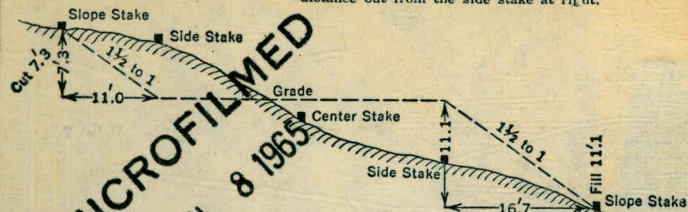


MB 110

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	Distance out from Side or Shoulder Stake										Cut or Fill
	.1	.2	.3	.4	.5	.6	.7	.8	.9		
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

KEUFFEL & ESSER CO., N. Y.

MB. No 110

THIS BOOK INDEXED 2/7/62

The paper in this book No. 373 A is made of 50% high grade rag stock with a WATER RESISTING surface sizing.

13.75 F. Hyd

11.97

7.70

The paper in this book No. 377A
is made of 50% high grade rag stock
and is WATER RESISTING unless soaked.

CURVE AT SWLY DE ANZA - SEE
FB106-58-

BK9 Chord

N153400

W 9945.48 B.S. 144°49'11" RT

26°15'11" C = 55.64

N54°49'11" W

N15267.94

W 99400 BS 60°54'56" RT

24°15'36" C = 114.43 N60°54'56" W

N15212.31

W 98400 B.S. 66°06'14" RT

20°09'31" C = 36.40 N66°06'14" W

N152700

W 9772.21 B.S. 159°52'46" RT

19°04'12" C = 76.86 N69°56'46" W

N15173.64

W 97400 B.S. 76°23'13" RT

16°18'59" C = 102.90 N76°23'13" W

N15149.42

W 96400 B.S. 83°40'45" RT

12°37'46" C = 100.61 N83°40'45" W

N15138.35

W 95400 - B.S. 90°52'13" RT

9°01'27" C = 100.01 589°07'47" W

N15139.86

W 94400 B.S. 98°04'23" RT

5°26'17" C = 101.02 581°55'37" W

N15154.04

W 93400 - B.S. 103°30'59" RT

1°49'08" C = 50.78 - 576°29'01" W

" PERCH

BC N15166.387

W 9250.965 BS 105°20'07" RT

BK9 Chord

SEE FB106-58

LIST TO OBTAIN CARDINAL DIRECTIONS

OBTAINED BY SITING ON NEXT STA

BACK + TURNING RT

N157495.94

W 10249.47 = E.C. MON
F.S. 79°48'30" LT

47°34'14" C 98.21 N13°42'36" W

N157400

W 10226.05 = BS 111°05'19" RT

44°03'08" C = 107.20 N21°05'19" W

N156400

W 10187.45 BS 119°02'56" RT

40°11'30" C = 114.39 N29°02'56" W

N155400

W 10131.90 BS 125°08'03" RT

36°05'31" C 55.44 N35°08'03" W

N15454.66

W 101400 = BS 39°39'49" RT

34°06'23" C = 71.01 N39°39'49" W

N154400

W 10054.67 BS 134°58'42" RT

31°33'46" C = 77.35 N44°58'42" W

N15345.28

W 100400 - B.S. 50°17'17" RT

28°47'30" C = 70.87 N50°17'17" W

12-4-58

SOUNDINGS WLY SIDE VENTURA BRIDGE

0+00 = SLY End of Bridge SOUNDINGS

Dist Sound Elev

0+50 5.0 2.0 +50 22.0 19.0

^{9:40} (3.0) 9+00 18.0 15.0

1+00 15.1 12.1 +50 15.5 12.5

+50 16.1 13.1 ^{9:55} 10+00 3.5 0.3

2+00 17.0 14.0

+50 14.1 11.1

3+00 13.2 10.2

+50 11.7 8.7

4+00 14.0 11.0

+50 13.5 10.5

5+00 12.1 9.1

+50 15.9 12.9

6+00 21.1 18.1

+50 23.3 20.3

7+00 25.1 22.1

+50 25.2 22.2

8+00 23.1 20.1

12-4-58

SOUNDINGS ELY SIDE VENTURA BRIDGE

0+00 = SLY End of Bridge Sound N50°W

Dist Sound Elev

0+50 Rocks (3.1) +50 20.0 16.9

^{10:05} (3.1) 9+00 18.1 15.0

1+00 15.0 11.9 +50 10.5 7.4

+50 14.1 11.0 10+00 2.9 +0.2

2+00 13.0 9.9

+50 16.2 13.1

3+00 12.0 8.9

+50 11.1 8.0

4+00 12.0 8.9

+50 12.1 9.0

5+00 11.1 8.0

+50 14.1 11.0

6+00 15.5 12.4

+50 20.1 17.0

7+00 22.8 19.7

+50 22.8 19.7

8+00 22.0 18.9

NOTE: FOR B/L LAYOUT SEE M.B. N° 106

CROSS SECTIONS & SOUNDINGS MISSION BAY

3-10-59

②

DE ANZA PT. & VICINITY W.O. 64501

Sta	+	H.1	-	Elev
B.M.	3.85	16.24		12.39
	5.46	15.66	6.04	10.20
	6.29	18.07	3.88	11.78
	3.41	14.90	6.58	11.49
T.B.M.	7.51	16.76	5.65	9.25
	3.91	16.64	4.03	12.73
	4.45	15.52	5.57	11.07
	6.18	16.16	5.54	9.98
B.M.			3.74	12.42

Chis 1st NW Cor. N. Conc. Step De Anza Sewer Pump Sta.

ON MON. AT BC 800' Rad. W 92° 50.56

NW 165.96

(12.39) Starting BM AT DE ANZA SEWER PUMP STA

NOTE: See X-sec's Pg. 8-9
 STA. N. 175+00 ; 0+00 = W 10730.00 SOUND WEST

See P. 34 X-sec 3-10-59
 STA. N172+00 ; 0+00 = W 10660.00 SOUND WEST

DIST	SOUND	ELEV.	DIST	SOUND	ELEV.
0+00	0.1	+5.3	0+60	1.1	+4.3
10.09			W10800 LATW 0+70	1.1	+4.3
(5.4)	1.1	+4.3			
	2.8	+2.6			
	2.8	+2.6			
	2.0	+3.4			
+50	1.8	+3.6			

DIST	SOUND	ELEV.	DIST	SOUND	ELEV.
10:25			0+60	2.0	+3.3
0+00	0.1	+5.2			
(5.3)	0.9	+4.4		1.7	+3.6
	1.5	+3.8	W10740.0 LATW 0+80		
	2.1	+3.2			
	2.0	+3.3			
+50	1.9	+3.4			

STA N174+00 ; 0+00 = W 10720.00 SOUND WEST

X-sec page 35
 N171+00 ; 0+00 = W 10630.00 SOUND WEST

DIST	SOUND	ELEV.	DIST	SOUND	ELEV.
10.13			W10780 LATW 0+60	1.5	+3.9
0+00	0.5	+4.9			
(5.4)	1.5	+3.9			
	1.8	+3.6			
	1.5	+3.9			
	1.8	+3.6			
+50	2.0	+3.4			

DIST	SOUND	ELEV.	DIST	SOUND	ELEV.
10:30			0+60	2.0	+3.2
0+00	0.5	+6.0			
(5.2)	1.1	+4.1	W10700 0+70	2.0	+3.2
	1.7	+3.5			
	2.1	+3.1			
	2.2	+3.0			
+50	2.0	+3.2			

Sta N173- ; 0+00 = W 10690.00 SOUND WEST

X-sec page 35
 N170+00 ; 0+00 = W 10600.00 SOUND WEST

DIST	SOUND	ELEV.	DIST	SOUND	ELEV.
10.18			W10760.0 LATW 0+70	0.9	+4.4
0+00	0.7	+6.0			
(5.3)	1.1	+4.2			
	1.9	+3.4			
	1.8	+3.5			
0+40	1.8	+3.5			

DIST	SOUND	ELEV.	DIST	SOUND	ELEV.
10:36			0+50	2.1	+3.2
0+00	0.7	+5.8			
(5.2)	1.2	+4.0	W10660 LATW 0+60	1.0	+4.2
	2.0	+3.2			
	2.1	+3.1			
0+40	2.1	+3.1			

STA-N169+00; 0+00=W/10570.00 SOUND WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
10:44					
0+00			0+60	2.5	+2.6
(5.1)	1.9	+3.2	W/10640 LATL 0+70	1.0	+4.1
	2.1	+3.0			
	2.0	+3.1			
	2.5	+2.6			
+50	2.5	+2.6			

X-SEC Page 36

STA N168+00; 0+00=W/10550.0 - SOUND WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
10:49					
0+00			0+60	1.8	+3.2
(5.0)	2.0	+3.0	W/10620 LATL 0+70	1.7	+3.3
	2.9	+2.1			
	2.6	+2.4			
	2.3	+2.7			
+50	2.1	+2.9			

Shore Stations Page 46

STA N167+00 0+00=W/10540.00 - SOUND W

DIST	SOUND	ELEV	DIST	SOUND	ELEV
10:54					
0+00			0+50	2.0	+2.9
(4.9)	3.0	+1.9		1.9	+3.0
	2.9	+2.0		1.2	+3.7
	2.7	+2.2	W/10620 LATL 0+80	1.0	+3.9
0+40	2.1	+2.8			

0+00 3-10-59

STA N166+00 W=10530.0 SOUND WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
10:59					
0+00	0.0	+4.9	0+60	2.1	+2.8
(4.9)	2.8	+4.1		1.0	+3.9
	2.8	+4.1	W=10610 LATL 0+80	0.5	+4.4
	2.8	+4.1			
	2.8	+4.1			
+50	2.0	+2.9			

STA 165+00 W=10530.0 SOUND WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:03					
0+00			0+60	2.7	+2.1
(4.8)	3.0	+1.8		2.0	+2.8
	2.9	+1.9		1.0	+3.8
	2.5	+2.3	W/10620 LATL 0+70	0.5	+4.3
	2.5	+2.3			
+50	2.5	+2.3			

STA N164+00; 0+00=W/10550.00 SOUND WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:09					
0+00			0+50	2.3	+2.5
(4.8)	3.0	+1.8		1.1	+3.7
	2.8	+2.0	W/10620 LATL 0+70	0.5	+4.3
	2.8	+2.0			
0+40	2.8	+2.0			

X-sec Page 48-

STAN 163+00; 0+00 = W 10530.00 Sound

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:15 0+00			0+60	3.0	+1.7
(47)	1.0	+3.7	W10600 LATN 0+70	3.0	+1.7
	2.1	+2.6			
	2.8	+1.9			
	2.9	+1.8			
+50	2.9	+1.8			

STAN 162+00; 0+00 = W 10500.0

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:24 0+00	0.0	+4.5	0+60	2.8	+1.7
(45)	0.5	+4.0	3.0	+1.5	
	1.0	+3.5	W10580 LATN 0+80	2.0	+2.5
	2.5	+2.0			
	2.5	+2.0			
+50	2.7	+1.8			

STAN 161+00; 0+00 = W 10480.00; Sound WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:32 0+00	0.0	+4.5	0+50	2.5	+2.0
(45)	0.5	+4.0	3.0	+1.5	
	0.8	+3.7	2.9	+1.6	
	2.3	+2.2	W10560 LATN 0+80	2.9	+1.6
0+40	2.7	+1.8			

3-10-59

STAN 160+00; 0+00 = 10460.0

Sound
WEST

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:29 0+00	0.5	+4.0	+60	3.0	+1.5
(45)	0.9	+3.6	3.0	+1.5	
	2.9	+1.6	2.0	+2.5	
	3.0	+1.5	W10550 LATN 0+90	0.1	+4.4
	2.8	+1.7			
+50	2.9	+1.6			

STAN 159+00; 0+00 = W 10420.0

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:43 0+00	0.2	+4.1	+60	2.9	+1.4
(43)	0.2	+4.1	2.8	+1.5	
	1.1	+3.2	2.7	+1.6	
	2.0	+2.3	2.7	+1.6	
	2.8	+1.5	2.2	+2.1	
0+50	3.0	+1.3	W10530 LATN 1+10	0.5	+3.8

3-10-59

STA N 154400; 0400 = W 10180.00 Sound W.

DI	DIST	SOUND	ELEV	DIST	SOUND	ELEV
11	13:26					
0	0400	0.0	+3.6	+60	2.7	+0.9
(36)		2.9	+0.7		2.6	+1.0
		3.0	+0.6		2.7	+0.9
		3.0	+0.6		2.7	+0.9
		2.8	+0.8	1400	2.7	+0.9
+	+50	2.8	+0.8		2.1	+1.5
				W 10300 LATH 1420	0.4	+3.2

SOUNDINGS
CONTINUED page 10

57
11
0

S. X-SEC DE ANZA POINT - ROSE

ELEV Hub at N 175+00 W 10576.10 = 9.75 (8)
3-10-59

CREEK AREA

D. STA N 175+00; 0+00 = W 10576.10 - ^{x-sec} WEST

11. BM. 12.39

DIST	ELEV
0+00	9.75
W 16'	+9.0
W 50	+8.4
+ W 100'	+9.1
S. W 132'	+8.8
11. W 138	+6.4
Begin Soundings Pg 3	
W 153.90	+5.3
END Soundings Pg 3	
0+00 = W 10800	
W 6'	+4.0
W 14'	+7.7
7. W 38'	+7.0
S. W 62'	+9.0
11. = FENCE School Bdy.	
0. W 92'	+12.3

CHILI DON NW COR N CONC STEP DE ANZA

SEWER PUMP STATION
SOUNDINGS PAGE 3

STA N 174+00 - 0+00 = W 10549.43 - ^{x-sec} WLY.

DIST	ELEV	DIST	ELEV.
0+00	+9.79	W 30'	+6.6
W 10'	+8.6	W 48'	+7.4
W 50'	+8.2	W 77'	+12.0
W 100'	+8.5	School Bdy FENCE	
W 113'	+8.8	W 89'	+12.4
W 124'	+7.2		
W 135'	+7.0		
W 148'	+5.3		
W 168'	+5.9		
W 170.57	+4.9		
See Page 3 For Soundings in CHANNEL			
0+00 = W 10780.00			
0+00	+3.9		
W 5'	+4.9		
W 8'	+7.4		

3-10-59
STA N 173+00; 0+00 = W 105 22.77 X-sec
Wky

DI. 11. 0.	DIST	ELEV
	0+00	+9.60
	W 10'	+8.2
	W 50'	+8.0
	W 100'	+8.1
	W 116'	+8.4
+	W 126'	+6.3
5. 11. 0.	W 150'	+7.0
	W 153'	+5.3
4	W 167.23' = W 106 90.00	+6.0
	Begin Sounding Pg 3	
	0+00 = W 107 60.00 Page 3	
	0+00	+4.4
	W 11'	+7.5
+	W 54'	+7.8
57. 11. 0.	W 73'	+12.0
	SCHOOL Bdy FENCE	
	W 83	+12.2

TBM. 9.56

Point
ON MIDN QT NWLY COR TRAILER PK Bdy

SOUNDINGS DE ANZA POINT AREA CONTINUED SEE PAGE 7

DIST	SOUND	FLEV	DIST	SOUND	FLEV	DIST	SOUND	FLEV	DIST	SOUND	FLEV
9:50 0+00 (5.1)	0.2	+4.9	1480	4.0	+1.1	3+60	0.9	+4.2	5+40	1.0	+4.1
	0.5	+4.6		4.0	+1.1		0.9	+4.2	5+50	1.0	+4.1
	0.6	+4.5	2+00	4.2	+0.8		1.0	+4.1		1.8	+3.3
	0.7	+4.4		4.0	+1.1		0.9	+4.2		1.4	+3.7
	0.8	+4.3		2.3	+2.8	4+00	1.0	+4.1		2.0	+3.1
+50	0.8	+4.3		2.2	+2.9		0.9	+4.2		1.9	+3.2
	1.0	+4.1		1.8	+3.3		1.0	+4.1	6+00	1.1	+4.0
	1.1	+4.0	9:55 +50	1.8	+3.3		0.8	+4.3		1.5	+3.6
	2.1	+3.0	(5.1)	1.5	+3.6		0.8	+4.3		1.3	+3.8
	3.3	+1.8		1.6	+3.5	+50	1.0	+4.1		1.7	+3.4
1+00	4.2	+0.9		1.6	+3.8		0.8	+4.3		1.3	+3.8
	4.2	+0.9		1.2	+3.9		0.8	+4.3	10:00 +50	1.1	+4.0
	4.7	+0.4	3+00	1.1	+4.0		1.0	+4.1	(5.1)	1.2	+3.9
	4.7	+0.4		1.0	+4.1		1.0	+4.1		1.2	+3.9
	4.2	+0.9		1.0	+4.1	5+00	1.0	+4.1		1.3	+3.8
+50	4.1	+1.0		0.9	+4.2		1.3	+3.8		1.5	+3.6
	4.1	+1.0		0.9	+4.2		1.0	+4.1	7+00	1.5	+3.6
+70	4.0	+1.1	3+50	0.9	+4.2	5+30	1.0	+4.1			

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STA N153400 Cont

DIST	SOUND	ELEV	DIST	SOUND	ELEV
7+10	2.0	+3.1	8+80	2.0	+3.1
	1.7	+3.4		2.0	+3.1
	2.0	+3.1	9+00	2.0	+3.1
	1.8	+3.3		2.1	+3.0
+50	2.0	+3.1		2.1	+3.0
	2.0	+3.1		2.1	+3.0
	2.0	+3.1		2.2	+2.9
	2.0	+3.1	+50	2.3	+2.8
	2.0	+3.1		2.4	+2.7
8+00	2.1	+3.0		2.3	+2.8
	1.8	+3.3	W11000 9+80=	2.2	+2.7
	2.0	+3.1		2.2	+2.9
	2.0	+3.1	10:03 10+00	2.3	+2.8
	2.0	+3.1	(5.1)		
+50	2.0	+3.1			
	2.0	+3.1			
8+70	2.0	+3.1			
			10+50		

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Shore STA Page 53

STA N152400; D+00 = W 9860.00

①
Sound
West

DIST	SOUND	ELEV	DIST	SOUND	ELEV
9:25 0+00	0.1	+4.8	1+90	4.2	+0.7
(4.9)	0.3	+4.6	2+00	4.5	+0.4
	0.5	+4.4		4.5	+0.4
	1.1	+3.8		4.7	+0.2
	1.5	+3.4		4.5	+0.4
+50	1.7	+3.2		4.1	+0.8
	1.7	+3.2	+50	4.1	+0.8
	1.7	+3.2		4.2	+0.7
	2.0	+2.9		4.2	+0.7
	2.0			4.1	+0.8
1+00	2.0			4.2	+0.7
	2.0	+2.9	3+00	4.0	+0.9
	1.9	+3.0		3.2	+1.7
	2.1	+2.8		3.5	+1.4
	2.0	+2.9		2.1	+2.8
1+50	2.1	+2.8		2.1	+2.8
	3.1	+1.8	+50	2.0	+2.9
	3.7	+1.2		1.9	+3.0
	3.5	+1.4	3+70	1.8	+3.1

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STAN 152+00 CONT

DIST	SOUND	ELEV	DIST	SOUND	ELEV
3+80	1.6	+3.3	5+60	1.1	+3.8
	1.6	+3.3		1.1	+3.8
4+00	1.5	+3.4		1.1	+3.8
9:30 ✓ (4.9)	1.5	+3.4		1.1	+3.8
	1.5	+3.4	6+00	1.1	+3.8
	1.2	+3.7		1.5	+3.4
	1.2	+3.7		1.8	+3.1
+50	1.2	+3.7		1.4	+3.5
	1.2	+3.7		1.2	+3.7
	1.4	+3.5	6+50	1.2	+3.7
	1.3	+3.6		1.2	+3.7
	1.1	+3.8		1.2	+3.7
5+00	1.1	+3.8		1.2	
	1.0	+3.9		1.2	
	1.1	+3.8	7+00	1.2	
	1.1	+3.8		1.2	+3.7
	1.3	+3.6		2.0	+2.9
5+50	1.4	+3.5	(5.00)	1.2	+3.8
			9:35		
			7+40	1.2	+3.8

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STAN 152+00 - CONT.

(2)

DIST	SOUND	ELEV	DIST	SOUND	ELEV
7+50	1.7	+3.3	9+40	1.9	+3.1
	1.7	+3.3	9+50	1.9	+3.1
	2.0	+3.0		2.0	+3.0
	2.0	+3.0		2.1	+2.9
	1.9	+3.1		2.0	+3.0
8+00	1.8	+3.2		2.1	+2.9
	1.5	+3.5	10+00	2.1	+2.9
	1.9	+3.1		2.1	+2.9
	1.5	+3.5		2.0	+3.0
	1.5			2.0	+3.0
+50	1.5			2.2	+2.8
	1.5		+50	2.1	+2.9
	1.5			2.1	+2.9
	1.5	+3.5		2.1	+2.9
	1.7	+3.3		2.3	+2.7
9+00	1.6	+3.4		2.4	+2.6
	1.6	+3.4	11+00	2.3	+2.7
	1.8	+3.2		2.2	+2.8
9+30	2.0	+3.0	11+20	2.2	+2.8

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STAN 152+00 cont

DIST SOUND ELEV.

11+30 2.1 +2.9

W 11000

11+40 2.2 +2.8

9:40

+50

(5.0) 2.5 +2.5

2.3 +2.7

2.7 +2.3

2.5 +2.5

2.8 +2.2

12+00 2.6 +2.4

2.6 +2.4

2.6

2.6

9:42

12+40 2.6 +2.4

(5.0)

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STA W 101+00; 0+00 = N 15380.00

SOUND (3)
SOUTH

DIST SOUND ELEV DIST SOUND ELEV

10:20

0+00

(5.1)

0.3

0.5

0.6

0.6

0.9

+50 1.0

1.1

1.1

3.1

4.0

4.0

4.3

4.7

4.7

4.8

+50 4.7

4.2

4.1

1+80 4.0

1+90 4.2

2+00 4.2

4.2

4.2

4.2

+50 4.3

+50 4.0

2.8

2.8

2.8

2.7

3+00 2.5

2.5

2.6

2.6

2.6

2.6

10:25
+50 2.8

(5.0) 2.8

3+70 2.8

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STA W 101400 CONT

3-11-59

STA W 101400 CONT

Sound South

(4)

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
11 3+80	2.5		5+70	3.6		7+60	11.5		9+50	5.0	
11	2.5			4.2			11.5			5.2	
4+00	2.5			5.3			11.2			5.0	
	2.5		6+00	6.9			11.5			5.0	
	2.5			7.8		10:30 8+00	11.2			5.2	
	2.5			8.0		(5.0)	10.7		10+00	5.2	
	2.2			8.2			10.5			5.5	
12 +50	2.3			9.0			9.5			6.0	
	2.5		+50	9.0			8.0			6.0	
	2.7			9.0		+50	7.3			6.1	
	3.1			9.0			6.9		114330	6.1	
	3.1			9.0			6.5		10+50=	6.1	
	3.2			9.0			6.3		10:33	6.0	
5+00	3.2			9.0			6.3		10+60	6.0	
	2.9		7+00	9.3			6.1		(5.0)		
	2.6			9.6		9+00	6.5				
5+30 N 15000	2.6			9.9			6.5				
	2.6			10.1			5.2				
+50	2.7			10.5			5.2				
5+60	3.2		7+50	11.1		9+40	5.0				

Page 53 3-11-59 SOUND SOUTH STA W 100+00; 0+00 = N/5 280.00

3-11-59 STA W 100+00 CONT (15)

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
10:44 0+00 (4.9)	0.2		1+90	4.6	+0.3	3+80	2.5	+2.4	5+70	8.1	
	0.4		2+00	4.6	+0.3		2.5			9.0	
	0.6			4.7	+0.2	4+00	2.5			9.8	
	1.0			4.7	+0.2		2.5	+2.4	6+00	10.1	
	1.5			4.5	+0.4		2.7	+2.2		10.3	
10:45 +50 (4.9)	1.5			4.7	+0.2		2.8	+2.1		10.4	
	1.5		+50	5.0	0.1		3.0			10.5	
	1.7			5.0	0.1	+50	3.0			10.0	
	2.0	+2.9		3.0	+1.9		3.0		+50	8.5	
	2.9	+2.0		3.1	+1.8		3.1			8.2	
1+00	3.2	+1.7		3.0	+1.9		3.1			8.3	
	4.0	+0.9	3+00	3.1	+1.8		3.2			8.6	
	4.0	+0.9		3.1	+1.8	10:50 5+00	3.5			8.5	
	4.0	+0.9		3.3	+1.6	(4.8)	4.0		7+00	8.6	
	4.2	+0.7		3.1	+1.8		4.7			8.7	
+50	4.5	+0.4		2.8	+2.1		5.5			7.7	
	4.5	+0.4	+50	2.8	+2.1		6.2			6.7	
	4.6	+0.3		2.8	+2.1	5+50	7.3			6.2	
1+80	4.6	+0.3	3+70	2.7	+2.2	5+60	7.9		7+50	6.0	

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STAW 100400 Cont

DIST SOUND ELEV

7+60 5.8

6.0

6.0

6.0

8+00 6.0

6.0

5.8

5.7

5.7

8+50 5.5

5.4

5.4

5.3

5.3

N 14380

9+00 = 5.3

10.155

(4.8) 5.3

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STAW 99+00; 0+00 = N 152.30.00

16
SOUND
SOUTH

DIST SOUND ELEV DIST SOUND ELEV

N 105

0+00

(4.2)

1+90 4.0

(4.7)

0.5

2+00 4.0

1.1

4.0

1.5

4.0

1.6

4.0

+50 1.7

4.0

2.0

2+50 4.1

1.8

4.3

1.8

4.5

1.8

4.5

1+00 1.8

4.5

11.15

(4.6)

1.8

3+00 4.7

1.8

4.9

1.7

5.0

2.0

5.0

+50 2.7

5.0

3.5

3+50 5.0

4.1

4.5

1+80 4.1

3+70 3.7

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STA^N 99400 CONT

DIST	SOUND	ELEV	DIST	SOUND	ELEV
			5+60	7.1	
3+80	3.7			7.6	
	4.5			8.1	
4+00	4.5			8.5	
	3.5	11:20		9.0	
		6+00		9.0	
	3.5	(4.6)		9.0	
	3.7			9.0	
	4.0			8.9	
+50	4.1			8.1	
	4.2	+50		7.1	
	4.7			6.7	
	5.5			6.0	
	6.2			5.2	
5+00	6.2			5.3	
	6.5	7+00		5.2	
	6.6			5.1	
	7.0			5.0	
	7.1			4.9	
	7.1			5.0	
+50	7.1			5.0	
		7+50		5.0	

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STA 99400 CONT

DIST SOUND ELEV

7+60 5.0

5.0

5.0

5.0

8+00 5.0

5.0

5.0

5.0

(4.5) 5.0

11:22 8+50 5.0

5.0

11:37:00 5.0

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Sound
South

STA W 98+00; 0+00 = N15150.00

STA W 98+00 Cont

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
11135											
0+00	(-0.2)	+4.6	1+90	2.2	+2.2	3+80	5.5	1.1	5+70	6.0	
	(4.4)	0.3	+4.1	2+00	2.5	+1.9		5.6	1.2		5.1
		0.8	+3.6		2.2	+2.2	4+00	6.1	1.7		5.0
		1.1	+3.3		2.3	+2.1		6.1	1.7	6+00	4.9
		1.5	+2.9		2.9	+1.5		6.2	1.8		5.0
+50		1.6	+2.8		3.0	+1.4		6.5	2.1		4.9
		2.0	+2.4	+50	3.6	+0.8		7.1	2.7		4.8
		2.0	+2.4		4.9	0.5	+50	7.3	2.9		4.8
		1.9	+2.5		4.9	0.5		7.4	3.0	+50	4.8
		2.0	+2.4		4.5	0.1		7.5	3.1		4.8
1+00		1.8	+2.6		4.5	0.1		7.4	3.0		4.9
		2.0	+2.4	3+00	4.2	0.2		7.8	3.4		4.8
		1.6	+2.8		4.3	0.1	5+00	8.1	3.7		4.8
		1.6	+2.8		4.3	0.1		8.0	3.6	11:45 7+00	4.9
		1.1	+3.3		4.4	0.0		7.9	3.5	(4.3)	
+50		1.2	+3.2		5.0	0.6		7.2	2.8		
		1.3	+3.1	11:40 +50	5.1	0.7		7.0	2.6		
		1.9	+2.5	(4.3)	5.2	0.8	+50	6.8			
1+80		2.0	+2.4	3+70	5.2	0.8	5+60	6.1			

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SOUND

SOUTL

STAW 97+00; 0+00 = N15/10.00

DIST	SOUND	ELEV	DIST	SOUND	ELEV
11:50					
0+00	(-0.3)		1+90	3.2	
(4.2)	0.5		2+00	3.5	
	1.0			3.9	
	1.1			4.0	
	1.6			4.0	
+50	2.0			4.3	
	2.0		+50	4.9	
	2.0			6.1	
	2.0			7.0	
	2.0			8.1	
1+00	2.1			9.5	
	2.0		3+00	10.0	
	2.0			10.0	
	2.1			10.4	
	2.2			10.6	
+50	2.2			10.6	
	2.3		11:55		
			+50	11.0	
			(4.2)		
	3.0			10.9	
1+80	3.2		3+70	10.7	

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STAW 97+00 CONT

DIST	SOUND	ELEV	DIST	SOUND	ELEV
			3+80	10.3	
				5+60	4.9
				9.8	5.0
			4+00	8.9	5.0
				8.9	5.0
				8.9	5.0
				7.2	5.0
				6.7	
			+50	6.5	
				6.5	
				6.5	
				6.2	
				6.0	
			5+00	5.8	
				5.3	
				5.3	
				5.0	
				5.0	
			5+50	5.0	

STA W96+00; 0+00 = N 15080, 00

SOUTH

STA W96+00 CONT

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
1:05											
0+00	0.0	+3.2	1+90	7.5	4.3	3+80	9.8	6.8			
(3.2)			1:10 (3.1)								
	0.3	+2.9	2+00	8.0	4.9		9.0	6.0			
			DELAY								
	0.5	+2.7	1:15	8.1	5.0	4+00	7.0	4.0			
			(3.0)								
	0.8	+2.4		8.5	5.5		6.1	3.1			
	1.0	+2.2		9.1	6.1		5.5	2.5			
+50	1.5	+1.7		9.5	6.5		4.9	1.9			
	1.5	+1.7	+50	9.7	6.7		4.3	1.3			
	1.1	+2.1		9.7	6.7	+50	4.0	1.0			
	1.0	+2.2		9.7	6.7		4.0	1.0			
	1.0	+2.2		9.9	6.9		4.0	1.0			
1+00	1.0	+2.2		10.0	7.0		4.0	1.0			
	1.1	+2.1	3+00	10.0	7.0		4.0	1.0			
	1.6	+1.6		10.0	7.0	5+00	4.0	1.0			
	1.9	+1.3		10.0	7.0		4.0	1.0			
	2.1	+1.1		10.0	7.0		4.0	1.0			
+50	3.3	0.1		10.0	7.0		3.6	0.6			
	4.5	1.2	+50	10.0	7.0		3.5	0.5			
	5.8	2.6		10.0	7.0	1:20					
						+50					
1+80	6.9	3.7	3+70	9.8	6.8	N14630					
						(2.9)					

X-500 P 54-

STAW 95+00; 0+00 = N 15060.00. Sound South

STH W 95+00 CONT

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	DIST
1:25								
0+00	0.0	2.8	1+90	9.0		3+80	5.1	
(2.8)	0.4		2+00	9.0			4.8	
	0.8			9.1		4+00	4.2	
	1.0			9.2			4.0	
	1.2			9.6			3.8	
+50	1.5			9.7			3.5	
	1.1		+50	9.9			3.5	
	1.3			9.9		+50	3.3	
	1.6			10.0			3.2	
	2.3			10.0			3.2	
1+00	3.2			10.0			3.0	
	5.0		3+00	10.0			3.0	
	6.6			9.7		1133	2.9	
	7.6			9.3		5+00		
	8.0			9.2		(2.8)		
+50	8.1			9.1				
	8.3		1130					
			+50	8.5				
	8.5		(2.8)	7.2				
1+80	8.7		3+70	6.0				

X-sec P 55

3-11-59 - ALLEN

22

STATION 94+00; 0+00 = N 15° 06' 00" SOUND SOUTH

STATION W 94+00 CORNER

	DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
	1:40								
0	0+00	0.0	+2.6	1+90	9.0	6.4	3+80	4.6	2.0
0	(2.6)	0.3	+2.3	2+00	9.1	6.5		4.1	1.5
		1.0	+1.6		9.1	6.5	4+00	4.0	1.4
		1.5	+1.1		9.3	6.7		3.9	1.3
		2.0	+0.6		9.3	6.7		3.5	0.9
	+50	3.0	0.4		9.5	6.9		3.5	0.9
		3.6	1.0	+50	9.8	7.2		3.5	0.9
		4.5	1.9		9.9	7.3	+50	3.5	0.9
		6.0	3.4		9.8	7.2		3.4	0.8
		7.2	4.6		9.7	7.1		3.5	0.9
1	1+00	7.5	4.9		9.7	7.1		3.3	0.7
		7.7	5.1	3+00	9.2	6.6		3.4	0.8
		7.9	5.3		8.9	6.3	1:45 5+00	3.4	0.8
		8.1	5.5		8.2	5.6	(2.5)		
		8.1	5.5		7.2	4.6			
	+50	8.3	5.7		6.0	3.4			
		8.5	5.9	+50	5.3	2.7			
		8.8	6.2		5.1	2.5			
1	1+80	9.0	6.4	3+70	4.7	2.1			

x-sec 25 3-11-59

SOUND

STA W 93400; 0+00 = N 15080.00 SOUTH

STA W 93400 Cont

(23)

DIST	SOUND	ELEV	DIST	SOUND	ELEV
1.50			1490	9.0	
0+00	0.0				
(2.4)	0.5		2+00	9.0	
	1.0			9.0	
	1.7			9.2	
	2.4			9.1	
+50	3.3			9.3	
	4.0		+50	9.3	
	4.9			9.1	
	5.5			9.2	
	6.3			9.3	
1+00	7.2			9.0	
	7.8		3+00	8.9	
	8.0			8.0	
	8.2			7.3	
	8.3			7.5	
+50	8.4			5.5	
	8.5		1.55	5.0	
			+50		
	8.5		(2.3)	4.5	
1+80	8.9				
			3+70	4.3	

DIST	SOUND	ELEV	DIST	SOUND	ELEV
3+80	4.0				
	3.8				
4+00	3.7				
	3.5				
	3.5				
	3.3				
	3.3				
			1.56		
			+50	3.3	
			(2.3)		

X-sec P55
 STA=W 92+00; 0+00; N15/00.00 Sound SOUTH

DIST	SOUND	ELEV	DIST	SOUND	ELEV
2:00 0+00	0.0	+2.2	1+90	8.7	6.5
(2.3)	0.7	+1.5	2+00	9.0	6.8
	1.2	+1.0		9.0	6.8
	2.3	0.1		9.1	6.9
	3.1	0.9		8.9	6.7
+50	4.2	2.0		8.7	6.5
	5.0	2.8	+50	8.7	6.5
	6.0	3.8		8.7	6.5
	6.5	4.3		8.9	6.7
	7.1	4.9		9.0	6.8
1+00	7.5	5.3		9.0	6.8
	7.8	5.6	3+00	8.5	6.3
	8.0	5.8		7.5	5.3
	8.2	6.0		6.5	4.3
	8.2	6.0		5.5	3.3
+50	8.4	6.2		4.9	2.7
	8.7	6.5	+50	4.5	2.3
	8.6	6.4		4.0	1.8
1+80	8.6	6.4	3+70	4.0	1.8

STA W 92+00 Cont

DIST	SOUND	ELEV
3+80	3.9	1.7
	3.7	1.7
2:05 4+00	3.4	1.3
(2.1)	3.4	1.3
	3.3	1.2
	3.3	1.2
	3.3	1.2
+50	3.3	1.2
	3.2	1.1
	3.2	1.1
	3.2	1.1
	3.1	1.0
2:07 5+00	3.0	0.9
(2.1)		

(24)

X-sec P 55 3-11-59 allen
 STA-W 914003 0400=N 15/20.00
 SOUND SOUTH

STA W 91400 CONT

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
2:12 0400	0.2	+1.8	1490	8.3	6.3	3480	3.8	1.8
(2.0)	0.8	+1.2	2400	8.4	6.4		3.7	1.7
	1.9	+0.1		8.2	6.2	4400	3.5	1.5
	2.8	0.8		8.5	6.5		3.5	1.5
	3.7	1.7		8.5			3.5	1.5
450	5.3	3.3		8.5			3.3	1.3
	5.9	3.9	2:15 450	8.5			3.2	1.2
	6.5	4.5	(2.0)	8.5		450	3.2	
	7.0	5.0		8.5	6.5		3.2	
	7.0	5.0		8.5	6.5		3.2	1.2
1400	7.0	5.0		8.3	6.3		3.1	1.2
	7.3	5.3	3400	7.4	5.4		3.0	1.1
	7.5	5.5		6.7	4.7	2:13 5400	2.9	0.9
	7.8	5.8		5.8	3.8	(2.0)		
	7.8	5.8		4.7	2.7			
450	8.0	6.0		4.2	2.2			
	8.2	6.2	450	4.0	2.0			
	8.2	6.2		4.0	2.0			
1480	8.4	6.4	3470	3.9	1.9			

(25)

X-sec P 56
STA = W 90+00; 0+00 = N 15140.00
Sound SOUTH STA W 90+00 Cont

DIST	SOUND	ELEV	DIST	SOUND	ELEV	DIST	SOUND	ELEV
2:22 0+00 (1.9)	0.5	+1.4	1+90	8.0	6.1	3+80	3.5	1.6
	1.5	+0.4	2+00	8.2	6.3		3.5	1.6
	2.5	0.6		8.2		4+00	3.4	1.5
	3.5	1.6		8.2			3.5	1.6
	4.8	2.9		8.2			3.5	1.6
+50	5.4	3.5		8.2			3.5	1.6
	6.0	4.1	+50	8.2	6.3		3.2	1.3
	6.4	4.5		8.3	6.1	+50	3.2	
	6.8	4.9		8.2	6.3		3.2	
	7.0	5.1		8.0	6.1		3.2	1.3
1+00	7.2	5.3		7.0	5.1		3.0	1.1
	7.2	5.3	2:25 3+00 (1.9)	6.0	4.1		3.0	1.1
	7.2	5.3		5.2	3.3	2:27 5+00 (1.9)	3.0	1.1
	7.6	5.7		5.0	3.1			
	7.7	5.8		4.5	2.6			
+50	8.0	6.1		4.2	2.3			
	8.0		+50	4.0	2.1			
	8.0			3.9	2.0			
1+80	8.0	6.1	3+70	3.9	2.0			

X-sec P 26

STA W 89+00; 0+00=N 15170

Sound

South

STA W 89+00 cont

(27)

DIST	Sound	ELEV	DIST	Sound	ELEV	DIST	Sound	ELEV
2:30 0+00	0.0	+1.8		7.7	6.0	(1.7)	3.7	2.0
(1.8)	0.7	+1.1	2+00	8.0	6.3		3.8	2.1
	1.5	+0.3		8.0		4+00	4.0	2.3
	3.0	1.2		8.0			4.0	2.3
	4.0	2.2		8.0			4.1	2.4
+50	5.0	3.2	2:35 (1.7)	8.0			4.0	2.3
	5.5	3.7	+50	8.0			4.0	2.3
	6.0	4.2		8.0	6.3	+50	4.0	2.3
	6.5	4.7		8.2	6.5	(1.7)		
	6.8	5.0		8.1	6.4			
1+00	7.0	5.2		7.8	6.1			
	7.0	5.2	3+00	6.7	5.0			
	7.1	5.3		5.5	3.8			
	7.2	5.4		4.7	3.0			
	7.4	5.6		4.5	2.8			
+50	7.5	5.7		4.0	2.3			
	7.7	5.9	+50	4.0	2.3			
	7.7	5.9		3.8	2.1			
1+80	7.7	5.9		3.5	1.8			

x-sec 56

Sta W 88+00

0+00=N15190

Sound South

Sta. 88+00 (con)

Dist	Sound	Elev	Dist	Sound	Elev
0+00	0.3	+1.3		7.8	6.2
	1.0	+0.6	2+00	8.0	6.4
(2.45)	2.0	0.4		8.0	6.4
(1.6)	3.8	2.2		7.7	6.1
	5.0	3.4		7.3	5.7
+50	5.2	3.6		7.3	5.7
	5.8	4.2	+50	7.8	6.2
	6.2	4.6		7.8	6.2
	6.5	4.9		7.5	5.9
	6.7	5.1		7.3	5.7
1+00	6.7	5.1		6.5	4.9
	6.8	5.2	^{2.48} 3+00	5.2	3.6
	7.0	5.4	(1.5)	4.8	3.3
	7.1	5.5		4.2	2.7
	7.2	5.6		4.0	2.5
+50	7.2	5.6		3.5	2.0
	7.4	5.8	+50	3.4	1.9
	7.4	5.8		3.5	2.0
1+80	7.5	5.9	3+70	3.3	1.8

Dist	Sound	Elev
	3.2	1.7
	3.2	1.7
4+00	3.0	1.5
	3.0	
	3.0	
	3.0	
	3.0	1.5
+50	2.9	1.4
	2.8	1.3
	2.7	1.2
(1.5)	2.6	1.1
(2.50)	3.0	1.5
5+00	2.8	1.3

x-sec p 56

Sta W 87+00

0+00 = 15220

Sound South

Sta 87+00 (con)

Dist	Sound	Elev	Dist	Sound	Elev	Dist	Sound	Elev
0+00	0.1	+1.3	(14)	7.1	57		3.0	1.6
(1.4)	0.9	+0.5	2+00	7.1	57		3.0	1.6
	2.0	0.6		7.2	58	4+00	3.0	1.6
	3.2	1.8		7.1	57		2.9	1.5
	5.0	3.6		7.2	58		2.9	1.5
+50	5.3	3.9		7.2	58		2.9	1.5
	5.4	4.0	+50	7.1	57		2.8	1.4
(2.55)	5.6	4.2		7.0	56	+50	2.5	1.1
	6.0	4.6		7.0	56	(1.4)		
	6.1	4.7		6.7	53			
1+00	6.1	4.7		6.3	49			
	6.3	4.9	3+00	5.2	38			
	6.3	4.9		4.5	3.1			
	6.7	5.3		3.9	2.5			
	7.0	5.6		3.5	2.1			
+50	7.0			3.4	2.0			
	7.0		+50	3.2	1.8			
	7.0	5.6		3.2	1.8			
	7.1	5.7		3.0	1.6			

3-20-59

CROSS SECTIONS ROSE CREEK CONTD

STA. N. 177+00; 0+00 = W 10629.43 (30)

Sta	Elev	Sta	Elev
Sta. N. 176+00; 0+00 = W 10602.77	0		10.37 on Hub
Sta	Elev	W 3	10.2
B.M.	9.56 P. 9	W 4	10.7
0	10.09 on Hub	W 50	9.3
W 3	9.9	W 100	9.9
W 6	10.5	W 145	10.7
W 25	9.6	W 156	4.0
W 70	9.7	W 200	3.9
W 100	9.2	W 209	4.0
W 140	9.4	W 215	6.9
W 149	6.5	W 285	8.1
W 168	4.0	W 310	13.1
W 200	3.9	W 318	13.0
W 220	4.5	W	
W 224	6.0		
W 235	7.7		
W 280	8.6		
W 300	11.0		
W 317	12.6		

STA. N178+00: 0+00 = W10656.10

Sta	Elev
0	11.04 on Hub
W13	10.8
W26	8.5
W50	9.0
W100	9.0
W141	9.9
W156	3.8
W200	4.7
W226	5.0
W228	9.6
W275	8.0
W310	13.0
W316	13.2

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(31)

STA. N179+00: 0+00 = W10682.77

0	11.52 on Hub
W18	10.7
W50	8.9
W61	7.8
W80	9.5
W100	9.6
W138	10.3
W155	4.6
W200	5.0
W210	6.0
W214	5.9
W220	5.3
W228	5.3
W241	8.7
W266	8.6
W298	9.7
W310	13.3
W316	14.0

STA. N. 180+00; 0+00=W 10709.43

Sta	Elev
0	13.51 on Hub
W 50	12.0
W 65	10.0
W 100	9.7
W 114	9.9
W 120	8.6
W 133	9.5
W 142	4.0
W 184	4.7
W 191	7.1
W 200	6.2
W 227	5.8
W 238	9.5
W 285	10.5
W 306	13.9
W 315	14.4

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(32)

N. 181+00; 0+00=W. 10736.10

Sta	Elev
0	13.33
W 77	12.2
W 82	10.8
W 100	10.2
W 112	9.8
W 129	10.4
W 137	6.9
W 147	7.3
W 151	4.7
W 200	4.1
W 207	7.2
W 223	7.1
W 228	9.3
W 275	10.3
W 293	12.4
W 300	14.8
W 316	14.7

RWE CREEK AREA Cont - X-sec West
3-24-59 - ALLEN

STA. N. 182+00; 0+00 = W 10762.77

STA	ELEV
0	13.14 ON Hub
W 50	12.7
W 76	12.4
W 81	10.6
W 100	10.0
W 120	10.2
W 125	6.3
W 141	7.6
W 168	7.3
W 171	4.9
W 206	4.5
W 210	6.5
W 219	7.8
W 221	9.6
W 250	9.7
W 290	12.4
W 300	13.9
W 312	Fence Around M.B. School 14.6

X-sec West - 3-24-59
ALLEN

(33)

STA. N. 183+00; 0+00 = W 10789.44

STA	ELEV
0	12.95 ON Hub
W 50	12.3
W 62	12.0
W 76	10.8
W 100	10.8
W 108	11.3
W 113	8.4
W 149	8.0
W 153	5.2
W 201	4.9
W 208	7.0
W 236	9.3
W 266	10.8
W 300	13.8
W 316	Fence around M.B. School. 14.2

ROJO X-SEC WEST - 3-24-59-9100
 CREEK AREA
 STA. N. 184+00; 0+00 = W. 10 816, 10

3-24-59 ALLEN

(34)

CROSS SECTION ROJO CREEK CONT

STA	ELEV	FOR B/L	See MB No 106 - Page 59+60
10	12.76	9R same ON HUB	See Page 3 FOR SOUNDING X-SEC WEST STA. N 172+00; 0+00 = W 10501.88
W 18	12.4		STA
W 37	11.0		ELEV
W 50	11.0		9R same ON HUB
W 96	10.2		W 0
W 128	5.4		W 20
W 150	6.2		W 50
W 200	5.8		W 100
W 233	5.7		W 128
W 251	13.4		W 130
W 300	13.8		W 158
W 315	14.2		W 175
			W 195
			W 236
			W 246
			W 257
			W 266
			W 300
			W 318
			W 328 = FENCE around school

X-SEC ROSE CREEK CONT 3-24-79
SOUNDINGS PAGE 3
STA N171+00; 0+00 = W 10483.91

ROSE CREEK CONT
SOUNDINGS PAGE 3.

35

STA N170+00; 0+00 = W 10465.93 - WEST

STA	ELEV	STA	ELEV
W 0	10.58 9R same ON HUB	W 0	10.52 9R. Same ON HUB
W 31	6.8	W 35	6.7
W 50	6.5	W 50	6.7
W 100	6.6	W 100	6.3
W 127	7.2	W 128.	6.9
W 145	6.0	W 134.07	5.8
W 146	4.1	W 144	4.1
W 179	2.7	W 194.07	2.8
W 216	3.2	W 199	2.8
W 226	6.0	W 204	5.4
W 257	6.0	W 250	5.6
W 273	10.8	W 257	6.5
W 292	13.6	W 277	10.7
W 298 = FENCE AROUND M.B. SCHOOL	14.0	W 290	10.8
		W 295	13.5
		W 299 = FENCE AROUND SCHOOL	14.0

RWE CREEK Area - 3-24-59
 Sound page 4 -

X-sec
 West

STA N169+00; 0+00 = W 10447.95

STA	ELEV	GR. SAME HUB
0	10.60	
W 29	6.7	
W 50	6.6	
W 100	6.6	
W 120	6.5	
W 128	5.8	
W 134	2.9	
W 161	2.7	
W 185	2.5	
W 186	3.7	
W 192	4.1	
W 203	5.2	
W 232	4.5	
W 234	6.3	
W 265	6.0	
W 271	11.2	
W 300 = Fence Ground M.B. School	13.7	

3-26-59 - ALLEN
 Sounding page 4

X-sec west 36

STA N168+00; 0+00 = W 10429.97

STA	ELEV	GR. SAME HUB
W 0	10.86	
W 16	7.7	
W 25	7.4	
W 30	6.0	
W 50	6.0	
W 100	6.2	
W 112	6.3	
W 126	4.7	
W 130	2.7	
W 154	2.9	
W 190	3.7	
W 230	4.8	
W 235	6.4	
W 275	6.4	
W 300	10.6	
W 310 = Fence M.B. School	13.5	

CONT PAGE 46

X-sec P 57

3-25-59

W. 86+00 CONTD. SOUTH

137

STA. W. 86+00; 0+00=N. 15300; SOUND SOUTH

Dist Sound Elev

Dist	Sound	Elev.	Dist	Sound	Elev
0+00			(42)	9.1	4.9
(42)	0.2	+4.0	2+00	9.1	4.9
<u>11:23</u>	0.8	+3.4	<u>11:25</u>	9.2	5.0
	1.5	+2.7		9.2	5.0
	2.1	+2.1		9.2	5.0
50	2.8	+1.4		9.3	5.1
	3.6	+0.6	50	9.3	5.1
	4.5	0.3		9.5	5.3
	5.5	1.3		9.4	5.2
	6.9	2.7		9.4	
1+00	7.8	3.6		9.4	
	8.0	3.8	3+00	9.4	5.2
	8.1	3.9		9.5	5.3
	8.6	4.4		9.4	5.2
	8.6	4.4		9.4	5.2
50	8.7	4.5		9.1	4.9
	9.0	4.8	50	8.1	3.9
	9.0	4.8		7.3	3.1
	9.2	5.0		6.8	2.6

0+00

(42)

11:23

50

1+00

50

W. 86+00

CONTD. SOUTH

Dist Sound Elev

6.6 2.5

(41)

6.6 2.5

4+00

6.1 2.0

5.9 1.8

5.9

5.9

11:28

5.9

50

5.9 1.8

X-sec P 57

3-25-59

STA. W. 85+00; 0+00=N. 15310 ; SOUND SOUTH

Dist. Sound Elev. Dist. Sound Elev.

0+00 0.2 +3.8 (39) 8.7 4.8

11:33 0.9 +3.1 2+00 8.8 4.9

(40) 1.5 +2.5 8.9 5.0

2.1 +1.9 9.0 5.1

3.0 +1.0 9.0

50 3.9 +0.1 9.0

4.9 0.9 50 9.0 5.1

6.1 2.1 9.2 5.3

7.0 3.0 9.2 5.3

7.5 3.5 9.2 5.3

1+00 8.0 4.0 9.0 5.1

8.2 4.2 3+00 9.0 5.1

8.2 9.0 5.1

8.2 8.9 5.0

8.2 4.2 8.2 4.3

50 8.5 4.5 7.3 3.4

8.5 4.5 50 6.2 2.3

8.5 4.5 11:38 6.2 2.3

8.7 4.7 6.0 2.1

W. 85+00 CONTD. SOUTH

Dist Sound Elev

(39) 5.9 2.0

5.6 1.7

4+00 5.6 1.7

5.5 1.6

5.2 1.3

5.2 1.3

11:40 5.5 1.6

50 5.5 1.6

138

X-Jec P 57 3-25-59
 STA. W. 84+00; 0+00=N. 15340; SOUND SOUTH

W. 84+00 CONTO SOUTH
 Dist Sound Elev.

Dist	Sound	Elev.	Dist.	Sound	Elev.
0+00	0		(38)	8.7	4.9
(39)	0.4	+3.5	2+00	8.9	5.1
<u>1145</u>	1.1	+2.8	<u>1148</u>	8.9	5.1
	2.0	+1.9		9.0	5.2
	2.3	+1.6		9.0	
50	3.1	+0.8		9.0	
	4.1	0.2	50	9.0	
	5.2	1.3		9.0	
	6.3	2.4		9.0	
	7.2	3.3		9.0	5.2
1+00	7.5	3.6		9.2	5.4
	8.0	4.1	3+00	9.1	5.3
	8.2	4.3		9.0	5.2
	8.3	4.4		8.9	5.1
	8.5	4.6		8.5	4.7
50	8.5	4.6		7.1	3.3
	8.7	4.8	50	6.5	2.7
	8.7	4.8		6.0	2.2
	8.7	4.8		6.0	2.2

Dist	Sound	Elev.
(38)	5.5	1.7
	5.5	1.7
4+00	5.3	1.5
	5.3	1.5
	5.3	1.5
<u>1152</u>	5.1	1.3
	5.5	1.7
50	5.0	1.2

x-sec 57

3-25-59

STATION 83+00; 0+00 = N. 15, 350; SOUND SOUTH

Dist Sound Elev Dist Sound Elev

0+00

(23) 7.1 4.8

(1:00)

0.0 +2.3

2+00 7.0 4.7

(23)

0.5 +1.8

7.2 4.9

1.5 +0.8

7.2 4.9

2.3 0.0

7.5 5.2

50

4.0 1.7

7.5

4.7 2.4

50 7.5

5.0 2.7

7.5

5.5 3.2

7.5

6.0 3.7

7.5

1+00

6.2 3.9

7.5 5.2

6.4 4.1

3+00 7.5 5.3

6.4 4.1

(22) 7.0 4.8

6.5 4.2

6.0 3.8

7.0 4.7

5.0 2.8

50

7.0

4.5 2.3

(1:05)

7.0

50 3.8 1.6

7.0 4.7

3.8 1.6

7.2 4.9

3.8 1.6

W. 83+00 CONTD SOUTH

140

Dist Sound Elev

(22)

3.5 1.3

3.5

4+00

3.5

3.5

3.5 1.3

3.2 1.0

(1:08)

3.2 1.0

50

3.2 1.0

x-sec P 58

3-25-59

STA. W. 82+00; 0+00 = N. 15.370; SOUND SOUTH

Dist. Sound Elev. Dist Sound Elev.

0+00

(19) 6.5 4.6

(1.9)

2+00 6.6 4.7

6.6

1.0 +0.9

6.6

1.9 0.0

6.6

50

3.2 1.3

6.6 4.7

4.4 2.5

50 6.8 4.9

5.2 3.3

6.8

5.5 3.6

6.8

(1:20)

5.5 3.6

6.8 4.9

1+00

5.8 3.9

6.5 4.6

6.0 4.1

3+00 6.2 4.3

6.1 4.2

6.0 4.1

6.2 4.3

4.8 2.9

6.2 4.3

3.8 1.9

50

6.4 4.5

3.5 1.6

6.4 4.5

50 3.2 1.3

6.4 4.5

3.1 1.2

6.5 4.6

3.1 1.2

W. 82+00 CONTD SOUTH

Dist Sound Elev.

(18) 3.0 1.2

3.0

4+00 3.0

3.0

3.0 1.2

2.9 1.1

(1:23) 2.9 1.1

50 2.9 1.1

X-Jec 58 3-25-59
 W. 81+00; 0+00=N. 15.400; SOUND SOUTH

W. 81+00 CONTD SOUTH
 Dist Sound Elev

(42)

Dist	Sound	Elev.	Dist	Sound	Elev.
			(1.5)	2.6	1.1
0+00	0.0		(1.6)	6.0	4.4
1:33	0.0	+1.6	2+00	6.0	
(1.6)	0.7	+0.9		6.0	
	1.5	+0.1		6.0	
	2.4	0.8		6.0	4.4
50	3.1	1.5	1:37	5.9	4.3
	3.8	2.2	50	5.9	
	4.5	2.9		5.9	
	4.8	3.2		5.9	
	5.0	3.4		5.9	4.3
1+00	5.2	3.6		6.0	4.4
	5.5	3.9	3+00	5.8	4.2
	5.6	4.0		5.9	4.3
	5.6	4.0		4.8	3.2
	5.9	4.3		3.4	1.8
50	5.8	4.2		3.1	1.5
	5.8	4.2	50	3.0	1.4
	5.8	4.2		2.8	1.2
	5.9	4.3		2.7	1.1

Dist	Sound	Elev
(1.5)	2.6	1.1
	2.5	1.0
4+00	2.6	1.1
	2.5	1.0
1:40	2.2	0.7
	2.2	0.7
	2.2	0.7
50	2.7	0.6

X-sec P 58

3-25-59

W. 80+00 CONTD SOUTH

(73)

STA. W. 80+00; 0+00=N. 15.430; SOUND SOUTH

Dist Sound Elev.

Dist	Sound	Elev.	Dist	Sound	Elev.	Dist	Sound	Elev.
			(0.6)	1.8	1.2			
0+00			(0.7)	5.4	4.7	2+00	1.8	1.2
2:15			2+00	5.4	4.7	4+00	1.7	1.1
(0.7)				5.4	4.7		1.6	1.0
	0.5	+0.2		5.2	4.5		1.5	0.9
	1.5	0.8		5.2	4.5		1.5	0.9
50	2.8	2.1		5.4	4.7		1.2	0.6
	3.5	2.8	50	5.4	4.7	50	1.2	0.6
	4.0	3.3		5.4	4.7			
	4.5	3.8		5.7	5.0			
	4.8	4.1		5.5	4.8			
1+00	4.9	4.2		5.2	4.5			
	5.0	4.3	3+00	5.1	4.4			
	5.3	4.6		4.9	4.2			
	5.3	4.6		4.0	3.3			
	5.3	4.6		3.0	2.3			
50	5.2	4.5		2.5	1.8			
	5.4	4.7	50	2.2	1.5			
	5.4	4.7		2.0	1.3			
	5.4	4.7		1.9	1.2			

X-sec P 58 7-29-59
STA. W. 79+00; 0+00 = N. 15.500; SOUND SOUTH

Dist Sound Elev. Dist. Sound Elev.

0+00

7.7

2+00

7.7

11:20 0.5

7.7

(3.1) 1.1

7.2

1.7

7.2

50 2.3

7.2

3.2

50 7.1

4.0

7.1

5.1

7.1

5.7

7.2

1+00 6.3

7.2

6.7

3+00 7.1

7.0

7.3

7.5

50 7.5

7.5

50

7.5

7.7

7-29-59

STA. N. 155+00; 0+00 = W. 7900; SOUND EAST.

Dist.	Sound Elev.	Dist.	Sound Elev.
0+00			8.5
1.15	0.0	2+00	8.7
(3.5)	0.3		8.5
	1.1		8.5
	1.5		8.5
50	1.9		8.5
	2.3	50	8.5
	2.9		8.5
	3.6		8.5
	4.5		8.5
1+00	5.8		8.9
	6.3	3+00	8.9
1+25	6.9		8.8
	7.1	11+00	8.8
	7.5		8.8
50	7.7		8.8
	8.0	50	8.8
	7.9		8.7
	8.3		9.0

STA. N. 155+00 CONTD EAST

(45)

Dist.	Sound Elev.	Dist.	Sound Elev.
	8.8		5.0
	8.7		4.9
4+00	8.7	6+00	4.8
	8.7		4.2
	8.7		4.0
(3.5)	8.5		3.4
1+20	8.0		3.0
50	7.5	50	2.7
	7.5		2.5
	7.2		2.1
	7.0		1.8
	7.0	(3.5)	1.2
5+00	6.8	7+00	1.0
	6.5	11+25	0.8
	6.5		
	6.2		
	6.2		
50	5.5		
	5.1		
	5.1		

X-sec Rose CREEK AREA

3-26-59

STA N 167+00; 0+00 = W 10412.00

Sound 1195 page 4-

Sta

ELEV

W 0

10.96

ground
same
Hub

W 14

7.8

W 40

6.0

W 100

5.7

W 133

4.8

W 137

2.5

LATH

W 208

3.9

W 212

6.2

W 275

6.7

W 282

9.5

W 298

13.4

W 304 = Fence MB school

14.6

Page 4

Rose CREEK AREA

3-26-59 Allen

(46)

X-sec
West

STA N 166+00; 0+00 = W 10394.02

STA

ELEV.

W 0

10.52

GROUND same
Hub

W 20

6.9

W 41

6.1

W 100

5.6

W 140

4.9

W 143

2.3

W 216

4.4

W 228

6.0

W 274

5.8

W 286

11.0

W 315 = Fence MB school

12.8

Rosecreek - Soundings page 4 X-100
 STA N 165+00; 0+00 = 10376.04 West

Sta	ELEV.	GR same -
	T.P.	Hub
W 0	10.90	Hub
W 15	8.0	
W 36	6.0	
W 100	5.1	
W 159	5.4	
W 165	2.2	
W 244	4.3	
W 251	5.7	
W 278	5.6	
W 289	10.3	
W 309: Fence M.B. School.	12.4	

Soundings page 4 - ROSECREEK (47)
 STA N 164+00; 0+00 = 10358.06 West

Sta	ELEV	GR same -
		Hub
W 0	10.93	Hub
W 18	7.4	
W 35	6.1	
W 100	4.9	
W 180	4.9	
W 190	5.2	
W 197	4.4	
W 200	1.9	
W 252	2.7	
W 265	5.6	
W 300	5.6	
W 400	5.2	

ROSECREEK - Soundings P 5
STA N/63+00; 0+00 = W 10340.08

X-SEC

WEST

GROUND
SOME
HUB

STA	ELEV
W 0	10.79
W 37	5.5
W 100	4.7
W 150	4.7
W 175	4.5
W 192	4.8
W 215	2.1
W 260	1.7
W 266	5.5
W 300	5.2
W 400	5.0
W 500	4.8

ROSECREEK - Soundings P 5
3-30-59

(48)

X-SEC

WEST

STA N/62+00; 0+00 = W 10322.11

Sta	ELEV
W 0	10.89
W 36	5.4
W 100	4.9
W 150	4.6
W 200	3.7
W 208	2.4
W 253	1.4
W 260	5.0
W 300	5.2
W 400	5.1
W 500	4.8

GROUND
SOME
HUB

Rose CREEK AREA -
Soundings p. 5

STA N 161400; 0+00 = W 10304.13

STA	ELEV	Ground 30770 Hub
W0	10.65	Hub
W29	6.0	
W100	4.4	
W163	4.7	
W199	3.8	
W200	2.0	
W256	1.6	
W263	5.2	
W300	5.0	
W400	4.6	
W500	4.6	

Rose CREEK AREA - Soundings Page 5

(49)

STA N160400; 0+00 = 10286.15

X-sec
WEST

STA	ELEV	gr same Hub
W0	10.24	Hub
W32	8.7	
W45	5.3	
W100	4.5	
W173	4.3	
W178	3.3	
W190	3.5	
W200 - channel	1.4	
W264	4.4	
W274	5.2	
W300	5.1	
W350	5.1	
W400	5.0	

STA N/59+00; 0+00 = W/10268.18

x-sec
W

STA N/58+00; 0+00 = W/10250.20

x-sec
West

STA	ELEV	gr same
W0	10.01	Hub
W10	9.9	
W34	6.2	
W100	4.2	
W168	4.0	
W172	2.8	
W262	3.8	
W280	5.2	
W300	5.0	
W350	5.0	
W400	5.0	

STA	ELEV	gr same
W0	10.00	Hub
W10	9.4	
W38	5.1	
W88	4.7	
W100	3.9	
W140	3.3	
W155	2.5	
W160	1.2	
W240	2.8	
W242	3.6	
W267	5.1	
W300	4.9	
W350	4.9	
W400	4.9	

ROSE CREEK - Soundings p. 6

x-100

ROSE CREEK - Soundings Page 6

(51)

STA N 157+00; 0+00 - W 10 226.20

WEST

STA N 156+00; 0+00 = 10187.45

x-100
WEST

STA	ELEV		STA	ELEV	
W0	9.94	ground line Hub	W0	10.03	gr. same Hub
W30'	6.3		W50	5.3	
W100	3.7		W88	4.5	
W110	3.3		W103	1.5	
W125	1.9		W183	2.8	
W204	2.0		W185	3.6	
W207	3.6		W200	4.0	
W250	4.6		W300	4.7	
W300	4.9		W400	4.9	
W400	5.0				

Rose CREEK Sound p 6

S STA N 155+00; 0+00 = W 10131.90

X-101
WEST

STA	ELEV
W W 0	9.79
W W 18	8.3
W W 40	6.4
W W 58	4.8
W W 108	3.9
W W 120	1.1
W W 208	3.1
W W 210	3.3
W W 232	4.4
W W 300	4.6
W 400	4.8

gr James
Hub

Rose CREEK - Soundings Page 7

ALLEN

(52)

STA N 154+00; 0+00 = W 10054.67

X-100
WEST

STA	ELEV
W 0	9.80
W 17	9.2
W 33	6.6
W 60	5.1
W 100	4.3
W 125	3.9
W 135	0.8
W 255	3.2
W 300	4.6
W 400	4.6

gr James
Hub

Shore section DEANZA AREA
 Soundings Page 10 -
 STA = N153+00; 0+00 = W 9945.48

STA	ELEV	9K same Hub
W0	8.89	Hub
W4	7.3	
W50	5.4	
W100	4.4	

Soundings Page 11
 STA N152+00; 0+00 = W 9772.21

STA	ELEV	9K same Hub
W0	9.59	Hub
W22	9.2	
W42	6.3	
W100	4.5	

Shore Sta - Soundings P. 13
 DEANZA -
 STA W101+00; 0+00 = N15454.66

STA	ELEV	9K same Hub
50	9.63	Hub
515	9.4	
530	7.0	
5100	4.2	

Soundings Page 15
 STA W100+00; 0+00 = N 15345.28

STA	ELEV	9K same Hub
50	9.68	Hub
55	9.4	
59	7.6	
523	6.3	
5100	3.9	

Soundings Page 16
 STA W 99+00; 0+00 = N15267.94

STA	ELEV	9K same Hub
50	7.59	Hub
56	6.5	
550	4.1	
5100	3.3	

DE ANZA AREA - 3-30-59
SOUNDINGS Page 18.

STA W 98+00; 0+00 = N 15212.31

x-sec
567

STA	ELEV	
S 0	9.56	gr same Hub
S 10	9.1	
S 12	7.2	
S 50	4.9	
S 100	3.1	

SOUNDINGS Page 19

STA W 97+00; 0+00 = N 15173.64

STA	ELEV	
S 0	9.45	gr same Hub
S 8	8.9	
S 20	6.4	
S 50	5.0	
S 100	3.0	

SOUNDINGS P 20 3-30-59

STA W 96+00; 0+00 = N 15149.42

x-sec
507

STA	ELEV	
S 0	9.52	gr same Hub
S 10	8.5	
S 11	7.5	
S 50	4.2	
S 100	2.5	

SOUNDINGS P. 21

STA W 95+00; 0+00 = N 15138.35

x-sec 567

STA	ELEV	
S 0	9.85	gr same Hub
S 12	9.1	
S 16	6.8	
S 50	3.8	
S 100	2.5	

Sounding P 22 - 3-30-59

STA W 94+00; 0+00 = N 15139.86

x-sec
SLY

STA	ELEV
5.0	9.61
514	8.2
517	6.5
550	4.2
5100	1.7

9K Same
Hub

Sounding P 24 - 3-30-59

STA W 92+00; 0+00 = N 15179.82

(53)
x-sec
SLY

STA	ELEV	NTZ
5.0	9.40	9K Same Hub
515	7.8	
518	6.5	
550	4.1	
595	1.4	

Sounding P 23

STA W 93+00; 0+00 = N 15154.04

x-sec
SLY

STA	ELEV
50	9.25
512	8.1
514	6.9
550	3.9
595	1.3

9K Same
Hub

Sounding P 25

STA W 91+00; 0+00 = N 15207.24

STA	ELEV	NTZ
50	9.32	9K Same Hub
58	8.6	
520	6.6	
550	4.1	
595	1.4	

SOUNDINGS P. 26 - 3-30-59

STA W 90+00; 0+00 = N 15234.66

STA	ELEV	gr same Hub
50	8.91	Hub
510	8.0	
520	6.5	
550	4.4	
595 WATER	1.5	

SOUNDINGS P. 27

STA W 89+00; 0+00 = N 15262.08

STA	ELEV	gr same Hub
50	9.09	Hub
510	8.3	
512	7.1	
550	4.5	
595	1.5	

SOUNDINGS P. 28 - 3-30-59

1 STA W 88+00; 0+00 = N 15289.50

(56)

X-sec
SLY

STA	ELEV	gr same Hub
50	9.36	Hub
511	8.7	
515	7.1	
550	4.3	
593	1.6	

SOUNDINGS P. 29

STA W 87+00; 0+00 = N 15316.91

X-sec
SLY

STA	ELEV	gr same Hub
50	9.76	Hub
513	8.8	
520	7.3	
550	4.6	
591	1.7	

SOUNDINGS P 37 - 3-30-59 ALLEN

STA W 86+00; 0+00 = N 15344.33

x-sec
SLY

STA	ELEV	
50	9.64	GR SAME HUB
514	8.6	
525	6.7	
550	4.5	
TIDE 591	1.7	

SOUNDINGS P 38

STA W 85+00; 0+00 = N 15371.75

x-sec
SLY

STA	ELEV	
50	9.46	GR SAME HUB
513	8.5	
525	6.6	
550	4.8	
591	1.7	

SOUNDINGS P 39 - 3-30-59 ALLEN (57)

STA W 84+00; 0+00 = N 15399.17

x-sec
SLY

STA	ELEV	
50	9.36	GR SAME HUB
514	8.5	
524	6.5	
550	4.6	
591	1.8	

SOUNDINGS P. 40

STA W 83+00; 0+00 = N 15426.59

x-sec
SLY

STA	ELEV	
50	9.63	GR SAME HUB
515	8.6	
525	6.7	
550	4.9	
589	1.8	

SOUNDINGS P 41 X-sec 54

STA W 82+00; 0+00=N 15454.00

STA	ELEV	GR. SAME HUB
50	9.19	
512	8.5	
525	6.5	
550	4.9	
593	1.8	

TBM - EL = 9.16

MON AT 13.C. 250R
N 15505.22
W 8013.22

SOUNDINGS P 42 - X-sec 54.

STA W 81+00; 0+00=N 15481.42

STA	ELEV	GR. SAME HUB
50	9.45	
510	8.8	
520	6.7	
550	4.4	
585	1.8	

SOUNDINGS P 43 - 3-30-59

STA W 80+00; 0+00=N 15509.24

STA	ELEV	X-sec 54.	GR. SAME HUB
50	9.21		
58	8.8		
518	6.5		
550	3.9		
557	3.5		

SOUNDINGS P 44 - 3-30-59

STA W 79+00; 0+00=N 15572.13

STA	ELEV	X-sec 54.	GR. SAME HUB
50	9.47		
513	8.2		
520	6.6		
550	4.8		
569	3.5		

3-30-59 - 3.30.59 - 50 A

3-30-59 (59)

STA N 156+00; 0+00 = W 7876.62 ELY

STA N 158+00; 0+00 = W 7835.18 ELY

STA	ELEV	gr same hub
E0	9.50	
E16	8.5	
E30	7.0	
E50	6.1	
TIDE E77	3.5	

STA	ELEV	gr same HUB
E0	9.11	
E10	8.8	
E35	7.1	
E50	5.0	
TIDE E62	3.6	

X-sec

3-30-59 X-sec

STA N 157+00; 0+00 = W 7833.66 ELY

STA N 159+00; 0+00 = W 7880.54 ELY

STA	ELEV	gr same hub
E0	9.53	
E10	9.0	
E27	6.6	
E45	6.4	
E50	5.7	
TIDE E69	3.5	

STA	ELEV	gr same HUB
E0	9.25	
E30	7.7	
E50	5.0	
E61	3.6	

3-30-59

X-SEC
NLY

STAW 79+00; 0+00 = N 15920.51

STA	ELEV	9R SAME HUB
NO	9.28	
N 35	7.4	
N 40	6.1	
N 50	5.2	
N 63	3.7	

SOUNDINGS NORTHWAY OF NLY BRIDGE (60)
ON INGRAHAM AVE -
STAW 157+00; 0+00 = N 10300. Sound North

DIST Sound ELEV 1

2.45
0+00 10.0

(3.2) 11.0

11.3

10.3

4.6

50 3.9

3.2

3.0

2.5

2.3

1+00 2.1

2.0

1.5

1.1

50

3-30-59

X-SEC
NLY

STA W 80+00; 0+00 = N 15983.40

STA	ELEV	9R SAME HUB
NO	9.40	
N 32	7.3	
N 35	5.7	
N 50	3.8	
Tide N 53	3.7	

TBM-ELEV = 9.56

MON ON EC 250' RAD
N 15995.45 2 DE
W 81+00, 2.0, ANZA CORN

STA W157+00; 0+00 = N10300 Sound SOUTH

DIST Sound ELEV DIST Sound ELEV

2:50 0+00 13.0 9.7

(3.3) 10.6 7.3 2+00 13.2 9.9

11.3 8.0 13.0 9.7

11.3 8.0 13.0 9.7

11.3 8.0 13.0 9.7

50 11.3 8.0 12.2 8.9

11.3 8.0 50 12.3 9.0

11.3 8.0 12.2 8.9

11.3 8.0 12.2 8.9

11.3 8.0 12.0 8.7

1+00 11.2 7.9 (3.3) 12.0 8.7

11.2 7.9 2:55 3+00 12.2 8.7

11.2 7.9 12.1 8.8

11.2 7.9

11.3 8.0

50 12.0 8.7

12.0 8.7 50

12.1 8.8

12.8 9.5

STA W156+00; 0+00 = N10300 Sound NORTH

DIST Sound ELEV DIST Sound ELEV

2:55 0+00 11.3 8.0

(3.3) 11.1 7.8

5.4 2.1

4.2 0.9

3.8 0.5

50 3.2 +0.1

2.4 +0.9

2.1 +1.2

2.0 +1.3

2.7 +0.6

1+00 2.1 +1.2

1.9 +1.4

(3.4) 1.5 +1.8

3:00 1.1 +2.2

50

STA W 156+00; 0+00 = N 10300 - Sound South

STA W 155+00; 0+00 = N 10300 - Sound North

DIST.	Sound	ELEV	DIST	Sound	ELEV
0+00			(3.4)	13.9	10.5
3+00	11.3	7.9	3+05	13.8	10.4
(3.4)	11.1	7.7	2+00	13.8	10.4
	11.1	7.7		13.8	10.4
	11.9	8.5		13.9	10.5
50	11.8	8.4		11.8	8.4
	11.2	7.8	50	12.2	8.8
	11.4	8.0		12.1	8.7
	11.4	8.0		12.1	8.7
	12.0	8.6		12.2	8.8
1+00	12.0	8.6		12.0	8.6
	12.0	8.6	3+00	12.1	8.7
	13.1	9.7			
	12.0	8.6			
	12.3	8.9			
50	12.7	9.3			
	13.2	9.8			
	13.7	10.3			
	13.9	10.5			

DIST	Sound	ELEV
3+10		
0+00	11.8	
(3.1)	10.8	
	4.5	
	3.9	
	3.7	
50	3.2	
	2.5	
	2.2	
	2.1	
	2.1	
1+00	2.1	
	1.9	
	1.6	
	1.1	
	0.8	
50		

See page 68

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Sound

STAW 160 f to 00 to 004 NORTH 63

STAW 160 f to 00; 0+00=N/10200 NORTH

DIST Sound ELEV

DIST Sound ELEV DIST Sound ELEV

(4.0) 1.9 +2.1

0+00 13.1 9.0 12.1 8.0

9:35 1.3 +2.7

9:30 12.7 8.6 2+00 12.1 8.0

4+00 1.2 +2.8

(4.1) 13.0 8.9 12.2 8.1

1.1 +2.9

12.8 8.7 12.1 8.0

0.8 +3.2

12.8 8.7 12.2 8.1

5.0 13.1 9.0 11.8 7.7

12.4 8.3 5.0 9.4 5.3

5.0

12.4 8.3 6.6 7.5

12.7 8.6 2.9 +1.2

13.0 8.9 3.0 +1.1

1+00 13.2 9.1 2.9 +1.2

12.8 8.7 3+00 2.9 +1.2

12.8 8.7 2.9 +1.2

12.4 8.3 2.9 +1.2

12.7 8.6 2.8 +1.3

5.0 12.3 8.2 2.9 +1.2

12.2 8.1 5.0 2.9 +1.2

12.0 7.9 2.7 +1.4

12.0 7.9 2.3 +1.8

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STAW 160+00; 0+00 = N10200 - Sound South

DIST	Sound	ELEV	DIST	Sound	ELEV
0+00			14.4	10.4	
9:40	12.3	8.3	2+00	14.0	10.0
(4.0)	13.0	9.0	12.5	8.5	
	13.0	9.0	12.4	8.4	
	13.1	9.1	12.1	8.1	
50	13.1	9.1	12.2	8.2	
	12.9	8.9	50	12.2	8.2
	12.9	8.9	12.2	8.2	
	12.9	8.9	12.0	8.0	
	12.9	8.9	11.9	7.9	
1+00	13.0	9.0	11.8	7.8	
	12.4	9.4	3+00	12.0	8.0
	14.1	10.1	11.8	7.8	
	14.9	10.9	11.4	7.4	
	15.0	11.0	(4.0)	11.3	7.3
50	15.1	11.1	9:45	11.9	7.9
	15.2	11.2	50	11.2	7.2
	15.2	11.2			
	15.0	11.0			

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STAW 159+00; 0+00 = N10200 - Sound North

DIST	Sound	ELEV	DIST	Sound	ELEV
9:50 0+00	12.2	8.2	7.5	3.5	
(4.0)	12.0	8.0	2+00	3.0	+1.0
	12.1	8.1	2.8	+1.2	
	12.0	8.0	2.6	+1.4	
	12.1	8.1	2.6	+1.4	
50	12.1	8.1	2.5	+1.5	
	12.2	8.2	50	2.7	+1.3
	12.2	8.2	2.9	+1.1	
	13.0	9.0	3.0	+1.0	
	13.9	9.9	3.0	+1.0	
1+00	14.0	10.0	3.0	+1.0	
	14.0	10.0	3+00	2.6	+1.4
	14.0	10.0	2.2	+1.8	
	13.5	9.5	2.2	+1.8	
	13.6	9.6	2.0	+2.0	
50	13.7	9.7	1.8	+2.2	
	13.5	9.5	50	1.2	+2.8
	13.0	9.0	(4.0)	1.1	+2.9
	12.8	8.8	9:55	1.1	+2.9

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STAWIS 9+00; 0+00 = N10200 Sound South

DIST	SOUND	ELEV	DIST	SOUND	ELEV
0+00			12.0	8.0	
9:55	12.2	8.2	2+00	12.0	8.0
(4.0)	12.5	8.5	12.0	8.0	
	12.6	8.6	12.0	8.0	
	12.7	8.7	12.2	8.2	
50	13.0	9.0	12.2	8.2	
	13.5	9.5	50	12.2	8.2
	13.6	9.6	12.0	8.0	
	13.4	9.4	12.0	8.0	
	13.4	9.4	11.9	7.9	
1+00	13.7	9.7	(3.9)	11.7	7.8
	14.0	10.0	3+00	11.7	7.8
	14.6	10.6	10:00	11.7	7.8
	14.7	10.7			
	14.7	10.7			
50	14.8	10.8			
	15.0	11.0	50		
	14.8	10.8			
	12.2	8.2			

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65

STAWIS 58+00; 0+00 = N10200 Sound North

DIST	SOUND	ELEV	DIST	SOUND	ELEV
0+00			12.0	8.0	
	11.6	7.7	0+00	11.6	7.7
	11.8	7.9	(3.9)	11.8	7.9
	11.5	7.6	2+00	3.0	+0.9
	11.5	7.6		3.0	+0.9
	11.5	7.6		3.0	+0.9
50	11.5	7.6		3.0	+0.9
	11.5	7.6	50	2.5	+1.4
	11.3	7.4		1.9	+2.0
	11.2	7.3		1.4	+2.5
	11.0	7.1		1.0	+2.9
1+00	11.0	7.1			
	11.3	7.4	3+00		
	11.3	7.4			
	12.0	8.1			
	12.5	8.6			
50	12.5	8.6			
	9.6	5.7			
	9.0	5.1			
10:05	3.5	+0.4			

STAIN 154+00 cont South - 67

DIST	Sound	ELEV	DIST	Sound	ELEV
0+00			10:45	18.0	14.4
10:40	2.0	+1.6	2+00	18.1	14.5
(3.6)	2.0	+1.6		18.6	15.0
	2.2	+1.4		19.0	15.4
	3.0	+0.6		19.0	15.4
50	4.0	0.4		19.0	15.4
	4.3	0.7	50	19.5	15.9
	4.5	0.9		19.5	15.9
	4.5	0.9		19.3	15.7
	13.4	9.8		19.5	15.9
1400	14.5	10.9		19.6	16.0
	16.0	12.4	3+00	18.0	14.4
	19.0	15.4		14.5	10.9
	20.5	16.9		14.2	10.6
	20.6	17.0	(3.6)	14.5	10.9
50	20.7	17.1	10:45	13.8	10.2
	18.1	14.5	50	13.5	9.9
	18.0	14.4		14.0	10.4
	18.0	14.4		14.0	10.4

DIST	Sound	ELEV	DIST	Sound	ELEV
	13.5	9.9			
	13.5	9.9			
4+00	13.5	9.9			
	13.5	9.9			
	13.2	9.6			
	13.1	9.5			
	13.1	9.5			
50	13.0	9.4			
	12.0	8.4			
	12.0	8.4			
(3.6)	11.8	8.3			
10:50	11.0	7.5			
5+00	9.1	5.6			

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Sound
South

STAW 155400 } 0400 = N10300-

DIST Sound ELEV DIST Sound ELEV

0400 11.3 7.8 12.8 9.3

10:55 11.5 8.0 2400 12.7 9.2

(3.5) 11.5 8.0 11.1 7.6

11.5 8.0 11.2 7.7

11.3 7.8 11.3 7.8

50 11.3 7.8 11.9 8.4

11.3 7.8 50 12.0 8.5

11.3 7.8 12.0 8.5

11.3 7.8 12.0 8.5

11.3 7.8 12.0 8.5

1400 11.3 7.8 12.0 8.5

11.3 7.8 3400 12.2 8.7

11.4 7.9 12.2 8.7

11.6 8.1 12.1 8.6

11.8 8.3 12.3 8.8

50 12.1 8.6 12.8 9.3

12.6 9.1 50 12.7 9.2

12.8 9.3 12.4 8.9

13.0 9.5 12.3 8.8

STAW 155400 CONT SOUTH 68
DIST Sound ELEV

(3.6) 12.1 8.6

12.1 8.6

4400 12.0 8.5

11:00 11.3 7.8

50

5400

7-29-59 SOUND EAST
 STA. N. 156+00; 0+00 = W. 7800.0

N. 156+00 CONTD EAST 69
 Dist Sound Elev Dist Sound Elev

Dist	Sound	Elev	Dist	Sound	Elev
1/30 0+00				9.0	5.4
(3.6)	0.9	+2.7	2+00	9.0	
	1.8	+1.8		9.0	
	2.6	+1.0		9.0	
	3.1	+0.5		9.0	
50	4.4	0.8		9.0	
	5.7	2.1	50	9.0	
	6.8	3.2		9.0	
	7.2	3.6		9.0	
	7.6	4.0		8.8	5.2
1+00	8.0	4.4		8.8	
	8.1	4.5	3+00	8.8	
	8.4	4.8		8.8	
(3.6)	8.4	4.8		8.8	
1/35	8.8	5.2		8.8	
50	8.8	5.2		9.0	5.4
	8.9	5.3	50	9.1	5.5
	9.0	5.4		9.2	5.6
	9.2	5.6		9.0	5.4

	8.6	5.0	(3.6)	1.5	+2.1
	8.4	4.8	1/40	1.3	+2.3
4+00	8.3	4.7	6+00	1.2	+2.4
	8.0	4.4		0.8	+2.8
	7.8	4.2		0.5	+3.1
	7.4	3.8		0.4	+3.2
	7.0	3.4		0.1	+3.5
50	6.4	2.8		SHORE	
	6.2	2.6			
	5.8	2.2			
	5.4	1.8			
	5.1	1.5			
5+00	5.1	1.5			
	5.0	1.4			
	4.7	1.1			
	4.4	0.8			
	3.7	0.1			
50	3.0	+0.6			
	2.7	+0.9			
	2.5	+1.1			

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STAN 157+00; 0400 = W 7770.00 - Sound EAST

DIST Sound elev DIST Sound ELEV

DIST	Sound elev	DIST	Sound ELEV
0+00			9.7
1.45	0.4	2+00	9.6
(3.7)	1.9		9.6
	2.8		9.6
	3.6		9.6
50	4.7		9.4
	6.2	50	9.4
	7.0		9.4
	8.0		9.4
	8.5		9.4
1+00	8.8		9.4
	9.0	3+00	9.5
	9.2		9.4
	9.4		9.4
	9.6		9.4
50	9.8		9.5
	9.7	50	9.5
	9.7		9.3
	9.7		9.3

STAN 157+00 CONT EAST 70

DIST Sound elev DIST Sound elev

DIST	Sound elev	DIST	Sound elev
	9.3		1.8
	8.9		1.6
4+00	8.0	6+00	1.1
	7.6		0.6
	7.3		SHORE
(3.7)	7.2		
1150	6.9		
50	6.9	50	
	6.8		
	6.3		
	6.1		
	5.9		
5+00	5.5		
	5.0		
	4.5		
	4.0		
	3.3		
50	2.9		
	2.3		
	1.8		

Sound

STAN 158400; 0400 = W 7780.0 EAST

DIST		Sound elev		DIST		Sound elev	
	0400		+0.4		10.0		6.3
	1.55	0.5	+3.2	2400	10.0		
	(3.7)	1.9	+1.8		10.0		
		2.6	+1.1		9.8		6.1
		3.4	+0.3		9.8		
	50	4.3	0.6		9.8		
		5.4	1.7	50	9.8		
		6.3	2.6		9.8		
		7.3	3.6		9.8		
		8.0	4.3		9.8		
	1400	8.6	4.9		9.8		
		9.0	5.3	3400	9.8		
		9.2	5.5		9.7		6.0
		9.8	6.1		9.7		
		10.0	6.3		9.7		
	50	10.0			9.7		
		10.0		50	9.7		
		10.0			9.7		
		10.0			9.7		

2

STAN 158400 CONT EAST

DIST		Sound elev		DIST		Sound elev	
		9.7	6.0			3.1	+0.7
		9.7	6.0			2.7	+1.1
	1400	9.6	5.9	6400	2.0		+1.8
		9.6	5.9		1.5		+2.3
		9.5	5.8		0.6		+3.2
	(3.8)	9.5	5.7		0.0		+3.8
	2400	9.3	5.5				
	50	9.0	5.2	50			
		9.0	5.2				
		9.0					
		9.0					
		8.9	5.1				
	5400	8.5	4.7	7400			
		8.2	4.4				
		7.8	4.0				
		7.3	3.5				
		6.7	2.9				
	50	6.0	2.2				
		5.1	1.3				
		4.0	0.2				

SHORE

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Sound
EASTSTAN 159+00 CONT EAST
DINT Sound elev. DINT Sound elev.

72

STAN 159+00) 0+00 = W 7830.0

DIST Sound elev DIST Sound elev

0+00 9.9

2'05 0.1 2+00 10.1

(3.8) 1.0 10.1

1.9 10.1

2.3 10.1

50 3.2 10.1

4.0 50 10.2

4.6 10.2

5.6 10.2

6.4 10.1

1+00 7.0 10.2

7.7 3+00 10.2

8.1 10.2

8.8 10.1

9.1 10.1

50 9.2 10.1

9.3 50 10.1

9.6 10.1

9.7 10.1

10.2

10.2

4+00 10.1

10.0

9.9

9.9

9.6

50 9.4

9.4

9.6

9.8

9.5

5+00 9.6

9.1

9.1

9.0

8.9

50 8.4

8.0

7.2

6.6

5.4

4+00 4.3

3.6

2.8

2.1

(3.8) 1.8

2+10 50 1.2

0.3

SHORE

7+00 0.2

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STAN/60+00 E. 47 EAST

73

STAN/60+00) DIST = W 7940			Sound EAST DIST			Sound elev DIST			Sound elev		
DIST	Sound elev	DIST	Sound elev	DIST	Sound elev	DIST	Sound elev	DIST	Sound elev	DIST	Sound elev
2:15 0+00			9.1	5.2		10.5	6.6	(3.9)	10.0		6.1
(3.9)	0.2	+3.7	2+00	9.5	5.6	4+00	10.5	6.6	2:20 6+00	9.8	5.9
	0.8	+3.1		9.8	5.9		10.5	6.6		9.5	5.6
	1.4	+2.5		10.1	6.2		10.6	6.7		9.4	5.5
	2.0	+1.9		10.1	6.2		10.6	6.7		9.0	5.1
50	2.2	+1.7		10.2	6.3		10.7	6.8		8.4	4.5
	2.7	+1.2	50	10.2		50	10.8	6.9	50	7.8	3.9
	3.1	+0.8		10.2			10.9	7.0		7.1	3.2
	3.7	+0.2		10.3	6.4		10.9			6.2	2.2
	4.1	0.2		10.3	6.4		10.3	6.4		5.0	1.1
1+00	4.4	0.5		10.4	6.5		10.4	6.5		3.8	+0.1
	5.0	1.1	3+00	10.5	6.6	5+00	10.2	6.3	7+00	2.9	+1.0
	5.5	1.6		10.5	6.6		10.2			2.2	+1.7
	6.1	2.2		10.6	6.7		10.2			1.8	+2.1
	6.9	3.0		10.5	6.6		10.1	6.2		1.4	+2.5
50	7.4	3.5		10.5			10.1			0.5	+3.4
	8.1	4.2	50	10.5		50	10.1		50	0.1	+3.8
	8.4	4.5		10.5			10.0	6.1		Shoe F	
	8.9	5.0		10.5			10.0				

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STAW 79400 COAST NORTH 24

STAW 79400; 0400 = N 5970		Sound North		DIST		Sound elev		DIST		Sound elev	
DIST	Sound elev	DIST	Sound elev								
			11.1		11.0						11.0
0400					11.0						11.0
2:30	0.2	2400	11.3	4400	11.0			6400			11.0
(4.0)	1.5		11.5		11.0						11.0
	2.3		11.7		11.0						11.0
	3.0		11.5		11.0						11.0
50	4.0		11.5		11.0						10.9
	5.0	50	11.3	50	11.0			50			10.8
	5.0		11.3		11.0						10.5
	5.8		11.3		11.0						10.5
	6.5		11.0	(4.1)	11.0						10.5
1400	7.0		11.0	2:40	11.0						10.5
	8.0	3400	11.0	5400	11.0			7400			10.3
	8.8		11.0		11.0						10.0
(4.1)	9.5		11.0		11.0						9.4
2:35	10.1		11.0		11.0						8.8
50	10.5		11.0		11.0						7.5
50	10.5	50	11.0	50	11.0			50			5.0
	10.5		11.0		11.0						4.2
	11.0		11.0		11.0						3.6

STA W 79+00 CONT NORTH

DIST	Sound elev
	3.1
	2.8
8+00	2.3
	2.0
	1.9
(4.2)	1.5
2:45	1.0
50	

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 STA W 80+00, 0+00 = N 16030. Sound NORTH (75)

DIST	Sound elev	DIST	Sound elev
	0.1 +4.1		11.5 7.3
(4.2)	1.6 +2.6	2+00	11.1 6.9
	2.6 +1.6		11.1 6.9
	3.3 +0.9		11.0 6.8
	4.2 0.0	(4.2)	11.0
50	4.9 0.7	2:50	11.0
	5.9 1.7	50	11.0
	6.5 2.3		11.0
	7.2 3.0		11.0
	8.1 3.9		11.0
1+00	9.2 5.0		11.0
	10.0 5.8	3+00	11.0
	10.8 6.6		11.0
	11.2 7.0		11.0
	11.2 7.0		11.0
50	11.4 7.2		11.0
	11.4 7.2	50	11.0
	11.8 7.6		11.0
	11.8 7.6		11.0

STA W 80+00 CONT NORTH
 DIST Sound elev DIST Sound elev

	11.0	6.8		10.6
	11.0			10.6
4+00	11.0		6+00	10.4
	11.0			10.4
	11.0			10.1
	11.0			10.1
	11.0			10.0
50	11.0		50	9.9
	11.0			9.0
	11.0			8.5
	11.0			7.0
	10.9	6.7		5.5
5+00	10.9	6.7	7+00	4.4
	10.8	6.6		3.3
	10.8	6.6		2.7
	10.7	6.5		2.0
	10.7	6.5		1.5
50	10.6	6.4	50	0.5
	10.6	6.4	shore	
	10.6	6.4		

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(76)

STA. W. 81+00; 0+00 = N. 16,060; SOUND NORTH

DIST	Sound	Elev	DIST	Sound	Elev
1:15					
0+00	0.3			9.8	
(3.1)	1.4		2+00	10.0	
	2.7			9.8	
	4.1			9.9	
	5.0			10.0	
50	6.0			9.9	
	6.8		50	9.9	
	7.5			9.7	
	8.2			9.9	
	9.0			9.8	
1+00	9.5			9.8	
	9.9		3+00	9.8	
	10.0			9.7	
	10.0			9.7	
	10.0			9.7	
50	10.0			9.7	
	10.0		50	9.7	
	10.0			9.5	
	9.9			9.4	

W. 81+00 CONTO NORTH T-30-59
Dist Sound Elev. Dist Sound Elev

	9.5		8.9
	9.4		8.8
4+00	9.7	6+00	8.5
	9.4		8.4
	9.3		8.0
	9.3		7.6
	9.4		6.5
50	9.3	50	4.8
	9.3		3.4
	9.5		2.0
	9.4		1.6
	9.5		0.4
5+00	9.3	7+00	
	9.5		SHORE
	9.4		
(3.1)	9.6		
	9.7		
11:20			
50	9.2		
	9.0		
	9.0		

contd. N.B. 111-Pg. 61

N153+00 = W9945.48

N152+00 = W9772.21 ✓

WESTINGS - SOUNDING SOUTH

W104+00 = N15454.66 ✓

W100+00 = N15345.28

W84+00 = N15399.17

W99+00 = N15267.94 ✓

W83+00 = N15426.59

W98+00 = N15212.31 ✓

W82+00 = N15454.00

W97+00 = N15173.64 ✓

W81+00 = N15481.42

W96+00 = N15149.42 ✓

W80+00 = N15509.24

W95+00 = N15138.35 ✓

W79+00 = N15572.13

W94+00 = N15139.86 ✓

N156+00 W7876.62

W93+00 = N15154.04 ✓

N157+00 = W7833.66

W92+00 = N15179.82 ✓

N158+00 W7835.18

W91+00 = N15207.24 ✓

N159+00 = W7880.54

W90+00 = N15234.66 ✓

W79+00 = N15920.51

W89+00 = N15262.08 ✓

W80+00 = N15983.40

W88+00 = N15289.50

W81+00.2 = N15995.45

W87+00 = N15316.91

W82+00 = N15987.09

W86+00 = N15344.33

W83+00 = N15978.71

W85+00 = N15371.75

W84+00 = N15970.34

W85+00 = N15961.96

W86+00 = N15953.59

W87+00 = N15945.21

W88+00 = N15936.84

W89+00 = N15928.46

W89+24.61 = N15926.40

W89+91.39 = N16723.60

W89+00 = N16731.25

W88+00 = N16739.63

W87+00 = N16748.00

W86+00 = N16752.38

W85+00 = N16764.76

W84+00 = N16773.13

W83+00 = N16781.51

W82+00 = N16789.88

W81+00 = N16798.26

W80+00 = N16829.38

W79+00 = N16876.20

W78+00 = N16905.37

W77+00 = N16911.00

W76+00 = N16894.02

W75+00 = N16851.49

W74+00 = N16772.53

N167+00 = W7343.13

N166+00 = W7296.64

N165+00 = W7268.75

N164+00 = W7241.33

N163+00 = W7213.91

N162+00 = W7186.50

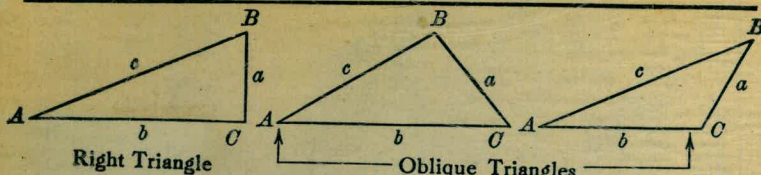
N161+00 = W7159.08

N6N = N16798.72

W 8094.53

926 59
 76 59
 35000

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

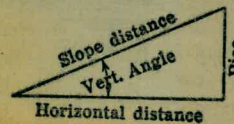
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\text{cosec} = \frac{c}{a}$

Given	Required	Formulas
a, b	A, B, c	$\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a \sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c \sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90^\circ - A, b = a \cot A, c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90^\circ - A, a = b \tan A, c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90^\circ - A, a = c \sin A, b = c \cos A$

Solution of Oblique Triangles

Given	Required	Formulas
A, B, a	b, c, C	$b = \frac{a \sin B}{\sin A}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180^\circ - C, \tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$ $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a + b + c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s - b)(s - c)}{bc}}$ $\sin \frac{1}{2}B = \sqrt{\frac{(s - a)(s - c)}{ac}}, C = 180^\circ - (A + B)$
a, b, c	Area	$s = \frac{a + b + c}{2}, \text{area} = \sqrt{s(s - a)(s - b)(s - c)}$
A, b, c	Area	$\text{area} = \frac{b c \sin A}{2}$
A, B, C, a	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = 5° 10'. From Table, Page IX. $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ ft.
 Horizontal distance also = Slope distance minus slope distance times (1 - cosine of vertical angle). With the same figures as in the preceding example, the following result is obtained. $\text{Cosine } 5^\circ 10' = .9959, 1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ ft.
 When the rise is known, the horizontal distance is approximately: — the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.