	18.7	"	C.W.	1869	G.L.O. Plat	See history			
SE-SE	15.5	"	"	1869	"	" "				
28	NE-NE	14.6	"	"	1869	G.L.O. Tr. Bk.	See history			
	SE-NE	0.6	"	"	1869	" Plat	" "			
	NE-SE	12.7	"	"	1869	G.L.O. Plat	" "			
	SE-SE	0.6	"	"	1869	"	" "			

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 16 N., R 3E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
31		SE-SE	20.0	Verde	Haskell Spring	1876	G.L.O. Plat 1877	(No filings early use. (Late filings as follows: (Upper Verde Farm & Orchard Co. Claims use since 1913	1917	7	440
32		SW-SW	9.0	"	"	1876	"	(United Verde (Copper Co. (United Verde (Copper Co. Entire Spring, flow 250-350 g.p.m. now used as City domestic supply Clarkdale, supplemented by 250 g.p.m. from artesian well.	1917	7	440
32		SW-SW	1.0	Verde	Haskell Spring	1876	G.L.O. Plat, 1877				
34		NE-NW	3.0	"	C.W.	1869	G.L.O. Plat	See history.			
		NE-NW	26.5	"	"	1914	Latimer & H.L.H.	Formerly pump from C.W.			
		NE-NE	1.1	"	"	1869	G.L.O. Plat	Strahan			
		NE-NE	20.0	"	"	1908	Latimer & H.L.H.	Formerly pump from C.W.			
		NW-NE	11.3	"	"	1869	G.L.O. Plat	Strahan			
		NW-NE	1.1	"	"	1914	Latimer & H.L.H.	Formerly pump from C.W.			
35		NE-NW	40.0	"	"	1869	G.L.O. Plat	Wingfield & Stewart			
		NW-NW	20.2	"	"	1869	G.L.O. Plat	" " "			
		NW-NW	17.8	"	"	1908	Latimer & H.L.H.	Formerly pump from C.W.			
		SW-NW	5.3	"	"	1878	S & P	See history			
		SW-NW	12.3	"	"	1908	Latimer & H.L.H.	Formerly Pump from C.W.			
		SE-NW	39.0	"	"	1878	S & P	See history			
		NW-NE	17.7	"	"	1869	G.L.O. Plat	See history			
		SW-NE	7.4	"	"	1869	"	" " "			
		NE-NE	5.0	"	Hickey	1914	H.L.H. & Phelps	See history			
		NE-SW	30.0	"	C.W.	1878	S & P	See history			
		NW-SW	1.0	"	"	1878	S & P	See history			
		SE-SW	17.8	"	"	1878	S & P	" "			
		NW-SE	6.0	"	"Pete's"	1937	T.A.H.	"Pete's Ditch" built 1937 by Pete Busich			
		NW-SE	5.0	"	Hickey	1901	Latimer	Irrigated 1940 from well, by pump.			
		SW-SE	26.1	"	"	1901	"	(Not irrigated since 1937. Irrigated			
		SE-SE	1.0	"	"	1901	"	(by pump from well since prior to 1914 originally			
		Total	917.2								
		Total	329.8								

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
11	SW-SW	10.0	Oak Cr.	Kinsey	1877	G.L.O. Plat, Latimer & H.L.H.	No record			
	SW-SW	4.0	" "	Norville	1925	T.A.H. & Forest Rgr.				
12	NE-NE	6.0	" "	Drake	1914	H.L.H.	No record			
	NE-NW	10.0	" "	Russell	1914	H.L.H.	No record			
13	SW-NW	8.0	" "	Vintage	1916	Filing	Jessie E. Duncan	1916	7	209
14	SE-SW	2.0	" "	Downing-Moore	1898	Latimer	Downing (A.J.) Claims use since -	1901	5	41
							G. H. Moore	1898		
	SW-SW	1.0	" "	" "	1898	Latimer		1910	6	167
22	SW-SW	5.0	" "	Springs	1877	H.L.H.	No record.			
	NW-NW	8.0	" "	Springs	1891	H.L.H.	No record.			
	SW-NW	4.0	" "	" "	1908	"	No record.			
23	NW-NW	4.0	" "	Willard Springs	1877	H.L.H.	No record.			
	NW-NW	4.0	" "	" "	1877	G.L.O. Plat	" "			
	SE-NW	6.0	" "	Page No.1	1911	"	Ditch built 1878			
	SW-NE	10.0	Oak Cr.	Downing-Moore	1898	(Filing & H.L.H. & Latimer)	A. J. Downing Claims use since	1901	5	41
							G. H. Moore	1898	6	167
	SW-NE	3.0	" "	" "	1908	Latimer	"	"	"	"
	NW-SE	6.0	" "	" "	1908	"	"	"	"	"
25	NW-SE	15.0	" "	Page #1	1878	H.L.H.	No record			
	SW-SE	25.0	" "	" "	1878	"	" "			
	SE-SE	4.0	" "	Turner or Capple	1877	G.L.O. plat & H.L.H.	L.M. Turner	1897	3	205
	NE-SW	8.0	" "	Page #1	1878	H.L.H.	No record			
						H.L.H. & Latimer	Jas. Page, J.W. Muse	1887	3	229
							Jas. Page et al	1899	3	438
							Claims back to	1876		
	NW-SW	20.0	" "	" "	1878	"	" "	"	"	"
	SW-SW	5.0	" "	" "	1878	"	" "	"	"	"

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
26	NE-NE	16.0	Oak Cr.	Page #2	1875	G.L.O. Plat)	Jas. Page & Latimer) O.A.T. &) H.L.H.) & filing)	1887	3	229
	NW-NE	12.0	" "	" "	1878	" "	" " " "	" "	" "	" "
	NW-NE	12.0	" "	Page #1	1878	" "	No record.			
	SW-NE	20.0	" "	Page #2	1878	" "	See above			
	SE-NE	30.0	" "	" "	1878	" "	" "			
	NE-NW	15.0	" "	Page #1	1893	" "	No record			
	SE-NW	5.0	" "	Page #2	1909	" "	See above			
	SE-SE	15.0	" "	" "	1878	" "	" "			
	SE-SE	10.0	" "	Oak Cr.	1894	" "	J.D. Tipton) relates back to) A. Jackson et al) Van Deren et al)	1876	P-1	348
	SW-SE	20.0	" "	" "	1894	" "	" "	1890	3	458
	NW-SE	6.0	" "	Loy	1904	H.L.H.	No record			
	NW-SE	4.0	" "	" "	1913	" "	" "			
	NE-SE	6.0	" "	" "	1904	" "	" "			
	NE-SE	4.0	" "	" "	1913	" "	" "			
	27	NE-NW	8.0	" "	Hender-son	1912	" "	" "		
SE-NW		3.0	" "	" "	1912	" "	" "			
33	SE-SE	7.0	" "	Holden	1897	H.L.H.	S. C. Dickinson	1901	5	12
34	NW-NE	18.0	" "	Jack	1876	G.L.O. Plat & H.L.H.	Pt. old Dumas place			
	NE-NE	10.0	" "	Oak Cr.	1894	H.L.H.	(Tipton et al) (Van Deren et al)	1876	P-1	348
	SW-NE	25.0	" "	" "	1894	" "	" " " "	" "	" "	" "
	SE-NE	30.0	" "	" "	1894	" "	" " " "	" "	" "	" "
	NE-NW	8.0	" "	" "	1908	" "	" " " "	" "	" "	" "
	NE-NW	8.0	" "	Jack	1876	G.L.O. Plat & H.L.H.	No record			
	SE-NW	35.0	" "	Oak Cr.	1876	" "	(Pt. old Dumas Place -) (Tipton et al) (Van Deren et al)	1876	P-1	348
	NE-SW	15.0	" "	" "	1876	" "	" " " "	" "	" "	" "
	NW-SW	6.0	" "	Jack	1898	Latimer & H.L.H.	No record			
	NW-SW	10.0	" "	Sheepshead Spring	1898	" "	" "			
SW-SW	9.0	" "	Jack	1898	" "	" "				
SW-SW	23.0	" "	Holden	1897	" "	S. C. Dickinson	1901	5	12	
SE-SW	35.0	" "	Jack	1898	" "	No record.				

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
34	Cont'd.										
		NE-SE	15.0	Oak Cr.	Oak Cr.	1894	H.L.H. & Latimer	Tipton et al Van Deren et al	1876 1890	P-1 3	348 458
		NW-SE	30.0	" "	" "	1894	"	" "	"	"	"
		NW-SE	10.0	" "	" "	1912	"	" "	"	"	"
		SW-SE	10.0	" "	" "	1894	"	" "	"	"	"
		SW-SE	20.0	" "	" "	1912	"	" "	"	"	"
		SE-SE	35.0	" "	" "	1894	"	" "	"	"	"
35		NE-NE	10.0	" "	" "	1894	"	" "	"	"	"
		NE-NE	12.0	" "	" "	1908	"	" "	"	"	"
		NW-NE	7.0	" "	" "	1894	"	" "	"	"	"
		NW-NE	8.0	" "	" "	1908	"	" "	"	"	"
		NW-NE	20.0	" "	Loy	1912	H.L.H.	No record			
		Total	776.0								
		Total	4.0								

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
7		NE 1/4	32.0	Verde	Pvt. ditch N. Side of river	1874	H.L.H.	T. E. Campbell			
		Total	<u>32.0</u>								

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

						WATER APPROPRIATIONS						
Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	* Book	Page	
13		NW-SW and SW-NW)	15.0	Granite Creek	Pvt.		H.L.H.	T. E. Campbell				
14		E 1/2-NE	15.0	"	"		"	No record of cultivation since 1913.	"	"	"	
9		SE 1/4	App. 15.0	Chino Wash	reservoir			for fishing, boating, etc. built by Prescott Club approx. 1936. (no irrigation)				
10		SW 1/4										
15		NW 1/4										
16		NE 1/4										
22		S 1/2-SE 1/4)	140.0	Springs Tributary to Verde in SW 1/4 26 & NW 1/4 35			1864	H.L.H.	Del Rio Dairy, Fred Harvey, owner			These springs also formerly were piped to Prescott for domestic water supply, abandoned 10 yrs. or so ago. Pipe was removed in 1940.
26		W 1/2-NW 1/4)										
27		NE 1/4)										
Total			<u>155.0</u>									
Total			<u>30.0</u>									

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
4)	-		App. 20.0	Williamson Valley Wash	Williamson Valley Farms Co. Ditch	1925	T.A.H.	Williamson Valley Farms Co.			
5)											
7)											
Total			<u>20.0</u>								
				<p><u>NOTE:</u> The above name company sold a number of 5 and 10-acre tracts and proposed to build a storage reservoir in Sections 7, 8, 17 & 18 & 19 of this Township and Sections 13 & 24 of T.17N., R.4W.</p> <p>They irrigated a few experimental tracts with pumped water from the wash. The project was dropped in 1925.</p> <p>Land owners in the vicinity and others are still trying to promote the construction of this reservoir. Flow of the Williamson Valley wash above the dam-site was approximately 2 sec.-ft., May, 1940.</p> <p style="text-align: right;">T.A.Hayden</p>							

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
12			4.0	Verde	Private	1914	H.L.H.	David Armon			
"			9.0	"	"	1901	"	Rosindo Alvarez			
		Total	<u>13.0</u>								

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	*	Page	
7		SE-SE)	8.0	Sycamore		1880	H.L.H.& Lee Smart	A. G. Wood	1906	5	316	
		SE-SE)	5.0			1914	"					Filing relates back to use of two ditches to water the Packard ranch for past 20 years"
8		NE-SW	2.0	"		1880	"	Lee Smart	1914	6	618	
		NE-SW	3.0	"		1914	"	" "	1916	7	353	
		NW-SW	2.0	"		1880	"					
		SW-SW	6.0	"		1880	"					
		SE-SW	2.0	"		1914	"					
17		NW-NW	4.0	"		1880	"					
		NW-NW	4.0	"		1914	"					
Above land has not been cultivated for over five years.												
Total			<u>36.0</u>									

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
24	SE-NE	1.0	Oak Cr.	John Babbitt	1925	T.A.H.& Forest Rgr.	No record			
	SE-SW	3.0	" "	Chavez	1890	H.L.H.	No record			
	SW-SW	5.0	" "	"	1890	"	" "			
25	NW-NW	4.0	" "	"	1890	"	" "			
26	NE-NE	3.0	" "	"	1890	"	" "			
	SW-NE	10.0	" "	Dumas	1880	H.L.H.	" "			
27	NE-SE	2.0	" "	"	1880	"	" "			
	NW-SE	4.0	" "	"	1880	"	" "			
	SE-NW	4.0	" "	"	1880	"	" "			
	SW-NW	5.0	" "	"	1880	"	" "			
	NW-SW	4.0	" "	Shuerman No. 1 & Owenby	1880	O.A.T.& H.L.H. H.	H. Shuerman	1889	2	79
	NW-SW	10.0	" "	Shuerman No. 2	1880	" "	"	1889	2	79
	NE-SE	15.0	" "	Shuerman No. 1 & Owenby	1880	O.A.T.& H.L.H.	H. Shuerman	1889	2	79
	NW-SE	15.0	" "	"	1880	"	"	"	"	"
	SW-SE	25.0	" "	"	1880	"	"	"	"	"
	SW-SE	5.0	" "	"	1908	"	"	"	"	"
32	SE-SE	18.0	" "	Shuerman No. 2	1880	"	"	"	"	"
	NE-SW	5.0	" "	Shuerman No. 1 & Owenby	1908	"	"	"	"	"
	NE-SW	5.0	" "	"	1880	"	"	"	"	"
	SE-SW	10.0	" "	"	1880	"	"	"	"	"
	SE-SW	16.0	" "	"	1908	"	"	"	"	"
	NW-SE	10.0	" "	L.E. Hart	1900	O.A.T.	No record			
	SW-SE	10.0	" "	"	1908	H.L.H.	" "			
33	NE-NE	7.0	" "	Armijo or Blackmore No. 1	1896	O.A.T.	Juan Armijo	1900	3	499
	NW-NE	15.0	" "	"	1896	"	" "	1900	"	"
	SW-NE	5.0	" "	"	1896	"	" "	"	"	"
	SE-NW	8.0	" "	"	1896	"	" "	"	"	"
	SW-NW	10.0	" "	Blackmore No. 2	1925	H.E. Pilmer	No record			
	NW-SW	3.0	" "	"	1925	" "	" "			

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	Recorded Filings					
						Year	Source of data	Name of Locator	Year	Book	Page
34	NE-NE		6.0	Oak Cr.	No. 2	1880	H.L.H.	H. Shuerman	1889	2	79
	NW-NE		2.0	" "	No. 1	1880	"	"	"	"	"
	NE-NW		6.0	" "	"	1880	"	"	"	"	"
	NW-SW		15.0	" "	"	1880	"	"	"	"	"
	Total		<u>272.0</u>								

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
4	NW-NE	1.0	Oak Cr.	Dr. C. C. Creighton	1925	H. E. Pilmer (Forest Rgr.)	No Record			
	NW-SW	2.0	" "	Jas. Huckaby	1925	"	" "			
5	SW-SE	2.0	" "	J. Partyman	1925	"	" "			
	SE-SW	1.0	" "	" "	1925	"	" "			
6	SE-SE	20.0	" "	W. Jordan	1925	"	" "			
7	SE-SE	12.0	" "	Van-Deren & Stemmer (Sedona)	1914	"	" "			
8	NE-NW	3.0	" "	Geo. Jordan	1909	H. L. H.	" "			
	NW-NW	2.0	" "	" "	1909	"	" "			
	NW-NW	5.0	" "	" "	1925	T. A. H.	" "			
	SW-NW	13.0	" "	" "	1909	H. L. H.	" "			
	SE-NW	7.0	" "	" "	1909	"	" "			
	NW-SW	4.0	" "	Farley	1893	H. L. H.	" "			
	NW-SW	10.0	" "	Steele	1910	"	" "			
	SW-SW	5.0	" "	" "	1910	"	" "			
18	NE-NE	12.0	" "	Van-Deren & Stemmer	1894	H. L. H.	" "			
	NW-NE	3.0	" "	" "	1894	"	" "			
	SW-NE	5.0	" "	Brewer formerly Hart	1908	"	" "			
	SE-NE	6.0	" "	Fred Hart	1925	T. A. H.	" "			
	NW-SE	10.0	" "	Brewer formerly E. M. Hart	1908	H. L. H.	" "			
	NE-SE	6.0	" "	Fred Hart	1925	T. A. H.	" "			
19	NE-NW	10.0	" "	Ralph Thomas	1925	T. A. H. & Forest Rgr.	" "			
	Total	<u>144.0</u>								

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
51		S $\frac{1}{2}$	75.0	Verde	Private	1864	H.L.H.	M.A. & R.E. Perkins		
		Total	<u>75.0</u>							

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
4		NW-NW	2.0	Oak Cr.	Thomas	1834	H.L.H.	No record			
8		NW-NE	2.0	" "	Allen & Howard	1897	H.L.H.	" "			
		NW-NE	8.0	" "	" "	1914	" "	" "			
		SW-NE	4.0	" "	" "	1910	" "	" "			
		NE-SW	6.0	" "	" "	1910	" "	" "			
17		NE-SE	6.0	" "	Pondley	1914	" "	" "			
		NE-SE	9.0	" "	" "	1925	T.A.H. & H.E. Pilmer (Forest Rgr.)	No record.			
		SE-SE	6.0	" "	" "	1914	H.L.H.	No record			
		SE-SE	9.0	" "	" "	1925	T.A.H. & H.E. Pilmer, (Forest Rgr.)	No record.			
21		NE-NW	2.0	" "	A.C. Boutwell	1925	H.E. Pilmer, For. Rgr.	" "			
		NE-SE	1.0	" "	T. Boutwell	1925	" "	" "			
		NW-SE	5.0	" "	G. Baes	1925	" "	" "			
		SE-SE	2.0	" "	Burtis	1925	" "	" "			
27		NW-SW	2.0	" "	Indian Gardens Thompson	1914	H.L.H. & H.E. Pilmer, (Forest Rgr.)	No record			
		SW-SW	3.0	" "	" "	1875	" "	" "			
		SE-SW	3.0	" "	" "	1914	" "	" "			
		SE-SW	2.0	" "	" "	1875	" "	" "			
34		NE-NW	5.0	" "	" "	1875	H.L.H. & H.E. Pilmer (Forest Rgr.)	No filing			
		SE-NW	5.0	" "	" "	1875	" "	" "			
		NW-SW	8.0	" "	" "	1875	" "	" "			
		Total	90.0								

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 19 N., R 6E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
15		SE-SE	3.0	Oak Cr.	Springs	1894	H.L.H.	Now State Fish Hatchery			
27		SE	8.0	Oak Cr.	Babbitt	1908	U.S.G.S.	Quadrangle & H. E. Pilmer			
34		NE	3.0	"	" Simpson	1914	H.L.H. & H.E. Pilmer				
		N 1/2-SE	4.0	"	" Mahew	1914	"	"			
		S 1/2-SE	6.0	"	" Thomas	1884	"	"			
		S 1/2-SE	24.0	"	"	1884	"	"			
		Total	21.0								
		Total	27.0								

IRRIGATED LANDS
UPPER VERDE WATERSHED

Summary of Areas, by Townships

T.13N., R.4E.	42.1	
" R.5E.	1,600.4	120.0
" R.6E.	10.0	
T.14N., R.1W.	30.0	
" R.2W.	106.0	39.0
" R.4E.	1,006.8	450.1
" R.5E.	876.8	165.6
T.15N., R.1W.	100.0	
" R.3E.	448.8	
" R.4E.	532.8	17.0
" R.5E.	82.0	
" R.6E.	143.0	57.0
T.16N., R.2W.	2,538.0	
" R.3E.	917.2	329.8
" R.4E.	776.0	4.0
T.17N., R.1W.	32.0	
" R.2W.	155.0	30.0
" R.3W.	- -	20.0
" R.2E.	13.0	
" R.3E.	- -	36.0
" R.5E.	272.0	
" R.6E.	144.0	
T.18N., R.2E.	75.0	
" R.6E.	90.0	
T.19N., R.6E.	<u>21.0</u>	<u>27.0</u>
	<u>10,011.9</u>	<u>1,295.5</u>

TABLE II

LIST OF IRRIGATED LAND

ON

UPPER VERDE RIVER WATERSHED

T. A. Hayden
1940

--

Grouped According to Source of Water
Ditches, Springs, etc.

- 1 - Chino Valley
- 2 - Upper Verde Canyon
- 3 - Upper Verde Valley
- 4 - Oak Creek
 Upper
 Lower
- 5 - Beaver Creek
- 6 - Clear Creek

--

Note: Lands listed in red have been
abandoned.

CHINO VALLEY

Granite Dells

Duke & Bianconi Ranches

Chino Valley Irrigation District

Del Rio (Fred Harvey) Farm

T. E. Campbell Ranch, Granite Creek

Prescott Club Reservoir

Williamson Valley Wash

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>GRANITE DELLS</u>											
<u>T. 14N., R. 2W.</u>											
12		SE $\frac{1}{4}$	1	Granite Creek	Granite Dells	1879	H.L.H.	Mrs. Marshall Payne			
12		SE $\frac{1}{4}$	39	"	"	1879	"	" " "			
<u>DUKE & BIANCONI</u>											
1		W $\frac{1}{2}$ SE) E $\frac{1}{2}$ SW)	35	Granite & Willow Creeks	Bianconi & Chino Valley	1868	H.L.H.	John Bianconi			
(1		E $\frac{1}{2}$ SE	20	"	"	1916	"	(John Duke	1894	2	403)
)								(" "	1894	2	404)
)								(John Duke & J. Bianconi	1910	6	266)
)								(" " " "	1910	6	267)
)								(Mary A. Duke	1911	6	315)
)											
(1		E $\frac{1}{2}$ NE	50	"	"	1898	"	" " "	"	"	")
))
<u>T. 14N., R. 1W.</u>											
(6		W $\frac{1}{2}$	30	"	"	1916	"	" " "	"	"	")
))
<u>T. 15N., R. 1W.</u>											
(30		SE $\frac{1}{4}$	100	"	"	1916	"	" " "	"	"	")
)			235)
			Areas by year of appropriation								
			35	-	-	1868					
			50	-	-	1898					
			150	-	-	1916					
			235								

CHINO VALLEY IRRIGATION DISTRICT

Chino Valley Irrigation District consists of a compact body of 2,538 acres, net, of irrigable land. The water supply comes from Granite and Willow Creeks, supplemented lately by artesian wells located on the tract.

The District was organized in 1925 and succeeded the Chino Mutual Water Users' Association, a corporation organized in 1916. The irrigation works consist of the Lake Watson dam, built in 1915, Willow Creek dam, built by P.W.A. in 1935-36, and the Chino Valley Canal and ditch system. The Lake Watson dam creates a reservoir of 4,800 ac.-ft. capacity storing run-off from 45 square miles of mountain watershed. The Willow Creek reservoir has a capacity of 6,000 ac.-ft., with a watershed of only 22 square miles. The original plan called for a dam at Lake Watson 14 ft. higher than it was actually built. The Willow Creek reservoir is separated from Lake Watson by less than a half-mile of low land and it was intended to discharge surplus water from the Watson into the Willow Creek reservoir by means of a shallow connecting ditch. Unfortunately, grades for the cut were established on the assumption that the original plans showed the true height of the Watson dam, which left the bottom of the cut when completed higher than the high water level of Lake Watson. There is now considerable talk of raising the Watson dam to the height originally planned.

Water right certificate No. 593 in the State Water Commissioner's office covers 2,455 acres with priority date of 1922. Certificate 594 adds 83 acres with priority date of 1935.

Records show a deed to the Chino Mutual Water Users' Association dated October 24, 1924 from the Hassayampa Alfalfa Farms Company conveying certain alleged water rights acquired by deed from the Arizona Land and Irrigation Company, and based on a filing by that company in 1915, filings by Geo. A. Thayer in 1911 and 1912 and by D. M. & M. A. Wynkoop in 1911.

The first land was irrigated in 1916, a wet year immediately following the completion of the Watson dam. A total of 2,000 acres is reported to have been irrigated in that year. In 1925 only about 500 acres were irrigated and in 1939 and 1940 about 1,500. There is no evidence of lapse in the old water rights by non-use and the record constitutes a continuous chain relating back to the 1911 filings, under which the Watson dam was built and the land reclaimed. That year is therefore taken as the year of appropriation applying to all the land.

For details of filings see brief herewith.

List of lands follows:-

Willow & Granite Creeks

Chino Valley Irrigation District.

2,538 Acres - all 1911 Priority
of Water Right

T.16N., R.2W.

Sec.	Sub.	Acres	Sec.	Sub.	Acres	Sec.	Sub.	Acres	
15	(Trs. 55 & 56)	164	23	NW-NW	30	28	NE-NE	40	
	SW-NE			35	SW-NE		40		
	SE-NE				SE-NE		40		
	NE-SE				NE-NW		30		
	NW-SE				SE-NW		30		
	SW-SE								
21	NE-NE	20	26	NW-NW	30	34	NE-SE	40	
	NE-NE	12		SW-NW	20		SE-SE	38	
	NE-SE	20	27	NW-SW	20		NE-NE	34	
	NW-SE	20		NW-SW	20		NW-NW	34	
	SW-SE	20		SW-SW	40		NW-NW	1	
	SE-SE	20		SE-SW	20				
22	NE-NE	40	27	NE-NE	40	35	NE-SE	20	
	NW-NE	38		NW-NE	40		NW-SE	32	
	NW-NE	3		SE-NE	41		NW-SE	2	
	SW-NE	40	27	NE-NW	40		SW-SE	20	
	SE-NE	20		NW-NW	35		SE-SE	33	
	NE-NW	41		SW-NW	40				
	NW-NW	40		SE-NW	40		NE-NW	37	
	SW-NW	20		27	NE-SW		41	N W-NW	40
	SW-NW	20			NW-SW		41	SW-NW	35
	SE-NW	40	SW-SW		40		SW-NW	3	
	NE-SW	40	SE-SW		41		SE-NW	36	
	NW-SW	38	NE-SE		37		NE-SW	35	
	SW-SW	40	NW-SE	40	NE-SW		2		
	SE-SW	40	SW-SE	41	NW-SW		38		
22	NE-SE	40	SE-SE	40	SW-SW	40	35	SE-SW	40
	NW-SE	40							
	SW-SE	35							
	SE-SE	35							
							Total	<u>2,538</u>	

DEL RIO FARM (FRED HARVEY DAIRY)

Approximately 140 acres have been irrigated here since 1864 according to H. L. Hancock. The water supply comes from springs in Sections 26 and 35, T.17N., R.2W., which flow approximately 175 M.I., (about 4-1/2 Sec.-ft.). This water would reach the head of the Verde river if not intercepted. It appears to be the natural overflow of a limited artesian basin of some 200 square miles, including the Little Chino Valley and extending north to the Verde. South of the Del Rio farm 18 new artesian wells were located in operation in 1940, of which 14 are free flowing. It is possible that the draft on these wells and others proposed in the same area may affect the flow of the Del Rio Springs. From 600 to 800 acres are said to be irrigated from the artesian wells. Since this report deals with surface water only the areas named are not enumerated. Until recently part of the domestic water supply for Prescott was piped over 20 miles from the Del Rio springs. The pipe line was removed in 1939-40. The Santa Fe railroad has for many years hauled a great deal of water in tank cars from the springs for engine and domestic use. The land irrigated on the Del Rio farm is as follows:

Sec. 22 - S 1/2 - SE 1/4	}	140 acres, all 1864
Sec. 26 - W 1/2 - NW 1/4		
Sec. 27 - NE 1/4		

GRANITE CREEK

T. E. Campbell Ranch.

H. L. Hancock (1914) reports about 30 acres cultivated here about a mile above the mouth of Granite Creek, in 1913. There is no evidence of cultivation since that time. Date of appropriation is not known.

The land is approximately as follows:-

T.17N., R.2W.

Sec. 13 - NW 1/4 - SW 1/4 and	}	15 Ac.
SW 1/4 - NW 1/4		

Sec. 14 - E 1/2 - NE 1/4	}	15 Ac.
		<u>30</u> Ac. (Prior to 1913)

PRESCOTT CLUB RESERVOIR - T.17N., R.2W.

A small masonry dam has been built by Prescott sportsmen at the junction of Big and Little Chino washes at the head of the Verde, for shooting, fishing and recreational purposes. From 10 to 15 acres are flooded as follows:-

Sec. 22 - S 1/2 - SE 1/4	}	15 Acres approximately 1936.
Sec. 26 - W 1/2 - NW 1/4		
Sec. 27 - NE 1/4		

WILLIAMSON VALLEY WASH

A small flow of water (approximately 2 Sec.-ft. in May 1940) rises in the Williamson Valley wash at the site of a proposed reservoir in Section 18, T.17N., R.3W. The drainage area above this point is approximately 185 square miles. From time to time small areas have been irrigated in the valley a short distance below. In 1925 the "Williamson Valley Farms Company", Wm. H. Thompson, Manager, promoted the sale of a number of 5 and 10-acre tracts on the strength of an irrigation supply to be developed by a dam proposed to be built in the vicinity of the Corner of Sections 7, 8, 17 and 18, creating a reservoir of 17,000 Ac.-ft. capacity. Notice was given the company that this would be opposed by the Salt River Valley Water Users' Association on the ground of infringement of the water rights of the Salt River Project, and the proposal was abandoned. There is current talk in the vicinity of reviving this scheme. The land formerly irrigated is approximately as follows:-

T.17N., R.3W

Sec. 4)
Sec. 5) 20 acres - 1925
Sec. 7)

CHINO VALLEY

Areas by Year of Appropriation

Year	Ditches, Ranches, etc.	Area - Acres		Totals
1864	Del Rio	140.0		140.0
1868	Bianconi	35.0		175.0
1879	Granite Dells	1.0	39.0	176.0
1898	Duke & Bianconi	50.0		226.0
1911	Chino Valley Irrigation District	2,538.0		2,764.0
1913	Campbell		30.0	
1916	Duke & Bianconi	150.0		2,914.0
1925	Williamson Wash		20.0	
1936	Prescott Club	15.0		2,929.0
		<u>2,929.0</u>	<u>89.0</u>	

Note: Lands listed in red have been abandoned.



Prescott Gun Club Dam - Head of Verde River
Looking West from Highway, July 25, 1940.

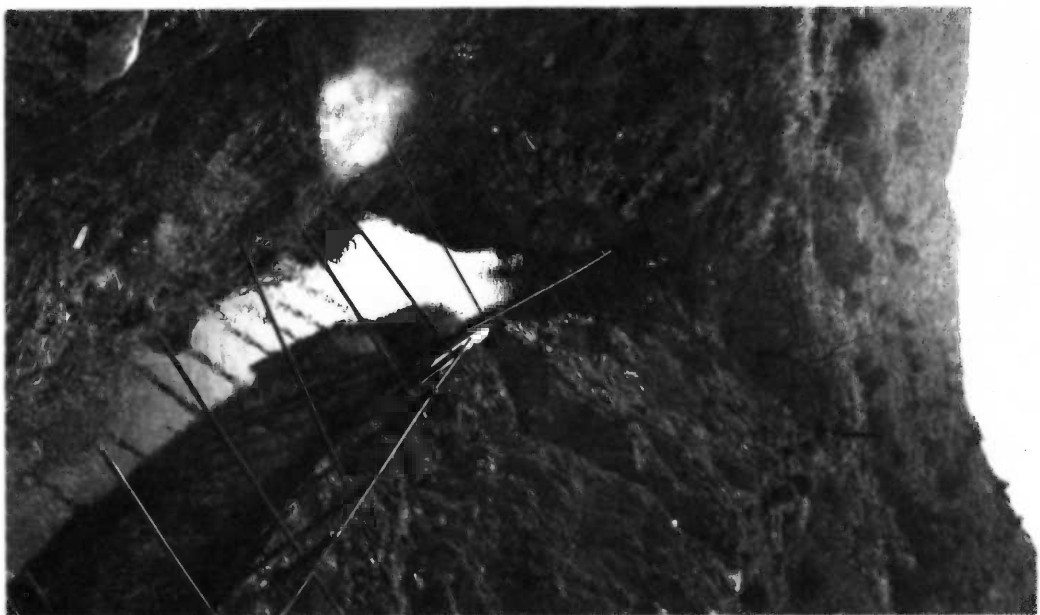


S.F.R.R. Bridge Over Head of Verde River
Looking East from Highway, July 25, 1940

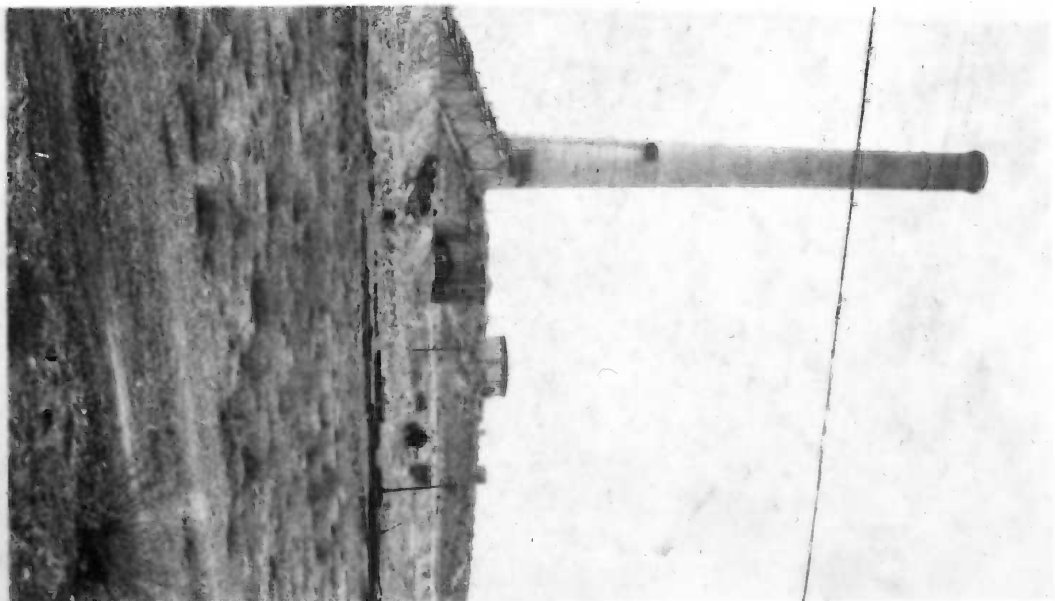
Blancort's Bond - Head of
Little Chino Valley, near
Prescott - May 29, 1940



Mouth of Tunnel - Allen Ditch
June 5, 1940



Smoke Stack Abandoned
Smelter at Clemenceau
July 27, 1940.



UPPER VEEDY RIVER CANYON

Campbell Ranch

Perkins Ranch

Armon Ranch

Alvarez Ranch

UPPER VERDE CANYON

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
		<u>Campbell Ranch</u> <u>T. 17N., R. 1W.</u>									
7		NE $\frac{1}{4}$	32	Verde	Campbell N. Side of river	1874	H.L.H.	T.E. Campbell			
		<u>Perkins Ranch</u> <u>T. 18N., R. 2E.</u>									
51		S $\frac{1}{2}$	75	Verde	Perkins	1864	H.L.H.	M.A. & R.E. Perkins			
		<u>Armon Ranch</u> <u>T. 17N., R. 2E.</u>									
12			4	Verde	Armon	1914	H.L.H.	David Armon			
		<u>Alvarez Ranch</u> <u>T. 17N., R. 2E.</u>									
12			9	Verde	Alvarez	1901	H.L.H.	Rosindo Alvarez			
			<u>120</u>								

UPPER VERDE CANYON

Areas by Year of Appropriation

Year	Ditches, Ranches, etc.	Area - Acres	Totals
1864	Perkins Ranch	75.0	
			75.0
1874	Campbell Ranch	32.0	
			107.0
1901	Alvarez Ranch	9.0	
			116.0
1914	Armon Ranch	4.0	
			120.0

120.0

UPPER VERDE RIVER VALLEY

Sycamore Creek - Packard Ditch

Duff Ditch

Sullivan, "Dykstra", or "Hawkins & Bird" Ditch

E. L. Jordan, or "Fleet" or "Hawkins" Ditch

W. A. Jordan Ditch

Humbert Ditch

Allen, or "Hawkins" or "Tunnel" Ditch
including
Phelps-Dodge pump through smelter.

Hickey Ditch

Cottonwood, or "Upper Verde Reservation"
or "Old Government Reservation" Ditch
or "Upper Verde Canal".

Haskell Springs

"Pete's", or "Willard" Ditch

Watson Ditch

Pumps in Sections 17, 18 & 19, T.15N., R.4E.

O. K. Ditch, or "Middle Verde Canal".

Central Verde (C.V.), or Ralston Ditch
and
Marr Ditch

Eureka, or Hutcheson Ditch

Wood Ditch, or "Lower Verde Canal"
or "Verde Canal".

Enterprise Ditch

Eaman, or "Diamond S" Ditch

Newman Ditch

UPPER VERDE VALLEY

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings					
						Year	Source of data	Name of Locator	Year	*	Page		
		Sycamore Creek					(U.S.G.S. (Quadrangle 1902-03.						
		Packard Ditch					H.L.H. & Lee Smart						
								Sidney S. Brown	1877	1-P		283	
								Ed. Packard	1906	5		313	
								Arthur G. Wood	1906	5		316	
								Lee Smart	1914	6		618	
								Lee Smart	1916	7		353	
								Note: Filings under which no claims are made or no development ever undertaken are omitted.					
		T.1 N., R.3E.		Sycamore									
	7	SE-SE	8	Creek	Packard	1880	See above	-	Abandoned over	5	years.		
		SE-SE	5	"	"	1914	"	"	"	"	"	"	"
	8	NE-SW	2	"	"	1880	"	"	"	"	"	"	"
		NE-SW	3	"	"	1914	"	"	"	"	"	"	"
		NW-SW	2	"	"	1880	"	"	"	"	"	"	"
		SW-SW	6	"	"	1880	"	"	"	"	"	"	"
		SE-SW	2	"	"	1914	"	"	"	"	"	"	"
	17	NW-NW	4	"	"	1880	"	"	"	"	"	"	"
		NW-NW	4	"	"	1914	"	"	"	"	"	"	"
			<u>36</u>										
			Areas by year of appropriation										
			22	- -		1880							
			14	- -		1914							
			<u>36</u>										

DUFF DITCH

This ditch and irrigated land in Secs. 8 and 9, T.16N., R.3E., are shown on the G.L.O. township plat, as surveyed in 1877.

Robinson and Woolf (1895) give the area as 35 acres.

Stroud & Prothero (1899) give the date of construction as 1833 and area irrigated as 20 acres by Duff and 10 by Morris.

O. A. Turney (1901) gives 1879 for date of construction and area as 35 acres.

Park W. Latimer, (1903) gives area as 32 acres for Duff and 10 for Morris.

H. L. Hancock, (1914) gives 1879 for date of construction and 42 acres for area irrigated.

I found the Morris place abandoned in 1925 and it has not been cultivated since.

The Duff place was under cultivation then but has not been cultivated since prior to 1938.

County Records show filing as follows:-

Nov. 15, 1895, Recorded at page 61, Bk. 3, M & W.

J. C. Duff and J. H. Muse; claim 500 M.I. diverted in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 8, T.16N., R.3E., "at mouth of Box Canyon".

The G.L.O. record proves cultivation of the Duff place in 1877. There is no documentary proof showing the Morris land earlier than 1879 as given by Turney and Hancock.

DUFF DITCH

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	*	Page
		T.16N., R.3E.									
8		SE-NE	4.0	Verde	Duff	1879	O.A.T.& H.L.H.	Duff & Muse	1895	3	61
									Not cult. since 1937.		
9		SW-NW	20.0	"	"	1879	"	" " " "	"	"	"
		SE-NW	4.0	"	"	1879	"	" " " "	"	"	"
		NE-SW	12.0	"	"	1879	"	Not cult. since before 1925.			
		SE-SW	2.0	"	"	1879	"	" " " "	"	"	"
Total				Areas by year of appropriation.							
			28.0			1879					
			<u>14.0</u>			1879					

SULLIVAN (OR DYKSTRA) DITCH, ALSO
CALLED "HAWKINS AND BIRD".

Sheet 1 of 2

This ditch, called "Hawkins and Bird Ditch" in the Robinson & Woolf report of 1895, is not shown on the G.L.O. survey of the township in 1877. Ralph A. Dykstra filed on the land in 1896.

Robinson and Woolf give the area as 50 acres.

The Stroud & Prothero report of 1899 describes the ditch (called by them "Duxter") as having been located in 1885 and watering 15 acres.

O. A. Turney (1901) gives the year of appropriation as 1893, an enlargement of the ditch being made two years later -- area 50 acres. (Name "Dykstra")

Park W. Latimer (1908) gives area irrigated as 60 acres.

H. L. Hancock (1914) gives 1896 as year of construction, by "Dykster", and area irrigated 50 acres.

In 1940 I found part of 50 acres total in cultivation and part idle, but was informed that the land is all still cultivated at times. The southwest part is in area subdivided for residences in Tapco.

County records show the following filing:-

May 13, 1895, Recorded at page 4 of Ek. 3, M & W.

Antonia Bird, - claims 150 M.L. on Upper Verde in Section 8, T.16N., - at mouth of canyon above J. C. Duff's ranch - water to be used on Sections 8 and 9.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.
 (* Millsite & Water-right Records, Yavapai Co. "PW" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
T. 16N., R. 3E.											
8	SE-NE	1.0	Verde	Sullivan							
					OR						
					Dykstra	1893	O.A.T.	Antonia Bird	1895	3	4
	NE-SE	5.0	"	"		1893	"	" "			
	SE-SE	5.0	"	"		1893	"	" "			
9	SW-NW	2.0	"	"		1893	"	" "			
	NW-SW	30.0	"	"		1893	"	" "			
	SW-SW	7.0	"	"		1893	"	" "			
	Total	<u>50.0</u>				1893					

Robinson and Woolf (1895) call this the Conwell Ditch, and give the area as 35 acres. This name may be intended for Carroll, who filed on most of the land in 1889.

Stroud and Prothero (1899) give 1885 as the year built and 25 acres as the area. They also give the "W. S. Hawkins Ditch", located 1884, irrigating 10 Acres. This is the same ditch.

O. A. Turney (1901) gives 1881 or 1882 as year taken out and 35 acres the area irrigated.

Park W. Latimer, (1908) gives area as 35 acres.

H. L. Hancock (1914) says the ditch was built by Tom Carroll in 1882 - Area irrigated 50 acres.

In 1925 this was found by me unchanged from the Hancock figure.

In 1940 I found most of the area still cultivated and was told that it is all cultivated from time to time. The East part is in area subdivided for residences in Tapco.

No recorded filings were found.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
T.16N., R.3E.											
8		SE-SE	3.0	Verde	E.L.						
		SW-SE	17.0	"	Jordan	1881	O.A.T.	Tom Carroll			
		NW-SE	3.0	"	"	1881	"	"			
		NE-SW	20.0	"	"	1881	"	"			
		SE-SW	2.0	"	"	1881	"	"			
		NW-SW	5.0	"	"	1881	"	"			
		<u>Total</u>	<u>50.0</u>			1881					

Stroud and Prothero (1889) first mention this ditch. They give 1880 as the year built and 15 acres as the area irrigated.

O. A. Turney (1901) gives "1860 or 1882" as year built and 20 acres as area irrigated.

Park W. Latimer, (1908) gives area as 20 acres.

H. L. Hancock (1914) says the ditch was built by Thompson "about 1880" - area irrigated 35 acres.

I found this land abandoned in 1925 as it has remained ever since.

No filings were found of record.

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
17		NE-NW	6	Verde	W.A. Jordan	1880	H.L.H.	Built by Thompson	1880		
		NW-NE	4	"	"	1880	"	"	"		
		SW-NE	25	"	"	1880	"	"	"		
		Total	<u>35</u>	-		1880					
All abandoned prior to 1925.											

HUMBERT DITCH (Abandoned)

Sheet 1 of 2

Stroud and Prothero (1899) report Humbert irrigating 5 acres by pump.

Park W. Latimer in 1908 gives area irrigated as 5 acres.

H. L. Hancock (1914) says the ditch was built by Humbert about 1898 - area 5 acres.

In 1925 and 1940 I found the land part of the town of Clarkdale and no trace of ditch irrigation.

County records show filing as follows:-

Feb. 1, 1896 - Recorded at page 81, Blr. 3, M & W.

A. J. and J.J. Humbert claim 300 M.I., diverted in Section 17, T.16N., R.3E.

HUMBERT DITCH

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 16 N., R 3E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
20) & 21)			5	Verde	Humbert	1898	H.L.H. & O.A.T.	Humbert	1896	3	81
Abandoned prior to 1925 - In subdivided area, Clarkdale.											

This is the only ditch on the river with a permanent diversion dam. A sheet steel pile dam with concrete apron is maintained at the head by the Phelps-Dodge Corporation.

The "Hawkins ditch" from the lower (East) end of Peck's Lake is shown on the G.L.O. township plat - 1877. The Hawkins house is shown in the SW $\frac{1}{4}$ of Section 22, (entered in 1881 by Wm. N. Hawkins).

The Robinson and Woolf report (1895) give the area irrigated as 25 acres.

Stroud and Prothero (1899) call this the "Hawkins Ditch" and give the area irrigated as 250 acres. They state the ditch carried 350 M.I., of which 50 M.I. came from Peck's Lake.

O. A. Turney (1901) calls this the "Tunnel Ditch", owners Allen and Wood, agents for Senator W. A. Clark, also Dan Shea and E. W. Hawkins;" - Area irrigated 250 acres. Says E. W. Hawkins irrigated his land in 1876.

Park W. Latimer (1908) lists 211 acres under this ditch and shows approximately 140 acres more irrigated but does not list the areas.

H. L. Hancock (1914) says ditch was built by Allen and Wood in 1898 - area irrigated 1914, 320 acres. Gives 35 acres irrigated in 1876 by F. Hawkins from prior ditch.

In 1925 I found approximately 365 acres cultivated.

In 1940 I found 233 acres cultivated, including 45 acres in the golf course. Approximately 137 acres formerly irrigated, is now out of cultivation, being used as a tailings pond for the Phelps-Dodge Smelter. Since this land is continuously flooded, the use of water is greater than when it was farmed, as water was then used only at intermittent intervals less than 6 months of the year.

Most of the water used to bring tailings to this pond is pumped from the river on the west side in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 17, T.16N., R.3E., where a pumping plant of 3600 g.p.m. (320 M.I.) capacity, has been operated for 20 years or more. A large part of the water seeps back into the river through the bed and porous gravel bank of the tailings pond.

No filing could be found of record covering the operation of this pumping plant.

County records show the following filing:-

Mar. 9, 1895, recorded at page 1 of Bk. 3, M & W.

George Rich, Hugh Brewer, D. J. Shea and C. C. Keefe claim 2000 M.I. and tunnel site and water right to irrigate public land in Sections 17 and 21 and all south, T.16N., R.3E. - Head about 3/4 miles south of Wm. Jordan's ranch and about 1/4 mile west of Peck's Lake and about 1/4 mile west of I. Goodwin's ranch in the Upper Verde Valley on the east side of the Verde River.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 16 N., R 3

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	*	Page	
15	NW-SW		4	Verde	Allen	1896	O.A.T.	Rich, Brewer, Shea & Keefe	1895	3	1	
				"	or Hawkins		& H.L.H.					
	SW-SW		38	"	"	1896	"					
			3	"	"	1896	"	"	"	"	"	
16	SE-SE		30	"	"	1896	"	"	"	"	"	
	SW-SE		2	"	"	1896	"	"	"	"	"	
	NW-SW		28	"	"	1896	"	Golf Course)	"	"	"	
	SW-SW		12	"	"	1896	"		"	"	"	"
	SW-SW		3	"	"	1925	T.A.H.		"	"	"	"
				2	"	"	1925	H.L.H.	"	"	"	"
	17	NE-SE		17	"	"	1896	"	"	"	"	"
SE-SE			15	"	"	1896	"	"	"	"	"	
21	(All of following land in this Section is tailings pond for smelter the water for) which is pumped from the river in Section 17.											
	NW-NW		6	"	"	1880	S & P	Rich, Brewer, Shea & Keefe	"	"	"	
	NE-NW		25	"	"	1880	"		"	"	"	
	SE-NW		18	"	"	1880	"	"	"	"	"	
	SW-NE		35	"	"	1880	"	"	"	"	"	
	NW-NE		3	"	"	1880	"	"	"	"	"	
	SE-NE		15	"	"	1880	"	"	"	"	"	
	NE-SE		3	"	Hawkins	1876	O.A.T.&	"	"	"	"	
	NW-SE		32	"	"	1876	H.L.H.	"	"	"	"	
22	NW-NW		16	"	Allen	1896	O.A.T.&	"	"	"	"	
	NE-NW		3	"	&	1896	H.L.H.	"	"	"	"	
	SE-NW		20	"	Hawkins	1896	"	"	"	"	"	
	SW-NW		20	"	"	1896	"	"	"	"	"	
	NW-SW		20	"	"	1896	"	"	"	"	"	
	Totals		<u>233</u>									
			<u>137</u>	Areas by Year of appropriation								
						228	Ac. - 1896					
						5	Ac. - 1925					
						<u>233</u>						
						35	Ac. - 1876					
						102	" - 1880					
						<u>137</u>						



Panorama Showing Sheet Steel Piling Diversion Dam at Head of Allen (or Tunnel) Ditch on Verde River opposite Clarkdale. Smelter in Distance. June 5, 1940.



Looking South from Tuzigoot, over U-Bend in Verde River.
Cottonwood Ditch on right side of view. June 3, 1940.



Tailings Pond - Phelps-Dodge Smelter (Formerly farm)
Looking Northwest from Tuzigoot, June 3, 1940.
Clarkdale Smelter in background.



Head of ditch draining out of East end Peck's Lake.
Sub-irrigated meadow in background - June 5, 1940.

The Hickey ditch is shown on the G.L.O. township plat as surveyed in April 1877, extending through the SW $\frac{1}{4}$ of Section 26, T.16N., R.3E. It was the subject of a water filing by Jones and Pleasants in February 1876.

The Robinson & Woolf report (1895) give the age of the Ditch at that time as 8 or 10 years and the area irrigated as 100 acres. Pleasant and Jones are named as the locators.

Stroud & Prothero (1899) give the area as 140 acres, described as "old land".

O. A. Turney (1901) says the ditch was taken out in 1894 by Hickey and Ricker; - area 115 to 200 acres being given in one place and exactly 158 in another.

Park Latimer (1908) gives the area as 121 acres. Latimer's map shows the ditch extending all the way through to Sections 1 and 12, T.15N., R.3E.

H. L. Hancock (1914) gives 1874 as the date of construction and 173 acres as the area irrigated.

Latimer shows the ditch heading on the east side of the river. Hancock states that some years prior to 1914 this heading had been washed out and a new one made on the west side of the river, being flumed across to the east side in a 23-inch pipe and taking in 22 acres new land in the SW $\frac{1}{4}$ of Section 22, T.16N., R.3E.

This heading, about a 1/4-mile upstream from the Cottonwood ditch dam, is still in service. The Hickey ditch is carried over the Cottonwood in a flume and over the river in a pipe.

In 1920 Phelps surveyed a total of 175 acres then being cultivated, exclusive of 32 acres in Section 35 shown by Latimer and Hancock - as watered by this ditch but in 1920 and since that time irrigated by pumping from a well.

This acreage I found unchanged in 1925 and again in 1940.

There being no evidence as to exact dates of development of the different tracts under the Hickey Ditch, the land (with the exception of 20.4 acres in Section 22) is here considered as having water right as of 1874, as given by Hancock.

The Pleasants-Jones filing is as follows:-

Feb. 2, 1876 - recorded at page 324 of Bk. 1, Prom.

R. W. Pleasants and Isaac C. Jones claim 1000 M.I. Ditch on east side of Verde River about 1/4-mile below Peck's Lake - 3 miles in length and covers ranches of claimants.

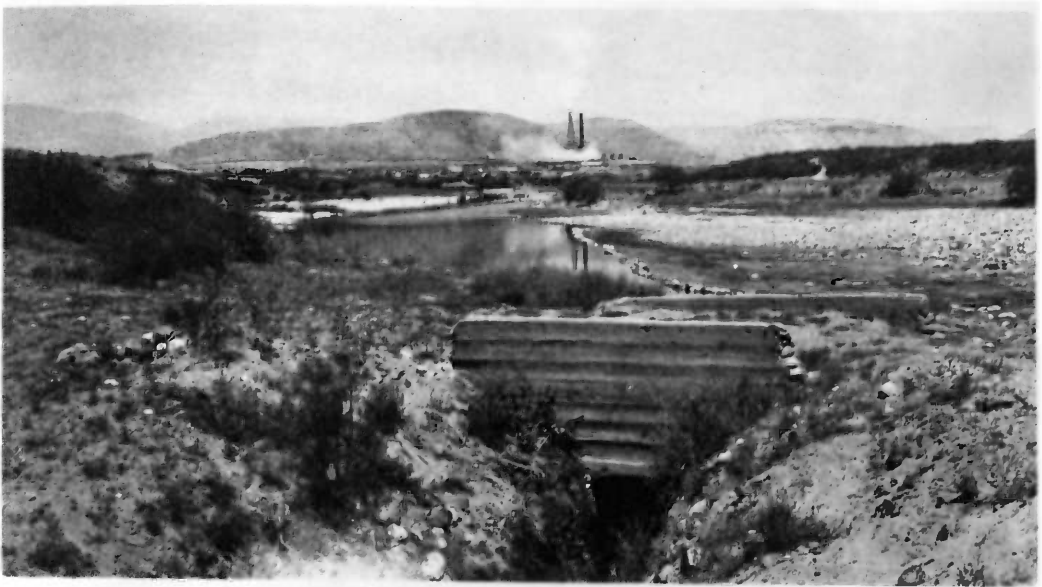
Another water filing was made by W. W. Nichols for the W $\frac{1}{2}$ E $\frac{1}{2}$ of Section 35, as follows:

Mar. 5, 1901, recorded at page 24 of Bk. 5, M & W.

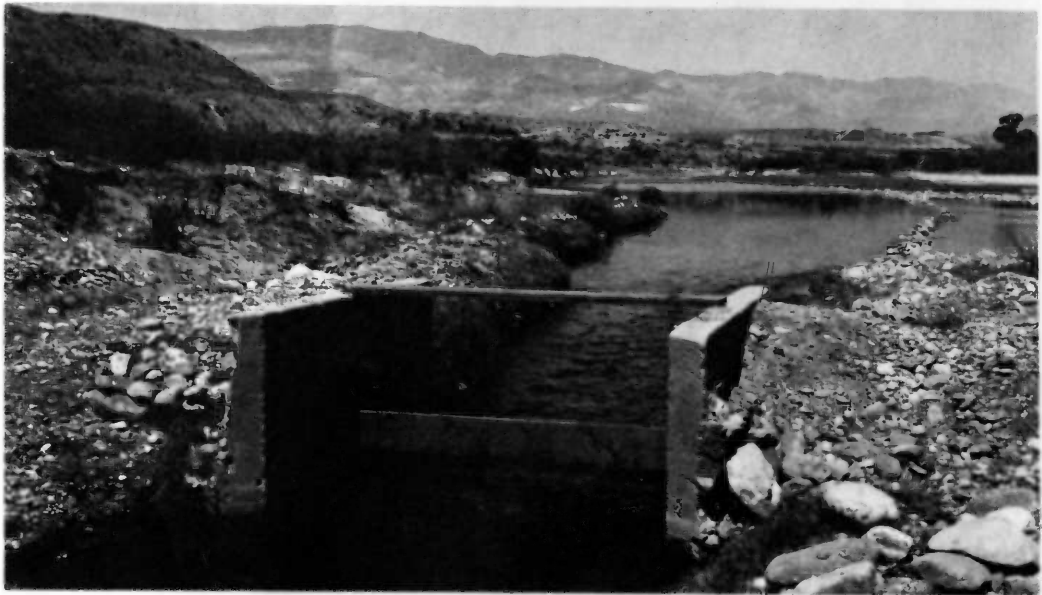
Claims 400 M.I. from the Verde River near Cottonwood to cover the W $\frac{1}{2}$ NE $\frac{1}{4}$ and W $\frac{1}{2}$ SE $\frac{1}{4}$ Section 35, T.16N., R.3E. (Homesteaded by Nichols in 1888) The north part of this homestead had already been under the Cottonwood ditch since prior to 1877 as shown on the G.L.O. plat.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 16 N., R 3E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
22		SW-SW	20.4	Verde	Hickey	1908	H.L.H.	Pleasants & Jones	1876	1 Prom.	324
26		SW-NW	2.6	"	"	1874	"	"	"	"	"
		NE-SW	7.2	"	"	1874	"	"	"	"	"
		NW-SW	30.9	"	"	1874	"	"	"	"	"
27		SE-NE	2.5	"	"	1874	"	"	"	"	"
		NE-SW	11.9	"	"	1874	"	"	"	"	"
		NW-SW	1.8	"	"	1874	"	"	"	"	"
		NW-NW	3.0	"	"	1874	"	"	"	"	"
		SW-NW	31.1	"	"	1874	"	"	"	"	"
		SE-NW	9.8	"	"	1874	"	"	"	"	"
		NW-SE	17.5	"	"	1874	H.L.H.	"	"	"	"
35		NE-SE	5.0	"	"	1914	"	"	"	"	"
		NW-SE	5.0	"	"	1901	Latimer)	W. W. Nichols	1901	5	24
		SW-SE	26.1	"	"	1901	")	"	"	"	"
		SE-SE	1.0	"	"	1901	")	"	"	"	"
		Totals	<u>171.5</u>								
		<u>32.1</u>									
				Areas by year of appropriation							
						146.1 Ac. -	1874				
						20.4 Ac. -	1908				
						32.1 Ac. -	1901				
						5.0 Ac. -	1914				
				Totals		<u>171.5</u>					
						<u>32.1</u>					



Diversion Dam and Headworks, Hickey Ditch
Clarkdale Smelter in distance. June 6, 1940.



Diversion Dam and Headworks - Cottonwood Ditch.
June 6, 1940.



Diversion Dam and Intake - Wood Ditch - June 6, 1940.

OR
 "UPPER VERDE RESERVATION DITCH"
 OR
 "OLD GOV'T. RESERVATION DITCH"
 OR
 "UPPER VERDE CANAL".

- - -

G.L.O. plat of township, surveyed 1877, shows this ditch then located and in service substantially as at present. The diversion dam is shown near the southwest Corner, Section 22, T.16N., R.3E., whereas it has since been moved upstream and is now near the center of the south line of the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 21.

Robinson & Woolf (1895) give the date of construction of the ditch as prior to 1875, and the area irrigated around 700 acres.

Stroud & Prothero (1899) give the date of construction as 1873 and area as 500 acres cultivated prior to 1880, with a total of 800 acres in 1899.

O. A. Turney (1901) gives 1869 for date of construction and 600 to 700 acres as estimated area.

H. L. Hancock (1914) gives date of construction by the Government as 1874 and area as 878 acres. He says it was taken over "soon after" by Carroll, Strahan & Willard and enlarged and extended. Old time residents of Cottonwood say the ditch was built about 1870.

The only recorded filings are as follows:-

Dec. 4, 1877, Recorded Page 317 of Bk. 1, Promiscuous Records.

Locators J. H. Wingfield, D. W. Strahan; Mrs. Mary Elizabeth Clift, L. B. Barney & Bros., J. W. Anderson and James Bristow.

Claim 5000 M.I. to be used by enlarging and extending the "Old Government (Apache) Reservation Ditch", commencing opposite Peck's Lake and passing through the ranches of Winningham, Bristow, Strahan, Wingfield Bros., Clifts (Senior & Junior) Barney Bros., and Anderson, (all on west side of Verde River) a distance of 2492 rods (approximately 8 miles). The location described covers the ditch as it now exists. The holdings of the areas named are shown on the C.L.O. plat of 1877 and/or in the Land Office record of entries.

Later filings were made as follows:-

Charles D. Willard Oct. 20, 1885, recorded at page 293 of Bk. 1, M & W.

Claims 500 M.I., to be diverted about $1\frac{1}{2}$ miles above Cottonwood Post Office, known as the "Winningham dam".

Jan. 28, 1895, recorded at page 484 of Bk. 2, M & W.

Thomas Carroll claims 10000 M.I. to be diverted in Section 22, T.16N., R.3E., Dam at southwest Corner, Section 22, Ditch extends about 16 miles through townships 16 and 14 north.

NOTE: Both Willard and Carroll owned lands along the Cottonwood ditch, but on the high side, which in later years for a time were irrigated by pumping from the ditch.

Reference is made to Judgment July 16, 1896, in Case 2577, Yavapai County District Court, Willard, et al vs Willard, et al., and to final decree Aug. 10, 1916, for detailed data as to ownership of the six shares of ditch stock and details of management ordered by the Court. The decree apportions the right to use of water in the ditch in accordance with ownership of shares of stock, regardless of the year of appropriation, and provides for the appointment of a "ditch Master", each year by the Court.

The heading of the Cottonwood ditch was originally known as the "Winningham Dam", being located immediately above the old Winningham homestead, filed on in 1877. The old Bristow, Strahan, Whitaker, Stewart, Wingfield and Barney places are all shown on the G.L.O. plat as surveyed in April of that year. The plat shows the ditch to terminate at that time at the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 12, T.15N., R.3E. The total area above that point is roughly 700 acres, out of a total of 821 acres maximum ever under the ditch. Stroud & Prothero (1899) give 500 acres total cultivated prior to 1880. It was not found possible to segregate this area out of the 700 mentioned, but the ranches shown on the G.L.O. plat total 300 acres. To arrive at a figure which will allow any area the fullest latitude in fixing it's date of priority these 300 acres are here given the earliest date fixed by any of the early reports. This is 1869 as reported by Turney in 1901. With a few exceptions, it is not possible out of the 700-acre total above the then end of the ditch to identify the balance of the 200 acres necessary to make up Stroud & Prothero's 500 acres in cultivation prior to 1880. The only thing possible to do is to give ALL the acreage the benefit of the earliest date after 1877 (the date of G.L.O. survey) to which all are equally entitled, as far as evidence is known. This fixes 1878 as the earliest year applicable to 400 acres to make up the total of 700 acres above the terminus of the ditch as then built. No evidence was found to fix the date after 1880 when the remainder of the acreage was first brought under cultivation so that year is therefore the earliest date which can be claimed by those lands, and is here used.

A few areas have been specifically identified in one or more of the reports mentioned but they are minor in extent, and the use of the dates so established has little effect on the gross areas considered.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>T. 15N., R. 3E.</u>						See history for filings					
1		SW-SW	8.0	Verde	CW	1878	G.L.O. Plat & Tr. Bk.	Barney & Willard	-	See history	
2		NW-NE	20.7	"	"	1878	"	See history			
		SW-NE	37.0	"	"	1878	"	" "			
		SE-NE	22.0	"	"	1878	"	" "			
		NE-NW	6.8	"	"	1878	"	" "			
		SE-NW	6.7	"	"	1878	"	" "			
		NE-SE	35.5	"	"	1878	"	" "			
		NW-SE	31.5	"	"	1878	"	" "			
		SW-SE	13.3	"	"	1878	"	" "			
11		SE-SE	34.9	"	"	1878	"	" "			
		NE-NE	36.4	"	"	1878	"	" "			
		NW-NE	2.0	"	"	1878	"	" "			
		SE-NE	25.6	"	"	1878	"	" "			
12		NE-SE	3.7	"	"	1878	"	" "			
		NW-NW	19.7	"	"	1869	"	Barney & Willard	-	See history	
		SW-NW	27.8	"	"	1869	"	" "	"	"	
		NE-SW	14.2	"	"	1880	S & P G.L.O. Plat Anderson		-	See history	
		NW-SW	4.7	"	"	1869	& Tr. Bk. Barney & Willard		-	" "	
		NE-SE	1.9	"	"	1880	S & P Anderson		-	" "	
		NW-SE	1.2	"	"	1880	S & P Anderson		-	" "	
		SW-SE	10.0	"	"	1880	S & P See history		-	" "	
	SE-SE	8.0	"	"	1880	S & P Anderson		-	" "		
<u>T. 15N., R. 4E.</u>											
7		SW-SW	7.7	"	"	1880	S & P	See history			
18		NW-NW	6.7	"	"	1880	S & P	" "			
<u>T. 15N., R. 3E.</u>											
21		SE-SE	2.8	"	"	1914	H.L.H. & Phelps	See history			
26		SW-SW	20.5	"	"	1869	G.L.O. Plat	Wingfield & Stewart	-	See history	
		SE-SW	33.0	"	"	1869	"	" "	"	"	
		SW-SE	9.6	"	"	1869	"	Whitaker	-	" "	

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R. _____
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	* Book	Page	
T.16N., R.3E. (Cont'd.)												
27	SW-SW		9.5	Verde	CW	1869	G.L.O. Plat	Strahan	-	See history		
	SE-SW		16.5	"	"	1869	"	"	-	"		
	NW-NW		9.3	"	"	1878	S & P	See history				
	SW-SE		18.7	"	"	1869	G.L.O. Plat	Strahan	-	See history		
	SE-SE		15.5	"	"	1869	"	"	-	"		
28	NE-NE		14.6	"	"	1869	G.L.O. Tr. Bk.	Winningham	-	See history		
	SE-NE		0.6	"	"	1869	G.L.O. Plat	Bristow	-	"		
	NE-SE		12.7	"	"	1869	"	Bristow	-	"		
	SE-SE		0.6	"	"	1869	"	"	-	"		
34	NE-NW		3.0	"	"	1869	"	Strahan	-	"		
	NE-NW		26.5	"	"	1914	Latimer & H.L.H.		-	"		
	NE-NE		1.1	"	"	1869	G.L.O. Plat	Strahan	-	"		
	NE-NE		20.0	"	"	1908	Latimer & H.L.H.		-	"		
	NW-NE		11.3	"	"	1869	G.L.O. Plat	Strahan	-	"		
	NW-NE		1.1	"	"	1914	Latimer & H.L.H.		-	"		
35	NE-NW		40.0	"	"	1869	G.L.O. Plat	Wingfield & Stewart	-	See History		
	NW-NW		20.2	"	"	1869	"	"	-	"		
	NW-NW		17.8	"	"	1908	H.L.H. & Latimer		-	"		
	SW-NW		5.3	"	"	1878	S & P	See history				
	SW-NW		12.3	"	"	1908	H.L.H. & Latimer		-	"		
	SE-NW		39.0	"	"	1878	S & P	See history				
35	NW-NE		17.7	"	"	1869	G.L.O. Plat	See history				
	SW-NE		7.4	"	"	1869	"	"				
	NE-SW		30.0	"	"	1878	S & P	"				
	NW-SW		1.0	"	"	1878	"	"				
	SE-SW		17.8	"	"	1878	"	"				
	Total		743.7									
	Total		77.7	Totals for different classes of land.								
						304.7	Ac. -	1869				
						386.5	" -	1878				
						49.7	" -	1880	50.1	Ac. - 1908		
						2.8	" -	1914	27.6	" - 1914		
						743.7			77.7			

///

HASKELL SPRING

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
								This spring flows from 250 to 350 g.p.m. and at present furnishes a large part of the domestic supply of Clarkdale, supplemented by an artesian well from which 250 g.p.m. is pumped as needed.			
								The spring is located in Section 31, T.16N., R.3E. and normally would reach the Verde through Mescal gulch. The water was formerly used to irrigate about 30 acres in Sections 31. and 32. This has long been discontinued except for a few shade and fruit trees and lawn at the old Haskell farm residence.			
								Filings are as follows:-			
								Upper Verde Farm & Orchard Co.	1917	7	440
								United Verde Copper Company	1917	7	440
								(United Verde Copper Company Files on Canyon	1919	7	537
31	SE-SE		20	Haskell Spring		1876	G.L.O. Plat 1877				
32	SW-SW		<u>9</u> <u>29</u>	"		1876	"				
32	SW-SW		1	Haskell Spring		1876	G.L.O. plat 1877				
20	Town of Clarkdale		20 21	Haskell Spring	Pipe Line	1913	See above				
								Areas by year of appropriation			
			1	-	-	1876					
			29	-	-	1876					
			20	-	-	1913					
			21								
			<u>29</u>								

The lower end of this ditch, in Sections 1 and 12, T.15N., R.3E., is of uncertain date and origin. On the Latimer map (1908) it is shown as an extension of the Hickey ditch, with no land under cultivation, but proposed to be cultivated. This note may have been intended to apply both to the extension of the ditch and to the land, since no trace of the Hickey ditch can be found for nearly three miles above. Hancock (1914) says some of this land had been reported as irrigated from the Hickey Ditch at one time. If such was the case the attempt to maintain this ditch was a failure as much of it would have been subject to flood damage and there was no irrigation there in 1908 or 1914.

In 1920 Phelps found land irrigated from this ditch (called the "Willard Ditch") in Sections 1 and 12 as noted in the tabulations herein; the water being taken from the river by a pump at the highway bridge in Section 1. This was still in operation when inspected by me in 1925. When I again visited it in January 1940, the old pump had long been abandoned and the ditch extended to a gravity diversion dam about $2\frac{1}{2}$ miles upstream. It is now known as "Pete's Ditch", the extension having been built by Pete Busich in 1937. Busich maintains the ditch and besides irrigating the land in Sections 1 and 12 sells water to several small narrow strips of land between it and the river in Section 35, T.16N., R.3E.

The only recorded filing found was as follows:-

Dec. 8, 1913 - recorded at page 589 of Book 6, M & W.

Wallace Willard claims 100 M.I. - Point of diversion adjacent to NE $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 12, T.15N., R.3E., to irrigate land in Section 12.

The date of first cultivation could not be determined. Earlier attempts, if any, had been abandoned for considerably more than 5 years prior to 1914. The exact year between 1914 and 1920 being unknown, cannot be earlier than 1914 since Hancock's survey was completed late in that year.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>T. 16N., R. 3E.</u>											
1	SW-SW		3.0	Verde	Pete's	1914	H.L.H. & Phelps	Wallace Willard	1913	6	589
	SE-SW		2.0	"	"	1914	"	"	"	"	"
12	NW-NW		5.7	"	"	1914	"	"	"	"	"
	SE-NW		9.9	"	"	1914	"	"	"	"	"
	NE-NW		38.1	"	"	1914	"	"	"	"	"
	NW-NE		15.2	"	"	1914	"	"	"	"	"
	SW-NE		3.3	"	"	1914	"	"	"	"	"
<u>T. 16N., R. 3E.</u>											
35	NW-SE		6	Verde	Pete's	1937	T.A.H.	"Pete's Ditch" built in year 1937, by Pete Busich.			
Areas by year of appropriation											
						77.2	Ac. = 1914				
						6.0	" = 1937				
						<u>83.2</u>					

WATSON DITCH

This ditch is shown on the G.L.O. township plat made in 1877, originating in Section 7 and irrigating land owned by Watson east of the river in Section 18, T.15N., R.4E. No filings were found.

The location is one where the river makes it very difficult to maintain a heading and ditch and all reports up to that of Phelps in 1920 show the land abandoned. In 1920, Phelps' survey showed the land being irrigated by pumping from the river. I found a pump in service here in 1925 and attempts still being made in 1940 to keep the land in cultivation by means of a make-shift pump, then down, but being repaired.

Three small holdings (Lee, Scott & Schleight) have from time to time thus been watered in some fashion, probably enough to keep the water-right (prior to 1920 and subsequent to 1914) alive.

The lands are included in the tabulation with others having pumped supply on the second sheet following.

PUMPS IN SECTIONS 17, 18 & 19,
T.15N., R.4E.

Sheet 1 of 2

- - -

Around 50 acres of land (in addition to land under the old Watson Ditch) are irrigated part of the time in some fashion by pumping directly from the river in Sections 17, 18 & 19, T.15N., R.4E. The first record of any irrigation here is Hancock's report in 1914.

He reports Dea Mee Get cultivating 10 acres and L. Tissaw 27 acres since 1912.

Phelps surveyed around 55 acres here in 1920 which I found unchanged in 1925. The Tissaw area was only about 15 acres instead of 27 as reported by Hancock.

In 1940 I found about 8 acres under a pump installed by E. W. Putnam to irrigate new land filed on by him as a homestead in 1933.

The Tissaw (spelled Tisza on the homestead filings in 1903) land was out of cultivation and had been for several years but had just been leased with the understanding that a Diesel powered pump would be installed to irrigate 60 acres.

These lands with their individual water right filings, are given in detail on the tabulation following.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T15 N., R 4E.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
17	NW-SW		5.0	Verde	Pump	1934	T.A.H.	E. W. Putnam			
	SW-SW		3.0	"	"	1934	"	No filing			
18	NW-NE		3.5	"	Watson Ditch Now Pump	1914	H.L.H. & Phelps	O. M. Andrews	1911	6	328
	SW-NE		4.5	"	Pump	1914	"	Doo Folk	1911	6	349
	SE-NE		3.7	"	"	1914	"	" "	"	"	"
	NE-SE		12.7	"	"	1913	"	Dea Mee Get	1913	6	581
								Dea Hong	1915	7	102
	SW-SE		10.3	"	"	1912	"	L. Tissaw	1914	6	624
								(Spelled "Tisza" in homestead filing in 1903 & 1911.)			
	SW-SE		12.0	"	"	1912	"				
			?			1940	T.A.H.	Plans increase.			
	NE-NW		14.6	"	Watson Ditch Now Pump	1914	H.L.H. & Phelps	O. M. Andrews	1911	6	328
19	NW-NE		4.4	"	Pump	1912	"	L. Tissaw (or Tisza)	1914	6	624

Areas by year of appropriation

14.7 ac. - 1912
 12.0 " - 1912
 12.7 " - 1913
 26.3 " - 1914
 8.0 " - 1934

61.7

~~12.0~~

This is one of the old Verde Valley ditches. It is shown, with a number of ranches, on the G.L.O. townships as surveyed in April 1877, and a water filing is of record dated Jan. 12, 1877, made by P. W. Burford, who homesteaded land under the ditch in 1875.

Robinson & Woolf (1895) report the ditch to have been built about 17 years, or 1878. They report 10 ranches aggregating 600 to 700 acres then irrigated. They refer to a filing made Sept. 11, 1888 but careful reading of this filing clearly shows it to relate to a later proposed development described as "above the O.K. ditch". The filing applying to it is the Burford one above mentioned, and local residents name him among the builders of the ditch.

Stroud & Prothero (1899) say "this is one of the old canals of the valley" and give the area as 800 acres and capacity 800 M.I.

O. A. Turney (1901) says the ditch was taken out in 1873, capacity about 600 M.I. and area 610 acres.

Park W. Latimer (1908) gives the area as 516 acres.

H. L. Hancock (1914) gives 1875 as the year the ditch was built, 1300 M.I. the capacity and 570 acres as the area irrigated. (Note: An error in addition gave his total 610 acres instead of the above) Hancock states that there are 24 ditch rights of 40 M.I. each.

Phelps survey in 1920 gave 511.4 acres, including 36 acres above the ditch to which water was pumped.

I found no change in 1925.

In 1940 I found some of the old pumped area abandoned and other land substituted but very little material change in the aggregate.

The larger areas given in some of the earlier reports must be taken as estimates only, since the physical conditions - river bottom on one side and steep land on the other - limit the area to that shown by the actual surveys by Latimer, Phelps and later by the U. S. Bureau of Reclamation in 1934, as checked by me and given by the tabulation following.

Were it not for the Turney report, the evidence of the Hancock report giving 1875 as the year the ditch was built, supported by the Burford water filing of that year, would be taken as the earliest for which priority could be claimed. However, in the absence of facts proving the contrary, the extra two years given by Turney are taken as fixing 1873 for the year of appropriation applying to all these lands except the pumped areas which first are reported by Phelps in 1920 and come in at some undetermined date after 1914.

The Burford filing is as follows:-

Jan. 12, 1877, recorded at page 254 of Ek. 1, Promiscuous Records.

P. W. Burford claims water for agriculture etc, diverted "about 400 yds. above C. P. Head & Co's Cattle Camp" on east side of Verde River.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator		Year	Book	Page
T. 14N., R. 4E.												
2		NW-SW	13.1	Verde	O.K.	1873	O.A.T.	P. W. Burford		1877	1-P	254
		NE-SW	15.1	"	"	1873	"	"	"	"	"	"
		SE-SW	14.1	"	"	1873	"	"	"	"	"	"
		NW-SE	2.4	"	"	1873	"	"	"	"	"	"
		SW-SE	17.3	"	"	1873	"	"	"	"	"	"
3		SE-NW	10.5	"	"	1873	"	"	"	"	"	"
		SW-NW	2.7	"	"	1873	"	"	"	"	"	"
		NW-SW	28.5	"	"	1873	"	"	"	"	"	"
		NE-SW	42.7	"	"	1873	"	"	"	"	"	"
		SE-SW	1.0	"	"	1873	"	"	"	"	"	"
		SW-NE	20.6	"	"	1873	"	"	"	"	"	"
		SE-NE	8.1	"	"	1873	"	"	"	"	"	"
		NW-SE	36.2	"	"	1873	"	"	"	"	"	"
		NE-SE	28.1	"	"	1873	"	"	"	"	"	"
4		NW-NE	9.0	"	"	1873	"	"	"	"	"	"
		SE-NE	15.0	"	O.K. & Pump	1914	Phelps	"	"	"	"	"
		NE-NE	22.7	"	"	1914	Phelps	"	"	"	"	"
11		NW-NE	8.5	"	O.K.	1873	O.A.T.	"	"	"	"	"
		SW-NE	2.3	"	"	1873	"	"	"	"	"	"
		NE-NW	7.3	"	"	1873	"	"	"	"	"	"
		SE-NW	0.2	"	"	1873	"	"	"	"	"	"
		NE-SW	7.3	"	"	1873	"	"	"	"	"	"
		SE-SW	4.4	"	"	1873	"	"	"	"	"	"
		NW-SE	18.7	"	"	1873	"	"	"	"	"	"
		SW-SE	34.4	"	"	1873	"	"	"	"	"	"
		SE-SE	37.4	"	"	1873	"	"	"	"	"	"
12		NW-SW	1.0	"	"	1873	"	"	"	"	"	"
		SW-SW	37.8	"	"	1873	"	"	"	"	"	"
		SE-SW	7.0	"	"	1873	"	"	"	"	"	"
13		NW-NW	10.7	"	"	1873	"	"	"	"	"	"

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
T. 14N., R. 4E. -- Cont'd.											
14		NE-NE	22.5	Verde	O.K.	1873	O.A.T.	P. W. Burford	1877	1-P	254
		NW-NE	17.1	"	"	1873	"	" "	"	"	"
T. 15N., R. 4E.											
53		SE-SW	4.2	"	"	1873	"	" "	"	"	"
		SW-SW	1.5	"	"	1873	"	" "	"	"	"
		Totals	<u>487.2</u>								
			<u>22.7</u>								

Areas according to year of appropriation

472.2 Ac. - 1873

15.0 " - 1914

487.2

22.7 " - 1914

117-A



10-ft. Undershot Water Wheel - A. J. Ralston's place on Verde River - Pumps to small area formerly irrigated by C.V. Ditch. June 6, 1940.



Pumping Plant in pit at extreme right with discharge to Lebsch Ditch, formerly part of C.V. Ditch (Head of Wood Ditch nearby) June 6, 1940.



Discharge Pipe delivering water to land from O.K. Ditch from 6" Centrifugal pump operated by old tractor. June 7, 1940.

CENTRAL VERDE (C.V.) or RALSTON DITCH
and
MARR DITCH
- - -

Sheet 1 of 5

These ditches do not now divert water directly from the river and have long since been abandoned as continuous aqueducts. A few short sections are in use to carry small quantities of water pumped from the river or from pits. The Marr ditch was taken out to operate a mill and is here mentioned because it was used as an upstream extension of the C.V. or Ralston ditch after the heading of the latter had washed out. All traces of the dams and upper reaches of both ditches have long been obliterated by the river.

Robinson & Woolf (1895) say the ditch was built in 1878 and covered at that time (1895) 40 acres of land. They state that work was then (1895) under way on an enlargement of the ditch and an extension down to Camp Verde, above the Wood Ditch.

Stroud & Prothero (1899) give 300 acres irrigated under the original ditch and an additional 300 acres to be irrigated under the extension built in 1898, making 600 acres in all.

O. A. Turney (1901) says the ditch "is stated to irrigate 1000 acres" - - - "300 acres of this land was first irrigated three years ago" 1898. It is to be noted that Turney does not claim to have checked this personally. Of this area, the maximum ever reported under the ditch, the greater part was abandoned following the complete destruction of dam and upper ditch in the heavy floods of 1905.

Park W. Latimer lists 123 acres irrigated in 1908, but discrepancies between his list and map make the quantity and identity of the land doubtful.

H. L. Hancock (1914) says the ditch was built in 1875. He lists only 95 acres being cultivated in that year with 930 additional susceptible of cultivation. He states that "the larger part of the land shows no evidence of ever having been irrigated, what little has been irrigated was done so many years ago".

Phelps surveyed and listed in detail, 495 acres actually irrigated in 1920.

In July 1925 the diversion dam and the upper two miles of the ditch (Old Marr ditch) were completely gone and practically all the land was out of cultivation.

No attempt has since been made to restore this ditch to service and such lands as are still cultivated are served by means of pumps of a more or less makeshift character.

Taylor E. Estes operates a centrifugal pump on the right bank of the river in the northwest part of the SW $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 3, T.14N., R.4E. irrigating 35 acres in Sections 3 and 10. He claims that the water right on this place has been maintained.

A. J. Ralston irrigates 3-1/3 acres in the SE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 3, T.14N., R.4E. from a pump operated by a water wheel on the right bank of the river.

The largest acreage being cultivated in 1940 is in the $W\frac{1}{2}$ of Section 13 and $E\frac{1}{2}$ of Section 14 of T.14N., R.4E. Most of this land had every appearance of having lain fallow a long time, but a good portion of the land was being brought under cultivation in June and July. It was impossible for me to determine whether or not the water right on any or all of this land had been allowed to lapse and Mr. C. J. Boyer, manager for J. T. Ralston, present owner of the land, says that it has all been cultivated in some manner in most years. In the survey by F. M. Holmquist for the U. S. Bureau of Reclamation, in April 1934 all but 64 acres of this land is shown as uncultivated, but classed as "pasture". This body of land must be classed as part of the original 1878 area. The areas below belong with the increase under the 1898 extension. The Ralston land (formerly the "Apache Maid Cattle Co.") is irrigated by pumping from the river into a small ditch not over 18 inches wide excavated in the bottom of the old C.V. Ditch. This has been the only source of water for this land since the C.V. ditch was abandoned prior to 1925. The pump is shown on the U. S. Bureau of Reclamation survey in April 1934.

The old Lebsch place irrigates 32.4 acres in the $SE\frac{1}{4}$, $NW\frac{1}{4}$ Section 13 by a pump located in an open pit approximately 75 ft. south of the right bank of the river opposite the head of the Wood ditch, about 400 ft. east of the northwest corner of the $SW\frac{1}{4}$, $NW\frac{1}{4}$ of Section 13. This pump pit is well above the reach of any possible floods and outside the defined river channel, so it can not be classed as river flow. The pump was in operation in 1934 and has furnished this land with water since the abandonment of the C.V. ditch.

The question of priority of appropriation of lands under this ditch is resolved into the years applying to the land still maintaining any water right at all.

The G.L.O. township plat made in 1877 shows the land vacant. The year 1878, as given by Robinson & Wolf, is the earliest that can be claimed for the oldest land.

Mack Davis has installed a pump near the southeast corner of the $SW\frac{1}{4}$, $NE\frac{1}{4}$, Section 4, T.14N., R.4E. and is irrigating approximately 20 acres of what was some of the oldest land under the C.V. ditch. Some of this had been idle for years but as it is not possible to say how long, it would be difficult or impossible to prove that the old right has lapsed, if, indeed, that be the case.

The Estes land in the $S\frac{1}{2}$, $SE\frac{1}{2}$ Section 3 was not cultivated in 1908 or 1914 but was in 1920. In 1925 it was out. The best that can be claimed is 1913 for this land, under the cultivation claimed and a new filing in 1913 as later described.

In the $SE\frac{1}{4}$, $NW\frac{1}{4}$ Section 13 the river right of the Lebsch 32.4 acres has been abandoned and water has for fifteen or more years been obtained by pumping from the open pit or well before described. The Lebsch land in the $SW\frac{1}{4}$, $NW\frac{1}{4}$ Section 13 is irrigated by pumping from the river.

The J. T. Ralston holdings were out in 1908 and 1914. In 1920 as before stated, the land was being cultivated but was not in 1925, although this was claimed to be temporary only. Giving it the benefit of the doubt the claim to cultivation of a sufficiently continuous nature to maintain the water right, could not be asserted prior to 1913.

Recorded water filings are as follows:-

Mar. 20, 1884 - Recorded at page 202, Bk. 1, M & W.

J. C. Ralston, J. W. Ralston and Z. L. Kay claim 6000 M.I. surplus water of the Verde River for the "Ralston Ditch" - diversion point at head of canyon on west side Verde River just below the mouth of Oak Creek. "Ditch to be taken out at head of aforesaid canyon, down which it flows, through Kay's ranch and near the Conger Mill and Dan'l Marr's house; Thence to the various farms at Central Verde on the west side of Verde River and to Gen. W. T. Wither's Millsite".

(NOTE: - Robinson & Woolf (1895) state that nothing was done under this filing.)

Feb. 14, 1894 - recorded at page 400 of Bk. 2, M & W.

R. M. Rodgers, Sarah J. Arnold and J. W. Ralston claim 2500 M.I. for the "Central Verde Ditch" - - "to be taken from the Verde River near the mouth of Cherry Creek and to flow through what is known as the Ralston Ditch".

Oct. 20, 1913 - Recorded at page 582, Bk. 6, M & W.

J. W. Ralston, J. H. Smith, A. J. Ralston, J. T. Ralston, J. F. Ralston, Tom Logan, A. D. Ralston, Babbitt Bros., Robt. E. Morrison, Walter Blackford, H. C. Blackford, W. T. Head, Robert Finney, J.I. Marksberry, Mrs. I. S. Forest and Louis Lebsch claim 2000 M.I. from Verde on west bank near mouth of Black Canyon; ditch to be 14 miles long.

The heading described in the last filing above listed is some two or more miles above the uppermost heading theretofore in use. This rehabilitation of the C.V. ditch system involved a large expenditure and the ditch location for four or five miles was a very difficult or impossible one in which to maintain a ditch. Nevertheless Phelps survey in 1920 shows the ditch to have been again placed in service and nearly 500 acres irrigated. The initiation of this renewed water right dates from the 1913 filing.

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of Data	Name of Locator	Year	* Book	Page
T.14 N., R.4E.											
2		SW-SW	3.4	Verde	C.V.& Pump	1913	Phelps	Ralston, et al	1884	1	202
		SW-SW	15.4	"	C.V.	1913	Phelps	Rodgers, et al	1894	2	400
		SW-SW		"	"			Ralston, et al	1913	6	582
3		SE-SW	3.3	"	C.V.& Pump	1913	Phelps	"	"	"	"
		SW-SW	1.0	"	Pump	1925	T.A.H.	Roy Minter	1925	No	filing
		SW-SE	5.7	"	Pump	1913	Phelps	See canal history			
		SW-SE	5.4	"	"	1913	Phelps	"	"	"	"
		SE-SE	24.0	"	"	1913	Phelps	"	"	"	"
4		NE-SE	15.0	"	"	1878	Mack Davis	"	"	"	"
		SE-SE	5.0	"	"	1878	"	"	"	"	"
		SW-SE	12.2	"	"	1913	Phelps	"	"	"	"
		SE-SE	3.7	"	C.V.	1878	"	"	"	"	"
11		NW-NW	6.5	"	C.V.	1913	"	"	"	"	"
		SW-NW	3.0	"	"	1913	"	"	"	"	"
13		NE-NW	2.3	"	(C.V.& Lebsch	1878	Phelps	Now watered from well.			
		NW-NW	1.2	"	"	1878	"	"	"	"	"
		SW-NW	24.2	"	C.V.by Pump	1878	"	See canal history			
		SW-NW	6.3	"	"	1913	"	"	"	"	"
		SE-NW	32.4	"	C.V.& Lebsch	1878	"	Now watered from well.			
		NE-SW	28.1	"	C.V.by Pump	1913	Phelps	See canal history			
		NW-SW	38.4	"	"	1913	"	"	"	"	"
		SW-SW	33.0	"	"	1913	"	"	"	"	"
		SE-SW	1.1	"	"	1913	"	"	"	"	"
14		SW-NE	9.9	"	"	1913	"	"	"	"	"
		SE-NE	27.7	"	"	1913	"	"	"	"	"
		NE-SE	26.0	"	"	1913	"	"	"	"	"
		NW-SE	15.9	"	"	1913	"	"	"	"	"
		SW-SE	8.3	"	"	1913	"	"	"	"	"
		SE-SE	24.8	"	"	1913	"	"	"	"	"
23		NE-NE	23.8	"	C.V.	1898	R & W & REvived	G.L.O. Abandoned before 1908.			
		SE-NE	3.0	"	"	1898	"	1920. Abandoned before 1925.			
		SE-NE	10.0	"	"	1898	R & W & GLO.	Abandoned before 1908.			
		NE-SE	5.0	"	"	1898	"	" " " "			

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	Recorded Filings					
						Year	Source of data	Name of Locator	Year	* Book Page	
T.14N., R.4E. (Cont'd)											
24		NW-NW	14.5	Verde	C.V.	1898	R & W &	S.L.O. Abandoned before 1908.			
		SW-NW	2.5	"	"	1898	" "	" " " "			
		SW-NW	20.0	"	"	1898	R & W &	S.L.O. Abandoned before 1908.			
		NE-SW	16.0	"	"	1898	R & W &	S.L.O. Abandoned before 1908.			
		NW-SW	8.0	"	"	1898	R & W &	S.L.O. Abandoned before 1908.			
		SW-SW	3.0	"	"	1898	" "	" " " "			
		SW-SW	10.9	"	"	1898	R & W &	S.L.O. Abandoned 1908.			
		SE-SW	5.0	"	"	1898	R & W &	S.L.O. Abandoned 1908.			
								Revived 1920. Abandoned 1925.			
25		NW-NE	3.0	"	"	1898	R & W &	S.L.O. Abandoned 1908.			
		SW-NE	33.0	"	"	1898	" "	" " " "			
		SE-NE	2.0	"	"	1898	" "	" " " "			
		NE-NW	4.9	"	"	1898	R & W &	S.L.O. Abandoned 1908.			
								Revived 1920 - Abandoned 1925.			
		NE-NW	15.0	"	"	1898	R & W &	S.L.O. Abandoned 1908.			
		SE-NW	8.0	"	"	1898	" "	" " " "			
		NE-SE	25.0	"	"	1898	" "	" " " "			
		NW-SE	35.0	"	"	1898	" "	" " " "			
		SW-SE	18.0	"	"	1898	" "	" " " "			
		SE-SE	30.0	"	"	1898	" "	" " " "			
36		NE-NE	20.0	"	"	1898	" "	" " " "			
		NW-NE	10.0	"	"	1898	" "	" " " "			
T.14N., R.5E.											
30		SW-SW	25.0	"	"	1898	R & W &	S.L.O. Abandoned 1908.			
		SE-SW	10.0	"	"	1898	" "	" " " "			
31		SW-NE	3.6	"	(C.V. & later from Wood)	1898	R & W &	S.L.O. Abandoned 1908.			
								Revived 1920. Abandoned 1925.			
		NE-NW	40.0	"	C.V.	1898	R & W &	S.L.O. Abandoned 1908.			
		NW-NW	35.0	"	"	1898	" "	" " " "			
		SW-NW	4.0	"	"	1898	" "	" " " "			
		SE-NW	6.0	"	"	1898	" "	" " " "			
		Total	301.1								
		Total	332.3								
						Classification by years is as follows:					
						1878	44.2 Ac.	7.2 Ac.			
						1898	"	482.6 "			
						1913	255.9 "	42.5 "			
						1925	1.0 "	532.3 "			
							301.1				

All of the land under this ditch lies within the abandoned Camp Verde Military reservation, which was not turned over to the Department of the Interior until 1884, not surveyed until 1892 and not open for entry until 1894.

Robinson & Woolf (1895) give 1895 as the year built, 175 M.I. capacity of ditch and 200 acres as area irrigated. They call this the "Hutchinson Ditch".

Stroud & Prothero (1899) give 1887 as the year built, 400 M.I. capacity of ditch and 350 acres area irrigated.

C. A. Turney (1901) gives 1893 as the year built, 747 M.I. capacity of ditch and 420 acres area irrigated.

Park W. Latimer, (1908) gives 439 acres irrigated.

H. L. Hancock (1914) gives 1893 as year built, 525 M.I. capacity of ditch and 480 acres area irrigated.

Phelps (1920) lists 375 acres irrigated.

In 1925 I found the area unchanged.

In 1940 the total is about 40 acres higher, or 417 acres.

Recorded filings are as follows:-

July 12, 1892, recorded at page 294 of Ek. 2, M & W.

Thos. A. Smith claims 1000 M.I. "on the east side of Verde River at Middle Verde" - "about 1/2-mile north of Middle Verde school house and about 1/4-mile southwest of E. A. Jordan's house and about 1/2-mile south from Parson Bristow's".

July 20, 1894, recorded at page 459 of Ek. 2, M & W.

John H. Hicks claims 3000 M.I., heading on east side of Verde River at Middle Verde - "1/4-mile north of Middle Verde school house and about 1/4-mile southwest of E. A. Jordan's and about 1/2-mile south of Parson Bristow's house and northeast of R. M. Rodgers' ranch.

April 3, 1895, recorded at page 498 of Ek. 2, M & W.

A. B. Hutcheson, Burton Maxwell, W. F. Hutcheson, Tommie Bristow and C. P. Wingfield claim 1000 M.I. for the "Eureka Ditch" on Middle Verde at road crossing at lower end of E. Jordan's house, about 1/2-mile from same, in southerly direction.

The Land Office Survey (1892) does not show the Eureka Ditch, although the Wood Ditch on the west side of the river is shown completely and accurately. The year 1887 as given by Stroud & Prothero disagrees with all other evidence and the earliest date consistent with other reports is 1893, which is therefore taken as the year of appropriation applying to this land.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
T. 14N., R. 4E.											
12		SE-SW	0.6	Verde	Eureka	1893	See Canal History		(1892 1894 1895)	2 2 2	294 459 498
13		NE-NW	2.3	"	"	1893	" "	"	"	"	"
		NW-NW	11.2	"	"	1893	" "	"	"	"	"
		NW-SE	0.4	"	"	1893	" "	"	"	"	"
		SW-SE	11.3	"	"	1893	" "	"	"	"	"
24		NW-NE	22.3	"	"	1893	" "	"	"	"	"
		SW-NE	30.2	"	"	1893	" "	"	"	"	"
		NE-NW	0.5	"	"	1893	" "	"	"	"	"
		NE-SE	33.8	"	"	1893	" "	"	"	"	"
		NW-SE	12.8	"	"	1893	" "	"	"	"	"
		SE-SE	22.6	"	"	1893	" "	"	"	"	"
T. 14N., R. 5E.											
19		Lot 5 (NW-SW)	2.8	"	"	1893	" "	"	"	"	"
		Lot 4 (SW-SW)	15.8	"	"	1893	" "	"	"	"	"
		SE-SE	10.9	"	"	1893	" "	"	"	"	"
		SW-SE	0.3	"	"	1893	" "	"	"	"	"
29		NW-NW	7.0	"	"	1893	" "	"	"	"	"
		SW-NW	10.0	"	"	1893	" "	"	"	"	"
30		NE-NE	34.0	"	"	1893	" "	"	"	"	"
		NE-NE	19.0	"	"	1893	" "	"	"	"	"
		NE-NE	37.5	"	"	1893	" "	"	"	"	"
		NE-NE	38.0	"	"	1893	" "	"	"	"	"
Lot 1,		(NW-NW)	24.0	"	"	1893	" "	"	"	"	"
		SE-NW	19.5	"	"	1893	" "	"	"	"	"
		NE-SW	3.3	"	" #	1893	" "	"	"	"	"
		NE-SE	20.7	"	" #	1893	" "	"	"	"	"
		NW-SE	26.4	"	" #	1893	" "	"	"	"	"
		<u>Total</u>	<u>417.2</u>	All	1893						

Originally under Enterprise Ditch, built same year and later abandoned, the land being served entirely by the Eureka.

Present owner, Verde Ditch Company, a corporation, with 10 shares of stock.

Robinson & Woolf (1895) say this ditch was begun in 1890 but covered the same land formerly irrigated by "the Old Camp Verde Ditch", besides some new land both above and below Camp Verde. They give the capacity at 1000 M.I., but do not give the area irrigated.

Stroud & Prothero (1899) give the capacity as 1000 M.I. and area irrigated at 1000 acres. They say it covers the old Government farm and was enlarged in 1889. They give the following dates applying to land irrigated:

Wm. Head	50 Acres	- 1895
Wm. Stephens	80 "	- 1895
Geo. Hance	100 "	- Prior to 1899.

O. A. Turney, (1901) gives the capacity at 1042 M.I. and area as 1200 acres, about half of which he states are among the oldest lands on the river.

Park Latimer (1908) gives the area at 1123 acres.

H. L. Hancock (1914) gives the ditch capacity as 1150 M.I. and area as 1170 acres. Hancock says the upper end of the ditch was built by the Government for Indians and Wales Arnold in 1868 and that the lower end was built in 1871 by R. C. Campbell, John Davis, John Wood, Abe Kuntz and Jackson Thompson.

The only water right filing found of record was as follows:-

Mar. 20, 1891, recorded at page 224 of Bk. 2, M & W.

John Davis, John Wood and James Brown claim 5000 M.I. to be diverted from the Verde River "about 100 yards north of Fort Verde Military Reservation" with notice of intention to extend the "Verde Irrigation Canal" etc.

The portion of T.13N., R.5E. outside the Camp Verde Military reservation was surveyed by the G.L.O. in December 1873. The plat makes careful note of ditches and irrigation on the east side of the Verde but shows the west side entirely vacant. A careful check of the earliest homestead and other entries show the following:-

John Davis, John Wood and James Brown, who made the 1891 filing above noted, Nov. 10, 1874, Oct. 3, 1873 and Feb. 15, 1879 respectively.

R. C. Campbell, mentioned by Hancock among the four individuals stated by him to have built the lower end of the old ditch in 1871, filed on his homestead Jan. 10, 1874. Geo. Hance, mentioned by Stroud & Prothero as irrigating 100 acres in 1899, made his filing June 9, 1891.

Land titles to the area inside the Military reservation have no relation to dates of first using irrigation water since the land was not turned over to the Land Office until 1884 and not open to entry until 1894. The homesteads of Davis, Wood, Brown, Campbell and Hance were all outside the reservation.

The evidence of the Land Office plat places the earliest irrigation outside the reservation at later than the end of 1873. The land filings and statements of Robinson & Woolf (1895) and Stroud & Prothero (1899), with the water filing of 1891 give a early possible limit of 1874 and a late one of 1890 for the extension of the old ditch. Using the earliest date affirmatively given by the contemporary witnesses, Stroud & Prothero, fixes 1889 as the date of priority of the earliest irrigation outside the reservation. This view was confirmed by local residents who were interviewed.

Current opinion as far as ascertained is that the lands inside the reservation date back to the early 70s or late 60s. No evidence of exact dates could be found. Therefore to be sure that no injustice is done to any of these lands all are considered as having the priority of the earliest date given anyone, which is the year 1868, named by Hancock.

With the exception of small late areas as listed in the tabulation, all the lands under the Wood ditch are therefore classed herein as 1868 or 1889. In case of doubtful areas the older dates are used.

The figures arrived at by this rough method of classification divide the entire area into nearly equal parts of the older and later areas as reported by Turney.

Reference is made to the Court files in Case No. 4772, Yavapai County, Hance vs. Arnold et al., and the decree by Judge R. E. Sloan dated Mar. 23, 1909. In this decree the rights of the various users of water in what is called the "lower or old Verde ditch" and the "Upper or New Verde Ditch" are defined as certain fractional portions of the water flowing in said ditches in accordance with the ownership of shares therein as set forth in the decree. Priorities of appropriation as against lands under other ditches or streams are not determined. Provision is made for distribution of the water under authority of a Commissioner to be appointed by the Court, expense to be paid by the several land owners in proportion to ownership of shares.

The records show such appointments up to and including 1935.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 13 N., R 4 & 5E

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	Book	Page	
		<u>T. 13N., R. 4E.</u>			Wood or Lower Verde				(John Davis John Wood James Brown)			
12		Lot 1	16.9	Verde	"	1889	See canal	history	1891	2	224	
		Lot 2	0.8	"	"	1889	"	"	"	"	"	
		Lot 3	16.6	"	"	1889	"	"	"	"	"	
		NE-SE	7.8	"	"	1889	"	"	"	"	"	
		<u>T. 13N., R. 5E.</u>										
5		Lot 4	9.0	"	"	1868	"	"	"	"	"	
6		Lot 1 (NE-NE)	39.0	"	"	1868	"	"	"	"	"	
		Lot 2 (NW-NE)	39.0	"	"	1868	"	"	"	"	"	
		Lot 9 (SW-NE)	38.0	"	"	1868	"	"	"	"	"	
		Lot 9 (SE-NE)	17.2	"	"	1868	"	"	"	"	"	
		Lot 3 (NE-NW)	29.0	"	"	1868	"	"	"	"	"	
		SE-NW	27.2	"	"	1868	"	"	"	"	"	
		Lot 8 (NE-SW)	29.0	"	"	1868	"	"	"	"	"	
		Lot 7 (SE-SW)	0.6	"	"	1868	"	"	"	"	"	
7		Lot 5 (W $\frac{1}{2}$ -NW)	20.8	"	"	1889	"	"	"	"	"	
		Lot 9 (NW-SW)	16.7	"	"	1889	"	"	"	"	"	
		Lot 13 (SE-SE)	6.4	"	"	1889	"	"	"	"	"	
8		SW-SW	2.7	"	"	1889	"	"	"	"	"	
		SE-SW	12.8	"	"	1889	"	"	"	"	"	
		SW-SE	8.8	"	"	1889	"	"	R. Campbell	"	"	
		SE-SE	5.0	"	"	1889	"	"	"	"	"	
16		NW-NW	1.0	"	"	1889	"	"	"	"	"	
		SW-NW	3.8	"	"	1889	"	"	"	"	"	
17		NE-NE	41.2	"	"	1889	"	"	R. Campbell	"	"	
		NW-NE	5.0	"	"	1889	"	"	"	"	"	
		NW-NE	15.3	"	"	1914	H.L.H. & Latimer	"	"	"	"	
		SW-NE	3.7	"	"	1889	See history	John Davis	"	"	"	
		SW-NE	33.0	"	"	1914	H.L.H. & Latimer	"	"	"	"	
		SE-NE	43.1	"	"	1889	See history	"	"	"	"	
		NE-SE	20.3	"	"	1889	See history	"	"	"	"	
		NW-SE	8.5	"	"	1914	H.L.H. & Latimer	"	"	"	"	
128		SE-SE	0.7	"	"	1889	See history	- John Davis	"	"	"	

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T 13 N., R 4 & 5E.
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	* Book	Page	
T.13N., R.5E. (Cont'd.)						Lower	Verde Ditch					
20		NE-NE	1.5	Verde	Wood	1889	See history					
21		NE-SW	32.0	"	"	1889	" "	John Wood				
		SE-SW	9.5	"	"	1889	" "	" "				
		NW-SE	27.5	"	"	1889	" "	" "				
		SW-SE	31.2	"	"	1889	" "	" "				
27		NW-SW	13.0	"	"	1889	" "	Brown				
		SW-SW	11.8	"	"	1889	" "	"				
28		NE-NE	16.6	"	"	1889	" "	"				
		NW-NE	28.7	"	"	1889	" "	"				
		SW-NE	18.2	"	"	1889	" "	"				
		SE-NE	36.1	"	"	1889	" "	"				
34		NE-SE	29.5	"	"	1889	" "	"				
		NW-SE	1.1	"	"	1889	" "	"				
		SE-SE	7.5	"	"	1889	" "	"				
		NE-NW	20.0	"	"	1889	" "	Hance				
		NW-NW	5.0	"	"	1889	" "	Brown				
		NW-NW	10.0	"	"	1889	" "	Brown				
T.14N., R.4E.	13	NE-SW	2.7	"	"	1868	" "					
		NE-SW	5.2	"	"	1868	" "					
		SW-SW	1.2	"	"	1868	" "					
		SE-SW	3.8	"	"	1868	" "					
		SE-SW	0.5	"	"	1868	" "					
24		NE-NW	0.4	"	"	1868	" "					
		NW-NW	15.7	"	"	1868	" "					
		SW-NW	2.1	"	"	1868	" "					
	SE-SW	16.2	"	"	1868	" "						
25		NW-NE	11.2	"	"	1868	" "					
		SW-NE	2.4	"	"	1868	" "					
		SE-NE	14.8	"	"	1868	" "					
		NE-NW	5.7	"	"	1868	" "					
	NE-SE	15.0	"	"	1898	Latimer						

WOOD DITCH

IRRIGATED LAND - UPPER VERDE RIVER, T. A. Hayden, May-June, 1940. T. 14 N., R. 5E
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv. Year	Source of data	Recorded Filings		
						Name of Locator	Year	*	Book	Page
T. 14 N., R. 5E.						Wood or Lower Verde Ditch -(Cont'd.)				
29		SW-SW	34.0	Verde	Wood	1868	See history			
		SE-SW	7.4	"	"	1868	" "			
30		NW-SW	10.0	"	"	1868	Latimer			
		SW-SW	10.0	"	"	1868	History			
		SE-SW	20.0	"	"	1868	"			
30		SW-SE	29.4	"	"	1868	See history			
		SE-SE	33.8	"	"	1868	" "			
31		NE-NE	19.6	"	"	1868	" "			
		NW-NE	21.5	"	"	1868	" "			
		NW-NE	15.9	"	Wood & Pump Once C.V.	1868	" "			
		SW-SE	8.7	"	Wood	1868	" "			
		SE-SE	12.0	"	"	1868	" "			
		SE-SW	13.2	"	"	1868	" "			
32		NE-NW	24.3	"	"	1868	" "			
		NW-NW	19.4	"	"	1868	" "			
		SW-NW	0.8	"	"	1868	" "			
		SE-NW	2.6	"	"	1868	" "			
		NW-SW	4.0	"	"	1868	" "			
		SW-SW	13.0	"	"	1868	" "			
Totals			<u>1,130.2</u>							
			<u>120.7</u>							
Total areas according to				Priority of Use						
				563.8	45.7	1868				
				509.6	60.0	1889				
				-----	15.0	1898				
				56.8	-----	1914				
				<u>1,130.2</u>	<u>120.7</u>					

ENTERPRISE DITCH

This ditch is first mentioned in the Stroud & Prothero report in 1899. It was then serving 60 acres on the Smith ranch, (NW 1/4 Section 30, T.14N., R.5E.) just above the mouth of Beaver Creek.

O. A. Turney (1901) gives the area as 50 acres and date of construction 1893.

Latimer, 1908 does not segregate the area jointly irrigated by the Enterprise and Eureka.

H. L. Hancock (1914) gives 1892 as the year built and says a "few acres" were irrigated from it and also the Eureka.

In 1920 Phelps' survey shows no trace of the Enterprise ditch remaining - all being irrigated by the Eureka.

Since 1892 applies equally to the Eureka and Enterprise the priority of water right is not affected in listing the land under the Eureka.

The Enterprise Ditch contemplated the irrigation of a total of 1000 acres of land and it was dug for about two miles below Beaver Creek. However, the Beaver Creek crossing, a fairly costly undertaking, was never built, and the development remains one of the few physically feasible expansions of the Verde Valley acreage which was never carried out, but which in future may still contain a possible threat to old water rights.

This is one of the newer Verde Valley ditches. It supplies water to a small acreage originally irrigated by water brought from Clear Creek by the Pioneer Ditch, the oldest, or one of the oldest in the Valley.

Robinson & Woolf (1895) give 1892 as the year of construction 640 acres as the area irrigable, of which they say a large portion had not then (1895) been cultivated.

Stroud & Prothero (1899) make no mention of the Eaman Ditch.

O. A. Turney (1901) gives 1895 for the year built and 340 acres the area irrigated. Turney makes the statement that "formerly the old lands under the "Eaman" ditch were irrigated from Clear Creek, but six years ago the Clear Creek water was sold to newer lands and water taken from the Verde for the "Eaman" lands, owners Haywood Cattle Co., Aurora, Illinois, manager, C. B. "Eaman", Garden City, Kansas".

Park W. Latimer (1908) lists 320 acres under the Eaman Ditch.

H. L. Hancock, (1914) gives 1895 as the year of construction and 320 acres the area irrigated, of which he says 150 acres in Section 16 also "draws some water from the Pioneer Ditch".

The area measured under this ditch by Holquist for the U. S. Bureau of Reclamation in 1934, which I checked in 1940, is 320 acres, of which 110.5 acres originally obtained its water from Clear Creek through the Pioneer Ditch.

This township was surveyed by the G.L.O. in 1873 and over 200 acres of land are shown irrigated under the Pioneer Ditch. This includes about 25 acres in the west half of Section 16 now watered by the Eaman Ditch.

Recorded filings are as follows:-

July 23, 1877 - Recorded at page 298 of Bk. 1, Prom.

Joseph Melvin claims water from Verde River not being used by older acquias for his ranch.

(Note:- This is the NW $\frac{1}{4}$ of Sec. 16, then getting water, as it is now, from the Pioneer Ditch and now partly watered by the Eaman Ditch.)

July 21, 1892. Recorded at page 298 of Bk. 2, M & W.

W. S. Head, Thos. J. Eaman and Chas B. Eaman claim 3000 M.I. from the Verde River, "To commence on east side of Verde at the Old Verde Ditch Company's old dam and to run so as to cover the Jordan flat and all" - - - "land under said ditch".

Reference is made to files in Case 3013, Yavapai County District Court, Wilber, et al vs Jones et al and to judgment dated September 7, 1900, by Judge R. E. Sloan, for respective priority of rights of individual plaintiffs and defendants using water from Clear Creek. The rights of 110.5 acres irrigated out of 200 acres, gross, owned by the Haywood Cattle Co., which now receives all or most of its water from the main Verde through the Eaman Ditch, are involved in this suit. The decree allots 475 M.I. from May to September, inclusive, among the various users in accordance with priority of right as among the parties to the suit but not with respect to any other water users under other ditches or streams. This 110.5 acres of old land under the Eaman ditch would be entitled to claim date of priority as of the Pioneer Ditch 1865. The remaining Eaman Ditch lands claim back to 1892.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
T. 13N., R. 5E.						Baman or					
7		NE-NE	6.3	Verde	Diamond S	1892	History	Joseph Melvin	1877	1-P	298
		SE-NE	19.0	"	"	1892	"	Head et al	1892	2	298
		SE-NE	5.0	"	"	1892	"	"	"	"	"
		NE-SE	1.5	"	"	1892	"	"	"	"	"
8		SW-NE	25.0	"	"	1892	"	"	"	"	"
		NW-NE	0.1	"	"	1892	"	"	"	"	"
		NE-NW	19.5	"	"	1892	"	"	"	"	"
		NW-NW	25.2	"	"	1892	"	"	"	"	"
		SW-NW	32.0	"	"	1892	"	"	"	"	"
		SE-NW	27.7	"	"	1892	"	"	"	"	"
		Lots 3 & 5 (NE-SW)	11.1	"	"	1892	"	"	"	"	"
		Lot 4 (NW-SW)	19.2	"	"	1892	"	"	"	"	"
		Lot 7 (NE-SE)	3.7	"	"	1892	"	"	"	"	"
		Lot 1 (Pt NE-SE)	0.3	"	"	1892	"	"	"	"	"
		Lot 6 (NW-SE)	15.2	"	"	1892	"	"	"	"	"
		Lot 2 (Pt NW-SE)	4.8	"	"	1892	"	"	"	"	"
16		NE-NW	6.6	Verde & Clear Cr.	Baman & Pioneer	1865	"	Originally from Pioneer Ditch.			
		NW-NW	3.0	"	"	1865	"	"	"	"	"
		SW-NW	10.5	"	"	1865	"	"	"	"	"
		SE-NW	10.0	"	"	1865	"	"	"	"	"
		NE-SW	10.0	"	"	1865	"	"	"	"	"
		NW-SW	27.0	"	"	1865	"	"	"	"	"
		SW-SW	34.4	"	"	1865	"	"	"	"	"
		SE-SW	9.0	"	"	1865	"	"	"	"	"
		Total	<u>321.1</u>								
		Total	<u>5.0</u>								
					Areas according to Priority of Use						
					110.5	1865					
					210.6	1892					
					5.0	1892					
					<u>321.1</u>						
					<u>5.0</u>						

NEWMAN DITCH

This ditch and about 40 acres of irrigated land in Section 34, T.15N., R.5E., are shown on the G.L.O. township plat as surveyed in 1873.

H. L. Hancock (1914) says the ditch was built in 1870 by Peter Winkler, and irrigated 25 acres. He says the ditch had been dry 3 or 4 years, but was being repaired by J. H. "Morris". The G.L.O. records and the U. S. Bureau of Reclamation survey in 1934 give the name as J. H. Morrison (not Morris).

This land was not cultivated in 1925, 1934 or 1940. I am informed it has been abandoned for many years.

As far as known no effort is being made to reestablish this irrigation.

NEWMAN DITCH - Cont'd.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
		T. 13N., R. 5E.									
27		SE-SW	5.0	Verde	Newman	1870	H.L.H. & G.L.O.				
		SW-SE	20.0	"	"	1870	"				

UPPER VERDE RIVER VALLEY

Areas by Year of Appropriation.

Year	Ditches, Ranch, etc.	Areas - Acres				Totals
1865	Eaman Ditch	110.5				
				110.5		110.5
1868	Wood Ditch	563.8	45.7			
				563.8	45.7	674.3
1869	Cottonwood Ditch	304.7				
				304.7		979.0
1870	Newman Ditch		25.0			
					25.0	
1873	O. K. Ditch	472.2				
				472.2		1,451.2
1874	Hickey Ditch	146.1				
				146.1		1,597.3
1876	Allen, or Tunnel Ditch Haskell Springs	1.0	35.0 29.0			
				1.0	64.0	1,598.3
1878	Cottonwood Ditch Central Verde Ditch	386.5 44.2	39.6			
				430.7	39.6	2,029.0
1879	Duff Ditch	28.0	14.0			
				28.0	14.0	2,057.0
1880	Sycamore Creek (Packard) W. A. Jordan Ditch Allen, or Tunnel Ditch Cottonwood Ditch	49.7	22.0 35.0 102.0			
				49.7	159.0	2,106.7
1881	E. L. Jordan Ditch	50.0				
				50.0		2,156.7
1889	Wood Ditch	509.6	60.0			
				509.6	60.0	2,666.3
1892	Eaman Ditch	210.6	5.0			
				210.6	5.0	2,876.9
1893	Sullivan Ditch Dureka Ditch	50.0 417.2				
				467.2		3,344.1

UPPER VERDE RIVER VALLEY (Cont'd.)
Areas by Year of Appropriation

Year	Ditches, Ranch, etc.	Areas - Acres				Total
1896	Allen, or Tunnel Ditch	228.0				
				228.0		3,572.1
1898	Humbert Ditch		5.0			
	Central Valley Ditch		450.2			
	Wood Ditch		15.0			
					470.2	
1901	Hickey Ditch		32.1			
					32.1	
1908	Hickey Ditch	20.4				
	Cottonwood Ditch		50.1			
				20.4	50.1	3,592.5
1912	Watson Ditch & Pumps	14.7	12.0			
				14.7	12.0	3,607.2
1913	Haskell Spring (Clarkdale)	20.0				
	Watson Ditch & Pumps	12.7				
	Central Valley Ditch	255.9	42.5			
				288.6	42.5	3,895.8
1914	Sycamore Creek (Packard)		14.0			
	Hickey Ditch	5.0				
	Cottonwood Ditch	2.8	27.6			
	Pete's Ditch	77.2				
	Watson Ditch & Pumps	26.3				
	O. K. Ditch	15.0	22.7			
	Wood Ditch	56.8				
				183.1	64.3	4,078.9
1925	Allen, or Tunnel Ditch	5.0				
	Central Valley Ditch	1.0				
				6.0		4,084.9
1934	Putnam Pump	8.0				
				8.0		4,092.9
1937	Pete's Ditch	6.0				
				6.0		4,098.9

4,098.9 1,083.5 4,098.9 1,083.5

Note: Lands listed in red have been abandoned.

OAK CREEK

UPPER OAK CREEK CANYON

Includes the following small tracts and ditches, strung out along 20 miles below the head of the canyon.

State Fish Hatchery	Owenby (Shuerman No. 1) Ditch
Babbitt	Shuerman No. 2 Ditch
Simpson	Amijo Ditch (Now Blackmore No. 1)
Mahew	Blackmore No. 2 Ditch
Thomas	E. L. Hart Ditch
Allen & Howard	C. V. Drake
Penley	Russell
A. G. Boutwell	Kinsey
T. Boutwell	Norville
G. Baes	Vintage
E. Burtis	
Indian Gardens	
Creighton	
Huckaby	
J. Purtyman	
W. Jordan	
Geo. Jordan	
Sedona (Van Derou & Stommer)	
E. M. Hart (Brewer)	
Fred Hart	
R. Thomas	
John Babbitt	
Chavez Ditch	
Dumas Ditch	

OAK CREEK

LOWER OAK CREEK

Downing, or Moore Ditch

Willard Springs

Page Ditch No. 1

Turner Ditch

Page Ditch No. 2

Loy Ditch

Oak Creek, or Jackson Ditch

Spring Creek

Spring Creeks, - Jack Ditch

Sheephead Spring

Holden Ditch

Sayers & Pelcher Ditch

Fain, Chick & Hayden Ditch

Hart Ditch

Rogers - Pump

Morris Pump

Williams Pump

Smith & Aims Pump



Looking West across Verde River One Mile North of Clarkdale showing Verde Limestone Outcrop. July 27, 1940.



Looking up Oak Creek from Highway, at Sedona. Oak Creek at right. Orchards in center. June 4, 1940.

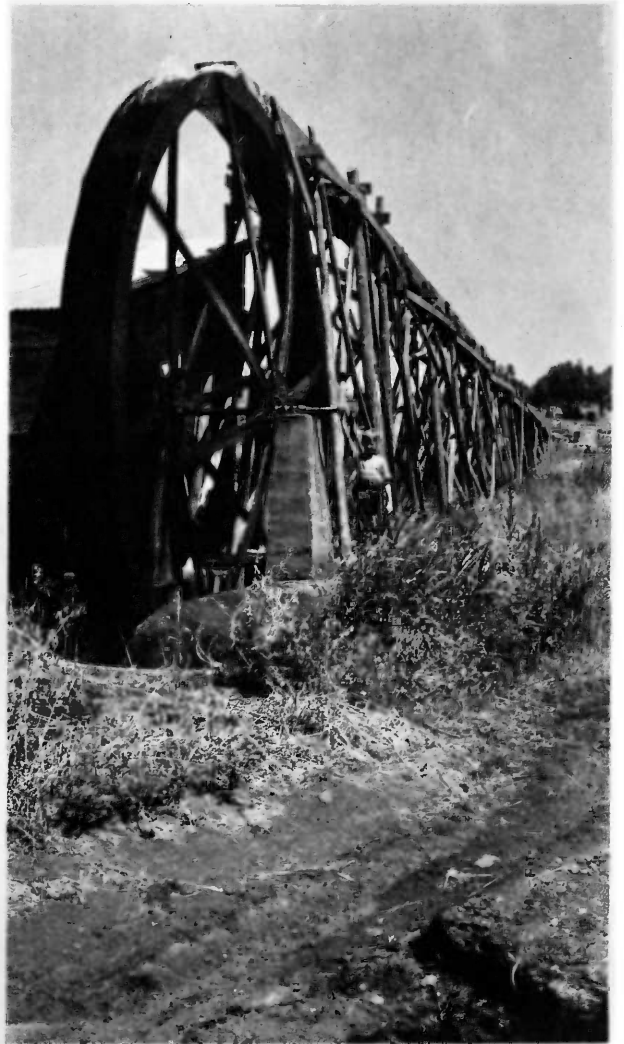


New U.S.G.S. Gaging Station at Highway Bridge, Oak Creek, July 26, 1940.

BELOW:

George Jordan's 24-inch Pipe Line,
serving his farm on Oak Creek,
showing penstock operating turbine
at right. Highway at left.

June 4, 1940.



ABOVE:

George Jordan's 20-ft. Overshot
Water Wheel operating triplex pump
(at left of wheel) to lift water from
one ditch to a high-line, on his farm
on Oak Creek.

June 4, 1940.

OAK CREEK

The irrigated lands along Oak Creek are in Coconino National Forest and divide themselves into two natural groups. One consists of a succession of comparatively small tracts strung out for over 20 miles along the upper canyon, many being only a few acres, but aggregating 565 acres in all. This is one of the State's outstanding recreational areas and the holdings contain many private and commercial resorts, as well as camping grounds built, maintained and supervised by the Forest Service.

The lower division consists of 1180 acres of land in fairly large compact bodies extending for about 4 miles north and one mile south of Cornville. A considerable part of the flow of the stream originates in this section from springs, of which Page Springs are by far the largest.

The use of water on some of these lands dates back to the early seventies.

List of lands in these two groups, with dates of priority in use of water, follow.

Coconino County

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R. (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	* Book	Page
T.19N., R.6E.											
15		SE-SE	3	Oak Cr.	Springs	1894	H.L.H.	Now State Fish Hatchery.			
27		SE 1/4	8	Oak Cr.	Babbitt	1908	U.S.G.S.	No filing			
34		NE 1/4	3	"	Simpson	1914	Forest Rgr.	"	"		
		N 1/2, SE 1/4	4	"	Mahew	1914	"	"	"		
		S 1/2, SE 1/4	6	"	Thomas	1884	"	"	"		
		S 1/2, SE 1/4	24	"	"	1884	"	"	"		
T.18N., R.6E.											
4		NW-NW	2	Oak Cr.	Thomas	1884	H.L.H.	"	"		
8		NW-NE	2	" "	Howard	1897	H.L.H.	"	"		
		NW-NE	8	" "	"	1914	"	"	"		
		SW-NE	4	" "	"	1910	"	"	"		
		NE-SW	6	" "	"	1910	"	"	"		
		<u>20</u>	Areas by year of appropriation								
		(2				1897)			
		(10				1910)			
		(8				1914)			
		<u>(20</u>)			
17		NE-SE	6	" "	Pendley	1914	H.L.H.	No filing			
		NE-SE	9	" "	"	1925	Forest Rgr.	"	"		
		SE-SE	6	" "	"	1914	H.L.H.	"	"		
		SE-SE	9	" "	"	1925	T.A.H.& Forest Rgr.	"	"		
		<u>30</u>	Areas by year of appropriation								
		(12				1914)			
		(18				1925)			
		<u>(30</u>)			
21		NE-NW	2	Oak Cr.	Boutwell	1925	Forest Rgr.	No filing			
		NE-SE	1	" "	Boutwell	1925	"	"	"		
		NW-SE	5	" "	G.Baes	1925	"	"	"		
		SE-SE	2	" "	E.Burtis	1925	"	"	"		
		<u>10</u>									

Coconino County

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	Book	Page	
		T.18N., R.6E., Cont'd.										
		<u>INDIAN GARDENS DITCH</u>										
27	NW-SW	2	Oak Cr.	Indian Gardens (Tompson)	1914	H.L.H. & Forest Rgr.	No filing					
	SW-SW	3	" "	" "	1875	" "	" "	" "				
	SE-SW	3	" "	" "	1914	" "	" "	" "				
	SE-SW	2	" "	" "	1875	" "	" "	" "				
34	NE-NW	5	" "	" "	1875	" "	" "	" "				
	SE-NW	5	" "	" "	1875	" "	" "	" "				
	NW-SW	8	" "	" "	1875	" "	" "	" "				
		<u>28</u>										
				Areas by year of appropriation								
		(23		1875)								
		(5		1914)								
		<u>(28</u>										
		T.17N., R.6E.										
4	NW-NE	1	Oak Cr.	Dr.C.C. Greighton	1925	Forest Rgr.	" "	" "				
	NW-SW	2	" "	Jas. Huckaby	1925	" "	" "	" "				
5	SW-SE	2	"	" Purtyman	1925	"	"	"	"			
	SE-SW									1	" "	" "
		<u>3</u>										
6	SE-SE	20	" "	W. Jordan	1925	Forest Rgr.	" "	" "				
		<u>GEORGE JORDAN DITCH</u>										
8	NE-NW	3	" "	Geo. Jordan	1909	H.L.H.	" "	" "				
	NW-NW	2	" "	" "	1909	" "	" "	" "				
	NW-NW	5	" "	" "	1925	T.A.H.	" "	" "				
	SW-NW	13	" "	" "	1909	H.L.H.	" "	" "				
	SE-NW	7	" "	" "	1909	" "	" "	" "				
		<u>30</u>										
				Areas by year of appropriation								
		(25		1909)								
		(5		1925)								
		<u>(30</u>										

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
<u>T. 17N., R. 6E. (Cont'd.)</u>										
<u>SEDONA (Van Derent & Stemmer) DITCH</u>										
					Bedona,					
7	SE-SE	12	Oak Cr.	Van Derent & Stemmer	1914	H.L.H. & Forest Rgr.	No filing			
18	NE-NE	12	" "	" "	1894	H.L.H.	" "			
	NW-NE	8	" "	" "	1894	" "	" "			
		<u>52</u>								
			Areas by year of appropriation							
		(20			1894)			
		(12			1914)			
		(52)			
<u>E. M. HART (Now Brewer) DITCH</u>										
18	SW-NE	5	Oak Cr.	Brewer formerly E.M. Hart	1908	H.L.H.	" "			
	NW-SE	10	" "	" "	1908	" "	" "			
		<u>15</u>								
<u>FRED HART DITCH</u>										
18	SE-NE	6	" "	Fred Hart	1925	T.A.H. & Forest Rgr.	" "			
	NE-NE	6	" "	" "	1925	" "	" "			
		<u>12</u>								
<u>RALPH THOMAS DITCH</u>										
19	NE-NW	10	" "	Ralph Thomas	1925	" "	" "			

Yavapai County

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>T.17N., R.5E.</u>											
24		SE-NE	1	Oak Cr.	John Babbitt	1925	T.A.H.& Forest Rgr.	No filing			
<u>CHAVEZ DITCH</u>											
24		SE-SW	3	" "	Chavez	1890	H.L.H.	" "			
		SW-SW	5	" "	"	1890	"	" "			
25		NW-NW	4	" "	"	1890	"	" "			
26		NE-NE	3	" "	"	1890	"	" "			
			<u>15</u>								
<u>DUMAS DITCH</u>											
26		SW-NE	10	" "	"	1880	H.L.H.	" "			
		NE-SE	2	" "	"	1880	"	" "			
		NW-SE	4	" "	"	1880	"	" "			
		SE-NW	4	" "	"	1880	"	" "			
		SW-NW	5	" "	"	1880	"	" "			
			<u>25</u>								
<u>OWENBY (Shuerman No. 1) DITCH</u>											
26		NW-SW	4	" "	Shuerman No.1	1880	O.A.T.& H.L.H.	H. Shuerman	1889	2 79	
27		NE-SE	15	" "	"	1880	"	" "	" "	" "	
		NW-SE	15	" "	"	1880	"	" "	" "	" "	
		SW-SE	25	" "	"	1880	"	" "	" "	" "	
		SW-SE	5	" "	"	1903	H.L.H.	" "	" "	" "	
		NE-SW	5	" "	"	1903	O.A.T.& H.L.H.	" "	" "	" "	
		NE-SW	5	" "	"	1880	"	" "	" "	" "	
		SE-SW	10	" "	"	1880	"	" "	" "	" "	
		SE-SW	16	" "	"	1903	"	" "	" "	" "	
34		NE-NW	6	" "	"	1880	"	" "	" "	" "	
		NW-NE	8	" "	"	1880	"	" "	" "	" "	
		NW-SW	15	" "	"	1880	"	" "	" "	" "	
			<u>129</u>								
Areas by year of appropriation											
			103	-	-	1880)				
			26	-	-	1903)				
			<u>129</u>)				

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>SHUERMAN DITCH NO. 2</u>											
T. 17N., R. 5E.											
26		NW-SW	10	Oak Cr.	No. 2	1880	O.A.T. & H.L.H.	H. Shuerman	1889	2	79
27		SE-SE	18	"	"	1880	"	"	"	"	"
34		NE-NE	6	"	"	1880	"	"	"	"	"
			34								
<u>ARMIJO DITCH (Now Blackmore No. 1) - S. Side Oak Cr.</u>											
33		NE-NE	7	"	Armiijo	1896	O.A.T.	Juan Armiijo	1900	3	499
		NW-NE	15	"	"	1896	"	"	"	"	"
		SW-NE	5	"	"	1896	"	"	"	"	"
		SE-NW	8	"	"	1896	"	"	"	"	"
			35								
<u>BLACKMORE NO. 2 DITCH (N. Side Oak Cr.)</u>											
33		SW-NW	10	"	Blackmore No. 2	1925	Forest Rgr.	No filing.			
		NW-SW	3	"	"	1925	"	"			
			13								
<u>L. E. HART DITCH</u>											
					L.E.						
32		NW-SE	10	"	Hart	1900	O.A.T.	"			
		SW-SE	10	"	"	1906	H.L.H.	"			
			20								
<u>C. V. DRAKE</u>											
T. 16N., R. 4E.											
12		NE-NE	6	"	Drake	1914	H.L.H.	"			
<u>RUSSELL</u>											
12		NE-NW	10	"	Russell	1914	"	"			
<u>KINSEY</u>											
							C.L.O. Plat				
11		SW-SW	10	"	Kinsey	1877	Latimer & H.L.H.	No filing			
<u>NORVILLE</u>											
							T.A.H. &				
11		SW-SW	4	"	Norville	1925	Forest Rgr.	"			
<u>VINTAGE</u>											
13		SW-NW	8	"	"Vintage	1916	Filing	Jessie E. Duncan	1916	7	209

OAK CREEK, UPPER
Summary of Areas Irrigated, by
Years of Appropriation

Year	Ditches, Ranches, etc.	Area - Acres		Totals	
1875	Indian Gardens	23.0		23.0	23.0
1877	Kinsey	10.0		10.0	33.0
1880	Dumas Ditch Shuerman No. 1 (Owenby) Shuerman No. 2	25.0 103.0 54.0		182.0	195.0
1884	Thomas	8.0	24.0	8.0	203.0
1890	Chavez Ditch	15.0		15.0	218.0
1893	Farley	4.0		4.0	222.0
1894	State Fish Hatchery Sedona	20.0	3.0	20.0	242.0
1896	Amajo Ditch	35.0		35.0	277.0
1897	Allen & Howard Ditch	2.0		2.0	279.0
1900	L. E. Hart Ditch	10.0		10.0	289.0
1908	Babbitt Brewer (E. M. Hart) Shuerman No. 1 (Owenby) L. E. Hart Ditch	8.0 15.0 26.0 10.0		59.0	348.0
1909	Geo. Jordan	25.0		25.0	373.0
1910	Allen & Howard Ditch Steele	10.0 15.0		25.0	398.0

OAK CREEK, UPPER(Cont'd.)

Year	Ditches, Ranches, etc.	Area - Acres			Totals
1914	Simpson	3.0			
	Mahew	4.0			
	Allen & Howard	3.0			
	Pendley	12.0			
	Indian Gardens	5.0			
	Sedona	12.0			
	G. V. Drake	6.0			
	Russell	10.0			
			60.0		458.0
1916	Vintage	8.0			
				8.0	466.0
1925	Pendley	18.0			
	A. G. Boutwell	2.0			
	T. Boutwell	1.0			
	G. Baes	5.0			
	E. Burtis	2.0			
	Dr. C. C. Creighton	1.0			
	Jas. Huckaby	2.0			
	J. Purtyman	3.0			
	W. Jordan	20.0			
	Geo. Jordan	5.0			
	Fred Hart	12.0			
	Ralph Thomas	10.0			
	John Babbitt	1.0			
	Blackmore No. 2 Ditch	15.0			
Norville	4.0				
			99.0		565.0

Totals 565.0 27.0 565.0 27.0

Note: Lands listed in red have been abandoned.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS				
						First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
<u>T. 16N., R. 4E.</u>										
<u>DOWNING, or MOORE DITCH</u>										
14	SE-SW	2	Oak Cr.	Downing Moore	1898	Latimer filing	} A.J. Downing Claims use since A. H. Moore	1901	5	41
								1898		
	SW-SW	1	" "	" "	1898	"	" "	"	"	"
25	SW-NE	10	" "	" "	1898	"	" "	"	"	"
	SW-NE	3	" "	" "	1908	"	" "	"	"	"
	NW-SE	6	" "	" "	1908	"	" "	"	"	"
		<u>22</u>								
		(Areas by year of appropriation)								
		(13			1898)				
		(9			1908)				
		<u>(22</u>)				
<u>WILLARD SPRINGS</u>										
14	SW-SW	5	" "	Willard Springs	1877	G.L.O. Plat	No filing			
23	NW-NW	4	" "	" "	1877	" "	" "	" "	" "	" "
23	NW-NW	4	" "	" "	1877	" "	" "	" "	" "	" "
		<u>9</u>								
		<u>4</u>								
<u>PAGE DITCH NO. 1 (W. Side Oak Cr.)</u>										
23	SE-NW	6	" "	"Page No. 1	1911	H.L.H.	Ditch built 1878			
	NE-SW	8	" "	" "	1878	"	" "	" "	" "	" "
	NW-SE	15	" "	" "	1878	"	" "	" "	" "	" "
	SW-SE	25	" "	" "	1878	"	" "	" "	" "	" "
26	NW-NE	12	" "	" "	1878	"	" "	" "	" "	" "
	NE-NW	15	" "	" "	1893	"	" "	" "	" "	" "
		<u>81</u>								
		(Areas by year of appropriation)								
		(60			1878)				
		(15			1893)				
		(6			1911)				
		<u>(81</u>)				

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>TURNER DITCH (Formerly Capple)</u>											
T.16N., R.4E.											
23		SE-SE	4	Oak Cr.	Turner or Capple	1877	G.L.C. & H.L.H.	L. M. Turner	1897	3	205
<u>PAGE DITCH NO.2</u>											
26		NE-NE	16	"	" Page #2	1876	G.L.C. Plat)	Jas. Page & Latimer) J.W. Muse H.L.H. &) Jas. Page et al O.A.T. Also) filing) Claims back to	1887	3	229
		NW-NE	12	"	"	1878	Latimer et al	"	"	"	"
		SW-NE	20	"	"	1878	"	"	"	"	"
		SE-NE	30	"	"	1878	"	"	"	"	"
		SE-NW	5	"	"	1878	"	"	"	"	"
		SE-SE	15	"	"	1878	"	"	"	"	"
25		SW-NW	10	"	"	1878	"	"	"	"	"
		NW-SW	20	"	"	1878	"	"	"	"	"
		SW-SW	5	"	"	1878	"	"	"	"	"
			<u>133</u>								
			(Areas by year of appropriation)								
			(16			1876)				
			(117			1878)				
			(<u>133</u>)				
<u>LOY DITCH</u>											
26		NW-SE	6	"	Loy	1904	H.L.H.	No filing			
		NW-SE	4	"	"	1913	"	"			
		NE-SE	6	"	"	1904	"	"			
		NE-SE	4	"	"	1913	"	"			
35		NW-NE	20	"	"	1912	"	"			
			<u>40</u>								
			(Areas by year of appropriation)								
			(12			1904)				
			(20			1912)				
			(8			1913)				
			(<u>40</u>)				

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R. (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
OAK CREEK, or JACKSON DITCH - Also at times referred to as Dickenson, Hurst or Page)											
T. 16N., R. 4E.											
26		SE-SE	10	Oak Cr.	Oak Cr.	1894	G.L.C. Plat J.D. Tipton) OR Latimer, (relates back) Jackson O.A.T.&H.L.H. to Jackson ditch)) & filings. Van Deren et al	1876	1-P	343)	
		SW-SE	20	" "	" "	1894	" "	" "	" "	" "	
35		NE-NE	10	" "	" "	1894	Latimer, O.A.T. & H.L.H. & filings.	" "	" "	" "	
		NE-NE	12	" "	" "	1908	" "	" "	" "	" "	
		NW-NE	7	" "	" "	1894	" "	" "	" "	" "	
		NW-NE	8	" "	" "	1908	" "	" "	" "	" "	
34		NE-NE	10	" "	" "	1894	" "	" "	" "	" "	
		SW-NE	25	" "	" "	1894	" "	" "	" "	" "	
		SE-NE	30	" "	" "	1894	" "	" "	" "	" "	
		NE-NW	8	" "	" "	1908	" "	" "	" "	" "	
		SE-NW	35	" "	" "	1876	" "	" "	" "	" "	
		NE-SW	15	" "	" "	1876	" "	(Part old Dumas Place - 1876)	" "	" "	
		NE-SE	15	" "	" "	1894	Latimer Tipton et al & H.L.H. Van Deren et al	1876	1-P	343	
								1890	3	453	
		NW-SE	30	" "	" "	1894	" "	" "	" "	" "	
		NW-SE	10	" "	" "	1912	" "	" "	" "	" "	
		SW-SE	10	" "	" "	1894	" "	" "	" "	" "	
		SW-SE	20	" "	" "	1912	" "	" "	" "	" "	
		SE-SE	35	" "	" "	1894	" "	" "	" "	" "	
T. 16N., R. 4E.											
5		NE-NE	25	" "	" "	1894	" "	" "	" "	" "	
		SE-NE	10	" "	" "	1894	" "	" "	" "	" "	
		NE-SE	35	" "	" "	1894	" "	" "	" "	" "	
		SE-SE	10	" "	" "	1894	" "	" "	" "	" "	
		SW-SE	7	" "	" "	1914	T.A.H. Frank & Hden chauer	1914	6	633	
		NW-SE	13	" "	" "	1925	" "	1930	8	90	
			410								
		{ Areas according to year of appropriation)									
			50			1876					
			282			1894					
			28			1908					
			30			1912					
			7			1914					
			13			1924					
			410								

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
<u>SPRING CREEK</u>										
<u>T. 16N., R. 4E.</u>										
22		NW-NW	8	Spring Creek	Springs	1891	G.L.O. Plat H.L.H.	No filing		
		SW-NW	4	"	"	1908	H.L.H.	" "		
27		NE-NW	8	"	Henderson	1912	H.L.H.	No filing		
		SE-NW	3	"	"	1912	"	" "		
			<u>11</u>							
<u>SPRING CREEK - JACK DITCH</u>										
34		NW-NE	18	"	Jack	1876	G.L.O. Plat (Part old Dumas place) & H.L.H.	No filing		
		NE-NW	8	"	"	1876	"	" " " "		
		NW-SW	6	"	"	1898	H.L.H.	No filing		
		SW-SW	9	"	"	1898	"	" "		
		SE-SW	35	"	"	1898	"	" "		
			<u>76</u>							
			Areas by Year of appropriation							
		(	26			1876)			
		(	50			1898)			
		(	76)			
<u>SHEEPSHEAD SPRING</u>										
<u>T. 16N., R. 4E.</u>										
34		NW-SW	10	Oak Cr.	Sheeps-head Spring	1898	Latimer & H.L.H.	No filing		
<u>HOLDEN DITCH</u>										
<u>T. 16N., R. 4E.</u>										
3		NW-NE	5	Oak Cr.	Holden	1913	Latimer & H.L.H.	No filing		
		NE-NW	5	"	"	1913	"	" "		
<u>T. 16N., R. 4E.</u>										
34		SW-SW	23	"	"	1897	"	" "		
33		SE-SE	7	"	"	1897	"	" "		
			<u>40</u>							
			Areas by Year of appropriation							
		(	50			1897)			
		(	10			1913)			
		(	40)			

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>SAYERS & PEICHER DITCH</u>											
<u>T. 15N., R. 4E.</u>											
3		NW-NW	25	Oak Cr.	Sayers	1877	Latimer & H.L.H.	No filing			
4		NE-NE	25	" "	"	1877	"	" "			
			50								
<u>FAIN, CHICK, HAYDEN DITCH</u>											
<u>T. 15N., R. 4E.</u>											
								G.W.Hull & Co.	1878	1-P	355
								Mr. Fain & J.W.Muse	1895	3	2
								(Chick, Fain, et al)	1904	5	216
								(Claims back to 1876)			
4		SE-NE	8	Oak Cr.	Fain	1876	G.L.O. Plat	"	"	"	"
		NE-SE	9	" "	"	1876	" "	"	"	"	"
3		NW-SW	8	" "	"	1876	" "	"	"	"	"
		SW-SW	20	" "	"	1876	" "	"	"	"	"
		SW-SW	15	" "	"	1913	H.L.H.	"	"	"	"
10		NE-NW	5	" "	"	1914	O.A.T.& H.L.H.	"	"	"	"
		NW-NW	5	" "	"	1914	"	"	"	"	"
		NW-NW	15	" "	"	1876	G.L.O. Plat	"	"	"	"
							O.A.T.& H.L.H.				
		SW-NW	20	" "	"	1876	"	"	"	"	"
		SE-NW	8	" "	"	1876	"	"	"	"	"
		NE-SW	25	" "	"	1876	"	"	"	"	"
		NW-SW	15	" "	"	1876	"	"	"	"	"
		SW-SW	30	" "	"	1876	"	"	"	"	"
		SE-SW	10	" "	"	1876	"	"	"	"	"
15		NW-NW	5	" "	"	1876	G.L.O.	"	"	"	"
			190								
			5								
Areas by year of appropriation											
			(163			1876)				
			(15			1913)				
			(10			1914)				
			(190)				
			(5			1876)				

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>HART DITCH</u>											
<u>T.15N., R.4E.</u>											
15		NE-NW	20	Oak Cr.	Hart	1897	H.L.H.	(David F. Hart) (David E. Hart) (States ditch built	1900 1898-99	3	487
		NW-NW	10	" "	"	1897	"	" "	" "	"	"
		NW-NE	6	" "	"	1929	J. Warlopp	State Cert. of W.R.	1932		
			56								
Areas by year of appropriation.											
			30			1897					
			6			1929					
			56								
10		NE-SE	5	Oak Cr.	Pump	1925	T.A.H.	Rogers - No filing			
15		SW-NE	5	"	"	1925	T.A.H.	Jas. T. Morris E. H. Rogers	1915 1915	7 7	90 152
<u>F. F. WILLIAMSON PUMP</u>											
(		NE-SE	5	"	"	1935	F.F.Williams	E. H. Rogers	1915	7	152
(		SE-SE	25	"	"	1935	"	"	"	"	"
(	14	SW-SW	10	"	"	1935	"	"	"	"	"
(			40								
22		NW-NW	15	"	"	1925	F.F.Williams	John Smith & Atwood Aims	1900	3	495

OAK CREEK, LOWER
Summary of Areas Irrigated by
Year of Appropriation

Year	Ditches, Ranches, etc.	Area - Acres		Totals	
1876	Page Ditch No. 2	16.0			
	Oak Creek (Jackson) Ditch	50.0			
	Spring Creek (Jack Ditch)	26.0			
	Fain, Chick & Hayden Ditch	165.0	5.0		
				257.0	5.0
					257.0
1877	Willard Springs	9.0	4.0		
	Turner (Capple)	4.0			
	Sayers & Pelcher Ditch	50.0			
				63.0	4.0
					320.0
1878	Page Ditch No. 1	60.0			
	Page Ditch No. 2	117.0			
				177.0	
					497.0
1891	Spring Creek	3.0			
				8.0	
					505.0
1893	Page Ditch No. 1	15.0			
				15.0	
					520.0
1894	Oak Creek (Jackson) Ditch	232.0			
				232.0	
					802.0
1897	Holden Ditch	30.0			
	Hart Ditch	30.0			
				60.0	
					862.0
1898	Downing (Moore) Ditch	15.0			
	Spring Creek (Jack Ditch)	50.0			
	Sheephead Spring	10.0			
				75.0	
					935.0
1904	Loy Ditch	12.0			
				12.0	
					947.0
1908	Downing (Moore) Ditch	9.0			
	Oak Creek (Jackson) Ditch	28.0			
	Spring Creek	4.0			
				41.0	
					988.0
1911	Page Ditch No. 1	6.0			
				6.0	
					994.0

OAK CREEK, UPPER (Cont'd.)

Year	Ditches, Ranches, etc.	Area - Acres			Totals
1912	Loy Ditch	20.0			
	Oak Creek (Jackson) Ditch	30.0			
	Spring Creek (Henderson Ditch)	11.0			
				61.0	1,055.0
1913	Loy Ditch	8.0			
	Holden Ditch	10.0			
	Fain, Chick & Hayden Ditch	15.0			
				33.0	1,088.0
1914	Oak Creek (Jackson) Ditch	7.0			
	Fain, Chick & Hayden Ditch	10.0			
				17.0	1,105.0
1925	Oak Creek (Jackson) Ditch	13.0			
	Rogers Pump	5.0			
	Morris & Rogers Pump	5.0			
	F.F. Williams (Smith & Aims)	15.0			
				38.0	1,143.0
1929	Hart Ditch (Warlopp)	6.0			
				6.0	1,149.0
1935	F. F. Williams (Rogers)	40.0			
				40.0	1,189.0

Totals

1,189.0

9.0

1,189.0

9.0

Note: Lands listed in red have been abandoned.

BEAVER CREEK

Casner Ditch & Springs (Beaver Creek Guest Ranch)

Skaggs Ditch (Beaver Creek Ranger Station)

Landers

Hollingshead Ditch (Bruce Brockett)

Hutchinson

Clift Ditch

Walker Creek (Landers)

Finney (Soda Springs Guest Ranch)

"Old Drum" (Taylor) Ditch

Montezuma Well & Back Ditch

Schroeder Ditch

J. C. Maxwell Ditch (Bruce Brockett)

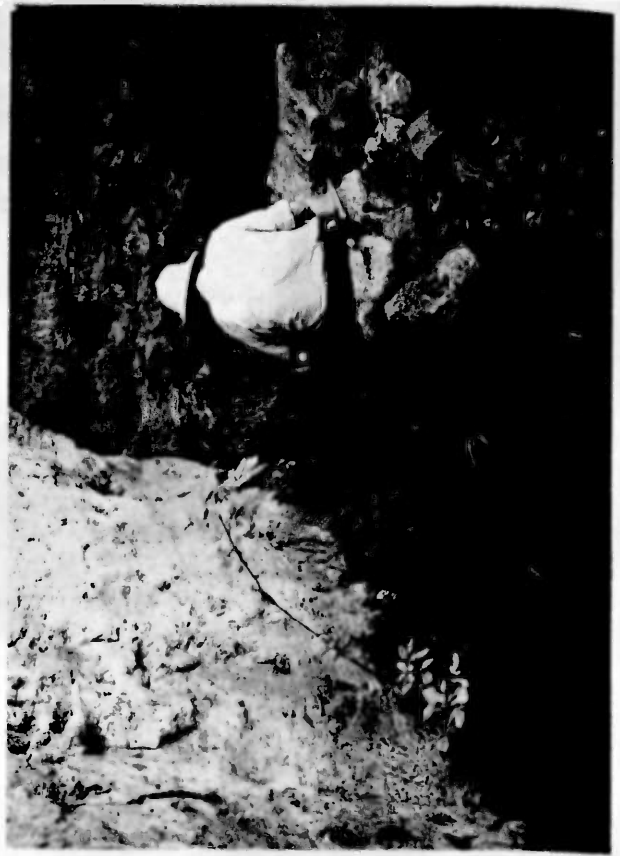
Leonard Maxwell Ditch (Langdon)



Montezuma Well - July 26, 1940



Page Spring - on Beaver Creek, July 26, 1940



Outlet - Montezuma Well - July 26, 1940.

BEAVER CREEK

Sheet 1 of 7

The water rights of lands along Beaver Creek have been the subject of two suits in the Yavapai County District Court.

These are:

No. 3583 Mahan vs. Schroeder, et al
and
No. 5669 Langdon vs. Reid.

In Case 3583 Judge R. E. Sloan, in a decree dated December 24, 1903, made certain findings and orders fixing relative priorities of certain lands with respect to each other.

Later, in a subsequent Decree dated May 29, 1906, Judge Sloan definitely adjudicated the rights of specified areas according to year of appropriation. These rights are set forth in connection with the respective tracts hereinafter listed.

Provision was also made for a water commissioner to be appointed by the Court. The last order appointing such a commissioner was May 6, 1937.

In Case 5669, the respective priorities of plaintiff and defendants are determined and the year 1871 is fixed applying to plaintiff Langdon's land in Sections 4 and 9.

Defendants land in Section 10 is adjudged subsequent in right. Decree September 9, 1912.

The rights to water have been the subject of a number of filings. The lands are listed, with dates of water rights, filings, etc., below:-

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS								
						First Cultiv.		Recorded Filings						
						Year	Source of data	Name of Locator	Year	* Book	Page			
T.15N., R.6E.														
CASNER DITCH & SPRINGS ("Beaver Cr. Guest Ranch")														
22		NE-SE	3	Beaver Creek	Casner	1884	Case 3583	(Beaver Creek Ranch 1928 (State Cert. of W.R. (No. 384, 400 M.I. Decree 21 Ac. to Riley Casner.	8	92)			
		NE-SE	3	"	"	1883	"							
		NW-SE	5	"	"	1884	"							
		NE-SW	10	"	"	1884	"							
			21	Areas by priority of appropriation										
			3	1883										
			18	1884										
			21											
SKAGGS DITCH (Beaver Cr. Ranger Sta.)														
22		NW-SE	1	Beaver Creek	Skaggs	1906	H.L.H.	Decree 15 Ac. to John Skaggs.						
		NE-SW	4	"	"	1906	"							
		NW-SW	1	"	"	1901	"							
		SW-SW	4	"	"	1901	"							
21		SE-SE	15	"	"	1889	Case 3583							
		" "	5	"	"	1901	H.L.H.							
28		NE-NE	2	"	"	1901	H.L.H.							
			32	Areas by priority of appropriation										
			15	1889										
			12	1901										
			5	1906										
			32											
LANDERS														
22		SW-SW	1	Beaver Creek	Landers	1901	Latimer	No filing						
27		NW-NW	2	"	"	1901	"	" "						
28		NE-NE	4	"	"	1901	"	" "						
			7											

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R. _____
 (*Millsite & Water-right Records, Yavapai Co., "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	* Book	Page
T.15N. R.6E.										
HOLLINGSHEAD DITCH (Now Bruce Brockett)										
28		SW-NE	4	Beaver Creek	Hollings-head	1898	Case 3583	Nelson Hollingshead Decreed 10 Ac. 1898 land.		
		NW-SE	2	"	"	1898	"			
		NE-SW	3	"	"	1898	"			
		SE-SW	1	"	"	1898	"			
			<u>10</u>							
HUTCHINSON										
28		SE-SW	4	Beaver Creek	Hutchin-son	1897	Case 3583	N. Hutchinson Decreed 8 Ac.		
33		NE-NW	4	"	"	1897	"	" "		
			<u>8</u>							
CLIFT DITCH										
28		SE-SW	2	Beaver Creek	Clift	1901	Latimer	C. T. Hawkins		
		SW-SW	4	"	"	1901	"	" "		
33		NW-NW	1	"	"	1901	"	" "		
			<u>7</u>							
32		NE-NE	8	"	"	1880	Case 3583	Elizabeth Clift Decreed 15 Ac.		
		NW-NE	7	"	"	1880	"	" "		
			<u>15</u>							
			<u>22</u>							
			Areas by year of appropriation							
			{ 15			1880				
			{ 7			1901				
			{ <u>22</u>							
WALKER CREEK										
Lorenzo Landers										
34		W 1/2-SW	10	Walker Creek	Lorenzo Landers	1894	H.L.H.	Lorenzo D. Landers 1911 6 339		
33		E 1/2-SE	10	"	"	1894	"	" " " " " "		
			<u>20</u>							

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (*Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	*	Book	Page
T.15N., R.6E.											
FINNEY - (Soda Springs Guest Ranch)											
32	SW-NE	2	Beaver Creek	Finney	1879	Case 3583	Robert Finney	1879			
	NW-SE	10	"	"	1879	"	" " "	"			
	" "	5	"	"	1906	H.L.H. Case					
	NE-SW	10	"	"	1879	3583	R. Finney	1879			
	NW-SW	8	"	"	1879	"	Decreed 30 Ac.	"			
	NW-SW	2	"	"	1906	H.L.H.	" " "	"			
		37	Areas by year of appropriation.								
		30	1879								
		7	1906								
		37									
32	NW-SW	2	Beaver Creek	Private	1901	Latimer	No Record.				
	SW-NW	6	"	"	1901	"	" "				
31	SE-NE	2	"	"	1901	"	" "				
		10									
"OLD DRUM" (Taylor) DITCH											
31	NW-SE	6	Beaver Creek	Old Drum	1890	Case 3583	J. T. Bristow	1890	5	2	
	SW-SE	7	"	"	1890	"	B.F. Taylor, decreed 14 Ac.	1890			
	SE-SW	1	"	"	1890	"	" " "	"			
		14									
MONTEZUMA WELL & BACK DITCH (Old Wales Arnold & Wm. Back places)											
31	NE-SW	2	Beaver Creek	Back	1870	Case 3583	(See filings below)				
	NW-SW	17	"	"	1870	"	Wm. Back decreed 101 Ac.	1870			
T.15N., R.5E.											
36	NE-SE	23	"	"	1870	"	" " "	"			
	NW-SE	23	"	"	1870	"	" " "	"			
	NE-SW	13	"	"	1870	"	" " "	"			
	SE-SW	13	"	"	1870	"	" " "	"			
	SW-SW	10	"	"	1870	"	" " "	"			
		101									

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings				
						Year	Source of data	Name of Locator	Year	Book	Page	
				Montezuma Well				Wm. Back	1890	2	132	
				Montezuma Well & Beaver Creek				Wales Arnold	1900	5	3	
								Claims 200 M.I. from Montezuma Well.				
								Claims 300 M.I. dating back to year	1870			
				<u>SCHROEDER DITCH</u>				No old filings of record Late filing as follows:-				
								Wm. Schroeder	1915	7	46	
								Claims 100 M.I. Additional to old rights.				
				Beaver Creek			Case 3583	Priscilla & C.F. Mahan		150	Ac. 1871	
1	NW-NW		5	"	"	1871	"	" " "		20	" 1891	
	SW-NW		25	"	"	1871	"	Wm. Schroeder		90	" 1871	
	NW-SW		25	"	"	1871	"					
	SW-SW		15	"	"	1871	"					
2	SE-NE		15	"	"	1871	"					
	NE-SE		35	"	"	1871	"					
	NW-SE		10	"	"	1871	"					
	SW-SE		20	"	"	1895	"					
	SE-SE		20	"	"	1871	"					
2	NE-SW		10	"	"	1871	"					
	SE-SW		35	"	"	1871	"					
	SW-SW		15	"	"	1871	"					
11	NW-NW		30	"	"	1871	"					
10	NE-NE		10	"	"	1891	Latimer & H.L.H.	See history - No decreed W.R.				
			270									
			Areas by year of appropriation									
			240			1871						
			10			1891						
			20			1895						
			270									

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings								
						Year	Source of data	Name of Locator	Year	Book	Page					
<p><u>J. O. MAXWELL & LEONARD MAXWELL DITCHES</u> (Bruce Brockett, 1940)</p>						<p>No filings. Ditch first recorded by O. A. Turney. Decree in Case 5669 adjudges land subsequent to rights of plaintiff which is fixed at 1871. Testimony shows old Leonard Maxwell ditch being used.</p>										
<p>T. 14N., R. 5E.</p>						10	SW-NE	23	Beaver Creek	J.O.& L. Maxwell	1891	O.A.T. & H.L.H.	See above.			
		SE-NW	15	"	"	1891	"	"	"	"	"					
			<u>38</u>													
<p><u>LEONARD MAXWELL DITCH</u></p>						4	SW-SW	20	Beaver Creek	Leonard Maxwell	1871	Case 5669 O.A.T. & H.L.H.	J.R. Landon decreed	50	Ac. - 1871	
		NW-NW	20	"	"	1871	"	"	"	"	"	"	"	"		
			<u>40</u>													

BEAVER CREEK
Summary of Areas - By Years

Year	Ditches, Ranches, etc.	Areas - Acres			Totals
1870	Montezuma Well & Back Ditch	101.0		101.0	101.0
1871	Schroeder Ditch Leonard Maxwell Ditch	240.0 40.0		280.0	581.0
1879	Finney (Or Finnie)	30.0		30.0	411.0
1880	Clift Ditch		15.0		15.0
1883	Casner Ditch	3.0		3.0	414.0
1884	Casner Ditch	18.0		18.0	432.0
1889	Skaggs Ditch (Ranger Sta.)	15.0		15.0	447.0
1890	"Old Drum" (Taylor) Ditch	14.0		14.0	461.0
1891	Schroeder Ditch J. C. Maxwell Ditch	10.0 38.0		48.0	509.0
1894	Walker Creek (Landers)	20.0		20.0	529.0
1895	Schroeder Ditch	20.0		20.0	549.0
1897	Hutchinson		8.0		8.0
1898	Hollingshead		10.0		10.0
1901	Skaggs Ditch (Ranger Station) Landers Clift Ditch Sections 31 & 32	12.0	7.0 7.0 10.0	12.0	24.0 561.0
1906	Skaggs Ditch (Ranger Sta.) Finney (or Finnie)	5.0 7.0		12.0	573.0
Totals		573.0	57.0	573.0	57.0

Note: Lands listed in red have been abandoned.

CLEAR CREEK

Jones & Thompson Ditch

Wingfield Ditch No. 1

Wingfield Ditch No. 2

Heath Ditch

Wingfield Ditch No. 3

Pioneer Ditch

Wingfield Ditch No. 4

With the exception of one ten-acre tract, all farming by use of water from Clear Creek is confined to the area within four miles of the Verde River. Some of these lands are among the oldest in the Verde Valley, including such pioneer names as Wingfield, Head, Heath, Melvin and others.

A considerable part of the land under cultivation is shown on the G.L.O. township plat as surveyed in 1873. The respective water rights of the various ranches were adjudicated by Judge R. E. Sloan under a decree dated September 7, 1900, in Case 3013, Yavapai County District Court, Wilber, et al vs. Jones, et al. The decree grants the plaintiffs first and prior rights to 475 M.I. of water from May to September inclusive and fixes the rights of the defendants to secondary rights to 189 M.I. The respective years of appropriation are not set forth in the judgment.

The area in cultivation from all Clear Creek ditches is variously given in different reports, including area served by both Eaman and Pioneer ditches, as follows:

1895 - Robinson & Woolf	-	465 Ac. (150 Ac. added under Eaman Ditch)
1899 - Stroud & Prothero	-	597 Ac. - All "Old 1873 & 1876 except 12 Ac.
1901 - O. A. Turney	-	450 Ac. - (150 Ac. added under Eaman Ditch) All but small area 1876.
1908 - Park W. Latimer	-	506 Ac.
1914 - H. L. Hancock	-	595 Ac.
1940 - T. A. Hayden	-	643 Ac.

The ditches and areas irrigated are listed and described in the pages following.

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
JONES & THOMPSON DITCH (N. Side Clear Creek)											
						1894	Stroud & Prothero	Jones & Thompson (No filings) 12 Ac. in 1899.			
							H.L.H.	gives 1898 as year ditch was built and 20 acres area.			
								Decree in Case 5013, Wilber et al vs. Jones et al gives Isaac Jones and Wm. Hutchinson a 6th right to 23 1/2 M.L. of water for 10 acres of land in Clear Creek Canyon.			
T.13N., R.6E.											
11		NW-NW	3	Clear Creek	Jones & Thompson	1894	See above				
3		SE-SE	1	"	"	1894	" "				
2		SW-SW	6	"	"	1894	" "				
		Total	10	- All		1894					
WINGFIELD DITCH NO. 1 (N. Side Clear Creek)											
						1875	H.L.H.	says built 1874-75 (No filing) by Tom Smith.			
T.13N., R.5E.											
13		NE-NW	15	Clear Creek	Wingfield No.1	1875	"	"	"	"	
		NE-NW	5	"	"	1908	H.L.H. & Latimer.	"	"	"	
		NW-NW	15	"	"	1875	H.L.H.	"	"	"	
		NW-NW	5	"	"	1908	H.L.H. & Latimer.	"	"	"	
12		SW-SW	25	"	"	1875	H.L.H.	"	"	"	
		SW-SW	8	"	"	1908	H.L.H. & Latimer	"	"	"	
		SE-SW	5	"	"	1875	H.L.H.	"	"	"	
		SE-SW	2	"	"	1908	H.L.H. & Latimer	"	"	"	
			80								
			Areas by Year of Appropriation								
			60			1875					
			20			1908					
			80								

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>WINGFIELD DITCH NO. 2</u> (S. Side Clear Creek)											
<u>T. 13N., R. 5E.</u>											
13	NE-SW		10	Clear Creek	Wingfield No. 2	1872	H.L.H.	Says ditch built 1872 by Roberts			
	NW-SE		5	"	"	1872	"	" " "	"	"	
			15		ALL	1872					
<u>HEATH DITCH</u>											
<u>T. 13N., R. 5E.</u>											
14	NE-NE		5.2	Clear Creek	Heath	1872	H.L.H.	Says ditch built 1872 by Glen			
	NW-NE		0.4	"	"	"	"	" " "	"	"	
11	SE-SE		3.5	"	"	"	"	" " "	"	"	
			12.9	"	"	"	"	" " "	"	"	
			2.7	"	"	"	"	" " "	"	"	
			15.3	"	"	"	"	" " "	"	"	
			1.8	"	"	"	"	" " "	"	"	
			41.8								
			25.0			1872					
			16.8			1914					
			41.8								
			Areas by Year of Appropriation								

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T N., R

(* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	Recorded Filings					
						First Cultiv. Year	Source of data	Name of Locator	Year	Book	Page
WINGFIELD DITCH NO. 3 (S. Side Clear Creek)											
T. 13N., R. 5E.						1871	H.L.H.	Says ditch built 1871 by John Martin			
14	SW-NW	7.6	Clear Wingfield Creek	No.3	1871	"	John Martin - See above				
15	SE-NE	20.0	"	"	1871	"	"	"	"	"	
	SE-NE	5.0	"	"	1871	"	"	"	"	"	
	SW-NE	1.7	"	"	1871	"	"	"	"	"	
	SW-NE	25.0	"	"	1871	"	"	"	"	"	
Totals		29.3									
		<u>30.0</u>									

Acres by Year of Appropriation

29.3	1871
30.0	1871

PIONEER DITCH (Called "Melvin Ditch" in Robinson & Woolf Report) (N. Side of Clear Creek)

Claimed to be the oldest in the Verde Valley. Shown on G.L.O. Township Plat surveyed in 1873 with approximately 250 acres irrigated. Various reports give year of construction and area irrigated as follows:

320	(Includes 150 Ac.) (under Eaman Ditch)	Robinson & Woolf (1895)	1867
400	(Includes area under (Eaman Ditch)	Stroud & Prothero (1889) O. A. Turney (1901)	1876 1876
375	(Including 150 Ac. under Eaman Ditch)	Park W. Latimer (1908)	--
365	(Including 150 Ac. under Eaman Ditch)	H. L. Hancock (1914)	1865 (begun)

It is a matter of historic record that the first military post in this area was established in 1865 on the east side of the Verde River at Clear Creek, for the protection of settlers who were then raising hay, vegetables, etc. there. Irrigation, therefore undoubtedly dates back at least to 1865, although it is now impossible to fix the exact areas and dates. However, any time prior to 1870 so far antedates most modern irrigation that it makes little difference, if any, which year is used, so all is here classed as 1865 land.

List of land follows, omitting 110.5 acres now mainly served by the Eaman Ditch but originally by the Pioneer.

(See Eaman Ditch for area mentioned.)

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

WATER APPROPRIATIONS

Tr No	Sec	Subdivision	Acres	Stream	Ditch	First Cultiv.		Recorded Filings		
						Year	Source of data	Name of Locator	Year	Book	Page
		T. 15N., R. 5E.		Clear Creek	Pioneer	1865	See above			
9		SE-SW	0.4	"	"	1865	"	"		
15		SE-NW	7.3	"	"	1865	"	"		
		SW-NW	23.0	"	"	1865	"	"		
16		NW-SW	2.7	"	"	1865	"	"		
		NE-NE	6.2	"	"	1865	"	"		
		NW-NE	18.8	"	"	1865	"	"		
		SW-NE	20.5	"	"	1865	"	"		
		SE-NE	22.0	"	"	1865	"	"		
		NE-NW	14.8	"	"	1865	"	"		
		SE-NW	23.4	"	"	1865	"	"		
		NE-SW	26.7	"	"	1865	"	"		
		SE-SW	2.6	"	"	1865	"	"		
		NE-SE	7.6	"	"	1865	"	"		
	NW-SE	20.0	"	"	1865	"	"			
	Total		201.5	-	-	1865				

WINGFIELD DITCH NO. 4 (South Side Clear Creek)

This land and ditch is shown on the C.L.O. township plat as surveyed in 1873. Park W. Latimer (1908) gives area as 120 acres. H. L. Hancock (1914) lists same area and says ditch was built prior to 1868, "most likely second oldest ditch in Verde Valley". The land irrigated is as follows:

		T. 15N., R. 5E.		Clear Wingfield						
21		NE-NE	20.6	Creek	No. 4	1868	See above			
		NW-NE	3.1	"	"	1868	"	"		
		SW-NE	6.1	"	"	1868	"	"		
		SE-NE	38.6	"	"	1868	"	"		
		NE-SE	1.7	"	"	1868	"	"		
22		NW-NW	6.5	"	"	1868	"	"		
		SW-NW	33.2	"	"	1868	"	"		
		NW-SW	7.2	"	"	1868	"	"		
	Total		117.0	-	-	1868				

IRRIGATED LAND - UPPER VERDE RIVER. T. A. Hayden, May-June, 1940. T. N., R.
 (* Millsite & Water-right Records, Yavapai Co. "P" denotes Promiscuous Records.)

Tr No	Sec	Subdivision	Acres	Stream	Ditch	WATER APPROPRIATIONS					
						First Cultiv.		Recorded Filings			
						Year	Source of data	Name of Locator	Year	Book	Page
<u>STRAHAN DITCH (West side Clear Creek)</u>											
		<u>T.15N., R.5E.</u>				1909	H.L.H.	David Strahan	(No filings)		
16		SE-SW	0.5	Clear Creek	Strahan	1909	See above				
21		NW-NW	19.5	"	"	1909	" "				
		Total	<u>20.0</u>	-	-	1909					
<u>STRAHAN PUMP (East Side Clear Creek)</u>											
		<u>T.15N., R.5E.</u>									
16		SE-SW	0.5	Clear Creek	Pump	1914	H.L.H.	David Strahan	(No filings)		
21		NE-NW	16.0	"	"	1914	"	" "	"	"	
		SE-NW	5.3	"	"	1914	"	" "	"	"	
		NW-NE	0.3	"	"	1914	"	" "	"	"	
		SW-NE	0.3	"	"	1914	"	" "	"	"	
		Total	<u>22.4</u>	-	-	1914					

CLEAR CREEK

Summary of Areas - By Years

Year	Ditches, Ranches, etc.	Areas - Acres				Totals
1865	Pioneer Ditch (Does not include area served also by Eaman Diamond S)Ditch	201.5				
				201.5		201.5
1868	Wingfield Ditch No. 4	117.0				
				117.0		318.5
1871	Wingfield Ditch No. 3	29.3	30.0			
				29.3	30.0	347.8
1872	Wingfield Ditch No. 2 Heath Ditch	15.0 25.0				
				40.0		387.8
1875	Wingfield Ditch No. 1	60.0				
				60.0		447.8
1894	Jones & Thompson	10.0				
				10.0		457.8
1908	Wingfield Ditch No. 1	20.0				
				20.0		477.8
1909	Strahan Ditch	20.0				
				20.0		497.8
1914	Heath Ditch Strahan Pump	16.8 22.4				
				39.2		537.0
	Total	<u>537.0</u>	<u>30.0</u>	<u>537.0</u>	<u>30.0</u>	

Note: Lands listed in red have been abandoned.

TABLE III

UPPER VERDE RIVER WATERSHED
SUMMARY OF AREAS IRRIGATED

By
YEAR OF APPROPRIATION

* * *
* *
*

UPPER VERDE RIVER WATERSHED
Summary of Areas Irrigated, by
Year of Appropriation

Year	Division or Group	Area - Acres			Totals
1864	Chino Valley - Del Rio	140.0			
	Upper Verde Canyon Perkins Ranch	75.0			
			215.0		215.0
1865	Upper Verde Valley				
	Eaman Ditch Clear Creek	110.5 201.5			
			312.0		527.0
1868	Chino Valley				
	Duke & Bianconi	35.0			
	Upper Verde Valley Wood Ditch	563.8	45.7		
	Clear Creek	117.0			
			715.8	45.7	1,242.8
1869	Upper Verde Valley				
	Cottonwood Ditch	304.7			
			304.7		1,547.5
1870	Upper Verde Valley				
	Newman Ditch Beaver Creek		25.0		
		101.0			
			101.0	25.0	1,648.5
1871	Beaver Creek	230.0			
	Clear Creek	29.3	30.0		
			309.3	30.0	1,957.8
1872	Clear Creek	40.0			
			40.0		1,997.8
1873	Upper Verde Valley				
	O. K. Ditch	472.2			
			472.2		2,470.0
1874	Upper Verde Canyon				
	Campbell Ranch	32.0			
	Upper Verde Valley Hickey Ditch	146.1			
			178.1		2,648.1
1875	Oak Creek - Upper	25.0			
	Clear Creek	60.0			
			25.0		2,731.1

Summary by Years, Cont'd.

Year	Division or Group	Area - Acres			Totals
1876	Upper Verde Valley				
	Allen Ditch		35.0		
	Haskel Spring	1.0	29.0		
	Oak Creek - Lower	257.0	5.0		
				258.0	69.0
					2,989.1
1877	Oak Creek, Upper	10.0			
	Oak Creek, Lower	63.0	4.0		
				73.0	4.0
					3,062.1
1878	Upper Verde Valley				
	Cottonwood Ditch	386.5			
	Central Verde Ditch	44.2	39.6		
	Oak Creek, Lower	177.0			
				607.7	39.6
					3,669.8
1879	Chino Valley				
	Granite Dells	1.0	39.0		
	Upper Verde Valley				
	Duff Ditch	28.0	14.0		
	Beaver Creek	30.0			
				59.0	53.0
					3,728.8
1880	Upper Verde Valley				
	Sycamore Creek		22.0		
	W. A. Jordan Ditch		35.0		
	Allen Ditch		102.0		
	Cottonwood Ditch	49.7			
	Oak Creek, Upper	162.0			
	Beaver Creek		15.0		
				211.7	174.0
					3,940.5
1881	Upper Verde Valley				
	E. L. Jordan Ditch	50.0			
				50.0	
					3,990.5
1883	Beaver Creek	3.0			
				3.0	
					3,993.5
1884	Oak Creek, Upper	8.0	24.0		
	Beaver Creek	18.0			
				26.0	24.0
					4,019.5
1889	Upper Verde Valley				
	Wood Ditch	509.6	60.0		
	Beaver Creek	15.0			
				524.6	60.0
					4,544.1
1890	Oak Creek, Upper	15.0			
	Beaver Creek	14.0			
				29.0	
					4,573.1

Summary of Years, Cont'd.

Year	Division or Group	Areas - Acres				Totals
1891	Oak Creek, Lower	8.0				
	Beaver Creek	48.0				
				56.0		4,629.1
1892	Upper Verde Valley					
	Human Ditch	210.6	5.0			
				210.6	5.0	4,839.7
1893	Upper Verde Valley					
	Sullivan Ditch	50.0				
	Eureka Ditch	417.2				
	Oak Creek, Upper	4.0				
	Oak Creek, Lower	15.0				
				486.2		5,325.9
1894	Oak Creek, Upper	20.0				
	Oak Creek, Lower	232.0	3.0			
	Beaver Creek	20.0				
	Clear Creek	10.0				
				232.0	3.0	5,657.9
1895	Beaver Creek	20.0				
				20.0		5,677.9
1896	Upper Verde Valley					
	Allen Ditch	223.0				
	Oak Creek, Upper	35.0				
				263.0		5,940.9
1897	Oak Creek, Upper	2.0				
	Oak Creek, Lower	60.0				
	Beaver Creek		8.0			
				62.0	8.0	6,002.9
1898	Chino Valley					
	Duke & Bianconi	50.0				
	Upper Verde Valley					
	Humbert Ditch		5.0			
	Central Verde Ditch		450.2			
	Wood Ditch		15.0			
	Oak Creek, Lower	73.0				
	Beaver Creek		10.0			
				123.0	480.2	6,125.9
1900	Oak Creek, Upper	10.0				
				10.0		6,135.9
1901	Upper Verde Canyon					
	Alvarez Ranch	9.0				
	Upper Verde Valley					
	Hickey Ditch		32.1			
	Beaver Creek	12.0	24.0			
				21.0	56.1	6,156.9

Summary of Years, Cont'd.

Year	Division or Group	Areas - Acres			Totals	
1904	Oak Creek, Lower	12.0				
				12.0	6,168.9	
1906	Beaver Creek	12.0				
				12.0	6,180.9	
1908	Upper Verde Valley Hickey Ditch Cottonwood Ditch	20.4	50.1			
	Oak Creek, Upper	59.0				
	Oak Creek, Lower	41.0				
	Clear Creek	20.0				
				140.4	50.1	6,521.5
1909	Oak Creek, Upper	25.0				
	Clear Creek	20.0				
				45.0		6,566.3
1910	Oak Creek, Upper	25.0				
				25.0		6,391.3
1911	Chino Valley Chino Valley Irr. Dist.	2,538.0				
	Oak Creek, Lower	6.0				
				2,544.0		8,935.3
1912	Upper Verde Valley Watson Ditch & Pumps	14.7	12.0			
	Oak Creek, Lower	61.0				
				75.7	12.0	9,011.0
1913	Chino Valley Campbell Ranch		30.0			
	Upper Verde Valley Haskell Spring (Clarkdale)	20.0				
	Watson Ditch & Pumps	12.7				
	Central Verde Ditch	255.9	42.5			
	Oak Creek, Lower	33.0				
				321.6	72.5	9,332.6
1914	Upper Verde Canyon Arnon Ranch	4.0				
	Upper Verde Valley Sycamore Creek		14.0			
	Hickey Ditch	5.0				
	Cottonwood Ditch	2.8	27.6			
	Pete's Ditch	77.2				
	Watson Ditch & Pump	26.3				
	O.K. Ditch	15.0	22.7			
	Wood Ditch	36.8				
	Oak Creek, Upper	60.0				
	Oak Creek, Lower	17.0				
	Clear Creek	39.2				
				303.3	64.3	9,635.9

Summary by Years, Cont'd.

Year	Division or Group	Area - Acres			Totals
1916	Chino Valley	150.0			
	Duke & Bianconi Oak Creek, Upper	8.0			
			158.0		9,793.9
1929	Oak Creek, Lower	6.0			
			6.0		9,799.9
1925	Chino Valley				
	Williamson Wash		20.0		
	Upper Verde Valley	5.0			
	Allen Ditch	1.0			
	Oak Creek, Upper	99.0			
	Oak Creek, Lower	38.0			
			143.0	20.0	9,942.9
1934	Upper Verde Valley				
	Putnam Pump	8.0			
			8.0		9,950.9
1935	Oak Creek, Lower	40.0			
			40.0		9,990.9
1936	Chino Valley, Escott Club	15.0			
			15.0		10,005.9
1937	Upper Verde Valley				
	Pete's Ditch	6.0			
			6.0		10,011.9

Totals

10,011.9 1,295.5 10,011.9 1,295.5

IRRIGATED LANDS,
UPPER VERDE WATERSHED

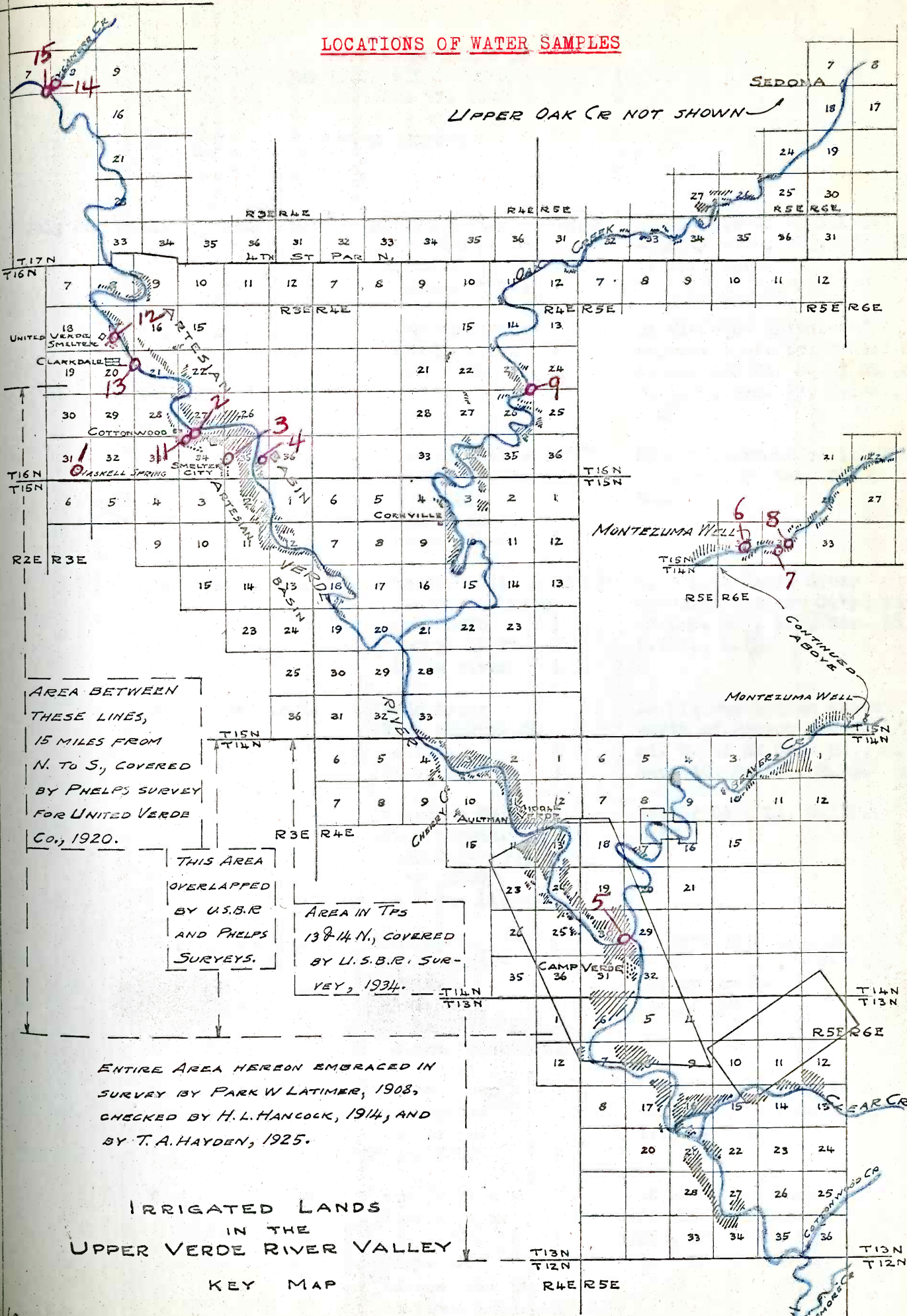
Summary of Areas, by Divisions or Groups

Chino Valley	2,929.0	89.0
Upper Verde Canyon	120.0	
Upper Verde Valley	4,098.9	1,083.5
Oak Creek		
Upper	565.0	27.0
Lower	1,189.0	9.0
Beaver Creek	573.0	57.0
Clear Creek	537.0	30.0
	10,011.9	1,295.5

TABLE IV

WATER ANALYSES

LOCATIONS OF WATER SAMPLES



UPPER OAK CR NOT SHOWN

AREA BETWEEN THESE LINES, 15 MILES FROM N. TO S., COVERED BY PHELPS SURVEY FOR UNITED VERDE CO., 1920.

THIS AREA OVERLAPPED BY U.S.B.R. AND PHELPS SURVEYS.

AREA IN TPS 13 & 14 N., COVERED BY U.S.B.R. SURVEY, 1934.

ENTIRE AREA HEREON EMBRACED IN SURVEY BY PARK W. LATIMER, 1908, CHECKED BY H. L. HANCOCK, 1914, AND BY T. A. HAYDEN, 1925.

IRRIGATED LANDS IN THE UPPER VERDE RIVER VALLEY

KEY MAP

WATER SAMPLES TAKEN ON
UPPER VERDE RIVER WATERSHED

July 26 & 27, 1940

- - - -
T. A. Hayden

July 26	1.	9:30 A.M.	Haskell Spring - $68\frac{1}{2}^{\circ}\text{F}$ (Flow 350 g.p.m.) (Elev. 3900) (Volcanic Talus)	2 $\frac{1}{2}$ Mi. WSW of Cottonwood, approx. ctr., SE $\frac{1}{4}$, Sec. 31, T.16N., R.3E.
	2.	10:30 A.M.	Cottonwood Ditch (Flow 35 c.f.s.) (Elev. 3300)	In flume at Cottonwood, approx. 2 mi. below head of ditch, 600 ft. N. of SE Cor. SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 27, T.16N., R.3E.
	3.	11:30 A.M.	Artesian Well - $69\frac{1}{2}^{\circ}\text{F}$ 400-600 ft. deep (Elev. 3312) (Approx. 25 ft. above river)	SE Cor. Cottonwood in NW Cor. of SW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 35, T.16N., R.3E.
	4.	12:30 P.M.	Artesian Well - $66\frac{1}{2}^{\circ}\text{F}$ 400-600 ft. deep (Elev. 3270) (Approx. 15 ft. above river)	Left side Verde River opposite Smelter City, in SE Cor. NW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 35, T.16N., R.3E.
	5.	2:30 P.M.	Verde River (Flow approx. 30 c.f.s.) (Elev. 3080)	At highway bridge above mouth of Beaver Creek, 1/8 mi. W. of SE Cor. NE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 30, T.14N., R.5E.
	6.	3:00 P.M.	Montezuma Well (Flow approx. 140 M.I. - $77\frac{1}{2}^{\circ}\text{F}$) (Elev. 3530) (In Verde Limestone)	Center Sec. 31, T.15N., R.6E.
	7.	4:15 P.M.	Soda Spring - 75°F (Flow approx.) 75 M.I.) (Elev. 3600) (Below Verde lime- stone formations)	N. part SE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 32, T.15N., R.6E., - S. Side Beaver Creek.
	8.	4:30 P.M.	Beaver Creek (Flow approx. 10 c.f.s.) (Elev. 3600)	Above Soda Spring in N. part SE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 32, T.15N., R.6E.
	9.	6:30 P.M.	Page Springs - 67°F (Flow approx. 30 c.f.s.) (Elev. 3500) (Coarse volcanic conglomerate; both Verde limestone and lava in vicinity)	At State Fish Hatchery, E. side Oak Creek, in SE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 23 & NE $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 26, T.16N., R.4E.

Page 2. - Water Samples Taken on
Upper Verde River Watershed,
July 26 & 27, 1940.

T.A. Hayden

July 27	10	9:00 A.M.	Deep Well 400-600 ft. deep (Flow 250 g.p.m.) (Elev. 3420)	Municipal water supply Clemenceau at abandoned Smelter in SE Cor. SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 34, T.16N., R.3E.
	11	9:30 A.M.	Artesian Well 400-600 ft. deep (Elev. 3325)	Town domestic supply, Cottonwood. SE $\frac{1}{4}$, Sec. 28, T.16N., R.3E.
	12	11:30 A.M.	Artesian Well 265 ft. deep - 64 $\frac{1}{2}$ ° F (Disch. 250 g.p.m.) (Elev. 3357) (6 ft. above river)	Phelps-Dodge Co. Smelter, Clarkdale. 20 ft. W. of Verde River in NW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 17, T.16N., R.3E. - Draw-down 44 ft. below ground level (38 ft. below river water) when pumping 250 g.p.m. recovered 10 ft. in 10 minutes after shut- down.
	13	Noon	Verde River (Flow 35 c.f.s. approx.) (Elev. 3344)	At Bridge due E. of Clarkdale, 1000 ft. N. of E $\frac{1}{4}$ Cor. Sec. 20, T.16N., R.3E.
	14	3:00 P.M.	Sycamore Creek (Approx. 600 M.I.) (Elev. 3560)	About 100 ft. above mouth, in SE Cor. Sec. 7, T.17N., R.3E.
	15	5:00 P.M.	Verde River (Flow 60-70 c.f.s.) (Elev. 3560)	About 1/8 mi. above mouth of Sycamore Creek in Ctr. SE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 7, T.17N., R.3E.

WATER ANALYSIS

Description of Sample: Haskell Spring
 2 1/2 Mi. W.S.W. of Cottonwood, Arizona.
 Approx. Center S 1/4, Sec. 31, T.16N., R.3E.
 Discharge: 350 g.p.m.

Sampled by: T. A. Hayden Date Sampled: 9:30A.M. 7/26/40
 Reported to: Date Analyzed 7/31/40
 Date Reported 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9261 Date

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.10	72	20.04	3.59	46.0
Magnesium	Mg	0.06	43	12.16	3.53	45.2
Sodium	Na	0.02	16	23.00	0.69	8.8
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	7.81	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.11	61	48.03	1.69	21.7
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.43	314	61.01	5.15	66.3
Chloride	Cl	0.04	28	35.46	0.80	10.3
Nitrate	NO ₃	0.01	8	62.02	0.13	1.7
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	7.77	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 71.3 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 405 ppm; 0.55 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	8.8	%
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	0	%
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	3.2	%
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	88.0	%
Na + K ÷ Total Cations	8.8 %	TYPE I 100%	
Cl + NO ₃ ÷ Total Anions	12.0 %		

Remarks:

Copied by..... Analyzed by A. W. Zahner 7/31/40
 Checked by..... Reported by A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Cottonwood Ditch
 In Flume at Cottonwood, Approximately 2 Mi.
 below Head of Ditch
 600 Ft. N. of SE Cor. SW $\frac{1}{2}$, SW $\frac{1}{2}$, Sec. 27, T.16N., R.3E.
 Discharge: 35 S.F.

Sampled by: T. A. Hayden Date Sampled: 10:30 A.M. 7/26/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9262 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.06	41	20.04	2.05	37.5
Magnesium	Mg	0.04	27	12.16	2.21	40.4
Sodium	Na	0.04	28	23.00	1.21	22.1
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	5.47	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO $_4$	0.03	25	48.03	0.53	9.7
Carbonate	CO $_3$ *	0	0	30.00	0	0
Bicarbonate	HCO $_3$ *	0.37	274	61.01	4.50	82.4
Chloride	Cl	0.02	15	35.46	0.42	7.7
Nitrate	NO $_3$	0	1	62.02	0.01	0.2
Total Anions	xx	xx	xx	xx	5.46	100.0

*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 50.2 x 10⁻⁵
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 274 ppm; 0.37 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO $_3$ Ions	7.9 %
Group Z 2	Minimum grouping of Na, K, SO $_4$, HCO $_3$, & CO $_3$ Ions	14.2 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO $_3$ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO $_4$, HCO $_3$, & CO $_3$ Ions	77.9 %
Na + K ÷ Total Cations	22.1 %	TYPE II
Cl + NO $_3$ ÷ Total Anions	7.9 %	
		100%

Remarks:

Copied by: Analyzed by: A. W. Zahner 7/31/40
 Checked by: Reported by: A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

SALT RIVER VALLEY WATER USERS' ASSOCIATION

WATER ANALYSIS

Description of Sample: Artesian Well
 Cottonwood, Arizona.
 N W Cor., SW $\frac{1}{4}$, N W $\frac{1}{4}$, Sec. 35, T.16N., R.3E.
 400-600 ft. deep

Sampled by: T. A. Hayden Date Sampled 11:30 A.M. 7/26/40
 Reported to: Date Analyzed 8/2/40
 Date Reported 8/5/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9263 Date

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.08	56	20.04	2.79	46.9
Magnesium	Mg	0.04	29	12.16	2.42	40.7
Sodium	Na	0.02	17	23.00	0.74	12.4
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	5.95	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.01	4	48.03	0.09	1.5
Carbonate	CO ₃	0	0	30.00	0	0
Bicarbonate	HCO ₃	* 0.41	305	61.01	5.00	84.4
Chloride	Cl	0.04	29	35.46	0.82	13.9
Nitrate	NO ₃	0	1	62.02	0.01	0.2
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	5.92	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 56.3 × 10⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 289 ppm; 0.39 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	12.4 %	
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	0 %	
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	1.7 %	
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	85.9 %	
Na + K + Total Cations	12.4 %	TYPE I	100%
Cl + NO ₃ + Total Anions	14.1 %		

Remarks:

Copied by..... Analyzed by Paul G. Brown 8/2/40
 Checked by..... Reported by Paul G. Brown 8/5/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Artesian Well
 Description of Sample: Left side Verde River opposite Smelter City
 SE Cor., N $\frac{1}{2}$, SE $\frac{1}{4}$, Sec. 35, T.16N., R.3E.
 400-600 ft. deep

Sampled by: T. A. Hayden Date Sampled: 12:30 P.M. 7/26/40
 Reported to: Date Analyzed: 8/2/40
 Date Reported: 8/5/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9264 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.07	53	20.04	2.63	44.4
Magnesium	Mg	0.04	31	12.16	2.54	42.8
Sodium	Na	0.02	17	23.00	0.76	12.8
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	5.93	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.01	4	48.03	0.09	1.5
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.41	305	61.01	5.00	84.9
Chloride	Cl	0.04	28	35.46	0.80	13.6
Nitrate	NO ₃	0	0	62.02	Trace	0
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	5.89	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 55.7 × 10⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 286 ppm; 0.39 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	12.8	%
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	0	%
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0.8	%
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	86.4	%
Na + K + Total Cations	12.8	%	TYPE I
Cl + NO ₃ + Total Anions	13.6	%	
			100%

Remarks:

Copied by: Analyzed by: Paul G. Brown 8/2/40
 Checked by: Reported by: Paul G. Brown 8/6/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Verde River
 At Highway Bridge above Mouth of Beaver Creek
 1/8 Mi. West of SE Cor. NE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 30, T.14N., R.5E.
 Discharge: Approx. 30 S.F.

Sampled by: T. A. Hayden Date Sampled: 2:30 P.M. 7/26/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9265 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.07	48	20.04	2.41	31.5
Magnesium	Mg	0.05	40	12.16	3.32	43.4
Sodium	Na	0.06	44	23.00	1.92	25.1
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	7.65	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.09	69	48.03	1.43	18.8
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.45	332	61.01	5.45	71.4
Chloride	Cl	0.04	27	35.46	0.75	9.8
Nitrate	NO ₃	0	0	62.02	0	0
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	7.63	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 70.4 × 10⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 394 ppm; 0.54 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	9.8 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	15.3 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	74.9 %
Na + K + Total Cations	25.1 %	TYPE II
Cl + NO ₃ + Total Anions	9.8 %	
		100%

Remarks:

Copied by: Analyzed by: A. W. Zahner 7/31/40
 Checked by: Reported by: A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

FORM 100 - REVISED APRIL 1, 1936. SALT RIVER VALLEY WATER USERS ASSOCIATION

WATER ANALYSIS

Description of Sample: Montezuma Well
 Center Sec. 31, T.15N., R.6E.
 Discharge: Approx. 140 M.I.

Sampled by: T. A. Hayden Date Sampled: 3:00 P.M. 7/26/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9266 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.15	112	20.04	5.59	50.5
Magnesium	Mg	0.05	38	12.16	3.11	28.1
Sodium	Na	0.07	53	23.00	2.31	20.9
Potassium (by difference)	K	0	2	39.10	0.06	0.5
Total Cations						
	xx	xx	xx	xx	11.07	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.01	10	48.03	0.21	1.9
Carbonate	CO ₃	* 0	0	30.00	0	0
Bicarbonate	HCO ₃	* 0.82	601	61.01	9.85	89.0
Chloride	Cl	0.05	35	35.46	1.00	9.0
Nitrate	NO ₃	0	1	62.02	0.01	0.1
Total Anions						
	xx	xx	xx	xx	11.07	100.0

*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 101 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 552 ppm; 0.75 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	9.1 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	12.3 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	78.6 %
Na + K + Total Cations	21.4 %	TYPE II
Cl + NO ₃ + Total Anions	9.1 %	
		100%

Remarks:

Copied by: Analyzed by: A. W. Zahner 7/31/40
 Checked by: Reported by: A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Soda Spring
 North Part SE_{1/4}, SW_{1/4} Sec. 32, T.15N., R.6E.
 South Side Beaver Creek
 Discharge: Approx. 75 M.I.

Sampled by: T. A. Hayden Date Sampled: 4:15 P.M. 7/26/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9267 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.20	145	20.04	7.23	50.5
Magnesium	Mg	0.06	47	12.16	3.89	27.2
Sodium	Na	0.09	70	23.00	3.06	21.4
Potassium (by difference)	K	0.01	5	39.10	0.13	0.9
Total Cations	xx	xx	xx	xx	14.31	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.02	14	48.03	0.29	2.0
Carbonate	CO ₃	* 0	0	30.00	0	0
Bicarbonate	HCO ₃	* 1.05	775	61.01	12.7	88.8
Chloride	Cl	0.06	46	35.46	1.30	9.1
Nitrate	NO ₃	0	1	62.02	0.02	0.1
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	14.31	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 127 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre-Foot
 Total Solids by Sum of Ions (Dry Weight) 715 ppm; 0.97 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	9.2 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	13.1 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	77.7 %
Na + K + Total Cations	22.3 %	TYPE II
Cl + NO ₃ + Total Anions	9.2 %	
		100%

Remarks:

Copied by: Analyzed by A. W. Zahner 7/31/40
 Checked by: Reported by A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Beaver Creek
 Above Soda Spring
 N. part SE₁, SW₁, Sec. 32, T.15N., R.6E.
 Discharge: Approx. 10 S.F.

Sampled by: T. A. Hayden Date Sampled: 4:30 P.M. 7/26/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9268 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.03	23	20.04	1.15	36.9
Magnesium	Mg	0.03	19	12.16	1.56	50.2
Sodium	Na	0.01	9	23.00	0.40	12.9
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	3.11	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0	0	48.03	0	0
Carbonate	CO ₃	* 0.02	12	30.00	0.40	13.0
Bicarbonate	HCO ₃	* 0.21	156	61.01	2.55	82.5
Chloride	Cl	0.01	5	35.46	0.13	4.2
Nitrate	NO ₃	0	1	62.02	0.01	0.3
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	3.09	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 28.0 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 147 ppm; 0.20 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	4.5 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	8.4 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	87.1 %
Na + K + Total Cations	12.9 %	TYPE II
Cl + NO ₃ + Total Anions	4.5 %	
		100%

Remarks:

Copied by..... Analyzed by A. W. Zahner 7/31/40
 Checked by..... Reported by A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Page Springs
 At State Fish Hatchery, East Side of Oak Creek
 SE₁, SE₂, Sec. 23 & N E₁, N E₂, Sec. 26, T.16N., R.4E.
 Discharge; Approx. 30 S.F.

Sampled by: T. A. Hayden Date Sampled 6:30 P.M. 7/26/40
 Reported to: Date Analyzed 7/31/40
 Date Reported 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9269 Date

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.06	41	20.04	2.03	50.8
Magnesium	Mg	0.02	18	12.16	1.51	37.7
Sodium	Na	0.01	10	23.00	0.45	11.3
Potassium (by difference)	K	0	0	39.10	0.01	0.2
Total Cations	xx	xx	xx	xx	4.00	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0	1	48.03	0.03	0.8
Carbonate	CO ₃	0	0	30.00	0	0
Bicarbonate	HCO ₃	* 0.31	226	61.01	3.70	92.5
Chloride	Cl	0.01	9	35.46	0.25	6.2
Nitrate	NO ₃	0	1	62.02	0.02	0.5
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	4.00	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 37.3 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 193 ppm; 0.26 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	6.7 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	4.8 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	88.5 %
Na + K + Total Cations	11.5 %	TYPE II
Cl + NO ₃ + Total Anions	6.7 %	
		100%

Remarks:

Copied by..... Analyzed by A. W. Zahner 7/31/40
 Checked by..... Reported by A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Deep Well
 Municipal Water Supply of Clemenceau
 SE Cor., SE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 34, T.16N., R.3E.
 400-600 ft. deep
 Flow: 250 g.p.m.

Sampled by: T. A. Hayden Date Sampled: 9:00A.M. 7/27/40
 Reported to: Date Analyzed: 8/2/40
 Date Reported: 8/5/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9270 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.08	61	20.04	3.06	42.8
Magnesium	Mg	0.05	37	12.16	3.01	42.0
Sodium	Na	0.03	25	23.00	1.09	15.2
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	7.16	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.01	9	48.03	0.18	2.5
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.51	378	61.01	6.20	87.5
Chloride	Cl	0.03	25	35.46	0.70	9.9
Nitrate	NO ₃	0	1	62.02	0.01	0.1
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	7.09	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C	K = 65.7 × 10 ⁻⁶					
Hydrogen Ion Concentration (pH)						
Total Solids by Evaporation @ 110°C			ppm;		Tons per Acre Foot	
Total Solids by Sum of Ions (Dry Weight)	347		ppm;	0.47	Tons per Acre Foot	

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	10.0 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	5.2 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	84.8 %
Na + K + Total Cations	15.2 %	TYPE II
Cl + NO ₃ + Total Anions	10.0 %	
		100%

Remarks:

Copied by: Analyzed by: Paul G. Brown 8/2/40

Checked by: Reported by: Paul G. Brown 8/5/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Artesian Well
 Cottonwood Domestic Water Supply
 SE $\frac{1}{4}$, Sec. 28, T.16N., R.3E.
 400-600 ft. deep

Sampled by: T. A. Hayden Date Sampled: 9:30 A.M. 7/27/40
 Reported to: Date Analyzed: 8/2/40
 Date Reported: 8/5/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9271 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.08	58	20.04	2.91	48.9
Magnesium	Mg	0.04	27	12.16	2.26	38.0
Sodium	Na	0.02	18	23.00	0.78	13.1
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	5.95	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.01	9	48.03	0.19	3.2
Carbonate	CO ₃	* 0	0	30.00	0	0
Bicarbonate	HCO ₃	* 0.41	302	61.01	4.95	83.6
Chloride	Cl	0.04	28	35.46	0.78	13.2
Nitrate	NO ₃	0	0	62.02	Trace	0
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936. NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	5.92	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 56.2 × 10⁻⁵
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 291 ppm; 0.40 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	13.1 %	
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	0 %	
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0.1 %	
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	86.8 %	
Na + K + Total Cations	13.1 %	TYPE I	100%
Cl + NO ₃ + Total Anions	13.2 %		

Remarks:

Copied by: Analyzed by: Paul G. Brown 8/2/40
 Checked by: Reported by: Paul G. Brown 8/5/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Artesian Well
 Phelps-Dodge Corp. Smelter, Clarkdale.
 20 ft. West of Verde River
 N W₁, SE₁, Sec. 17, T.16N., R.3E.
 265 ft. deep
 Flow: 250 g.p.m.

Sampled by: T. A. Hayden Date Sampled: 11:30 A.M. 7/27/40
 Reported to: Date Analyzed: 8/2/40
 Date Reported: 8/5/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9272 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.08	58	20.04	2.89	42.6
Magnesium	Mg	0.04	30	12.16	2.49	36.7
Sodium	Na	0.04	32	23.00	1.39	20.4
Potassium (by difference)	K	0	1	39.10	0.02	0.3
Total Cations	xx	xx	xx	xx	6.79	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.07	54	48.03	1.13	16.6
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.42	311	61.01	5.10	75.1
Chloride	Cl	0.03	19	35.46	0.54	8.0
Nitrate	NO ₃	0	1	62.02	0.02	0.3
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	6.79	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 63.3 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 351 ppm; 0.48 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	8.3 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	12.4 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	79.3 %
Na + K + Total Cations	20.7 %	TYPE II 100%
Cl + NO ₃ + Total Anions	8.3 %	

Remarks: Draw-down 44 ft. below ground level
 (38 ft. below river water) when pumping
 250 g.p.m. Recovered 10 ft. in 10 minutes
 after shutdown.

Copied by: Analyzed by: Paul G. Brown 8/2/40
 Checked by: Reported by: Paul G. Brown 8/5/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Verde River

Description of Sample: At Bridge due East of Clarkdale
 1000 ft. N. of E $\frac{1}{2}$ Cor. Sec. 20, T.16N., R.3E.
 Discharge: Approx. 35 C.F.

Sampled by: T. A. Hayden Date Sampled Noon, 7/27/40
 Reported to: Date Analyzed 7/31/40
 Date Reported 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9273 Date

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.05	40	20.04	1.99	37.2
Magnesium	Mg	0.04	27	12.16	2.19	40.9
Sodium	Na	0.04	27	23.00	1.17	21.9
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	5.35	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.04	27	48.03	0.57	10.7
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.36	262	61.01	4.30	80.8
Chloride	Cl	0.02	16	35.46	0.45	8.5
Nitrate	NO ₃	0	0	62.02	0	0
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	5.32	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 49.6 × 10⁻⁶
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 268 ppm; 0.36 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	8.5 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	13.4 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	78.1 %
Na + K + Total Cations	21.9 %	TYPE II 100%
Cl + NO ₃ + Total Anions	8.5 %	

Remarks:

Copied by..... Analyzed by A. W. Zahner 7/31/40
 Checked by..... Reported by A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Sycamore Creek
 About 100 ft. above Mouth
 SE Cor. Sec. 7, T.17N., R.3E.
 Discharge: Approx. 600 M.I.

Sampled by: T. A. Hayden Date Sampled: 3:00 P.M. 7/27/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9274 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.07	48	20.04	2.39	48.2
Magnesium	Mg	0.04	27	12.16	2.23	45.1
Sodium	Na	0.01	6	23.00	0.28	5.7
Potassium (by difference)	K	0	2	39.10	0.05	1.0
Total Cations	xx	xx	xx	xx	4.95	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0	2	48.03	0.04	0.8
Carbonate	CO ₃ *	0	0	30.00	0	0
Bicarbonate	HCO ₃ *	0.39	287	61.01	4.70	95.0
Chloride	Cl	0.01	7	35.46	0.20	4.0
Nitrate	NO ₃	0	1	62.02	0.01	0.2
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	4.95	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C $K = 45.2 \times 10^{-6}$
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 236 ppm; 0.32 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	4.2 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	2.5 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	93.3 %
Na + K + Total Cations	6.7 %	TYPE II 100%
Cl + NO ₃ + Total Anions	4.2 %	

Remarks:

Copied by: Analyzed by: A. W. Zahner 7/31/40
 Checked by: Reported by: A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER ANALYSIS

Description of Sample: Verde River
 About 1/8 Mi. above Mouth of Sycamore Creek
 Center SE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 7, T.17N., R.3E.
 Discharge: 60-70 S.F.

Sampled by: T. A. Hayden Date Sampled: 5:00 P.M. 7/27/40
 Reported to: Date Analyzed: 7/31/40
 Date Reported: 8/1/40
 Laboratory: S.R.V.W.U.A. Laboratory No. 9275 Date:

	SYMBOL	TONS PER ACRE FOOT	PARTS PER MILLION	COMBINING WEIGHT	REACTING VALUE M. E.	PERCENTAGE REACTING VALUE
CATIONS (POSITIVE IONS)						
Calcium	Ca	0.05	38	20.04	1.91	37.9
Magnesium	Mg	0.03	23	12.16	1.85	36.7
Sodium	Na	0.04	29	23.00	1.28	25.4
Potassium (by difference)	K	0	0	39.10	0	0
Total Cations	xx	xx	xx	xx	5.04	100.0
ANIONS (NEGATIVE IONS)						
Sulphate	SO ₄	0.01	6	48.03	0.12	2.4
Carbonate	CO ₃ *	0	0	30.00	Trace	0
Bicarbonate	HCO ₃ *	0.37	274	61.01	4.50	89.6
Chloride	Cl	0.02	14	35.46	0.40	8.0
Nitrate	NO ₃	0	0	62.02	0	0
*IN COMPARING WITH ANALYSES REPORTED PRIOR TO APRIL, 1936, NOTE CHANGE IN FORM OF REPORT						
Total Anions	xx	xx	xx	xx	5.02	100.0

OTHER DETERMINATIONS

Specific Electrical Conductance @ 25°C K = 46.8 × 10⁻⁵
 Hydrogen Ion Concentration (pH)
 Total Solids by Evaporation @ 110°C ppm; Tons per Acre Foot
 Total Solids by Sum of Ions (Dry Weight) 247 ppm; 0.34 Tons per Acre Foot

GEOCHEMICAL CLASSIFICATION FROM PERCENTAGE REACTING VALUES

Group Z 1	Maximum grouping of Na, K, Cl, & NO ₃ Ions	8.0 %
Group Z 2	Minimum grouping of Na, K, SO ₄ , HCO ₃ , & CO ₃ Ions	17.4 %
Group Z 3	Minimum grouping of Ca, Mg, Cl, & NO ₃ Ions	0 %
Group Z 4	Maximum grouping of Ca, Mg, SO ₄ , HCO ₃ , & CO ₃ Ions	74.6 %
Na + K + Total Cations	25.4 %	TYPE II 100%
Cl + NO ₃ + Total Anions	8.0 %	

Remarks:

Copied by: Analyzed by: A. W. Zahner 7/31/40
 Checked by: Reported by: A. W. Zahner 8/1/40
 Signatures and Dates Signatures and Dates

WATER RIGHT FILINGS

ON

UPPER VERDE RIVER and TRIBUTARIES

From head down to and including

CLEAR CREEK

YAVAPAI COUNTY RECORDS

BRIEFED MAY, 1940

By T. A. HAYDEN

CONTENTS

Williamson Valley Wash.
Willow and Granite Creeks..
Verde River, including Sycamore Creek, Haskell Springs,
Peck's Lake, Black Canyon, Cherry Creek &
miscellaneous small springs.
Oak Creek, including springs & tributaries.
Beaver Creek " " " "
Clear Creek " " " "

YAVAPAI RECORDS

Water Rights Recorded in
"Millsites and Water Rights" (M & W)
to and including Page 198
of Book 8 - M & W, and including
Filings recorded in "Promiscuous Records"
prior to the making of special books for
"Millsites and Water Rights".

Verde River and Tributaries from
the head down to and including Clear Creek.

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The following list of locations and filings of record in the County Recorder's office of Yavapai County, Arizona contain all recorded appropriations of material size affecting the watershed, including many known never to have been perfected. Very small appropriations of one or two Miner's inches were not listed, and also stock watering, mining and milling appropriations. Some old filings on Big Chino and Williamson Valley washes and some power filings, attempting to appropriate water for projects known to me personally have been long ago abandoned, were also omitted.

Recorded permits and water right certificates issued since 1919 by the State Water Commissioner are included. Large tributaries are listed under their own names. Small ones, under the name of the main river or tributary. These records were taken from Book One (1) of "Promiscuous Records" and from Books One (1) to eight (8), inclusive of "Millsites and Water Right Records". These records were examined page by page and not by referring to the index only. This was found necessary because in many cases the indexing gave little, if any, clue to the subject matter of the filing. The records were compared carefully with lists of filings contained in reports on use of water made by H. L. Hancock in 1914, O. A. Turney in 1901, Stroud and Prothero in 1899 and Robinson and Woolf in 1895. Where discrepancies were found in their lists with the names and/or other data in the County Records, a careful comparison was made to see that the correct data was entered in this compilation.

ABBREVIATIONS USED

"Prom" means Promiscuous Records.
"M & W" " Millsites and Water Right Records.
"abt" " about.
"Mi." " mile or miles.
"N, S. E & W" means North, South, East and West.
"bet" means between.
"Sec" " Section.
"T & R" " Township & Range.
"opp" " opposite.
"approx." " approximate.
"Cor." " Corner.
"div." " diversion.

WILLIAMSON VALLEY WASH

Year	Mo. & Day	Names	Description	M.I.	Recorded	
					Page	Ek.
1891	3-1	J. W. Sullivan	Dam, site, etc.	75,000	193	- 2 M & W
1896	3-4	J. W. Sullivan	Dam, ditches, etc.	150,000	91	- 3 M & W

WILLOW CREEK AND GRANITE CREEK
Promiscuous Water Right Records.

Year	Mo. & Day	Names	Description	M.I.	Recorded	
					Page	Bk.
1866	1-4	R. E. Farrington	Granite Creek abt 2 mi. N'yly from Prescott on E. side of Cr.		8	1
1877	6-9	S. L. Brigham	Water Rt located 1 $\frac{1}{4}$ miles S. of Willow Cr. from ranch owned by the "two Italians" in Sec. 6, for Agricultural purpose.		288	1
1872	12-24	J. S. Curtis	Claims water from Willow & Granite Creeks, used for 3 yrs., flowing in & thru "Point of Rocks".	<u>All</u>	81	1
1873	8-23	W. N. Yarbrough	On Granite Cr. abt half-way from the entrance of the Creek into the rocks - for irrigations.		87	1
1875	7-24	J. H. Lee	Granite Creek abt 1 mi. below Ft. Whipple, 50 ft. above Crossing.	200	155	1
1879	8-11	Joseph Garbarino	Willow Creek	<u>All</u>	419	1
1880	12-24	Philip Ciannuoni	"Bubbling Spring" on Willow Cr. abt 3 mi NW of Prescott.		471	1

WILLOW CREEK & GRANITE CREEK
Millsites & Water Right Records.

Year	Mo. & Day	Names	Location & Description	M.I.	Recorded Page Bk.
1885	5-15	James E. Wing	Hd. in Sec. 14, T.14N., R.2W. Land SE $\frac{1}{4}$ Sec. 12, " "		265 - 1 M & W.
1887	4-18	John Raible	Hd. in Post Gulch, which empties into Granite Creek below Ft. Whipple. Dam located abt 1 mi. above Ft. Whipple.	100	398 - 1 M & W.
1887	12-20	M. Maier	Dam 1 mi. S. of Prescott for making ice on ppty. of Hezekiah Brooks.	500	445 - 1 M & W.
1894	3-1	John Duke	Damsite to store waters of Granite & Willow Creeks. "At point where Willow Cr. passes thru" - "Point of Rocks" - on Cook Ranch in T.14N., R.2W.		403 - 2 M & W.
"	"	" "	Damsite to store water of Granite & Willow Creeks "--" abt SW $\frac{1}{4}$ Sec. 13, T.14N., R.2W.		404 - 2 M & W.
1899	10-4	Samuel Hill Jas. Samuels	N. Dr. of Willow Cr. abt 7 mi. All un- W. from Prescott near Iron appro- Spr. siding of S.F.P. & P.Ry. priated		428 - 3 M & W.
1910	5-26	Eugene Neuman	Water for irrigation of SW $\frac{1}{4}$ Sec. 4 & N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 9, T.15N., R.2W.		191 - 6 M & W.
1910	10-1	John Duke & John Bianconi	On Granite Creek abt 1 mi. below Prescott.	All flood Waters	266 - 6 M & W.
"	"	" "	On Willow Cr. abt 1 mi. above jct. with Granite Cr.	" "	267 - 6 M & W.
1911	1-24	Geo. A. Thayer	Pt. of diversion Sec. 26, T.14N., R.2W., Granite Cr.	All winter & flood waters Granite Cr.	273 - 6 M & W.
1911	1-4	David M. Wynkoop M. Anna Wynkoop	Pt. of div. on Willow Cr. in Sec. 11, T.14N., R.2W.	All Willow Cr.	274 - 6 M & W.
1911	4-22	Paul Burks	To irrigate lands in N $\frac{1}{2}$ SE $\frac{1}{4}$ & SE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 19 & NW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 20, T.15N., R.1W.	160	301 - 6 M & W.
1911	6-1	Mary M. Duke	Granite Creek on Sec.12, T.14N., R.2W.	200	313 - 6 M & W.

WILLOW CREEK & GRANITE CREEK (Cont'd.)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1912	12-19	Geo. A. Thayer	Willow Cr. in Sec. 11, T.14N., R.2W.		475- 6
1912	12-18	" " "	Granite Cr. in Sec.26, T.14N., R.2W.		476- 6
1913	5-24	Ariz. Land & Irr. Co., by Geo. A. Thayer	Granite Cr. in Sec. 13, T.14N., R.2W.		548- 6 M & W
1917	12-18	Wm. L. Hargrove	Div. in Sec. 11, T.14N., R.2W.	All	432- 7 M & W
1928	6-18	Chino Valley Irr. Dist.	Proof of app'n. of water permit E-9 app. E-15		33- 8 M & W
1922	2-7	" " "	Cert. of W.R. 593, 3/14/35 for use on flowing lands in T.16N., R.2W.:		162- 8 M & W

Sec.	Sub.	Acres
15 Trs.	55 & 56	164
21	NE-NE	20
"	NE-SE	20
"	SW-SE	20
"	SE-SE	20
22	NE-NE	40
"	NW-NE	38
"	SW-NE	40
"	SE-NE	20
"	NE-NW	41
"	NW-NW	40
"	SW-NW	20
"	SE-NW	40
"	NE-SW	40
"	NW-SW	38
"	SW-SW	40
"	SE-SW	40
"	NE-SE	40
"	NW-SE	40
"	SW-SE	35
"	SE-SE	35
23	NW-NW	30
"	SW-NW	35
"	NW-SW	30
"	SW-SW	30
26	NW-NW	30
"	SW-NW	20
26	NW-SW	20
"	SW-SW	40
"	SE-SW	20
27	NE-NE	40
"	NW-NE	40
"	SW-NE	40
"	SE-NE	41
"	NE-NW	40
"	NW-NW	35
"	SW-NW	40

(Cont'd.)

WILLOW CREEK & GRANITE CREEK (Cont'd.)

Year	Mo & Day	Names	Description			M.I.	Recorded
			Sec.	Sub.	Acres		Page Bk.
			27	SE-NW	40		
			"	NE-SW	41		
			"	NW-SW	41		
			"	SW-SW	40		
			"	SE-SW	41		
			"	NE-SE	37		
			"	NW-SE	40		
			"	SW-SE	41		
			"	SE-SE	40		
			28	NE-NE	40		
			"	SW-NE	40		
			"	SE-NE	40		
			"	NE-NW	30		
			"	SE-NW	30		
			"	NE-SE	40		
			"	SE-SE	38		
			34	NE-NE	34		
			"	NW-NW	34		
			"	N E-SE	20		
			"	NW-SE	32		
			"	SW-SE	20		
			"	SE-SE	33		
			35	NE-NW	37		
			"	NW-NW	40		
			"	SW-NW	35		
			"	SE-NW	36		
			"	NE-SW	35		
			"	NW-SW	38		
			"	SW-SW	40		
			"	SE-SW	40		
				(Total	2,455		
				(T.A.H.			

1955 3-11 Chino Valley Irr. Cert. of W.R. No. 594 3/14/55,
 District. applying to the following lands
 Recorded 3/19/35 in T.16N., R.2W.

160 - 8
 M & W

Sec.	Sub.	Acres
21	NE-NE	12
"	NW-SE	20
22	NW-NE	3
"	SW-NW	20
26	NW-SW	20
34	NW-NW	1
"	NW-SE	2
35	SW-NW	3
"	NE-SW	2
	(Total	83 Ac.)
	(T.A.H.	

(Total Chino Valley Irr. Dist. 2,538 Ac.)

WATER FILINGS ON VERDE RIVER
"Promiscuous Records"

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1877	1-12	P. W. Burford	Abt. 400 yds. above C.P. Head & Co's. Cattle Camp on E. side of Verde.		254- 1 Prom.
1877	5-11	Sidney S. Brown	N.E. Fork of Sycamore Creek for agriculture.	200	283- 1 Prom.
(1871 Recorded Posted)	9-12	Jas. H. Wilkerson Wm. Sherard 2/12/71	"Water of Verde River & Slough".	3000	65- 1 Prom.
1875	9-18	Albert Young Charles F. Bennett	E. bank Verde river abt. 1 $\frac{1}{2}$ mi. N. of N. line of T.13N., R.5E. abt. $\frac{1}{2}$ -mi. NE of Flagstaff at Camp Verde at point of rocks where Beaver Cr. enters Verde.	3000	162- 1 Prom.
1877	7-23	Joseph Melvin	Water for irrigation not used by acequias built prior.		298- 1 Prom.
1877	12-4	J. H. Wingfield D. W. Strahan Mrs. Mary Eliz. Cleft. L. B. Barney & Bros. J. W. Anderson James Bristow	"Upper Verde Reservation Ditch" Claims rt. to enlarge old Gov't. (Apache) Res. Ditch & to extend & enlarge same, commencing opp. Peck's Lake & passing thru the ranches of Winingham, Bristow, Strahan, Wingfield Bros., Clefts, Seigior & Jr. Barney Bros. & Anderson (all on W. side of Verde river) a distance of 2492 rods.	3000	317- 1 Prom.
1876	2-16	R. W. Pleasants Isaac C. Jones	Ditch on E. side of Verde river abt $\frac{1}{2}$ -mi. below Peck's Lake is 3 mi. in length & covers ranches of claimants.	1000	324- 1 Prom.
1878	1-10	F. E. Jordan	Verde abt 2 mi. below C. Verde abt $\frac{1}{2}$ -mi. above Campbell ranch. surplus	6000	363- 1 Prom.
1878	3-1	Samuel Loy	In Verde river opp. the Benj. Barney ranch abt. 11 mi. NW'ly from Camp Verde.	1000	365- 1 Prom.
1872	2-15	Wm. M. K. Owen John Barick Frank Howe Joseph Melvin	Cherry Creek, abt. 1 mi. W. of Verde river abt. 3 mi. SW'ly from Camp Verde		69- 1 Prom.
1871	6-15	Wm. Jennings	Cherry Creek for Agri. & Mining		97- 1 Prom.
1877	5-24	James M. Baker	Hd. abt. 3/4-mi. above Clt's farm.	1000	457- 1 Prom.

VERDE RIVER
"Millsite & Water Right Records"

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1832	- See P.	hereof T.A.H.			
1883	2-10	John Duke & F. Krell	Near old Mexican Crossing abt. $\frac{1}{2}$ -mi. above Krell ranch.	1500	124- 1 M & W
1884	- See P.	hereof T.A.H.			
1885	10-20	Charles D. Willard	Abt. $1\frac{1}{2}$ mi. above Cottonwood P.O. known as the "Winningham dam."	500	293- 1 M & W
1891	3-20	John Davis John Wood James Brown	"Extension of Verde Irrigation Canal" -- "abt. 100 yds. N. of Ft. Verde Mil Res."	5000	224- 2 M & W
1891	12-21	Rio Verde Canal Co. By A.C. Sheldon, Pres., Prosper P. Parker, Sec'y.	Reservoir & dams, etc., "at ex- treme eastern limits of horse- shoe bend" to irrigate land in Salt, Verde & Gila Valleys	275000	249- 2 M & W
1892	7-12	Thomas A. Smith	"On E. side of Verde river at Middle Verde" -- "abt $\frac{1}{2}$ -mi. N. of Middle Verde School house & abt $\frac{1}{4}$ -mi. SW of E. A. Jordan's house & abt $\frac{1}{2}$ -mi. S. from Parson Bristow's."	1000	294- 2 M & W
1892	7-21	W. S. Head Thos. J. Eaman Chas. B. Eaman	"To commence on E. side of Verde - at the old Verde Ditch Co's old dam and to run so as to cover the Jordan flat and all - land under said ditch."	3000	298- 2 M & W
1894	2-14	R.M. Rodgers Sarah J. Arnold J. W. Ralston	"Central Verde Ditch" - "to be taken from Verde River near the mouth of Cherry Cr. & to flow thru what is known as the Ralston ditch".	2500	400- 2 M & W
1894	7-20	John H. Hicks	E. side of Verde River at Middle Verde - " $\frac{1}{2}$ -mi. N. of Middle Verde School house & abt. $\frac{1}{4}$ -mi. SW of E. A. Jordan's & abt $\frac{1}{2}$ -mi. S. of Parson Bristow's house & NE of R.M. Rodger's Ranch.	3000	459- 2 M & W
1894	7-26	" " "	Dam & canal from pt. S. of Everett Jordan's ranch SE to Clear Cr.	1500	460- 2 M & W
1895	1-28	Thomas Carroll	Beg. in Sec. 22, T.16N., R.3E. Dam at SW Cor. Sec. 22 - abt. 16 mi. thru Ts. 16 & 14N., R.3E.	10000	484- 2 M & W

VERDE RIVER (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1882	9-23	M. R. Vernon	W. bank Verde river abt $\frac{1}{2}$ -mi. above mouth of Oak Cr. to run to pt. near D.J. Marr's homestead in Sec. 4, T.14N., R.4E.	All	56- 1 M & W
1884	1-2	Z. L. Kay	Verde river - for " <u>mining, mill-</u> <u>ing & other purposes</u> , to run a 100-stamp mill. On R. bank of Verde 100' N'ly from Conger Mining Co's headgate former location.	6000	182- 1 M & W
1884	3-20	J. C. Ralston J. W. Ralston Z. L. Kay	"Ralston Ditch" - At head of canyon on W. side Verde river just below mouth of Oak Cr. "Ditch to be taken out at head of aforesaid canyon, down which it flows, through Kay's ranch & near the Conger mill & Dan'l Mar's house. Thence to the various farms at Central Verde on the W. side of Verde river & to Gen. W.I. Wither's millsite.	6000 surplus	202- 1 M & W
1895	4-3	A. B. Hutchison Burton Maxwell W. F. Hutchison Tommie Bristow C.P. Wingfield	"Eureka" - on Middle Verde at road crossing at lower end E. Jordan's house, abt $\frac{1}{2}$ -mi. from same in S'ly direction.	1000	498- 2 M & W
1911	4-15	C. H. Rutherford Arthur W. Whitaker	Water of Black Canyon to irri- gate land in Sec.28, T.15N., R.3E.	All	297- 6 M & W
1913	6-20	E.H. Meek	In "Box Canyon" abt 3 mi. above Ed. Jordan's ranch.	20000	569- 6 M & W
1911	2-13	John M. Sullivan Timothy F. Shea M. J. Bradley J. J. Sullivan	Water of Black Canyon abt 12 mi. SE'ly from Jerome.	100	283- 6 M & W
1913	10-15	John M. Sullivan	Verde View Spring, abt 500 yds. W'ly from RR from Clarkdale to U.V. Cop. Co. mine near Jerome, abt 2000 yds. W. of Slaughter house of Jerome Meat Co.	200	581- 6 M & W
1895	2-18	Thomas Carroll David Scott Godfrey Van Direu	From pt. in Sec. 8, T.16N., R.3E. Dam at mouth of Box Canyon. Ditch running S'ly thru T.16 & 14N., R.3E. about 16 miles.	15000	491- 2 M & W
1895	3-9	George Rich Hugh Brewer D. J. Shea C. O. Keefe	Tunnel site & water Rt. to irri- gate public land in Secs. 17 & 21 & all So. - - T.16N., R. E. Abt. $\frac{3}{4}$ mi. S. of Wm. Jordan's ranch & abt $\frac{1}{2}$ -mi. W. of Peck's Lake & abt $\frac{1}{2}$ -mi. W. of J. Goodwin's ranch in the upper Verde Valley on the E. side of Verde.	2000	1- 5 M & W

VERDE RIVER (Continued)

Year	Mo & Day		Names	Description	M.I.	Recorded
						Page	Bk.
1895	5-13		Antonia Bird	On upper Verde in T.16N., Sec.8 at mouth of canyon above J.C. Duff's ranch, water to be used on Secs. 8 & 9.	150	4- 3 M & W
1895	11-15		J. C. Duff J. H. Muse	NW $\frac{1}{4}$, NE Sec.8, T.16N., R.3E. at mouth of "Box Canyon on river in SE'ly direction thru Secs. 8 & 9.	500	61- 3 M & W
1895	11-18		L. P. Bristow J. C. Bristow	Ditch head on W. Side of Verde $\frac{3}{4}$ -mi. above mouth of Oak Cr., where the old Conger dam was. Ditch to be called "BB" ditch & to "run the old Conger ditch line & by the Old Conger mill & extend abt 3 mi. below said mill.	5000	68- 3 M & W
1896	2-1		A. J. Humbert J. J. Humbert	Hd. in Sec. 17, T.16N., R.3E.	300	81- 3 M & W
1896	8-6		Wm. E. Van Deren David Scott	Beg. abt mouth of gulch leading from Jerome Jct., abt $\frac{1}{4}$ -mi. S. of Wm. Jordan's ranch, to be known as "Upper Verde No. 2 Irrig. Ditch" to run SE'ly to near SW Cor. Sec.2.	1500	154- 5 M & W
1898	8-8		Frederic E. Gates	Water from Brown Springs on W. side of Verde abt 4 mi. S. from "lower John Davis ranch" - from springs to Verde river.	200	268- 3 M & W
1899	1-28		Arthur E. Cordiner David Kilpatrick	Dam for storage, hd. of "Box Canyon" $\frac{1}{2}$ mi. below Packard's ranch at Jct. of Sycamore Cr. & Verde. Ditch from mouth of Box Canyon $\frac{3}{4}$ -mi. above Ed. Jordan's ranch, SE'ly.	25000	311- 3 M & W
1900	2-1		Nathan Huckaby Richard Huckaby James Huckaby Geo Huckaby John McCall	"Loy Water Right". Ditch on E. side Verde River abt 300 ft. below the Van Deren crossing to a suitable site for a reservoir.	600	405- 3 M & W
1901	3-5		Wm. W. Nichols	From Verde near Cottonwood to cover W $\frac{1}{2}$, NE $\frac{1}{4}$ & W $\frac{1}{2}$, SE $\frac{1}{4}$, Sec.35, T.16N., R.3E.	400	24- 5 M & W
1901	8-13		Prosper P. Parker John K. Doolittle	Dam 100' high at SW Cor., T.5N., R.7E. & impounding dam 200 ft. high at horseshoe bend below mouth of Lime Creek. Also canal etc.	2000 C.F.S.	58- 5 M & W
1902	3-22		Robert Finnie G. H. Clayson	Ditch to begin on W. side of Verde opp. "Osborne place" abt 8 mi. below C. Verde. To run S. along W. side of Verde abt. 7 mi. to Fossil Cr.	10000	29- 5 M & W

VERDE RIVER (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1902	6-28	Robert Finnie	Ditch to begin on W. side of Verde opp. "Osborne place", about 8 mi. below Camp Verde. To run S. along W. side of Verde abt 7 mi. to Fossil Cr.	10000	114- 5 M & W
1902	11-16	F. E. Jordan	(Power Dam opp. bluff near lower extremity (of "Box Canyon" near ctr S. line (Sec.5, T.16N., R.3E., abt 1 mi. N. (of "Walled Caves", on W. bank Verde abt 6 mi. NE of Jerome. To be used particularly for power.	6000	127- 5 M & W
1902	12-18	Eggert Stofen	Pt. of div. on L. bank on Morris' homestead, opp. the Ed. Jordan head-gate. Runs abt 1/2 mi. to NE Cor. NE 1/4, NE 1/4, Sec. 16, T.16N., R.3E.	400	130- 5 M & W
1903	3-16	Augustus C. Sheldon Prosper P. Parker	Horseshoe Res., etc. Middle Res. Diversion Dam & Res. New River Res. Hassayampa Res. Canal & power stations.		171- 5 M & W
1905	5-4	Rio Verde Canal Co.	Res., dams, power plants, canals, etc. Refers to many other filings in Yavapai & Maricopa Counties.		234- 5 to 251- 5 M & W
(1906	9-11	Ed Packard (See below T.A.H.)	From Sycamore Cr. abt 1 1/2 mi. above Jct. of same with Verde. Ditch to run to suitable res. site.	100	313- 5 M & W
(1906	9-22	Arthur G. Wood (Water used for 20 yrs. prior (See above T.A.H.)	"A.G. Wood Water right". Sycamore Cr. abt. 1 mi. above jct. with Verde, "there being two ditches to convey said water to the "Packard Ranch" said ranch watered in this way for past 20 yrs."		316- 5 M & W
1907	9-25	Wm. E. Fry	Ditch 40 ft. wide heading abt 1 mi. above mouth of Oak Cr. <u>FOR POWER</u>	14000	446- 5 M & W
1908	9-19	B. B. Perez	"Perez Bitter Creek Water Right." abt 2 1/2 mi. E. of Jerome at SW Cor. T.16N., Sec. 19. Water to be used on "E 1/2 NW 1/2 & SW 1/2 NE 1/4 Sec.20, T.16N.,R.3E."(already in use)	80	31- 6 M & W
1910	7-23	Verde Water & Power Co.	Res., dams, power plants, canals, etc. Succeeding Rio Verde Canal Co., etc.		226-243 Bk.6 M & W.
1911	6-14	Charles D. Willard	For irrigation of land in Sec.21, T.16N., R.3E. - terminus of ditch being 1 1/4-mi. from pt. of diversion.	700	318- 6 M & W
"	"	" " " "	To irrigate land in Sec.28, T.16N., R.3E.	600	319- 6 M & W

VERDE RIVER (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1911	7-5	O. M. Andrews	To irrigate land in Sec. 18, T. 15N., R. 4E.	300	328- 6 M & W
1911	7-6	Wm. M. Keagle	W. side of Verde abt $\frac{1}{2}$ mi. below mouth of Sycamore Cr. "Will be called "Water Cress Spring".	20	334- 6 M & W
1911	7-23	Tim F. Shea John M. Sullivan	Sycamore Spring abt $1\frac{1}{2}$ mi. up Sycamore Cr. above Jct. with Verde.	All	344- 6 M & W
1911	9-4	Edith Whitaker	"Old Weaver Spring" to irrigate land in Sec. 5, T. 15N., R. 3E.	300	347- 6 M & W
1911	9-8	Doo Fok	For irrigation of land in Sec. 18, T. 15N., R. 4E.	100	349- 6 M & W
1911	9-22	William Stephens	Div. pt. $\frac{1}{8}$ mi. below mouth of Oak Cr. To build impounding dam & ditch on each side of Verde SW'ly for 15 mi.	All surplus	352- 6 M & W
1911	8-4	Charles D. Willard	Pt. of div. near SE Cor. Sec. 28, T. 16N., R. 3E. Ditch to be abt. $3\frac{1}{2}$ mi. long & to irrigate land along same in Secs. 28, 27, 26, 35 & 36 of said Tp. & Secs. 1 & 12, T. 15N., R. 3E.	600	394- 6 M & W
"	"	"	"	"	"
"	"	"	Pt. of div. abt. ctr. of S. line NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 21, T. 16N., R. 3E., - ditch to be abt $4\frac{1}{2}$ mi. long & water to be used on land in Secs. 27 & 28.	700	395- 6 M & W
1912	1-8	J. J. Sullivan	10 mi. below Camp Verde for power.	4000	404- 6 M & W
1912	9-23	J. L. Summers J. D. Bethune Jr.	Sycamore Spring & Cr. abt. 2 mi. above mouth.	1000	445- 6 M & W
1912	11-12	Verde Water & Power Co.	Res., dams, power plants, canals etc., succeeding Rio Verde Canal Co. etc.	All	459-474 Bk. 6 M & W
1913	9-20	Dea Mee Get	To irrigate NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 18, T. 15N., R. 4E.	300	581- 6 M & W
1913	10-20	J. W. Ralston J. H. Smith A. J. Ralston J. T. Ralston J. F. Ralston Tom Logan A. D. Ralston Babbitt Bros. Robt. E. Morrison Walter Blackford H. C. Blackford	From Verde on W. bank near mouth of Black Canyon. Ditch to be 14 mi. long.	2000	582- 6 M & W

(Continued)

VERDE RIVER (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
		W. T. Head Robert Finney J. J. Markesberry Mrs. I. S. Forest Louis Lebsch			
1913	12-8	Wallace Willard	Adjacent to NE $\frac{1}{4}$ NW $\frac{1}{4}$ & NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 12, T.15N., R.3E. to irrigate land in Sec. 12.	100	589- 6 M & W
1914	2-14	James C. Maxwell Leonard A. Maxwell Lewis B. Bell	Existing ditch "known as the Irrigating Ditch" abt. 2 mi. long.	500	609- 6 M & W
1914	3-20	Lee Smart	Sycamore Creek in Secs. 7 & 8 T.17N., R.3E.	300	618- 6 M & W.
1914	3-30	L. Tissaw	Abt. 3 mi. W of Cornville by pump, abt. 1000 ft. W of line bet. Secs. 17 & 18, T.15N., R.4E., to irrigate SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 18 (pt.) & NW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 19.		624- 6 M & W
1914	4-4	A. G. Wood	Water of Shea Spring in NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec.15, T.16N., R.3E.	50	628- 6 M & W
1914	7-11	Walter R. Lamberson	To irrigate NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 17, T.15N., R.4E.	50	1- 7 M & W
1914	9-12	David Amor	At Sycamore, near mi. post 25, Clarkdale - Cedar Glade branch of S. F. Ry.	50	10- 7 M & W
1914	9-22	Bonadeo Liugi	At SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 19, T.15N., R.4E.	150	11- 7 M & W
1914	10-5	Jose Ruiz	In Sec. 20, T.15N., R.4E.	150	27- 7 M & W
1915	4-6	Timothy P. Sullivan	"Extends to mouth of Box Canyon" to irrigate land on both sides of Verde river (abt. 3 mi. above Clarkdale adjoining U.V. Cop. Co. ranch known as Ames ranch) in Sec. 23, T.17N., R.3E.	200	68- 7 M & W
1915	Nov.3	Dea Hong	Pt. of div. in Sec. 18, T.15N., R.4E.	100	102- 7 M & W
1915	11-27	Granville Fain	Water of Fain Spring, in bed of Verde River $\frac{1}{2}$ mi. NW of Clt's house.	20	139- 7 M & W
1916	1-1	James Temby	Abt. 3 mi. above Sycamore Cr.	40	173- 7 M & W

VERDE RIVER (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1916	5-18	R. C. Taylor	To irrigate land on "Blowout Canyon" in Sec. 5, T.15N., R.3E., (W. of Verde river)	All water of Div. spring	196- 7 M & W
"	5-20	" "	" " " " "	All of Cinega spring	197- 7 M & W
1916	5-29	Nick Radokovitch	To irrigate homestead in T.15N., R.3E.	Water Of Rock Spr.	199- 7 M & W
1916	9-11	C. H. Rutherford	Sycamore Springs & Canyon, in Secs. 8 & 5, T.17N., R.3E., & Secs. 32 & 29, T.18N., R.3E.	All	252- 7 M & W
1916	10-13	W. J. Simmons Richard L. Byrd	Springs at $\frac{1}{2}$ mi. S. of old Hull ranch & $\frac{1}{3}$ mi. W. of J.P. King ranch.	All	268 & 269 7 - M & W
1916	8-8	T. Thomas, pres., Par.-Verde W.U.A.	Dams, ditches etc.	All surplus	273- 7 M & W
"	11-22	" " "	" " "	"	290- 7 M & W
1916	9-22	Mrs. C. V. Hopkins	1" pipe from spring 1700' SE of NW Cor. 34 & from 1500' SE of same, T.16N., R.3E.		293 & 294 7 - M & W
1916	11-23	Julius Warren E. A. Jordan	E. side of Verde river, below mouth of Beaver Cr., abt. 1 mi. N. of C. Verde.	1000	310- 7 M & W
1916	12- 5	Richard Rucker Frank L. France	Springs abt. Sec. 20, T.15N., R.3E.	All	312- 7 M & W
Recorded (1916	6-5	J.P. King	Springs in Juniper Wash in NE $\frac{1}{4}$ Sec. 20, T.15N., R.3E. (Stock watering)	50	200- 7 M & W
(Posted	6-2	" "	Amended same.	"	313- 7 M & W
(" 12-2	" "	" "	Amending filing made 6-2-16		314- 7 M & W
(" " "	" "	" "	Recorded P.200 Bk. 7, M & W - Lee's Springs	30	314- 7 M & W
1916	3-6	Verde Water & Power Co.	"Entire Enterprise by the Verde Water & Power Co. Dams, etc., etc.		325-343 7- M & W
1916	12-20	Lee Smart	Sycamore Spr., 1 mi. up Sycamore Cr. from Clt's ranch, $\frac{1}{4}$ mi. E. of main channel of Sycamore Cr., abt $\frac{1}{2}$ -mi. from mouth.	700	353- 7 M & W

VERDE RIVER (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1917	9-22	E. V. Latham) N. J. Larson) F. K. Crusfahl) A. T. Caston) Officers of "Verde) Valley Power Co.")	At line bet. Secs. 28 & 29, T.17N., R.3E.	10000	413- 7 M & W
1917	12-17	C. V. Hopkins	All Water Cress Spring, abt. SW $\frac{1}{4}$ Sec. 17, unsurveyed T.17N., R.3E. on S. side Verde abt. 3 mi. E. of Clarkdale.		434- 7 M & W
1917	10-25	W. W. Midgley	In Sec. 36, T.15N., R.3E. - Spring.	All	437- 7 M & W
1917	12-28	Upper Verde Farm & Orchard Co. (Recording) Witness: (rights) C. V. Hopkins (used) (since) (9/30/1913)	Claims & has used since 9-30-1913 $\frac{1}{2}$ of spring in SE $\frac{1}{4}$, Sec. 31, T.16N., R.3E. (See next filing)	$\frac{1}{2}$ of All	
1917	12-28	United Verde Copper Co. Witness: C. V. Hopkins	Springs in SE $\frac{1}{4}$ Sec. 31, T.15N., R.3E. (See next previous filing)	All	440- 7 M & W
1918	2-16	Paradise-Verde W.U.A.	Dams, etc.	All unapp'd.	457- 7 M & W
1919	1-18	United Verde Copper Co.	Canyon at SE $\frac{1}{4}$, Sec. 31, T.16N., R.3E., where canyon crosses W. sideline of the Haskell ranch.	All	537- 7 M & W
1919	3-3	Charles D. Willard	E. bank Verde river abt. 1 mi. above Cottonwood. Ditch to be built to SE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 22, T.16N. R.3E., to irrigate SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22 & NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 27.	100	550- 7 M & W

OAK CREEK
"Promiscuous Records"
Water Rights

Mo & Year	Day	Names	Description	M.I.	Recorded Page Bk.
1876	12-10	J. D. Tipton	$\frac{1}{2}$ Interest in ditch located by A. Jackson, P. Hough & J.D. Tipton on SE side Oak Cr. abt. 600 yds. above Edw. Mulholland's house & running along SE side of Oak Cr.		348 - 1 Prom.
1878	5-10	G. W. Hull & Co.	$\frac{1}{3}$ interest in completed ditch owned by Wm. Fane, Mat Durch & G. W. Hull & Co. Said $\frac{1}{3}$ Int. has been released by John Parker to G. W. Hull & Co. Terminates in Sec. 10, T.15N., R.4E.		355 - 1 Prom.
1875	8-25	Jas. Douglas	"The Big Spring."		159 - 1 Prom.

OAK CREEK
"Millsites & Water Rights Records"

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
(1887	See P.)			
1888	4-2	H. D. Willcox John Loy Conway Bristow	Bet. mouth of Oak Cr. & "Sheep Corrals", above, - to irrigate land on E. side of Verde river	Pt. or all normal flow	473- 1 M & W
1888	9-11	(Mrs. S. J. Arnold (Verde) (Lands) (By Oak) (Cr.) (Water) (T.A.H.)	(M. K. Gaddis by Wales Arnold Water from Oak Cr. On S. side of Oak Cr. to land lying along Verde below mouth of Oak Cr. N & E of O.K. ditch.	2000	3 & 4- 2 M & W
1888	9-22	Conway Bristow James Loy John Loy	Thru T.15N., R.4E., T.14N., R.4E., and Ts.13N., Rs. 4 & 5E and thence to the end of the Military Res. of Ft. Verde at or near Clear Cr.	10000	6 - 2 M & W
1889	-	See P. hereof			
1897	6-24	L. M. Turner	"Page Springs" on E. side of Oak Cr. abt. 7 mi. above mouth Ditch commences 100 ft. S. of head of James Page's ditch & runs N. abt. 1500 ft. to Oak Cr.	2500	205- 3 M & W
1899	8-24	E. J. Parkinson (Witness: E. H. Meek)	Abt. 3 $\frac{1}{2}$ mi. upstream from the Page Springs. Ditch to run to S. edge of Allen's Flat, opp. Hart's Bend in Oak Cr.	4000	419- 3 M & W
"	"	E. H. Meek (Witness: E. J. Parkinson)	" " " " " " " "	"	421- 3 M & W
1899	8-19	J. F. Derrick	Tunnel site for irrigation abt. $\frac{1}{2}$ mi. E. from Page's Springs on E. side of Oak Cr. - to run S'ly from 1st falls in Canon above L. M. Turner's house.	All	431- 3 M & W
1887	-	See P.			
1899	11-24	James Page Charles Dickinson John D. Lay Chas R. Chestnut	Water from Springs in Sec. 23, T.16N., R.4E. on E. side of Oak Cr. "Ditch is known as the Page ditch and has been in use since 1876."	400	438- 3 M & W

OAK CREEK (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Ek.
1899	12-2	E. H. Meek	Hd. to be abt. 3 $\frac{1}{2}$ mi. upstream from Page's Springs, abt. 600 ft. above head of Downings ditch. Ditch to be built to S. edge of Allen's flat, opp. Hart's Bend in Oak Cr. where a bluff abt. 225 ft. high forms E. bank of Oak Cr.	4000	441- 3 M & W
1889	10-15	Henry Schuerman	On left bank Oak Cr. 100 ft. from where it leaves J. W. Dougherty's ranch and on R. bank opp. same.	500 250	79- 2 M & W
1895	5-4	Wm. Fain M. W. Muse	Near N. line Sec. 3, T.15N., R.4E., - to irrigate SW $\frac{1}{4}$ (SW - T.A.H.) Sec. 3 & NW $\frac{1}{4}$ Sec. 10. Ditch to run W. abt. $\frac{1}{2}$ mi., S. 1 $\frac{1}{2}$ mi. & E. 1 mi. to Oak Cr.	500	2- 3 M & W
1887	10-25	Jas. Page & J. W. Muse	Springs in Oak Creek.	500	229- 3 M & W
1899	12-2	E. J. Parkinson (Witness: E. H. Meek)	Abt. 3 $\frac{1}{2}$ mi. upstream from Page's Springs, abt. 300 ft. E. of head of Downing's ditch. Ditch to run to S. edge of Allen's Flat opp. Hart's bend in Oak Cr.	4000	442- 3 M & W
1900	1-22	A. T. Cornish J. T. McWilliams	Div. dam just below mouth of W. fork of Oak Cr., Coconino County, near ranch of J. L. V. Thomas. - To run down W. side of Oak Cr. to pt. whence water can flow by gravity to pt. abt. 2 mi. from Jerome.	1000	454- 3 M & W
1890	2-2	J. A. Van Deren A. & E. Dickinson Chas. R. Chestnut Elijah Lay Alonzo Mason D. E. Dumas	Amended Location, "Oak Cr. Water Rt. & Irrigation Ditch" - E. side of Oak Cr., from pt. where wagon road crosses Oak Cr. bet. Dickin- son's place & James Page's place where the Capt. Jackson's old ditch began. Extends along E. bank of Oak Cr. to Sec. 3, T.15N., R.4W. (? T.A.H.-should be R.4E.)	2100 Chas.	458- 3 M & W
1894	12-17	Wm. Lane D. E. Dumas Alonzo Mason J.D. Lay	) Same location made 12-17-94 and) recorded Feb. 11, 1899 by Wm. Lane,) E. E. Dumas. Alonzo Mason & J. D. Lay, recorded -		310- 3 M & W
1900	2-10	J. F. Derrick	Spring, to be developed with tunnels, ditches, etc. to irrigate land. Spring abt. 1 $\frac{1}{2}$ mi. E. from Elijah Loy's Ranch at left of white Flat & in canyon above big flume on Oak Cr.		475- 3 M & W

OAK CREEK (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1900	6-13	David F. Hart David E. Hart	Dam & ditch built on E. bank of Oak Cr. near ctr. Sec. 3, T.15N., R.4E., thence S'y along E. bank abt. 2½ mi. to irrigate, NW¼ Sec. 15 etc. Ditch begun 2-1-1898 & finished 1899.	200	487- 3 M & W
1900	9-29	John Smith Atwood Aims.	Ditch begins below a canyon on W. side Oak Cr., abt. ¼ mi. E. of old "Aztec" ruin, to run abt. 2½ mi. to land, viz;- SE¼ SW¼ Sec. 15, W½ NW¼ & NE¼ NW¼ Sec. 22, T.15N., R.4E.	300	495- 3 M & W
1900	11-12	Juan Armijo	Claims 160 acres on Oak Cr. N. of Henry Schucerman's place. Irrigates 20 ac. & can irrigate 80 more. Claims 100 M.I. Pt. of diversion is 100 ft. from pt. where Oak Cr. leaves the J. W. Dougherty Ranch. Head of ditch is about 250 yds. above cultivated land of claimant.	100	499- 3 M & W
1901	1-16	R. H. Jack	"Spring Creek Water Right" As much of waters of spring Cr. as pass headgate of D. E. Dumas located on W. side of spring cr. opp. D. E. Dumas' headgate. Ditch to run to suitable res. site.	300	7- 5 M & W
1901	2-6	Samuel C. Dickinson	On W. bank Oak Cr. abt. ¼-mi. downstream from D. E. Dumas' barn.	720	12- 5 M & W
1901	5-22	Andrew J. Downing "Located & in use since Feb., 1898"	Ditch heading in SE¼ Sec. 14, T.16N., R.4E., & running to SE¼ NE¼ Sec. 23, T.16N., R.4E.	70	41- 5 M & W
1904	9-9	Charles S. Chick "Constructed about 1876"	"Lower Oak Creek Ditch" From pt. 1 mi. S. of mouth of Spring Cr., over ranches of original builders, (SW¼, Sec. 10, W½ SW¼, Sec. 3, T.15N., R.4E.) Claims flow of to protect his water right.	250 To ea. 160 Ac. 600	216- 5 M & W
		"Afterward Wm. Fain & J.W. Muse (abt. 1894) recorded a water right claim."			
1908	6-23	J. F. Derrick Work done 1901-02.	Enlarging Lane Ditch & Dave Lay Tunnel.		8- 6 M & W
1910	2-26	Geo. H. Moore	"Abt. 2½-mi. up Oak Cr. from Page's Springs, at a pt. known as "Downey's Head", on NE¼, Sec. 14, T.16N., R.4E.	70	167- 6 M & W

OAK CREEK (Continued)

Year	No. &		Description	M.I.	Recorded	
	Day	Names			Page	Bk.
1910	5-25	Abraham L. Smith	Water of Copple Spring abt. 1 $\frac{1}{2}$ -mi. above ranch of Claimant. Location SW $\frac{1}{4}$, Sec. 14, T.16N., R.4E.	50	192-	6 M & W
1910	10-13	Gertrude Lewis Gates	"Cottonwood Seep" in NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 23, T.16N., R.4E.		249-	6 M & W
1913	12-24	Eric Bloom	Pt. of Div. in Sec. 3, T.15N., R.3E., ditch abt. 4 mi. long.	127	597-	6 M & W
1914	2-16	Sam McMillen	To irrigate NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 34 T.16N., R.4E.	150	610-	6 M & W
1914	3-14	Dolph Willard	Abt. 1 $\frac{1}{2}$ -mi. S. of Dolph Willard's house on Oak Cr.	All	620-	6 M & W
1914	5-16	Frank Pittschauer Helen Pittschauer	"Oak Creek W.R. & Irrig. Ditch". same recorded P453, Bk. 3 M & W, Irrigates SE $\frac{1}{4}$, Sec. 34, T.15N., R.4E.	300	633-	6 M & W
1914	3-31	R. R. Willard	1 $\frac{1}{2}$ -mi. above claimant's homestead	All Floods	635-	6 M & W
1914	8-14	Elmer H. Rogers	Pt. of div. on E. side Oak Cr. $\frac{1}{2}$ -mi. from Sugar Loaf Mound - to irrigate SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 14, T.15N., R.4E.	65	6-	7 M & W
1914	11-30	C. S. Chick	Water of Cottontail Springs at SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 4, T.15N., R.4E.	100	36-	7 M & W
1915	3-6	Pearl Hallett	To irrigate NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 21, and NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 20, T.15N., R.4E.	150	53-	7 M & W
1915	10-5	James T. Morris	To irrigate NW $\frac{1}{4}$ NE $\frac{1}{4}$ & S $\frac{1}{2}$ NE $\frac{1}{4}$ Sec. 15, T.15N., R.4E.	1100	90-	7 M & W
1915	12-10	E. H. Rogers	Irrigates land in Sec. 15, T.15N., R.4E.	50	152-	7 M & W
Recorded		Manley Sooter	At NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 15, T.15N., R.4E.	3000	205-	7 M & W
1916	6-9	James F. Morris				
1916	6-20	Jessie E. Duncan	On Oak Cr. on line bet. Secs. 14 & 11, T.16N., R.4E. To irrigate SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 13 & SE $\frac{1}{4}$ NE $\frac{1}{4}$ & NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 14, T.16N., R.4E.	100	209-	7 M & W
1916	9-8	Gertrude Lewis Gates	Pt. of div. at head of "Downing Ditch" in SE $\frac{1}{4}$ Sec. 14, T.16N., R.4E., for irrigation of land in Sec. 23.	25	251-	7 M & W

OAK CREEK (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1916	10-9	C. S. Chick	At W. near line bet. secs. 26 & 27, T.16N., R.4E., approx. 200 ft. N'ly from Cor. Secs. 34, 35, 26 & 27.	3000	264- 7 M & W
1916	11-23	L. R. Stuck	In SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 15, T.15N., R.4E.	250	289- 7 M & W
1925	3-27	Erwin Schuerman	Notifies all claims use for 6 or more years on his homestead.	100	659- 7 M & W
1930	7-27	Frank Petchauer Helen "	All waste water of Oak Cr. (the location of which is recorded in Ex. 3, M & W, page 458.)		90- 8 M & W
1932	3-23	Julius F. Warlop	Cert. of W.R. 689 5/17/37 To irrigate 15 ac. in NW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 10, T.15N., R.4E.	2 $\frac{1}{2}$ Ac.Ft. per Ac. Per Yr.	198-8 M & W

BEAVER CREEK
"Promiscuous Records"

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1878	7-19	George L. Pratt	On Beaver Cr. in Sec. 4, T.14N., R.5E., ditch $1\frac{1}{2}$ -mi. long.	100	333- 1 Prom.

BEAVER CREEK
"Millsites & Water Right Records".

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1890	7-22	William Back	Montezuma Well, abt. 1 mi. E. of Mehren's ranch. Ditch to run W. abt. 1 mi.	200	132- 2 M & W
1905	5-26	E. B. Mulholland	Crystal Spring, abt. $\frac{1}{2}$ -way bet. Montezuma Well & mouth of Beaver Cr., for agriculture.	100	297- 5 M & W
1897	2-27	J. A. Rokohl	Wet Beaver Cr. & Hutchinson's Springs for use on owner's land descr. in Bk. 1 of pre-emptions pp. 300-301.	500	314- 3 M & W
1900	12-12	J. T. Bristow	"Old Drum Ditch" water right. Claims 150 M.I. from Soda Springs. Ditch built abt. 1890. Head is abt. 250 yds. from said Soda Springs, & ditch runs abt. $\frac{1}{2}$ mi. to land of claimant.	150	2- 5 M & W
1900	7-24	Wales Arnold Affidavit land & Water Right owned by Wm. B. Back	Affidavit by Wales Arnold says that in July 1870 he located 160 Ac. on Beaver Cr. & Located a water right & posted notices at hd. of ditch, which he built 1870-71, taking 300 M.I. from Beaver Cr. & Montezuma Wells. Claims there was then no other water used from said source. Land & ditch commonly known as the "Wales Arnold land & ditch" and had been owned for past 15 yrs. by "One horse shoe Cattle Co. & now (7-24-1900) owned by Wm. B. Back.	300	3- 5 M & W
1911	8-1	Lorenzo D. Sanders	Water of Walker Creek a trib. of Beaver Cr., in Secs. 33 & 34, T.15N., R.6E. for use on "Walker Ranch" in said Secs.	All	339- 6 M & W
1915	2-1	William Schroeder	A ditch etc. as constructed 1 mi. from div. pt. to where water is to be used.	100 Add'l.	46- 7 M & W
1915	1-30	H. R. Grisco	Rt. to ditch etc. "from pt. of div." - $\frac{1}{2}$ -mi. to pt. of use.	100 Add'l.	47- 7 M & W
1915	9-18	Jas. W. Sullivan	At pt. $2\frac{1}{2}$ mi. above mouth of Beaver Cr., on N. side. Ditch to run S'ly. abt $1\frac{1}{2}$ mi.	All surplus	83- 7 M & W

BEAVER CREEK (Continued)

Year	Mo & Day	Names	Description	M.I.	Recorded Page Bk.
1915	11-1	Eugene McGuire	To irrigate land in Sec. 34, T.15N., R.5E. & Sec. 3, T.14N., R.5E.	200	115- 7 M & W
1919	1-30	J. L. Davis	Hd. in NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, & run to S $\frac{1}{2}$ NE $\frac{1}{4}$ & SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 17, T.14N., R.5E.	150	541- 7 M & W
1928	11-8	Beaver Creek Ranch (A Corp.)	Cert. of Water Rt. 384 used on NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 22, T.15N., R.6E.	400	92- 8 M & W

CLEAR CREEK

"Millsites & Water Right Records."

Year	Mo & Day	Names	Description	M.I.	Records	
					Page	Bk.
1889	1-28	Thomas A. Smith	For use on "The Turner Valley Ranch", bet. ranches of W.S. Head & John Morris. "Commencing-- bet. Morris & Mason possessions in "----" the Slough"	500	23 -	2 M & W
1891	5-9	J. B. Ricketts	"Abt. 1 mi. above John Morris ranch	100 "Surplus"	208-	2 M & W
1902	2-16	J. B. Ricketts	Additional water right to take all water lost in channels. Propose to move ditch head higher up creek abt. $\frac{1}{4}$ -mi. above Ed. Wingfield's ditch head. Propose to enlarge ditch & furnish the older ditches their water.		77 -	5 M & W
1903	3-11	J. W. Wingfield L. M. Turner W. F. Hutchison	Notices abt. 6 mi. above & 3 mi. below Wm. Hutchison's ranch. <u>For Power.</u>	2000	138-	5 M & W
1917	9-13	Dr. Chas. Hollingshead Thomas Taylor Thomas D. Hawkins.	Abt. in Secs. 33 or 27, T.14N., R.7E.	2000	422-	7 M & W
1939	8-29	Earl Heath	"Affidavit of Beneficial Use" on NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 21; W $\frac{1}{2}$ NW $\frac{1}{4}$ & NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22; T.13N., R.5E., containing 320 Ac. Owned ppty. since 7/1/36 & used water thereon.	47	257-	7 M & W

WATER SUITS

YAVAPAI COUNTY

WATER SUITS - YAVAPAI COUNTY

2577	(Willard & McDonald) (vs.) (M. G. Willard et al)	Old Cottonwood Ditch
5669	(John R. Langdon) (vs.) (Edgar Reid et al)	Beaver Creek
3583	(Priscilla & Chas. F. Mahan) (vs.) (Wm. Schroeder et al)	Beaver Creek
3013	(W. F. Wilbur et al) (vs.) (Isaac Jones et al)	Clear Creek
4772	(Geo. W. Hance) (vs.) (Wales Arnold et al)	Old Verde Ditch
5843	(E. W. Monroe) (vs.) (Geo. W. Hance)	Old Verde Ditch

L. A. Willard)
 John McDonald) Ptf's.
 vs.

M. G. Willard - A. M. Strahan - Wm. Marshall - J. H. Strahan
 R. R. Willard - Thomas Carroll - W. W. Nichols - David Scott
 & Godfrey Van Deren - Def.

Judgment July 16, 1896 - Judge J. J. Hawkins.

Ptfs. & Defs. own & irrigate land under "Upper Verde Indian Reservation Ditch", of which there are six shares owned as follows:-

M. G. Willard	1 Share	David Scott	0-1/3 Share
A. M. Strahan	0 1/4 "	Godfrey Van Deren	0-1/3 "
Wm. Marshall	0 1/8 "	Wm. Van Deren	0-1/3 "
Alex & J.H. Strahan	0 1/4 "	John McDonald	0-1/2 "
R. R. Willard	0 1/4 "	L. A. Willard	<u>1-1/2 "</u>
Thos. Carroll	0 1/8 "		
W. W. Nichols	0 1/2 "	Total	- 6 Shares

Water to be divided according to shares.
 To be measured in boxes etc.

Later - Court orders show Water Commissioner appointed from year to year to distribute water for months April-September inclusive. 1923 last year recording Commissioner's appointment.

Final Decree Aug. 10, 1916 - Judge Frank O. Smith.

Stockholders of "Cottonwood Indian Reservation Ditch Co." owning 5-15/48 out of a total of 6 shares as follows:

Mrs. L. A. Willard		C. D. Willard	3/4
for Willard Estate	3/4	David Scott	1/3
Arthur Nicholas	1/4	Mrs. E. J. Gibbons	2/48
William Flynn	1/16	Eggert Stofen	2/48
Thomas Taylor	1/2	(by LeRoy Anderson, Att'y.)	
Ed. W. Rucker	1/16	Reanos Thompson	3/16
Alonzo Mason	1/4	Harry Crain	3/8
H. R. Brown	1/48	J. Fred Boyd	5/8
M. B. Hazeltine	3/48	Chas. Burrus	1/8
E. Lambeth	2/48	(by R. E. Morrison, Att'y.)	
Fred Mickle	1/4		
R. Smiley	1/48		
Gottlieb Fischer	3/48		
Steve Galich	1/4		
C. V. Hopkins	1/2		

Decrees ditch to be managed by a Board of Ditch Commissioners of 5 members elected by stockholders each spring.

Court to appoint Ditch Master prior to April 1.

Each water user to build measuring box.

E. W. Monroe, Elias Wine)
J. H. Scott, E. J. Monroe)
J. Bristow, J. Marksbery) vs. George Hance
Dave Wingfield, C. H. Harbeson)
Taylor Goddard, W. F. Wingfield)
& Dan Fain)

Suit for money.

Court Order - May 6, 1937

Appoints Peter P. Schroeder, Water Commissioner.

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Priscilla Mahan)	(Wm. Schroeder	James C. Maxwell
Chas F. Mahan)	(Leonard Maxwell	Wm. Back
)	vs. (B. F. Taylor	Robert Finney
)	(Elizabeth Cliff	Nelson Hollingshead
)	(John Skagg	Nicodemus Hutchinson
)	(& Riley Casner	

- - -

(Nov. 25 - 1904

(Motion by dfts. to set aside decree rendered against

(them Dec. 24, 1903.

Decree May 29, 1906, Judge R. E. Sloan.

Finds that parties irrigate land and have rights as of dates as follows:

- I. (1) Wm. Back - 101 Ac. - 1870
- (2) Priscilla & Chas. F. Mahan - 150 Ac. - 1871
- " " " " " - 20 " - 1895
- (3) Wm. Schroeder - 90 " - 1871 - subsequent to Mahan
- (4) Robt. Finney - 30 " - 1879
- (5) Elizabeth Clift - 15 " - 1880
- (6) Riley Casner - 3 " - 1883 from Beaver Cr.
- " " - 18 " - 1884 (from spring)
- (7) John Skaggs - 15 " - 1889
- (8) B. F. Taylor - 14 " - 1890
- (9) Nicodemus Hutchinson - 8 " - 1897
- (10) Nelson Hollingshead - 10 " - 1898

II. Finds that at times water is insufficient for all.

Provides for Water Commissioner to be appointed by Court.

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Decree Dec. 24, 1903, Judge R. E. Sloan

- (1) Wm. Back has 1st & prior right to 100 inches.
- (2) Back to provide box at head.
- (3) Mahan has 2nd right to 150 inches.
Wm. Schroeder has 3rd right to 100 inches.
- (4) Wm. Schroeder also to have additional water for 15 acres.
- (5) Other dfts. subsequent to above.

Decree Sept. 9, 1912, Judge Frank O. Smith.

John R. Langdon)
vs.)
Edgar Reid & Wm. Reid)

Plf. is owner of SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 4 and N $\frac{1}{2}$ NW $\frac{1}{4}$ & NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 9,
T.14N., R.5E.

Also of ditch built by Peter Arnold and Jake Weingart
in 1871 irrigating 50 Ac. of said land.

(Ptf. claim dfts. wrongfully use ptf. ditch etc.)

Decrees ptf. rights prior to dfts.

Dfts. own N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ N W $\frac{1}{4}$ and SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 10, T.14N., R.5E.

Decree Sept. 9, 1912, Judge Frank O. Smith.

John R. Langdon)
 vs.)
Edgar Reid & Wm. Reid)

Plf. is owner of SW $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 4 and N $\frac{1}{2}$ NW $\frac{1}{4}$ & NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 9,
T.14N., R.5E.

Also of ditch built by Peter Arnold and Jake Weingart
in 1871 irrigating 50 Ac. of said land.

(Ptf. claim dfts. wrongfully use ptf. ditch etc.)

Decrees ptf. rights prior to dfts.

Dfts. own N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ N W $\frac{1}{4}$ and SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 10, T.14N., R.5E.

(Fred Back	Fred Boyd)	Petitioners)
(Walter Wingfield	Ida B. See))
	vs.)
(J. L. Wall	Chas. P. Wingfield)	Respondents)
(John Heath))
	-----)
)
Judgment on mandate Jan. 23, 1939. Awards \$39 to ptf.)			

(W. F. Wilber	A. E. Head)	(Isaac Jones,	Jas. Thompson
(Lucinda J. Louthain,	Isaac Louthain)	vs. (John B. Ricketts,	Ed. Wingfield
(Heywood Cattle Co.	J. H. Wingfield)	(John Bristow,	W. I. Smith
(	)	(W. G. Wingfield	

Judgment Sept. 7, 1900 - Judge R. E. Sloan

- (2) Ptf. have 1st right to 475 inches from May to Sept. incl.
- (3) Ptf. own land as follows:

W. F. Wilber 60 ac. off E. side of NW $\frac{1}{4}$ and 60 ac. off E. side of SW $\frac{1}{4}$ Sec. 16, T.13N., R.5E.

A. E. Head - S $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 15 and SE $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 16, T.13N., R.5E.

Lucinda J. & Isaac Louthain - W $\frac{1}{2}$ SE $\frac{1}{4}$ Sec. 16, T.13N., R.5E.

Heywood Cattle Co. - W $\frac{1}{2}$ NW $\frac{1}{4}$ & W $\frac{1}{2}$ SW $\frac{1}{4}$ and 20 ac. off the W. pt. of E $\frac{1}{2}$ NW $\frac{1}{4}$ and 20 ac. off the W. pt. of E $\frac{1}{2}$ SW $\frac{1}{4}$ said Sec. 16.

J. H. Wingfield - NE $\frac{1}{4}$ Sec. 21, T.13N., R.5E.

- (4) 475 inches is necessary to irrigate said lands.
- (5) J. H. Wingfield is entitled to 47 inches.
- (6) Dfts. are subsequent in rights to ptf.

W. G. Wingfield owns Lots 1, 3 & 4 Sec. 15 (inside abandoned Fort Verde Garden Res.) and Lots 3 & 4 Sec. 15 (outside said res.) and Lots 2 and 3 Sec. 14. Said Tps. containing 169.97 ac.

W. I. Smith owns S $\frac{1}{2}$ NW $\frac{1}{4}$; NE $\frac{1}{4}$ SW $\frac{1}{4}$; NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 13, 160 Ac.

Ed. Wingfield owns $N\frac{1}{2}$ $NW\frac{1}{4}$ and $W\frac{1}{2}$ $NE\frac{1}{4}$ Sec. 13.

John F. Bristow owns 160 Ac. of unsurveyed land N. of and adjoining Ed. Wingfield.

John B. Ricketts owns $NW\frac{1}{4}$ Lot 1 Sec. 15 (78.42 Ac.).
Lots 5 & 6 and $S\frac{1}{2}$ $SW\frac{1}{4}$ Sec. 9 (140.51 Ac.).

Isaac Jones & Wm. Hutchinson own 10 ac. in Clear Cr. Canyon on Clear Cr. in Mogollon Mts.

Dfts. are entitled to the use of said water subsequent to ptfs. as follows:

Dft. W. G. Wingfield has 2nd right to 30-3/4 inches.

Dft. W. I. Smith has 3rd right to 23 $\frac{1}{2}$ inches.

Dft. W. S. Head, as successor to A. M. Head has 4th right to 29 inches.

Dft. Ed. Wingfield & John Bristow have 5th right to 58-3/4 inches.

Dft. Wm. Hutchinson, is the successor of James Thompson and with Isaac Jones has 6th right to 23-1/2 inches.

Dft. J. B. Ricketts has 7th right to 23-1/2 inches.

REPORT OF H. F. ROBINSON AND J. W. WOOLF

ON USE OF WATER FROM VERDE RIVER

September 1, 1895

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REPORT OF H. F. ROBINSON AND J. W. WOOLF
ON USE OF WATER FROM VERDE RIVER

September 1, 1895

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For several years it has been evident that there was less water for irrigation purposes in the Salt River Valley each succeeding year. Deeming that it was self-evident that it was the use of water by new settlers on the Salt and Verde Rivers, representatives of the following canals, to-wit: Mesa, Tempe, Utah, Arizona, Grand, Maricopa and Salt River Valley canals met in Phoenix on Saturday, July 20, 1895, to consider the matter, and devise ways and means for the preservation of the rights of these canals.

As a preliminary step, we, the undersigned, were sent to make a personal investigation, to ascertain what ditches had been taken out of the river, their owners, capacity, date of construction and such other information as might be useful. In compliance with these instructions we have been over the Lower Verde from its mouth to a point at or near the mouth of Camp Creek, a distance of about twenty miles, from this point there is no irrigated land for about forty-five miles. In this distance we found nine ditches. These ditches nearly all lie in what was the Ft. McDowell Military Reservation; a number of these ditches were located and built while the post was still occupied, but immediately prior to its abandonment all squatters on the reservation were evicted, and supposed to have remained off until the reservation was thrown open for settlement in November, 1894. When the reservation was thrown open for settlement, we understand, former locators were allowed six months in which to locate, failing in which they would lose any priority of right they may have had.

We herewith append a list of ditches, with such information as we could ascertain concerning the same.

On the west side of the river we found the following ditches:

1. Francisco Mason together with Ortez. Head located about two and one-half miles below Ft. McDowell; probably taken out about 1883; occupied until the eviction of squatters, and for the past year or two. The ditch has an estimated capacity of 150 to 175 inches, and at the time we first saw it, it was carrying about eighty inches. Mason claims to have but twelve acres of land that can be cultivated, balance of water in ditch returns to the river.

2. Smith and Ault. Pump ditch. This is a ditch constructed during the present year; its head is at Ft. McDowell; they have an engine and boiler that runs a five-inch centrifugal pump, which has a capacity of 180 inches, but ordinarily pumps 150. They have under fence 160 acres of land. McCann also has a quarter section of land, both quarters being under the ditch. They are cultivating this year about 15 acres of their land, and about four acres of McCann's.

3. The "Government" or McDowell Ditch". This ditch heads about three miles above the Post. The original ditch was taken out by the Government in about 1869 to irrigate a vegetable garden for the Post. When the Post was abandoned, five years ago, the ditch was, of course, also abandoned. We are informed that there are fifty-seven men now interested in the ditch. Dec. 21, 1894, the McDowell canal was located by Manuel Gallardo, Ramon Piani, James McCann and Neri Osborn. They claim 5,000 inches of water to be taken from the Verde River at a point about three miles above old Ft. McDowell, at or near what is known as the old Government Ditch. They also claim the right of way for a canal six miles long, running in a southerly direction, also for a damsite at its head. This notice was posted about twenty-five feet from the old ditch head. As they have done nothing towards building a larger canal, this is virtually a relocation of the old Government Ditch. We were told that they would claim priority of right from date of construction of original ditch, but their location notice does not claim this. The ditch now irrigates about 160 acres of land. We measured it and found it running 391 inches of water, and estimated it could carry about 500 inches, or perhaps a little more.

The land is now cultivated in small holdings by Mexicans, and McCann and Neri Osborn have been advancing provisions, etc., to the Mexicans in order to keep up the ditch, and we understand that they are virtually owners of both canal and land. The ditch as located, would cover, if constructed, the land owned by old man McCann, Smith and Ault and Mason, as well as much more.

4. The Dennaby Ditch. This is a small ditch that headed at one time about eight miles above the Fort. It has been abandoned five or six years.

5. Mrs. Ann White. She has filed a location notice dated January 2, 1886, appropriating 1,000 inches of water. Claims she began the construction of the ditch in August, 1878, ran water through the same in 1879 and 1880, and that the notice was intended to date back to that time. The head of the ditch was about nine miles above Fort McDowell, has been abandoned for years and we believe that a portion of the channel is now used by the Asher ditch. We also understand that she claims her location and right from the above date.

6. Asher Ditch. John Asher claims 5,000 inches of water. Canal to Head one mile below the mouth of Camp Creek on the Verde River. Notice dated February 4, 1895 and says he has had a ditch and dam for three years previous. We measured the ditch and found it carrying 60 with a capacity of about 150 inches. He has in cultivation 30 or 40 acres, which is about all he can irrigate with ditch as now constructed.

7. The Miller Ditch. Owned by John (?) Miller, and E. P. S. Andrews. This is a pump ditch. They have an 18-horse-power portable engine, and a 10-inch centrifugal pump that will pump 250 inches of water. Mr. Andrews says that it has an extreme capacity of 480 inches but they do not need that amount of water. They have about 70 acres under cultivation with probably as much more that can be irrigated. This plant was put in July or August 1894.

On the east side of the river there are:

8. The Valasquez ditch. The head is about two miles below the fort. This ditch is owned by Ventura Velasquez and Francisco Lopez. They originally located about 1876, but were evicted with others five or six years ago, but as soon as the reservation opened, they returned and are now rebuilding the ditch. The ditch is four feet wide on the bottom, and will carry eighteen inches depth of water. There is at least 320 acres of land under the ditch. We could not get the grade of the ditch, but estimated it at a capacity of about 500 inches.

9. The Weller Ditch. A new ditch is now being taken out by E. Weller to irrigate land at the mouth of Sycamore Creek. It heads about two miles above, is but 18 inches wide, and the water may run seven or eight inches deep. Will cover 150 acres of land. He expects to enlarge it later. He thinks the ditch will carry but ten inches of water, but we think it will probably carry forty or fifty inches.

To recapitulate. We found nine ditches, of which two were abandoned, two were pump ditches, three were supplied direct from the river bed, one an old ditch being reconstructed, and one a small ditch not yet completed.

The pump ditches when irrigating use about 400 inches of water, the total capacity of the three running water we estimate at from 800 to 900 inches, though the land in cultivation would not warrant the use of that amount. Of course water not used in irrigation is returned to the river.

We found no locations or appropriations of water filed except in the case of Mrs. White, John Asher and Neri Osborn et al.

We herewith append to, and make a part of this report, photographs as follows: The Head of the Government Ditch, the pumping plant of the Miller Ditch taken from below, and the Smith and Ault Engine, boiler, etc., and one from river showing pump.

Respectfully submitted,

As we said in our former report, there are no ditches or canals on the Verde River between the "Lower Verde" settlement and the mouth of Camp Creek, to which point our former report extended.

We found the following ditches and canals on the Verde River and its tributaries, and we have added all the information we could gather regarding them.

On the Lower Verde, on the west side of the river, all of the ranches are under one ditch, the "Wood" or "Lower Verde Canal." This ditch heads at about the north line of the Camp Verde Military Reservation, and has a length of about twelve miles, following the river very closely. It was carrying 758 inches of water at the time of our visit, and it has a maximum capacity of about one thousand inches. Its construction commenced in 1890. It covers the same land that was previously covered, however, by the old Camp Verde ditch, which is much older; also some new land, both above and below Camp Verde. On March 20, 1891, a location filing was made claiming five thousand inches, and signed by John Davis, John Wood and James Brown.

On the east side of the river we found the Eaman Ditch. This was built in 1892, has a capacity of about 75 inches, and covers about 640 acres. A considerable body of this has not been cultivated, and more of it is under a ditch from Clear Creek, and is watered by it. On July 21, 1892, W. S. Head, Thos. J. Eaman and Chas. B. Eaman filed an appropriation of three thousand inches of the water of the Verde River.

Clear Creek empties into the Verde here. We found the following ditches covering the amounts of land indicated.

Melvin	40 acres
Lothian	40 acres
Head	60 acres
Wingfield	30 acres
Head	30 acres
Bristow	30 acres
Morris	10 acres
Wingfield	75 acres

The Melvin ditch was constructed in 1867, the others are all old, from fifteen to twenty-five years, so we are told. We found no location notices of any water in any of these names, but did find one by Thos. Smith in 1889 for five hundred inches of water but cannot connect it with any of the ditches now constructed.

On Beaver Creek which joins the Verde just above Camp Verde we find the following:

Maxwell	40 to 50 acres
Thompson	100 acres
Finney)
Walker)
Cliff)
Hutchinson) Average 10 to 40 acres each. Say 80 acres
Skaggs)
Casner)

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The Maxwell ditch was taken out 18 or 19 years ago. The Thompson ditch takes the flow of water from Montezuma Well, about 100 inches. This water was taken by filing July 22, 1890, by Wm. Beck, claiming 200 inches of water.

This well or spring flows about one hundred inches or a little more the year around. We also find filings by Geo. L. Pratt for 100 inches water, July 19, 1878, but cannot say what ditch it refers to.

On the "Middle Verde" we found on the East side of the river the Hutchinson ditch, taken out in 1895, at a point about five miles above old Camp Verde, it carried about 175 inches of water, and covers in the neighborhood of 200 acres of land.

The "Middle Verde Canal", also on the east side of the river, has been built about 17 years. There are ten settlers under this ditch, each an owner in it, which was carrying 455 inches but has a capacity of about 800 inches, and irrigates 600 to 700 acres of land. A filing was made Sep. 11, 1888 claiming 2,000 inches, and declaring intention of enlarging the existing ditch.

On the west side is the Ralston Ditch, built in 1878, and covers about 40 acres of land. Work has lately been begun on a large ditch, to be an enlargement and extension of this ditch, to extend down to Camp Verde, and to be above the Wood ditch. A filing was made March 20, 1884, but nothing was done. A new filing was made Feb. 14, 1894 by R. M. Rodgers, Sarah J. Arnold and J. W. Ralston, claiming 2500 inches. The new ditch will have a capacity of 500 inches or a little more.

On Oak Creek we found the following:

Dickinson, Chick, Dickinson, Faier, Jackson, Loy, Gray, Dickinson, Kelly, Page, Houghton, Lief, Schuerman, Heckleby and Thompson, fifteen in all. Those will average twenty-five acres to each place, or a total on the creek of 375 acres.

In the county records we found that on the ditch owned by Wm. Faire, et al. a third interest had been sold and recorded May 10, 1878, and on May 4, 1895 in a filing for 500 inches signed by Wm. Fairer and J. U. Muse.

A filing is also recorded for the Loy ditch Sept. 22, 1888 appropriating 10,000 inches (!) signed Conway Bristow, James Loy and John Loy.

On Cherry Creek are a number of settlers, but very little land under cultivation. Not more than a few acres, so we did not take the time to investigate it in detail.

On the "Upper Verde" is the Upper Verde Canal, eight miles long. This is the old Government Indian Reservation Canal. On December 4, 1877, the following was filed: The undersigned individually and collectively claim the right to enlarge the old Government (Apache) Reservation ditch, and to extend the ditch 2492 rods, and appropriate 3,000 inches of water.

Signed J. H. Wingfield, D. W. Strahan, Mrs. Mary Elizabeth Cleft, L. W. Barney and Bros., J. W. Anderson and James Bristow. January 28, 1895, Thos. Carroll files appropriation for ten thousand inches, and Feb. 18, 1895, Thos. Carroll, David Scott and Godfrey Van Deren refile the same location and claim 15,000 inches. This seems to be the same Government ditch.

We were unable to find the area under this ditch or measure the ditch as the water was out. Its capacity is approximately 500 inches, and the acreage under the ditch is not over 700 acres, probably in the neighborhood of a section. The original ditch was taken out twenty years ago or more.

On the east side of the river is a ditch from eight to ten years old, will carry 250 inches, and covers about 350 acres of land. Filing made in 1877 by W. R. Pleasant and Isaac C. Jones claiming 1,000 inches.

Further up the river are the following:

Hickey,	100 acres
Hawkins	25 acres
Jordan	25 acres
Hawkins & Bird	50 acres
Conwell	35 acres
Duff	35 acres
and on Sycamore Creek, at the mouth is	
Packard	20 acres

These are the last ditches on the river.

In all we found forty-five ditches, covering in the neighborhood of 3,000 to 3,400 acres, in addition to the aggregate set forth in former report.

None of these ditches are at any great distance from the streams, as the mountains come down to the water very closely in all places. Half a mile between the ditch and stream is the maximum, and in our opinion nearly all of the water used reaches the stream again very quickly by seepage, and all that is lost is the small amount due to evaporation.

There are no very large ditches, with the exception of the Lower Verde, with an extreme capacity of 1,000 inches, the Middle Verde with 800 and the Upper Verde with 500, they are all small most of them with a capacity of not more than forty or fifty inches, and some even smaller.

We have omitted to mention the Rio Verde Canal, because we consider it an unknown quantity. To the older irrigation interests of the Salt River Valley it is, or will be, a problem requiring prompt and vigorous treatment, or it will be nothing worth our attention. Depending altogether on whether the Company prosecutes the work begun to a point where the rights of the older canals are infringed upon.

(Signed) H. F. Robinson,
(Signed) J. W. Woolf

Sept. 1, - 95.

TO THE CONFERENCE COMMITTEE OF THE ASSOCIATED CANALS.

REMARKS:-

We the undersigned, appointed by you to investigate and report on the condition, capacity and number of ditches and canals on the Verde River, also the acreage of crops and condition of same, beg leave to report as follows:

NOTE:

There is omitted here part of the report concerning irrigation below)
(Horsehoe damsite. Full report in Secretary's files, Salt River Valley)
(Water Users' Association.)

T. A. Hayden, 10/31/40.

UPPER VERDE RIVER

On the Verde River in the neighborhood of Camp Verde we find the farming country locally spoken of as the "Lower Verde", "Middle Verde" and "Upper Verde". We will however in this continuation of the report take the ditches in rotation on the West side of the river and down the East side and later take up each tributary of the river commencing below Camp Verde.

First on the West side we find:

13. The Wood Canal. This canal heads about four miles above Camp Verde and has a length of about 14 miles. A portion of the land under this canal was covered by a small ditch that was first taken out in 1872. The Wood canal was constructed in 1890 and was to take place of the above spoken of ditch, the head being moved up the river some miles. It has a capacity of about 1,000 inches. At the time of our visit there was no water in the canal. The owners of the Wood Canal are the following persons:

John Wood 3/5; W.S. Head 1/10; Jas Brown 1/10; John Davis 1/5.
The following persons are cultivating land under the Wood Canal:
Lewis Hunt.....40A. W. Arnold.....90A. Fred Platten.....40A. R. Hansen.....10A.
Ed. Mahuron.....30A. Chas. Rile.....50A. J.R. Hance.....15A.
Jas. Wingfield.....75A. Thos. Kile.....40A. L. Young.....15A. John Wood.....120A.
A. Jones.....30A. W. S. Head.....75A. E.E. Jordan.....112A. J. Brown.....100A.
Wm. Kunde.....30A. W. Stevens.....100A. J.A. Davis.....80A. Brown & Davis.....90A.
John Wood.....50A. Fred Masch.....50A. H. Williams.....15A. Colorado Tom.....10A.
F. Abrecht.....7A.

14. Ralston Ditch of Central Verde Ditch. This ditch is about 5 miles long. We are informed that the ditch was first taken out in 1839 with a capacity of 75 inches and having about 40 acres of land cultivated under it. Enlargements started in 1894 and not yet completed, however there was a force of men working on it at the time of our visit.

The settlers expect to complete the ditch this winter (1896). The ditch has a width of 5 feet on the bottom, there was no water in it but we estimated the capacity at 500 inches.

The owners of the ditch are said to be:-

Charles P. Colston, J. E. Ralston, J. E. Wingfield and W. A. Jones.

15. Upper Verde Canal. This canal heads on the Verde River near Peck's Lake, one and one-half miles above Cottonwood P. O. and is seven or eight miles long. It has an estimated capacity of 500 inches. This canal is an enlargement of the old Government ditch which was first taken out in the summer of 1873 and was constructed as far as the present Cottonwood P. O. site.

It was extended from here in 1887 by private individuals.

It is not incorporated but maintained by the co-operative plan. The following are the settlers under the ditch:-

John Wood.....15A. J. Strahan.....15A. Scott.....35A. McDonald.....70A.
Mrs. V. Willard.....9A. Delit Willard.....42A. Vandarien.....50A. I.W. Willard.....170A.
Al Strahan.....6A. John Willard.....10A. Wm. Vandarien.....25A. Wm. Nicolson.....10A.
Verhall.....20A. Thos. Carroll.....100A.

Continuing up the West side we found the following notice posted:

16. "Claim of Water Right" Notice is hereby given to all whom it may concern that the undersigned claim 1,500 inches (miner's measure) of the water in this river (the stream known as the Upper Verde) for milling, manufacturing, agriculture and culinary purposes and for all such other purposes as we may desire to use the same together with so much of the ground, rock and earth about this point on said stream as may be necessary for the construction and maintenance of a dam across said stream. The point at which we take said water for the purposes aforesaid is described as follows to-wit:

Commencing about the mouth of the gulch leading from Jerome Smelter and about 1/4 mile South of Wm. Jordan's Ranch.

This claim shall be known as the "Upper Verde No. 2 Irrigation Ditch", and is to be running Southeasterly direction, near the S.W. corner of Section 2 Upper Verde Arizona Territory, Yavapai County.

Located and claimed this 6th day of August, 1896.

Signed: Wm. Van Derien
David Scott

17. Humbert Bros. Ditch. This is a new ditch not yet completed and heads above Jerome Gulch. It will cover 40 acres of land near the mouth of this gulch. The ditch is to be one and one-quarter miles long, of which one mile is fully constructed. It will carry 300 inches for a distance of one mile where 200 will be used to run a water wheel to elevate water to irrigate part of a mesa that lies above the grade of the ditch. The rest of the water will be conveyed to the land below. The owners expect to complete this ditch by Jan. 1, 1897.

18. E. L. Jordan Ditch. This is a small ditch taken out in 1877. It has a capacity of 75 inches and there is 40 acres of land under it. The owner is a market gardener.

EAST SIDE OF THE RIVER

Commencing at the head of the settlement on the East side of the river and coming down we find:

19. Packard's Ranch. This place is 11 miles above Cottonwood P. O. It has two ditches and has 20 acres under cultivation.

20. Jack Duff Ranch. 5 miles above Cottonwood P. O. and has 13 acres in cultivation. Under this ditch is E. Butler with 10 acres of garden. This ditch was taken in 1876 by Ed. Vardi, (Frenchman).

21. Wm. A. Jordan Ditch. This ditch has a capacity of 75 inches and was taken out in 1875; there is 20 acres in cultivation under it of garden.

22. Peck's Lake. John Goodman 4 acres irrigated by spring.

23. Emory Hawkins Ditch. 37 acres under cultivation under this ditch.

24. The O.K. Ditch. This ditch heads one and one-half miles below Oak Creek and is 7 miles long. It has a capacity of 300 inches. It was taken out in 1877 and the amount of land will approximate 800 acres. The ditch is operated on the co-operative plan and is divided into 37 inches each.

The following settlers are under this ditch: (the O.K.)
Negro Smith.....6A. Rev. J. Eristow.....30A. Conway Bristow.....40A. E. A. Jordan.....60A.
Mrs. Davidson.....15A. J.E. Jordan.....85A. Meadows.....20A. Albert Randall.....15A.
J. Humann.....40A. Isaac Jones.....40A. Ladd Bristow.....15A. Gaddis.....45A.

25. The Burke Ditch. This ditch was taken out in 1895, it heads 3 miles below the mouth of Oak Creek and is 6 miles long.

It has a capacity of 600 inches. About 500 inches was running in at the head of the ditch at the time of our visit. This ditch covers the land immediately above Beaver Creek. The ditch is owned by the settlers under it and is operated by them on the co-operative plan. We estimated the amount of land under this ditch at 600 acres.

The following settlers are under this ditch:
Alonso Bristow.....40A. Morris Smith.....50A. Jas. Smith.....75A.
B. Maxwell.....80A. H.V. Hutchinson.....50A. Chas. Wingfield.....150A.

26. Waman Ditch. This ditch heads 3/4 mile below Camp Verde and is 4 miles long. It was taken in the winter of 1888, has a capacity of 800 inches and covers 700 acres of land. This ditch is controlled by Chas. Waman who represented, so we are informed, the Hayward Cattle Co. The farmers under this ditch rent water to cultivate their land.

The following persons are cultivating land under this system:
J. Lopez.....40A. John Hicketts.....5A. Dr. Ketcherside.....10A.
Lewis Turner.....70A. T.E. Jordan.....40A. Hayward Cattle Co.....180A.
26. Martin Weber Ditch. This is a small private ditch at the mouth of Clear Creek that was taken out in 1880. It covers about 30 acres of land.

SUMMARY OF THE CANALS, DITCHES ON THE VERDE RIVER PROPER.

Name of Ditch	Length	Estimated Cap. In.	Priv. Co.	Taken Out	Side of River	Est. Acres	Rep. No.
Mason & Ortis	3	150	Co.		W	480	1
Mrs Burdock		175	P		W	500	2-Pump
Old Government		300	Co.		W	500	3
T. Jones & Co.	2	1,000	Co.	1896	W		4-bldg.
Denmatt		100	P		W	100	5
Ann White			P		W		6-sub'd.
Asher		150	P		W	100	7
Miller			P		W	160	8-pump
Velanues & Co.	4	350	Co.		E	480	9
Webster	3	100	P	1896	E	200	10-bldg.
Sears	3	300	P	1896	E	200	11 "
Rio Verde	1		Co.		W		12 "
The Wood	14	1,500	Co.	1890	W	1,500	13 "
Ralston Ditch	5	500	Co.	1889	W		14 "
Upper Verde	8	500	Co.	1873	W		15 "
Hurlbert Bros.	2	300	P	1896	W	500	16 "
E. L. Jordan		75	P	1877	W	40	17 "
Packard's			P		E	20	18 "
J. Duff			P	1878	E	20	19 "
Wm. Jordan		75	P	1877	E	30	20 "
Peck's Lake					E	4	21 "
Emory Hawkins			P		E	37	22 "
The O.K.	7	300	Co.	1878	E	800	23 "
Burke	6	600	Co.	1895	E	600	24 "
The Waman	4	500	P	1888	E	700	25 "
Martin Osborne			P	1880	E	30	26 "

CHERRY CREEK. There is no farm of any consequence on Cherry Creek; however there are several small farms of a few acres each. None exceed 10 acres in extent.

OAK CREEK. This is one of the principal tributaries of the Verde; at the time of our visit to the junction of Oak Creek and the Verde we found that the supply of water in Oak Creek fully equal to the supply from the Upper Verde. Commencing from the head of Oak Creek we find:-

Name	Acres	Ditch	Date Filled	Remarks
Jas Thompson	20	Private	1880	East side
Frank Owensby	25	"	1993	North side
Dave James	12	"	1883	East side
J. Robinson	10	"	1896	North side const'g.
Mrs. E. James	12	"	1886	"
M. Ruckaby	6	Company	1895	East side
Scherman	12	"	1895	"
Scherman	50	Private	1880	N.S. 320A. available
R. Ruckaby	15	"	1886	"
Frank	6	"	1895	"
Juan Omdog	15	"	1895	End of Upper Oak Cr.
D. Willard	6	"	1895	Lower Oak Creek
J. Luse	60	"	1880	N.S. spring.
J. Page	65	Company	1880	Page Spr. Ditch Co.
C. Dickson	12	"	1880	do
J. Kelly	15	"	1880	do
Wm. Gray	35	"	1880	do
S. Dickson	50	Private	1881	North Side.
J. Day	15	"	1893	East Side.
Copple	50	"	1881	North Side.
Faine	75	"	1894	North Side.
Dickens	45	"	1881	North Side.

End of Lower Oak Creek.

BEAVER CREEK. This is another one of the principal tributaries of the Upper Verde, however, owing to the farming along it, it is entirely dry at times, during the dry season. The following named persons draw their supply of water from this creek.

Name	Acres	Ditch	Date Filled	Remarks
Riley Casler	20	Private	1894	Ditch and Spring.
John Skages	20	"	1887	North side.
S. Hutchinson	10	"	1880	S. Side. 20A. avail.
Wm. Gleft	8	"	1881	South side.
Wm. Gleft	9	"	1885	North side.
J. Walker	12	"	1878	Walkers Cr. 40A. avail.
Robert Finnie	5	"	1883	North side.
Robert Finnie	22	"	1885	South side.
Wm. Beck	10	"	1890	South side.
Wm. Beck	18	"	1889	F 3 (Monterum Well)
Mrs. Moore & Sherman	55	"	1889	South side.
Wm. Martin	20	"	1896	S S (Not yet comp.)
C. Mahan	100	"	1876	South side.
Wm. Schroeder	75	"	1876	South side.
J. C. Maxwell	15	"	1890	South side.
J. C. Maxwell	20	"	1878	South side.

CLEAR CREEK. This creek is also an important feeder of the Verde; it ranks in importance with Beaver Creek though not equal to Oak Creek. It enters the Verde River some 4 miles below Camp Verde, on the East side of the river. We found the following settlers cultivating land on this creek.

Name	Acres	Ditch	Date Filled	Remarks
John Morris	20	Private	1873	North side.
Geo. Elzgett	20	Company	1891	North side.
P. Fristow	20	"	1891	N.S. (with Elzgett)
Head	20	Private	1873	South side.
Wm. Wingfield	40	"	1876	South side.
Head	75	Company	1876	North side.
J. Lothing	40	"	1876	North side.
Dr. Wilbur	60	"	1876	(with Head & Loth'g.)
H. Wingfield	80	"	1876	South side.

THE PROPOSED W. I. JOHNSON DITCH. This scheme is of some magnitude and is promoted by W. I. Johnson of Prescott. By survey the head will be some two and one-half miles above Oak Creek. This canal if put through is intended to be above all other canals on the West side of the river and to cover all the tillable land from its head to Camp Verde and with a possibility of continuing and covering all the land lying under the Wood Canal. The survey was made in the fall of 1895. Location notices said to have been filed in Prescott.

THE PRISTOW DITCH. The chief promoters of this ditch are J.C. & L.P. Fristow. It heads one-half mile above Oak Creek on the West side of the Verde River and shows a width of 4 feet on the bottom. We followed the ditch for three quarters of a mile but do not know how much further it has been constructed. This work was done in the winter of 1895 and it is said that \$500.00 was expended.

THE JOHN E. LEE PROPOSED DITCH ON OAK CREEK. The proposed head is three and one-half miles above the mouth of Oak Creek (at the Sheep Camp). Length of proposed canal is six and one-half miles with 600 inches capacity. The land to be covered is 600 acres. The survey was made Dec. 15, 1895. Promoters:- Conway Bristow, J. H. Meadows, C.W. Hardy, J. W. Humann, Blaks Baker, and Andy Cannon (colored).

THE DAVIS CANAL (PROPOSED) OAK CREEK. The survey for this canal was made in Sep. 1896. Frank Hages, promoter. It was impossible for your committee to find out anything definite about this proposition as we did not see any of the promoters.

In conclusion we would say that the estimates made in this report are based on our judgment aided by what we considered reliable information from the resident settlers. We had some difficulty at times in gaining any useful information owing to the reticence of the settlers. It was very difficult to make accurate estimates of the quantity of a good many of the ditches as they had no water in at the time of our visit. The farmers in this section use a great deal of summer water as their crops are principally corn, gardens and alfalfa. The settlers are very careless in the use of water, having all

that they can possibly use.

We did not find a canal on the Verde that employed a sanjero, each settler goes to the canal and raises his headgate as he wants water.

We are very respectfully,
(signed) E. L. Frankenberg.
(signed) Fowler.

Dated

ARIZONA WATER COMPANY

REPORT of Robert R. Stroud and Frank
Prethero, on the number of canals and
ditches, their capacity, also the
acreage of crops on the Verde River.

ARIZONA WATER COMPANY

Phoenix, Arizona, Nov. 2nd, 1899.

REPORT OF ROBERT R. STROUD AND FRANK PROTHERO, ON
THE NUMBER OF CANALS AND DITCHES, THEIR CAPACITY, ALSO THE
ACREAGE OF CROPS ON THE VERDE RIVER.

1. THE JONES DITCH

Completed within the last three years. Has a capacity of 500 inches, and runs parallel with the Government ditch. We find the following settlers under this ditch;

Ty Jones	40 A	H. Blew	15 A
C. V. Saunders	30 "	-- Carr	10 "
Antonio Romo	40 "	Manuel Gallardo	10 "

2. THE GOVERNMENT DITCH

Has a capacity of 300 inches.

H. B. Clew	20 A	-- Brewer	100 A
Manuel Gallardo	20 "	McCann & Adams	30 "
Ramon Pringos	30 "	Asher	40 "

3. VILASCO DITCH CO.

East side of river, has a capacity of 250 inches.

Phillips	10 A	J. Muse	10 A
Ben Vilasco	30 "	Mrs. B. Vilasco	25 "
Muse, Sr.,	20 "	Cunningham	10 "
Clay Blackford	25 "		

4. ORTEZ & MASON DITCH CO.

West side of river, has a capacity of 150 inches.

Francisco Mason	45 A	Located	1892.
Jesus Ortez	15 "	"	1892.
Joe Ruiz	25 "	"	1898.

5. THE VERDE OR WOOD CANAL

On West side of river. Heads about 2 1/2 miles above Camp Verde and extends for about six miles, and covers the old Government farm. Was enlarged in 1889 and carries about 1000 inches of water and irrigates about 1000 acres. Is owned and controlled by W. W. Head, Wm. Stephens, Mrs. Stephens, John Wood, Haroldson, Geo. Hance & others.

Wm. Head	50 A	first cultivated	1897
Wm. Stephens	80 "	"	1895
Geo. Hance	100 "	"	.... and intends to
put	400 "	in cultivation	the coming season.

6. THE O. K. CANAL

East side of river, one mile below the mouth of Oak Creek and is about four miles in length. Has a capacity of 800 inches and waters 800 acres of land. Is owned by Mars Bros., J. R. Lee, Meadors, Jordan and others. This is one of the old canals of the Verde Valley.

7. EUREKA DITCH CO.

Was built in 1887, 3 1/2 miles in length, has a capacity of 400 inches, and waters all land under it to the mouth of Beaver Creek with exception of Smith ranch. Is controlled by six shares, east side of river and irrigates 350 acres of land.

8. THE ENTERPRISE CANAL

East side of the river and waters Smith ranch of 60A. It is proposed to continue the Canal across Beaver Creek to a mesa of 1000 acres. Just below and East of old Camp Verde, they have built a canal 1 1/2 miles in length, probable capacity 500 inches. Is owned and controlled by Dr. Ketcherside and J. Lothian. Intend to begin active operation within 60 days. Will use about 600 inches of water when completed.

9. THE RALSTON DITCH CO.

Located on West side of the Verde river, has a capacity of about 300 inches and irrigates about 300 acres under the original ditch. An extension, built in 1898 covering about 300 acres, owned by Ralston, James Wingfield, Martin and others.

10. THE UPPER VERDE CANAL

This is the old Government ditch, West side of the river, estimated capacity of from 1200 to 1500 inches, and waters about 800 acres. Is controlled by six shares. Owners Willard, Strahan, Van Daren, Whittaker, Carrol, Turnbald and Bashford. Ditch was constructed by the Government in 1873 for the use of the Apache Indians.

11. JOHN DUFF RANCH

20 A five miles above mouth of Sycamore Creek and watered by ditch East side of Verde. Under the same ditch Morris has 10 acre ranch. These ranches were located 1883. Capacity of ditch 50 in.

12. DUXTER

15 A watered from ditch West side, capacity 25 in.
Located 1885.

13. W. S. HAWKINS DITCH

Waters 10 A has a capacity 25 inches, located 1884.

14. E. L. JORDAN DITCH

Waters 25 A. West side. Located 1885.

15. Wm. JORDAN DITCH

Waters 15 A. Capacity 25 inches, East side of River. Ranch located 1880.

16. HUMBERT

3 A West side, watered by pump.

17. HAWKINS DITCH

East side of river, has capacity 350 inches, 50 inches of which comes from Pecks Lake.

Hawkins	80 A	Located	1880	Willard	40 A	Located	1880.
Wines	60 "	"	1897	Canon	20 "	"	1897.
Ames	40 "	"	1897	Goodwin	10 "	"	1897.

18. MRS. STEMMER AND HICKEY RANCH DITCH

Capacity 250 in. Waters 60 A Mrs. Stemmer and 80 A Hickey Ranch. Ditch on East side of river. Old Ranches

19. SYCAMORE CREEK

Packard 30 A ditch 100 in. capacity. Located 1885.

SUMMARY OF THE CANALS, DITCHES ON THE VERDE RIVER

Name of Ditch	Est.Cap inches	Priv.or Co.	Side of River	Est. Acres	Rep. No.
The Jones Ditch	500	Co.	West	145	1
The Government Ditch	300	"	"	240	2
The Velasco Ditch Co.	250	"	East	130	3
Ortez & Mason Ditch Co.	150	"	West	85	4
The Verde or Wood Canal	1000	"	"	1000	5
The O. K. Canal	800	"	East	800	6
Eureka Ditch Co.	400	"	"	350	7
The Enterprise Canal	600	"	"	1060	8
The Ralston Ditch Co.	300	"	West	300	9
The Upper Verde Canal	1200 to 1500	"	"	800	10
John Duff Ranch	50	P	East	30	11
Duxter	25	"	West	15	12
W.S. Hawkins Ditch	25	"		10	13
E. L. Jordan "	25	"	West	25	14
Wm. Jordan "	25	"	East	15	15
Humbert		Pump	West	3	16
Hawkins Ditch	350	Co.	East	250	17
Mrs. Stemmer & Hickey Ranches	250	P	East	140	18
Packard	100	"	" & West	30	19

CLEAR CREEK

The Pioneer Ditch Co. constructed in 1876 and owned by H. Wingfield, D. Wilbur, I. Lothian and Eamens. Waters about 400 acres and has capacity of 400 inches. Informed there was a suit pending wherein the Pioneer Ditch Co. were plaintiffs against parties who had taken out water above them at a later date. The following named persons draw their supply of water from Clear Creek.

Name	Acres	Ditch	Date Located	Remarks
Wm. Head	50	P	Old ranches	75 in.
John Bristow	50	"	" "	75 "
Ed. Wingfield	25	"		25 "
Smith	20	"	1876	
Wm. Wingfield	40	"	1875	
Jones & Thompson	12	"	1894	
Rickets	80	"		
Osborne	20	"		20 "

BEAVER CREEK

Was unable to state amount of water it carries in normal condition, account recent rains. Informed it goes dry near the mouth, summer season. We found the following settlers getting their water supply from this creek.

Riley Kastner	15 A	Old Ranch
Skaggs	15 "	" "
Chas Hollenhead	20 "	Located 1889
Wm Clift	15 "	" "
Finney	40 "	Old Ranch
Wm Bach	110 "	(Montezuma Well 100")
		Old Ranch
Chas Mahan	120 "	" "
B. Schroeder	100 "	" "

Sam Dickens	30 A	P. Ditch	Old Ranch
Frank Owensby	25 "	"	1892
John Munds	8 "	"	1881
John Robison	10 "	"	1896
Dave James	20 "	"	1881 Old Ranch
Widow "	20 "	"	"
N. Hickabee	30 "	"	1895
Henry Shuerman	60 "	"	1881
" "	12 "	"	1881
Ambrosio Armijo	30 "	"	1896
Manuell Chavez	10 "	"	1896
Adolph Willard	25 "	"	1880
P. Downing	25 "	"	1890
Henry Page	40 "	"	
" "	16 "	"	Page Spring

Lou Turner has a mill, with 1000 in. of water flowing from the Page Spring, with tail-race emptying into Oak Creek. This Water was appropriated in 1887.

UPPER SALT RIVER

All ranches above the mouth of Pinal Creek have been abandoned, as far as the line of the Indian Reservation. Pinal Creek at the mouth carries about 400 inches. We find the following settlers getting their water supply from the river, near the mouth of Pinal Creek.

J. Braddock	20 A	
" "	40 "	Cultivate coming season.
Fred Medlar	60 "	Located 1888
J. Lee	20 "	" 1894



Sam Dickens	30 A	P. Ditch	Old Ranch
Frank Owensby	25 "	"	1892
John Munds	8 "	"	1881
John Robison	10 "	"	1896
Dave James	20 "	"	1881 Old Ranch
Widow "	20 "	"	"
N. Hickabee	30 "	"	1895
Henry Shuerman	60 "	"	1881
" "	12 "	"	1881
Ambrosio Armijo	30 "	"	1896
Manuell Chavez	10 "	"	1896
Adolph Willard	25 "	"	1880
P. Downing	25 "	"	1890
Henry Page	40 "	"	
" "	16 "	"	Page Spring

Lou Turner has a mill, with 1000 in. of water flowing from the Page Spring, with tail-race emptying into Oak Creek. This Water was appropriated in 1887.

UPPER SALT RIVER

All ranches above the mouth of Pinal Creek have been abandoned, as far as the line of the Indian Reservation. Pinal Creek at the mouth carries about 400 inches. We find the following settlers getting their water supply from the river, near the mouth of Pinal Creek.

J. Braddock	20 A	
" "	40 "	Cultivate coming season.
Fred Medlar	60 "	Located 1888
J. Lee	20 "	" 1894

THE KENTON CANAL

The head of this canal is about one mile below Pinal Creek, on the south side of the river, has a capacity of 1000 inches and is an old ditch. We find the following settlers under this canal.

Chambers	20 A	Located 1888.	Geo. Schultz	100 A	Located 1884
Freeman	40 "	" "	Kenton	100 "	" 1884
Bud Armer	40 "	Old Ranch	Stovener	60 "	" 1885
H. Livingston	100 "	Located 1887			
Canutt	60 "	" 1887			

ARMER DITCH

Tobe Cline	20 A	Old Ranch
Dellenger	60 "	Located 1884
Armer	120 "	" 1879

TIBBS DITCH

Waters a part of what is known as Eddie Flat, has not been used for three years, and is owned by L. Sultar of Globe.

DANFORTH DITCH

Heads below the mouth of Pinto Creek on the south side of river and waters all the land under cultivation as far as Grape Vine Spring. Has a capacity of about 700

inches and was built about 1885. Waters about 800 acres belonging to Baker, Hocker, Danforth Estate, Hocker and Robison & Hunt.

GAMM & BACON DITCH

John Pemberton	10 A	Old ranch
Bacon	8 "	" "
Windy Hill Ditch.	Not in use at present time	
Mrs. Gordon	60 A	Old ranch

PINE CREEK

This is a small stream of about 200 inches. The water is all used in summer season by about 25 Mormon settlers. Many of these ranches were located prior to 1880 and none later than 1888. Near the mouth Cole & Mayer have a ranch of 40 A located 1884.

EAST FORK OF THE VERDE

Heads at what is known as the Tunnell. Has a few small ranches. They are located in a narrow valley and use but small flow of water. Some 25 or 30 miles from the head. Smith, McDonald & Abbott own 200 acres of land and have a ditch, 250 inches capacity.



TONTO CREEK

This creek is about 75 miles in length. All its tributaries, have some small ranches on them which have been farmed for 15 to 20 years. At the old Mormon settlement there are nine small ranches, from 5 to 25 acres each. They all use water from the creek and located in 1877. J. Booth, P. Ellison, S. A. Haught, J. Neal, B. Felton, P. Cole, D. Gilliland, A. Ryan and John Abbott. The creek has a flow of 1000 inches at this settlement.

WILD RYE CREEK

Has a flow of about 400 inches. Upper part of creek goes dry in summer season. About six miles from the mouth of creek is the Blake Ranch owned by Ed Howell, about 100 acres of land and uses 100 inches of water. Throughout the length of this creek for about 25 or 30 miles we find the following settlers, farming small pieces of land, all of which have been located for ten years or more and none of which contain more than 40 acres.

Deversbee, Mrs. Don Hart, Gilliland, Huffer, Crawford, Packard, Clanton, Ben McDonald, A. Martin, John See, Webb, Alex Cline, John Cline, H. Morris, I. Crabtree, Felecito, Peters, Frank Cline, Mills and Flippin.

Amount of lands cultivated prior to 1890 in District examined by Committee.

UPPER SALT RIVER

Fred Medlar	40 A	Located	1888
Chambers	20 "	"	1888
Freeman	40 "	"	1888
Bud Armer	40 "	Old ranch	
H. Livingston	100 "	Located	1887
Canutt	60 "	"	1887

Geo. Schultz	100	A	Located	1884
Kenton	100	"	"	"
Stovener	60	"	"	1885
Tobe Cline	20	"	Old ranch	
Dellenger	60	"	Located	1884
Armer	120	"	"	1879
Danforth Ditch Co.	300	"	Ditch built	1885
John Pemberton	10	"	Old ranch	
Bacon	8	"	" "	
Mrs. Gordon	60	"	" "	
Smith McDonald & Abbott	200	"	Located	1879
Nine small ranches Tonto Creek	80	"	"	1877
Ed Howell	100	"	Old ranch	
Twenty-One Settlers Tonto Creek Est. A	600	"	Settled prior to 1890.	

UPPER VERDE

Pioneer Ditch Co.	400	A	Ditch built	1876
Wm. Head	50	"	Old ranch	
John Bristow	50	"	" "	
Ed. Wingfield	25	"	" "	
Smith	20	"	Located	1876
Wm Wingfield	40	"	"	1875
Riley Kastner	15	"	Old ranch	
Chas Hollenshead	20	"	Located	1889
Wm Cliff	15	"	"	1889
Finney	40	"	Old ranch	
Wm Bach	110	"	" "	
Chas Mahan	120	"	" "	
R. Schroeder	100	"	" "	
Maxwell	40	"	" "	
Ed "	20	"	" "	
Mullholland	60	"	" "	
Calloway	80	"	" "	
	<u>3323</u>			

OAK CREEK

	3323 A		
Chick	40 A	Located	Old Ranch
Faine	60 "	"	" "
Mrs. Dickinson	30 "	"	" "
Dickens	20 "	"	" "
J. Withers	30 "	"	" "
Kelly	50 "	"	" "
Alfred Dickens	80 "	"	" "
Thompson	15 "	Located	1887
John Munds	8 "	"	1881
James Rauch	40 "	"	1881
Henry Shuerman	60 "	"	1881
" "	12 "	"	1881
A. Willard	25 "	"	1880

UPPER VERDE

The O. K. Canal	800 A	Built	1877-1878
" Eureka Ditch Co.	350 "	"	1887
" Ralston Ditch Co.	300 "	"	1889 (original)
" Upper Verde	500 "	"	1873 (O.G.D.)
John Duff	20 "	Located	1883
Morris	10 "	"	"
Duxter	15 "	"	1885
Hawkins, W. S.	10 "	"	1884
E. L. Jordan	25 "	"	1885
Wm. Jordan	15 "	"	1880
Hawkins	80 "	"	1880
Willard	40 "	"	"
Mrs. Stemmer	60 "	Old ranch	
Hickey Ranch	80 "	" "	
Packard	30 "	Located	1885
	<u>6218</u>		

AMOUNT OF NEW LANDS BROUGHT UNDER CULTIVATION SINCE 1890.UPPER SALT RIVER

J. Braddock	20 A	Located	1892
J. Lee	20 "	"	1894
Danforth Ditch Co.	500 "	"	1885

UPPER VERDE

Jones & Thompson	12 "	Located	1894
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OAK CREEK

Alfred Dickens	40 "	New cultivation	1899
Eliza Lay	30 "	" "	"
Frank Owensby	25 "	Located	1892
John Robison	10 "	"	1896
N. Hickabee	30 "	"	1895
Ambrosio Armijo	30 "	"	1896
Manuell Chavez	10 "	"	1896
P. Downing	25 "	"	1890
Henry Page	56 "	Since	1890
Ty Jones	40 "	"	"
C. V. Sauver	30 "	"	"
Phillips	10 "	"	"
Ben Vilasco	30 "	"	"
Muse	20 "	"	"
Clay Blackford	25 "	"	"
J. Muse	10 "	"	"
Mrs. B. Vilasco	25 "	"	"
Cunningham	10 "	"	"
Joe Ruiz	25 "	Located	1898
Francisco Mason	45 "	Located	1892
Jesus Ortez	15 "	"	1892
Antonio Romo	40 "	" since	1890
H. Blew	35 "	" "	"
Carr	10 "	" "	"
M. Gallardo	30 "	" "	"
Ramon Princos	30 "	" "	"
Brewer	10 "	" "	"
McCann & Adams	30 "	" "	"
Asher	40 "	" "	"
Wm. Head	50 "	First cultivated	1897

 1368

	1368	A		
Wm. Stephens	80	A	First cultivated	1895
Geo Hance	100	"	" since	1890
Enterprise Canal Co.	60	"	" "	1890
Ralston Ditch Co.	300	"	Extension Ditch built	1898
Wines	60	"	Located	1897
Canon	20	"	"	1897
Ames	40	"	"	"
Goodwin	10	"	"	"
	<u>2038</u>			

AMOUNT OF WATER ABOUT TO BE TAKEN OUT FOR THE PURPOSE OF IRRIGATING LANDS, TO BE HEREAFTER BROUGHT UNDER CULTIVATION.

(1) Proposed Canal. J. R. Lee Promoter. Oak Creek.

The proposed head is three and one-half miles above the mouth of Oak Creek. Length of proposed canal four miles. Capacity 600 in. Will reclaim about 800 acres of land. Survey was made Dec. 15, 1895. The proposed canal is on record Yavapai Co.

(2)

Extension of Enterprise Canal to a mesa of 1000 acres. It is proposed to continue the canal across Beaver Creek, with a capacity of 600 inches. There has been some work done on the ditch. They have built a canal about one and one-half miles in length. Intend to begin active operations within 60 days. The proposed scheme is owned and controlled by Dr. Ketcherside and J. Lothian.

(3) Proposed Canals. Oak Creek

There has been some preliminary work done on a canal to head at Page Spring and extend about seven miles, on East side of Oak Creek to reclaim mesa land. Survey was made Sept. 1895. Daggs Bros. and some Jerome parties are the promoters. Active operations are to begin November of this year.

(4)

Frank Derrick has about 150 acres of mesa land that he is preparing to cultivate. Will use water from the Kelly & Dickens Ditch, Lower Oak Creek.

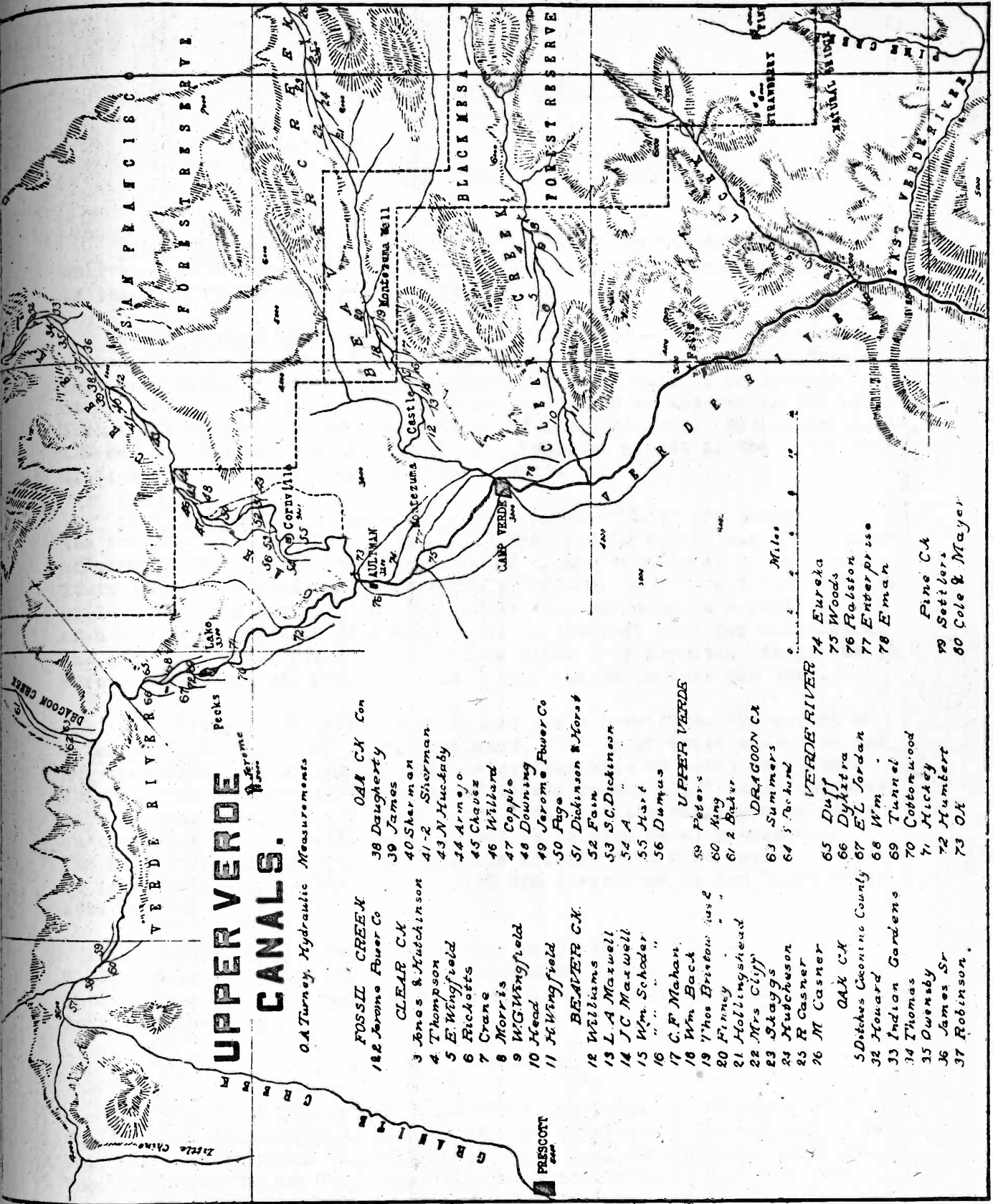
(5)

Geo. Hance on the Verde or Wood canal intends to put 400 acres of land into cultivation the coming season.

WATER SUPPLY AND IRRIGATION
ON THE
VERDE RIVER AND TRIBUTARIES

* *
*

O. A. Turney
Arizona
1901.



UPPER VERDE CANALS.

O.A. Turney, Hydraulic Measurements

FOSSIL CREEK

- 18.2 Jerome Fuser Co
- 3 Jones & Hutchinson
- 4 Thompson
- 5 E. Wingfield
- 6 Rickotts
- 7 Crane
- 8 Morris
- 9 W.G. Wingfield
- 10 Head
- 11 H. Wingfield

OAK Ck Con

- 38 Daugherty
- 39 James
- 40 Sherman
- 41-2 Sherman
- 43 N. Huctaby
- 44 Arnejo
- 45 Chavez
- 46 Willard
- 47 Copple
- 48 Downing
- 49 Jerome Fuser Co
- 50 Page

BEAVER Ck.

- 12 Williams
- 13 L. A. Maxwell
- 14 J. C. Maxwell
- 15 Wm. Schoder
- 16 " "
- 17 C. F. Mahan.
- 18 Wm. Back
- 19 "Hos. Eristow" use 2
- 20 Finney
- 21 Hollingshead
- 22 Mrs. Cliff
- 23 Skaggs
- 24 Hutcheson
- 25 R. Casner
- 26 M. Casner

UPPER VERDE

- 51 Dickinson & Morst
- 52 Foun
- 53 S.C. Dickinson
- 54 A
- 55 Hart
- 56 Dumas

DRAGON Ck

- 58 Pebers
- 60 King
- 61 2 Biter
- 63 Summers
- 64 J. Packard

VERDE RIVER

- 65 Duff
- 66 Dykstra
- 67 E.L. Jordan
- 68 Wm.
- 69 Tunnel
- 70 Cottorwood
- 71 Hickey
- 72 Humbert
- 73 O.K.
- 74 Eureka
- 75 Woods
- 76 Robson
- 77 Enterprise
- 78 Eman
- Pine Ck
- 80 Settlers
- 80 Cole & Mayer

Miles

REPORT OF ENGINEER O. A. TURNEY

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UNITS OF MEASUREMENT EMPLOYED

THE SECOND-FOOT is one cubic foot of water, or 1,728 cubic inches, delivered every second. This is a convenient unit of measurement, and is the one usually employed by text book writers.

THE MINER'S INCH in Arizona is the flow of one-fortieth part of a second foot. In Southern California it is held to be the one-fiftieth part of a second foot, other equivalents are also held in California and other states. The Montana Legislature has passed an act making the miner's inch equal to the flow of one-fortieth of a second-foot. Both these units, the second-foot and the miner's inch, presuppose motion of the water measured; they are measurements of flowing water.

THE ACRE-FOOT is a newer unit, and has advantages not possessed by the former. It contains 43,560 cubic feet and is equivalent to a volume of water sufficient to cover one acre of ground to a depth of one foot. It is then not a measurement of water in motion, but of depths on an acre of land. The delivery of 0.5 acre-feet to an acre means a depth of 0.5 of a foot over one acre of ground. It is the best unit for calculating the amount of water required to produce given crop results. In places in Europe the amount of water required is calculated in tons per acre.

The states of Nebraska, Wyoming and Idaho have fixed the amount of water per acre which may be appropriated. In two of these states no one may appropriate exceeding one second-foot for each 70 acres irrigated. This must be measured at the point of diversion and all losses from seepage, evaporation, etc., fall upon the land. While working a hardship on the water user, it affords an incentive to good canal management. The above maximum diversion permissible affords 5.95 acre-feet in 7 months. It is well to compare this figure with the diversions on the Verde hereafter given.

All measurements were made current meter invented by W. G. Price, U. S. Engineer. Lack of space has prevented summarizing the results obtained; net results only are given which would have appeared more clearly in tabular form.

ITINERARY.

The Sub-Committee of the Joint Canal Committee was composed of J. W. Woolf, W. B. Cleary and J. W. Stewart, who represented the Arizona Water Co., The Arizona Canal Co., The Grand Canal Co., The Maricopa Canal Co., The Salt River Valley Canal Co., the Consolidated Canal Co., the Mesa Canal Co., the Utah Canal Co., the Tempe Canal Co., and the San Francisco Canal Co.

This committee left Phoenix, Arizona, July 8th, 1901, and arrived at Camp Verde on the 13th. The total amount of water herein reported as diverted from the Verde River and its tributaries may be accepted as the smallest amount taken during the Summer season. According to all reports ✓

the water was lower there than the Summer before, which was the dryest we have ever known. On one stream, Beaver Creek, rotation had never been practiced before. Even this shortage was not such as to induce the users to look after the water at night; it was uniformly turned on the land and permitted to take care of itself. All these lands have a much greater fall than in the Salt River Valley, so much so that very little good is accomplished by the water turned loose at night.

Soon after commencing work, Mr. Geo. Hance came to our camp; he seems to be Major Domo of the valley; Mr. Dan. Head, the one older settler, being away. Hance urged on us that Fossil Creek, a tributary 23 miles south, was of equal importance to us as the Verde.

MEASUREMENT OF THE VERDE

We went down the river as far as possible to go with wagon to a place where the rock, rising in the channel, apparently brings all the water to the surface. This afforded a perfect place to determine its flow below all ditches in Yavapai County. Here the Verde measured 2,509 miner's inches (62.7407 sec-ft.) On the day of our arrival at Camp Verde the entire head ordinarily diverted by the Woods Canal was turned into the river to permit repair to overflowed banks and to allow the moss to die. Be it noted that the flow of water in all ditches in this country is constant, and is only interrupted at considerable intervals. This Woods water was very annoying. Afterwards the Woods Canal was found to carry 1,042 inches. We do not know whether this water had reached the point of measurement, called the Falls, or had not, but believe it had. It had been turned out two days prior; the distance was about 12 miles of ponds and rapids. If deducted, it leaves the Verde River, 1467 inches.

MEASUREMENT OF FOSSIL CREEK

Two of the party took saddle animals at this point and went down to Fossil Creek. This was a very hard trip, over mountain spurs, and down a channel cut through granite and porphyry. There could be little seepage here, while as far as the eye could reach to the southward the channel appeared the same. Camp McDowell was 70 miles below.

Fossil Creek enters from the East, it rises in springs West of Baker Butte. It is indeed a wonderful stream, its water is clear, cold, never muddy, and uniform throughout the year. It is an ideal for power purposes, but can be reached only by the wagon road over Baker's Butte. At the mouth the flow measured 1,353 inches (33.8128 sec-ft.), or over twenty million gallons per 24 hours.

The Verde was measured just below, from which Fossil Creek being deducted, leaves the Verde 2273 inches (56.7987 sec-ft.) Both measurements were on sandy bottoms. The Verde measurement was 236 inches less than at the rock-bottomed Falls, 12 miles higher up. We desired the comparative values, but the Woods canal water interfered. The distance to the Woods waste gate was 24 miles, and four days had elapsed since the water had been turned down. If deducted at the Falls, as above, then it must be here.

1901. Flow of the Verde River at Fossil Creek.....2,273 Inches
 July 17. Flow of the Woods Canal deducted.....1,042 "
 Normal flow of the Verde at Fossil Creek.....1,231 "
 Flow of Fossil Creek.....1,353 "
 Total flow coming down to Camp McDowell.....2,584 "

The Verde people insisted this would not show up at McDowell. The following was the flow of the Verde about a mile North of its junction with the Salt:

<u>Date</u>	<u>Miner's inches</u>	<u>Date</u>	<u>Miner's inches.</u>
July 15, 1901.....	1,388	July 24, 1901.....	10,636
July 16, 1901.....	1,388	July 25, 1901.....	9,568
July 17, 1901.....	1,536	July 26, 1901.....	11,344
July 18, 1901.....	1,680	July 27, 1901.....	11,108
July 19, 1901.....	1,752	July 28, 1901.....	30,292
July 20, 1901.....	1,900	July 29, 1901.....	33,256
July 21, 1901.....	1,900	July 30, 1901.....	47,100
July 22, 1901.....	1,936	July 31, 1901.....	57,000
July 23, 1901.....	11,936		

Seven days after the Woods water was turned down Mr. Trott notes an increase of 512 inches over that on the 16th. We had seen no signs of rain to cause this rise. Rains caused a sharp rise in Oak Creek on evening of 21st; it came down in two days. There was heavy rain in the mountains about Jerome on the 25th, which appear on the 28th. A heavy raise presumably comes down faster than a ditch full turned down.

The Verde above Fossil Creek with its feeders drain 4,500 square miles, yet its waters are so taken by the more than eighty canals that it is reduced to a size approximating Fossil Creek, yet Fossil Creek, with all its windings and turnings, is not as long as the Grand Canal.

There is no irrigation on Fossil Creek and we believe there can be none. The Jerome Power Co. and others have made two locations near the head of the creek for power purposes. Other power propositions (Oct., 1901) are coming up.

CLEAR CREEK

All of the tributaries of the Verde come from the East. On returning, the party took up the next tributary, Clear Creek. It enters 5 miles below the settlement; for several miles up it is alternately dry, or flowing a small stream above the sands. We went about 9 miles, beyond which the road is impassable. The only ranch above is eight miles beyond, 8 or 10 acres in fruit, probably taking 20 inches of water; owners, Isaac Jones and Wm. Hutchinson.

Clear Creek at this point, marked on map, measured 253 inches (6.3107 sec-ft.) It had just been measured by methods here in vogue and claimed to be 150 inches. Below this place are some half dozen ranches, but this being, according to local views, a time of scarcity of water, the oldest

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settler had taken the entire flow of the stream. He was irrigating his fields and the remainder, his neighbors stated, was running out on "buck brush." The oldest appropriators frequently turn what they cannot use into arroyos, or any other place handy, or let it go where it will. We visited a fine old apple orchard on this creek which was not receiving water at all for its maturing crop, as the oldest appropriator had the entire flow. We did not visit the remaining ranches on the stream, as we had no level to calculate the capacity of dry ditches.

There are nine ditches on Clear Creek, location and owners are shown on map; they cover a little over three hundred acres, for which, when there is water for all, from 400 to 700 inches are taken. The larger part of this land has been in cultivation for twenty-five years, although some has been reclaimed since 1894, the latter acreage being small. Although the water of Clear Creek was not reaching the Verde during the Summer, it unquestionably would do so were it not all diverted.

APPROPRIATIONS ON CLEAR CREEK

There are only two appropriations on Clear Creek of record in Yavapai County, as follows:

- 500 inches - Thos. A. Smith, Jan. 28, 1888; Book 2, page 24.
- 100 inches - M. B. Ricketts, May 9, 1891; Book 2, page 209.

BEAVER CREEK

Beaver Creek is just above Camp Verde. We found a good irrigating head flowing from Beaver Creek, which proved to waste water from the Enterprise Canal, a ditch farther up on the Verde. Above this the creek was dry to Montezuma Castle, then a very small stream for a mile to a rock-and-brush dam. Said dam diverts water into the Williams ditch, No. 12, capacity 30 inches; was dry; in the end of the dam is a spring, also diverted by ditch, running about 10 inches. Both ditches unite and irrigate a 25-acre garden; owner, Gus Williams, Groom Creek, Yavapai Co. Location amounting to 500 inches made Feb. 27th, 1897, by J. A. Rokhl, County records, Book 3, page 314.

Next ditch, No. 13, belonging to Leonard Maxwell, measured 15 inches (0.3773 sec-ft.); was taken out 27 years ago and irrigates 30 to 40 acres, as it was measured where tunnelled through a solid stone cliff, we know this is its maximum.

Next ditch, No. 14, owned by J. C. Maxwell, covers 30 acres, and measured 91 inches (2.2705 sec-ft.) was taken out about 10 years ago. Next above are two ditches of Wm. Schoder, No. 15, carrying 25 inches (0.6371 sec-ft.), and No. 16, carrying 44 inches (1.0966 sec-ft.), a total of 69 inches; this was less than half their usual flow; normal head, 150 to 175 inches; acreage in cultivation, 100 to 125.

Beyond is the nicely improved farm of C. F. Mahan. At this place we broke our front axle squarely in two for the second time. We stated who we were and the object of our investigations; we were given everything our needs demanded without charge. Our work was everywhere heralded in advance

we
of our progress; were commonly treated with some suspicion, but were usually given all the information we asked. Mr. Mahan being one of the earliest settlers on the creek, had, the week before, demanded of the later comers that water be rotated, and in such a manner that he would have what he needed for his farm; rotation had never been practiced before. In his ditch, No. 17, we found 39 inches (0.9703 sec-ft.), called stock water; his normal use was about 200 inches, acreage 180, appropriation 25 to 30 years old. He as well as his neighbors states that Beaver Creek was usually difficult fording in Winter, but that for three months in the Summer it never reached the Verde; farther that where no water diverted during the summer the flow would not reach the Verde; we believe it would reach it at all times were it not all taken.

Between this place and the next above is supposed to run the line of the Black Mesa Forest Reserve in which the people of the Salt River Valley are especially interested. The location of this line seems to be anywhere within six miles or so. These lands are not surveyed. Wm. Back, whose place is next above, claims continuous use of the water since 1870, yet his only right to his finely improved place is a squatter's title.

None of the lands we visited except on the lower part of Oak Creek and the central Verde are surveyed. The object is to escape taxation, as only the improvements are taxed on unsurveyed lands. Mr. Back stated his place was reasonably worth ten thousand dollars, but that he was only taxed on \$800.00. He has a ready and constant market in Flagstaff for all he can raise on his 150 acres, of which only ten acres are in recent cultivation. He irrigates through a ditch heading in Beaver Creek, which also catches the water escaping from Montezuma Well. This ditch, No. 18, was carrying 153 inches (3.8201 sec-ft.), which appeared to be about half its normal flow, with a capacity even greater. A hasty measurement of the water coming from underneath the wall of Montezuma Well gave 132 inches (3.2384 sec-ft.).

The County records contain only two appropriations on Beaver Creek. 500 inches, Wales Arnold, in 1863, from Beaver Creek and Montezuma Well, and not recorded until Dec. 12, 1899; Book 3, page 4. Also "the entire flow of Montezuma Well," by Wm. Back, July 23, 1890; Book 2, page 132.

Next ranch, Thos. Bristow, ditch No. 19, carrying 58 inches (1.4611 sec-ft.), which appeared to be one-third of normal head. He also has another ditch capable of carrying 10 inches, temporarily dry. (Above was Mr. Finney, owner of a beautiful place with cut stone dwelling; this is the well-known Soda Springs. There are two ditches, the smaller carrying 10 inches (0.2468 sec-ft.); the larger one, No. 20, was dry. He has 25 or 30 acres, and is using 50 to 75 inches.

Above him, Hollingshead, No. 21, 12 to 15 acres, and using about 30 inches. Mrs. Cliff's ditch, No. 22, contained 15 inches (0.3648 sec-ft.), normal flow about 30 inches, 15 acres, claims use since 1889. Skaggs has No. 23, 15 to 20 acres, all in alfalfa, normal head about 35 inches, is also an old place.

Last place visited was Reiley Casner's, No. 25, an old fruit ranch, 25 acres. Mr. Casner claims continuous occupation for 17 years, but owing

to shortage of water the older settlers below him had demanded all the water, hence he was diverting none from the creek, but was depending upon the flow of two springs, which together measured 10 inches. Above him Moses Casner, No. 26, has 15 acres, place not visited.

The creek above Reiley Casner's measured 273 inches (6.8290 sec-ft.); there was also the water of two springs and from Montezuma Well to be added, making a total of 415 inches. In several places waste water was running back into the stream, at Mrs. Cliff's place there were several springs, while lower down the seepage was very great.

The water found in ditches amounted to 482 inches, the normal head when there was water for all was not less than 700 inches more, making a total of 1,200 inches, which their ditches in their present condition readily carry.

OAK CREEK

On July 21st, the party crossed over to Central Oak Creek; above this point Oak Creek is enclosed in a narrow canon. There are about 12 ditches above, but all are small and almost without exception old ditches; several are in Coconino County. The combined water taken above is perhaps 250 inches; there is always an abundance of water in Oak Creek and a ready market in Jerome and Flagstaff; the diversion is probably uninterrupted. As the water cannot be taken more than 200 yards from the stream, and as the sides are unbroken sandstone walls, the return must be considerable. Below this point the canon widens gradually, but at no place opening out until within 10 miles of its mouth.

A measurement of Oak Creek was made; after taking meter observations it was found the stream had raised 3 inches during the operation, rendering the results far too small; the measurement figures out 1,263 inches (31.5310 sec-ft.) The first ditch measured was Sherman ditch, No. 40, carrying 44 inches (1.1060 sec-ft.), which was 50 per cent. of its capacity; this irrigates 25 to 30 acres, which owners state has been in 20 years or more. Sherman also owns no. 41, diverting 40 inches (0.9900 sec-ft.) for 17 acres, which have been in 10 years. He also owns the Huckaby ditch, No. 42, which contained 20 inches at about 40 per cent of its capacity, covers 8 acres, been in 10 years.

The Sherman lands are mostly in grapes; they are wine makers. The trees in the canon here are loaded with wild grapes. These people gave us no information in regard to their holdings. They, like some others in the Valley, believed our mission was in connected with impending legislation along the lines of the Ivy Bill. The people were uniformly bitterly opposed to the Ivy Bill. There was plenty of water in Oak Creek, but the people seemed to be using less water than their ditches had been recently carrying; our presence might have affected the amount taken; they all told us they were using very little water.

Mrs. James' ditch, No. 39? was diverting about 20 inches, at about 40 per cent of its capacity for 15 acres; her land has been in about 20 years. Nathan Huckaby's, No. 43, runs for a long distance along the edge of a bluff. As this ditch was taking 87 inches (2.1840 sec-ft.) at about half a head for only eight acres, a part must seep back to the stream in time.

Ambrosio Armijo, No. 44, has 30 acres, first cultivated in 1896, and Manuel Chavez, No. 45, 10 acres, also in 1896, for which they are taking out about 75 inches. Adolph Willard, No. 46, takes about 10 inches from a spring in creek bank, irrigates 5 acres; he states taken out since 1876, his neighbors state since 1894. The Copple ditch, No. 47, was dry, probably using at least 60 inches on 40 acres; was taken out in 1876, Jas. Page, owner. The Downing ditch, No. 48, uses about 20 inches on 10 acres, was taken out in 1897. The Page ditch, No. 50, was carrying 139 inches (3.4710 sec-ft.), its full capacity, claimed to be taken out in 1876; appropriation appears Yavapai records, Oct., 1887; this ditch covers four places of a total of 50 acres.

At this point is a remarkable group of springs in the bed of Oak Creek and its Eastern bank. In the space of half an acre there is a combined flow of 1,500 inches or more of pure, cold water. Had time permitted we would have measured flow. The Page ditch above comes from a tunnel run into the bank, thus getting water out at a higher level than the stream bottom.

Below is Dickinson & Horst ditch, No. 51, carrying full capacity of 350 inches (8.742 sec-ft.); covers 215 acres divided into six holdings; was taken out in 1876, and is largely new land. The Fain ditch, No. 52, measured 169 inches (4.230 sec-ft.), about 75 per cent of capacity; irrigates 4 ranches, a total of 195 acres; all been in 12 years or more but 40 acres. The S. C. Dickinson ditch, No. 53, was dry; has 35 acres and probably uses 50 inches. The A. Dickinson ditch, No. 54, was dry, cultivating 40 to 50 acres, and using about 75 inches; the greater part of this has been put in within four years.

The Hart ditch, No. 55, like some others heretofore, was filled with grass and weeds, hence not measured; estimated flow at 65 inches at one-third of capacity, for 40 acres; this was taken out four years ago. At this point a tributary called Spring Creek enters. The entire flow is diverted on the Dumas ranch of 22 acres, No. 56. Said diversion is in lawsuit, and has been measured by a Weir formule obtained from the Pelton Water Wheel Co. and claimed thereunder to be 176 inches. As this was not visisted we will take 50 per cent., or 88 inches, to be the flow; said place is 25 years old, is located in an open, sandy country.

JEROME POWER COMPANY.

The dotted line, No. 49, is the line of the proposed ditch of the Jerome Power Co.; capital, \$400,000.00. Officers: J. F. Mullen, Pres.; H. J. Allen, Vice Pres.; E. J. Parkinson, Sec'y, and E. H. Meek, Supt., the latter two resident in Jerome. Their proposition is to convey 65 second-feet of water, equaling 2,600 inches, a distance of 9 miles to a bluff over which it is dropped a distance of 246 feet back into Oak Creek. This gives a theoretical 1,840 horse power, or an actual horse power of nearly 1,500. Since there is the above as a minimum head always available for power purposes and much of the time a larger head, there is some ground for the general belief of the Verde people that the company will attempt to irrigate a part or all of the 1,000 acres of land susceptible of cultivation under the line of the proposed Canal. While it is

possible to irrigate land in this vicinity sufficient to take the entire flow of Oak Creek, and Jerome would furnish a ready market for all that can be raised, yet there is a more profitable market for the power. Both cannot be obtained from the same water. Power in Jerome is costing from \$115.00 to \$125.00 per horse power, hence it would seem there need be no fear that any of the normal head of water available for power purposes will be used for irrigation. The United Verde has contracted for 800 H.P. and Prescott parties for 250 H.P. No work has been done on the ground since Nov. 9, 1900, and not much prior. Since returning to Phoenix, information is received that M. H. Shuerman, formerly of Phoenix, has taken an active hand in the proposition.

NEW LANDS.

Near the mouth of Oak Creek we noted from 80 to 150 acres of new land under extensions, recently put in cultivation, and from 150 to 250 under extensions never in crop, but easy to put in. There are no canals on Oak Creek below this point. There is sufficient land along the mouth of Oak Creek upon which water can be readily and cheaply diverted to take the entire normal flow of the stream. It is probable the entire flow could be used on lands near the mouth below the point where the Jerome Power Company contemplate dropping it back into the stream. At present there is absolutely nothing to prevent additional ditches being taken out and old ditches being increased in size and length, both on this stream and elsewhere in the valley. There is the water - the land - and an unlimited market.

SUMMARY ON OAK CREEK

The total flow found in the ditches carrying water, plus the probable normal head of those temporarily dry, is 1,562 inches, while the full capacity as indicated by the water line is 2,111 inches. The average summer head probably lies between these amounts. At this place, July 25th, Oak Creek measured 2,092 inches (52.309 sec-ft.) Two days later it was measured nine miles lower down at its junction with the Verde; here we found 1,991 inches (49.781 sec-ft.) The distance between was on a sandy bottom; the canon walls having given away to a rolling country. Rains had occurred between the measurements.

APPROPRIATIONS ON OAK CREEK

Many of the ranches have no appropriations of record.

The "Big Spring," by Jas. Douglas, Aug. 25, 1875; bk. 1, pg. 159.

"A ditch 18 inches deep by 8 feet wide," by J. D. Tipton, May 30, 1878; bk. 1, pg. 348.

2,000 inches by Mrs. S. J. Arnold and M. J. Gaddis, Sep. 11, 1888; bk. 2, pg. 4.

10,000 inches by Conway Bristow, Jas. & Jno. Foy, Sep. 22, 1888; bk. 2, pg. 6.

500 inches by Henry Shuerman, Oct. 15, 1889; bk. 2, pg. 78.

500 inches by Wm. Fain and J. W. Muse, May 4, 1895; bk. 3, p. 2.

500 inches by Jas. Page and Jas. W. Muse, in Springs in Oak Creek, Oct. 25, 1887; bk. 3, p. 229.

4,000 inches by E. J. Parkinson, Aug. 24, 1899; bk. 3, pg. 420.

"All the water to be developed," at a certain seepage into Oak Creek, by J. F. Derrick, Aug. 19, 1899; bk. 3, p. 431.

4,000 inches by E. H. Meek, Dec. 2, 1899; bk. 3, p. 442.

200 inches by David F. and David E. Hart, June 13, 1900; bk. 3, p. 487.
4,000 inches by E. J. Parkinson, Dec. 2, 1899; bk. 3, p. 442.
1,000 inches by J. T. McWilliams, Jan. 22, 1900; bk. 3, p. 454.
300 inches by Jno. Smith and Atwood Aims, Sept. 29, 1900; bk. 3, p. 497.
100 inches by Juan Armijo, Nov. 12, 1900; -
720 inches by Saml. C. Dickinson, Feb. 6, 1901; bk. 5, p. 12.

GRANITE AND DRAGOON CREEKS.

The upper Verde near Granite Creek was not visited. In this section are No. 59, belonging to Peters Bros.; No. 60, belonging to Thomas R. King, and Nos. 61 and 62, to Baker. Dragoon Creek was not visited. On this Creek are John Summers, No. 63, and Nos. 64 and 65, belonging to Packard.

The Stroud report two years ago reported Packard as having 30 acres and a ditch of 100 inches capacity, located in 1885. If we allow the remaining ditches not visited in this neighborhood 15 inches each, we have a total of 175 inches.

THE UPPER VERDE RIVER.

The first place visited was the John Duff ditch, No. 66, carrying 25 per cent of its capacity, measured 42 inches (1.0623 sec-ft.), 35 acres thereunder. Ditch was taken out in 1879, known also as W. A. Morris or Lombardy ditch. Next ditch Dykextra, No. 67, carrying 50 per cent, measured 36 inches (0.911 sec-ft.); irrigates 50 acres. Appropriation in 1893, and enlarged two years later.

Below is Ed. L. Jordan ditch, No. 68, also called Fleet ditch, or Hawkins ditch; was carrying 30 per cent, measured 47 inches (1.186 sec-ft.), and irrigates about 35 acres; was taken out in 1881 or 1882. Wm. Jordan's on the opposite side of the river, No. 69, was carrying about 70 per cent, measured 62 inches (1.563 sec-ft.), and covers about 20 acres. Was taken out in 1880 or 1882.

Next is No. 70, the Tunnel ditch. Owners are Allen & Wood, agents for Senator W. A. Clark, also Dan Shea and E. W. Hawkins. Ditch was carrying about 50 per cent, contained 190 inches (4.757 sec-ft.), 250 acres irrigated thereunder, while 150 acres additional unirrigated lay under the canal; taken out in 1896. E. W. Hawkins irrigated his land in 1876, but abandoned his ditch on completion of the Tunnel ditch.

No. 71, known as the Cottonwood, or Reservation, or Verde ditch, was carrying 711 inches (17.762 sec-ft.), which seemed a normal head. From 600 to 700 acres under this ditch, which appears to be all that can be covered by it. Was taken out in 1869. This ditch is said by the methods of measurement here in vogue to divert 1,000 inches.

On the opposite side the Hickey ditch, No. 72, was carrying about 60 per cent, measured 243 inches (6.071 sec-ft.) acreage claimed varies from 115 to 200, the smaller estimate by more reliable authority; lands scattered and irregular. Ditch was taken out in 1894 by Hickey & Ricker. The Humbert ditch, No. 73, while diverting about 75 per cent of the head it appeared to frequently carry, measured 216 inches (5.397 sec-ft.) Part of this was raised by a wheel on higher ground; in order to make the lift 86 inches (2.145 sec-ft.) were used for power and fell back into the river. The Stroud report gives this ditch as covering three acres, acreage presumably has been increased.

The O. K. Canal, No. 74, just below the mouth of Oak Creek, was carrying 517 inches (12.920 sec-ft.), full capacity about 600 inches, irrigates 610 acres, taken out in 1873. The Eureka Canal, No. 75, contained 448 inches (11.194 sec-ft.), which was about 80 per cent of its recent flow and about 60 per cent of maximum flow. It irrigates 420 acres belonging to four owners, was taken out in 1893 and increased two years ago.

The Woods, or Verde Canal, No. 76, was now taking water, was carrying 1,042 inches (26.0663 sec-ft.), about its maximum. Canal is fifteen miles long and irrigates land both above and below Camp Verde, amounting to 1,200 acres, about half of which are among the oldest lands on the river, and half more recent, having been added from time to time. There are perhaps a dozen owners under this canal, being more than under any other in the valley.

The Central Verde or Ralston Canal, No. 77, was temporarily dry, is stated to irrigate 1,000 acres, the Stroud report gives it 600 acres; the ditch probably diverts certainly not less than 600 inches. 300 acres of this land was first irrigated three years ago. The Enterprise ditch, No. 78, was carrying about 60 per cent of its capacity, measured 94 inches (2.342 sec-ft.), covers 50 acres, taken out in 1893.

The Eman ditch, No. 79, measured 235 inches (5.8728 sec-ft.), its maximum capacity; was taken out in 1893, covers 340 acres. Formerly the old lands under the Eman ditch were irrigated from Clear Creek, but six years ago the Clear Creek water was sold to newer lands and water taken from the Verde for the Eman lands; owners, Haywood Cattle Co., Aurora, Ill. Manager, C. B. Eman, Garden City, Kan.

The total amount of water found in ditches on the main channel of the Verde, plus the probable normal capacity of those ditches found temporarily dry, is 4,572 inches, an estimated full head, as shown by high water line, is 5,710 inches. Whether our presence had anything to do with the recent reduction in the amount of water that many of the ditches had been carrying we do not know. It is not probable that all of the ditches carry their maximum capacity at any one time, or if so, for only a short period. This was considered a time of great scarcity of water. The greatest diversion is during June and July.

TOTAL DIVERSIONS ON ALL STREAMS

	Measured Head.	Full Head.
Clear Creek	273 inches	655 inches
Beaver Creek	482 "	1200 "
Oak Creek	1562 "	2111 "
Verde River	<u>4572</u> "	<u>5710</u> "
	6889 inches	9676 inches

The water leaving the Verde Valley as measured at the Falls is probably 1467 inches. The above total measured head is presumably less than the usual summer diversion, hence with a total taken from the river of more than 6889 inches there is left 1467 for us. If they were taking no more, they were still taking 83 per cent, and leaving 17 per cent to come down to us.

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DIVERSION AND ACREAGE

None of the ditches seemed to be carrying a greater amount than ordinarily; several were carrying less than they had very recently contained. The following canals on the Verde and the Southern half of Oak Creek are the largest in the entire valley. This neighborhood is on the telephone line to Jerome from whence telephonic connection exists with Phoenix.

<u>Canals and Location</u>	<u>Measured head in inches</u>	<u>Estimated full head in inches</u>	<u>Acreage</u>	<u>Meas. head in ac.-ft. for 7 mo. flow</u>	<u>Estimated full head in 7 mos. flow</u>
Oak Creek					
James	20	50	15	13.88	34.70
Shuerman	44	88	28	16.36	32.72
Shuerman	40	40	17	24.50	24.50
Shuerman	20	50	8	26.03	65.07
Huckaby	87	174	8	113.20	226.40
Willard	10	10	5	20.83	20.83
Page	139	139	50	28.95	28.95
Dickinson & Horst	350	350	215	16.95	16.95
Fain	169	225	195	9.03	12.04
Hart	65	195	40	16.92	50.76
Verde River					
Duff	42	168	35	12.49	49.96
Dukextra	36	72	50	7.50	15.00
E. Jordan	47	157	35	13.98	46.60
W. Jordan	62	89	20	32.28	46.11
Tunnel	190	380	250	7.92	15.84
Cottonwood	711	711	650	11.39	11.39
Hickey	243	405	158	16.02	26.70
O. K.	517	600	610	8.83	10.24
Eureka	448	747	420	11.11	18.52
Woods	1042	1042	1200	9.04	9.04
Enterprise	94	173	50	19.58	32.63
Eman	235	235	340	7.20	7.20
Total	4611	6100	4399		

The great variation in the use of water is largely due to faulty constructions, to individual ideas as to the need of water and to slope of lands, as the borders are always run with the greatest slope even where the water cuts gulleys in the land. The total of water measured amounted to 4611 inches for 4399 acres, which is equivalent to 1.042 inches per acre. This average flow will give the land as follows:

	<u>Acre-feet 1 month</u>	<u>Acre-feet 5 months</u>	<u>Acre-feet 7 months</u>	<u>Acre-feet 9 months</u>
1.042 inches	1.5393	7.7965	10.9151	14.0337

If we calculate on the basis of 6100 inches, which represents the full head, we have 1,387 inches to the acre. This gives the land as follows:

	<u>Acre-feet 1 month</u>	<u>Acre-feet 5 months</u>	<u>Acre-feet 7 months</u>	<u>Acre-feet 9 months</u>
1.387 inches	2.063	10.314	14.440	18.565

The average actual diversion is probably between these two estimates, the one is probably too low, the other too high.

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RAINFALL AND ALTITUDE

The rainfall at Phoenix from March 1 to Nov. 1, 1901, was 2.97 inches. The amount of rainfall on the Upper Verde is unknown; the nearest stations are at Prescott, Congress and Flagstaff, no one of which has as heavy a Summer rainfall as the Verde Valley. We are convinced that the Summer rainfall is at least double the rainfall at Phoenix, and is probably greater than double. Again, the altitude is from 3,000 to 4,000 feet, making the Summer delightfully cool. Farmers in this valley know how much faster they can irrigate in the Summer during the early morning hours than the heat of the day.

WATER AND ACREAGE

There are nine other canals supplying water in the district above; some were not visited, others were temporarily dry; the total area under them is approximately 1292 acres. Calculating this acreage on the proportions as for that above, we have for them a diversion of from 1346 to 1792 inches. If these be added we have the following summary:

	<u>Measured head in inches</u>	<u>Estimated full head in inches</u>	<u>Acreage covered.</u>
22 canals above	4611	6100	4399
9 canals additional	<u>1346</u>	<u>1792</u>	<u>1292</u>
Total	5957	7892	5691

The total water diverted from the Verde and all its tributaries was from 6889 to 9676 inches, of this amount from 5957 to 7892 inches is in this district over which was advised daily supervision. It is probable a commissioner, assisted by one ditch rider to road gauges and adjust gates, could take care of the above area. A greater area would require more help.

SEEPAGE

We were constantly told that all the water they used soaked quickly back into the river, that none of it was lost. Measurements could be made to determine this, both as to amount and time required for its return. As none have been made we can only form an opinion by consideration of results elsewhere.

The Colorado State Agricultural College published in 1896 a report of investigations to determine the amount of water returning to the rivers from irrigated sections, and the comparative losses incurred where the same rivers passed through unirrigated sections. Since that time observations have been continued by the State engineer and others. A summary of all these measurements is contained in the tenth biennial report of the State Engineer, as follows:

1. "There is a real increase in the volume of the streams as they pass through the irrigated sections.
2. There is no such increase in the streams as they pass through the unirrigated sections. On the contrary, there is an actual loss, even when the drainage of a large area enters.
3. There is no perceptible underflow from the side channels (drywashes), even where they drain several thousand square miles.
4. The inflow is practically the same throughout the year. It is more in Summer, less in winter, principally because of the effect of the temperature

of the soil.

5. The passage of the seepage water through the soil is very slow, so that it may take years for the seepage from the outlying lands to reach the river.

6. On the Poudre River about 30 per cent of the water applied in irrigation returned to the river.

7. The use of water on the upper portions of a stream, when water is not immediately needed by prior appropriators, will increase the flow of the stream late in summer, and prevent such low stages as it would have without this regulating action."

Elwood Mead, in a pamphlet published by the U. S. Department of Agriculture, says :

"Much of the water which escapes from canals finds its way to the surface below in the form of springs in what were originally dry ravines. Irrigators have filed on these springs and secured thereby an ample water supply without having to pay the canal company which furnishes it anything for operating expenses or for the purchase of a water right. On the South Platte River alone there are over 400 of these filings on seepage water. The report of the State Engineer of Colorado for 1898 shows that 5,000 acres in the Poudre Valley were irrigated with seepage water in that year. In a number of instances canal companies have sought to establish a title to the water of these springs and to collect for its transportation from their users; but the decisions of the courts in these cases have been conflicting and no settled policy has as yet been established.

"The percolating water from canals and irrigated fields materially increases the water supply of Western rivers. Measurements of this return or seepage water have shown that this reaches in many instances 30 per cent of the original volume."

Now on the Verde there are no "springs" where once were "dry gulches;" there are no thousands of acres of land irrigated from seepage water; there are no filings on seepage waters; there is not a sign of rising water anywhere; everything is dry except where river water is diverted to the land; not a sign of any of the conditions of return waters as described above. Yet, be it noted, where all of these conditions exist of "springs," or "running arroyos once dry," there, after careful calculations by competent engineers, covering years of time, the amount of seepage water returning to the stream from which it was once diverted is set down at 30 per cent of the amount diverted. If 30 per cent returns under such conditions, then certainly less than 30 per cent returns on the Verde.

The diversion in Colorado begins early in the Spring and the engineer reports that in some places this percentage does not return for years, but in the larger number, it returns late in the Summer. If such is the case there, of the large amounts of water diverted on the Verde in June and July for the corn crop whatever returns comes to us late in the Fall, when our period of greatest need is past. As a matter of fact, our greater need occurs in June, July and August, when their diversion is greatest.

In Antelope Valley, California, the velocity of the underground flow has been shown to be 3.52 miles per year. (U. S. Geological reports)

When the river was dry below the Tempe dam in June, '96, 3200 inches was running at the Joint Head; in '99, river dry below Tempe dam, 2400 inches flowing at the Joint Head. (U. S. Geological Survey) It has never been contended that this was returning irrigation water, but only river water which has passed under the dams. The river drops off 14 feet to the mile to the West, soon the water level should be reached, and nine miles lower down it comes to the surface on the South side of the channel; there is very little irrigation within several miles of the place. Wherever boulder bars cross the river there more water rises, and the amount rising in the South side of the channel is greater than that in the North side. There is practically no irrigation to bring in water from the South. The writer has been making measurements of this flow for the Government. The total water diverted by all the ditches plus that in the river passing the Indian Reservation is 634 acres. (15.8546 sec-ft.)

We hardly need mention Kellner's artesian well which was confidently expected would strike the flow of returning irrigation water from the whole North side. The well was certainly deep enough, but was dry. The inferences are that this water is largely river water, not returning irrigation water. The water at Buckeye is largely Gila water.

When the Agua Fria dam was completed on the bed rock, it was expected there would be developed a constant flow of from five hundred to one thousand inches on account of the large drainage area. The flow amounted to only 30 inches, which soon dropped to 15 inches, where it remained.

RECORDED APPROPRIATIONS

There are other small ditches on other streams emptying into the Verde and on its own head waters, but their value is small. Many of the appropriations on the Verde are not of record; the following in addition to those heretofore given are of record: - ditch, by P. W. Burford, Jan. 7, 1877; b.1, p.254. ALL the waters of the Verde River, by Jos. Melvin, July 23, 1877; b.1, p. 298. ALL the water of the Verde River 1/2 mile above Oak Creek, by M. R. Vernon, Sept. 23, 1882; b. 1, p. 56.

- 3000 by Jno. H. Wilkerson and Wm. Sherard, Feb. 12, 1871; b. 1, p. 65.
- 3000 Albert Young and Chas. F. Bennett, Sep. 18, 1875; b. 1, p. 162.
- 3000 by J. H. Wingfield, D. W. Strahan, Mrs. Mary E. Cleft, L. B. Barney and Bristow, for Reservation ditch, Dec. 4, 1877; b. 1, p. 317.
- 1000 R. W. Pleasant and Isaac C. Jones, Feb. 16, 1876; b. 1, p. 324.
- 6000 F. E. Jordan, Jan. 10, 1878; b. 1, p. 363.
- 1000 Saml. Loy, Mar. 1, 1878; b. 1, p. 365.
- 1500 by Jno. Duke and F. Krell, Feb. 10, 1883; b. 1, p. 124.
- 6000 Z. L. Kay, near Oak Creek, Jan. 2, 1884; b. 1, p. 183.
- 6000 J. C. & J. W. Ralston and Z. L. Kay, below Oak Creek, for Ralston ditch, Mar. 20, 1884; b. 1, p. 202.
- 500 Chas. D. Willard, Oct. 20, 1885; b. 1, p. 293.
- 2000 J. B. Ezell and J. W. Ezell, East fork Verde, Mar. 21, 1889; b. 2, p. 50.
- 5000 Jno. Davis, Jno. Wood and Jas. Brown, Mar. 10, 1891; b. 2, p. 224.
- 275000 Rio Verde Canal Co., Dec. 21, 1891; b. 2, p. 252.
- 1000 Thos. A. Smith, July 12, 1892; b. 2, p. 294.
- 300 W. S. Head, Thos. J. & Chas. B. Eman, July 23, 1892; b. 2, p. 298.
- 250 R. M. Rodgers, Sarah Arnold and J. W. Ralston, near Cherry Creek, Feb. 14, 1884; b. 2, p. 400.

3000 Jno. J. Hicks, July 20, 1894; b. 2, p. 459.
 1500 Jno. J. Hicks, July 26, 1894; b. 2, p. 461.
 10000 Thos. Carroll, Jan. 28, 1895; b. 2, p. 485.
 15000 Thos. Carroll, David Scott and Godfrey Van Deren, Feb. 18, 1895;
 B. 2, p. 492.
 1000 A. B. Hutcheson, Burton Maxwell, W. F. Hutcheson, Tommie Bristow and
 C. P. Wingfield, Apr. 13, 1895; b. 2, p. 499.
 2000 Hugh Brewer, Geo. Rich, D. J. Shea and C. O'Keefe, Mar. 9, 1895; b. 3,
 p. 1.
 500 J. C. Duff and J. C. Muse, Nov. 15, 1895; b. 3, p. 61.
 5000 L. P. Bristow and J. C. Bristow, Nov. 18, 1895; b. 3, p. 68.
 300 A. J. & J. J. Humbert, Feb. 1, 1896; b. 3, p. 81.
 1500 W. E. Van Daren and David Scott, Aug. 6, 1896; b. 3, p. 134.
 25000 Arthur C. Cordiner and David Kilpatrick, Feb. 4, 1889; b. 3, p. 314.
 6000 Nathan, Richard, Jas., Geo. and Abe Huckaby and Jno McCall, Feb. 1, 1900;
 b. 3, p. 46.
 80000 reorganized Rio Verde Canal Company, Sept., 1901.

The above is a total of 465,350 inches on the Verde proper in addition to two separate appropriations of the entire flow of the river.

The following additional appropriations of water on tributaries of the Verde are also of record:

ON CHERRY CREEK.

All water, Wm. McK. Owen and Robt. Owen, Apr. 21, 1872; b. 1, p. 69.

ON WALNUT CREEK.

1000 in., Mrs. Fannie Plummer, July 17, 1896; b. 3, p. 128.
 500 Wm. G. Shook, June 24, 1887; b. 1, p. 426.
 500 W. H. Williscraft, Nov. 15, 1887; b. 1, p. 441.
 All water of Walnut Creek, Saml. C. Rodgers, original location of Apr. 13,
 1868, recorded Jan. 18, 1900; -

ON GRANITE CREEK.

All water of Granite Creek, R. A. Farrington, Jan. 4, 1866; b. 1, p. 8.
 All water of Granite Creek and Willow Creeks at Point Rocks, Mar. 27, 1872;
 b. 1, p. 81.
 75 inches, M. H. Yearborn, Aug. 23, 1873; b. 1, p. 87.
 800 Peter Marx, Aug. 1, 1873; b. 1, p. 94.
 200 J. H. Lee, July 24, 1875; b. 1, p. 155.
 500 M. Maur, Dec. 20, 1887; b. 1, p. 446.

ON BIG CHINO CREEK.

4000 ins., Jno. C. Loy and S. Morrison, Aug. 23, 1890; b. 2, p. 150.
 8000 ins. J. C. Snow and J. P. Storm, Mar. 20, 1884; b. 2, p. 394.
 2000 ins., J. C. Snow, Apr. 2, 1895; b. 2, p. 496.
 1000 ins., J. P. Storm and Thos. R. King, Mar. 16, 1898; b. 3, p. 248.

ON WILLIAMSON VALLEY CREEK.

150,000 by J. W. Sullivan and J. J. Fisher, Mar. 4, 1896; b. 3, p. 94.

ON DEER LICK CREEK.

All water by M. H. Shuerman, Aug. 30, 1875; b. 1, p. 160.

ON WILLOW CREEK.

All water by Jos. Carbarins, Aug. 11, 1879; b. 1, p. 419.
20 ins., Jack T. Stone, May 17, 1890; b. 2, p. 121.

ON PINE CREEK.

Sidel ditch, by Curtis B. Hawley, June 29, 1881; b. 1, p. 2.
5000 ins., Silas M. Lee, Jan. 10, 1891; b. 2, p. 178.
1000 ins., Jno. P. Hough, Jan. 10, 1891; b. 2, p. 179.

ON SALT RIVER.

All water of Green's ranch, Ft. McDowell, Jos. Green, Peter McHannan, Geo. Roberts and A. H. Peoples, June 14, 1867; b. 1, p. 12.
4000 ins., Henry Van Arman and L. C. Comfort, Van Debe ditch, Jan. 18, 1871; b. 1, p. 47.
10000 G. M. Ruson, Jos. H. Drum and Wm. T. Keller, Jan. 27, 1871; b. 1, p. 48.

ON TONTO CREEK.

All water Tonto Springs, Henry T. Crum, May 25, 1875; b. 1, p. 150.
500 Chas. Serget and M. H. Sanders, Dec. 22, 1888; b. 2, p. 18.
Of the following creeks and springs, on each of which there is but a single location, few, if any, are of particular value.
All water Sugar springs, Oct. 18, 1879; b. 1, p. 438.
All water Cottonwood Canon, Tom Flemming, Aug. 29, 1882; b. 1, p. 43.
All water O'Neal Spr., Jan. 24, 1883; b. 1, p. 93.
All water Cold Spr., C. H. Richardson and H. W. Lawson, Nov. 28, 1888; b. 2, p. 28.
All water Bryant Spr., Joseph H. Dickinson, July 24, 1889; b. 2, p. 64.
1000 ins. Rattlesnake Spr., Joseph H. Warren, July 24, 1889; b. 2, p. 65.
All water Mud Tanks Spr., Jas. Taylor, Mar. 20, 1891; b. 2, p. 195.
All water Peterson Spr., Jno. H. Peterson, Aug. 8, 1892; b. 2, p. 292.
All water Dove Spr., Wm. Ruby, Sept. 20, 1894; b. 2, p. 473.
All water White Rock Spr., Wm. Rudy, July 24, 1884; b. 1, p. 223.
All water Strawberry Spr., June 10, 1885; b. 1, p. 268.
All water Middle fork Wool Creek, Jas. Hanger, July 1, 1896; b. 3, p. 134.
100 ins. Perkins Valley Creek, Aug. 1, 1896; b. 3, p. 135.
1000 ins. in creek near Pocahontas mine, Dwight Crittenden, Apr. 21, 1897; b. 3, p. 195.
All water Hays Creek, U. W. Bosley and Jno. Morris, Feb. 20, 1899; b. 3, p. 329.
150 ins. for old Down ditch at Soda Spr., Dec. 12, 1900, by J. F. Bristow; b. 5, p. 21.
20 ins., R. H. Jack, Sheepshead Springs, Jan. 16, 1901; b. 5, p. 6.
300 ins., R. H. Jack, Spring Creek, Jan. 16, 1901; b. 5, p. 7.
20 ins., Jacob Ritter, Hays Canon Creek, Jan. 26, 1901; b. 5, p. 10.

CENSUS REPORT.

A bulletin of the Twelfth Census on the "Agriculture of Arizona" contains much matter of interest pertaining to irrigation. Herewith is table No. 19 therefrom:

IRRIGATION DITCHES IN ARIZONA, NOT INCLUDING INDIAN RESERVATIONS.

Counties	No. Ditches	Length miles.	Cost of construction.	Acres under ditches.	Acres irrigated in 1899.	Average acres irrigated per mile of canal
Yavapai	167	298	\$ 151,191	22,778	8,730	29
Maricopa	31	442	3,080,000	643,743	109,655	248
Apache	37	80	73,756	15,335	7,372	92
Cochise	36	51	27,561	7,565	4,989	98
Coconino	7	8	9,280	1,359	1,114	139
Gila	40	64	18,767	7,051	3,924	61
Graham	35	138	127,286	29,923	18,297	133
Majove	34	35	10,670	1,807	1,419	41
Navajo	12	39	127,200	7,045	3,007	77
Pima	42	106	40,340	9,732	8,617	81
Pinal	41	127	521,200	35,281	11,297	89
Santa Cruz...	29	40	20,907	5,295	2,562	64
Yuma	8	64	200,000	96,221	4,413	69
Total	519	1492	\$4,407,158	883,140	185,396	124

In Yavapai County, of the 167 ditches above given, all are reported as located upon the Verde and its tributaries, with the exception of a dozen or so which irrigate little garden patches on the headwaters of creeks, dry a large part of the year.

Mr. F. H. Newell, Hydrographer of the U. S. Geological Survey, sends us the following information: "Acreage in cultivation on the Verde River in the vicinity of Camp Verde, Cottonwood, Aultman and Cornville, 8,306 acres; Oak Creek, 2,423; Beaver Creek, 725, and Clear Creek, 700 acres. Total, 12,154 acres. Also on Granite and Walnut Creeks in the vicinity of Prescott and Juniper, 431 acres, making in all 12,585 acres". We are positive that Mr. Newell has received erroneous information. We are convinced the maximum acreage irrigated has never exceeded 9,000 acres.

GENERAL CONDITIONS

The census taker informs us there are about 1,500 people in the Verde Valley. As a rule they give us as large acreages as the circumstances would permit, perhaps with a view of covering future lands put in. The farms are of irregular shape, winding about the sides of hills, or on opposite sides of the stream. While a few of the dates of appropriation given agree with the Stroud report, many are earlier. It is probable nearly all of the ditches and acreages thereunder were very small when taken out and have been increased from time to time. We saw no evidence of ditches taken out within the past two or three years and a very little land put into cultivation since that time. The records of the Land Office would be of no value in determining priority of appropriation, as many of the lands are still Government lands, and where lands are patented the amount in cultivation has been in an increasing quantity year by year. The conditions there are very different from ours.

There is no adobe land, the soils are loose, shallow and of very inferior quality. Not a hundred acres were seen which would compare with the lands of the Salt River Valley. Owing to the slope and the shallowness and quality of

the soil, more frequent irrigation is needed. Their methods of applying water are the crudest, even under company ditches there are no headgates; every man taps the canal in a half a dozen places and keeps several small heads continually running on his alfalfa. Most crops are planted in the spring; there is little irrigation during the winter; the only winter irrigation is on alfalfa. Acreages are in the following order: Corn, hay, fruit, potatoes and garden produce. The market is always more extensive than the supply; they are in the following order: Jerome, Prescott and Flagstaff.

Little attempt is made to keep down Johnson grass and fox tail, while we saw a new and fiendish pest in the sandy soils, the spiked Cocklebur; this grows 2 feet high and bears thorns as long and hard as a cactus.

The people all exhibited a lively interest in our visit. Many of them feel that, sooner or later, there is bound to be a struggle with the people of the Salt River Valley; many of them are in doubt as to their power to retain the use of the water they are taking; while on the other hand these regular trips of observation which result in no action taken encourage them to continue widening and deepening and lengthening their ditches.

We had no formulated plan to present, but we outlined the manner in which the water is distributed among us by a water commissioner; and the appointment of a water commissioner was suggested. Little opposition to this suggestion was manifested. County Recorder Johnson was strongly opposed to any plan; part of his land was first cultivated five years ago, and for the remainder he states he will soon take out water. On lower Oak Creek and the Verde the idea seemed better than litigation.

Were a commissioner appointed by the court, instructed as to the delivery of water, and instructed to prevent the present wastage of water, the question remains as to what proportion of the water thus saved would reach this Valley. From the falls six miles South are Camp Verde to a point about ten miles North of Camp McDowell the river is a tortuous cut through prophyry and volcanic formations, it would seem there would be little seepage here. The surface and evaporation is about the same, whether 1,500 or 3,000 inches are in the river, and whatever was gained ought to come down little depreciated.

DATA NEEDED.

The loss between Camp Verde and the Salt River can be determined by having daily readings made of a gauge placed at McDowell North of the ditches there, also measurements with daily readings at Camp Verde. The records of three or four weeks ought to be sufficient. The observer at Camp Verde meanwhile could definitely determine the amount of water then returning to the river by seepage.

McDOWELL.

Antonio Romo, who has a farm at McDowell, states that the Apache Indians are making all preparations to construct a ditch above McDowell, but as yet have done no work.

There are four ditches at McDowell - the Jones ditch, completed in 1896, having a capacity of 500 inches; the Government ditch of 300 inches; the Valasco ditch, of 250 inches, and the Ortez and Mason ditch, of 150 inches; a total of 1,200 inches.

The last ditch was taken out in 1892 and extended in 1893.

THE COUNTRY WE VISITED

The committee traveled 450 miles through what had once been the finest of stock ranges and during time saw less than 200 cattle. We saw no sheep, only the evidences of sheep. We talked with cattlemen, and noted they did not attribute all the ills they suffered to sheep. They said it was more largely due to sheep than any one cause now existing, but the extinction of the range grasses began with the overstocking of the ranges by the cattlemen; then followed the sheep after the death of the thousands of cattle; and now more destructive than either in places are appearing the goats.

We were informed by such unprejudiced men as Mr. Mahan, Mr. Back and Mr. Hance that about 150,000 sheep were at present grazing on the southward slopes of the Black Mesa Forest Reserve. We only entered the Northwest end of this Reserve; there we saw no sheep, only sheep trails.

While the sheep are slowly driven in large droves through our watersheds, from the North to the South, and from the South to the North again, across the reserves, eating all the grasses and tender growth of young trees in their pathway, leaving worn trails for the rains to quickly convert into arroyos, their herders as well as their owners are as little interested in the lands they pass through as any nomads are; yet once they have passed through, the ground gets some little rest, the cut up earth hardens with the falling rains, the young trees try to leaf out again, in favored localities the galleta and the grama once more spring up, and here and there the range becomes partly green again; but not so where the goats have possession; they range into the hills beyond the endurance of stock to get where even sheep will not and cannot go; they thrive and fatten on ranges so denuded and bare that horses and cattle and even sheep are compelled to abandon or die; for them water every other day is a-plenty and the tender growth of the young pine and pinyon is a feast.

REPORT

By J. W. Woolf,
President of the Tempe Canal.

We, your committee, appointed to investigate and report on the condition and water supply of the Verde River and the appropriations of water therefrom, submit the following report:

We left Phoenix on the 8th of July and devoted twenty-four consecutive days to the work, and made as thorough and complete an investigation as the time and circumstances would permit. We employed Capt. Omar A. Turney as engineer, to whose careful and painstaking work the committee is much indebted for the reliability and completeness of the work. The conference committee will see by examining the compiled report on the various ditches and canals that were measured on the Verde River and its tributaries, and the acreage under them, that a very large amount of water is diverted in excess of the amount that can be advantageously used, or required by any kind of crops, under any conditions or circumstances. The minimum amount diverted by any ditch, based on a continuous flow, is about sixteen to eighteen acre-feet per annum, or about four times as much as is ordinarily required for the best results. It would seem that a very large proportion of this water must be wasted, or worse.

Your committee recommend that steps be taken at an early date to compel, if necessary, a more economical use of the water. It will be noted that a majority of the appropriations of water are comparatively old. A few, however, are known to have been made in recent years. As to what steps should be taken with regard to these, is a matter for the determination of the conference committee and the interests it represents.

Some other appropriations are contemplated, notably that by the Jerome Power Company on Oak Creek, also one at Cottonwood, one at Middle Verde, and other perhaps near Camp Verde. These appropriations, if made, would cover land aggregating several thousand acres. Your committee recommends that the necessary legal steps be taken to prevent the farther appropriation of water from the Verde and its tributaries for irrigation.

In view of the claim made by those using the water of the Upper Verde and its tributaries, viz: That a very large proportion of the water flowing in the river is lost between Camp Verde and the Salt River, we recommend that at a proper time, as early as convenient, careful measurements of the river be made at suitable points between Camp Verde and Camp McDowell, to determine whether such is the fact. The data thus obtained would, in our opinion, be very valuable in case it becomes necessary to go before the courts.

We farther recommend that every honorable means to secure the appointment of a commissioner, who shall have full control of the distribution of water, and be under the direction of the proper court. Such an arrangement would have the effect at least of preventing the reckless waste of water so prevalent at this time.

Your committee was profoundly impressed with the deplorable condition of all that part of the watershed over which we traveled, covering a distance of more than four hundred miles by wagon, on foot and on horseback. We saw certainly less than two hundred cattle, and a few horses. Most of the country is an absolute desert, with nothing to support animal life. In a few localities, small flocks of goats are being kept, subsisting upon the scanty browse and desert growths. Yet this same country, only a few years ago, supported thousands of cattle and horses.

Here and there we came upon the dilapidated and decaying remains of a once prosperous cattle ranch, including in some cases a plat of ground that had been cultivated, but now only portions of the fencing and ruins of old ditches remain, mute and melancholy evidences of the ruthless greed of man. A few of these ranches are still occupied in a sort of forlorn and hopeless way. But there are no gardens that we saw, with one exception, and but very few cattle claim the time and attention of the lonely ranchman.

Why is this? What has brought about these changes? The answer is easy - over grazing, coupled with the natural droughty conditions of climate. Cattle grazing began the work, and sheep grazing has finished it, or is finishing it were not already completed. The goat will appropriate any possible thing that may be left. These are the conditions, be it remembered, that we found within the drainage area, that is and must be depended upon to furnish water, or at least a very large proportion of the water for the irrigation of the Salt and Gila Valleys. And much of this area in question is included in the government timber reserves, a part of the public domain, especially set apart in order that it may receive the special care and oversight of the government to the end that the natural resources may be preserved,

and not ruthlessly destroyed by the cupidity and greed of man. But alas! a few more years of protection like they have had in the past, and such as your committee has good reason to believe they are getting now, and there will be little left to protect but naked rocks and drifting sand.

These are hard sayings, but true nevertheless. It would be remembered that something like two years ago an order was promulgated by the department having the supervision of these reserves, excluding stock from the reserves of the Territory, and how the grazers protested, and how finally limited time permits were granted to the sheep owners, presumably so as not to work too great a hardship on the sheep interests. Then followed an investigation by Government experts. The people of the Salt River Valley and others insisted that the grazing of the reserves ought to be prohibited, and the reserves ought to be extended; and that finally, as a sort of compromise, it would seem, the Department of the Interior decided to allow a limited number of sheep to graze North of the divide, i.e., North of the drainage area of the Salt and Verde River.

Now, from past experience, and the conditions as they are known to exist, what may be expected as the inevitable result of this arrangement. It is known that sheep are not kept North of the Divide after the storms of Winter set in, and cannot be kept there, except possibly by driving them to lower country to the East or Northeast. It is well known too that the great majority are driven South; over-running during the Winter and Spring pretty much all the country as far South as the Gila River, returning to the ranges to which the Department is endeavoring to restrict them about May or early in June of the following year.

We call your attention to these facts because we believe this question of grazing on these watersheds the most vital and important which you have to consider in your efforts to conserve the water supply of the Salt River Valley. In the opinion of your committee no other question affecting the interests you represent is of so vital and far-reaching importance.

The sheep as they are managed are nomadic in their habits, here to-day, there tomorrow. Under the existing laws they are not prohibited from grazing on the public domain. And since they are permitted to graze North of the Divide on the reserves, the owners, under one pretext or another, will manage to drive South as usual, across the strip of forbidden ground, Winter and lamb and shear as usual in the Southern and lower altitudes, overrunning the country, destroying the ranges and ruining other interests, just as before, notwithstanding all the vigilance the Government may use.

It is a long cry from Washington to the wilds of Arizona, and, however good may be the intention of the Government, some way will be found to circumvent it, with the results we have pointed out. For instance, we were told by several different ranchmen on the upper Verde that notwithstanding the prohibition and range riders, that there were a very large number of sheep there on July 15th, being grazed South of the Divide. The number is estimated by some as high as 150,000. As to the truth of this we are not prepared to say.

We mentioned the matter to Mr. Hanna, Superintendent of Forestry for New Mexico and Arizona, whom we met as we were returning home. Mr. Hanna said: "I do not think it is true, at any rate they have no right to be there." We talked with many farmers, pioneers, and others, in regard to the effect of grazing on the reserves and water sheds; with one exception

all agreed that it had proved ruinous, and that sheep grazing was more injurious than cattle grazing. The one exception noted above, it afterward developed, was a man who lived at Flagstaff and contemplated going into the sheep business.

There is one phase of the question upon which we have not touched, and which, while not necessarily pertinent on this subject, is very important in its relation to the future. It is this: The investigation of your committee, coupled with our knowledge of former conditions, have forced upon us the conviction that, if the reckless methods of the past, and, we might add, the future, are continued, both as to grazing and the cutting of timber, it will be only a few years until nearly all of the ranges will be, in the Territory, in as bad a condition as the worst are now, and only a question of time, a few decades perhaps, when the natural resources of these reserves, and other portions of our public domain, will have been destroyed.

The conditions of which we complain are but a repetition of the experience of other portions of the great grazing area of the Western States and Territories. But on account of the peculiar topography, and soil conditions here, these conditions come about much more quickly here, and for like reasons the time required for the ranges to recuperate will be very much greater.

We have not mentioned the bad effects on irrigation systems and on irrigated lands produced by denuding the watersheds, because this phase of the question is so well understood that it seems unnecessary.

In conclusion, allow us to express the hope that some way will be found to stop this wanton, we might almost say, criminal waste of the natural resources of the Territory.

Report on the
IRRIGATED LANDS
OF THE
VERDE RIVER
AND ITS TRIBUTARIES
IN 1914.

By
H. L. HANCOCK

Phoenix - - Arizona.

Hon. John C. Phillips,
Superior Judge of Maricopa County,
State of Arizona.

Sir:

I respectfully submit the following report of my investigations of the Verde River and its tributaries, commencing July 12th, and ending October 31st, 1914.

Mr. C. N. Fitch, Project Engineer, of the United States Reclamation Service requested me in a letter dated July 8th, 1914, to make this investigation and after I had taken it up with the Tempe Canal Company, you authorized me to proceed with the same.

Yours respectfully,

Harry L. Hancock,
Court Water Commissioner.

Phoenix, Arizona, July 8, 1914.

Mr. Harry Hancock,
Court Water Commissioner,
Phoenix, Arizona.

Dear Sir:-

The impression prevails in some quarters that water is being diverted from the Verde River and its tributaries in Yavapai County, and utilized for irrigation purposes in derogation of the rights vested in the land owners under the Salt River project under the terms of the Kent Decree.

It is assumed that in the exercise of your duties as Water Commissioner in executing and carrying out the provisions of the Decree, you will desire to take such steps as appear necessary in order to determine whether there is any basis for this impression, and to take appropriate corrective measures if it is found that such are necessary.

As to the manner of carrying on such an investigation my suggestions as to a proper procedure to follow are embodied in the following paragraphs:

The report of Mr. O. A. Turney covering investigations made by him and others in 1901, purports to show the approximate location, date of construction and capacity of the ditches taking water for irrigation from the Verde River and the various creeks which are tributary to it. It also shows the names of the then owners of the land irrigated from these ditches, and the acreage irrigated. The description of the various tracts is not shown. The report further shows all notices of appropriation of these waters, giving the date, amount, name of appropriator and reference to the County records.

These data should be thoroughly checked on the ground and the description of the lands being irrigated with the names of the present owners secured. If the acreage to which water is being applied has been enlarged, the dates when such new land was brought into cultivation from year to year should be

ascertained; also, as to both old and new lands whether water has been continuously used and if not the dates and lengths of the periods when the land was not irrigated. So far as possible the amounts of water actually used should be ascertained. If the ditches themselves have been enlarged the date and the increased capacity should be noted.

As to all notices of appropriation subsequent to Mr. Turney's report which are of record, the date, name of parties, amount of water, purpose, and, so far as is shown, the land to which it is proposed the water shall be applied should be ascertained. The names, locations and capacities of any new ditches should be secured, together with the names of the owners, the description of the lands irrigated, the dates of construction, the amounts of water diverted and the acreage brought into cultivation from year to year.

If water has been appropriated for power purposes, as full information as possible should be secured especially with reference to the disposition of the water after it has served its purpose in the matter of power development.

Altogether, for the purposes in mind, it seems to me that it is desirable to secure as complete information as possible relative to all notices of appropriation which are of record and more particularly relative to all lands for the irrigation of which water is being diverted from the Verde River and its tributaries, including the description of the land, the location, date of construction and capacity of the ditches, together with information as to dates of enlargements and increased capacity the dates when additional acreages were brought into cultivation and the facts as to whether the amount of water used or claimed has been applied to a reasonably continuous use since the date of appropriation.

Very truly yours,

(Signed) C. H. Fitch,
Project Manager.

JLC-EFY

GRANITE CREEK

Under normal conditions the water in upper Granite Creek will only reach the Verde River as underflow, even if none were appropriated. After rains there is considerable run-off at times that does not reach the Verde. This will be entirely cut off if the plans of the Arizona Land & Irrigation Company mature. It is their intention to impound and store all flood waters of Granite and Willow Creeks by building dams across both creeks, above five miles northeast of Prescott. They claim they will have a storage capacity of 19,000 ac.-ft., a sufficient amount to deliver 1.5 acre feet to 10,000 acres that they contemplate serving from their reservoirs. At present they have suspended work on account of financial troubles. They had completed, before quitting work, a storage dam built of concrete, 7 feet high above the bed of creek in Granite Creek. Their engineer in charge claims that a sufficient flow of flood water to make 6,000 acre feet has passed through their reservoir site on Granite Creek from January 1st to September 1st of this year.

Mrs. Marshall Payne owns the SE $\frac{1}{4}$, Sec. 12, T.14N., R.2W. (called Granite Dells), 40 acres cultivated, first cultivation 1879, supplied from two ditches out of Granite Creek, one on the East side, capacity 30 inches, the other on the West side, capacity 20 inches. Uses water most of the time.

John Branconia place is just below the mouth of Willow Creek on the West side of Granite Creek in the West half of the SE $\frac{1}{4}$ and the East $\frac{1}{2}$ of the SW $\frac{1}{4}$ of Section 1, and the North $\frac{1}{2}$ of the NW $\frac{1}{4}$ of Section 12, T.14N., R.2 W. 35 acres cultivated, first cultivation 1868, capacity of ditch 30 inches. Uses water most of the time.

The John Duke place is in the East $\frac{1}{2}$ of the NE $\frac{1}{4}$ of Section 1, T. 14 N. R. 2 W. on the East side of Granite Creek, capacity of ditch 90 inches, 50 acres cultivated, first cultivation 1898.

The T. E. Campbell place at mouth of Granite Creek is situated on the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$, and SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 13, and the East $\frac{1}{2}$ of the NE $\frac{1}{4}$ of Section 14, T. 12 N. R. 2 W. There are signs of about 30 acres having been cultivated on both sides of the creek. They claim last irrigation in 1913. Water used on this ranch reaches the Verde when it is not in use.

Springs in the SW $\frac{1}{4}$ of Section 26 and the NW $\frac{1}{4}$ of

Section 35, T.17N. R. 2 W. furnish Prescott with domestic water. The S. F. P. & P. Railway haul a number of train loads of water from here daily at times. In addition the Del Rio Dairy irrigate 140 acres in the S 1/2 of the SE 1/4 of Section 22, and the W. 1/2 of the NW 1/4 of Section 26, and the NE 1/4 of Section 27, T.17 N. R. 2 W. 175 inches is the total amount flowing from these springs. This land was first cultivated in 1864 or 1865. These springs naturally flow into the Verde a few miles above the mouth of Granite Creek.

VERDE RIVER

The first permanent water rises in the Verde about the mouth of Granite Creek. Granite Creek now adds 75 inches to the Verde. About one mile below Granite Creek springs rise in North side of river bed to make total flow 875 inches. This is a permanent flow at this point. About a mile below the first ditch is taken out by T. E. Campbell to irrigate 32 acres on the North side of the river in the NE 1/4 of Section 7, T. 17 N. R. 1 W. capacity of the ditch 110 inches, first cultivation in 1874 or 1875.

The M. A. & R. E. Perkins place is the next ranch irrigated. It is situated in the S 1/2 of Section 31, T. 18 N. R. 2 E. They irrigate 75 acres, capacity of ditch 80 inches. This is flumed under the river a short way below the head and land irrigated on both sides; first cultivation in 1864 or 1865.

David Armon, a squatter, is in Section 12, T. 17 N. R. 2 E. He is cultivating 3 or 4 acres. First water March, 1914, capacity of ditch 10 inches. Ditch 2 miles long. Cost \$400 to build.

Rosindo Alvarez has 70 acres in Section 12, Township 17 N. R. 2 E. 9 acres irrigated, 7 more can be irrigated, first irrigation 1901; capacity of ditch 40 ins. Water used all of the time.

August Thorbeck at mouth of Sycamore Creek on East side of Verde river, has two ditches that draw water from Sycamore; one on North side, capacity 45 inches, irrigates 12 acres; the other one on South side, capacity 30 inches, irrigates 5 acres, first cultivation 1880. Uses water most of the year.

The Duff ditch, built by Duff about 1879. Capacity 150 inches. Ordinary head used, 50 ins. This ditch supplies water for 42 acres out of 400 acres owned by Upper Verde Fruit & Orchard Co., on East side of Verde river in Sec. 8 and 9,

T. 16 N. R. 3 E. In Turney's report, 1901, max. capacity 170 inches. Water service to 35 acres at that time.

The Sullivan ditch, built by Dykster about 1896. Max. capacity 65 inches. Ordinary head used 55 inches. This ditch supplies water for 50 acres out of 120 acres owned by Verde Fruit Co. on West side of Verde river in Sec. 8 and 9, T. 16 N. R. 3 E. In 1901 Turney's report, maximum capacity 70 inches. Served water to 50 acres.

The E. L. Jordan ditch, built by Tom Carrol about 1882. Maximum capacity 175 inches, ordinary head used 175 inches. This ditch supplies water for 50 acres out of 240 acres owned by Verde Fruit Company on West side of Verde river in Section 8, T. 16 N. R. 3 E. There is a good deal of water wasted back into the river from this ranch. Turney's report in 1901, maximum capacity 150 inches, served water to 35 acres.

The W. A. Jordan ditch, built by Thompson about 1880, Maximum capacity 80 inches. Ordinary head used 55 ins. This ditch supplies water for 35 acres out of 150 owned by Upper Verde Fruit & Orchard Co. on the East side of Verde river in Sec. 17, T. 16 N. R. 3 E., 15 acres of this land has been put under cultivation recently. Turney's report, 1901, maximum capacity 90 inches served water to 20 acres.

Humbert ditch built by Humbert about 1898. Maximum capacity 35 inches, ordinary head used 20 inches. This ditch supplies water for 5 acres out of 160 owned by Upper Verde Fruit & Orchard Company on west side of Verde river in Sections 20 and 21, T. 16 N. R. 3 E. More of this land was in cultivation in the past before being purchased by present owners. This land is being used for townsite and smelter site at Clarkdale and all cultivation will most likely cease on it when smelter is in operation. Maximum capacity, Turney's report in 1901, 300 ins. Water power in ditch at that time to raise water to higher level, has been abandoned since then.

Allen Ditch, built by Allen & Wood about 1898, maximum capacity 350 ins. Ordinary head used 200 ins. This ditch supplies water for 320 acres out of 1580 owned and leased by Upper Verde Fruit & Orchard Company on East side of Verde river in Sections 15, 16, 17, 21 and 22. 35 acres in the N. 1/2 of the SE 1/4 of Section 21 was first cultivated by F. Hawkins by a private ditch in 1876. Maximum capacity, Turney's report in 1901, about 380 ins. served water to about 250 acres.

Hickey Ditch, built by Hickey about 1874, originally headed on East side of river and only served land on East

side. Some years ago a large flood washed out their head. They went further up stream and took water out on West side, taking in additional land amounting to 11 acres for Frank Delaney and 11 acres for B. Lugo in Section 22, then flumeing under the Verde river with a metal flume 23 ins. in diameter and irrigating 21 acres for Arthur Woods in Sec. 27, 20 acres for Arthur Nichels in Section 35, 10 acres for Lina Reyes in Section 27, and 100 acres for C. D. Willard in Sections 26 and 27.

Present maximum capacity of ditch 225 inches ordinary head, used 200 ins.

There is 240 acres belonging to Wm. Gray, Wallace Willard and Mrs. Camer in Sections 1 and 12, T. 15 N. R. 3 E., that can be irrigated from this ditch. It is claimed by some that water has actually been used on part of this land from the Hickey ditch. The old Hickey ditch that headed on the East side had a maximum capacity in 1901 of 400 ins. and served from 125 to 200 acres of land on East side of river.

Cottonwood ditch was originally started by the government for the Indians in 1874, was taken over soon afterwards by Carrol, Strahan and Willard, later enlarged and extended to present length and capacity. Maximum capacity 1250 in head, ordinary used 1000 ins. furnishing water for following ranches on West side of Verde river:

Description	Total Acres	Add Acres for Cul. Cul.
C. D. Willard, NE 1/4 NE 1/4, Sec. 28 T.16 N. R. 3 E. SW 1/4 of Sec. 27 S of river	140	90
Mrs. W. G. Willard SE 1/4 NE 1/4, E 1/2 SE 1/4, Sec. 28	120	15
Alonz Mason SW 1/4 SW 1/4 Sec. 27, N W 1/4 NW 1/4 Sec. 24	80	25
C. B. Hopkins, SE 1/4 SW 1/4 Sec. 27, NE 1/4 NW 1/4, Sec. 34	80	40
Fred Mickel, S 1/2 SW 1/4 Sec. 26	80	52
Ed Rucker, N 1/2 N 1/2 S 1/2 NW 1/4 Sec. 35		
Wm. Flynn, S 1/2 N 1/2 S 1/2 NW 1/4 Sec. 35	20	20
Thos. Carrol, S 1/2 S 1/2 NW 1/4, N 1/2 N 1/2 SW 1/4 Sec. 35	80	70

Tom Taylor, N 1/2 NW 1/4 Sec. 35	80	60	
E. Shoppin, S 1/2 NE 1/4 SW 1/4 Sec. 35	20	15	
David Scott, SE 1/4 SW 1/4, T.16 N. R. 3 E. Sec. 35			
N 1/2 NE 1/4, NE 1/4 NW 1/4 Sec. 2, T. 15 N. R. 3 E.	160	20	20
John Waddell, W 1/2 NE 1/4, Sec. 35, T. 16 N. SW 1/4 SE 1/4 Sec. 26 R. 3 E.	120	37	20
Tom Stone, SW 1/4 NE 1/4 Sec. 2, T. 15 N. R. 3 E.	40	40	
Will Jordan, SE 1/4 NE 1/4 Sec. 2, T. 16 N. R. 3 E.	40	34	
Bank of Ariz. Tr. N 1/2 SE 1/4 Sec. 2, T. 15 N. R. 3 E.	80	75	
Chas. Burris, SE 1/4 SE 1/4 Sec. 2 T. 15 N. R. 3 E.	40	40	
H. N. & K. C. Crain, S 1/2 NE 1/4 Sec. 11, T. 15 N. R. 3 E.	60	59	
L. A. Willard Est. NW 1/4 NW 1/4 Sec. 18, T. 15 N. R. 4 E. SW 1/4 SW 1/4 Sec. 1 W 1/2 NW 1/4, N 1/2 SW 1/4, SE 1/4 Sec. 12 T. 15 N. R. 3 E.	480	140	
R. Thompson, S 25 acres, SW 1/4 SE 1/4, Sec. 2 NW 1/4 NE 1/4 Sec. 11, T. 15 N. R. 3 E.	165	20	
T. B. Ferrel, N 15 acres SW 1/4 SE 1/4, Sec. 2, T. 15 N. R. 3 E.	<u>15</u>	<u>5</u>	<u> </u>
		878	40

Normal head in this ditch in 1901 about 700 ins. served between 600 and 700 acres.

Dea Mea Get has a pumping plant on the banks of the Verde, ten acres under cultivation in NE 1/4 and the SE 1/4 of Section 18, T. 15 N. R. 4 E. Filed on 300 inches of water of Verde River on Secs. 10, 12 and 13 for irrigation of NE 1/4 of SE 1/4 in Section 18. Has a 3 inch centrifugal pump.

L. Tissaw has a 500 gal. capacity endless chain and bucket pumping plant on the banks of the Verde River. Cultivates 27 acres in the S 1/2 of the SE 1/4 of Section 18, N 1/2 of the NE 1/4 of Section 19, T. 15 N. R. 4 E. Has been cultivated for two years.

O. K. ditch about 1875, maximum capacity 1300

inches, ordinary head used 1040 inches. There are 24 ditch rights of 40 inches each. It serves water to the following ranches on the east side of Verde River.

Turney's report, 1901, gives this ditch a maximum capacity of 600 inches. Serves water to 610 acres.

Latimer's report, 1908, gives 576 acres served with water by this ditch.

It now furnishes water for the following ranches on the east side of Verde River:

Ditch Shares	Name	Des.	Total Acres	Cul. Acres	Add For Cul.
3/4	Tom Logan,	SW 1/4 SE 1/4, SE 1/4 SW 1/4 Sec. 33			
		T. 15 N. R. 4 E.	80	20	
2	W. E. Cook,	W 52 acres S 1/2 NW 1/4, W 52 acres N 1/2 SW 1/4 Sec. 3, T. 14 N. R. 4 E.	104	50	15
2	W. C. Boren	E. 28 acres SE 1/4 NW 1/4, E 38 acres NE 1/4 SW 1/4, Sec. 3, T. 14 N. R. 4 E.	56	40	
1 1/2	A. G. Dickerson,	W 1/2 SE 1/4 NE 1/4 W 1/2 NE 1/4 SE 1/4, Sec. 3, T. 14 N. R. 4 E.	40	50	
3	C. B. Coulson,	SW 1/4 NE 1/4, NW 1/4 SE 1/4 Sec. 3, T. 14 N. R. 4 E.	80	70	
1	L. P. Bristow,	E 1/2 SE 1/4 NE 1/4, E 1/2 NE 1/4 SE 1/4, Sec. 3, T. 14 N. R. 4 E. 14 N. R. 4 E.	40	20	
1	J. C. Bristow,	NW 1/4 SW 1/4 Sec. 2 T. 14 N. R. 4 E.	40	12	
3	Ollin Grimes,	E 1/2 SW 1/4 Sec. 2, NE 1/2 NW 1/4 Sec. 11, T. 14 N. R. 4 E.	120	75	
5 3/4	Frank Turner,	W 29 acres, SE 1/4 SE 1/4 Sec. 11, W. 29 acres, NE 1/4 NE 1/4 Sec. 14, W 1/2 SE 1/4 Sec. 11, NW 1/4 NE 1/4 Sec. 14,	178	118	5

	E 11 acres NE 1/4 NE 1/4 Sec. 14, NW 1/4 NW 1/4 Sec. 14 T. 14 N. R. 4 E.	178	
2	Ed Bochat, E. 11 acres SE 1/4 SE 1/4 Sec. 11, SW 1/4 SW 1/4 Sec. 12, T. 14 N. R. 4 E.	102	75
2	T. J. Boren, SE 1/4 SW 1/4 Sec. 12, NE 1/4 NW 1/4 Sec. 13 T. 14 N. R. 4 E.	<u>80</u>	<u>40</u>
			570
			20

The Central Verde ditch was built about 1875. This ditch head in the river has been very poorly located. Last year the head was changed up stream about four miles to about the same location used years ago by the old Marr ditch, where it is expected it will not be washed out so much. Farmers on land served by this have been unable to make a living on the land for a number of years, some of them having land under cultivation under Verde Canal.

On July 30th I inspected the Central Verde ditch. There was no water running in it. The ditch was very much washed out and it would take at least \$1,200.00 to make repairs to keep the water in the same. Capacity about 600 inches.

It is proposed when ditch is in shape to carry water to 930 acres in addition to the 95 acres now using water. The larger part of the land shows no evidence of ever having been irrigated, what little has been irrigated was done so many years ago.

Babbitt Bros., R. E. Morrison, Walter Blackford, H. C. Blackford, W. T. Head, Robert Finney, J. I. Marlesberry, Mrs. I. S. Forrest, Louis Lebach, J. N. Ralston, J. H. Sarich, A. J. Ralston, J. T. Ralston, A. D. Ralston and Tom Logan filed with the County Recorder of Yavapai County a claim on 2,000 inches of flow of Verde River for irrigation, stock and domestic purposes, for agricultural, mining and milling or any other beneficial uses, to be diverted from the Verde River at a point near where this ditch heads. Most all these people are interested in land under Central Verde Canal.

It now furnishes water for the following ranches on the West side of the Verde river.

Name	Des.	Total Acres	Cul. Acres	Add. For Cul.
	T. 14 N. R. 4 E.			
C. J. Babbitt,	SE 1/4, E 1/2 of SW 1/4, E 1/2 of NW 1/4, SW 1/4 of NW 1/4, Sec. 4	360		150
J. W. Ralston,	S 1/2 of SE 1/4 of Sec. 3 W 1/2 of NW 1/4 of Sec. 11,	160	5 ✓	75
J. H. Rogers,	E 30 acres of SW 1/4 of SW 1/4 of Sec. 2,	30	10 ✓	10
Louis Lebach,	S 1/2 of NW 1/4 of Sec. 13	80	30	30
C. H. Hooker,	SW 1/4 of Sec. 13	160	30	80
J. T. Ralston,	N 1/2 of SE 1/4 SE 1/4 of SE 1/4, S 1/2 of SE 1/4 of NE 1/4 of 14,	140	20	80
N. Blackford,	SW 1/4 of NE 1/4 of 14	40		20
Wm. S. Forrest	W. 60 acres of NW 1/4 of N W 1/4 of Sec. 24 SE 1/4 of Sec. 25	220		180
J. I. Markberry,	W. 20 acres of E 1/2 of SW 1/2 of Sec. 24, SW 1/4 of NE 1/4 of 25, SW 1/4 of SW 1/4 of 24, N 1/2 of NW 1/4 of 25	240		110
Frank Burris,	NW 1/4 of SW 1/4 of 24	40		20
Robt. Finney,	S 1/2 of SW 1/4 of 30, N 1/2 of NW 1/4 of 31	145		95
Robt. Finney,	N 1/2 of NE 1/4 of 36	80		80
			95	930

Verde Canal, maximum capacity 1150, ordinary head used 1,000 inches. The upper end of this canal was located and built by the Government for Indians and Wales Arnold in 1868. The lower end located and built by R. C. Campbell, John Davis, John Wood, Abe Kuntz, Jackson Thompson, in 1871.

Turney in 1901 gives capacity of canal 1040 inches, serving water to 1200 acres.

Latimer gives 1125 acres under cultivation in 1908. I find 1170 under cultivation now, with a proposed high line extension almost completed that will bring in 300 acres more.

Name	Des.	Total Acres	Cul. Acres	Add. For Cul.
Wm. S. Forrest,	NE cor SE 1/4 of 25, E 100 acres of NW 1/4 of 24, T. 14 N. R. 4 E.	110	50	
J. I. Marksberry,	all east of Verde canal in E 1/2 of SW 1/4 of 24, N 1/2 of N 1/2 of NE 1/4 of NW 1/4 SE 1/4 of NE 1/4, All E. of Verde Canal in NW 1/4 of NE 1/4 of 25, T. 14 N. R. 4 E.	75	55	
	SE 1/4 of SE 1/4 of 31, T. 14 N. R. 5 E.	40	20	
Robt. Finney,	NE cor. of SE 1/4 of SW 1/4 of 30, T. 14 N. R. 5 E.	15	15	
Granville, Fain,	S 1/2 of SE 1/4 of 30, N 1/2 of NE 1/4 of 31, T. 14 N. R. 5 E.	160	100	
E. B. Mulholland and Sons,	S 1/2 of SW 1/4 of 29, NW 1/4 of 32, T. 14 N. R. 5 E.	240	100	17
Arthur Heath in Camp Verde,	NW 1/4 of SW 1/4 of 32, T. 14 N. R. 5 E.	3	3	
U. S. Govt. for Indians	SW 1/4 of SW 1/4 of SW 1/4 Sec. 32, T. 14 N. R. 5 E.	10	10	
John Bristow,	SE 1/4 of SW 1/4, SW 1/4 of SE 1/4 of 31 T. 14 N. R. 5 E. NE 1/4 of NW 1/4 of 6, T. 13 N. R. 5 E.	120	80	
Chas. Harbeson,	W 1/2 of NE 1/4 SE 1/4 of NE 1/4 of 6, T. 13 N. R. 5 E.	97	97	
E. E. Monroe,	SE 1/4 of NW 1/4 of 6, T. 13 N. R. 5 E.	40	27	
E. W. Monroe,	SW 1/4 of 6, SE 1/4 of SE 1/4 of 1, T. 13 N. R. 5 E.	170	80	40
M. L. Osborn,	NE 1/4 of NW 1/4 of NE 1/4 of 6, T. 13 N. R. 5 E.	10	10	

D. W. Wingfield, NW 1/4 of NW 1/4 of 5, NE 1/4 of NE 1/4 of 6, T. 13 N. R. 5 E.	67	60	
E. J. Edens, W 1/2 of NW 1/4, NW 1/4 of SW 1/4 of 7, E. 1/2 of E 1/2 of 12, T. 13 N. R. 4 E.	280	30	40
Lin Young, S 1/2 of SW 1/4 of 8, T. 13 N. R. 5 E.	80	15	40
E. J. Monroe, S 1/2 of SE 1/4 of 8, NE 1/4, N 1/2 of SE 1/4 of 17, T. 13 N. R. 5 E.	320	140	100
Elizabeth Wine, S 1/2 of SE 1/4 of 17, N 1/2 of NE 1/4 of 20, T. 13 N. R. 5 E.	160	10	30
Elias Wine, W 1/2 of SE 1/4, E 1/2 of SW 1/4 of 26, T. 13 N. R. 5 E.	160	90	20
John Scott, NE 1/4 of Sec. 28, T. 13 N. R. 5 E.	160	90	30
Geo. Reed, NW 1/4 of SW 1/4 of 27, N 1/2 of SE 1/4 E 1/2 of NW 1/4, NE 1/4 of SW 1/4 of 28, T. 13 N. R. 5 E.	240	50	
Will York & Mr. Hubbard SW 1/4 of SW 1/4 of 27, SE 1/4 of SE 1/4 of 28, NW 1/4 of 34, T. 13 N. R. 5 E.	240	40	
		1170	317

Eureka ditch, built in 1893, maximum capacity 525 inches, ordinary use 460 inches. Service water to 480 acres. Land on east side of Verde River just about mouth of Beaver Creek.

Turney in 1901 gives capacity of ditch 740 inches, serving 420 acres.

Name	Des.	Total Acres	Cul. Acres	Add for Cul.
C. C. Galloway,	SW 1/4 of SE 1/4 of 13, NW 1/4 of NE 1/4 of 24, T. 14 N. R. 4 E.			

E. 1/2 of NE 1/4, SW 1/4 of NE 1/4, N 1/2 of SE 1/4, SE 1/4 of NW 1/4, of 30, T. 14 N. R. 5 E.	266	240
Frank Dickerson, SW 1/4 of NE 1/4, NW 1/4 of SE 1/4 of 24, T. 14 N. R. 4 E. SE 1/4 of SE 1/4 of 24, NE 1/4 of NE 1/4 of 25, T. 14 N. R. 4 E.	72	50
L. B. Goddard, SW 1/4 of SW 1/4 of 19, NW 1/4 of NW 1/4 of 30, T. 14 N. R. 5 E.	100	100
Dickerson & Goddard, NE 1/4 of SE 1/4 of 24, T. 14 N. R. 4 E.	40	34
E. B. Mulholland, S 1/2 of SE 1/4 of 19, NE 1/4 of NE 1/4, NW 1/4 of NE 1/4 of 30, T. 14 N. R. 5 E.	160	30
J. D. Price, W 1/2 of SW 1/4 of 20, W 1/2 of NW 1/4 of 29, T. 14 N. R. 5 E.	160	<u>30</u>
		484

Enterprise ditch, built in 1892, capacity about 150 inches, dry when inspected. In addition to serving water to a few acres of Calloway's land that also gets water out of the Eureka, there are 740 acres of land lying on the east bank of the Verde River below the mouth of Beaver Creek that this ditch was built to serve. From all appearances of ditch and land below Beaver Creek, water has never been used on the land.

Eman ditch heads opp Camp Verde, serves water to 320 acres of land on east side of river. Ditch built in 1895, maximum capacity 250 inches. Ordinary head used 250 ins. The Perkins and Suttan land in Section 16, also draws some water from the Pioneer ditch of Clear Creek. The first irrigation of Perkins and Sutter land was under the Pioneer ditch in 1868, the balance was just brought under cultivation after the Eman ditch was built.

Turney's report in 1901 gives capacity of ditch 235 inches, 340 acres served with water.

Latimer in 1908 gives 320 acres served with water.

Name	Des.	Total Acres	Cul. Acres	Add. For Cul.
	All T. 13 N. R. 5 E.			
Perkins & Sutter,	W 200 acres of 16	200	150	
L. B. Bell,	N 1/2 of SW 1/4 of 8,	76	20	20
Ben McDonald,	SW 1/4 of NW 1/4 of 8,	40	30	
L. A. Maxwell,	NW 1/4 of NW 1/4 of 8,	40	20	
Mrs. Richardson,	SE 1/4 of NW 1/4 of 8,	40	30	
J. C. Maxwell,	NE 1/4 of 7,	160	30	10
Pat O'Sullivan & Mrs. Murphy	NE 1/4, NE 1/4 of NW 1/4 of 8,	200	40	
			320	30

On the east side of the Verde, below Clear Creek, in Newman's ditch, built in 1870 by Peter Winkler. The ditch has been dry for the past three or four years. It used to irrigate the SE 1/4 of Sec. 27, T. 13 N. R. 5 E. for Eugene Newman. There has been as much as 25 acres under cultivation. J. H. Morris has started to put the ditch in shape to irrigate land in the E 1/2 of the SW 1/4 of Section 27, T. 13 N. R. 5 E. This land he filed on January 8, 1913. Capacity of the ditch 75 inches.

Walter Starks ditch on West side of Verde River heads just above the mouth of Clear Creek. It has been built in the last year or so to irrigate a strip of land containing 40 acres along the west bank of the Verde river in Section 27, Township 13 N. Range 5 East, that has been filed on under Homestead entry by Walter Starke, May 6th, 1914. Ditch was dry when I crossed it. Will likely carry 50 inches of water.

The old Haskell ranch now owned by Upper Verde Fruit & Orchard Company irrigates 40 acres in the S² 1/4 of Sec. 31, and the SW 1/4 of Sec. 32, T. 16 N. R. 3 E. This draws water from a spring on upper side of ranch, flows 35 inches steady stream. At present the ranch uses water in the day time and at night water flows into reservoir that supplies Clarkdale with water. I understand ranch will be abandoned when town needs all the water.

G. W. Hull irrigates 8 acres in Secs. 17 and 20, T. 15 N. R. 3 E. from a spring. First cultivation in 1913. Springs flow about 10 inches.

James S. Durfee irrigates 4 acres in Section 16, T. 13 N.

R. 4 E. from a spring. First cultivation in 1905. Springs flow about 15 inches.

J. J. Sullivan irrigates 30 acres in Section 19, T. 12 N. R. 6 E. from a spring that flows about 40 inches.

William A. Tinsley on Houston Creek irrigates 25 acres in Section 17, T. 11 N. R. 6 E. Land brought under cultivation as follows:

1900 1 acre cultivated.
1903 2 acres cultivated.
1904 3 acres cultivated.
1905 6 acres cultivated.
1906 10 acres cultivated.
1907 15 acres cultivated.
1908 20 acres cultivated.
1909 25 acres cultivated.

Capacity of ditch 35 inches.

C. E. Lancaster irrigates 10 acres on Houston's Creek in Sec. 11, T. 11 N. R. 6 E. First cultivation 1914. About 10 acres more can be irrigated. Uses 15 inches of water.

Fain & Heath irrigate 25 acres in Red Creek in Sec. 10, T. 9 N. R. 5 E. Land brought under cultivation as follows:

1900 8 acres cultivated.
1901 9 acres cultivated.
1905 10 acres cultivated.
1908 15 acres cultivated.
1910 25 acres cultivated.

Capacity of ditch 30 inches.

E. F. Dugan has 50 acres in Tangle Creek in Secs. 7 and 8, T. 9 N., R. 5 E. Can irrigate about 30 acres. Land cleared and ready for water.

W. E. Cavness irrigates 20 acres on Sycamore Creek in Section 31, T. 9 N., R. 7 E. First irrigation on 10 acres in 1897, next 10 acres in 1900. Has two small ditches, one on each side of the creek that have a capacity of twenty inches each. Uses water about 5 months of the year.

OAK CREEK

Upper Oak Creek in forest reserve. First ranch belongs to O. H. Harding. Dry farms most of it. Has garden of about three acres, irrigated from springs running about 10 ins. of water. Uses water only a short time in summer. About

25 acres more could be irrigated. First cultivation in 1894. Land located in SE 1/4 of Sec. 15, T. 19 N., R. 6 E.

Lew Thomas owns 320 acres in Section 34, T. 19 N., R. 6 E., about thirty acres under irrigation. First water used in 1884, 15 acres or 20 acres more can be irrigated. Thomas only uses water in summer time. Has land on both sides of creek. Ditches in shape to carry 100 inches of water. Not irrigating the day I was there.

John Thomas owns 60 acres on NW 1/4 of Section 4, T. 18 N., R. 6 E. adjoining Lew Thomas' place on south. About 2 acres under irrigation from springs. Can irrigate 10 or 12 acres more. First irrigation in 1884. Flow of springs 15 inches.

C. R. Allen has the NW 1/4 of the NE 1/4 in Sec. 8 T. 18 N. R. 6 E. irrigates about 2 acres on west side of Oak Creek. First irrigated 1897 in same ditch with J. J. Howard. Capacity 25 inches, only irrigates in summer.

J. J. Howard has 15 acres on the East 1/2 of Sec. 8, T. 18 N. R. 6 E. Irrigates about 10 acres. Balance can be irrigated. First irrigation 1910. Only irrigates in summer.

F. L. Pendley has about 120 acres in the E 1/2 of Sec. 17, along west side of Oak Creek. Irrigates about 12 acres. First irrigation this year. Capacity of ditch 30 inches.

J. J. Thompson has 160 acres in SW 1/4 of Sec. 27, and NW 1/4 of Sec. 34. The lower part of this place was originally cultivated by Indians and is called the Indian Gardens. First cultivated by white people in 1875. Irrigates about 12 acres. Gets water out of springs and some by ditch out of creek. The North 80 has been recently filed on. First irrigation this year, about 2 acres, some 5 or 10 more can be irrigated.

Mrs. J. E. Purtyman holds by squatter's right about 50 acres in NW 1/4 of SW 1/4 of Sec. 34 and SE 1/4 of NE 1/4 and NE 1/4 of SE 1/4 of Sec. 33, T. 18 N. R. 6 E. She has started proceedings to have land thrown open for filing. About 8 acres irrigated since 1875. About 10 more can be irrigated. Gets water out of springs along bluff.

Frank Owenby has the W 1/2 of the NW 1/4 of Sec. 8, T. 17 N. R. 6 E. 25 acres under irrigation. 10 more can be irrigated. Ditch dry when there. Will carry about 50 ins. of water. Uses most of the year. First irrigation in 1909.

J. T. Farley has NW 1/4 of SW 1/4, and N 1/2 of SW 1/4 of SW 1/4, and N 1/2 of SW 1/4 of SW 1/4 and SW 1/4, and W 1/2 of

NE 1/4 of SW 1/4, Sec. 8, T. 17 N. R. 6 E. 15 acres irrigated. A few acres irrigated about 1893. Balance irrigated in the last few years. Is going to clear more land this winter and irrigate, in all about 20 acres more. Capacity of ditch 15 inches, full all time, intends to enlarge ditch, also, this winter.

R. L. Vanderan has the SE 1/4 of the SE 1/4 of Sec. 7, T. 17 N. R. 6 E. About 12 acres irrigated. Can irrigate about 10 acres more. First irrigation 1894. Owns half interest in ditch with M. A. Stemmer. Capacity 90 inches. Uses water most of the year.

M. A. Stemmer, the N 1/2 of the NE 1/4 of Sec. 18, T. 17 N. R. 6 E. about 30 acres irrigated. By building higher ditch 20 acres more can be irrigated, which Stemmer intends to do as soon as able. First irrigation 1894.

E. M. Hart, SW 1/4 of NE 1/4, NW 1/4 of SE 1/4 of Sec. 18, T. 17 N. R. 6 E. 15 acres irrigated. First irrigation 1908. Capacity of ditch 65 inches. Uses water most of the time.

Andrew Chaves, NE 1/4 of NE 1/4 of Sec. 26, N. 1/2 of NW 1/4 of 25, T. 17 N. R. 5 E. 15 acres under irrigation. Has been irrigated since 1890. Chavez ditch maximum capacity 50 inches, ordinary head used 40 inches.

D. E. Dumas, SE 1/4 of NW 1/4, and SW 1/4 of NE 1/4, and N 1/2 of SE 1/4 of Sec. 26, T. 17 N. R. 5 E. 20 acres irrigated, 25 acres more can be irrigated. Irrigated since 1880. Dumas ditch, maximum capacity 50 inches. Ordinary head used 25 inches, supplies water to D. E. Dumas and Irwin Shuerman. Turney's report 1901, gives Dumas 15 acres irrigated.

Irwin Shuerman, W. 1/2 of W 1/2 of Section 26, T. 17 N. R. 5 E. 9 acres irrigated, 30 acres more can be irrigated. First irrigation 1880.

H. Shuerman, SE 1/4, E 1/2 of SW 1/4 of Sec. 27, NE 1/4 of NE 1/4, N. 15 acres of the NW 1/4 of SW 1/4 of Sec. 34, T. 17 N. R. 5 E. About 130 acres irrigated. First irrigation in 1880, about 40 acres of this brought under cultivation in the last five or six years. About 40 acres more can be irrigated.

H. Shuerman ditch No. 1 on North side of Oak Creek has a maximum capacity of 150 inches, ordinary head used 110 inches.

H. Shuerman ditch No. 2 on South side of Oak Creek has a maximum capacity of 65 inches, which is the ordinary head used.

Turney's report, 1901 gives Shuerman 55 acres irrigated.

Latimer's report, 1908 gives Shuerman 100 acres irrigated.

Roy Owenby and Hayder Lane own the N E 1/4 of the NW 1/4, and the NW 1/4 of NE 1/4 of Section 37, T. 17 N. R. 5 E. 14 acres irrigated, about 10 more can be irrigated. First irrigation in 1880. Draws water through Shuerman's ditch No. 1.

Ambrose & Juan Armijo own the North 1/2 of Sec. 33, N. 1/2 of SW 1/4 of Sec. 34, T. 17 N. R. 5 E. 35 acres irrigated, about 30 acres more can be irrigated. Land cleared and ready for water. Ditch dry when there. Capacity about 50 inches. Used most of the time. Turney's report 1901, give Armijo 30 acres irrigated.

L. E. Hart and son, the S 1/2 of the SE 1/4 of Section 32, T. 17 N. R. 5 E. 19 acres irrigated, 10 acres more ready for irrigation. Only 4 or 5 irrigated up to three years ago. Capacity of ditch 55 inches. Used most of the time. Turney's report, 1901 gives Hart 10 acres irrigated.

Jose A. Molino, a Mexican squatter, in last land irrigated in Oak Creek in Forest Reserve. He is probably located on the SW 1/4 of Sec. 30, T. 17 N. R. 5 E. Has been unable as yet to get land withdrawn. About 8 acres irrigated. First irrigation in 1911. Capacity of ditch 15 inches. Used all the time.

The Moore ditch is the first ditch on Oak Creek after creek leaves Forest Reserve. Mrs. Gates on the SW 1/4 of NE 1/4, and NE 1/4 of SE 1/4 of Sec. 23, T. 16 N. R. 4 E. used most of the water in this ditch in irrigating 19 acres. Maximum capacity of ditch 60 inches. Same head used most of the time.

Turney's 1901 report gives this place 10 acres irrigated.

Latimer's 1908 report gives this place 10 acres irrigated. G. H. Moore also irrigates three acres out of Moore ditch in E 1/2 of SW 1/4 of Sec. 14, T. 16 N. R. 4 E. Has used water about 8 years.

R. H. Willard in SW 1/4 of SW 1/4 of Sec. 14, and SE 1/4 of SE 1/4 of Sec. 15, and W 1/2 of NW 1/4 of Sec. 23 T. 16 N. R. 4 E. irrigates about 9 acres from two small springs on the west bank of Oak Creek, running a total of 15 inches, of water, the first irrigation of land being in 1876 irrigation was abandoned later until 1896. Since then there has been continuous irrigation.

Page spring ditch No. 1 on west side of Oak Creek, draws water from Springs that flow 375 inches. Capacity of ditch 200 inches, balance of spring water flows direct into Oak Creek. Built in 1878. This ditch serves 6 acres for G. H. Moore in the E 1/2 of the NW 1/4 of Sec. 23, T. 16 N. R. 4 E.

This land has been irrigated two or three years. James Page also irrigates 60 acres in the E 1/2 of the SW 1/4 and the W 1/2 of the SE 1/4 of Sec. 23, T. 16 N. R. 4 E. Some of this land has used water since 1878.

David Reese, in the N 1/2 of the NW 1/4 of Sec. 26, T. 16 N. R. 4 E. is the last man on ditch. Irrigates 15 acres. Used water since 1893. Turney's report 1901, gives capacity of this ditch as 60 inches, and irrigating 40 acres.

Latimer's report, 1908, gives Page 60 acres, Smith 15 acres, drawing water from ditch.

James Page has about 40 acres more that can be irrigated from this ditch.

Page ditch No. 2 on East bank of Oak Creek draws 225 inches from springs that flow 1300 inches. Balance of water runs direct into Oak Creek. This ditch was built in 1878.

Turney's report gives capacity of ditch as 148 inches, irrigating 50 acres. The following lands are at present being served with water from ditch.

Name	Des.	Total Acres	Cul. Acres	Add For Cul.
	(All T. 16 N. R. 4 E.)			
James Page,	N 1/2 of NE 1/4 of 23	80	40	
J. O. Hirst,	S 1/2 of NE 1/4 of 23, W 1/2 of SW 1/4 of 25	160	50	
L. Lane,	SW 1/4 of NW 1/4 of 25	40	10	
C. J. Toppinel,	E 1/2 of SE 1/4 of SE 1/4 of 26	20	15	
David Reese,	SW 1/4 of NE 1/4 of NW 1/4 of 26		10	
*John M. Simmons,	SE 1/4 of NW 1/4 of 26	40	5	15
			130	15

*First irrigation 1909.

Loy ditch on west side of Oak Creek. Maximum capacity 50 ins. This ditch was originally built by Wm. Loy in 1904. He irrigated 12 acres in N 1/2 of SE 1/4 of Sec. 26 T. 16 N. R. 4 E. This land was increased to 20 acres in 1913 and 14. About 20 acres more can be irrigated from ditch. Fabrian & Fossum at present own the old Loy place. Ditch was extended in 1911 a mile farther and enlarged in 1913-14. William Bates has been using water on 20 acres in NW 1/4 of

N E 1/4 of Sec. 35, T. 16 N. R. 4 E. for the last 2 years, out of Loy ditch. Has about 15 acres more that can be irrigated.

Oak Creek ditch on East side of Oak Creek, built about 1894. Maximum capacity 600 inches. Ordinary head used 360 inches. Divided into 8 share of stock.

Turney's report 1901, capacity 350 ins. Serving water to 215 acres.

Shares	Owner	Des.	Total Acres	Cul. Acres	Add For Cul.
	(All T. 16 N. R. 4 E.)				
1/2	C. J. Topping,	S 1/2 of SE 1/4 of 26	60	20	
A 1/2	D. W. Stewart,	E 1/2 of NE 1/4 of 35	80	37	5
1	T. C. Cox	E 1/2 of NE 1/4 of 34	80	40	5
1/2	J. P. Gridner,	SW 1/4 of NE 1/4 of 34	40	25	
B 1/2	W. Hawkins,	S 27 ac. NE 1/4 of N W 1/4 of 34	27	8	13
C 1	W. F. Snifley,	SE 1/4 of NW 1/4, NE 1/4 of SW 1/4 of 34	80	50	20
D 2	Frank Betcher,	SE 1/4 of 34	190	120	20
1	Lee & Layles,	E 1/2 of NE 1/4 of 3, T. 15 N. R. 4 E.	80	35	
1	N. H. Simpson,	E 1/2 of SE 1/4 of 3, T. 15 N. R. 4 E.	80	50	
	Erick Bloom,	S 1/2 of NW 1/4, SW 1/4 of NE 1/4, NW 1/4 of SW 1/4, of Sec. 3, T. 15 N. R. 4 E.			<u>160</u>
				385	223

A -20 acres of this recent cultivation.

B -All new since 1908.

C -This land part of old Dumas place, first irrigated 1876.

D -30 acres of this irrigated only in last 2 years.

Spring Creek is a small tributary to Oak Creek, coming in on the North side. The first water on Spring Creek is used by J. A. Fenstermaker in the W 1/2 of the NW 1/4 of Sec. 22, T. 16 N. R. 4 E. Ditch, capacity, 13 ins. Will irrigate 12 acres, first irrigation 1891. 6 acres new since 1908.

Wm. Henderson has second ranch on Spring Creek, with

a ditch capacity of 40 ins. Irrigates 11 acres. First irrigation in fall of 1912.

At the mouth of Spring Creek McHuron & Palmer have a ditch, capacity 40 inches. McHuron owns 23 acres in the N 1/2 of the NE 1/4 of Sec. 34, T. 16 N. R. 4 E. Irrigates 16 acres.

Palmer owns 30 acres in the North 1/2 of the NE 1/4 of Sec. 34, T. 16 N. R. 4 E. Irrigates 2 acres. Can irrigate 15 acres.

McMillan owns 30 acres in NE 1/4 of the NW 1/4 of Section 34, T. 16 N. R. 4 E. Draws 10 ins. of water from Jack ditch, balance from small ditch lower down Spring Creek, irrigates 8 acres.

McHuron, Palmer and McMillan are on part of the old Dumas place, which first used water in 1876. Has been cultivated very irregularly up to the last few years.

Jack ditch heads in Spring Creek just above its mouth. Built in 1898. Capacity 85 inches, in addition to furnishing McMillan with 10 ins. of water, J. J. Humbert uses balance on the NW 1/4 and SW 1/4 and SE 1/4 of SW 1/4 of Section 34, T. 16 N. R. 4 E. about 50 acres. Humbert has also developed about 5 inches of water at Sheep Head Spring, which he uses on 10 acres of land. Has about 10 acres more which can be irrigated from either ditch.

W. W. Holden ditch on west side of Oak Creek, capacity 60 inches, built in 1897. Holden irrigates 30 from this ditch on SE 1/4 of SE 1/4 of Sec. 33, and SW 1/4 of the SW 1/4 of Sec. 34, T. 10 N. R. 4 E. In addition Wynecoop in NE 1/4 of NW 1/4 of the NE 1/4 of the NW 1/4 of Sec. 3, T. 15 N. R. 4 E. used water on 10 acres of land. This he did last year for the first time. About 30 acres more can be irrigated.

Sayers & Pelcher ditch, maximum capacity 45 inches, dry at head most of the time. Most of the water used in ditch comes out of Oak Creek ditch as waste water. Pelcher has small piece of land, irrigates from this ditch at time when water is hard to get through Oak Creek ditch. Wm. Sayers has 50 acres irrigated in S 1/2 of NW 1/4 of NW 1/4 of Section 3, NE 1/4 of NE 1/4 of Sec. 4, T. 15 N. R. 4 E. from this ditch. This ditch built about 1877.

Fain and Chick ditch on west side of Oak Creek, capacity 500 inches. Ordinary head used 430 inches, built in 1876.

Turney's report, 1901, gives capacity of ditch as 225

inches. Irrigated 4 ranches, a total of 195 acres. Furnished water for the following ranchers at present time:

Name	Des.	Total Acres	Cul. Acres	Add For Cul.
Mrs. Susie Hayden,	SE 1/4 of NE 1/4 NE 1/4 of SE 1/4 Sec. 4, T. 15 N. R. 4 E.	80	17	
a-Romon Martenez,	W 1/2 of SW 1/4 Sec. 3, T. 15 N. R. 4 E.	80	43	
C. S. Chick,	SE 1/4 of SE 1/4 Sec. 4 E 1/2 of NE 1/4, NE 1/4 of SE 1/4 Sec. 9, SW 1/4 Sec. 10 T. 15 N. R. 4 E.	320	79	136
Wm. Fain Est.,	NW 1/4 Sec. 10, T. 16 N. R. 4 E.	160	40	15
Mrs. E. T. Thorbeck,	E 1/2 of SE 1/4 SW 1/4 of SE 1/4 Sec. 10, NE 1/4 of NE 1/4 Sec. 15, T. 15 N. R. 4 E.	160		80
			179	231

a - 15 acres new land last year.

Hart ditch built in 1897, capacity 60 inches, irrigates 30 acres in N 1/2 of the NW 1/4, Sec. 15, T. 15 N., R. 4 E. for Roy Van Deren. Can irrigate 5 acres more. There is about 10 acres of Fain Estate on East side of Oak Creek, also 15 acres of Mrs. Hayden's place that can be irrigated from the Hart ditch.

BEAVER CREEK

The low water flow of Beaver Creek has been given to various ranches by a Court Decree, entitled Mayhan vs. Schroeder, et al, No. 3583, final decree entered August 25, 1906. This suit has determined the right of all the upper ranches on Beaver Creek to water according to their priority of settlement and acres cultivated. A commissioner is appointed by the Court who distributes the water from the first of May to October first. The balance of the year, the ranchers take water as they choose. Each ranch is allowed about 1 inch per acre continuous flow.

Date of Appropriation	Name	Des.	Acres App. for Cul.	Acres now Cul.
1870	William Back, in S 1/2 of 36. T. 15 N. R. 5 E. N 1/2 of SW 1/4 of Sec. 31, T. 15 N. R. 6 E.		101	101
1871	P. & C. F. Mayhan, W 1/2 of W 1/2 of Sec. 1, SE 1/4, SE 1/4 of NE 1/4 Sec. 2, T. 14 N. R. 5 E.		170	170
1871	Wm. Schroeder, E 1/2 of SW 1/4, SW 1/4 of SW 1/4, Sec. 2 NW 1/4 of NW 1/4 Sec. 11, T. 14 N. R. 5 E.		90	94
1879	Robt. Finney, in S 1/2 of Sec. 32, T. 15 N. R. 6 E.		30	37
1880	Eliza Clift, in N 1/2 of NE 1/4 Sec. 32 T. 15 N. R. 6 E.		15	15
1883	R. Casner, in N 1/2 of S 1/2 Sec. 22, T. 15 N. R. 6 E.		18	24
1889	John Skaggs, SE 1/4 of SE 1/4 Sec. 21, T. 15 N. R. 6 E. N E 1/4 of NE 1/4 of Sec. 28, T. 15 N. R. 6 E.		15	22
1890	B. F. Taylor, SE 1/4 Sec. 31, T. 15 N. R. 6 E.		14	14
1897	N. Hutchinson, S 1/2 of SW 1/4 Sec. 28, T. 15 N. R. 6 E.		8	
1898	N. Hollingshead, SW 1/4 of NE 1/4, N W 1/4 of SE 1/4 Sec. 28, T. 15 N. R. 6 E.		<u>10</u>	<u>10</u>
			471	497

The upper ranch on Beaver Creek is the old Casner place now owned by Blome and Bayles, decreed 18 acres 1883 water, 24 acres now under cultivation. As a matter of fact, Commissioner never comes as far up creek as this place in short water time. This place draws water all the time, on south side of creek from 2 springs totalling 15 inches of water irrigating 19 acres of land; on north side of Beaver Creek they have a ditch with forest ranger, capacity 40 inches, Blome and Bayles irrigate 5 acres and forest ranger 22 acres from same. Forest ranger is on Skagg's place that was decreed 15 acres of 1889 water.

The Hollingshead place decreed 10 acres of 1898 water, is owned by Wm. H. Dickerson, ditch on south side of Beaver Creek, capacity 15 inches.

C. C. Fredericks owns the old Clift place, small ditch which was dry decreed 15 acres in 1880.

N. Hutchinson place dry, decreed 8 acres in 1897.

Robert Finney decreed 30 acres in 1879, now has 37 acres under cultivation, has ditch with capacity of 75 inches. In short water time, uses water part of time as commission orders.

Ben Witter owns old Taylor Place, decreed 14 acres in 1890, draws water from Soda Springs that flow 77 inches, allows most of water to waste into Beaver Creek before it reaches ranch.

Back Place decreed 101 acres in 1870, draws water from Montezuma well that flows 135 inches, except in short water time uses all the water continuously. In short water time is cut to 100 inches continuous flow.

Mortimer and Griscom who own the old Mahan place together with Wm. Schroeder have same ditch, capacity 350 inches, usual amount used 250 inches. Mortimer and Griscom were decreed 170 acres in 1871, same amount now under cultivation. Wm. Schroeder decreed 90 acres in 1871, now has 94 acres under cultivation.

G. W. Guswich owns E 1/2 NW 1/4, NW 1/4- NW 1/4, SW 1/4- NE 1/4 Section 10, T. 14 N., R. 5 E., 38 acres irrigated, first cultivated 1891, capacity of ditch 112 inches, wastes some of this back into Beaver Creek before it reaches ranch on account of foul ditch. Turney's report 1901 gives 30 irrigates and 90 in capacity of ditch.

John Langdon owns SW 1/4-SW 1/4, Sec. 4, N 1/2 of NW 1/4, NW 1/4-NE 1/4, Section 9, T. 14 N., R. 5 E.; 40 acres irrigates, 25 more can be irrigated, part of it now ready for water. Land first cultivated in 1875, capacity of ditch 50 inches. Turney's report 1901 gives 30 to 40 acres irrigated, capacity of ditch 15 inches.

L. M. Landen in SE 1/4 Section 33 and SW 1/4 Section 34, T. 15 N., R. 6 E., irrigates about 20 acres from Springs, first cultivated 1894, Spring flow 25 inches of water.

CLEAR CREEK DITCHES

Upper one on Creek Jones ditch built 1898 by W. A. Jones. About 20 acres under cultivation now; started in with

an acre or two and added some each year; about 20 acres more can be cultivated. Lands all on north side of Clear Creek on unsurveyed land just outside of forest reserve. Maximum capacity of ditch 20 inches, run full most of the time.

Wingfield Bros. ditch built by Tom Smith in 1874-75, is the second ditch on Clear Creek, maximum capacity 125 inches all the time. J. H. Wingfield, Jr., has 40 acres under cultivation in the N 1/2 NW 1/4, Section 13, T. 13 N., R. 5E. Wm. Wingfield, Jr., has 40 acres under cultivation in SW 1/4, Section 12, T. 13 N., R. 5 E. and about 20 acres more that can be cultivated. Latimer gives each one of these places 30 acres cultivated in 1908.

W. G. Wingfield upper ditch, third ditch on Clear Creek built in 1872 by Roberts, maximum capacity 60 inches, full part of the time, supplies water to 15 acres in N 1/2 S 1/2, Section 13, T. 13 N., R. 5 E. belonging to W. G. Wingfield.

Heath ditch, fourth ditch on Clear Creek, built in 1872 by Glen, maximum capacity 100 inches, full all the time, supplies water to 25 acres in S 1/2 SE 1/4 Section 11, N 1/2 NE 1/4, Section 14, T. 13 N., R. 5 E., belonging to Wm. Heath. Has a large flat that can be irrigated from Wingfield Bros. ditch, likely 60 acres or more. Latimer's report gives 25 cultivated in 1908.

W. G. Wingfield, lower ditch - fifth ditch on Clear Creek, built in 1871 by John Martin, maximum capacity 90 inches, ordinary head 65 inches. Supplies water for 60 acres in NE 1/4 Sec. 15; W 1/2 NW 1/4, Sec. 14, T. 13 N., R. 5 E. Latimer gives a total of 56 acres cultivated in 1903 on both ditches of W. G. Wingfield.

Pioneer Ditch - First ditch built in Verde Valley, probably started in 1865, maximum capacity 225 inches, ordinary head used 150 inches. In addition to following list, Sutton and Perkins supplement their supply of water from Eman ditch by using some water out of Pioneer Ditch. The land under this ditch has all been cultivated a long time.

Name	Des.	Total Acres	Cul. Acres	Add for Cul.
Fred Atkinson,	S 1/2 NW 1/4 Sec. 18; SE 1/4 NE 1/4; NE 1/4 SE 1/4, Sec. 16, T. 13 N. R. 5 E.	160	100	
Mrs. L. J. Lowthen,	E 1/2 W 1/2 E 1/2 Sec. 16, T. 13 N. R. 5 E.	80	25	

Ed Wingfield, E 1/2 SE 1/4 NW 1/4; E 1/2
 E 1/2 SW 1/4; W 1/2 SW 1/4 NE 1/4;
 W 1/2 W 1/2 SE 1/4, T. 13
 N., R. 5 E. 120 90
 215

J. H. Wingfield ditch built before 1868. Maximum capacity 140 inches. Is most likely second oldest ditch in Verde Valley, takes out of Clear Creek a short way below Pioneer head and irrigates 120 acres for J. H. Wingfield in NE 1/4, NE 1/4 SE 1/4, Sec. 21 and W 1/2 NW 1/4, NW 1/4 SW 1/4 Sec. 22, T. 13 N., R. 5 E.

Dave Strahan ditch and pump. Strahan Homestead N 1/2 of the NW 1/4 of Section 21, T. 13 N., R. 5 E. in 1909. In 1909 and 1910 built ditch on north side of Clear Creek and cleared and cultivated about 30 acres of land. Ditch capacity 40 inches. In 1914, installed 5 inch pump and pumped water for 30 acres more on south side of Clear Creek. Pump has 20 foot lift.

EAST FORK OF VERDE

Mr. Beluzzi irrigates 9 acres in SW 1/4, Sec. 26, T. 12 N., R. 10 E. Capacity of ditch 20 inches.

Bert Beluzzi irrigates 15 acres in SW 1/4, Sec. 14, T. 11-1-2, R. 10 E. Capacity of ditch 25 inches.

Frank Henser irrigates 40 acres in W 1/2 of Sec. 25, T. 12 N., R. 9 E. Capacity of ditch 75 inches. Land cultivated about 30 years.

Paul Vogle irrigates 15 acres in NE 1/4 of Sec. 5, T. 11-1-2 N., R. 10 E. Capacity of ditch 30 inches.

Arthur Neal irrigates 20 acres in the S 1/2 of Sec. 8, T. 11 N., R. 10 E. Capacity of ditch 50 inches.

The settlement of Pine irrigates about 50 acres in Sec. 36, T. 12 N., R. 8 E. Capacity of ditch 120 ins.

D. G. Goodfellow at Natural Bridge irrigates 20 acres in the NE 1/4 of Sec. 8, T. 11 N., R. 9 E. First cultivation in 1898. Flow of Springs 35 inches.

Geo. F. Smith irrigates 50 acres in Sec. 16 and 17, T. 10 N., R. 9 E. First cultivation about 35 years ago. Capacity of ditch 125 inches.

John Lazear irrigates 15 acres in the SE 1/4 of Sec. 18, T. 10 N., R. 9 E. Has two small ditches, one from East Fork, the other one from Pine Creek.

*Gold mining?
Robert Pierce.
1914*

Dick Taylor irrigates 15 acres in the NE 1/4 of Sec. 19, T. 10 N., R. 9 E. Uses spring water on south bank of East Fork. ✓

Allen Beluse irrigates 3 acres in the SE 1/4 of Sec. 10, T. N., R. 8 E.

Fain and Heath irrigate 20 acres in the W 1/2 of Sec. 21, T. 11 N., R. 7 E. Capacity of ditch 50 inches. Land cultivated 25 years.

There are five Apache Indian settlements on the East Verde irrigating from 2 to 5 acres at each place, located in Sec. 34, T. 11 N., R. 9 E.; Secs. 3, 8 and 9, T. 10 N., R. 9 E. They have a special permit by Forest Service giving them possession of these lands. They raise corn and garden truck.

On July 22nd measured the Verde River at the riffels, 6 miles below Camp Verde and found 3412 inches. The same afternoon, Clear Creek measured 25 inches where it emptied into the Verde. During the night, Clear Creek raised to 3200 inches and was in flood stage the next 3 or 4 days.

July 27th found mouth of Beaver Creek dry. All ditches on Beaver were using all the water that could be diverted at their heads, with sand dams in Creek.

July 31st found Oak Creek at Verde running 4700 inches (some flood water). No ditch on Oak Creek able to use all the water passing its head. I believe the Creek never goes dry at any place.

August 6th measured 260 inches in mouth of Sycamore Creek. This was the low water flow.

LANDS ON VERDE RIVER IN MARICOPA COUNTY.

J. M. Sears in the N 1/2 of Sec. 34, T. 8 N., R. 7 E. on north bank of Verde River has this land. Irrigated about 20 acres of the place some 20 to 30 years ago. No recent irrigation.

The Asher ditch is the only ditch outside of McDowell reservation, located by John Asher February 4, 1895. Claims 5000 inches of water. This ditch had maximum capacity of 150 inches in September 1895, according to W. H. Robinson's measurements of that date. Cultivated between 30 and 40 acres; irrigate none at present. Ditch now has maximum capacity of 50 inches and is used by five men irrigating a total of 30 acres. These people are all squatters on forest reserve and have been in possession of land 10 or 12 years. The Indians on reservation maintain dams in the Verde and culti-

vate 400 to 500 acres. This land has been irrigated more or less continuously ever since 1866. They have two ditches on the west side of river. About 1300 acres of reservation have been cultivated, though not all at the same time.

Total lands irrigated on Verde River water shed above the proposed reservoir at Horse Shoe Bend:

	Number of Ditches.	Maximum Capacity	Ordin. Amt. Used.	Total Acres Irrigated.	Add for Irrigation.
Del Rio	1	175	175	140	100
Granite Creek	4	170	170	125	30
Upper Verde - above mouth of Sycamore Creek	6	315	315	137	7
Verde - between Sycamore and Oak Creeks	10	2435	1900	1590	300
Verde - between Oak & Clear Creeks	8	4100	3050	2721	2167
Small Creeks and springs tributary to Verde	9	210	190	152	30
Oak Creek in Forest Reserve	18	875	795	432	282
Lower Oak Creek	16	2110	1625	1065	629
Beaver Creek	11	879	740	565	25
Clear Creek	7	710	635	445	100
East Fork	12	575	550	272	...
	102	12554	10045	7644	3870

APPROPRIATIONS ON VERDE RIVER IN YAVAPAI COUNTY.

- Ditch by P. W. Burford, January 7, 1877.
- All water of Verde River by Jos. Melvin, July 23, 1877.
- All water of Verde River 1/2 mile above Oak Creek, M. R. Vernon, September 23, 1882.
- 3,000 inches in J. H. Wilkerson and Wm. Sherrard, Feb. 12, 1871.
- 3,000 " Albert Young and C. F. Bennett, Sept. 18, 1875.
- 3,000 " J. H. Wingfield, D. W. Strahan, Mrs. Mary E. Clift, L. B. Barney, and Jas. Bristow for Reservation ditch, Dec. 4, 1877.

1,000 inches	E. W. Pleasant and Isaac Jones, Feb. 16, 1876.
6,000 "	F. E. Jordan, Jan. 10, 1872.
1,000 "	Sam Loy, March 1, 1878.
1,500 "	John Duke and F. Bull, Feb. 10, 1883.
6,000 "	Z. L. Kay near Oak Creek, Feb. 2, 1884.
6,000 "	Ralston Ditch by J. C. and J. W. Ralston and M. L. Kay, March 20, 1864.
500 "	Chas. D. Willard, Oct. 20, 1885.
2,000 "	J. B. Ezell, East Fork Verde, March 2, 1889.
5,000 "	John Davis, John Wood and Joe Brower, March 10, 1891.
275 "	Rio Verde Canal Company, Dec. 21, 1891.
1,000 "	Thos. A. Smith, June 12, 1892.
300 "	W. S. Head, T. J. and C. R. Eman, July 23, 1882
250 "	R. M. Rogers, Sarah Arnold and J. W. Ralston, near Cherry Creek, Feb. 14, 1894.
3,000 "	J. J. Hicks, July 20, 1894.
1,500 "	J. J. Hicks, July 20, 1894.
10,000 "	Thos. Carroll, Jan. 28, 1895.
15,000 "	Thos. Carroll, David Scott and G. Van Deren, Feb. 18, 1895.
1,000 "	A. B. Hutchison, Barton Maxwell, W. F. Hutcherson, Tom Bristow and C. P. Wingfield, April 13, 1895.
2,000 "	Hugh Brewer, Geo. Rich, D. J. Shea and G. O'Keefe, March 9, 1895.
500 "	J. C. Duff and J. C. Muse, Oct. 15, 1895.
5,000 "	L. P. and J. C. Bristow, Oct. 18, 1895.
300 "	A. J. and J. J. Humbert, Feb. 1, 1896.
6,000 "	Nathan, Richard, James, George and Abe Huckaby and John McCall, Feb. 1, 1900.
80,000 "	Rio Verde Canal Company, Sept. 1, 1901.
100 "	W. W. Nichols for irrigation and agricultural purposes on the W 1/2 of the NE 1/4 the W 1/2 of the SE 1/4 Sec. 35, T. 16 N. R. 3 E. March 5, 1901.
100 "	Ed Packard on Sycamore Creek 1 1/2 miles above Verde for agricultural and stock raising, Sept. 11, 1906.

All of Verde - Pacific Water Power Co., March 30, 1909, for Agricultural and electric power 1 1/2 miles below Cold Water Canyon.

- All of Black Canyon - C. H. Rutherford, April 15, 1911, for irrigation of Sec. 28, T. 15 N., R. 3 E.
- All of Cherry Creek - D. W. Russell, Richard De Kuhn, Aug. 17, 1912, about 4 miles east of Cherry P. O. for electric power and stock raising.
- All of Cherry Creek at Maverick Springs - C. C. Scoullar, June 25, 1902, for irrigation and mining.
- 400 inches Eggart Stofen, Dec. 18, 1902, for power and irrigation of NE 1/4 of NE 1/4, Sec. 16, T. 16 N., R. 3 E.
- 10,000 " E. H. Meek, Apr. 30, 1905, for agriculture and electric power, 7500 feet below mouth of Fossil Creek.
- 100 " Arthur G. Wood Sep. 22, 1906, for use on Packard ranch on Sycamore Creek one mile from Verde.
- 4,000 " Arizona Power Company, April 25, 1902, for Fossil Creek 1000 feet below Springs for milling, mining and electric power.
- 50,000 " R. C. Alexander, Aug. 1, 1905, west bank of Verde seven miles below mouth of East Fork for electric power.
- 3,000 " R. C. Alexander, Aug. 3, 1905, west bank Verde 2000 feet below mouth Fossil Creek for electric power.
- 50,000 " R. C. Alexander, Nov. 23, 1906, east bank Verde 3-4 miles below East Fork for electric power.
- 20,000 " Arizona Water Right by J. W. Smith, Apr. 2, 1913, two miles above mouth of Fossil Creek on Verde for mining, agriculture and electric power.
- 1,500 " Black Canon Water Right by Wyatt Smith, July 1, 1909, 12 miles south of Jerome, for mining, stock raising and agriculture.
- 5,000 " In O. A. Lang and T. W. King, Jan. 11, 1913, in Sec. 20, T. 18 N., R. 1 W. for domestic stock and other useful purposes.
- 20,000 " Box Canon by E. H. Meek, June 30, 1913, in Box Canon three miles above Ed Jordan ranch for mining, agriculture and power.

- 100 inches J. M. Sullivan, T. F. Shea, M. J. Bradley and J. J. Sullivan, March 7, 1911, in Black Canon twelve miles outh of Jerome for mining and agriculture.
- 1,000 " J. L. Summers and J. D. Bethune, Jr., Oct. 20, 1912, Sycamore Spring two miles above mouth of Sycamore Creek for agriculture and stock raising.
- 2,000 " Babbitt Bros., R. E. Moonson, W. Blackford, H. C. Blackford, W. T. Head, Robt. Finnie, J. I. Marksberry, Mr. I. S. Forrest, Louis Lebsch, J. W. Ralston, Tom Logan and A. D. Ralston, Oct. 20, 1913, on Verde near mouth of Black Canon, for stock agriculture and other beneficial purposes.
- 300 " Dea Mea Get, Oct. 22, 1913, for irrigation of NE 1/4 of the SE 1/4, Sec. 18, T. 15 N., R. 4 E. and other beneficial purposes.
- 500 " of irrigation ditch by James C. Maxwell and L. C. Bell, Feb. 28, 1914, for irrigation, stock and other beneficial purposes.
- Horseshoe Reservoir for Rio Verde Canal Company by A. C. Sheldon and P. P. Parker, March 15, 1903.
- 10,000 inches Robt. Finnie and G. H. Clayson, March 22, 1902, west side Verde, eight miles below Camp Verde for mining, irrigation and other purposes.
- 50,000 " Rio Verde Water Right No. 5 by O. A. Ensign, April 10, 1904, on Verde 1-8 mile below mouth of Fossil Creek for domestic, irrigation, hydraulic, electric and other power purposes. 1 1/4 miles below East Fork No. 6, same as above.
Five milessouth East Fork No. 7, same as above.
- 50,000 " W. A. Ensign, June 17, 1905, in SW 1/4 of the SW 1/4 of Sec. 35, T. 13 N., R. 5 E. for irrigation, mining, hydraulic, electric and other power purposes.
- 500 sec.ft. East Verde River and Pine Creek, Oct. 18, 1905, for beneficial use.
- 5,000 inches J. J. Sullivan East Verde Water right, Jan. 18, 1912, mining, agriculture and electric power, one mile below Arizona Power Company.

- 200 inches J. T. Farley, Feb. 27, 1902, Northeast corner of Sec. 17, T. 16 N., R. 3 E. for mining, agriculture and stock.
- 10,000 " Robt. Finney, Feb. 28, 1902, West side Verde River 100 yards below Fossil Creek, for milling, mining, irrigation and other beneficial purposes.
- 10,000 " Power and irrigation water right by Chas. J. Gettings, June 20, 1914, on west line Sec. 28, T. 17 N., R. 3 E. for mining, agricultural and power purposes.
- 40 " Houston Springs by W. A. Tinsley, June 8, 1904, for mining, agricultural and stock purposes.
- 300 " Lee Smart, March 20, 1914, Sycamore Spring, Sec. 7 and Sec. 8, T. 17 N., R. 3 E. for mining, agricultural and stock purposes.
- 10,000 " R. H. Jack, March 1, 1901, on west bank of Verde river, 800 feet below Fossil Creek.
- 50,000 " J. K. McDonald, R. C. Alexander and L. Kendrick on Verde, seven miles below East Fork for power purposes. 3000 inches west bank of Verde 2000 ft. from mouth of Fossil Creek, for power purposes, April 2, 1906. Add 50,000 same, Oct. 23, 1906. 50,000 inches east bank Verde same.
- 4,000 " J. J. Sullivan, Jan. 8, 1912, on Verde River, ten miles south from Camp Verde for mining, agriculture and electric power.
- 5,000 " E. H. Meek, March 31, 1902, on Verde between Fossil Creek and east Verde for mining, agriculture and electric power.
- 5,000 " Orifice Mining and Milling Company, By D. J. Mara, Sam Pratt, T. C. Martin, W. J. Martin, Jan. 15, 1903, two and one-half miles above Etta Quartz Mill, for milling.
- 5,000 " C. H. Meek, Sept. 15, 1903, on west bank Verde, between Fossil Creek and East Fork for power and agricultural purposes.
- 8,000 " E. H. Meek, Sept. 7, 1908, on Verde River two miles above mouth of Fossil Creek, for mining, milling and agricultural purposes.

- 20,000 inches Feb. 20, 1911 on Verde River, half way between Turrett Butte and East Fork for mining, agricultural and electric power purposes.
- 20,000 " E. H. Meek, Feb. 20, 1911, on Verde 1 1-2 miles from East Fork, for mining, agricultural and electric power purposes.
- All of Verde - E. H. Meek, March 21, 1914, eight miles below Camp Verde on west side of Verde for mining, agricultural and electric power purposes.
- All of Verde - E. H. Meek, March 21, 1914, two miles below Brown Springs on west bank of Verde for mining, agricultural and electric power purposes.
- All of Verde - E. H. Meek, June 3, 1914, two miles below Hot Springs for mining, agriculture and electric power purposes.
- All of Verde - E. H. Meek, June 3, 1914, 2 1/2 miles Northeast of Brown Springs for mining, agriculture and electric power purposes.
- 10,000 inches J. W. Smith, Aug. 13, 1912, seven miles below Camp Verde for mining, agriculture and electric power purposes.
- 200 " J. M. Sullivan, Oct. 15, 1913, in Verde View Spring close to Clarkdale, for mining, agriculture and stock raising purposes.
- 6,000 " L. M. Turner, March 24, 1902, on Verde above Fossil Creek, for mining, milling, agriculture and electric power purposes.
- 700 " Chas. D. Willard, June 14, 1911, of Verde River for Sec. 21, T. 16 N., R. 3 E.
- 600 " Chas. D. Willard, Aug. 4, 1911, of Verde River near S. E. Corner of the NE 1/4 of Section 28, T. 16 N., R. 3 E.
- 100 " Wallace Willard, Dec. 8, 1913, of Verde River for irrigation of Sec. 12, T. 15 N., R. 3 E.

APPROPRIATIONS ON OAK CREEK:

The Big Spring Jas. Dougal, Aug. 25, 1875; a ditch 18 inches (A ditch) deep by 8 feet wide by I. D. Tipton, May 30, 1878.

2,000 inches Mrs. S. J. Arnold and M. J. Gaddis, Sept. 11, 1888.

10,000 " Conway Bristow, Jas. and Jno. Foy, Sept. 22, 1888.

- 500 inches Henry Schuerman, Oct. 15, 1889.
 500 " Wm. Fain and J. W. Muse, May 4, 1895.
 500 " Jas. Page and Jas. W. Muse, Oct. 25, 1887.
 4,000 " E. J. Parkinson, Aug. 24, 1899.

All water developed at a certain seepage into Oak Creek, by
 J. F. Derrick, Aug. 19, 1899.

- 4,000 inches E. H. Meek, Dec. 2, 1899
 4,000 " E. J. Parkinson, Dec. 2, 1899.
 1,000 " I. T. McWilliams, Jan. 22, 1900.
 200 " David F. and David E. Hart, June 13, 1900.
 100 " Juan Armijo, Nov. 12, 1900.
 720 " S. C. Dickinson, Feb. 6, 1901.
 300 " for irrigation and agricultural purposes on the
 SE 1/4 of Sec. 34, T. 16 N., R. 4 E. and the S 1/2
 of Sec. 3, T. 15 N., R. 4 E. by Frank Pitshauer
 and Hokma Pitshauer, May 16, 1904.

All of Oak Creek for agriculture and electric power 1 1/2 miles
 south of her house, March 14, 1904.

- 127 inches Eric Bloom, Dec. 29, 1913, in Sec. 3, T. 15 N.,
 R. 3 E. for irrigation, milling and mining.
 50 " A. L. Smith, Copper Spring, June 25, 1910, SW
 1/4 of Sec. 4, T. 16 N., R. 4 E. for irrigation and
 stock raising.

All Cottonwood seep, G. L. Gates, Oct. 13, 1910, NE 1/4 of the
 NE 1/4, Sec. 23, T. 16 N., R. 4 E. for rental, min-
 ing, irrigation and domestic purposes.

Lower Oak Creek irrigation ditch by M. Burch, L. Carrol and
 Wm. Fain, Dec. 9, 1904, 250 inches for 160 acres
 in SW 1/4, Sec. 10; and W 1/2 of the SW 1/4,
 Sec. 3, T. 15 N., R. 4 E.

- 1,000 inches C. S. Cluck, Feb. 9, 1904, for SE 1/4 of the SE
 1/4 of Sec. 4; the E 1/2 of the NE 1/4 and the NE
 1/4 of the SE 1/4 of Sec. 9, T. 15 N., of R. 4 E.
 70 " A. J. Downing, May 22, 1901, for the SE 1/4 of
 the NE 1/4 of Sec. 23, T. 16 N., R. 4 E. for agri-
 culture and stock raising.
 720 " S. C. Dickinson, Feb. 6, 1901, mining, agricul-
 ture and domestic purposes.
 150 " Sam McMillen, Feb. 24, 1914, for agriculture,
 milling, stock raising and other beneficial pur-
 poses on the NE 1/4 of the NW 1/4 of Sec. 34, T.
 16 N., R. 4 E.

All of Oak Creek, R. R. Willard, June 3, 1914, 1 1/2 miles above heads for mining, agricultural and electric power purposes.

APPROPRIATIONS ON BEAVER CREEK:

500 inches J. A. Rokhe, Feb. 27, 1897.
 500 " Wales Arnold, Jul. 24, 1900.
 Entire flow of Montezuma Well - Wm. Bach, July 23, 1890.
 100 inches Geo. L. Pratt, July 19, 1878.
 150 " Old Drum ditch water right from Soda Springs by J. T. Bristow, Dec. 12, 1900 for agriculture and stock raising.
 300 " G. W. Hance, July 1, 1870, from Beaver Creek to Montezuma Well for agriculture and stock for 160 A.
 100 " E. B. Mulholland, May 26, 1905, at Crystal Spring on Beaver Creek between Montezuma Castle and mouth of Beaver for agricultural and other purposes.

APPROPRIATIONS ON CLEAR CREEK:

500 inches Thos A. Smith, Jan. 26, 1888.
 100 " M. B. Ricketts, May 9, 1891.
 All Clear Creek J. B. Ricketts, Feb. 16, 1902.
 2,000 inches J. H. Wingfield, L. M. Turner, W. F. Hutchinson on Clear Creek, for electric power and other purposes.

