VV 304

WATER

304

LEVEL BOOK

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INDEX.

(OVER)

INDEX

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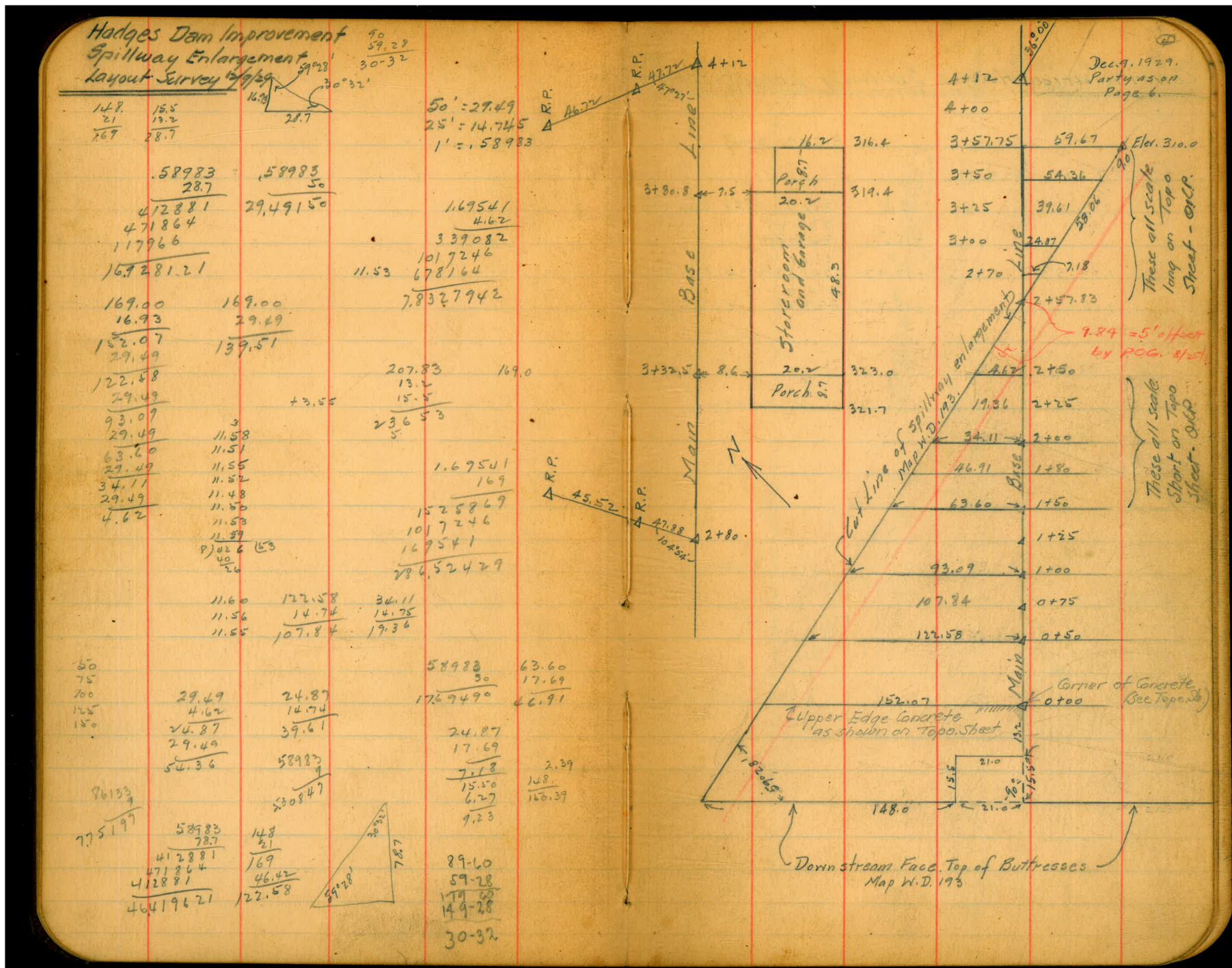
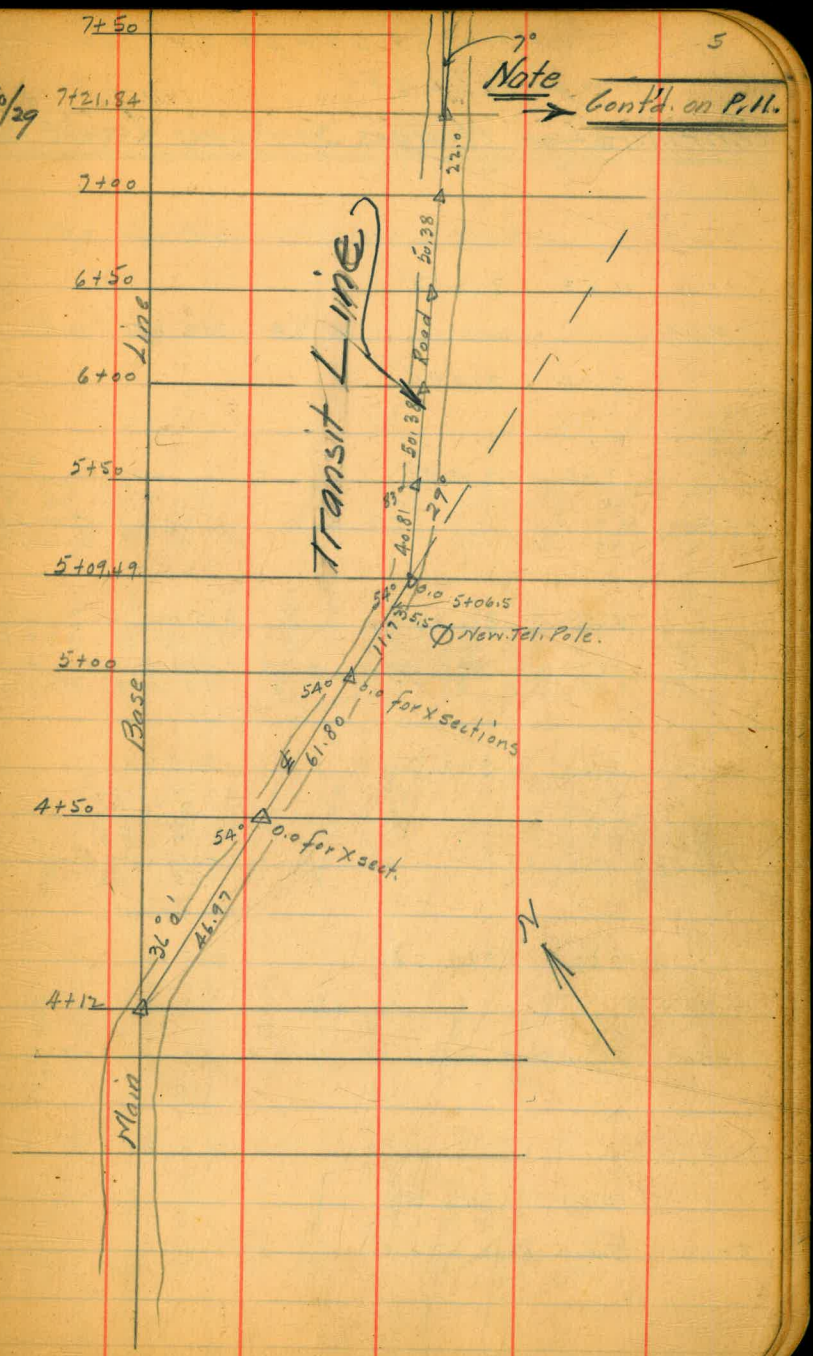


73.53

Continuation Hodges Spillway Layout Survey

12/9-10/29

			315.99	
7.32	323.31			
		4.6	318.7	At Road P.I.
			338.2	
		+19.5	~~342.8~~	
			336.6	
1.83 - 5°39'		+17.93	~~341.64~~	+11.3%
			334.4	
1.54 - 5°58'		+15.97	~~329.28~~	+12.0%



Note:- See pages 22 & 23 for Yardage computations.

Continuation Hodges Spillway Layout Survey

12/9-10/29

Dec. 9, 1929.
Parker
Converse Water
Hill
Elliott
Simpson
Walton.
Clear + Warm.

Elevs. checked by A.C.L. 9/12/30

Top Spillway. Average Elevation.

Point at Concrete Wall. Upstream Stairway Wall.

						Left ℄ Right
B.M.	11.58	326.58	11.58	315.00		
	3.94	318.94				
0+50	3.94	318.94	5.3			
0+75	1.43	316.43 back 9½ to Stairway	359.33 − 42.9 = 316.43	315.00		
	8.50	323.50		315.00		
1+00						
	7.58	322.58		315.00		
T.P.			4.56	318.02		
1+50	Small Rock + D.G.					
	2.49	320.51		318.02		
2+00	Small Rock + D.G.					

Trail to Tunnel

Trail to Tunnel

Trail

Road

Road

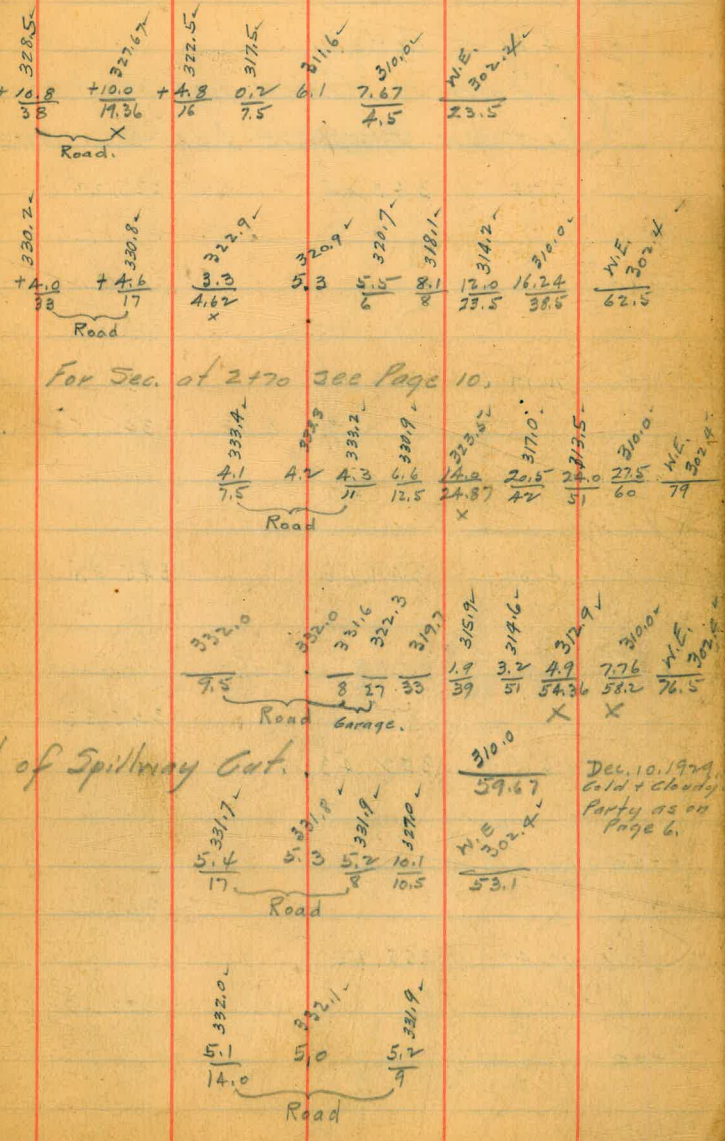
For Sec at 1+80 see Page 10.

Continuation Hodges Spillway Layout Survey

	-0.35	317.67		318.02	
2+25	Loose Rock + D.6.				
	8.22	326.24		318.02	
T.P.			1.87	324.37	
2+50	Small Rock + D.6.				
				324.37	
	13.16	337.53	4.62	332.91	T.P. at N.W. Cor.
3+00			13.00	324.53	
	4.06	328.59			
			12.60	315.99	
	1.77	317.76			
3+50					
				332.91	
3+57.75	4.16	337.07			
4+00					
4+12.0					
			1.78	335.29	

11/9+10/29

Left. & Right



Dec. 10. 1929.
Cold + cloudy
Party as on
Page 6.

Continuation Hodges Spillway Layout Survey

				335.29'
	4.01	339.30'		
4+50	(Center of Xsecs. not on base Line but on transit Line ahead of Sta. 4+20)			
	7.76	343.05'		335.29'
5+00				
				335.29'
	11.17	346.46'		
			0.93	345.53'
5+50				
	4.07	349.60'		345.53'
6+00				
				345.53'
	6.90	352.43'		
6+50				
				345.53'
	10.40	355.93'		
			2.26	353.67'
7+00				

Sta. 4+20

	Left										℄										Right
	341.8										333.3										
	+2.5										6.0										
	14										9.2										
											333.9										
											5.4										
													5.0	334.3	12.5	326.8	12.5	326.8	2.1.0	317.3	302.4 W.E.
													11.5		15.5		20.5		37		85
													Road								
	345.05																				
	+2.0																				
	15																				
		337.15																			
		5.9																			
		9																			
			337.75																		
			5.3																		
				338.15																	
				4.9																	
				10.5																	
					333.15																
					9.9																
					13.2																
					Road																
						322.45															
						20.6															
						35															
							315.55														
							27.5														
							40														
								312.35													
								30.7													
								63													
									302.4 W.E.												
									78												
	348.1																				
	+1.6																				
	9.5																				
		341.1																			
		5.4																			
		5																			
			341.2																		
			5.3																		
				341.5																	
				5.0																	
				9.5																	
					322.7																
					23.8																
					40.5																
						314.2															
						32.3															
						46															
							310.7														
							35.8														
							67														
								302.4 W.E.													
								77													
	352.1																				
	+2.5																				
	8																				
		344.1																			
		5.5																			
		4																			
			344.2																		
			5.4																		
				344.2																	
				5.4																	
				13																	
					338.2																
					11.4																
					19																
					Road																
						324.6															
						25.0															
						45															
							319.5														
							30.1														
							72														
								304.8													
								44.8													
								85													
									302.4 W.E.												
									90												
	355.4																				
	+3.0																				
	11																				
		347.4																			
		2.0																			
		4.0																			
			347.0																		
			5.4																		
				347.3																	
				5.1																	
				12.5																	
					344.1																
					8.3																
					14.5																
						336.3															
						16.1															
						26															
							326.8														
							25.6														
							46														
					Road																
	363.2																				
	+7.3																				
	17																				
		350.7																			
		5.2																			
		5.5																			
			350.6																		
			5.0																		
				351.1																	
				4.8																	
				8																	
					340.8																
					15.1																
					22																
						332.0															
						23.9															
						40															
Edge Co. Highway																					
					Road																

Continuation Hodges Spillway Layout Survey

				353.67
	5.25	358.92		
7+50				
				353.67
	6.14	359.81		
8+00				
				353.67
	9.39	363.06		
8+50				
				353.67
	12.76	366.43		
9+00				
		366.43		
9+41.21				
B.M.			0.90	365.53

13/9-10/29

9

Left ℄ Right

358.9	360.0	353.8	353.6	353.9	346.5	336.1
0.0 / 31	1.1 / 10	5.1 / 4	5.3	5.0 / 10	12.4 / 17	22.8 / 39
Co. Rd.		Road				

358.3	359.4	355.0	354.4	353.9	348.7	336.5
1.5 / 34	0.4 / 13.5	4.8 / 9.3	5.4	5.9 / 9	11.1 / 11	23.3 / 40
Co. Rd.		Road				

358.3	359.6	357.8	358.1	337.1	
4.8 / 28	3.5 / 4.5	5.3	5.0 / 18	26.0 / 52	
Co. Rd.		Rd.			

360.0	361.1	361.2		347.9	340.4	
6.4 / 19	5.3	5.2 / 15		18.5 / 34	26.0 / 51	
Jct. of Roads.						

362.9	363.2	363.6	358.8	
3.5 / 11	3.2	2.8 / 14	7.6 / 19	
County Highway				

Top S.E. Cor. Conc. Storm Drain 9+35

Continuation Hodges Spillway Layout Survey

	2.99	321.01	318.02
1+80			
	5.70	338.61	332.91
2+70			

17/9-10/29

Left ℄ Right

334.3 327.9 326.1 325.6 316.4 315.7 314.0 310.0 302.4 W.E.

+13.3 +6.9 +5.1 +4.6 4.6 5.3 7.0 11.0

63 46.9 39 23.5 7 29 41.5 56

Rd.

332.7 333.3 333.0 326.7 322.3 319.8 310.0 302.4 W.E.

5.9 5.3 5.6 11.9 16.3 18.8 28.6

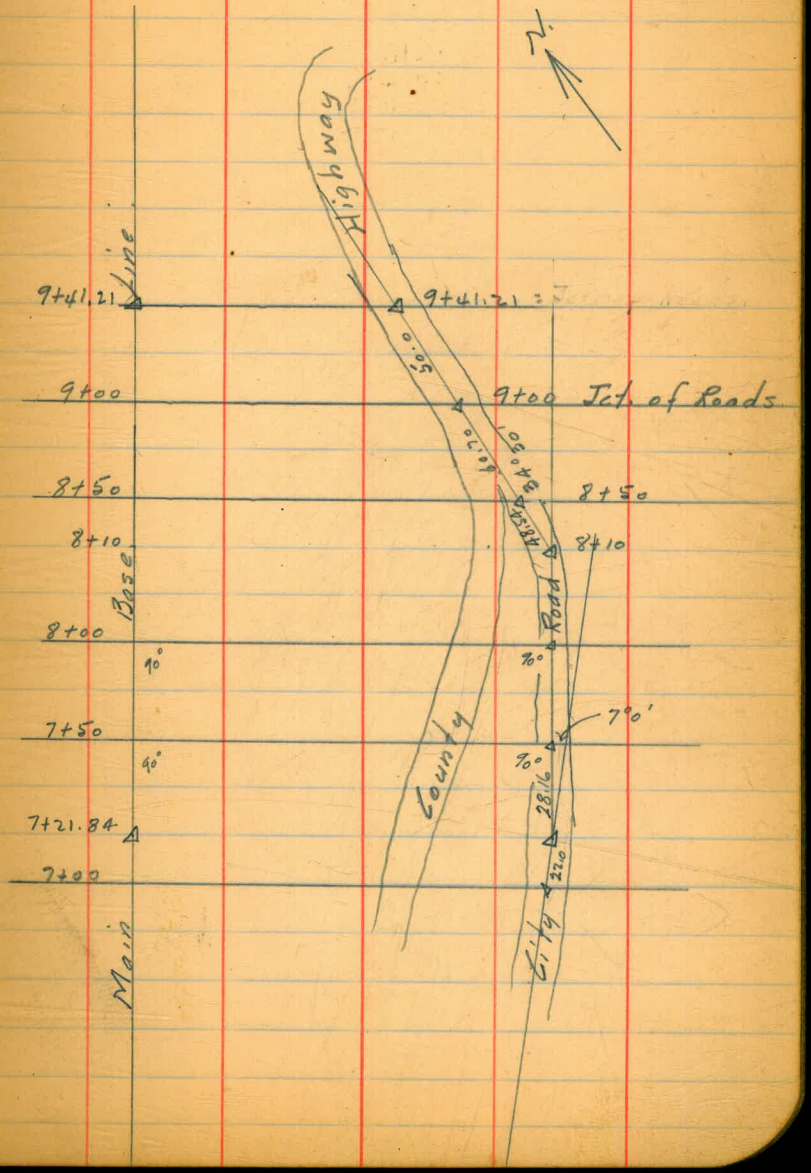
17.5 2.5 7.18 16 25 57.8 77.8

Road

Continuation Hodges Spillway Layout Survey

12/9-10/29

Contd. from P. 5.



				315.0		B.M. Point at concrete wall. up stream stair-way wall.
	4.51	319.51				
T.P.			0.95	318.56		
	11.92	330.48				
T.P.			0.37	330.11		T.P. Large Rock S. Edge of Rd.
	10.98	341.09				
T.P.			0.56	340.53		
	12.12	352.65				
			5.79	346.86	C-36 9	on 1+00 limit of excavation
			1.73	350.92	C-40 9	on 10' offset from 1+00
			9.40	343.25	C-33 2	on 1+50 limit of excavation
			4.69	347.96	C-38 0	on 10' offset from 1+50
				330.11		T.P. Large Rock S Edge of Rd.
	7.44	337.55				
			10.09	327.46		on 1+80 limit of excavation
			5.42	332.13	C-22 1	on 10' offset from 1+80
			11.30	326.25	C-16 2	on 2+00 limit of excavation
			6.33	331.22	C-21 2	on 10' offset from 2+00

		337.55				
			10.13	327.42	c-17$\frac{4}{}$	on 2+25 limit of excavation
			9.56	327.99	c-18$\frac{0}{}$	on 16^{0} offset from 2+25
			7.00	330.55	c-18$\frac{5}{}$	on 10' offset from 2+50 grade = 312^{0}
T.P.			11.26	326.29		
	3.36	329.65				
			6.32	323.33	c-11$\frac{3}{}$	on 2+50 limit of excavation grade = 312^{0}
			6.15	323.50	c-6$\frac{5}{}$	on 3+00 limit of excavation grade = 317^{0}
T.P.			9.89	319.76		
	4.77	324.53				
T.P.			0.47	324.06		
	12.17	336.23				

Monthly estimate X-sections

Note: See pages 22 & 23 for yardage Computations

On Converse co-ordinates

Aug. 25-27-28

P.O.G.

℄

Right out

Left out

H.I. 309.50 B.M.

H.I. 314.9

5.41 314.91

0+50 grade = 310.00

H.I. = 314.8

353.9

0+75 to walk +3.9.0 124.4 +3.9.2 117.7 +34.3 111.7

309.5

5.70 315.2

0+00 +36.1 112.1 +36.6 104.5

309.50

5.92 315.42

1+50 +33.4 94.3

309.50

5.30 314.80

1+80

309.5

5.22 314.72

2+00 +24.1 58.8

309.5

2+25 5.47 314.97

2+25

309.5

6.45 315.95

2+50 +14.9 15.8

H.I. 314.9

H.I. 314.9

H.I. 315.2

H.I. 315.7

H.I. 314.8

H.I. 314.7

H.I. 315.0

H.I. 315.90

Monthly estimate X-sections

2+70	4.7	338.0		333.3	ground elev
3+00	5.0	338.3		333.3	" "
3+50		338.3			
4+00	0.00	331.8		331.8	ground elev
4+35.6	5.8	337.6		331.8	" "

Check levels to see why 0+75 walk to Tunnel does not check in elev as given by G.C.

5.30	314.8		309.5 Ferguson B.M.
11.83	326.43	0.20	314.60
10.24	336.45	0.22	326.21
11.33	346.24	1.54	334.91
10.33	356.09	0.48	345.76
		2.20	353.89 on wolf
		2.10	354.60 = 354.0 117.7 left of 0+75

continued

℄ Out Right

2+70: 333.3 | 333.3 | 328.1 | 327.5 | 320.8 | 314.6 | 314.6 | 314.6 | 313.9 | 310.6 | 309.5
9.7 | 4.7 | 9.9 | 10.5 | 17.2 | 27.6 | 28.2 | 24.1 | 27.4 | 28.5
1.3 | 3.0 | 4.3 | 8.7 | 13.2 | 26.2 | 41.8 | 46.5 | 67
↑ new grade ↑

3+00: H.I. 338.3
333.3 | 333.3 | 326.3 | 325.0 | 320.1 | 317.4 | 317.3 | 309.4
5.0 | 5.0 | 12.0 | 12.75 | 18.20 | 20.9 | 21.0 | 28.9
11.7 | 13.0 | 20.7 | 25.3 | 30.0 | 51.8 | 63.7
↳ pump base ↳ new grade ↑

3+50: H.I. 338.3
332.0 | 332.5 | 323.0 | 309.4
6.3 | 15.8 | 15.3 | 28.9
28.2 | 56.4 | 75.0
↑ new grade ↑

4+00: H.I. 331.8
331.8 | 331.1 | 327.5 | 327.3 | 309.4 = W. Edge
0.0 | 0.7 | 4.3 | 4.5 | 1½:1 slope to
16.2 | 27.2 | 62.5 | 89.3
↑ new grade ↑

4+35.6: H.I. 337.6
333.0 | 333.4 | 331.0 | 330.5 | 331.3 | 331.0 | 309.4
4.6 | 4.2 | 6.6 | 7.1 | 6.3 | 6.6 | 1½:1 to
27.5 | 32.1 | 46.6 | 50. | 64.1 | 98.5
↑ new grade ↑

P.O.G.

Note: See pages 22 & 23 for yardage computations

309.50 B.M.

5.20 314.70

see next page for sketch

H.I. = 314.7

0+40 4 yds in over hanging cliff - class 1 — 310.0 — 4.7 — 128 — level — 4.7 310.0 — 4.7 310.0 — 29.4

0+40 — 309.5 — 5.2 — 128 — level — 5.2 309.5 — 5.2 309.5 — 29.4

0+10 — 313.7 — 1.0 — 155 — 313.7 — 1.0 — 145 — 309.2 — 5.5 — 140 — level — 5.5 309.2 — 5.2 309.5 — 11.8

0+05 — 313.7 — 1.0 — 155 — 312.7 — 2.0 — 145 — 309.7 — 5.0 — 140 — 309.7 — 5.0 — 120 — 309.7 — 5.0 — 110 — 309.7 — 5.0 — 100 — 309.7 — 5.0 — 90 — 309.7 — 5.0 — 80 — 311.7 — 3.0 — 75 — 311.7 — 3.0 — 35 — 311.7 — 3.0 — 30 — 311.7 — 3.0 — 20 — 310.7 — 4.0 — 10 — 310.7 — 4.0 — 4.0 — 309.5 — 5.2 — 9.0

0+00 — 313.7 — 1.0 — 155 — 312.7 — 2.0 — 140 — 311.7 — 3.0 — 130 — 312.7 — 2.0 — 120 — 311.7 — 3.0 — 110 — 309.7 — 5.0 — 100 — 309.7 — 5.0 — 90 — 312.7 — 2.0 — 80 — 314.2 — 0.5 — 75 — 314.2 — 0.5 — 35 — 313.7 — 1.0 — 30 — 314.2 — 0.5 — 25 — 313.7 — 1.0 — 20 — 313.7 — 1.0 — 10 — 312.7 — 2.0 — 6.0 — 313.7 — 1.0 — 310.7 — 4.0 — 6.0

0+00 — 314.7 — 0.0 — 155 — Edge of Concrete ← — Edge elev. 314.7 — 314.7 — 0.0 — 6.0

↑ = Base line

P.O.G.

Sept. 9-30

18

Additional X-section

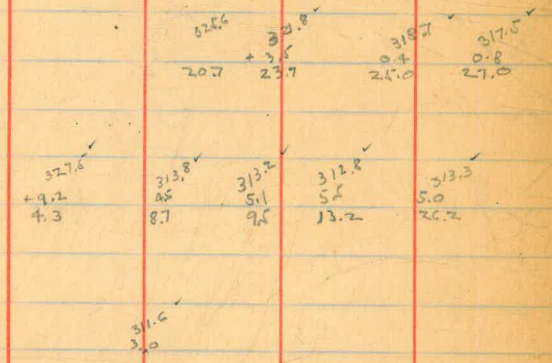
3+00

2+70 318.3

2+50 314.60

Finished excavation

sept. 10-30 19



Material Recd. on the Job.-

8/16/30	213 pcs. 5/8" Round x 40' bars.
"	50 " 3/4" Square x 4' "
"	12 " " " x 3' "
8/26+27	970 bags Colton Cement -
"	3 loads Sand + 2 loads Rock
8/28	2 " Rock. 8/31 - 5 loads Rock
8/31	2 " Sand. 9/5 - 1 load Sand.
9/5	6 loads Rock 9/6 3 loads Rock
9/6	5 loads Sand. 9/7 3 loads Rock
9/8	4 loads Rock + 1 load Sand
9/9	1 load Sand + 1 load Rock
9/10	2 loads Rock + 1 load Sand
9/12	4 loads Sand + 3 loads Rock
9/13	10 loads Rock + 5 loads Sand.
9/9	250 bags Riverside Portland Cement

Matl. Used.

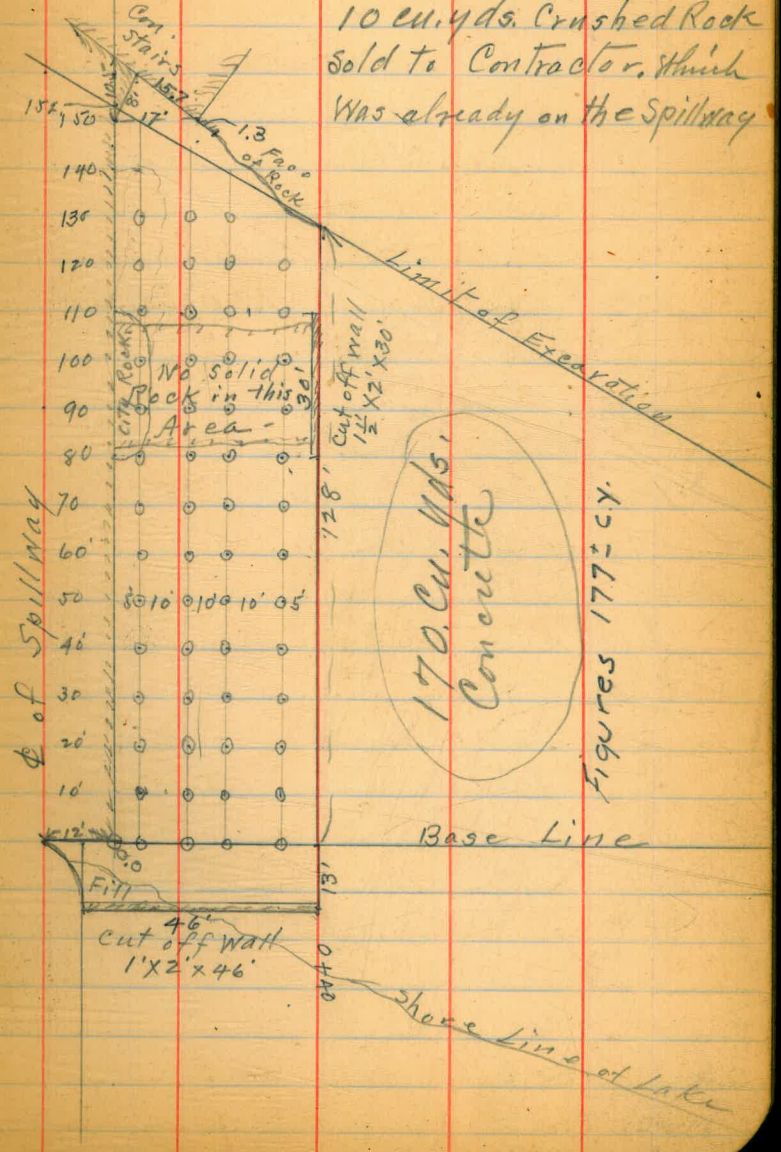
988. bags cement
75. Cu. yds Sand.
153. " " Rock.
8520 lin. ft. 5/8" Round Runforcing Steel
736 " " 3/4 Square " "

Concrete measured by bags cement used. = 5.84 bags per Cu. yd. Concrete.

M 9417

55. 3' anchor holes drilled for 4' bars. @ = 165 lin. ft drilling.

10 cu. yds. Crushed Rock sold to Contractor. Which was already on the Spillway



Map
See File #249 for X-Secs.

Hodges Spillway Enlargement.
— Excavation —
CLASS No. I

Sta.	Dist.	Coeff.	End Area.	Sum of End Area.	Cu. Yds.
0+00			107.9		
	5.0	.0926		519.0	48.06
+05			411.1		
	5.0	.0926		1036.5	95.98
+10			625.4		
	30.0	.5556		1192.1	662.33
+40			566.7		
	0.0			1031.8	—
+40			465.1		
	10.0	.1852		907.9	168.14
+50			442.8		
	25.0	.4630		1046.0	484.30
+75			603.2		
					1458.81
	Extra Exc. Sta. 0+40				3.33
	Total Cu. Yds. Class #1.				1462.14

Note: — X Sec. Notes on pages 6+17.
These notes where plotted and Planimetered.
From Sta. 0+00 to Sta 0+50 original Elevs. taken from topog sheet.

Excavation
CLASS No. 2

Sta.	Dist.	Coeff.	End Area.	Sum of End Area.	Cu. Yds.
0+50			0.0		
	25	.4630		577.8	267.52
0+75			577.8		
	0.0	—		—	—
0+75			1181.0		
	25.0	.4630		3649.3	1689.63
1+00			2468.3		
	50.0	.9259		4260.4	3944.70
+50			1792.1		
	30.0	.5556		2730.2	1516.90
+80			938.1		
	20.0	.3704		1574.6	583.23
2+00			636.5		
	25.0	.4630		877.8	406.42
+25			241.3		
	25.0	.4630		487.3	225.62
+50			246.0		
	20.0	.3704		422.2	156.38
+70			176.2		
	30.0	.5556		239.7	133.18
3+00			63.5		
	10.0	.1852		63.5	11.76
+10			0.0		
					8935.34
	Large rock removed at Sta. 0+40				4.00
	Total Cu. Yds. Class 2. (See Note)		—		8939.34

Hodges Spillway Enlargement.
Check of Paving Estimate.

	Cu. Yds.
Main Slab (Paved Flat)	103.70
Cut Off Walls	6.74
Addition for Curvature on Main Paving	6.59
Sloped Surface Baseline to Cut Off Wall	16.68
Sloped Surface Next to Stairs	4.86
On Sec. from Sta 0+00 to Sta 0+10 -	38.89
Total Cu. Yds. =	177.46

Note - Refer to general files for Computations - Under Hodge's Spillway Enlargement

Hodges Spillway Enlargement.

Steel -

8520' - 5/8" ϕ - 1.05# per ft.	8946#
236' 3/4" # 1.94# " "	458#
Total Steel -	9404#

Cement -

988 sks. 247 Bbls.

San Dieguito Ground water data

Cross-section of Valley from Dinsmore most westerly Well in Center of Valley going North from Well

POG
J. Salgado

Oct. 16-30

Page 37-38

			20.78	Greens elev	
Well #D-2			20.98	BM	Top of pipe 2" (east pipe) Well looks like this: (BM, two 2" pipes, concrete)
	3.75	24.73	6.4		
0 - 0		18.1	6.6	W. S	
		25.0	- 0.37	bottom	
0 - 0		5.33	19.40		lost a bob and 6' of tape in the bottom
			19.2		
228-N		5.33	19.40		
			19.6		
454-N		4.93	19.80	S.B. of Wash	
			17.1		
465-N		7.43	17.30	S. bottom "	
			15.0		
510-N		9.53	15.20	N. " "	Not cultivated some black alkali
			19.5		
522-N		5.03	19.70	N.B. of Wash	
			19.2		
677-N		5.33	19.40	on E&N Fence	
			17.1		
870-N		7.43	17.30		
			17.2		
1053-N		7.33	17.40	toe of slope	North side of valley
			24.53		
1148-N		0.00	24.73		
Going South			~~20.98~~		
		22.30	20.78		
	1.52	~~22.50~~			
			17.7		
0 - S		4.60	17.90	ground elev	at Well
			18.3		
310-S		4.00	18.50		
			17.3		
780-S		5.50	17.50	N.B. of Main	Channel
			11.3		
794-S		11.00	11.5	N. bottom "	
			11.3		
830-S		11.00	11.5	S. " "	
			15.0		
840-S		7.30	15.2	1st bank	on S. side of Main Channel
			17.4		
980-S		4.90	17.6	S.B. of	" "
			16.7		
1195-S		5.60	16.9		
			16.4		
1420-S		5.9	16.6	N-B of wash	
			12.5		
1425-S		9.8	12.7	N. bottom "	
			12.0		
1430-S		6.3	12.2	Center "	

X-Section of Valley thru D-2 contin.

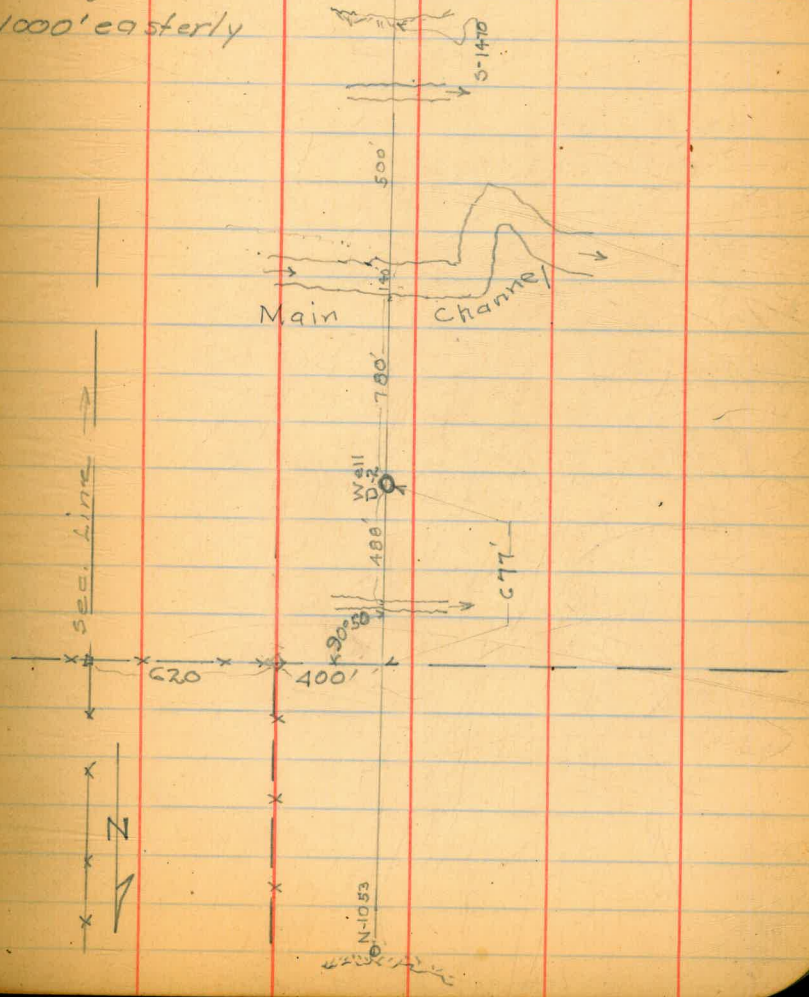
22.30
~~22.50~~

1450-S		8.8	13.5 13.7	
1470-S		8.9	13.4 13.6	toe of S. slope S. side of valley
1600-S		0.0	22.3 22.50	

To determine grade of Main Channel

℄ at 830-S 1000-E	86°20'	from Backsight to	Well D-2 Rt and 1000' easterly	
N.B. of M. Channel		3.7	18.6 18.8	
Center "	"	9.6	12.7 12.9	
	90°30'	from Backsight	Lt	
560-W		5.7	16.4 16.8	N.B
Center of Channel		11.8	10.5 10.7	
830-N	107°00	7.1	14.2 15.4	N.B
Center of channel		12.3	10.0 10.2	
1000-N	100°00	6.8	15.5 15.7	N.B
center of channel		13.00	9.3 9.5	

Note: it is impossible to determine groundwater level in the Main Channel, because the bottom of the creek bed contains running water from the irrigation system which is being cleaned and repaired at this time



Well Data on Dinsmore Tract

Well	2" pipe in floor (dirt)	Top of casing	near road and N.L. of Prop.
	10.5	W.S.	
	33.5	bottom	

Fairbanks Plant data

	2.59	38.27		35.68	B.M. on top of casing Well #5-F
Well #7	T. of Casin		2.24	36.03	
W.S			- 33.8	+ 2.2	
Bottom			- 123.8	-87.8	
Well #2	T of Casing		1.83	36.44	
W.S.			- 14.1	22.3	must be filled up
Bottom			- 14.6	21.8	
Well #3	T. of casing	4" pipe	0.43	34.84	
W.S			no water		
Bottom			12.1	22.7	
Well #4	T of Casing		2.67	35.60	
W.S.			- 16.1	19.5	
Bottom			- 127.0	-91.4	
Well #5	T. of Casing		2.59	35.68	
W.S.			- 36.1	- 0.4	
Bottom			- 138.7	-103.0	
Well #6	T of Casing		3.59	34.68	
W.S.			- 36.00	- 1.3	
Bottom			- 137.15	-102.5	

Ground elev. 33.3 average

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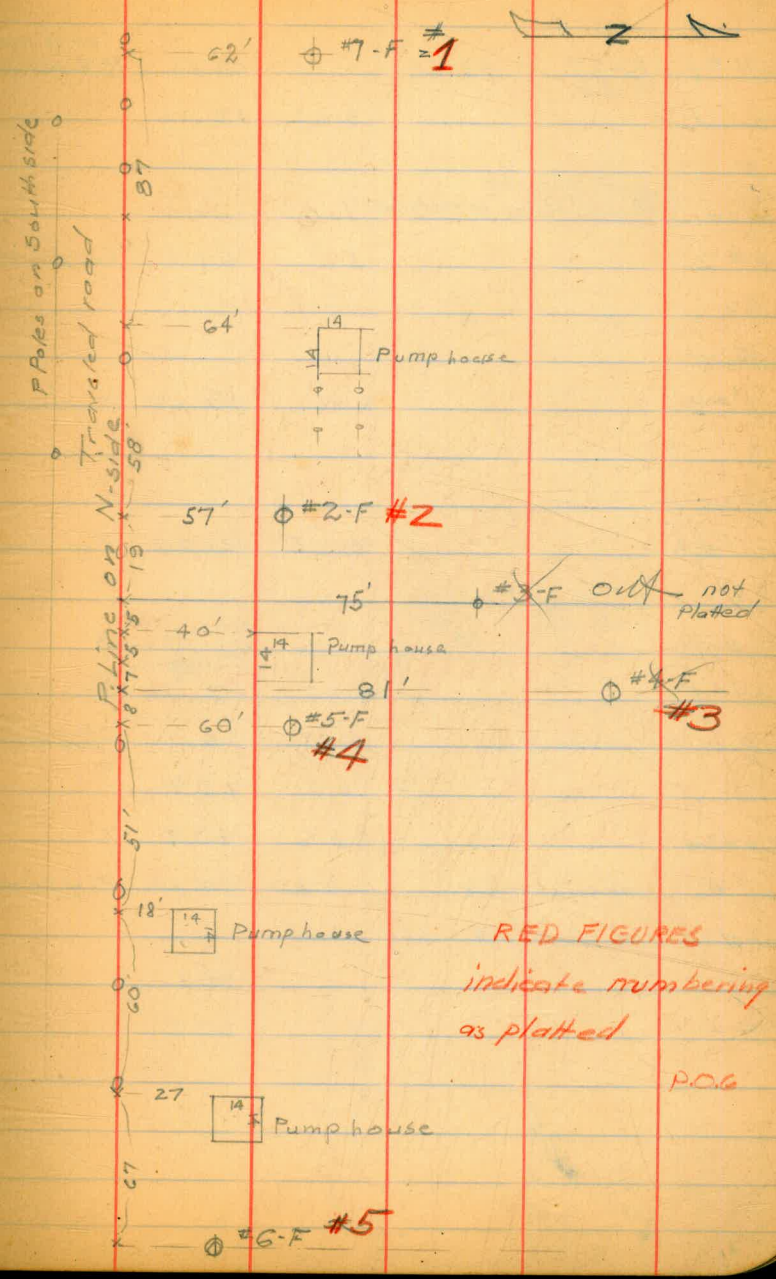

RED FIGURES indicate numbering as platted

Rancho Vista del Mar Well data

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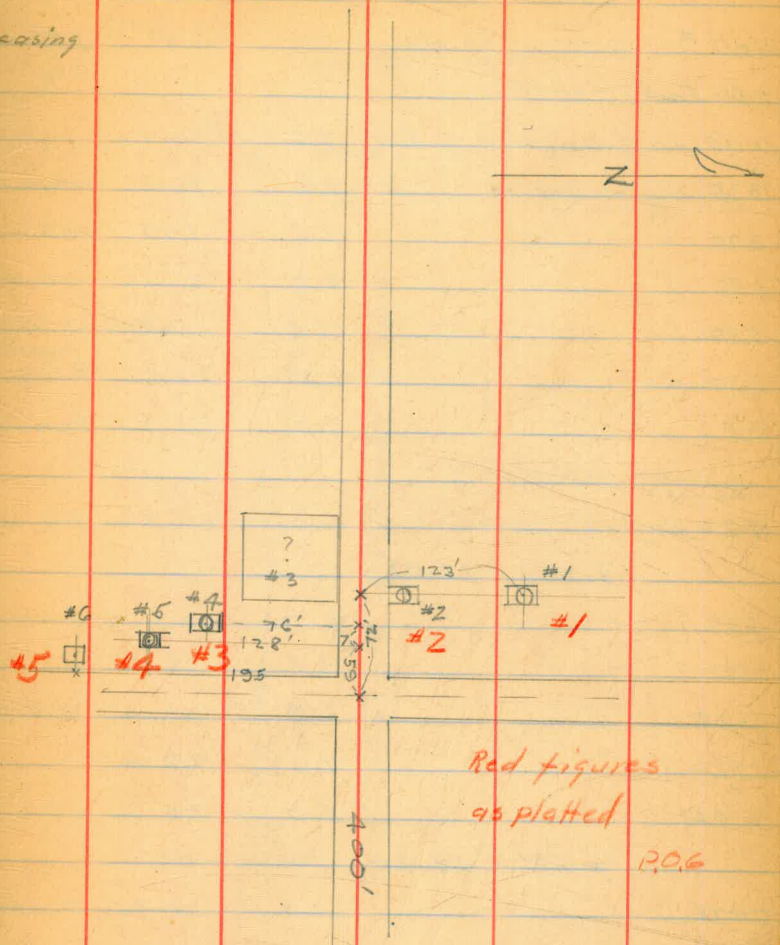
Well #1 = G-37 Z.83	46.66		43.83	Top of wood BM box around Well casing
ground		3.66	43.00	
W.S. } not possible				
Bottom } electric Motor on top of casing				
Well #2		3.1	43.6	T. of Box cover
W.S. -	"	"		
Bottom				
Well #3		3.06	43.60	T. of Doorsill
W.S.				
Bottom				
Well #4		4.66	42.00	T. of Box
W.S				
Bottom				
Well #5		4.00	42.66	T. of Box
Bottom Concrete Box		10.55	36.11	= T. of Casing
W.S		- 16.8	25.9	
Bottom		- 83.6	-40.9	
Well #6	not accessible	6.02	40.64	T. of Doorsill
Pond in old sandpit	see sketch			
Top of stake			30.1	
W.S.			27.2	



Red figures as platted

P.O.G.

Dinsmore Well data

X-Section of Valley near N-Brdy of Tract

Well #	4.00	30.67	27.08 U.S.G.S. El. 26.67	B.M. in side Floor
7.80 East = 0.00 on X-Section of Valley	17°30 Lt		26.5 26.1	
3.35' East on Baseline		4.6	22.7 22.3	W Edge of Pond
3.70 " " "		8.4	14.7 14.9	W.S.
4.80 " " "		15.8	22.1 21.7	island
5.80 " "		9.0	14.7 14.9	W.S. surface water entering Pond
8.30 " "		15.8	23.3 22.9	E. Edge of wash
8.80 " "		7.8	23.8 23.4	Toe of slope
going westerly 0.00 to 9.20 West on X-section		7.3	25.72 25.32	E.B. of Channel
	4.70	30.02		
9.32		5.35	23.4 23.3	E. bottom
13.00		6.7	20.6 20.2	W. "
13.20		9.8	25.0 24.6	W. B. of Channel
19.20		5.4	22.8 22.4	
24.40		7.6	25.2 24.72	E.B of Channel
	4.58	29.30		
24.75		11.7	18.0 17.6	E. bott.
25.28		11.3	18.4 18.0	W. bott.
25.68		0.30	29.4 29.00	E.S. of Road
25.78		0.30		℄ of Road

0.00 = Point on N.L. and ℄ of Road sighting east

9.50' 80°15 Rt

3.20' 20°35 Lt to 2" casing in Floor of abandoned Pumping Plant

P.O.G.
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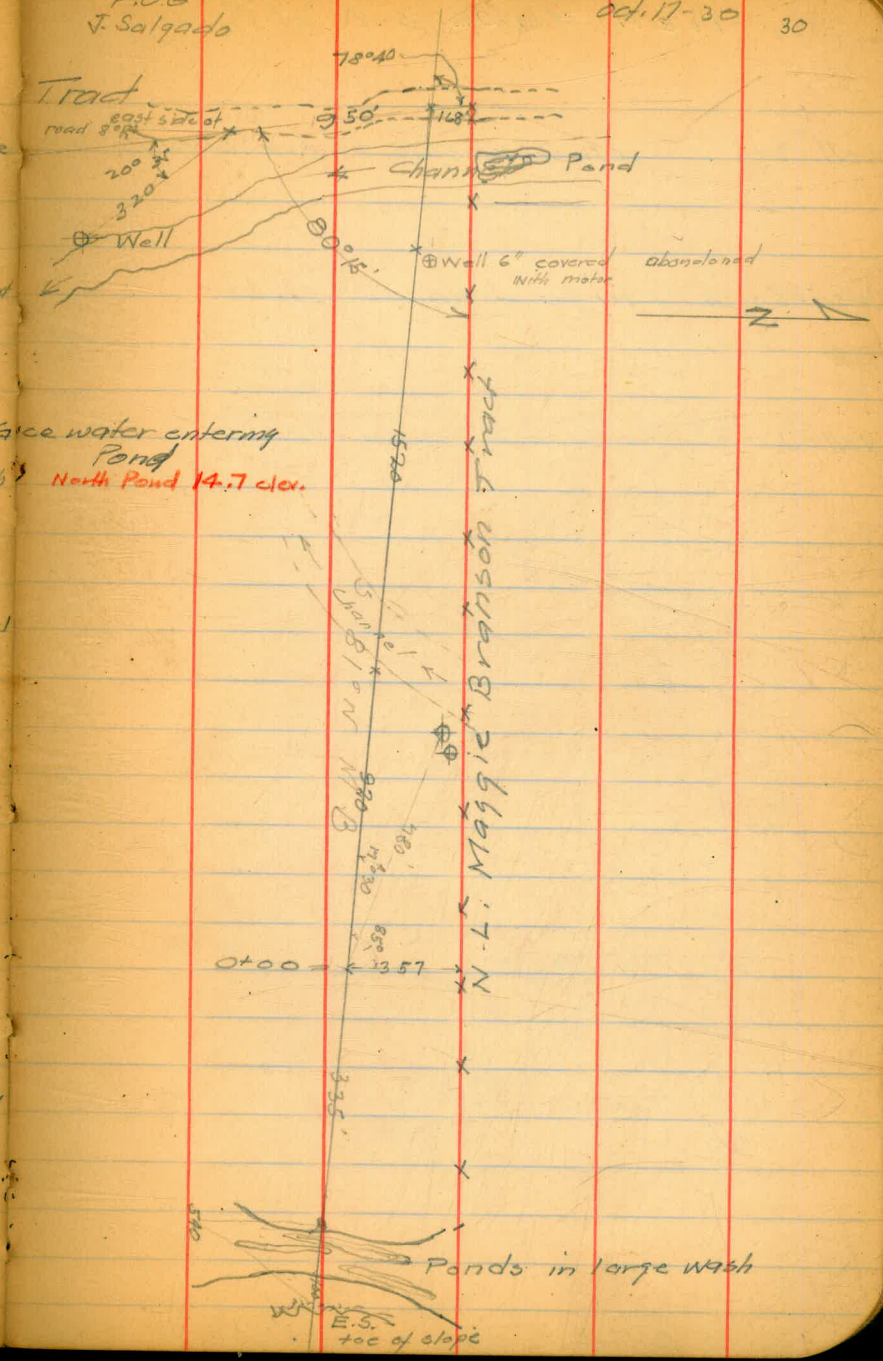

Well data S-W of F-Wells

Well #9-6" on north side of pumphouse

Well #8-12" in pit of old pumphouse

Well #7-8" new well nearest to road

Oct. 18-30
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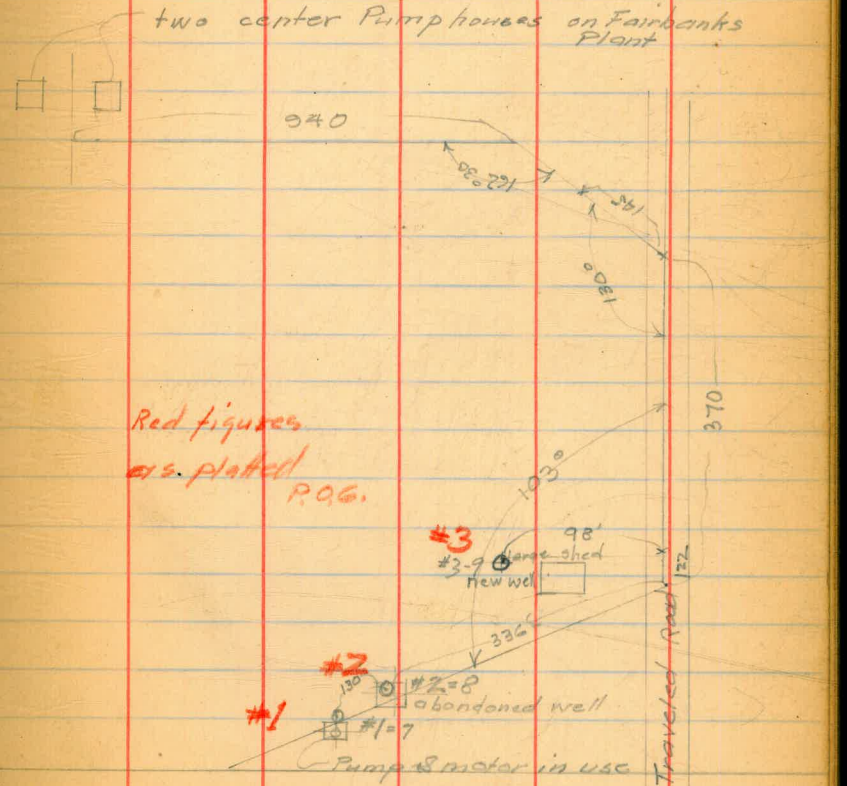
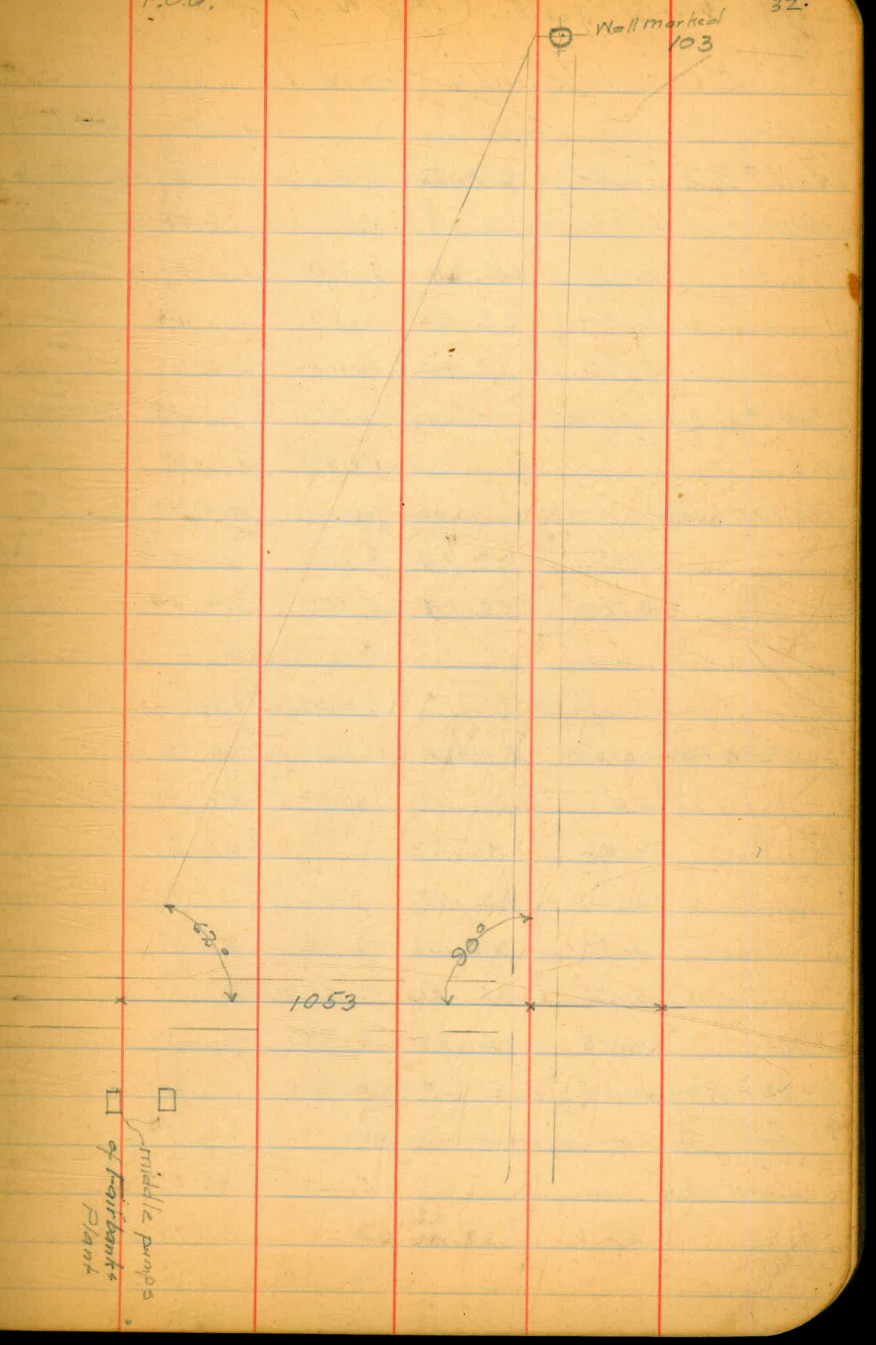


Well marked 103

ad. 18-30
P.O.G.

32.



San Diequito Valley Well data

Bench levels to Wells

				53.61	B.M.
Well #D-2	2" diam. 2.88	23.86		20.98	Top of E-Pipe Well D-2
W.S				- 14.33	
				6.65	
	4.11	24.47	3.50	20.36	
	5.84	26.82	3.49	20.98	
	5.70	28.40	4.12	22.70	
				21.53	
Well #D-3			6.67	21.73	Top of casing
				11.20	
W.S			17.00	11.40	
				22.6	
ground elev.			5.6	22.8	
			+0.2	- 11.8	bottom
	5.46	29.94	3.92	24.48	
	4.70	29.44	5.20	24.74	
				25.2	
			4.00	25.4	
				13.39	
W.S.			15.85	13.59	W.S.
				25.85	
S-10 cor top of wall		B.M.	3.39	26.06	B.M.
	5.44	30.04	4.84	24.60	
	5.86	32.53	3.37	26.67	
				28.57	
	4.21	32.98	3.76	28.77	
	7.30	33.26	7.02	25.96	
				30.05	
	5.55	35.80	3.01	30.25	
	4.95	36.37	4.38	31.47	
				32.94	=3292-3240
Well #103			3.33	33.94	
W.S.				- 19.08	
				13.94	
bottom				- 109.2 = -76.2	bottom
ground elev.			5.27	30.80	
	4.27	37.31 41		33.14	
			2.54	34.87 77	

P.O.C
J. Salgado

Oct. 20-30

(33)

no one knows about this

U.S.G.S in front of School house iron post & cap could not be found this date

lost a plum-bob used as weight on tape line

2" diam. inside of old abandoned Pump house level with the floor

this approx 15' West of old Bldg. normal valley floor also directly on West bank of Channel

Point X-Section #2

in Pond at N.L. of Prop. West Side of Valley

on concrete Box south of N. Fence 60' on E.B. of Channel

on N.B. of Main Channel

on E.B. " " "

Note: on checking back (2 times) found after. 16" casing for location seepage

Od-low from last B.M.

Bench levels continued

			34.87 77	
	5.57	40.74 34		
	8.25	42.05 15	6.54	33.80 90 near
	6.84	46.00 10	12.89	39.16 26
	4.05	45.81 91	4.24	41.76 86
				43.64 = 43.83 ?
			2.57	43.24 = 43.83 ? 43.34
Well #5				42.23
			3.48	42.33 .49 low Top of box
				40.13
			5.58	40.23 Top of
				15
W.S.				25.13
bottom			-83.6	- 41.4 —
ground elev.			4.6	41.2 3
	4.35	38.68 78	11.48	34.33 43
				26.83
W.S.			11.75	26.93
				29.68
			8.90	29.78
	5.38	39.08		33.80 90 Turn
		39.18		
		38.77		
	4.03	38.87	4.34	34.84 94
				36.45
Well # 7			2.32	36.55
				26.16
W.S.				+10.30 +
				34.3 -123.8
ground			4.5	34.4 -87.4 = bottom Well #7
Well # 2				36.86
			1.91	36.96
				14.1 36
bottom dry				22.86
				36.02
Well #4			2.75	36.02
				16.00 -127.0
W.S.				20.02 -90.8 — = bottom Well #4
bottom				36.10 36.10
Well # 5			2.67	36.20 = 35.68
				25.4
W.S.				+10.70 90 .42 high
ground			4.6	34.2
				-138.7
bottom				-102.4 —

turn in road going east to Fairbanks Pumping Plants

Check levels { 8.48 / 6.52 ; 42.28 / 46.50 ; 2.30 / 4.17 ; 33.80 / 39.98 / 42.33 = 42.33 } check levels, Top of box #5

Green elev. first well N of road Floor of box

Concrete box Note: Well #6 pumping

Pond old Sand pit east of Wells

Top of stake near Pond

in road going east to D.F. Plants

D. Fairbanks

D. F. Plant data

? Green elev. ?

Well data

Bench levels contin.

P.O.C.
J Salgado

Oct. 20-30

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D. F. Plant

		38.97			
Well #6			3.69	35.08 35.28 - 26.25 + 9.03	- 137.5 - 101.8 - bottom Well #6
W.S.					
bottom ground			5.1	33.9	Oct. 20 - 1 " 21 30
	3.17	38.45		35.28	
	5.14	37.59	5.90	32.45	
Well #3-9			2.08	35.41 35.87 - 12.75 22.86 22.66	Top of casing 8" diam see sketch page
W.S.					
ground			5.1	32.76	
Well #2-8			5.76	31.73 31.83 - 7.73 24.00 - 16.16 + 15.57 - 87.3 - 55.5 — 31.8	Top of 2" plank over Well pit Top of 12" casing in " "
W.S.					
bottom ground					
Well #1-7			3.08	34.41 34.51 - 14.50 + 19.90	Top of 8" diam. casing
W.S.					
ground			5.9	31.7	
bottom of well				- 85.5 - 51.0 —	
		37.09		32.05	check levels to Well #103 and S-Werly
	5.04	36.99	5.64	31.45	
	5.75	40.92	1.92	35.17	on Road east side of valley
	5.89	34.99	11.82	29.10	
	4.51	35.36	4.14	30.85	
				32.92	32.90
Well #103			2.24	33.02	= 33.04 check reading diff. 0.02 lower
	3.96	34.58	4.74	30.62	
			6.07	28.51	

Well data San Dieguito Valley

Bench levels contin.

3.74	32.25		28.41	
3.61	31.33	4.53	27.72	
			14.70	
W.S. in Pond		16.44	14.89	W.S
5.83	32.29	4.87	26.46	
5.48	31.47	6.33	25.96	Correct elev.
			27.08	27.08
		4.26	27.28	= 26.67 B.M. .41 high
4.11	30.08	5.47	25.94	
4.83	28.39	6.54	23.54	
		2.42	25.95	= 26.05?
2.16	35.30		32.94	
			33.04	Well #103
4.27	33.82	5.65	29.55	
5.21	32.57	6.46	27.36	
4.00	30.54	6.03	26.54	
		4.09	26.45	= 26.46
5.58	32.03	12.64	18.00	W.S.
			+7.90	
			17.80	
4.81	30.97	5.87	26.76	
		6.54	24.43	T.P. S. of R.
3.29	28.55	5.71	25.26	
			26.05	25.85
	28.65	2.60	26.05	= 25.92 = 26.05
6.11	30.00	4.76	23.89	
4.50	29.00	5.50	24.50	= 24.48
5.57	28.27	6.30	22.70	= 22.70
5.21	24.75	8.73	19.54	
		3.74	21.01	= 20.98

R.O.G.
J. Salgado

Oct. 21-30

(36)

in Pond East side of Valley on N.L. of M. Branson Tract

in Well #5 in center of valley on N.L. " "
(2 wells)

check reading diff 0.40 lower what the?

Check levels toward point of beginning

(do not use this)

in Pond on X-section Water level raised by pipe cleaning volume being turned into Pond

North Pond still 17.9 W.S.

the land is being prepared and the cement lines are relaid and water turned into same to take out the sand inside only one Plant in use two Wells on N.L. of Rop. in Center of Valley.

on concrete box

page.

"

= D.2 = starting point

Bench levels from Del Mar to Dinsmore Ranch

P.O.G. J. Salgado — Oct. 22-30 — (37)

U.S.G.S. El. used by Del Mar Land Co.			7.68	B.M.
	4.96	12.64		
	4.26	13.24	3.66	8.98
	4.39	13.85	3.78	9.46
	3.84	12.87	4.82	9.03
	12.75	22.47	3.15	9.72
County BM			12.52	9.95 = 9.95
	3.29	17.63	8.13	14.34
	4.97	16.25	6.35	11.28
	12.66	26.77	2.14	14.11
	12.95	39.58	0.14	26.63
	13.01	52.19	0.40	39.18
County BM			7.48	44.71 = 44.69
	13.92	60.83	4.38	47.81
	0.14	50.21	10.76	50.07
	2.27	43.77	8.71	41.50
	7.61	42.53	8.85	34.92
County B.M.			7.99	34.54 = 34.48
	1.25	32.26	11.52	31.01
	3.70	22.87	13.09	19.17
	5.55	22.50	5.92	16.95
	5.45	22.34	5.61	16.89
	0.84	21.62	1.56	20.78 = 20.98
	4.40	22.19	3.83	17.79

Del Mar Land Co. Elev.
X in top of W.S. of Concrete P. Support
2nd support N of C. Bridge

Judson BM nail in T.P at intersection of Roads N.S. Valley

hub and nail 10' S of Road by Judson

hub on S.S. Road Judson B.M.

Note: raise all El. on Dinsmore lower X Sec. 0.2'
" " " " " " upper " " 0.4'
" lower " " " Well #103 0.2'
" " " " D.F. & J.E. Plant 0.2'
" " " " N-Plant 0.2

making diff as given by Greene as follows: North Plant 0.69 low
D.F. " 0.42 high
N. Dinsmore " 0.41 "
S. " " " 0.26 low

D-2 Well by Greene

Checking back to beginning

Bench levels

	22.19			
1.01	21.94	1.26	20.93	on Top of Fence Post W.S. Road 6th south Bridge N-S-Valley
2.81	19.65	5.10	16.84	
9.67	24.07	5.25	14.40	
12.54	36.22	0.39	23.68	
9.66	44.18	1.70	34.52	=34.54 =34.48
6.42	50.39	0.21	43.97	
12.58	61.21	1.76	48.63	
5.99	62.48	4.72	56.49	
0.65	50.06	13.07	49.91	
2.54	47.23	5.37	44.69	=44.71 =44.69
0.45	38.02	9.66	37.57	
2.61	29.07	11.56	26.46	
0.06	17.63	11.50	17.57	
3.83	15.73	5.73	11.90	
6.35	18.99	3.09	12.64	
6.27	22.73	2.53	16.46	
		12.80	9.93	=9.95 =9.95

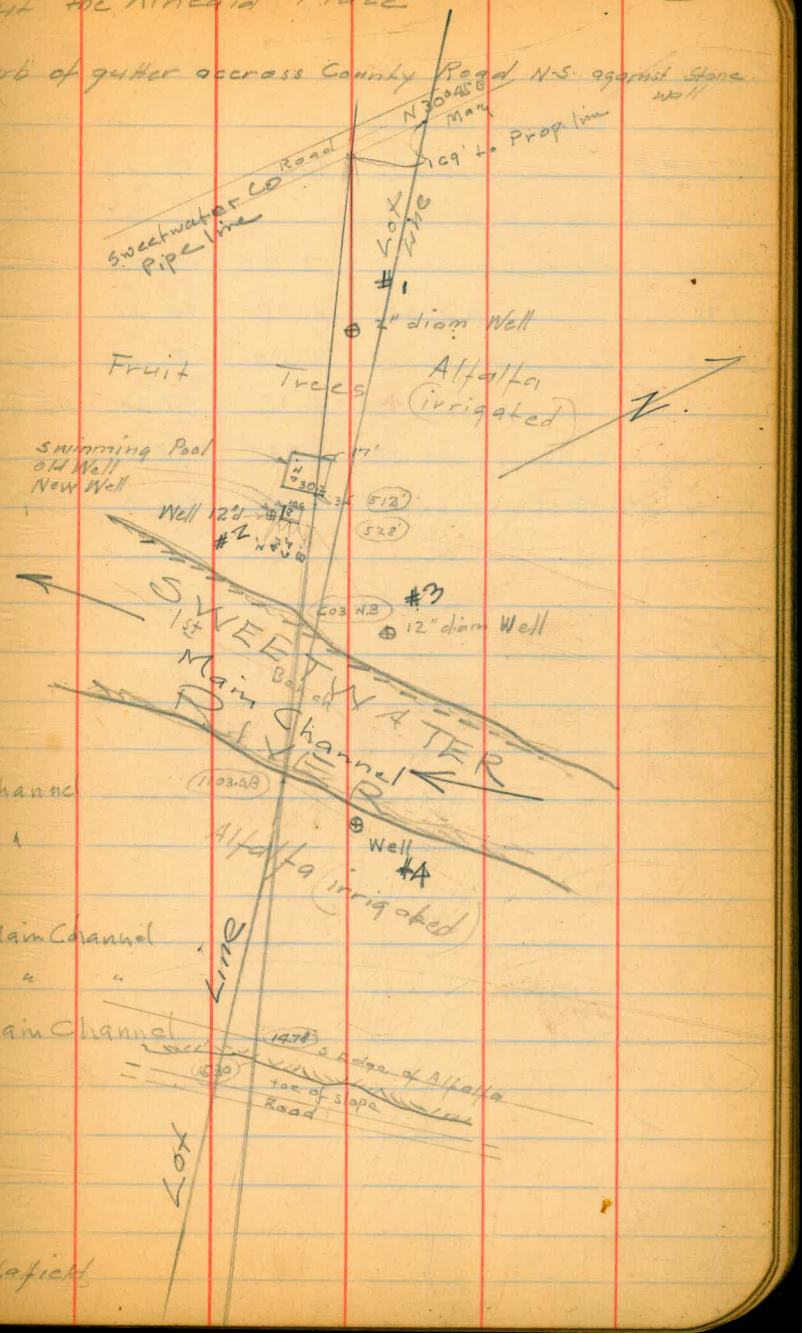
Note:
As the first Soundings, ect. were taken from certain BM's given by Mr. Green which, when carried from one BM to another and found to be at variance with each other, it was decided to run a set of Bench levels from a USGS Bench thru the entire Area affected and the figures in red are the correct El. resulting from the closed Bench levels P.O.G.

Derived by County from State Hi-way BM. El. 11.26 bolt in Topo of Pile N-E Cor. of Hi-way Bridge across San Dieguito Creek

Cross-section of Sweetwater Valley about the Kincaid Place

Oct. 23-30 (39)

Assumed E'l.		93.20 see page 41 = 99.	BM. Top of curb of gutter accross County Road N.S. against Stone wall	
from Pipe line R+101°10	= Axis of Cross-section			
	4.82	103.82		
Top of Pipe = 0+00	Δ 0°00	4.9	93.1 98.9	
19'	Δ 0°00	10.2	87.8 93.6	
65'	Δ 0°00	8.5	89.5 95.3	
Well #1	Δ = 13°15 Lt			
320'		6.7	91.3? 97.1	Top of 2" pipe
		4.3	93.7? 99.5	ground elev
515'	Δ 0°00	4.65	93.37 99.17	
560'	Δ 0°00		91.7 97.50	
	4.67	102.17		
Curbing of old Lew Kincaid Well		9.57	91.8 97.60	
		20.37	76.0 81.80	
Top of casing 12" diam.	Δ 58°30 Lt	3.07	93.3 99.10	
" " "	Δ 0°00	3.17	93.2	73' upstream
603		4.9	91.5	Top of N.B. of Main Channel
615	0°00	12.75	83.6 89.40	bottom " " "
751		12.57	83.8 89.60	
840		8.3	88.1 93.9	1st bench U.S. Main Channel
978		7.7	88.6 94.4	2nd " " "
995 = S.E. cor. P.S.	Δ 0°00	5.90	90.47 96.27	Top of S.B. Of Main Channel
	4.54	100.81		
1070		4.3	90.7 96.5	
1080		6.7	88.3 94.1	
1096		6.7	88.3 94.1	
1103		3.20	91.8 97.60	Top of S.B = alfalfa field



Well data Sweetwater Valley

1103				91.80 97.60	
	4.68	102.28			
Well #4		S63°40'E	4.11	92.37 98.17	
on 8' diam curb				91.25 96.92	
Top of discharge pipe			2.00	94.41 100.28	114' upstream
1478		S 0°00	8.08	88.4 94.20	S.S. alfalfa
1513	Toe of slope		6.50	90.0 95.78	S.S. of Valley
1550			4.45	92.0 97.83	N.S. Road
	3.39	101.78	3.89	92.0 98.39	
Meter #1964028			5.38	90.0 96.40	N.S. of Road on South side Valley 200 West of Sunnyside Store

Bench levels to X-section in Sweetwater Valley Oct. 27-30

(41)

ROG
J Salgado

+		−		
4.414	242.980		238.566	B.M. SD-238
0.98	231.21	12.75	230.23	
1.29	220.11	12.39	218.82	
0.33	207.65	12.79	207.32	
1.63	198.83	10.45	197.20	
0.70	186.86	12.67	186.16	
0.89	174.78	12.97	173.89	
4.41	166.72	12.47	162.31	
3.95	157.87	12.80	153.92	
1.29	150.16	9.00	148.87	
0.71	141.78	9.09	141.07	
0.63	132.43	9.98	131.80	
0.73	122.40	10.76	121.67	
4.55	119.43	7.52	114.88	
5.76	116.54	8.65	110.78	
0.70	104.28	12.96	103.58	
0.19	99.89	4.58	99.70	
5.14	98.58	6.45	93.44	
2.97	96.17	5.38	93.20	BM = 99.0 assumed el. for X-section
2.70	95.67	3.20	92.97	
6.10	97.32	4.45	91.22	
1.36	90.15	8.53	88.79	
3.02	85.48	7.69	82.46	
4.38	83.06	6.80	78.68	
2.28	78.97	6.37	76.69	

Pipe & cap 1/4 mile N of Dam. Sweetwater

on top of Curb of street drain N.S. of County road at Kincaid's Place
page 39-40

Bench levels contin.
Sweetwater Valley

P.O.S.
J. Salgado

Oct. 26-30

42

	78.97			
3.95	75.08	7.84	71.13	
4.05	73.43	5.70	69.38	
4.25	72.26	5.42	68.01	
3.37	74.34	1.29	70.97	on Fence near cor. N.B. of River 2000' N.E. of Bonita Store
3.28	73.30	4.32	70.02	
3.56	71.75	5.11	68.19	
		3.85	67.90	B.M. on P.P. in Front of Bonita schoolhouse "ANNO 1888" this = (about) BM #18 head of spike in same Pole (whose???)

Bench levels to Otay Valley

	3.72	66.29		62.57	BM # SDCZ
			0.50	65.79	BM # SDCZ
	5.12	67.92	6.49	59.80	
	7.73	69.03	3.67	61.30	
			2.62	66.41	Pav. at Str. P.I.
	7.91	75.18	1.76	67.27	
	4.59	71.39	8.38	66.80	
	9.22	78.32	2.29	69.10	
	9.27	86.16	1.43	76.89	
	5.77	89.89	2.04	84.12	
	1.10	83.44	7.55	82.34	
			9.70	73.74	
Well #1			4.39	79.05	Top of cast iron Pump base
			6.78	76.66	" " 8" casing
			45.7	37.7	= W.S.
			74.1	9.3	bottom
			4.6	78.7	ground
	0.50	73.94		73.44	
Well #5			17.20	56.7	Top of curbing 5.4 x 5.4 concrete = ground elev.
			36.20	37.7	W.S
			46.9	27.0	bottom
Well #2			6.3	67.6	ground elev.
on W. side	of Well curbing = BM		5.76	68.18	Top of curbing 4' diam. Concrete West side
			36.14	37.80	W.S
			38.4	35.5	bottom

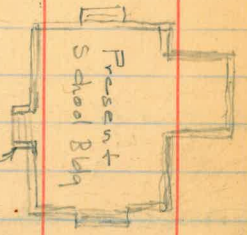
X-Section

Oct. 28-30

43

PQE
J. Salgado

U.S.G.S. BM has been destroyed by having been broke of near ground but the top piece is being kept in the Schoolhouse c/o Janitor who produced the top part and from this temporary connection set BM on wall of steps on East Side of South entrance to new schoolhouse



Bench levels and Well data

Well #3	73.94			
		16.12	57.82	Top of curbing
		32.9	41.0	bottom
		no water		
Well # 4		19.34	54.60	Top of curbing
		32.54	41.40	W.S
		35.1	38.8	bottom
Well #6 Sand Pt.		33.06	40.88	W.S.
		47.86.	26.08	bottom
50×200 Pond S.W of Plant		23.1	50.8	W.S
Small Pond S.E of "		28.1	45.8	W.S

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J. Salgado

Oct. 28-30

3.2 diam Concrete = ground elev.
no Water.

3.2 diam concrete = ground elev.

This pond is used as washing supply - pumps at N.E cor of Plant discharge into this pond making a continuos varying water level - the water level of Pond S.E of Plant is only about 150' from washing supply - and is surely effected by the fluctiation of the former

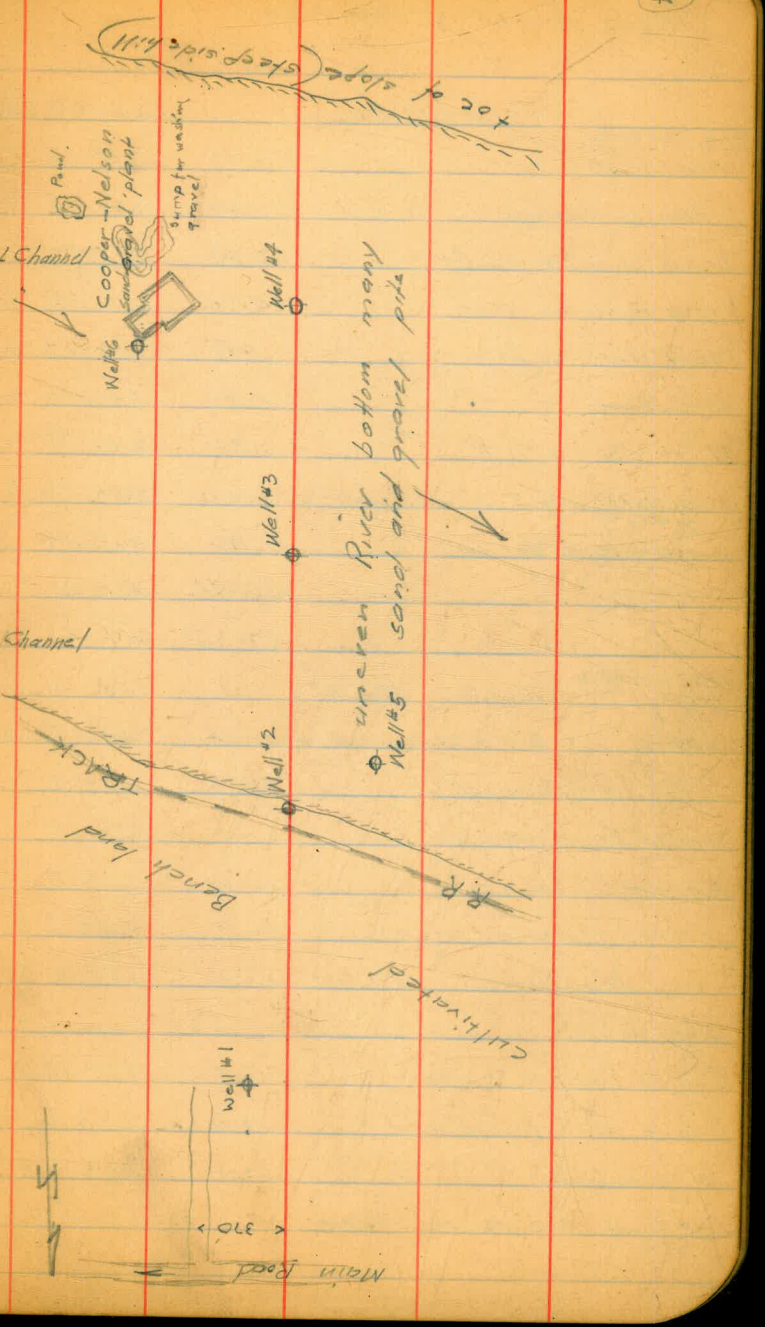
X-Section of Otay Valley

H.I. 72.45

Tat	M. B. of	Time	N 13°30 E	68.18 BM Well #2	
Well #1 =	0 00	(1301) 90°00 Lt	68.18 2.27 72.45	78.7	
Well #2					
645		(10' 90°00 Rt		68.2	
655			6.0	66.4	Top of Bank N.S. of Channel
			17.2	55.2	bottom " " "
Tat Well #5		(425'			
650 P.O.T.		63°40 Rt	15.7	56.7	
Well #3					
10 20		0°00	14.6	57.8	ground el.
Well #4					
15 20		0°00	17.8	54.6	ground el.
1750			19.0	53.5	℄ Main Chan.
1970			14.0	58.5	S.S. bottom "
2000			7.3	65.1	toe of slope
2000			+ 2.5	7.5.	" "
Tat 650 Well #6					
Sand Plant well		(920 36°43 Lt			

Oct. 29-30

(45)



San Dieguito Res. to Lockwood Mesa Res.

Profile of existing Pipe line

	251.82 ✓	16.82		235.00	B.M.
Sta. 0+00					
Wier crest			13.96	237.86	✓
Bottom of Wier box			16.97	234.85	✓
Top of Wier Box Wall			13.00	238.82	✓
Top of Pipe at 0+00			14.50	237.82	✓
Top of Walk at Dam			1.95	249.87	✓
" " Parapet " "			0.90	250.92	✓
" " W.S. " "			3.86	247.96	✓
" " H.W.M. " "			2.12	249.70	✓
2+77					
Standpipe O-A-24"			11.05	240.75	T.P on E.S. ✓
Bottom "			16.98	234.84	✓
W.S. "			12.36	239.46	✓
5+48 - 5+53					
#1	10.52	251.27 ✓		240.75	
Syphon box 5'X3.2'			12.55	238.72	B.M. #1 ✓
W.S. very uneven			16.3	235.0	✓
Top of sand in box			18.15	233.12	✓
Bottom of box			18.30	233.0	✓
invert upstream			16.8	234.5	✓
" downstream			17.1	234.2	✓
Branch Rt					
Top of con. 12" pipe			12.82	238.45	✓
Bot. " " " "			18.2	233.1	✓
" " outtake "			17.5	233.8	✓

bad leak in line 200' ahead

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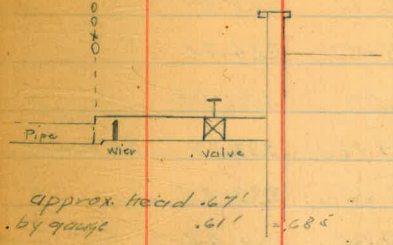
Soper
Rammen

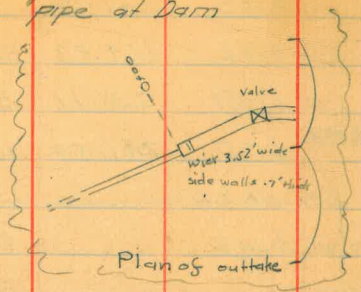
Dec. 4-30

46

from old Profile, invert of 8" pipe at Dam

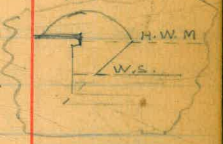


Profile



Plan

This is very close to end of Hood over spillway syphon - 8" of Pipe



Note: there is a measurable leak of 30 gall. per min. at this Dam

1 pin in N-W con of Syphon conc. box on top of wall

5+48.1

blind no connection to date 3" or 4" pipe

	2.30	241.02		238.72	
	0.96	229.83	12.15	228.87	
	11.41	236.11	5.13	224.70	
13+88 - 13+93	6.55	241.60	1.06	235.05	
#1 Syphon Box 5X 3.25'			4.05	237.57	BM #2 = 237.55
invert downstream			8.15	233.45	
Bott. of Box			9.35	232.25	
W.S.			6.90	234.70	
Bott. of outtake 12" pipe			7.9	233.7	
Top of overflow			7.1	234.5	
Bott.			11.6	230.0	
	7.04	244.82	3.82	237.78	
18+00 Standpipe A-1 -24"			7.82	237.00	
W.S			10.82	234.00	
Bott. 22+24 - 22+29			12.01	232.81	
#2 SyphonBox 5X3.23'			7.83	236.99	BM #3
invert upstream			12.33	232.49	
W.S			11.48	233.34	
Bottom of Box			13.67	231.15	
Top of sand in Box			13.47	231.35	
invert downstream			12.23	232.54	
			12.55	232.27	
	0.30	232.57			
	7.27	227.41	12.43	220.14	
	11.81	237.51	1.71	225.70	

1 pin in S-W cor. of Box .11 above top of wall

13+33

on Rt side 35' Rt } Branch

on downstream side

1 pin

leak in Syphon

about 100 ahead a 20' ST. Pipe with valvin bottom elev. of Top of pipe 233.92 bottom 230.8 maybe connected ? but cant see how

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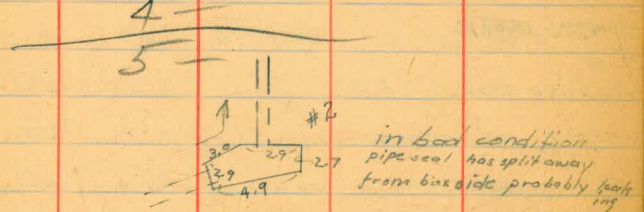
Dec. 5-30

		237.51			
#2 Syphon Box			0.63	236.98	BM.
check levels	11.46	237.23	11.74	225.77	
	9.45	246.13	0.25	236.98	BM
30+10.6-30+16			8.57	237.56	=237.55 =237.57
#3 #2 Syphon Box				236.98	BM
Invert upstream			5.25	231.73	
W.S			4.05	232.93	
Invert downstream			5.20	231.78	
Bott. of Box			6.35	230.63	
	7.03	244.01		236.98	
34+50 Stand pipe	Z-A-24"		6.82	237.19	T.P on upstream side of 24" pipe
Bott.			6.05	231.14	
W.S.			4.81	232.38	
	6.06	243.83	6.24	237.77	
39+04 Stand pipe	Z-B-24"		7.16	236.67	T.P on upstream side
Bott.			5.93	230.74	
W.S			4.83	231.87	
	5.32	237.95	11.20	232.63	
43+13.72 Stand Pipe	Z-C-24"		1.88	236.07	T.P. upstr side
Bott.			5.87	230.20	
S.W.			+1.15	231.35	
#3 Syphon or outtake	see stretch		about 100' downstream from Z-C S.P.		

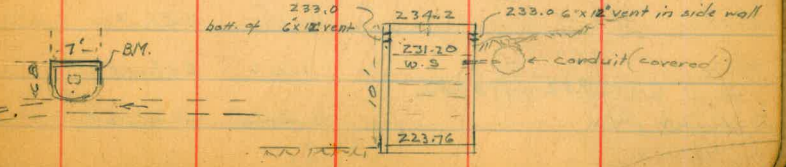
Seems to connect with conduit thru 24" pipe about .4 below W.S. but is inaccessible as opening in top of this box is small and cistern is full of water.

iron pin. find elev in Kiel 237.08 ? Will check back to last BM



in bad condition pipe seal has split away from box side probably leaking

100 upstream from Z-C S.P. probably a leak Willow grows 40' below on otherwise dry side hill - line is exposed here and has been fixed once



		237.95				
47+10.72	5.63	237.79	3.79	234.16	B.M.	on top of Conc. Box N-W cor. see sketch on prec. page
Stand Pipe. Z-D -24			4.14	235.63	T.P. upstream	Note: the owner of the prop. the line passes thru desires to have the wire screen which covers all ST. Ps. recemented as before, as his children go near and might fall in
Bott.			6.0	229.63		
W.S			+1.34	230.97		
50193.72-50198.72	2.62	235.94	6.47	233.32		
#3 Syphon Box 5'X 3.25'			2.39	233.55	BM	1 pin S-W cor.
invert upstream			4.75	229.30		
" downstream			4.50	229.06		
Bott			5.65	227.90		
W.S			3.25	230.30		
Sand in Bott.			5.45	228.40		
54+15.72	12.73	236.00	12.67	223.27		no sign of downstream syphon Box
Stand Pipe - 3 -24"			0.96	235.04	downstream	
Bott.			5.90	229.14		
W.S			+1.06	230.20		
58+07.72	8.21	242.80	1.41	234.59		
Stand Pipe 3-A			8.11	234.69	upstream	
Bott.			6.15	228.54		
W.S.			+1.12	229.66		
61+72.72	5.45	236.99	11.26	231.54		
Stand Pipe 3-B -24"			4.88	232.11	upstream	
Bott.			4.15	227.96		
W.S			+1.22	229.18		
#4 65429.02-65434.02 Syphon Box			4.345	232.145	on top	of wall S-E cor. of Box

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Dec. 5-30

(10)

C5+29.02 - C5+34.02 #4		236.99			
Syphon 5'x 3.25'				232.145	
invert upstream			4.55	227.60	
" down "			4.50	227.65	
Bott.			5.9	226.25	
W.S.			3.7	228.45	
invert of outtake valve				227.85	12" pipe
	11.82	245.99	2.82	234.17	
	0.99	234.57	12.41	233.58	
	10.12	231.72	12.97	221.60	
left BM 73+26.22	12.76	240.04	4.44	227.28	B.M. nail
Stand Pipe 4			7.20	232.84	upstream
Bottom			6.06	226.78	
W.S.			+1.05	227.83	
77+64.72	2.99	239.07	3.96	236.08	
Stand Pipe 4-A -24"			6.48	232.59	upstream
Bott			6.34	226.25	
W.S. 81+76.92 - 81+81.92 #5			+1.13	227.38	
Syphon Box 5'x 3.23'			7.14	231.93	N.W. cor
invert upstream			6.15	225.78	
" down "			6.15	225.78	
Bott.			7.6	224.3	
W.S			+2.3	226.6	
Sand			7.5	224.4	
Stand Pipe of Branch 30' S-E			8.83	230.24	

outtake with Valve inside of Syphon Box.
line goes thru deep Canyon turning on Contour

in RP. 50 back and 30 Rt of Stand Pipe 4 = S.S. of Syphon
no Box at S.S. of this Syphon

(60' back and 30' Rt Valve stem potrudes above gr. 234.

Conduit contin.

	Z 39.07			
first Pipe				
Branch outtake			Z 30.24	
W.S		4.8	225.4	
Bott.		8.75	221.49	
second Pipe				
Top of standpipe		0.85	229.39	
overflow		3.7	225.4	X
W.S.		5.4	224.8	
Bott.		8 2	221.4	
invert of outtake #2				
in second ST.P.		5.4	224.8	
	12.34	239.62		Z 27.28 BM on P.P.
	1.27	230.80	10.09	229.53
	2.34	221.17	11.97	218.83
	3.17	211.72	12.62	208.58
	0.54	199.40	12.86	198.86
	3.73	190.99	12.14	187.26
	12.96	203.59	0.36	190.63
	12.49	213.74	2.34	201.25
	12.35	225.98	0.11	213.63
	12.14	237.86	0.26	225.72
	4.48	236.54	5.8 0.	232.06
105+49.98				
Stand Pipe	#5 = S. end of Syphon #5		5.65	230.89 upstream
	Bott.		7.14	223.75
	W.S		+1.21	224.96
invert of 24" Pipe crossing Conduit at Rt angles				
100' South of ST.P. #5			7.20	229.24
			2.4	226.8 bottom of

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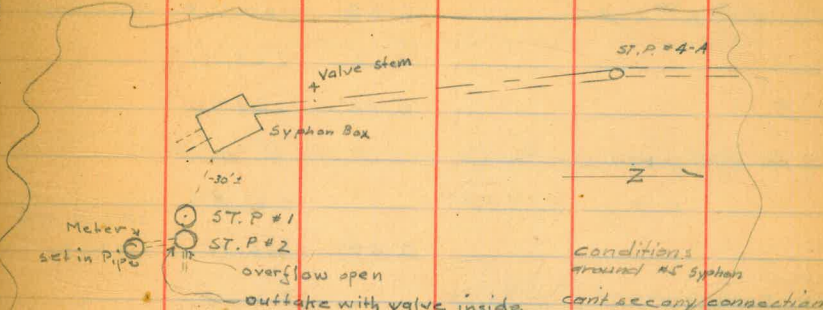
Dec. 5-30

(41)



Conditions around #5 Syphon
cant see any connection to the City Pipe for the two ST. Ps shown

swinging around deep wide valley

Well in front of begin. of Pipe = bott. of Weir

108+30±		236.54 ✓			
Stand Pipe #5-A			5.36	231.18 ✓	upstream
Bott.			7.67	223.51	
W.S			C.40	224.78	
tie to B.M given by P. Valley					
	6.10	237.28 ✓		231.18	
			0.97	236.31 ✓	S.F. Ranch B.M. = 236.35
110+13.28 - 18.28 #6	3.91	235.09 ✓		231.18	
Syphon Box 4.75'×2.75'			5.74	229.35 ✓	on N-W cor
invert upstream			C.05	323.30	
" down "			6.25	323.10	
Bottom			7.50	221.85	
W.S			+2.50	224.35	
Stand Pipe 18" 2' east					
Top.			7.54	227.56 ✓	
Bot.			5.5	222.06	
W.S.			3.5	224.06	
113+51.58 #6	10.38	234.46 ✓	11.01	224.08 ✓	
Stand Pipe 24"			4.72	229.74 ✓	upstream
Bott.			C.9	222.8	
W.S. unknown			+1.15	223.90	
~~118+00.88~~ C-A Stand Pipe			4.11	230.35 ✓	upstream
Bott.			7.87	222.48	
W.S			+1.12	223.60	
	4.26	235.03 ✓	4.29	230.17 ✓	

R.A.G.
Soper
Remmen

Dec. 6-30

(52)

one E. Side of Highway this should be covered tight as road fill is within a few inches of top of Manhole or Pipe

nail in T.P. N.S. of Pav. Str. 10' west & 10' N. of first driveway east of Pump Sta No 1

Dec. 6
Dec. 11 '30

Valve in Pipe line out side of Syphon Box on downstream side

no connection visible with conduit

W.S. raises and lowers 2.3 continually

P.O.G.
Saper
Remmen

Dec. 11-30

(43)

118+00.88 #7		235.03			
Syphon ST. Pipe	24"		3.96	231.07	upstream
Batt			rod to short		
W.S			7.83	223.24	
119+83.08 #7					
Stand Pipe	24"		5.94	229.09	
Batt.			7.00	222.09	
W.S.			+1.0	223.1	
121+92.58 Syphon #8	6.05	230.16	10.92	224.11	
ST. Pipe	24"		1.22	228.94	upstream
Batt.			7.15	221.79	
W.S.			+1.05	222.84	
122+90.28 #8					
ST. Pipe	24"		1.58	228.58	upstream
Batt			6.8	221.78	
W.S.			+1.05	222.83	
125+81.68 #9	5.19	230.37	4.98	225.18	
Syphon Box 5'x2.7'			2.91	227.46	NE cor
invert upstream			6.08	221.38	
" down "			6.10	221.36	
Batt.			7.30	220.16	
W.S.			5.29	222.17	
Out take invert of Branch or drain valve inside Box			4.5	223.0	Left side
	9.88	233.77	6.48	223.89	
Syphon #9 131+33.28	6.77	240.33	0.21	233.56	
ST. Pipe			12.61	227.72	upstream
Batt.			7.00	220.7	
W.S			+1.08	221.8	

R.O.G. Soper Remmen

Dec. 11-30

54

		240.33			
	2.32	229.85	12.80	227.53	
Lt Branch ST. Pipe		30"	3.37	226.48	upstream
Bott.			7.0	219.48	
W.S			4.95	221.53	
invert of outtake			6.8	219.7	
Valve outside					
#10 134+70.38 Syphon Box 5.x 2.75			2.74	227.1.1	S-E corn
invert upstream			6.9	220.20	
" down "			6.9	220.2	
Bottu			8.2	218.9	
W.S			5.65	221.46	
	0.60	217.63	12.82	217.03	
	0.48	205.46	12.65	204.98	
	0.92	193.58	12.80	192.66	
	1.79	182.77	12.60	180.98	
	8.37	185.10	6.04	176.73	
	12.94	185.84	12.20	172.90	
	12.49	197.91	0.42	185.42	
	12.69	210.15	0.45	197.46	
	9.86	219.94	0.07	210.08	
141+69.68 #10 28 11	10.15	229.63	0.46	219.48	
Syphon Box 5.x 2.75			4.57	225.06	nail in S-W cor.
invert upstream			4.95	220.11	
" down "			5.05	220.01	
Bott			6.4	218.66	
W.S			4.15	220.91	

8.12
6.40
1.72

143+12.	3.89	228.95		225.06	nail in S-W cor Box #10
Syphon #11					
ST. Pipe 24"			2.43	226.52	fd T.P. marked 223.02 = 226.95 S.78 223.17 our elev.
Bott			7.0	219.52	
W.S			+1.34	220.86	
#12 144+46 N					
Syphon Box			4.42	224.53	N-E cor This Box is only up to ground level - form is set
invert upstream			9.5	219.45	for Box and conc. material is scattered over
" down "			9.55	219.40	side hill.
Bott.			10.9	218.05	
W.S.			8.45	220.50	
lowest part of form			2.65	226.30	to which wall will be brought more or less
#12 148+06 N					
ST. Pipe 24"			2.62	226.33	
Bott.			7.4	218.93	bad leak at bott. of Syphon 12
W.S			+1.4	220.33	
	228	228.61		226.33	
#13 151+21 N					
Syphon Box 5x2.7			3.14	225.47	N-W cor
invert upstream			6.95	218.52	
" down "			6.95	218.52	
Bott.			8.40	217.07	
W.S.			6.00	219.47	
Branch outtake invert 4" pipe Lt			14.85	213.76	valve out side of 30" ST. Pipe
			11.25	217.36	
	9.48	227.24			leak at bott of Syphon #13
			12.70	214.54	B.M
	7.38	234.10	0.52	226.72	
	12.44	244.94	1.60	232.50	

P.O.G.
H. Soper
A.L. Ramaker

Dec. 12

VI

San Dieguito - Lockwood Mesa cont'm

		Z44.94		
167+19.5 #13 Syphon	0.38	Z34.02	11.30	Z33.64
ST. Pipe	24"		10.15	Z23.87 upstream
Bott			6.94	Z16.93
W.S.			+1.58	Z18.42
Lt Branch ST. Pipe			10.64	Z23.38
Bott			7.00	Z16.38
W.S			5.03	Z18.35
	3.94	Z25.36	12.60	Z21.42
171+25.5 S.T. Pipe	24"		1.18	Z24.18
Bott			7.62	Z16.56
W.S.			+1.50	Z18.12
175+15.5 St. Pipe	24"		2.42	Z22.94
	1.17	Z24.11		
Bott			6.85	Z16.09
W.S.			+1.54	Z17.63
Lt Branch ST.P.	30"		1.10	Z23.01
Bott.			7.4	Z15.6
W.S.			5.5	Z17.5
178+65.5 #14	6.97	Z23.45	7.63	Z16.48
Syphon Box 5'x 2.90'			1.53	Z21.92 nail in S-W
invert upstream			6.22	Z15.70
" down "			6.22	Z15.70
Bott.			7.72	Z14.20
W.S.			4.76	Z17.16
Lt Branch ST. Pipe		overflow lip	3.10	Z20.35
Bott			8.52	Z14.93
W.S.			6.30	Z17.15

D.O.G
A. Soper
A.L. Remmen

Dec. 12-30

Valve must be outside no outtake visible

cor = Z21.70 as marked (did not change elev.

San Dieguito - Lockwood Mesa contin.

		223.45		
	12.34	231.92	3.87	219.58
185+47.9 #14	2.41	221.93	12.40	219.52
ST. Pipe	24"		1.00	220.93
Bott.			5.84	218.10
W.S.			+1.60	216.7
188+36.4 #15	4.99	223.62	3.30	218.63
Syphon Box	5'x2'7"		4.06	219.56 nail in N-E cor.
invert upstream			4.85	214.71
" down	"		5.20	214.36
Bott.			6.26	213.30
W.S.			+3.10	216.4
			~~7.19~~	~~216.45~~
191+86.9 #15	7.17	226.73		219.56
ST. Pipe	24"		6.90	219.83
Bott.			5.67	214.16
W.S.			+1.92	216.08
15-A 193+30±				
ST. Pipe	24"		6.73	220.00
Bott.			5.80	214.20
W.S.			+1.83	216.03
	11.09	232.59	5.23	221.50
	10.02	239.35	3.26	229.33
	12.78	251.76	0.37	238.98
	0.38	250.87	1.27	250.49
	0.43	238.46	12.84	238.03
	1.12	226.89	12.69	225.77

P.O.G.
M. Soper
A.L. Remmen

Dec. 12-30

47

from Profile 193+35.9 Portal
upstream Tunnel entrance (Tunnel closed)
197+44.9 Portal

San Dieguito - Lockwood Mesa Contin.

		226.89		
	6.83	221.81	11.91	214.98
198+22.6 #16	3.21	221.21	3.81	218.00
Syphon Box 5'x 2.87'			1.10	220.11 Nail in SE cor
invert upstream			6.46	213.66
" down "			6.45	213.66
Both			7.8	212.3
W.S. #16 200+21.4			4.7	215.4
ST. Pipe 24"			1.82	219.39
Both			5.79	213.60
W.S.			+1.72	215.32
203+21.9	3.01	221.01		218.00
ST. Pipe 24"			2.02	218.99
Both			5.72	213.27
W.S.			+1.85	215.12
206+46.9 #17	10.24	227.00	4.25	216.76
Syphon Box			9.13	217.87 N.E. cor
invert upstream			4.93	212.94
" down "			4.95	212.92
Both			6.27	211.60
W.S.			3.07	214.80
209+78.9 #17	3.97	221.84		217.87
ST. Pipe 24"			3.72	218.12
Both			5.15	212.97
W.S.			+1.61	214.58

P.O.C
H. Soper
A.L. Ramirez

Dec. 12-

(18)

Dec. 12
13

cold-foggy-clammy!

downstream pipe split of from side of Box

Bottom of Syphon leaking

San Dieguito - Lockwood Mesa, contin.

		221.87		
213+10 ±				
ST. Pipe 24"			3.70	218.14
Bott.			5.70	212.44
W.S.			+1.77	214.21
Lt Branch				
ST. Pipe 30"			2.94	218.90
Bott.			7.12	211.78
W.S.			4.77	214.13
	10.51	226.77	5.58	216.26
216+50 ±				
ST. Pipe 24"			8.85	217.92
Bott.			5.64	212.28
W.S.			+1.41	213.69
#18 219+90				
Syphon Box 5.0 x 2.9'			8.51	218.26 rail in NE cor.
invert upstream			6.34	211.92
" down "			6.90	211.36
Bott.			7.90	210.36
W.S.			5.15	213.11
	7.74	225.42	8.56	218.21
			-2.43	222.99
	+10.57	233.56	-6.78	226.78
	+ 4.16	230.94	-10.14	220.80
	+ 8.17	228.97	- 9.81	219.16
	+ 3.72	222.88	- 8.91	213.97
229+51.5 #18	11.92	225.89		
ST. Pipe 24"			10.07	215.82
Bott.			5.02	220.80
W.S.			+3.11	213.91 ? this dont look right but has been checked

P.O.G.
H. Soper
At. Remmen

Dec. 13-30

(59)

Valve out side

Grading Radius Return at Head of Banyo of Road

Dec. 13

Dec. 15

San Diguito – Lockwood Mesa contin.

			225.89		
1	234+22.5	1.67	219.48	8.08	217.81
	#18-A				
	ST. Pipe	24"		3.12	216.36
	Both.			5.90	210.46
	W.S. 237+52±			+3.16	213.62
	#18-B				
	ST. Pipe	24"		3.54	215.94
	Both.			5.85	210.09
	W.S.			+3.19	213.28
	241+22.5	4.14	218.41	5.21	214.27
	#18-C				
	ST. Pipe	24"		2.76	215.65
	Both.			6.00	209.65
	W.S.			+3.38	213.03
1	245+72.5	12.76	223.82	7.35	211.06
	#18-D				
	ST. Pipe	24"		8.42	215.40
	Both.			6.00	209.40
	W.S 250+22.5			+3.20	212.60
	#18-E				
	ST. Pipe	24"		8.85	214.97
	Both.			6.00	208.97
1	W.S 254+22.5			+3.23	212.20
	#18-F				
	ST. Pipe	24"		9.39	214.43
	Both.			5.86	208.57
	W.S			+3.34	211.91
		4.27	218.70		214.43
	258+52.5	9.92	224.02	4.60	214.10
	#18-G				
	ST. Pipe	24"		10.06	213.96
	Both.			5.92	208.04
	W.S.			+3.57	211.61

P.O.C. –
H. Soper
AL. Remmen

Dec. N-30

(60)

outside of Eucs-forest thank the Lord!!

in Avocado orchard

San Dieguito - Lockwood Mesa

261+72.5 #18-H		224.02		
S.T. Pipe	24"		10.13	213.89
Bott.			5.92	207.97
W.S.			+3.45	271.42
265+22.5 #19	4.66	220.12	8.56	215.46
Syphon Box			5.68	219.44 = 219.27
266+26.5 #19				
S.T. Pipe	24"		5.69	214.43
Bott.			6.93	207.50
W.S. 270+5.76 #19-A			+3.50	211.00
S.T. Pipe	24"		4.71	215.41
Bott.			8.10	207.31
W.S.			+3.24	210.55
275+72.5 #19-B	12.00	223.59	8.53	211.59
S.T. Pipe	24"		10.92	212.67
Bott.			6.00	206.67
W.S.			+3.55	210.22
279+34. #19-C	11.76	224.43		212.67
S.T. Pipe	24"		12.21	212.22
Bott.			5.82	206.40
W.S. 283+64 #19-D			+3.55	209.95
S.T. Pipe	24"		12.44	211.99
Bott.			6.03	205.96
W.S			+3.59	209.55
	13.00	224.99		211.99
	12.66	237.26	0.39	224.60

P.O.G.
H-Soper
A.L. Rominger

Dec. 15-30

(21)

as marked on S-E cor of Box lid is held on by @ lock did not change

a house is being built over the conduit 100' post #19-A

East Portal 285+11

This is the East end of Tunnel #2 but nothing to indicate the existence of one all the spoil has been graded down and trees set out Orchard ends about 200' east of West Portal

West Portal 294+17

San Dequito - Lockwood Mesa cont'd

P.O.G.
H. Soper
A.L. Remmen

Dec 14-30

62

		237.26 ✓			
	12.20	249.12 ✓	0.34	236.92 ✓	
	12.19	260.91 ✓	0.40	248.72 ✓	
	3.36	263.94 ✓	0.33	260.58 ✓	
	0.38	251.58 ✓	12.74	251.20 ✓	
	0.81	239.59 ✓	12.80	238.78 ✓	
	0.93	227.56 ✓	12.96	226.63 ✓	
295+44.0 #19-E	6.21	221.28 ✓	12.49	215.07 ✓	
S.T. Pipe	24"		8.16	213.12 ✓	
Bott.			7.93	205.19 ✓	
W.S. #19-F 298+89.0			+3.50	208.69 ✓	
ST. Pipe	24"		10.55	210.73 ✓	
Bott.			5.76	204.97 ✓	
W.S. #20 302+76.			+3.30	208.27 ✓	
Syphon Box S. X 2.8'			11.75	209.53 ✓	1 pin in S.E. cor
Invert upstream			4.77	204.76 ✓	
" down "			4.83	204.70 ✓	
Bott.			6.03	203.50 ✓	
W.S.			1.53	208.00 ✓	W.S. Surface varys constantly about .1'
305+12. #20	12.22	221.75 ✓		209.53 ✓	
ST. Pipe	24"		11.29	210.46 ✓	
Bott.			5.85	204.61 ✓	
W.S. #21-307+21.			+3.07	207.68 ✓	
Syphon Box S x 2.8'			12.41	209.34 ✓	Nail in S-E cor
Invert upstream			4.84	204.50 ✓	
" down "			4.98	204.36 ✓	

San Diquito - Lockwood Mesa cont'in.

P.O.S.
H. Soper
A.L. Remmen

Dec. 15-30

(23)

307+21.		221.75 ✓		
#21				
Syphon Box			209.34 ✓	
Bott.		- 6.05	203.30	
W.S		1.80	207.54	
311+13.5	4.16	213.50 ✓	209.34 ✓	
#21.				
ST. Pipe 24"		2.13	211.37 ✓	
Bott.		7.10	204.27	
W.S. #22 - 315+CA.75		+2.87	207.14	
		10.86		
Syphon Box	218.93 ✓	5.43	208.07 ✓	
#21-A unknown, about in middle between 21 & 22				
ST. Pipe		8.89	210.04 ✓	
Bott.		5.89	204.15	
W.S.		+2.40	206.55	
#22 315+64.75				
Syphon Box 5x2.9 ✓			208.07	i.p. in S-E cor.
invert upstream		4.17	203.90	
" down stream		4.32	203.75	
Bott.		5.62	202.45	
W.S.		1.72	206.35	
#22 318+92.5				
ST. Pipe 24"		9.96	208.97 ✓	
Bott.		5.16	203.81	
W.S.		+2.27	206.08	
#23 321+15.7				
Syphon Box 5x2.99		10.13	208.80 ✓	N-E cor.
invert upstream		5.07	203.73	
" down "		5.28	203.52	
Bott.		6.45	202.35	
W.S.		2.88	205.92	
452	213.69 ✓	9.76	209.17 ✓	

Dec. 4 16

San Dieguito - Lockwood Mesa — Contin.

P.O.G. H. Soper Alt. Remmen — Dec. 16-30 — (64)

		213.69			
336+88.0	12.27	216.28	9.68	204.01	
#23 St. Pipe 24"			8.45	207.83	
Bott.			4.98	202.85	
W.S.			1.93	204.78	
	9.36	224.45	1.19	215.09	
341+39	7.55	219.29	12.71	211.74	
#23-A St. Pipe 24"			11.12	208.17	
Bott.			5.68	202.49	
W.S.			+1.87	204.36	
#23-B 345+14 St. Pipe 24"			11.18	208.11	
Bott.			5.83	202.28	
W.S.			+1.85	204.13	
#24 349+33 Syphon Box 4.9 X 2.9'			12.61	206.68	ir. bolt in N-E cor
invert upstream			4.60	202.08	bad leak below inlet
" down "			4.65	202.03	
Bott.			5.53	201.15	
W.S. Branch line ?	8.01	214.69	2.80	203.88 / 206.68	
St. Pipe 30"			7.50	207.20 / 199	to L.t of Syphon Box #23
Bott.			8.59	198.60	what is ix ?
W.S.			+5.20	203.80	
#24 350+55 St. Pipe 24"			7.69	207.00	
Bott.			4.97	202.03	
W.S.			+1.68	203.71	
#24-A 352+64 St. Pipe 24"			7.06	207.63	
Bott.			5.87	201.76	
W.S.			+1.76	203.52	

San Dieguito – Lockwood Mesa

cont'd.

P.O.G.
H. Sopher
A.L. Remmen

Dec. 16-30

65

		214.69			
1355+13.5	4.96	211.44	8.21	206.48	on Top of Conc. Wall of Lockwood Mesa Reservoir
invert of pipe at discharge			9.80	201.64	
W.S.			8.28	203.16	
Crest elev. of overpour wier			8.95	202.49	
Top of Wall of Wier Box ext. into Res.			7.90	203.54	width of Wier 2.98
W.S. in Res. 12 p.m.m			10.54	200.90	
5' x 2.75' Box on Ht side of Res - on W. Side					
Top of wall			5.83	205.61	
invert of 18" pipe ext. into box			9.83	201.61	This box has a valve inside
Bott.			11.44	200.00	

End of line

Total of 85 Structures

Elevs. of W.S. cats over the same line May 26 - June 5

	Time	Elev. of B.M.	700 .685	W.S. Sq. Ft. = 6.76		Batt. = 4.36 m.g.		
1 Bear Diequito gage								
O-A	7.15 AM 8.40	240.75	+1.93 36.27	+1.43 36.26	6.92	34.83	= 34.84	just rewind .28 ✓
N-#1		238.72	-3.56 35.16	2.00 35.15	5.57	33.18	? = 33.00	
S-#1		237.57	-2.50 35.07	2.87 ~~34.57~~ 35.10	5.47	32.10	? = 32.25	
A-1		237.00	+1.56 34.47	+1.56 34.46	4.09	32.91	? ~~32.81~~	this is too low dirt entering
N-2		236.99	3.20 33.79	+2.80 33.63	5.83	31.13	= 31.15	
W-2		236.98	-3.58 33.40	r2.71 33.43	6.30	30.68	= 30.63	
2-A		237.19	+1.69 32.89	+1.63 32.78	6.04	-31.15	= 31.14	
2-B		236.67	+1.48 32.17	+1.55 32.22	5.98 .69 6.00	30.67	? = 30.74	
2-C		236.07	+1.60 31.77	+1.69 31.84	5.89 30.17 5.92	-30.15	= 30.20	
2-D		235.63	+1.62 31.25	+1.72 31.35	6.00	-29.63	= 29.63	
E-3		233.55	-2.70 30.85	+2.70 30.70	5.55	28.00	? = 27.90	
W-3		236.04	+1.56 30.70	+1.75 30.59	5.90	29.14	= 29.14	
3-A	8.05 am	234.69	+1.82 30.41	+1.50 30.09	6.10	-28.59	~~= 28.54~~	
3-B		232.11	+2.12 30.12	+1.50 29.51	4.10	-28.01	= 27.96	
E-4		232.14	-2.20 29.94	+2.50 28.83	5.81	26.33	= 26.25	
W-4		232.84	+2.73 29.48	+1.52 28.26	6.10	26.74	= 26.78	
4-A		232.59	+3.10 29.31	+1.49 27.82	~~6.08~~ 6.08 ~~6.26~~	26.21 26.33	? = 26.25	
E-5	8.20 am	231.93	-2.95 28.98	+2.40 26.78	~~7.50~~ 7.45	24.33 ~~24.38~~	? = 24.30	
W-5		230.89	+4.18 27.93	+1.73 25.51	7.11	23.78	= 23.75	
5-A ?		230.89	+4.18	+4.04 28.95	5.98	24.91	gage .215	? throw out
5-B		231.18	+4.18 27.68	+1.81 1.93 25.31	7.68	22.50	= 23.51	
E-6		229.35	-1.98 27.37	+2.80 24.76	~~7.40~~	21.95 ✓	? = 21.85	
W-6		229.74	+4.19 27.04	+1.51 24.36	6.89	22.85 ✓	= ~~22.80~~	O.K. Water leaking thru box
6-A		230.35	+4.26 26.89	+1.60 ~~28.33~~ 24.08	7.81 8.62	22.54 ~~21.73~~	? = 22.48	?

	Sc F	M.G.
C80 =	6.70	4.31
C85		
490 =	6.82	4.40

Elev. of W.S. determination contin.

June 5th

May 25-31

	Time	Elevi			W.S.		Both.		
E-7		231.07	-1.38	26.69	7.05	=224.02		to short	
W-7		229.09	+4.38	26.38	+1.65	23.74	7.00	22.09	=22.09
E-8		228.94	+4.50	26.34	+1.63	23.97	7.10	21.84	=21.79
W-8		228.58	-2.40	26.18	+1.45	23.19	6.84	-21.74	=21.78
E-9		227.46	-1.56	25.90	+2.41	22.57	7.80	20.16	=20.16
W-9		227.72	+4.69	25.37	+1.78	22.48	7.01	20.70	=20.7
E-10		227.11	-2.01	25.10	+2.60	21.66	8.05	19.06	=18.90 ? ? 1" stand pipe wasting full stream
W-10 & 11		226.98 1.38 225.06	-2.12	24.66	+2.34	19.40	8.00	17.06	? ? ? =18.66 box raised 1.7'
W-11		226.52	+4.94	24.44	+1.95	20.95	7.02	19.50	=19.52
E-12		226.28 ~~224.63~~	+6.33	24.38	+2.62		8.25	218.05 Both over	=in N-E cor. newly raised box old BM destroyed 218.05 8.23 226.28 18.05 4.33 24.38
W-12	9.17 am	226.39	+5.20	24.11	+1.96	20.59	~~7.20~~ 7.42	18.91 19.13	? =18.53 ? leaking at new joint
E-13		225.47	-1.60	23.87	+2.~~74~~	19.71	8.20	17.27	? 17.07 ? " "
W-13		223.87	+5.52	22.47	+1.59	218.54	6.92	216.95	=16.93
13-A		224.18 ~~224.42~~	+5.59	22.14	+1.71	18.26	7.63	16.55 16.79	? =16.56 ?
13-B		222.94	+5.49	21.59	+1.65	217.77	6.82	216.18	=16.09 leating
E-14		224.92	-.69	21.23	+3.20	17.50	7.62	14.30	? ? =14.20 raining! standpipe discharging
W-14		220.93	+5.50	20.60	+1.87	16.97	5.83	15.10	=15.10
E-15		= ~~224.56~~ 221.47 now	-1.12	20.35	+3.45	16.76	8.15	13.31	? =13.30 ? ? Wheel has been raised 1.9'
W-15		219.83	+0.07	20.0	+2.26	16.43	5.66	-14.17	=14.16 running over
15-A		220.00	+5.58	19.78	+2.18	16.38	5.80	14.20	=14.20 E-S. Tunnel
16-E		220.11		19.40	+3.64	15.94	7.81	-12.30	=12.30 0.5 " " W.S. has been .1 higher Both. 21-2.30 9.80 222.80 Top of Box
W-16		219.39	= ±		+2.21	15.80	5.80	-13.59	=13.60 new ext.
16-A		218.99	= ±		+2.32	16.57	5.75	13.24	=13.27
E-17		~~217.87~~		18.48	+3.52	15.196	7.20	-11.67	=11.60 ? W.S. has been .18 higher 11.60 6.85 18.45 Both 21.60 8.20 19.80 Top
W-17		218.12	+.10 ±	18.20	+1.96	17.93	5.15	-12.97	=12.97

W.S. determination contin.

June 5th

	Time	Elev			W.S	Bott	
17-A		218.14	- 0.2 ±	17.9	+2.66 14.49	5.70	- 12.44
17-B		217.92	+4.95	17.25	+1.77 14.07	5.62	- 12.30
E-18	10.30	~~218.20~~		16.73	+3.23 213.76	2.23	210.53
W-18		~~218.9 ±~~ 215.82	+5.13	15.92	+2.20 213.00	5.02	210.80
18-A		216.36	- 1.80 ±	15.36	+2.22 12.63	5.95	- 10.41
18-B		215.94	- 0.9 ±	15.0	+2.20 12.29	5.85	- 10.09
18-C		215.65	- .09 ±	14.7	+2.36 12.00	6.01	- 9.64
18-D		215.40	- 1.1 ±	14.3	+2.22 11.61	6.01	- 9.39
18-E		214.97	- 1.2 ±	13.8	+2.23 11.20	6.03	- 8.97
18-F		214.43	- 1.1 ±	13.3	+2.35 10.88	5.90	- 8.58
18-G		213.96	- 1.1 ±	12.9	+2.51 10.55	5.92	- 8.04
18-H		213.89	- 1.2 ±	12.7	+2.44 10.38	5.95	- 7.94
E-19	12.35 P.M 1.10 P.M	214.44		12.97	+3.60 - 10.10	7.94	- 6.50
W-19		214.43	- 2.2 ±	12.2	+2.51 9.92	7.02	- 7.41
19-A		215.41	- 3.6 ±	11.8	+2.15 - 9.61	7.95	- 7.46
19-B		212.67	- 1.5 ±	11.2	+2.60 - 9.26	6.01	- 6.66
19-C		212.22	- 1.3 ±	10.9	2.60 - 9.02	5.80	- 6.42
19-D		211.99	- 1.5 ±	10.5	+2.65 - 8.60	6.04	- 5.95
19-E	11.25 am	213.12	- 3.5 ±	9.6	+2.58 7.78	7.92	205.20
19-E again	12.42 pm				+2.62 7.82	7.92	5.90
19-F		210.73	- 1.6 ±	9.1	+2.64 - 7.62	5.75	- 4.98
E-20		~~211.45~~ ~~209.55~~	- 2.62	8.83	+3.67 - 7.13	6.07	- 3.46
W-20		210.96	- 2.0 ±	8.5	+2.36 6.98	5.82	- 4.62
E-21		211.39 ~~209.94~~	- 3.00	8.39	+3.55 - 6.89	6.00	- 3.34
W-21		211.27 ~~209.34~~	- 3.4 ±	7.9	+2.25 6.49	7.10	- 4.17

May 25-31

= 12.44

= 12.28

leaking small stream

10.36 Bott. 210.36
6.34 2.60
12.71 214.96 Top.

? = 10.36

= 10.80

= 10.46

= 10.09

= 9.65

= 9.40

= 8.97

= 8.57

= 8.04

= 7.97

Knocked the lid of this time.

6.50 Bott. 206.50
5.93 9.80
12.47 216.30 Top

? = 7.50

? = 7.31

= 6.67

= 6.40

= 5.96 E end Tunnel

= 5.19 W end "

= 4.97

= 3.50 Top of Form above B.M. 1.92'

209.53
1.92
211.45 Top

= 4.61

= 3.80 Top of Form 205 above B.M.

= 4.27

Determination of W.S. Contin

				W.S.		Bott.	
Z1-A		210.09	+3.60	7.76	+2.18	6.34	5.88 -4.16
E-22		208.07		7.45	+3.61	-6.13	5.55 -2.58
W-22		208.97	+3.36	7.18	+2.05	-5.87	5.15 -3.82
E-23		208.80		6.75	+3.31	-5.73	6.38 -2.42
W-23		209.83	-2.03	5.80	+1.95	-4.78	5.00 -2.83
23-A		208.17	-2.9 ±	5.3	+1.86	-4.33	5.70 -2.47
23-B		208.11	-3.2 ±	4.9	+1.77	-4.07	5.81 -2.30
E-24		206.68		4.55	+2.70	-3.84	5.54 -1.14
W-24	June 5th 2.30 p.m	207.00	-2.8 ±	4.2	+1.65	3.70	4.95 2.05
24-A	1.30 p.m.	207.63	-3.6 ±	4.0	+1.78	03.53	5.85 201.78

Sc.Ft m.g.
gage at Lockwood Mesa 6.55 = 5.46 = 3.52 m.g.

W.S. in Lockwood Res. 0.3 over Top of Weir box elev. 203.54
+ 0.30
203.84 = W.S. of Res

= 4.15
? = 2.45
= 3.81
? = 2.35
= 2.85
= 2.49
= 2.28
= 1.15
= 2.03
= 1.76

2.45 Bott. 202.45
5 7.65
7.45 210.10 Top

2.35 Bott. 202.35
4.50 8.35
6.75 210.70 Top

1.15 Bott. 201.15
3.40 7.15
4.55 208.30 Top
leaking

	Sc Ft	M.G.
C50 =	5.40	3.48 =
C60 =	5.53	3.57

6.76 4.36
5.46 3.52
1.30 = .84

S.F.R. Co draft 0.90 Sc Ft May 25

then: 6.76 Sc Ft at S.Digi.
5.46 " " Lockwood
1.30
- 0.90 " " S.F.R.Co
1033 .40

	+	H.I.	−	ELEV.	
HODGES RESERVOIR – SAN PASQUAL VALLEY LANDS – TRACING					
B.M.	S.D. AQUEDUCT CHAMBER STA 746+57			440.67	IRON PIN IN TOP OF BOX
	+0.54	441.16			
T.P.			-1.12	440.04	ROCK IN PVMT.
	+12.35	452.39			
T.P.			-0.25	452.14	ROCK.
	+8.84	460.98			
T.P.			-12.40	448.58	ROCK IN PVMT
	+0.04	448.62			
T.P.			-12.99	435.63	ROCK IN PVMT
	+1.76	437.39			
T.P.			-12.31	425.08	ROCK IN PVMT.
	+0.53	425.61			
T.P.			-13.02	412.59	ROCK IN PVMT
	+0.83	413.42			
T.P.			-8.08	405.34	ROCK IN PVMT
	+1.61	406.95			
T.P.			-12.06	394.89	ROCK IN PVMT
	+8.75	403.64			
T.P.			-8.64	395.00	HUB SET ON CONTOUR
	+3.57	398.57			
T.P.			-11.38	387.19	ROCK
	+11.81	399.00			
T.P.			-4.00	395.00	HUB SET ON CONTOUR
	+9.67	404.67			
T.P.			-7.72	396.95	ROCK

COOL, CLOUDY. MAY 25, 1948 LEONARD, NIENOW, SHIPMAN (70)

	+	H.I.	−	ELEV.	
395 FT. CONTOUR THRU FREDRICK M. WHITE LAND, TRACT #38.					
T.P.				396.95	
	+6.12	403.07			
T.P.			-5.45	397.62	ROCK
	+4.87	402.49			
T.B.M.			-6.12	396.37	TOP RISER ON IRRIG. LINE.
	+10.21	406.58			
T.P.			-0.75	405.83	
	+10.35	416.18			
T.P.			-0.18	416.00	
	+10.81	426.81			
T.P.			-0.23	426.58	
	+12.50	439.08			
T.P.			-0.67	438.41	
	+9.66	448.07			
T.P.			-0.95	447.12	
	+11.21	458.33			
T.P.			-0.62	457.71	
	+10.61	468.32			
T.P.			-12.41	455.91	
	+0.56	456.47			
T.P.			-12.70	443.77	
	+0.36	444.13			
T.P.			-5.25	438.88	
	+2.84	441.72			
CHECK B.M.			-1.03	440.69	= RECORD 440.62

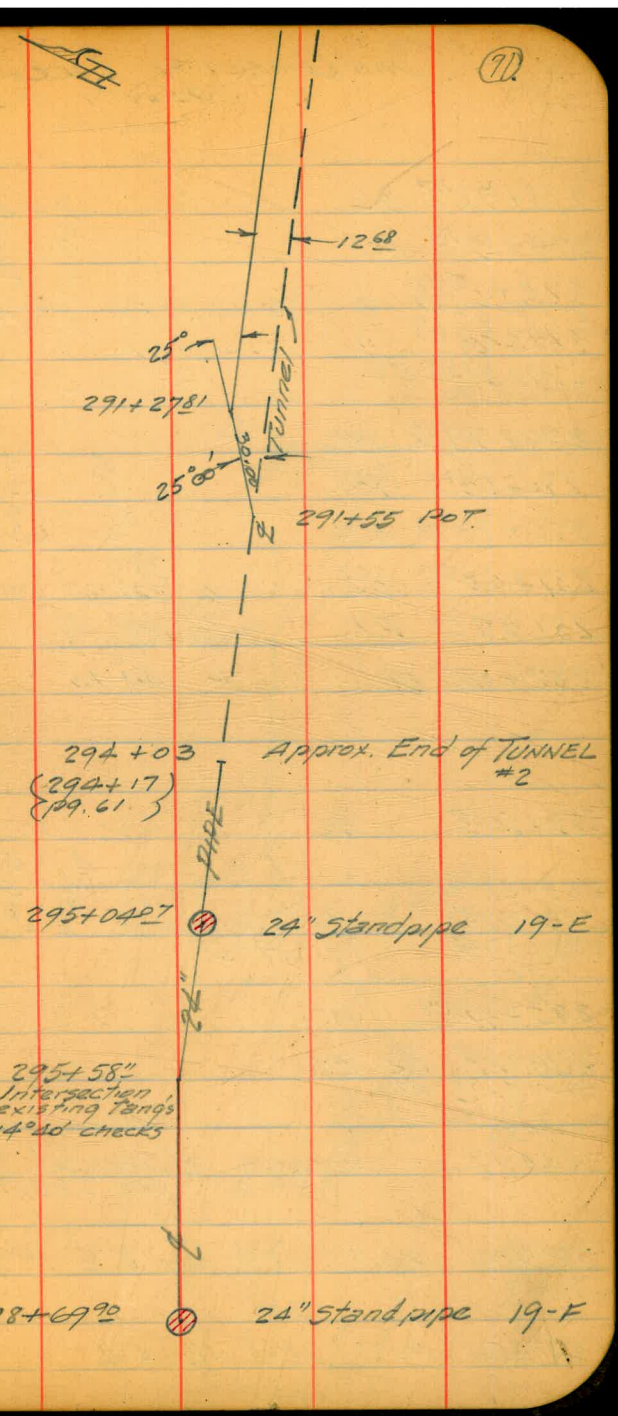
San Dieguito – Lockwood Mesa Gravity Pipeline

℄ Pipe 278+92 to 298+69
Flagged Thru New Sub-Division

286+00	POT.	(12.68 N/y)
287+50	POT.	(12.68 N/y)
289+61.85	P.O.T.	(12.68 N/y)
291+27.81	POT.	(12.68 N/y)
291+55	P.O.T.	(℄ PT. 25° LT. To 12.68 offset line.)
293+50	POT.	
294+03	P.O.T.	Approx W. Portal Tunnel #2 (Sta. 61 says 294+17)
295+02.87 295+04.27 295+05.27		℄ 24" Standpipe 19-E
		MAG BRG. S 86°00'W
295+32.37	B.C	
295+58"	P.I.	Δ 14°40' LT. R 200. T. 25.72 L 51.20 (As per plan (File 217 Sht. 6.)
295+83.57	EC	
		MAG. BRG S 71°00'W
298+68.70 298+69.90 298+71.10		℄ 24" Standpipe 19-F

April 4 1957
Beatty, Smith.

(71)



San Dieguito - Lockwood Mesa Gravity P.L. Cont'd

278+92.42 BC
279+13.13 P.I
279+19.88
279+21.08 ℄ Stand pipe 19-C
279+22.28
279+31.69 EC

Δ = 45° RT
R = 50
T = 20.71
L = 39.27

279+79.22 BC
280+03.09 P.I
280+23.40 EC

Δ = 50°00 LT
R = 50'
T = 23.32
L = 43.63

281+62.46 BC
281 87.90 P.I
282+12.1 EC

Δ 28° 26' 20" LT
R 50.100
T. 25.24
L 49.45

Mag Brg S 35°00' W

283+50.25 BC
283+51.05
283+52.25 ℄ 24" Stand pipe 19-D
283+53.45

Δ = 51°20' RT
R = 50'
T = 24.03
L = 44.80

Per plan

283+74.28 P.I.
283+95.05 BK EC.
283+96.88 AH

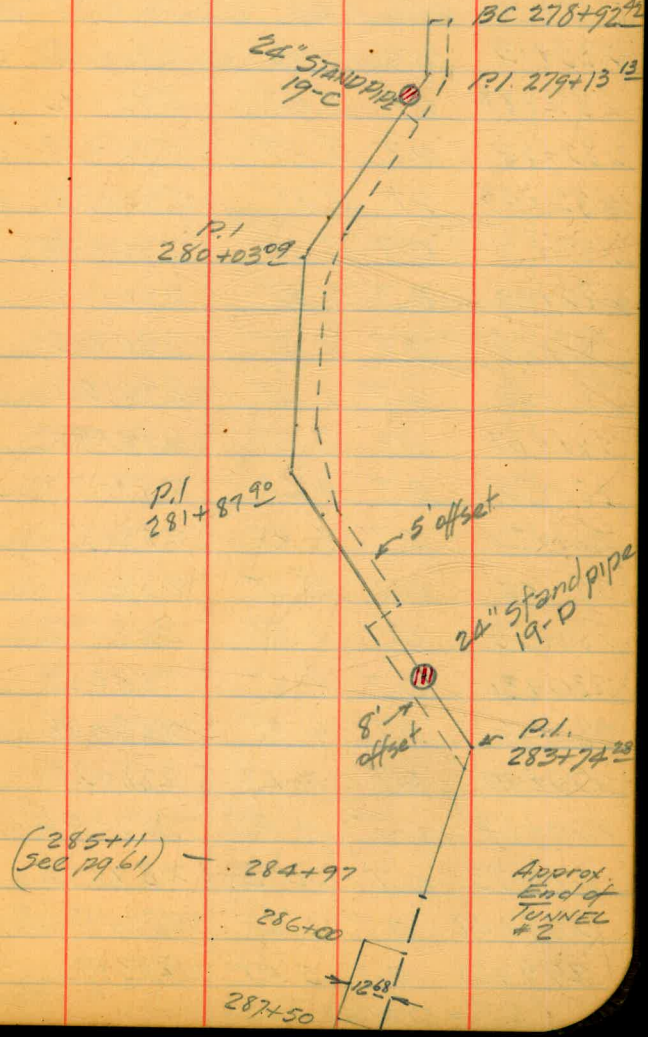
284+97 Approx. E. Portal Tunnel #2
(109.61 Sta 285+11.)

286+00 P.O.T. 12.68 N'ly ℄ ℄

287+50 P.O.T. 12.68 N'ly ℄ ℄.

4/5/57
Beatty
Shorey
Kemp
Obrien

(72)



San Dieguito - Lockwood Mesa P.L. Cont'd

4/8/57
Beatty
Smith.

283+90	Edge 1% Road Cut.		291+94	Av. 4'RT	
283+90	O.T. 6'RT		291+73	Av.T 5'RT	
283+63	O.T. 4'LT.		291+48	Av.T. 2'RT	
283+38	O.T. 1'LT		291+32	Av.T ℄	
283+13	O.T on ℄		291+15	L.T. 1½ LT	
282+88	O.T. 3'RT		290+95	O.T. 3'LT	
282+66	O.T. 5'RT		290+75	O.T 5'LT	
282+43	O.T. 6'RT		290+55	L.T. 6'LT	
282+31	O.T 8'LT.		290+40	L.T. 4'LT	
282+19	O.T. 7'RT		290+25	Av.T 9'LT	
282+04	O.T 7'LT		290+15	L.T 8'LT 9'RT	
281+80	O.T 1'LT		290+00	L.T 11'LT	
281+67	OT 5'RT		289+90	LT 6'LT	
281+35	O.T 4'LT		289+77	LT 11'LT	
281+20	O.T. 6'RT		289+55	LT 9'LT	
281+00	O.T. 1½ LT		289+15	LT 2'RT	
280+55	O.T 1'RT		288+92	LT 0 RT	
280+31	O.T. 8'LT		288+68	LT ℄	
280+16	O.T. 6'RT		288+46	LT ℄	
279+99	O.T. 14'LT		288+20	L.T 1½ LT.	
279+88	O.T 4'RT.		287+96	L.T. 4'LT.	
279+73	O.T 10'LT		287+75	O.T. 6'LT.	
279+48	O.T 6'LT		287+90	Edge 7% Road Cut.	
279+28	O.T. 5'RT		283+95	Pipe 35" deep Toe of Road Cut.	

(O.T. = Orange Tree)

296+40	Top of pipe 10" deep.
296+00	Top of pipe 10" deep
295+83	Top of pipe 11" deep
295+32±	Top of pipe 34" deep
283+95	Top of pipe 35" deep

296+40 Toe 1½ Fill
296+00 Toe 2% Fill
} Road Torn around (Banjo)

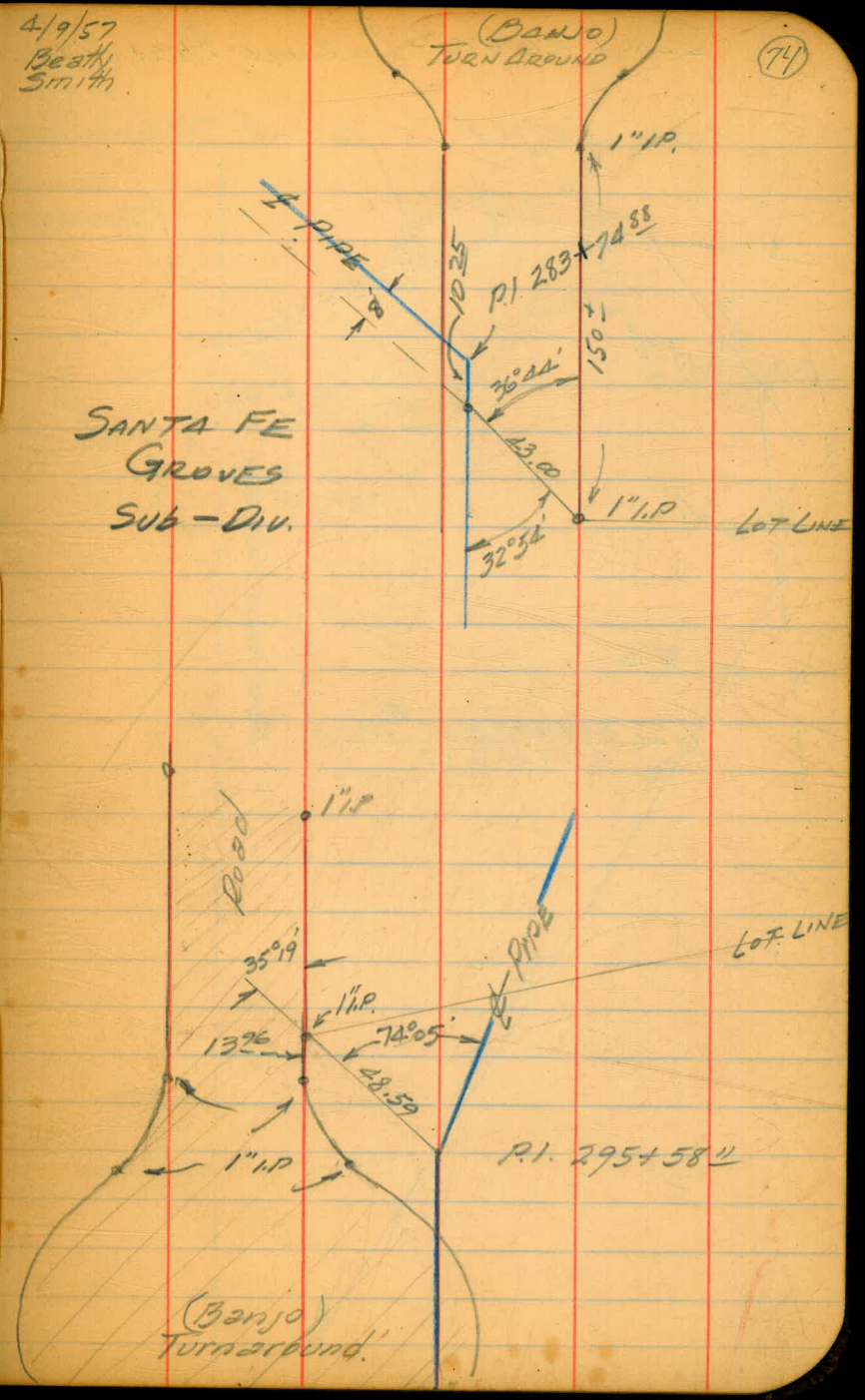
Av.T. = Avocado Tree
L.T = Lemon Tree
O.T = Orange Tree

295+01	Av. T. 6'LT.
294+80	Av.T 5'RT
294+45	Av.T. 6'LT.
293+90	Av.T 5'RT
293+65	Av. 5'RT
293+42	Av.T 4'LT.
293+15	Av.T 7'RT.
293+00	L.T. 9'LT.
292+85	Av.T 12'RT.
292+75	L.T. 10'LT
292+60	Av.T 6'RT
292+50	L.T. 12'LT.
292+40	Av.T. 8'RT
292+20	Av.T. 7'RT

San Dieguito – Lockwood Mesa P.L.

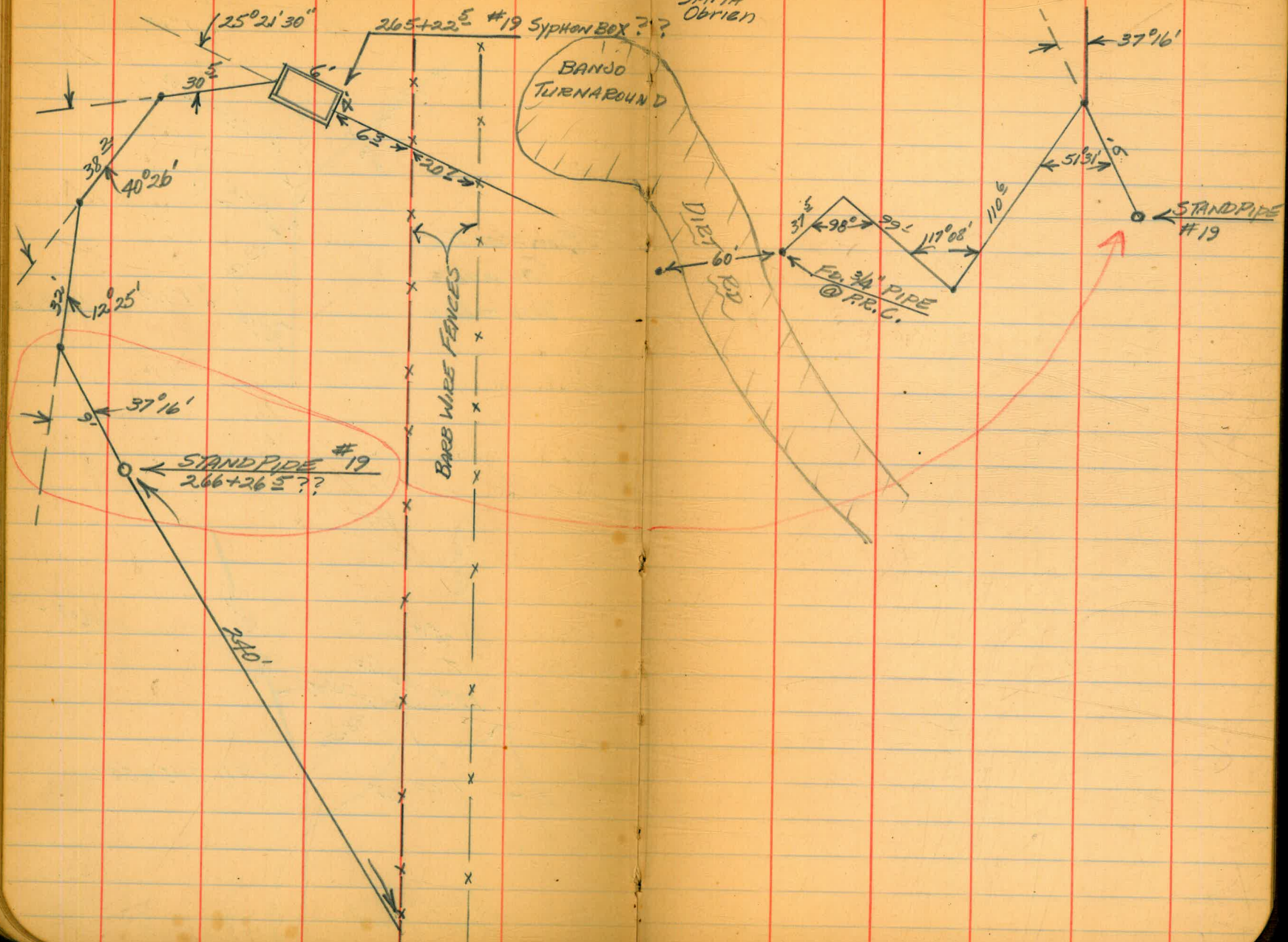
Ties.

4/9/57
Beath
Smith



San Dieguito - Lockwood Mesa P.L.

April 12 1957
Shorey
Kemp
Smith
O'Brien



Sta.	Grade	Elev.	Dist	L.C.	℄	R.C.	End Area	Av. End A	Cu. Yds.

IMPROVED TABLES
AND
INFORMATION

1800 gl
36000
-7200
43200

4.12
280
32.

30 g. per min.
1800 g. ∧ hr
43,200 g. ∧ d

95
15 6
9.75

311.3
8.8
315 6

310
8.3
318.3

220.12
21 1.27
5.195

1200
20
7200
3600
0 1200