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REPORT

FLOOD OF SEPT. 4, 1939

ARIZONA CANAL

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REPORT OF FLOOD ON ARIZONA CANAL
SEPTEMBER 4, 1939.

LILLYWHITE TO SUPERINTENDENT LAWSON:

At approximately 4:30 p.m. Aspey phoned and we discussed question of a possible flood condition if rain continued. Answering my inquiry Aspey informed me they had men ready at all strategic points - X-cuts, Indian Bend, Evergreen and Granite Reef. I instructed him to warn all hands to be on hand and open gates to carry off surplus if and when water reached flood stage. At that time storm appeared abating but indicated a wetting on north side lands and I instructed him to cut all water at Granite Reef into South Con. and keep it there for the night, requesting Watermaster Thompson to make best possible use of same and waste only as necessary. Southside at that time and for next 24 hours received but little rain. Also instructed him to cut at Evergreen, Indian Bend and on down as run-off conditions warranted. Within next 30 minutes after phone conversation above, storm came in increased intensity accompanied by heavy wind. My phone and lights went out, expecting momentarily they would be restored - I waited for approximately 30 minutes, then got in car and went to Aspey's home, found streets on way running full from curb to curb. From Aspey I learned Arizona canal was beyond bounds, but our men along way were on the job. I hurried out to old X-cut at Camelback road found it full to its limit. At head of new X-cut full within a few inches of top of concrete lining, now getting dark. I went to Zanjero Reynolds home, phoned Cartwright, who was requesting timbers to bulkhead Grand below X-cut. The volume of water pouring down these two sources seemed destined to break Grand. I proceeded to Yaqui - Water Users' camp - where I found material and men being loaded for Grand bulkhead for Indian Bend and for Arizona canal bank near Scottsdale. Efforts were then turned to canal bank near Scottsdale as the water from off Paradise Verde had reached a volume far beyond all past records. By this time all available men and equipment from Southside Association camp were added to available sources at Northside camp in an effort to save loss of property and possible life.

I phoned from Southside camp the Sheriff's office and warned him water from off hills and valleys north of the valley pouring into and over the Arizona was beyond control and every precaution should be taken to protect life and property in flood path. I then examined again head of new X-cut, then old X-cut by light of my car - observed approximate amount going on down Arizona from this point. Then I went to 40th Street and met Zanjero Harper and others - observed break just below 40th Street and volume of water pouring off slopes to north. I went by circuitous route to 16th Street bridge observing volume of water in vicinity of Biltmore Estates pouring off north slopes from every gully or low swale. Water was now abating damage done quick and heavy. I proceeded home thru water via 7th Street arriving home at approx. 12 p.m. County Engineer Downey called me within a few minutes informing me of plight of a group of home dwellers just north of Grand Canal and east of 7th St. I immediately returned to this point, met Downey and indicated a place in bank where a cut in north bank of Grand was made to supplement drainage syphon in draining water from homes. At home again at 2 a.m. flood having subsided.

I wish to offer here a word of praise for the prompt, devoted work of the Association employees taking part in this flood night, thru deep water, mud, rain many stranded autos and trucks-only to proceed on foot- wet and weary - there was no hesitation nor evasion of a disagreeable task.

C. W. Lillywhite.

STORM OF SEPTEMBER 4, 1939.

At 4 p.m. 9/4/39, I started to main office to see how Carpenters had gotten along with changes being made in office. At 12th Street and Indian School road, it was raining so hard, I turned and went home, approx. 20 minutes away from home. I tried calling Aspey but phone was out so drove to Rupperts house at 11th and Fairmont. Phoned Aspey who said was not yet raining at Indian Bend or Scottsdale. I told him I would go back home and try the phone and if still out come down to his place. Had hardly reached home when Rupperts came by saying that Aspey had called saying water was coming in at Indian Bend and that as phone to Yaqui Camp was out he was going to the camp to send men to Lat. 3 gates. I left for Aspey's reaching there about 5:30 p.m. He told me phone to Evergreen was out and that he had sent Ross White to Evergreen to close gates in canal and open Evergreen waste gates and that he had sent Rupperts to Indian Bend - Rupperts called from Indian Bend and I left for there at once reaching there about 6:20 p.m. Zanjero Roberts and Walter Walt were there, water had not reached 10.8 gauge height which has been considered safe elevation in canal, but we started engine at 6:30 p.m. started raising 1st gate, water had then reached 10.8 on gauge. No drop showed, so all four gates then raised. At 6:50 they were up. Canal began dropping and dropped 0.4" on gauge. I then left with Walter Walt leaving Zanjero Roberts and Zanjero Weaver at Indian Bend - Weaver arrived about 20 minutes after I did.

I stopped at Yaqui Camp to phone Aspey, he told me that canal had overflowed at 12th Street and other places, but did not then know of breaks. New Cross Out was at maximum then about 8 p.m. Mr. Lillywhite was there, he had been checking Old K-cut, other points - about 8:30 Aspey called saying to send men above Lat. 3 as water was then flowing 3 feet over spillway at Indian Bend and that canal would need patrolling. Previously a truck with some men had been sent to Indian Bend to take sacks off spillway. Rupperts instructed foreman to get more me and send to canal and together we drove up canal to approx. 1/4 mile above 22 $\frac{1}{2}$ - 10N pump. Water was running over top of canal road there. J. West and Ralph Phillips, Sub-foreman Winslow with some men joined us. Breaks were occurring so fast, we moved back to 22 $\frac{1}{2}$ 10N. Staked the canal, when showed drop of about 3", we left which was about 10 p.m.. We stopped at Yaqui Camp, found out about breaks on Arizona at 12th Street and at 40 Street. We went first to 12th Street breaks, then to 40th Street. Crew of Yaqui there had filled sacks and at 1:30 A.M., started sacking off breaks there, completing building up sacks across break till flow stopped, going from there to 12th Street. At day break, sacks were high enough to stop flow thru them. Another crew came in to strengthen them.

Engineer Weiswander is reporting on number of breaks, distances canal overflowed and size of breaks.

L. H. Tolleson
9/4/39

From Simmons to Tolleson - September 7, 1939.

According to the Weather Bureau the rain started in Phoenix at
8:45 P.M., September 4, 1939.

Hard Rains - from 4 p.m. to 4:25 p.m.
" 4:40 p.m. to 5:15 p.m.
" 5:28 " " 6:15 "

Flow water in Arizona

Northside - Granite Reef	6 p.m.	-	20,800
Evergreen	6 "		20,800
Below	6 "		13,000

Evergreen up - 6 p.m.

REPORT ON RESULTS OF RAIN FALL OF SEPTEMBER 4, 1939.

It began raining at 3:45 p.m. in Phoenix and continued until almost 8 p.m. At 4 p.m. .01" had fallen - at 5 p.m. 1.34" - at 6 p.m. 2.21" at 7 p.m. 2.99 and by 8 p.m. 3.01 inches. The 1.33" broke all records for Phoenix for 1 hour rain.

I left home at about 5 o'clock and went to Camelback road and the Arizona canal. I got there just as the water began coming off of Camelback mountain. I then tried to go to Scottsdale by the Camelback road but when I came near the canal on the east side it was impassable so was forced to turn and go to the power house crossing. Then I went back to 40th Street and down the canal. I was able to go to Lateral 9 $\frac{1}{2}$. Water was running over the canal bank just below 9 $\frac{1}{2}$. I turned down 20th Street to Glendale Avenue then to 16th Street and South on 16th to Indian School road, then east on same to Chicago Avenue and south to home.

After changing clothes I went west on McDowell road to 16th street then north on 16th street but was forced to turn around at Thomas road as there was so much water there.

Water was coming into the Arizona canal from every wash and was rising fast when I went along. There was nothing one could do to stop that amount of water. When I left the canal and went south on 20th Street no breaks or overflows could have reached that section ahead of me and there was water all over the road and land. At 16th Street and Camelback water was running into the store on the Southwest corner of the intersection. It was the same way all the way around water was coming off of every field and the roads were full. The breaks in the canal only caused the water to run longer.

On the 5th of September Frank Foltz and myself checked the damage to the Arizona Canal and found 17 breaks and 6 gopher holes that were washed out. Total length of breaks \approx 554 feet and would require about 6000 cu. yds. of back fill to repair same. The south bank of the Arizona canal ran over total length of 2300 feet but did not wash out. The Indian Bend pump ditch was checked and it had two breaks and some damage to the roadway. 100 cu. yds. of repair. Also the Telegraph pass lateral off the Western canal was damaged along the center of Section 16, T 1 S, R 2 E, which would require about 150 cu. yds. of repair. Other than the washing of material into the laterals and waste ditches and around structures little harm was done to the rest of the project.

On Sept. 6 and 7th J. W. Lillywhite, T. A. Hayden, Y. Siminoff F. Foltz and myself went along the up side of the Arizona canal from 12th Street to 40th Street and took cross section showing depth and area of water in the washes and on the larger washes slope measurement. Small washes and road were not taken. When a good picture could be taken it was done. We have attached a tabulation of the results and it is no wonder the canal broke as the total exceeds 6000 second feet. Six times the capacity of the canal.

Flood of September 4, 1939.

Pictures were taken along Indian Bend and the places that damage was done to crop. No surveys have been made otherwise for damage to crops.

A cross section was taken along the oiled road east of Scottsdale and an estimate of the amount of water at this point of 8,750 second feet or 350,000 M. I.

Frank Foltz and myself inspected the area from Evergreen wasteway to the west boundary of the Indian reservation and found no washes large enough to measure the cross sections. Then we went along the Arizona canal and estimated the amount of water that entered the canal between these points to be not over 400 sec. ft.

T. R. Neiswander
9/4/39

ESTIMATE OF DAMAGE DONE TO CANALS AND LATERALS
BY FLOOD WATER -- September 4, 1939.

ARIZONA CANAL

No.	Location	Length	Depth	Yardage, Cu. Yds.
1	600 ft. E of 18th Street	70	12	1,182
2	650 " " " " "	16	8	103
3	1/4 Mil W 16th Street	34	8	341
4	100 ft. W of 40th Street	36	8	341
5	180 " " " " "	36	8	332
6	1/4 Mi. down stream from Well 22 1/2 E - 10 N	32	12	540
7	1/4 Mi. up stream from Well 22 1/2 E - 10 N	Gopher hole		10
8	600 ft. down stream from Well 22 1/2 E - 10 N	" "		10
9	500 ft. up stream from Well 22 1/2 E - 10 1/2 N	" "		10
10	350 ft. up stream from Well 22 1/2 E - 10 1/2 N	20	6	120
11	370 ft. up stream from Well 22 1/2 E - 10 1/2 N	32	15	755
12	450 ft. up stream from Well 22 1/2 E - 10 1/2 N	Gopher hole		10
13	500 ft. up stream from Well 22 1/2 E - 10 1/2 N	" "		10
14	550 ft. up stream from Well 22 1/2 E - 10 1/2 N	42	10	544
15	650 ft. up stream from Well 22 1/2 E - 10 1/2 N	10	3	27
16	670 ft. up stream from Well 22 1/2 E - 10 1/2 N	10	3	27
17	700 ft. up stream from Well 22 1/2 E - 10 1/2 N	Gopher Hole		10
18	800 ft. up stream from Well 22 1/2 E - 10 1/2 N	40	8	320
19	1000 ft. up stream from Well 22 1/2 E - 10 1/2 N	40	8	320
20	1100 ft. up stream from Well 22 1/2 E - 10 1/2 N	50	10	650
21	1200 ft. up stream from Well 22 1/2 E - 10 1/2 N	12	6	77
22	600 ft. up stream from Indian Bend	48	8	455
23	800 ft. up stream from Indian Bend	24	10	310
Total				6,533 Cu. yds.

NOTE: In computing yardage 20 ft roadway 1 to 1 slope up stream and 3 to 1 down stream. Gopher hole is a place that the water ran thru but the bank did not cave in.

T. R. Neiswander.

ESTIMATE OF FLOOD WATERS RUN INTO ARIZONA
CANAL FROM THE DESERT -- SEPT. 4th, 1939.

Wash No. & Picture	Location	Area of Cross Sec.	Slope	Vel.	Discharge
1 P	1/8 Mi. W. 12th Street	143.2	0.008	5 ¹ /Sec.	741.0 S.F.
2	1/8 " E " "	9.9		3	29.7
3	1/8 " E " "	3.6		3	10.8
4 P	900 ft. E 12th Street	13.9		3	41.7
5	3/8 Mi. E 12th "	12.7		3	38.1
6 P	1/8 " W 16th "	107.1		5	535.5
7 P	At 16th Street	49.8	0.014	5	249.0
8	1/8 Mi. E 16th Street	8.3		3	24.9
9	1/4 " " " "	13.8		3	41.4
10	3/8 " " " "	7.8		3	23.4
11	7/16 " " " "	27.0		4	108.0
12 P	1/2 " " " "	43.4		4	133.6
13 P	5/8 " " " "	11.7		3	35.1
14 P	3/4 " " " "	10.1		3	30.3
15	3/4 " " " "	20.3		4	61.2
16	1/8 " W 24th "	16.1		4	64.4
17 P	1/8 " " " "	8.4		3	25.2
18 P	5/8 " E " "	17.3		4	69.2
19 P	3/8 " " " "	33.1		4	132.4
20	1/2 " " " "	17.0		4	68.0
21 P-2	1/2 " " " "	13.4		4	53.6
22 P-2	3/4 " " " "	13.8		4	55.2
23	7/8 " " " "	17.2		4	68.8
24 P	1/8 " E 32nd "	104.2	0.012	5.7	595.9
25 P	1/8 " " " "	55.7	0.012	5.7	317.5
26 P	3/8 " " " "	17.4		4	69.6
27 P	175 ft. W 40th "	347.2	0.009	5.0	1,736.0
28	At 40th Street	25.5		4	102.0
29	" " " "	14.9		3	44.7
30 P-2	" " " "	35.3		4	141.2
TOTAL					3,925.4

T. R. Neiswander

FROM ASPEY:

The rain started at approx. 4:15 p.m. 9/4/39 it rained about 20 minutes and I called Mr. Lillywhite as Mr. Tolleson's phone was out of order. Mr. Lillywhite asked me if I had men at Evergreen and Indian Bend of which I told him I did. After that it started worse than ever then I called White's residence, they stated it wasn't raining. Soon after White called stating they were having a hard rain so I decided to cut the water at Evergreen. I tried to call Mr. Lillywhite, his phone was out, tried to call Evergreen and the #2 line was out soon after White came to the phone from Indian bend approx. 5 p.m. so sent him to Evergreen to open gates, before he got there Reynolds called and the gates were down at 6 p.m. White came home and sent him to the head of X-cut to fill it with water. 6:30 p.m. soon after he called me and sent him to Indian Bend to help on waste gates.

Tolleson came to my house approx 5:30 p.m. saying his phone was out so I sent him to Indian Bend as I wasn't sure anyone was there. I had sent Weaver and Roberts and Howard Rupperts before soon after he called asking about wasting the water. I told him to go ahead and waste as the canal was broke at 12th Street.

Selvason called me soon after Tolleson left at 5:30 p.m. and we decided to cut the Arizona dry at New X-cut and Old X-cut. I tried to get Cluff his phone was out so sent Jake West from Tempe to Old X-cut. In the meantime got Cluff on the phone and he raised his gates immediately. I had sent Reynolds to Yaqui Camp about 5 p.m. to get men for the gates at Lat. 3 and he got stuck in the mud was the reason White went to the head of the New X-cut and turned in the water.

Mr. Lillywhite came by my house soon after Six and I told him everything which I had done, he said that we had done everything we could do. I asked Mr. Lillywhite if he would go to New X-cut and see if X-cut was full, which he did.

In the meantime I had calls of about 5 minute intervals from Indian Bend saying how fast the water was coming up, finally at 8 p.m. they called saying the canal was going to break and called for men and sacks. I called the Yaqui camp and had men and sacks sent up to see if it could be saved, but in 10 minutes they called again saying the canal was gone.

Aspey
9/7/39

FROM SOLVESON:

Sept. 7, 1939.

Arizona canal, below Lat. 6, was running 13,000 between 12 a.m. and 6 p.m., 9/4/39. Heavy rain was falling along canal from Lat. 16 west about 3 p.m. - Phoned Lat. 12 $\frac{1}{2}$ about 4:30 p.m. - no rain there at that time (Gilliland).

Zanj. Nelson and Gilliland reported rain and storm north of canal when they reported about 5:00 p.m.

Zanj. Acuff did not report as his phone was out.

McCally and Harper did not report.

A lady living near Arizona canal and Lat. 10 phoned me about 5:30 p.m. and reported south bank of canal running over at a point 1/4 east of Lat. 10.

I immediately phoned Mr. Aspey who ordered me to fill the Old X-cut canal at once. Phoned Zanjero Cluff and he started at once to fill old X-cut. He was assisted in raising the last gate by Jake West.

About 5:45 p.m. phoned Harper's house and his son stated he was out to find a phone that was OK.

About 6:00 p.m. Zanj. McCally reported a break in canal at 12th Street. Stated so much water in roads could not get up there to investigate. Ordered him to go to Lat. 11 and see that Acuff had all gates open.

About 6:15 p.m. Mr. Babcock phoned me saying he was calling for Acuff. That Acuff had all gates up and water was going over the banks. I requested this man to go down to Lat. 13 and see if Gilliland had all gates up, and tell Gilliland to go on to Lat. 14 $\frac{1}{2}$ and tell Zanj. Patterson to raise his gates. Reported this to Mr. Aspey.

Zanjero Nelson's phone was out.

Zanjero Gilliland phoned about 6:45 p.m. from Mrs. Fickas at Lat. 13 and reported his gates were up - that he had plenty of help to raise them. Directed him to go to 14 $\frac{1}{2}$ and notify Patterson.

As the Glendale phones were out and the Phoenix phone at 14 $\frac{1}{2}$, called Mr. Aspey and he advised my going out on the canal.

About 9 p.m. arrived at Lat. 20 - Tail gates were all open and gage was 6.00 (full). Found all check gates open and free water running in all laterals.

Cave Creek started into the Arizona about 9:00 p.m. with 3500".

Returned home about 12:45 A.M. 9/5 found call from Mr. Lillywhite and phoned him about 1 a.m.

SOLVESON
9/7/39

FROM ROSS WHITE:

9/7/39

At approximately 4:30 p.m. 9/4/39, believing it had rained in Paradise Valley north of Arizona Canal, I arrived at gate house at Indian Bend. There was about 2000" of water coming into Arizona canal from Paradise Valley at this time. By 5:00 p.m. there was approximately 10,000" coming from Paradise.

At about 5:10 pm. Mr. Aspey told me he was unable to get Mr. Reynolds on the telephone, and for me to go to Evergreen and cut all the water out of the Arizona canal. I arrived at Evergreen at about 5:40 p.m. and found Mr. Reynolds was already turning water out of Arizona. It started raining very hard at 5:30 p.m. and I started back toward Scottsdale. I took the road straight west instead of following canal, because the canal road is very slick when wet. It rained extremely hard during my whole trip to Scottsdale, which took me about 30 minutes.

When I arrived home, Mr. Aspey told me to go to new X-cut and fill new X-cut canal. I arrived at X-cut at about 6:20 p.m. and was raising X-cut gates when Mr. Reynolds arrived. I then went to Yaqui Camp to see that checks were being removed at bridge, which was being done.

I arrived back at Indian Bend at about 7:15 p.m., Mr. Roberts, Mr. Weaver, and 2 telephone repair men were there. The Indian Bend gates lacked about 6 inches being up. We finished raising them at about 7:30 p.m. At this time the water started over spillway. It rose very rapidly from this time and at about 8 p.m. commenced breaking canal banks both above and below Indian Bend gates. The inflow from Paradise Valley did not commence to abate until about 2 a.m. 9/5/39.

Ross White.

FROM REYNOLDS:

9/7/39

Began raining at my place about 5:00 p.m. Started to raise gates at New Cross Cut at 6:30 p.m. Mr. White started them and I finished them. Filled X-cut to capacity 22,500". At 11:00 p.m. water came in excess of capacity of X-cut. At 11 p.m. cut out 1000" in order to keep X-cut from overflowing, and kept it to capacity until the water dropped. Rode the X-cut canal. Above report refers to flood of night of September 4, 1939.

Chas. Reynolds.

At 3 a.m. Sept. 5. Mr. Slaughter called on phone and said that the water was 3 feet deep in his house, and that the Arizona canal had broke above his place about 1/2 mi. I drove the canal bank as soon as I could get there or in about 10 minutes and the water was 2 feet below top of canal bank.

Chas. Reynolds.

FROM HARPER:

9/7/39

In regards to flood on Arizona canal Sept. 4, 1939. It started to rain about 4:15 p.m. - at 5:15 p.m. flood water off of desert between Lat. #7 and Lat. #9 Arizona canal started to run in from desert on north side of canal. We raised gates at Lat. 8 at 5:30 p.m. there was about 30,000" came in canal from desert - started to run over south side of canal west of Lat. #7 about 6 p.m. The canal broke at this point about 7 p.m. - one break about 50 foot wide - the other break about 35 foot wide.

Harper.

FROM ROBERTS:

Sept. 7, 1939

Gates at Indian Bend wasteway were started to be raised at 6:30 p.m. 9/4/39. All gates were up except 6" at 6:50 p.m. Water dropped 0.4' after gates were up for few minutes.

At 7:20 p.m. they were raised last 6 inches water continued to raise until 8 a.m. 9/5/39 - water started over apron at 8 p.m. and continued until 4 a.m.

Roberts
9/7/39

FROM C. W. McCally:

September 4, 1939.

About 4 p.m. rain began to fall North of Arizona canal and 12 to 16th Streets. In one hours time there was a stream of water coming in to the canal from the north so that you couldn't tell where north bank was, forcing water over top of south bank of canal. Bank east of 16th Street about 6 in. deep; also braking in two places west of 16th Street. I was delivering water in header ditch at the time - about 6 p.m. I turned everything down lat. 10 it would carry. After going down and clearing lateral so that water could get to the Grand canal. Later on about 8 p.m. Lateral 10 partly stopped by trash. Cleaned out and raised gate again filling Lateral 10.

C. W. McCally.

9/4/39

FROM F. P. WEAVER

Sept. 7, 1939.

Flood of Sept. 4, 1939.

I went up to Indian Bend to help raise spill gates. Left home about 5:40 p.m. had a little car trouble due to high water on roads. I arrived at gates at about 6:40 p.m. and Mr. Roberts and Mr. Tolleson had gates partly raised and by a little after 7 p.m. all gates were raised and by 7:30 p.m. the water began going over spillways and continued to raise until 8 a.m., and began to fall about 4 a.m. 9/5/39.

F. P. Weaver,
9/7/39

FROM ACUFF:

Sept. 5, 1939.

Report of the flood of Sept. 4, 1939- vicinity of Arizona Canal.

The rain started at about 4 p.m. - at 4:40 p.m. I arrived at 7th Street headgate, there was about 2000 inch raise then. I started raising the gates and continued to raise them as the rise came in till 5:45 p.m. I had the gates all up. The raise continued to 6:30 p.m., the canal was full and running over on both sides. At 6:30 p.m. the canal started to drop. There was about 2000" coming in at 7th Street from off desert at that time. At about 8 p.m. I left Roscoe Babcock at the gate and I went to 18th Street and found the canal was broke.

Reference -- Roscoe Babcock
J. Babcock
Chas. Stalling
Stanley E. Gray.

About 11 p.m. I crossed the canal at Northern Avenue bridge to north side of canal and went around to 16th Street. I saw a car that was washed off the road just before it entered a wash.

PLACES WHERE SOUTH BANK OF ARIZONA CANAL
OVERFLOWED AND DID NOT BREAK - Sept. 4, 1939.

<u>Location</u>	<u>Length feet</u>
200 ft. West of 40th Street	180
200 " " " Lat. $7\frac{1}{2}$	320
At Lateral $7\frac{1}{2}$	5
Just East of Lateral $7\frac{1}{2}$	264
300 ft. East of 32nd Street	5
$\frac{1}{8}$ Mile West of 32nd Street	345
$\frac{5}{8}$ " East " 24th "	5
$\frac{1}{2}$ " " " 16th "	210
$\frac{3}{8}$ " " " 16th "	200
$\frac{1}{8}$ " " " 16th "	400
16th Street to 12th Street several places	<u>400</u> 2,334 ft.

Breaks on Indian Bend to Grand Canal Pump Ditch.

Indian Bend was higher than for years and ran across this ditch in several places. It washed some dirt from around the head structure and from the road as far down as the pump without doing much harm. This can be repaired with a little grading.

West of the pump there were 2 breaks. Total length of about 70 feet; also part of the roadway was washed away. Total work on this ditch will require about 150 yards of backfill.

T. R. Weiswander.

BREAKS ON WESTERN - September 4, 1939.

There was no run off from the South Mountains except west of 12 East. From 12 east west to 10 East on the Telegraph pass ditch the water ran across the bank in several places but did very little harm.

There were 6 breaks on the lateral west of 10 east of a total length of about 125 feet. Most of this rain fell north of the road on 2 $\frac{1}{2}$ South.

T. R. Weiswander
9/4/39