

171
BENA-FEDERAL DAMSAR^{#8}

Transit Notes-1^{to} 402

Level Notes-1^{to} 190

FIELD BOOK

360

NO. 171

KEUFFEL & ESSER CO.

DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.
NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1
FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

For Keith's Railroad Curve Tables see end of book.

Middletown (old Merit)
James Toban Forest Engineer

1931
CASS COUNTY

Field Notes

Bena-Federal Dam

SAR #8

Recent H₂O Level Reading
of Leach Lake. Date of Reading.

TD
F.G. Odegard.

Alignment 170 & 220
28 & 140

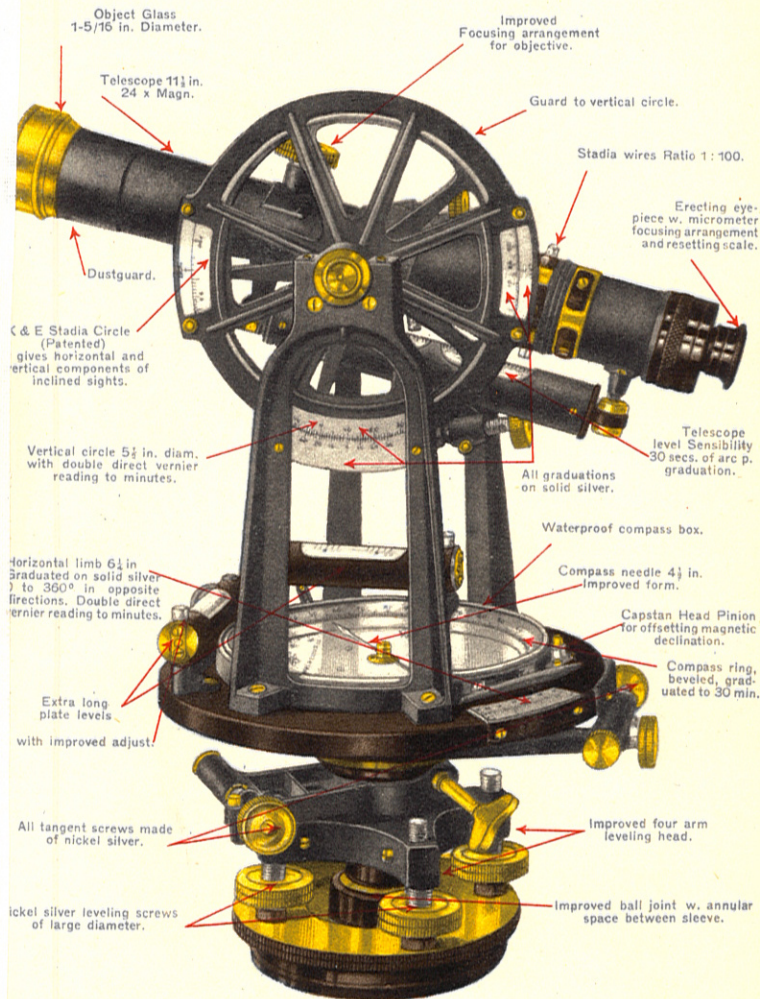
Book #171

Plan #11:293

Guard Rail to be taken up to make the curve
 sounding.
 Road to curves.
 See Cr. Posts.
 Direction of the 0 & Culverts
 Extent of Swamps.

0 0 =
1 2 0
5 0

EXTRA FINE ENGINEERS' TRANSIT
 No. 5060 S
KEUFFEL & ESSER CO., N.Y.



ALSO MADE WITH
INTERNAL FOCUSING TELESCOPE
PRACTICALLY DUST AND MOISTURE PROOF.

INDEX

P ₁ - Sta 0 to 80+64.4	pg 3 to 8
P ₂ - 71+10 (= P ₁ P&T 71+10) to 44+76.6	pg 9 to 23
P ₃ - 261+30.6 to 279+55.7	pg 24
P ₄ - 223+76.8 to 228	pg 25
Loc L [#] 0 to 402+63.8	26 to 49
X-Section L [#] 0 to 190	50 to 75
BM ² Elev	76, 77, 78
Soundings L [#] 15 to 187	79
Sec. Corners	80
Culverts in old R6 L [#] Sta - Back Book.	

0+00

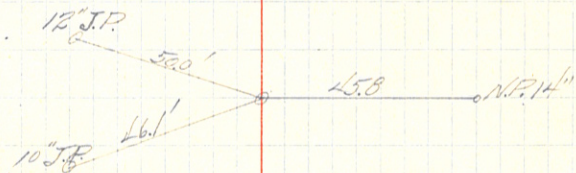
14" N.P.
 0 12.20 2.700 12" J.P.
 14" J.P. 2.200 16.95' 8" J.R.

NE. J. 6.34

+15.0

19

Hub on Ridge



56

P.

A

Cal. Cal. Neg. Cal.

2

1

40

+74.8

$\Delta 56^{\circ} 30' L.$

526-00' W

39

38

37

36

P.O.T.

35

34

33

32

+98.5

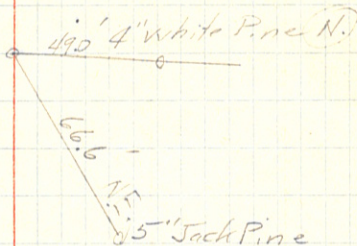
$\Delta 90^{\circ} 00' R.$

31

55. Walker Tr
M. D. Morgan Rd
B. Schuster Ch.

9-9-31. Hot

6



Robin

FP

52.8

46.9

TP

False Feather

53.0 in P.

54.3

TP

Flamingo

T₁

65

L

3

2

1535 P.O.T.

1

60

9

8
57+94.0 P.O.T.

7

6

55

L

3

52

1

50

9

8

7

46

P.O.T.

15

L

3

526°00'W

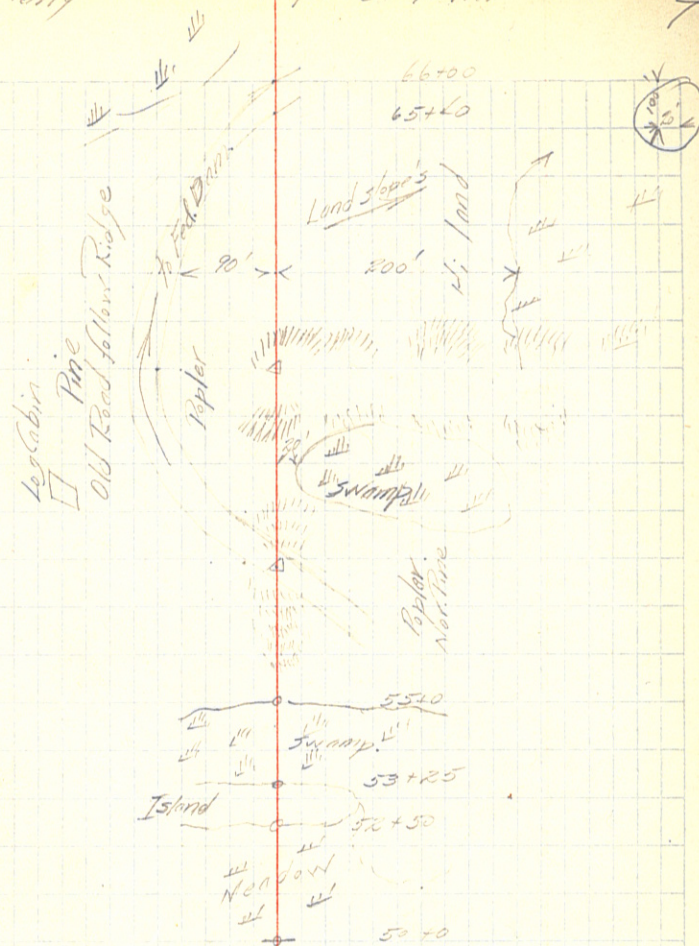
526°00'W

526°00'W

same Party

9-10-31 Plotter

7



72510

91
92 + 17.3 P.O.T.
90

9
8

7
86 + 57.3 P.O.T.
6

85

4
83 + 22.0 P.O.T.
3

2

1

80

79 + 16.7 P.O.T.

9
78 + 26.5 P.O.T.
8

7

6

75

4

3

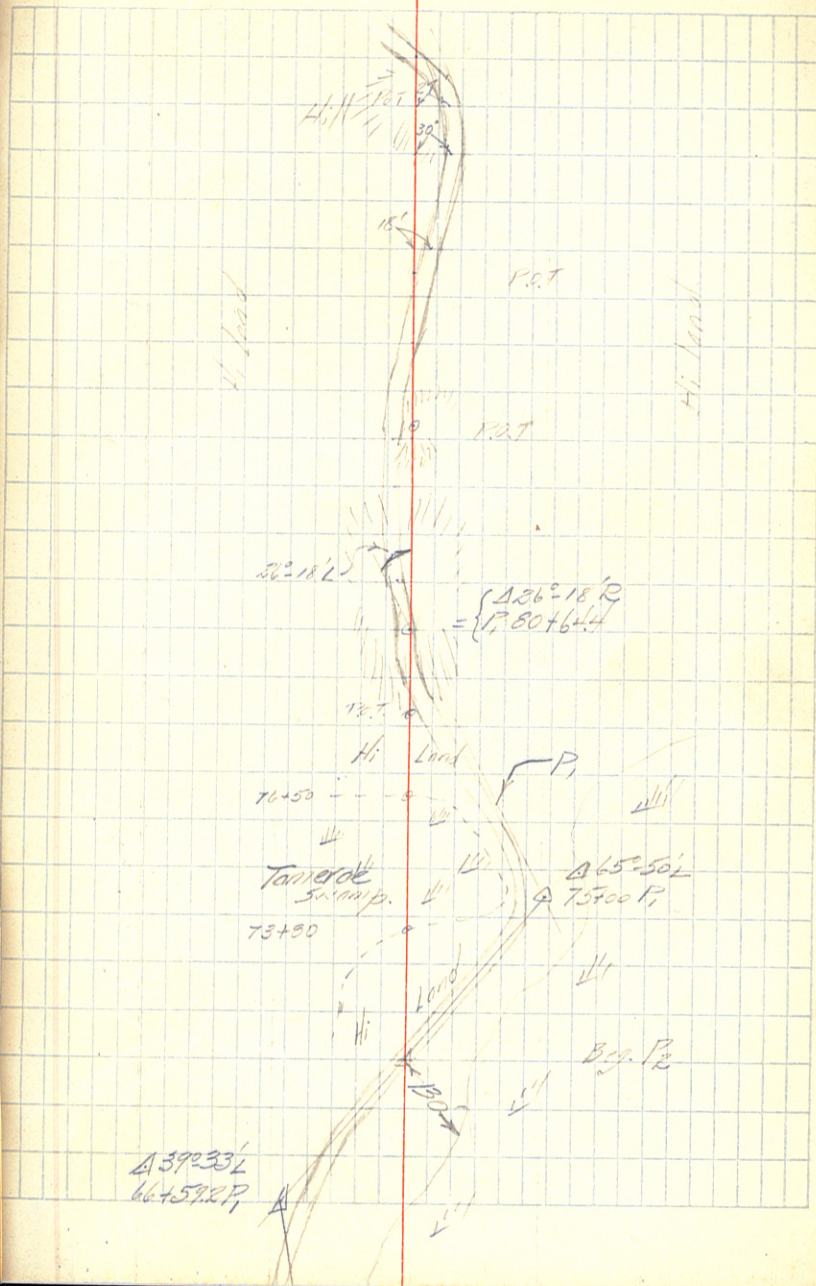
2

71 + 10 $\Delta 39^\circ 33' L$

Same Party

9-11-31 Hot-Rain 11 AM call 11:20
9-12-31

9



115

114 + 63.6 Δ $84^{\circ} - 39' R$

114
113 + 57.7 POT

13

12

11

110.
109 + 57.3 POT

109.1

8
107 + 14.1 POT

7

6

105.

4.1

3

2
101 + 98.8 POT

1

100

99
98 + 94.2 POT

98
97 + 16.0 POT

97

96
95 + 96.9 Δ $88^{\circ} - 18' L$

95
94 + 35.4 POT

94

93

92

531 $^{\circ}$ -00'E

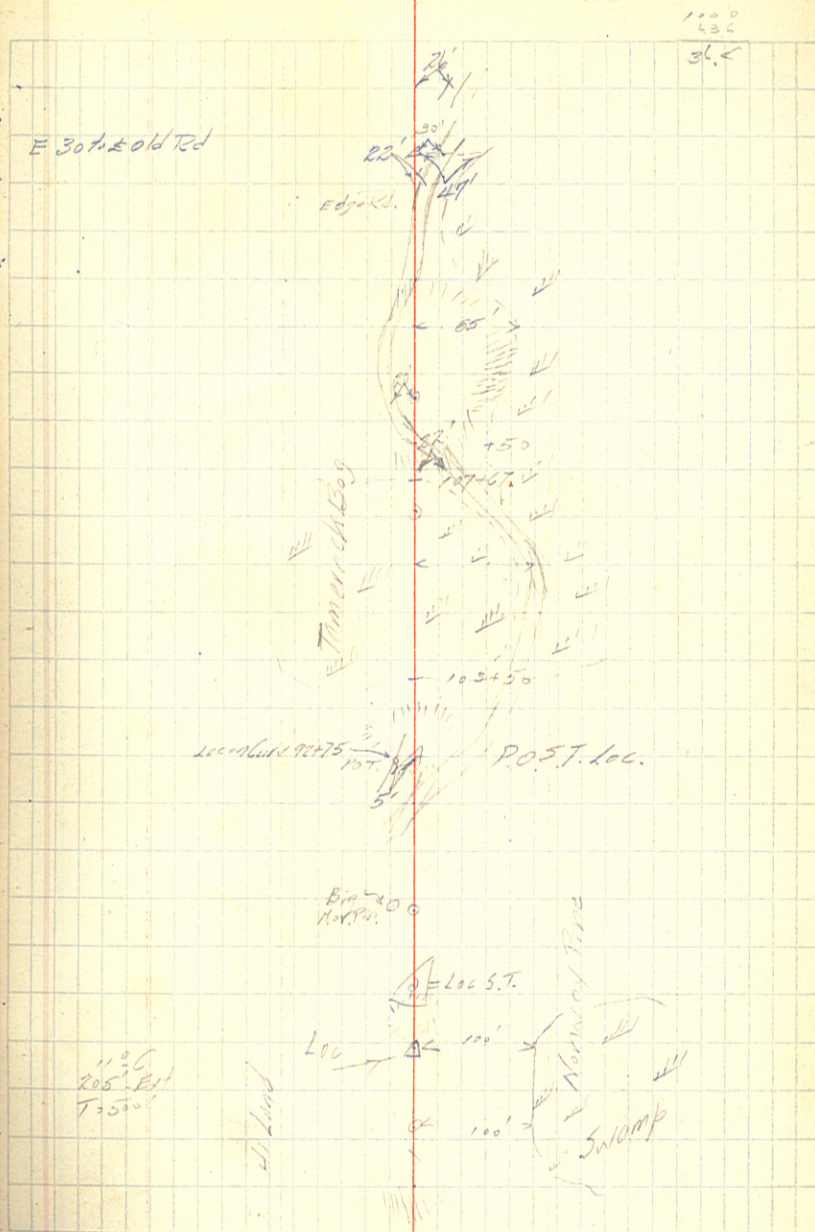
555 $^{\circ}$ -15'E

555 $^{\circ}$ -15'E

same party.

7-15-81 K. M. Clark

10



72-07 R

39.

38.

37.

36.

35.

34.

33.

32.

181+846 P.O.T.

31

130.

129.

128.

127.

126.

125.

124.

123.

122.

121.

120+129 P.O.T. = 120 P.O.T.

120.

119.

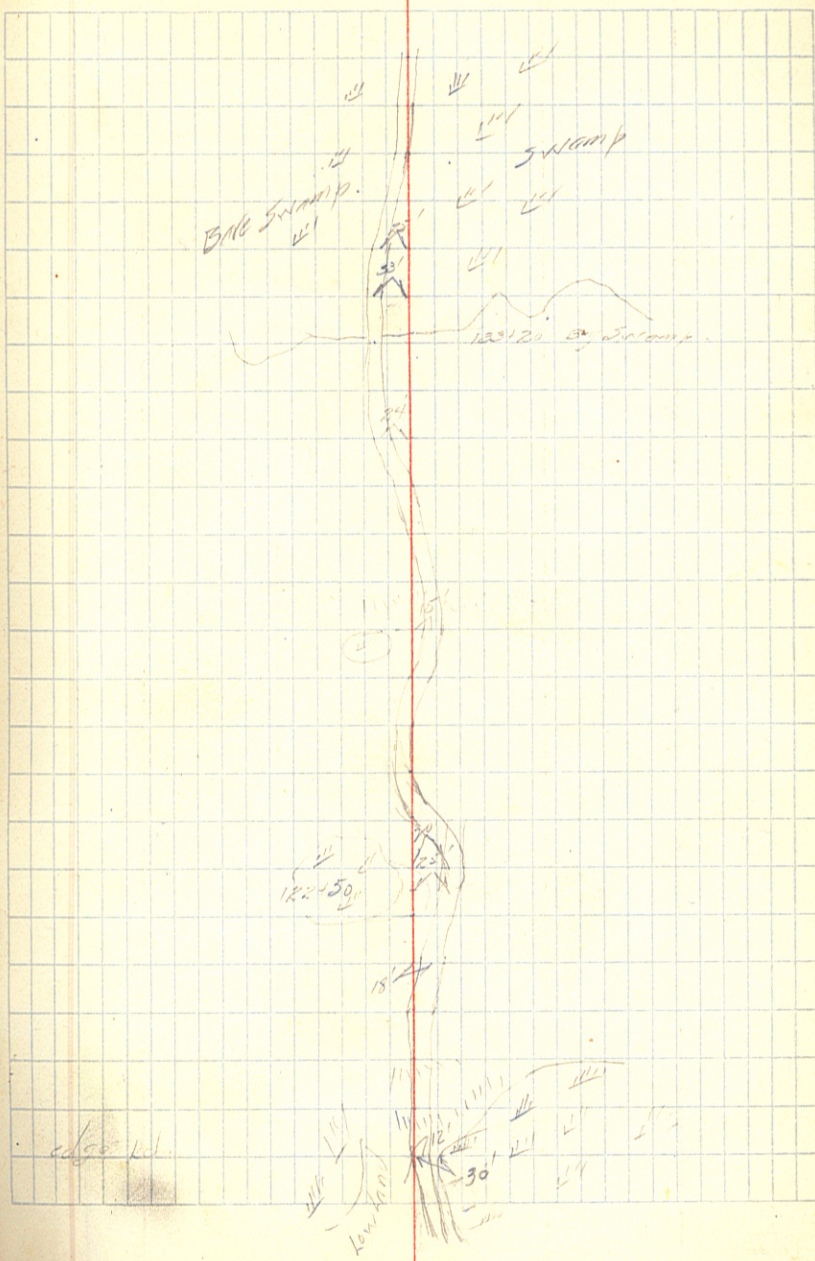
118.

117.

116.

9-16-81 Rainy

11



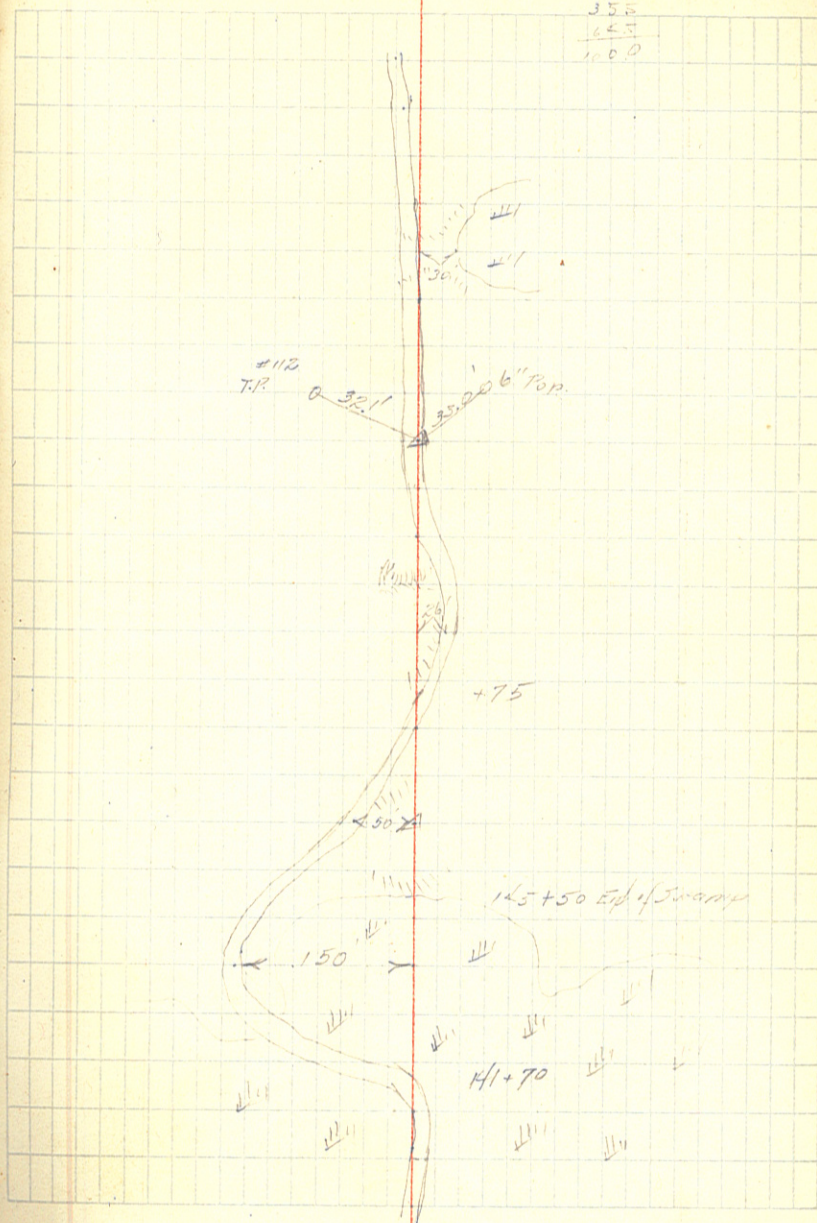
62.
 61.
 160.
 59.
 58.
 57.
 56.
 155.
 154+645 Δ 5°-33' L.
 54.
 53.
 52.
 151.
 150.
 149.
 148.
 147+391 Δ 7°-07' D.
 47.
 145.
 44.
 43.
 42.
 41.
 140.
 39.

529°-30' E

523°-30' E

9-16-31 Rainey
 9-17-31 Clark Water. 12

353
 643
 1000



84

83

82

81

180 + 39.5 Δ 21°-54' L

180

528°-20'E

79

78

77

76

175

74

173 + 57.0 Δ 9°-15' R

590°-12'E

73

72

71

170

69

68

67 + 99.3 POT Nail in 18" Birch Shump

67

66

165

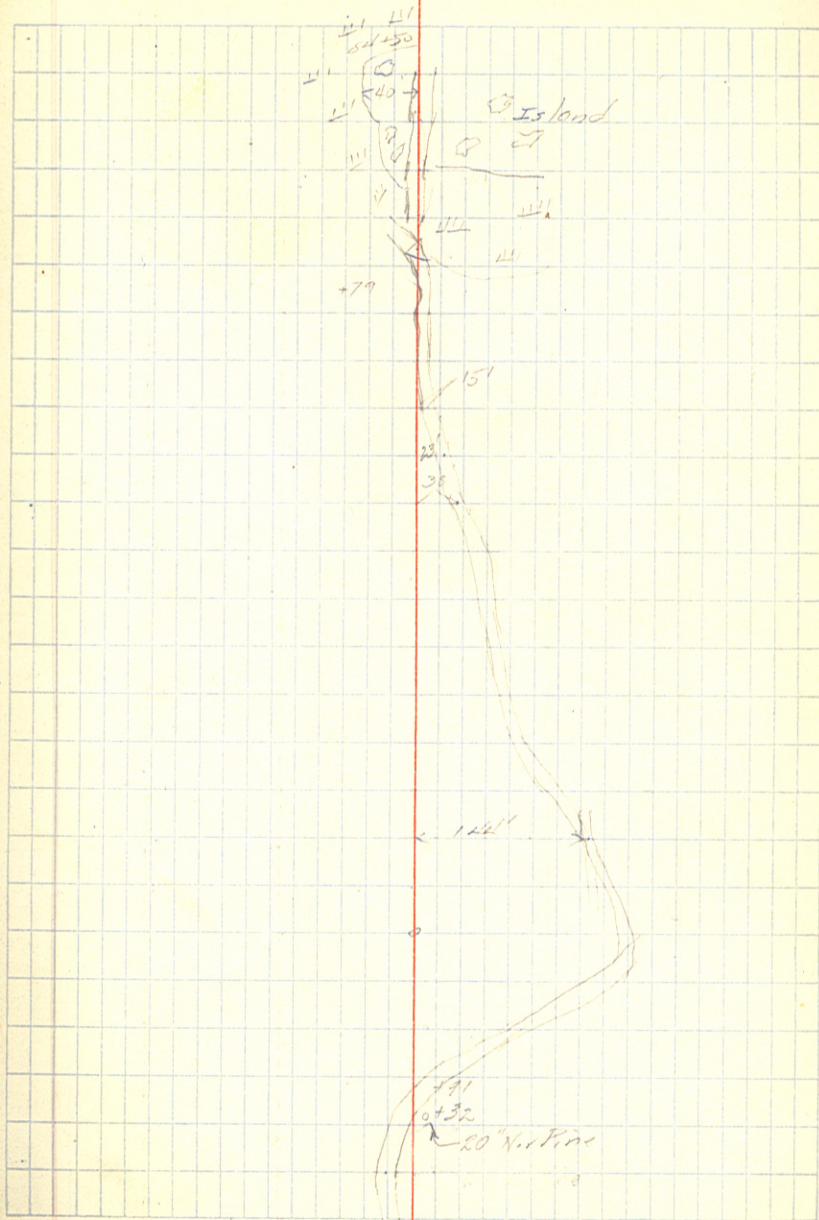
64

63

917.31

685
37.5
1000

13



07
 06
 05
 04
 03
 02
 01
 200+45.7 POT
 200

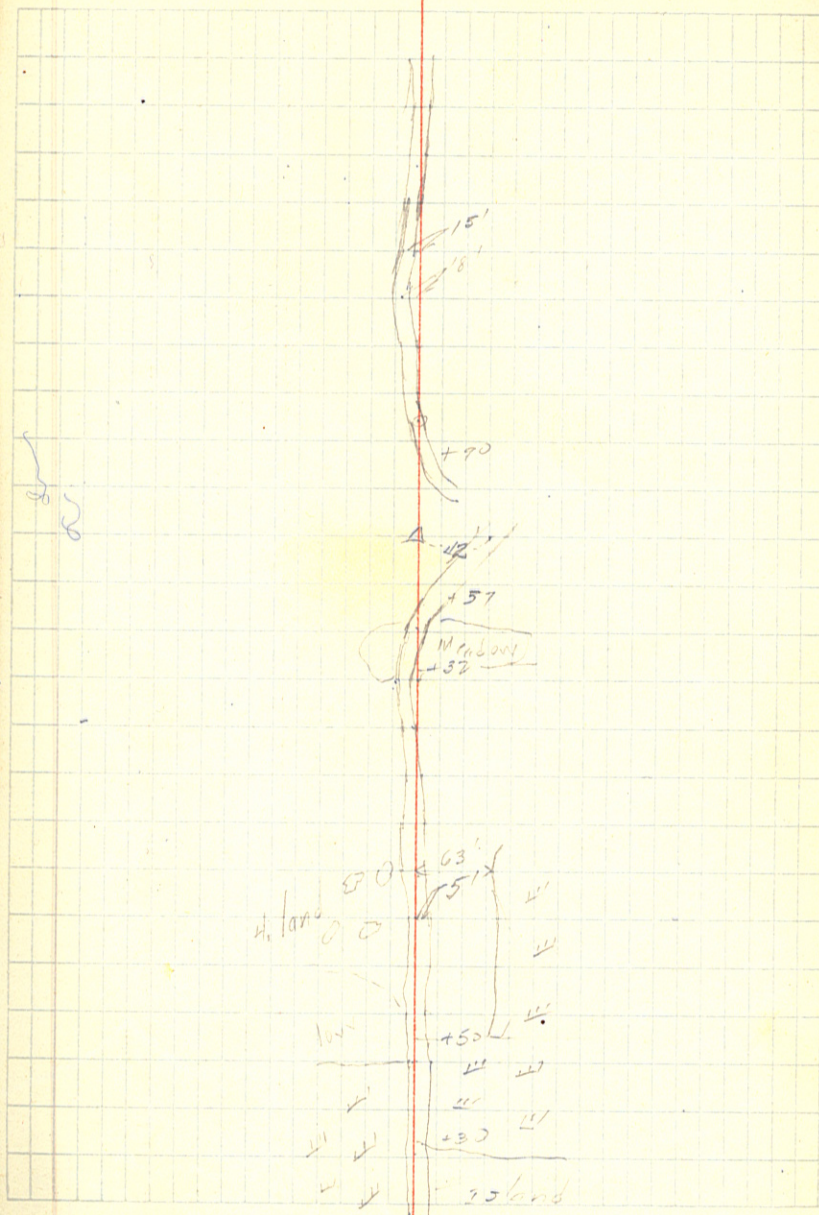
99
 96
 197+26.5 A 48°-56'R

99
 96
 195
 94
 93
 92
 91
 190
 89
 88
 87
 86
 185

55°-00'W

917-31 Rain 5:20

14



18

12-21'L

29
+532 Δ 14-21'L

28

27

26

25

224

223+76.8 Δ 13-44'L

23

22

21

20

19

18

17

16

215

14

13

12

211

210

209+54

209^{03.6}

208

Δ 31-08'R

511-00'W

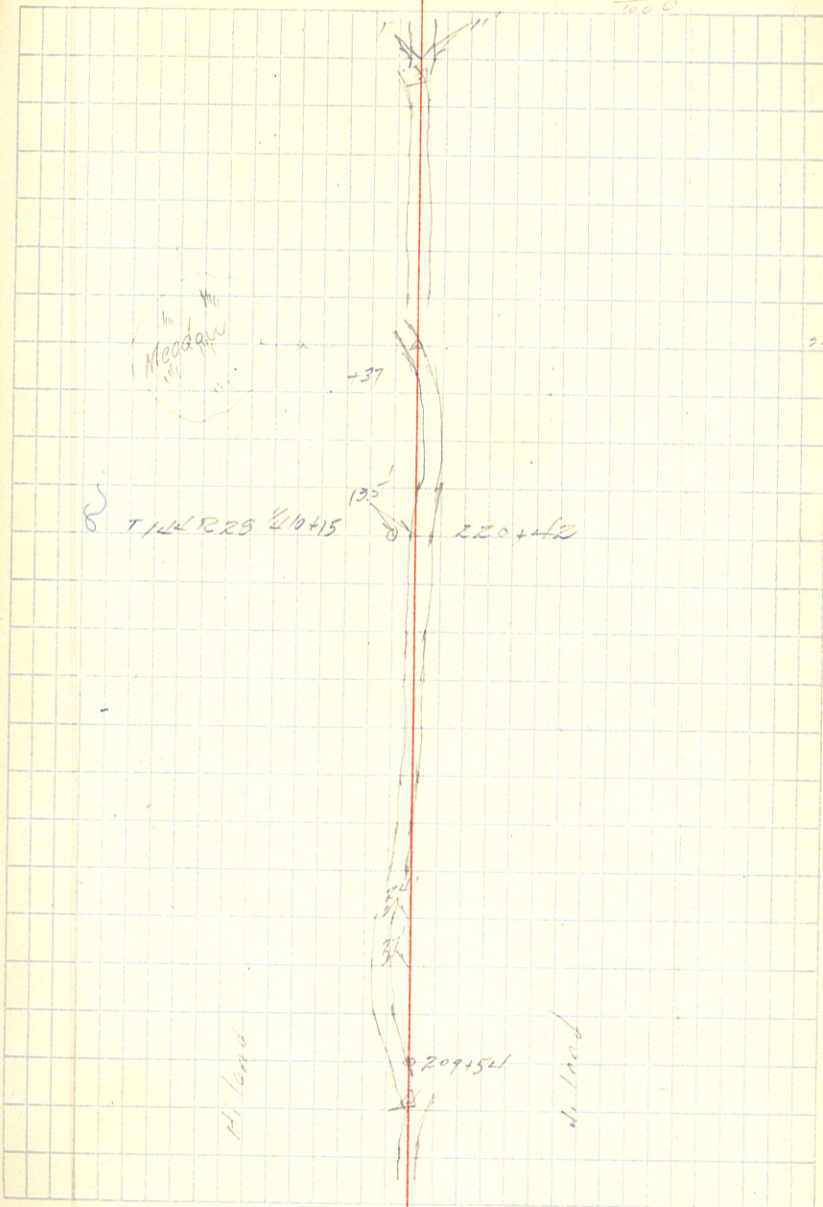
525-00'W

537-00'W

7-13-31 Cloudy Cool

15

46.8
53.2
100.0



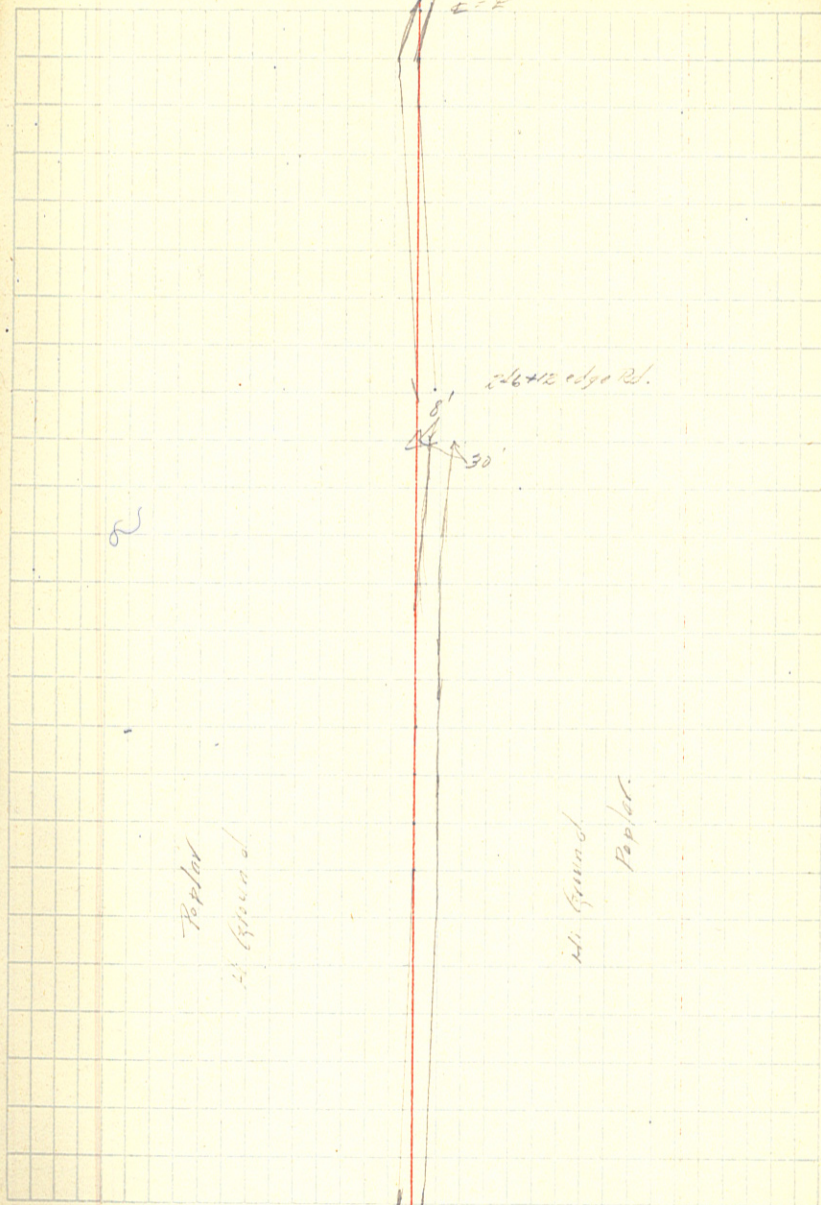
256
53
52
51
250
49
48
47
46
245+200
245
44
43
42
41
240
39
38
37
36
235
34
33
32
31
230

$\Delta 11^{\circ} 42' R.$


$519^{\circ} 30' W$

7-18-31

16

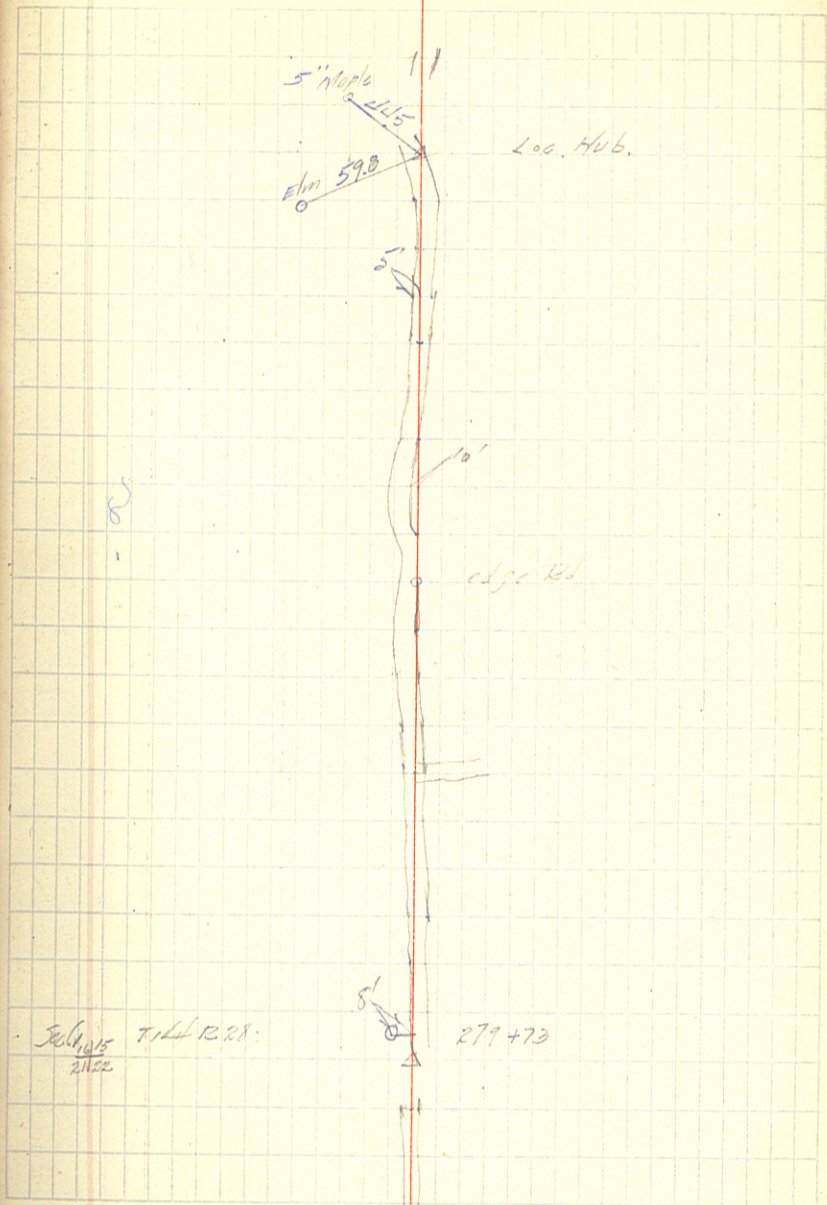


99
 98
 297+995 Δ 25° 52' L
 97
 96
 2 95
 94
 93
 92
 91
 2 90
 89
 88
 87
 86
 85
 84
 83
 82
 81
 280
 279+588 Δ 20°-26' R
 79
 78
 77


 S10° 15' N

S36° 30' W

5' N
 21.52
 21.52
 TILL R.R.



22

21

320

19

18

17

316

315

314

313

312 + 65.3 Δ $3^{\circ} - 54\frac{1}{2}' R$

312

311

310

309

308

307

306

305 + 16.0 Δ $23^{\circ} - 24' L$

05

04

03

02

01

300

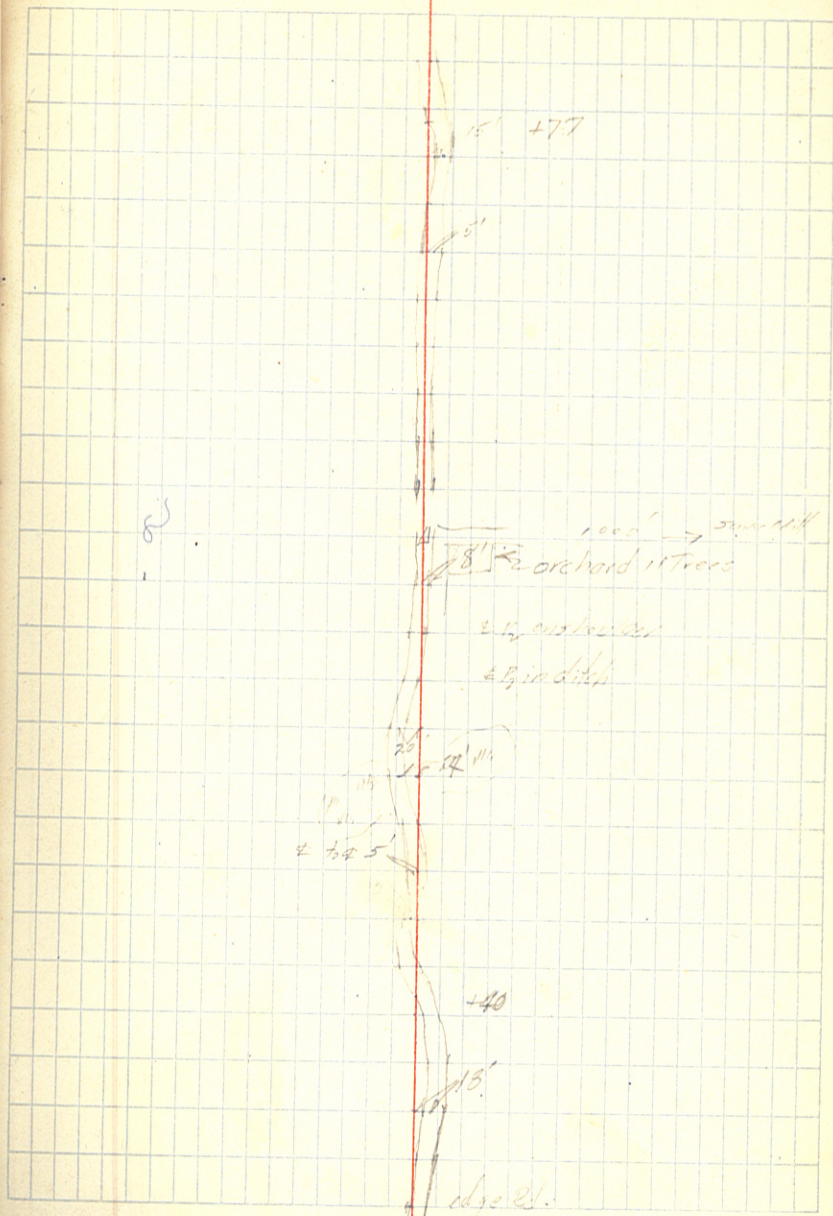
8

$57^{\circ} - 30' E$

$57^{\circ} - 00' E$

9-18-31
347

19



edge of.

43
 42
 41
 40
 339 + 553
 39

38
 37
 36
 35

334 + 499 A 23°-08' R

34
 33
 32
 31

330 + 717 A 36°-37' L

330
 329
 328
 327

326 + 595 A 17°-07' R

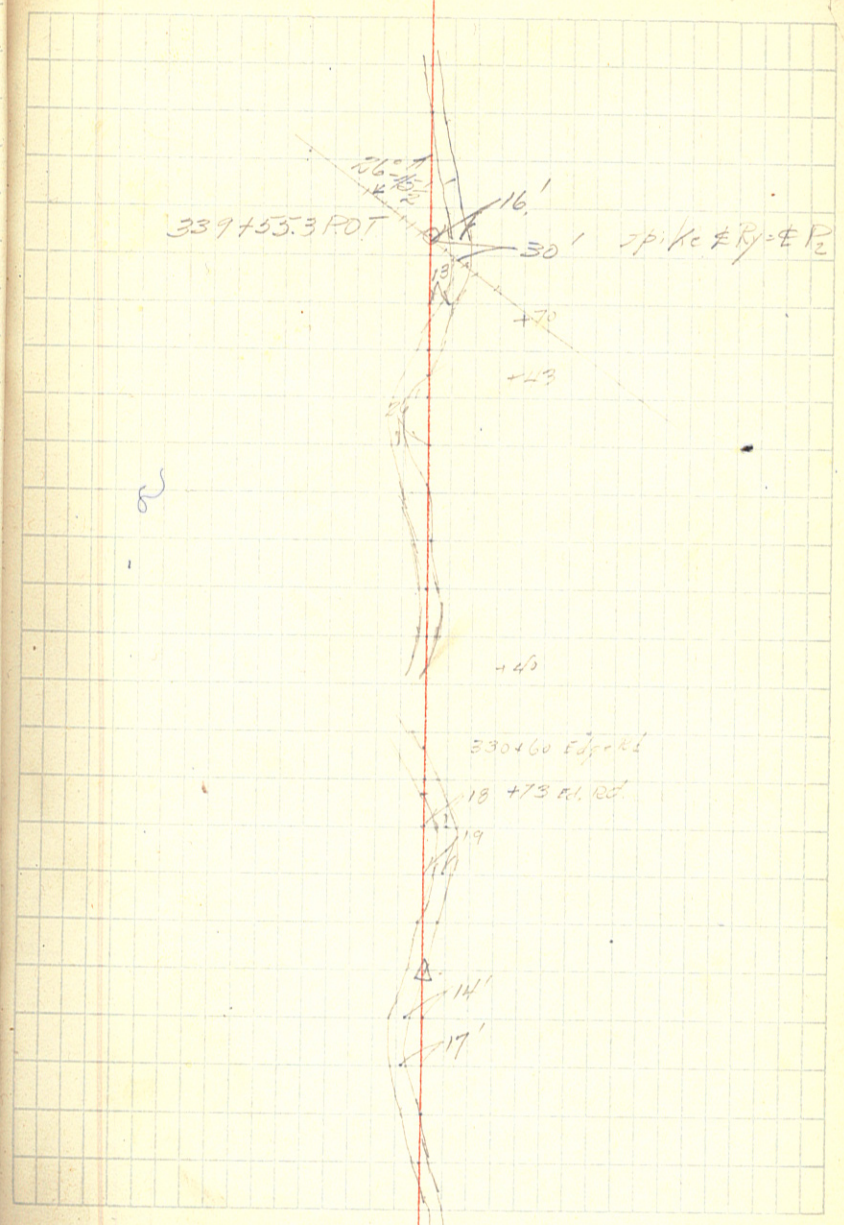
326
 325
 24
 323

55°-36' E

52°-45' E

58°-20' W

42.7
 53.3
 100.0
 4.1731.7
 8.3
 100.0
 57.5
 29.7
 100.0
 29.1
 50.1
 100.0
 20



364

63

62

61

360

359

358 + 38.9 $\Delta 15^\circ 45' L$

58

57

56

55

354

353 + 10.7 $\Delta 18^\circ 16' L$

53

52

51

350

49

48

47

346 + 94.0 $\Delta 18^\circ 23' L$

346

345

344

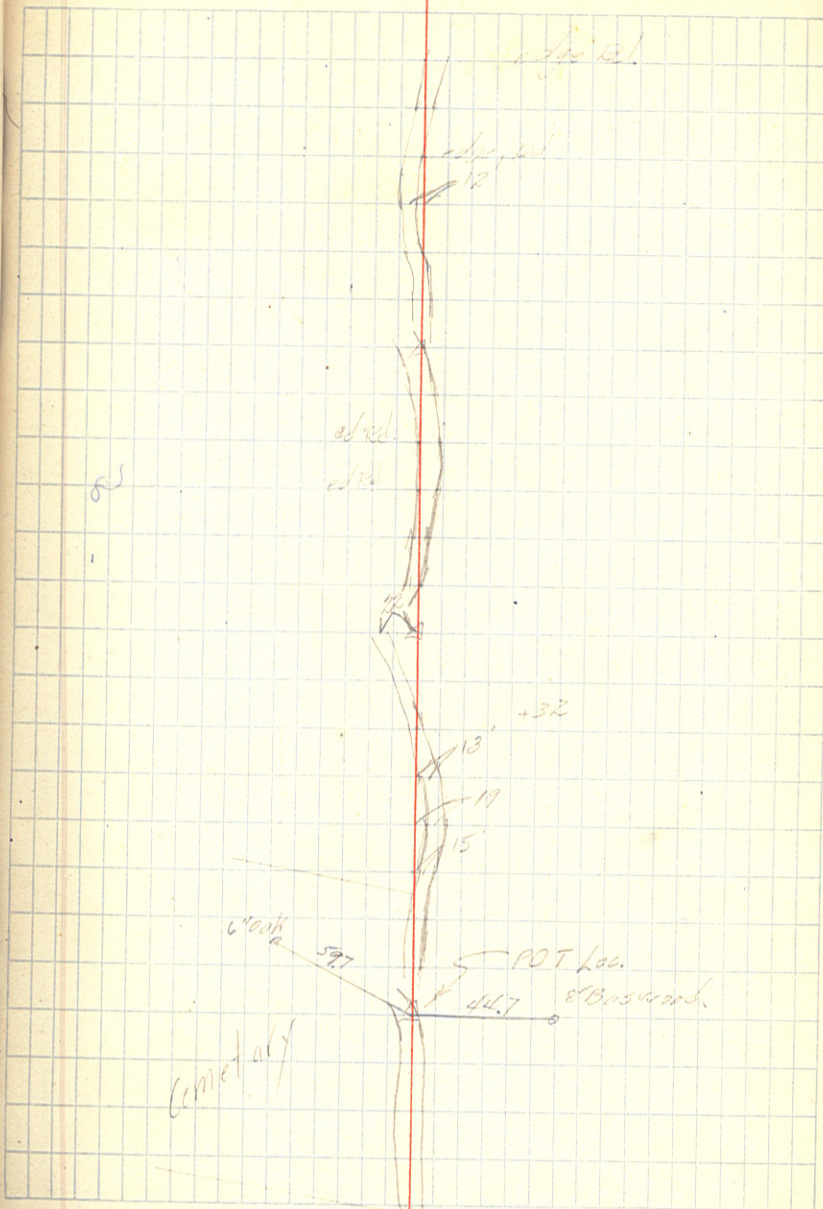
557.00 E

557.00 E

510.00 E

21.1
38.9
110.0

9-21-31 Fair-Warm 21



86
 85
 84
 83
 82
 81
 380+99.0 A 32°-52' R
 380
 79
 78
 77
 76
 375
 74
 73
 72
 71
 370
 69
 68
 67
 366
 365+35.5 A 15°-55' R
 365

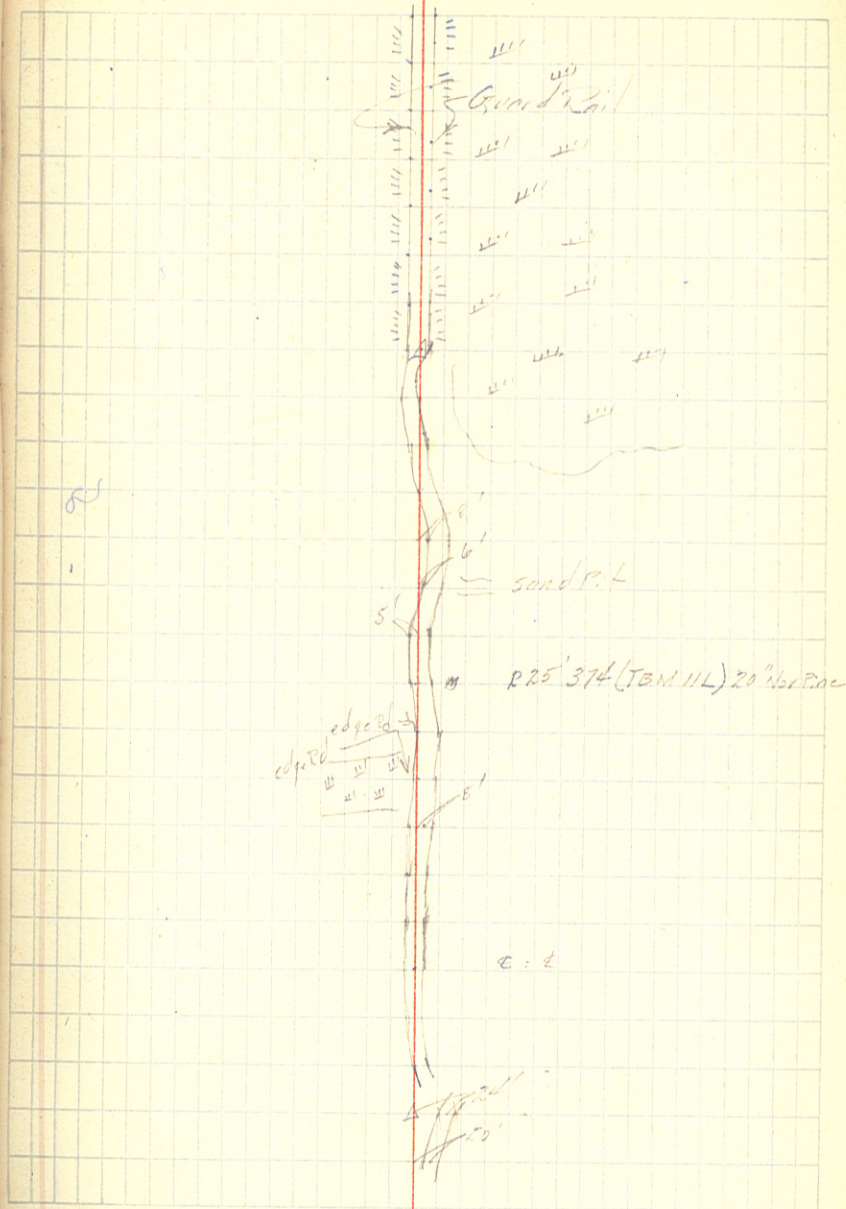
25°-20' E

536°-00' E

P₂

9-23-31 Cool-Fair.

82



41+76.6 Hedge concrete of Dam

411

410

09

08

07

06

05

04

03

02

01

400

99

98

97

96

95

94

93

92

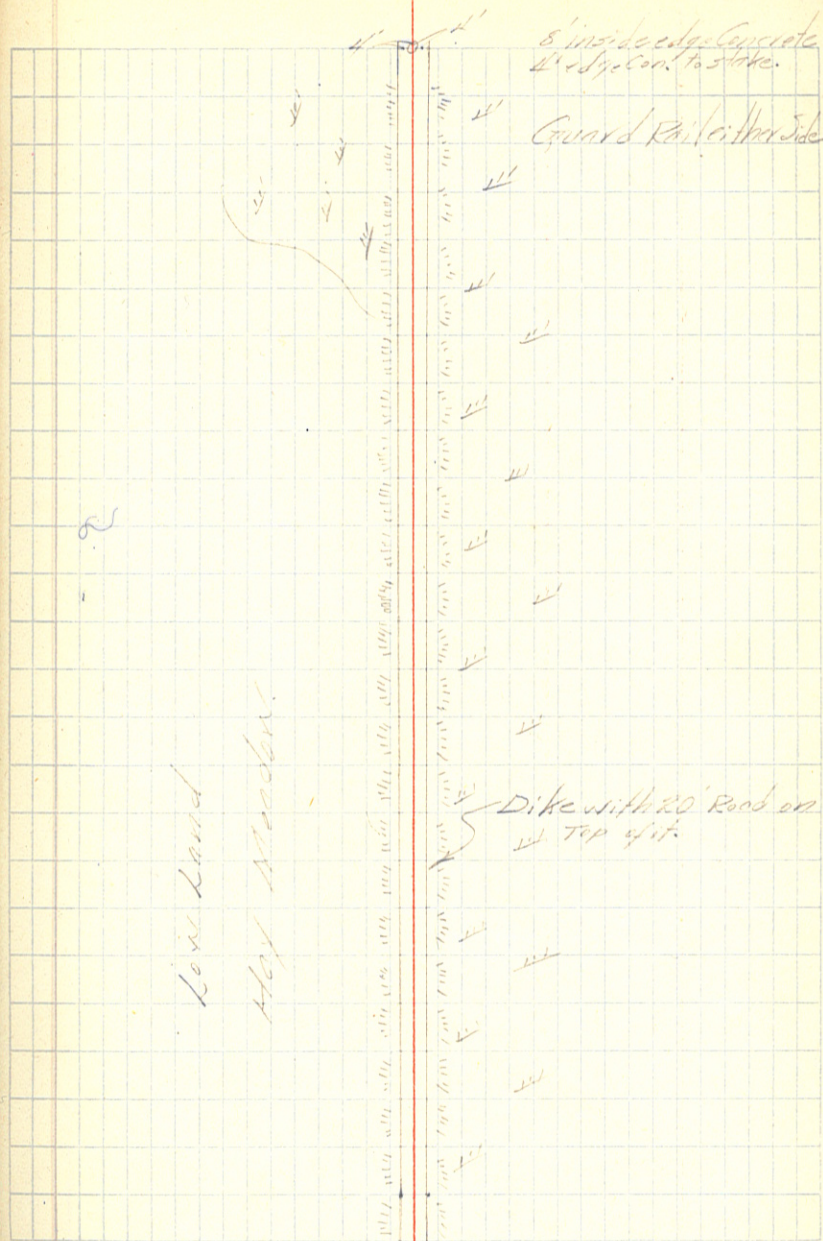
91

390

89

88

87



P₃ line

$$279+55.7 \text{ POT} = P_2 279+58.8 \Delta 20^\circ-26' R$$

79

78

$$276+05.0 \Delta 17^\circ-13' R$$

76

75

74

73

$$272+45.5 \text{ POT}$$

71

270

69

68

$$267+62.7 \text{ POT}$$

67

66

65

64

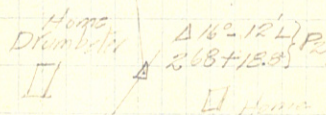
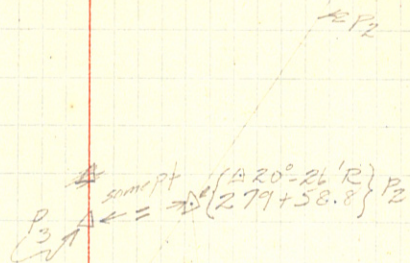
63

62

$$261+30.6 \text{ POT} = P_2 261+30.6 \Delta 13^\circ-30' R$$

9-22-31

24



P₂

12

226+ P.O.T. P₄ = P₂ 222.8 + 53.2 A 14° 21' L

28

27

226+280 A 28° 06' L

26

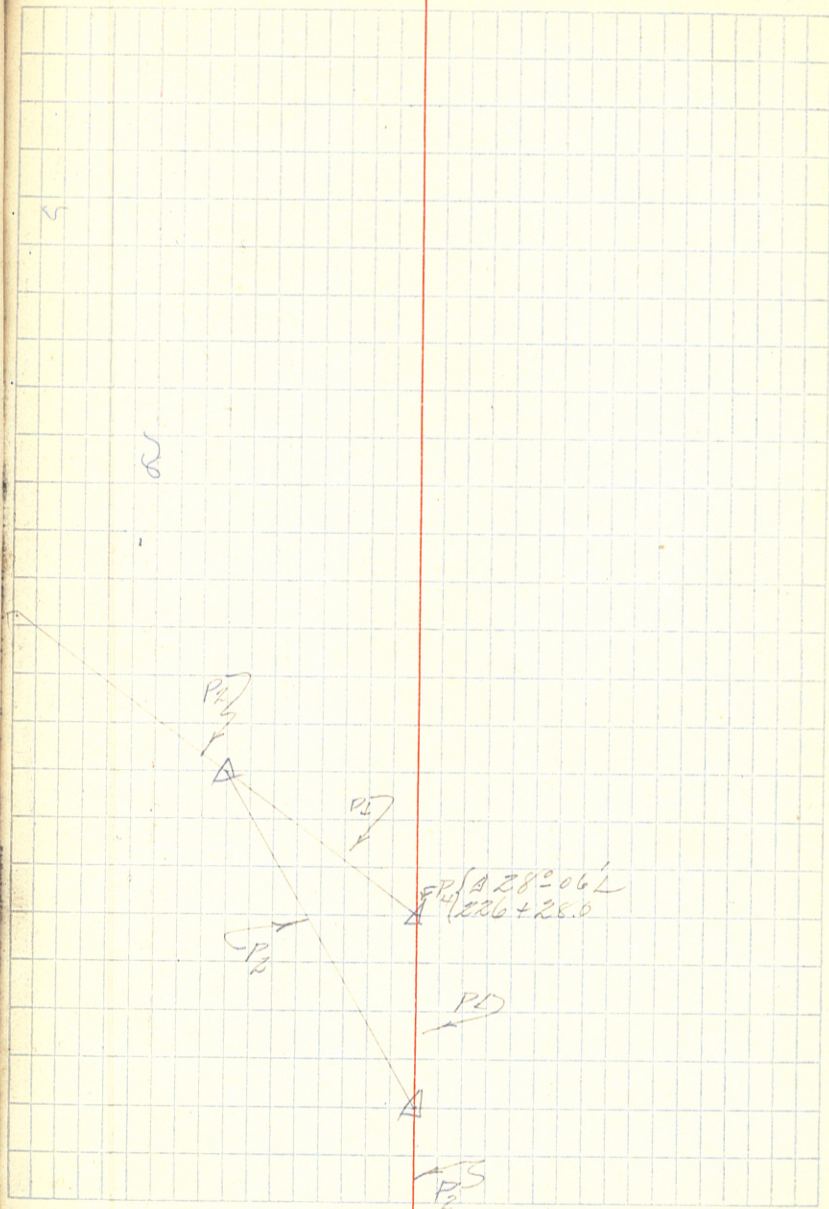
25

24

223+76.9 P.O.T. P₄ = P₂ 223+76.8 A 13° 41' L

9-23-31

25



- 17.
- 16
- 15+47.7 POT
- 15
- 14
- 13
- 12
- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2

+85.5
+60
+43

0+00 = (-3+68.7 "H" Line Loc Survey 1922 Bk 147 pg. 4

- 3
- 2
- 1

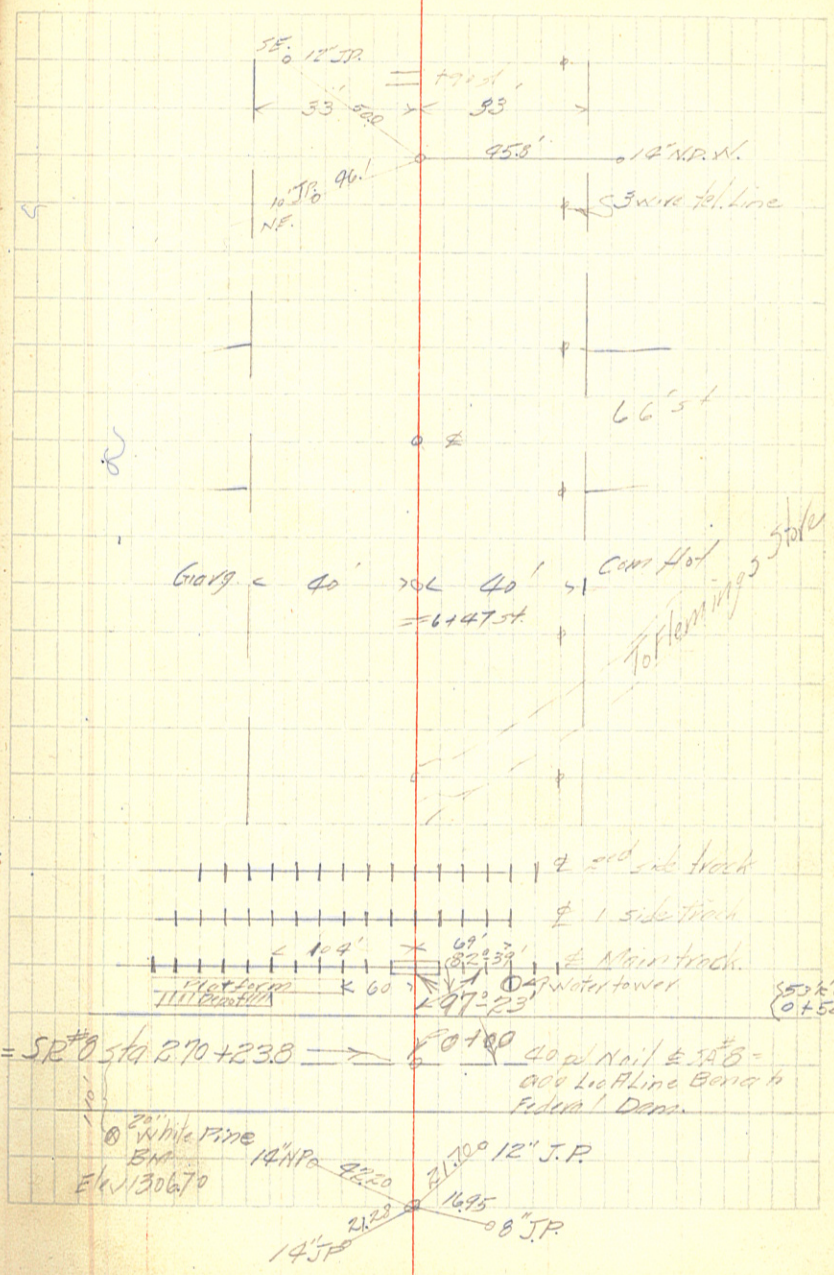
True Bear.

58° 30' E 57° 00' E

Loc F Line
S.S. Walker &
M. Duncanson
B. Schuber

Oct. 9-1931

26



67

66

65

64

63

62 + 95.6 P.O.T.

62

61

60

59

58

E.G. +58.1 6°-06'

57 5°-32' ✓

+50 5°-02' ✓

56 4°-32' ✓

+50 4°-02' ✓ P.O.G.

55 3°-32' ✓

+50 3°-02' ✓ $\Delta = 12^\circ - 14'R$

54 2°-32' ✓ 54 + 53.5 PI

+50 2°-02' ✓ T = 307.0

53 1°-32' ✓ L of Col = 6' 1.6

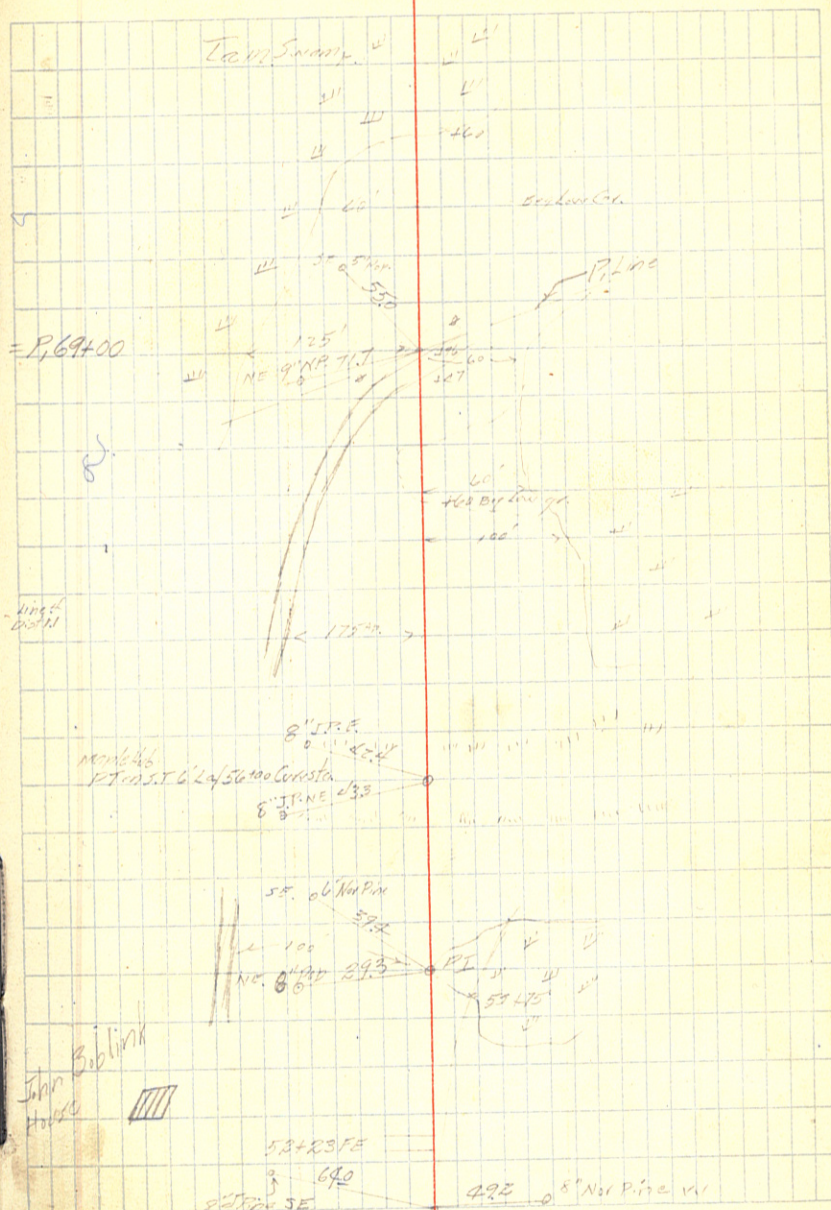
+50 1°-02' ✓ P.O.G. DR°R.

52 0°-31.5' ✓

B.C. 51 + 46.5 53.5

538°-00' W

= P, 69400

Wind
DR°RJohn
Hobbs

89+46.1

P.I.

73° 19' 17" 93° 18' L

87

88

87

86

85

84

83+91.0 P.O.S.T.

83

82

81 136.3 B.C.

80

79

78

77

76

75

74

73

72

71+75.9 P.O.S.T.

P.O.S.T.

71

70

69

68

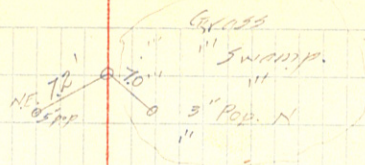
Pg-31
See Note Book 172

Abandoned

10-12-31
10-13-31 Warm-Cloudy

30

Swamp



Swamp

dir Rd
6' 0" S
7' 0" S

Spike in 6" Pop. Swamp. Note SE 49.5'

4' Basin

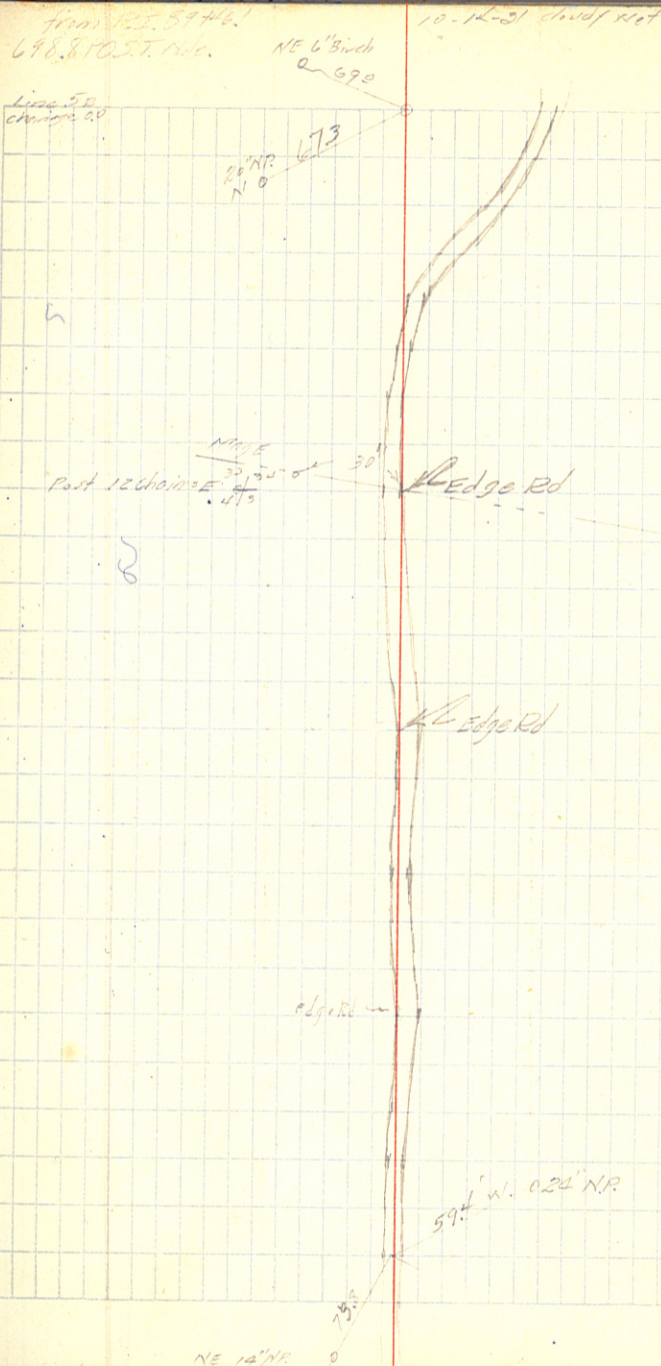
H. 5'

H. 5'

Taro Swamp

Abandoned.

EG. 93+80.3	46°-39'	/	P.O.T.	
93	43°-38.3	✓		3°-00.68'
+50	41°-45.8	✓	POC.	Bubble up.
92	39°-53.3	✓		
+50	38°-00.8	✓		
91	36°-08.3	✓	POC.	Bubble down.
+50	34°-15.8	✓		
90	32°-23.3	✓		
+50	30°-30.8	✓		
89	28°-38.3	✓		PI 69+46.1
+50	26°-45.8	✓		Δ 98-18L
88	24°-53.3	✓		D 7°-30L
+50	23°-00.8	✓		T-809.8
87	21°-08.3	✓	POC.	Bubble up. 46.1299°
+50	19°-15.8	✓		
86	17°-23.3	✓		
+50	15°-30.8	✓		
85	13°-38.3	✓		
+50	11°-45.8	✓		
84	9°-53.3	✓	POC	Bubble down.
+50	8°-00.8	✓		
83	6°-08.3	✓		
+50	4°-15.8	✓		
82	2°-23.3	✓		Bubble up.
BC. 8/136.3	137			



131

130

129

128

127

126

125

124

123

122 + 413 POT N.6

122

121

120

119

118

117

116

115

114

113

112

111 + 683 POT

111

110

109

330°-30' E.

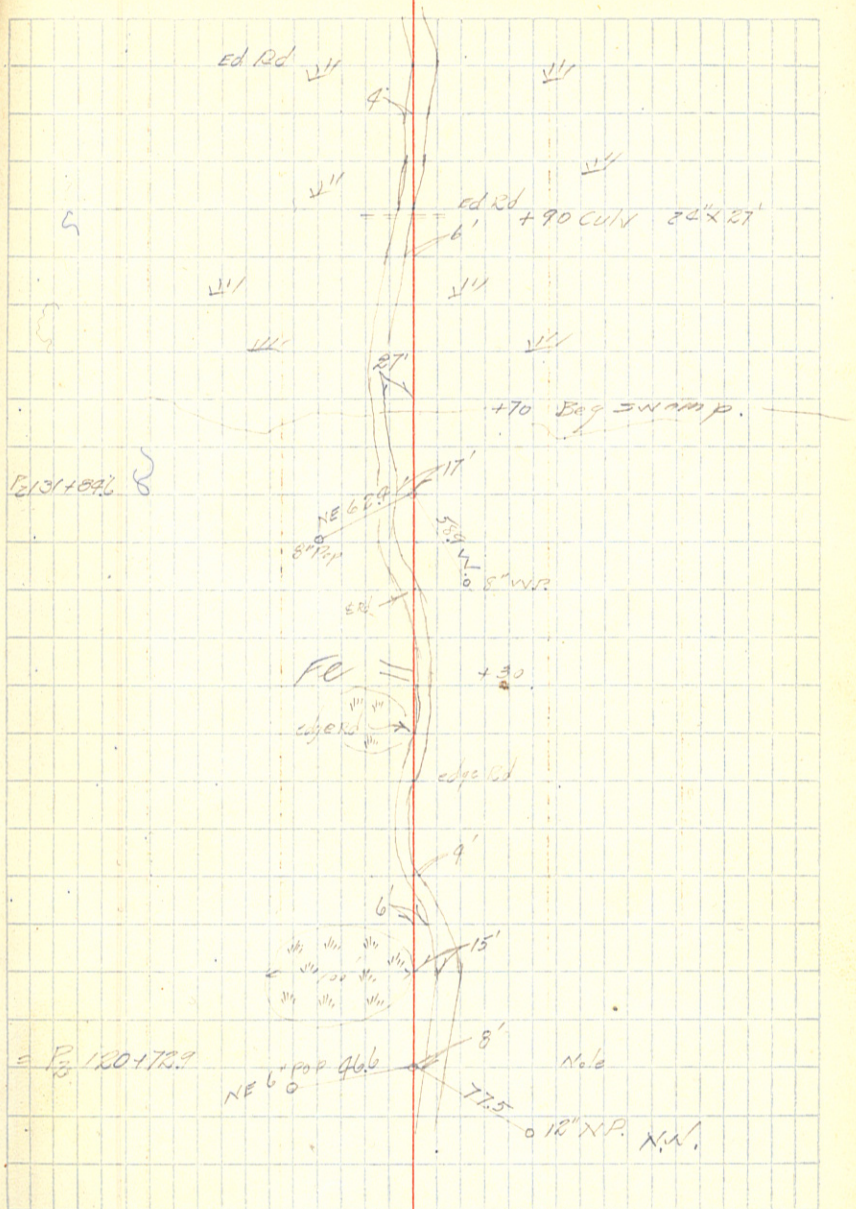
P. 131 + 092

P. 120 + 72.9

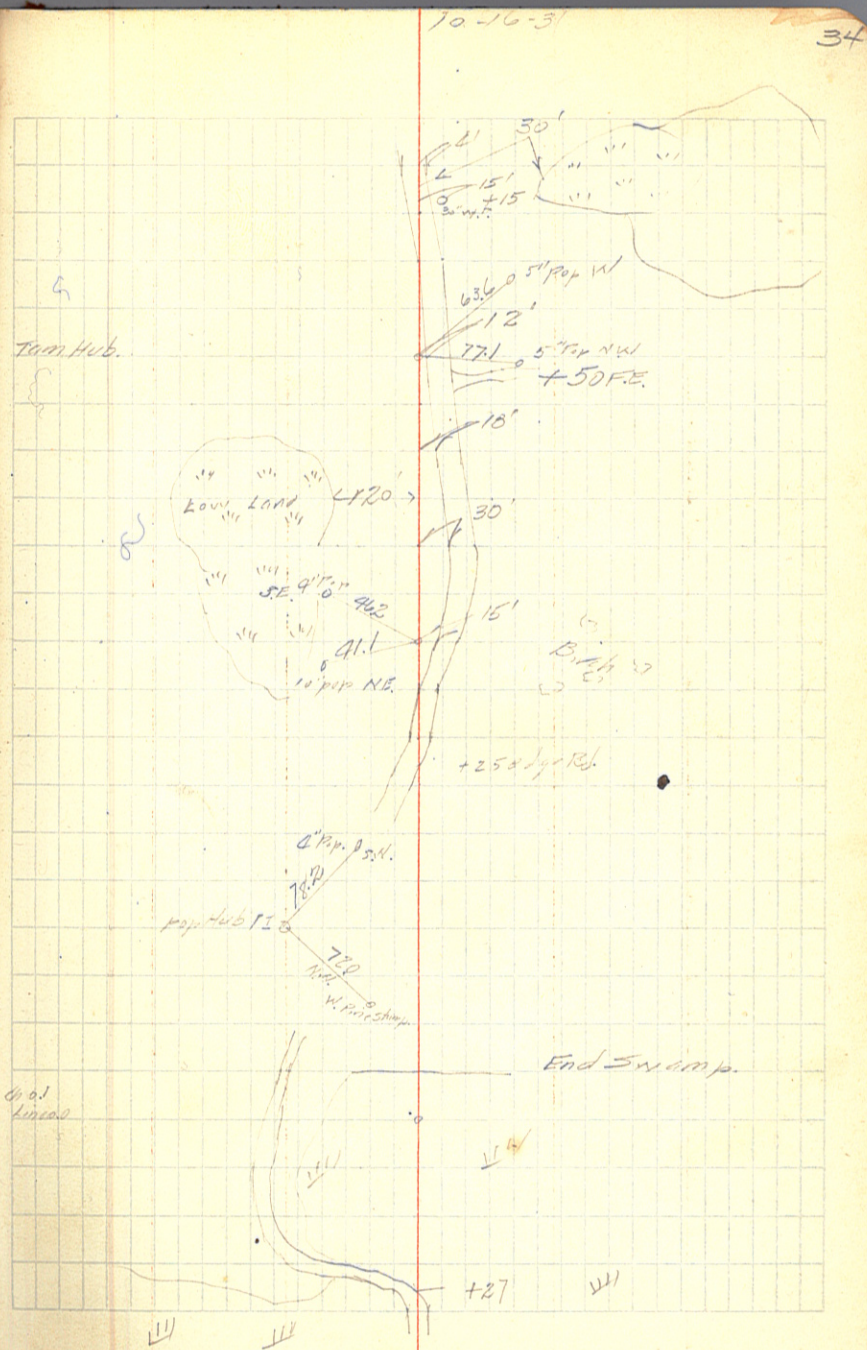
10-15-31 Cool Partly Cloudy

10-16-31

53



149
 148
 147
 146
 +1220 POT note
 145
 144
 143
 142
 141
 EG. +33.7 2°-24.5' POT
 140 2°-19.4' 0°-10.1' ✓
 +50 1°-59.4' 0°-25.1' ✓
 139 1°-44.4' 0°-40.1' ✓
 +50 1°-29.4' 0°-55.1' ✓
 138 1°-14.4' 1°-10.1' ✓
 POC. +50 0°-59.4' 1°-25.1' P1 137+93° = P2 147+39.1
 137 0°-44.4' 1°-00.1' Δ 4°-49' R
 +50 0°-29.4' 1°-55.1' D 1° C R
 136 0°-14.4' 2°-10.1' T-241°
 BL 135 +520 2°-24.5' LK 481.7
 135
 134
 133
 132



170+61.4
 86.4
 171+47.8

173+97.6 P.O.T. (Foreward sta.)

171+47.8 P.I.
 171

170+61.4 Maple Ave

70

69

167+122 BC

167

166 P.O.T. Maple Ave

165

164

163

162

161

160

159

158 P.O.T. Birch Ave

158

157

156

155

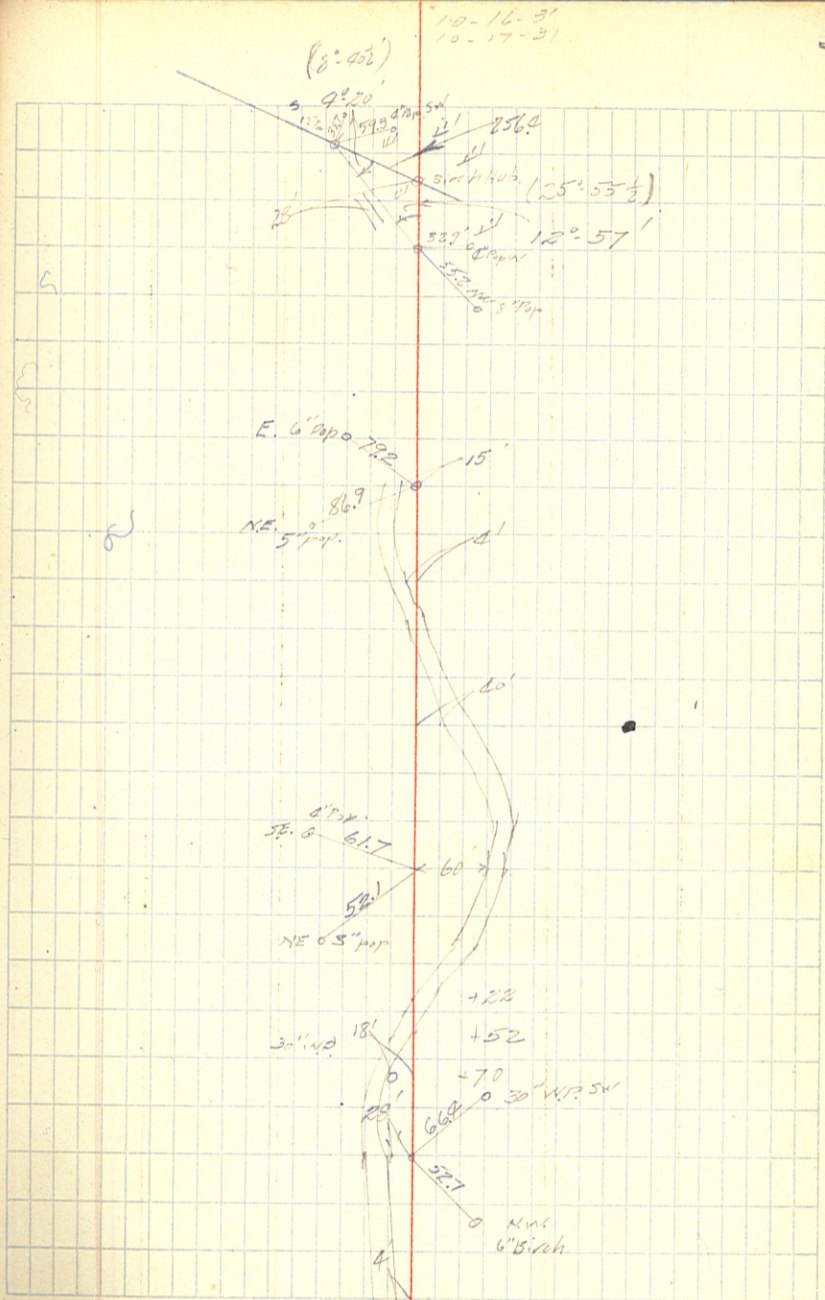
154

153 P.O.T.

152

151

150



180
 179
 178
 177
 176
 EC. +76.8 8°-38.76
 +50 8°-22.7
 175 7°-52.7
 +50 7°-22.7
 174 6°-52.7
 +50 6°-22.7
 173 5°-52.7
 +50 5°-22.7 P.D.C.
 172 4°-52.7
 +50 4°-22.7
 171 3°-52.7
 +50 3°-22.7
 170 2°-52.7
 +50 2°-22.7
 169 1°-52.7
 +50 1°-22.7
 168 0°-52.7
 +50 0°-22.68
 BC. 167+12.2
 37.5

Collected
 Infield called 181
 " " " 180
 " " " 179
 Infield called 178

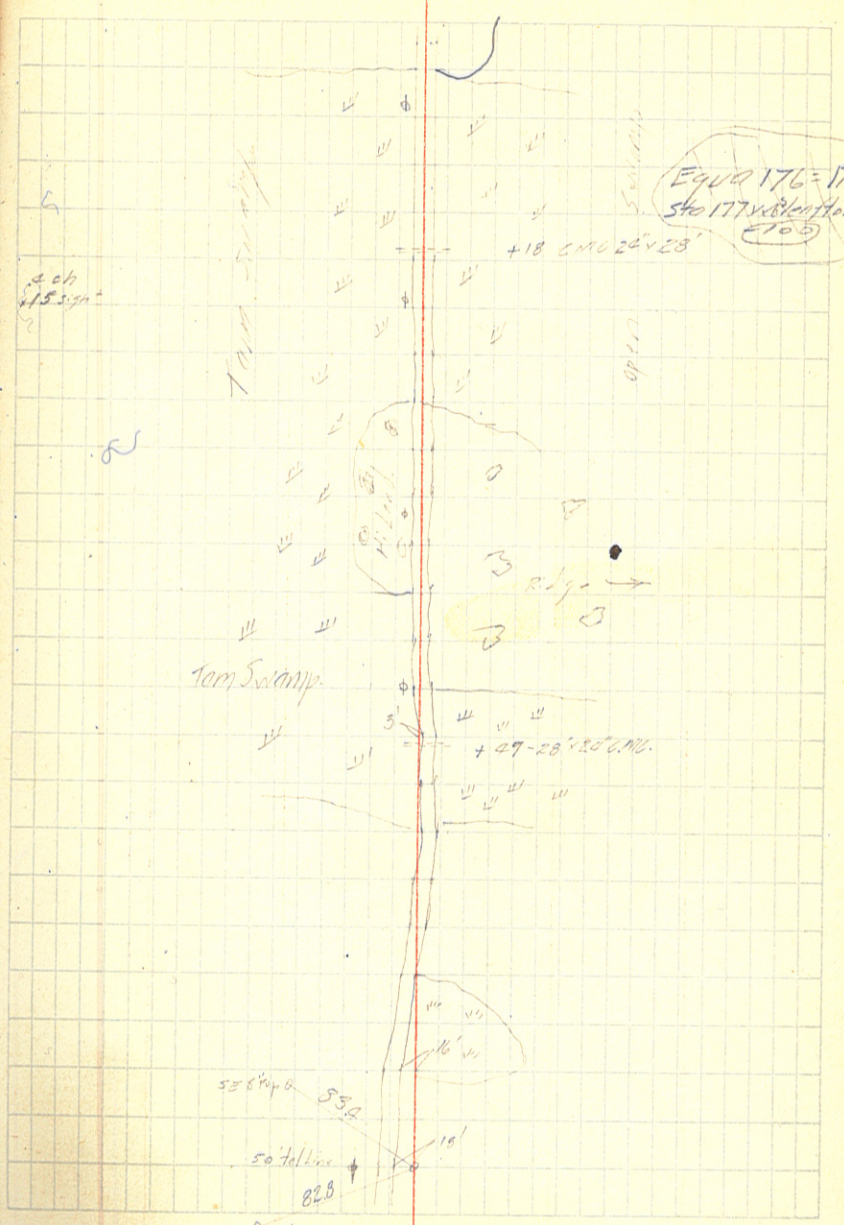
549°-45E

PI 171+49.8 L
 Δ 17°-17.30
 D 2° L
 T = 435.6
 1/6 864.6

50.2
23.2

10-17-31

36



NS 0.5"
 1/4 82.8

PI 200428.0

199

198

197

196

195

194

193

96.7

EG. 192+03.3

26°04.3'

P.O.T.

+50

23°56'

191

21°56'

+50

19°56'

190

17°56'

+50

15°56'

189

13°56'

P.O.C. P.I. 189+02.2

+50

11°56'

152°08.8 R

188

9°56'

D.B.C.R.

+50

7°56'

100°17.4
52°08.8 T=350.7

187

5°56'

116°65.8

+50

3°56'

186

1°56.9'

B.C. +57.5

185

184

183

182

181

29°52' R

50°04' R.D.

537°15' W

56°45' W

Abandoned

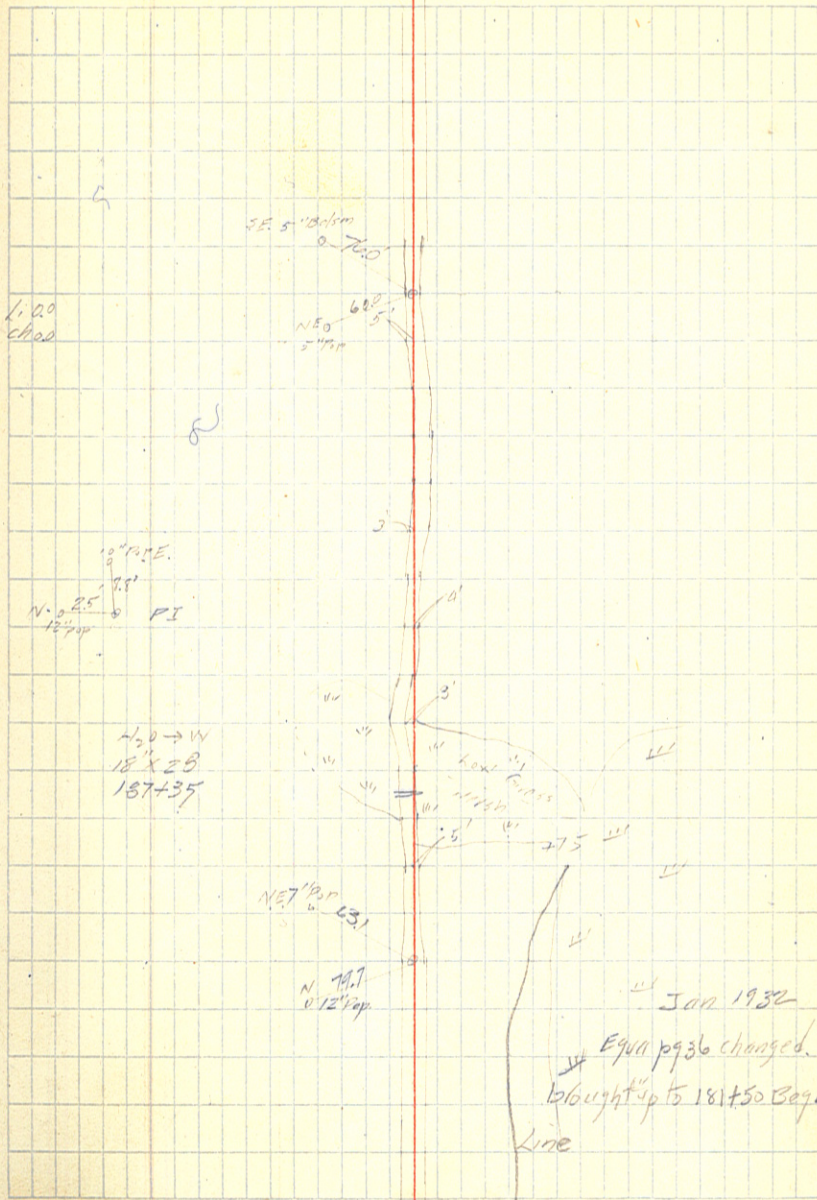
See Note BK # 172
Pg 32

181+50 = 182+50 LA

-181+50 LA = LC

10-21-31
PM Cloudy Rain
12-28-31

37



Loc

PI 217+226

$\Delta 12^{\circ} 21' L$
PI 228+53.5/2

215

+79.0 P.O.T.

$\Delta 13^{\circ} 40' L$
PI 203+176.3/2

214

213

+54.6 B.C.

212

211

210

209

208

207

206

205

204

203+176 LA = K-201+91.9
203

E.C. +34.0

$14^{\circ} 46'$

11-11.5'

202

$13^{\circ} 35'$

+50

$11^{\circ} 50'$

✓

201

$10^{\circ} 05'$

✓

+50

$8^{\circ} 20'$

✓

P.O. 200

$6^{\circ} 35'$

✓

+50

$4^{\circ} 50'$

✓

199

$3^{\circ} 05'$

✓

+50

$1^{\circ} 19.6'$

✓

B.C. 198+12.1

37.9

P.I. 200+26.0

$\Delta 29^{\circ} 32' R$

D7°CR

T 25.9

14% 421.9

Abandoned

531° 21' W

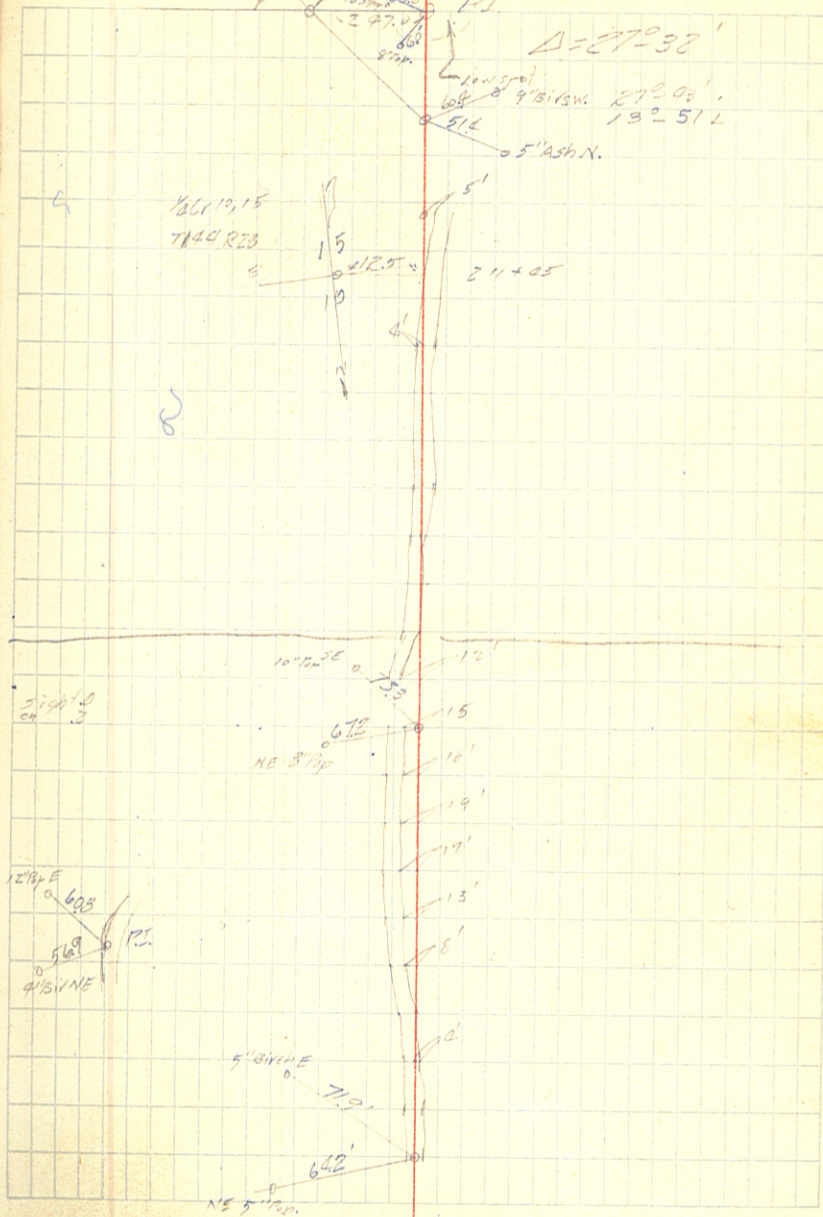
Bk 172
Pg 34

38

10:20-31 cloudy Rain @ PM.

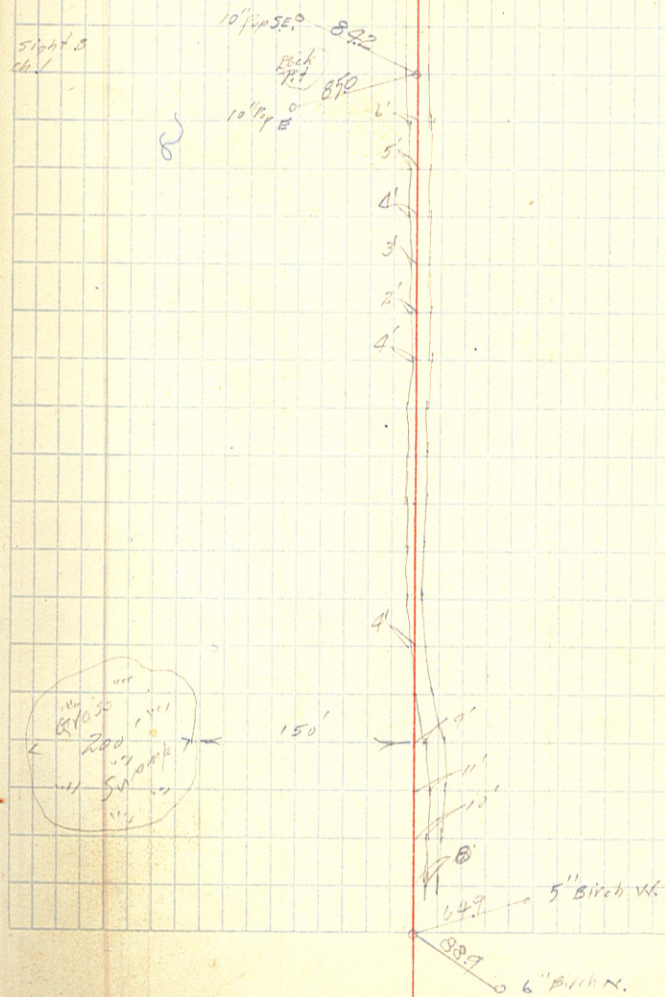
Loc 1009

$\Delta = 27^{\circ} 38'$



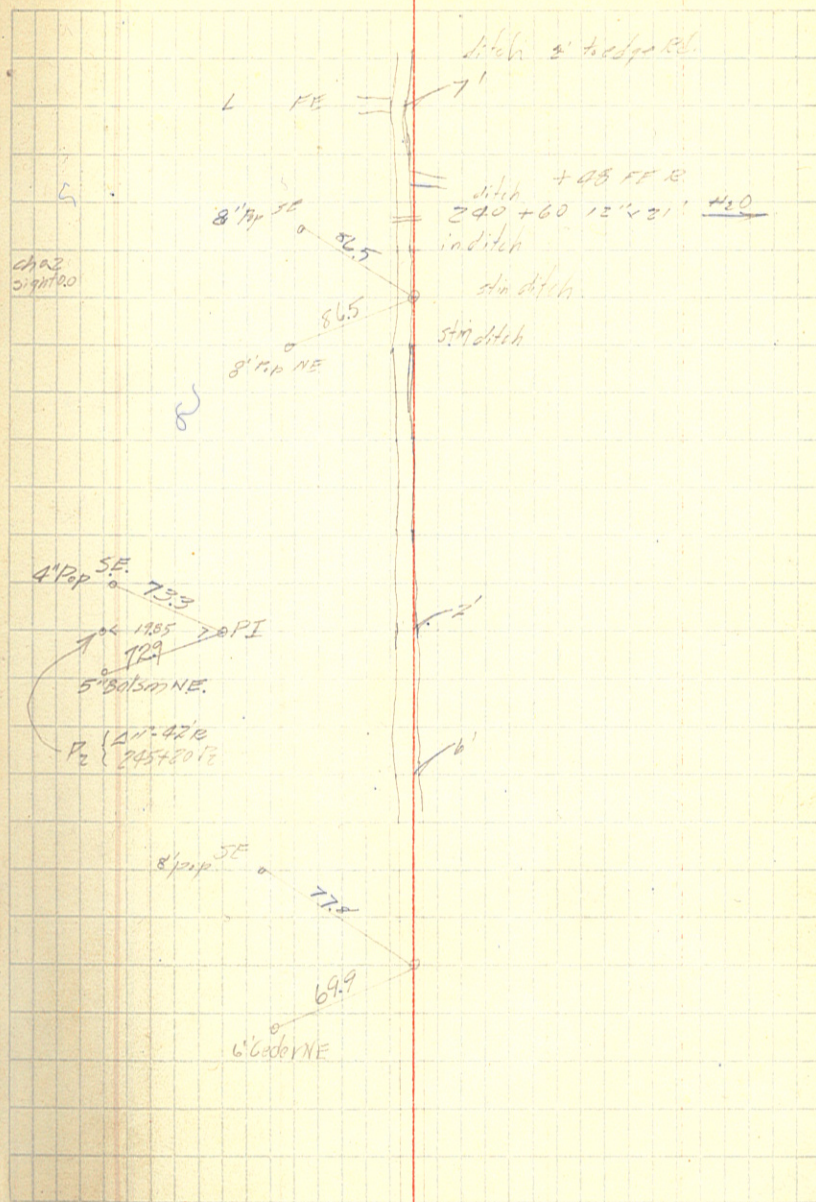
227			
226			
225			
224			
223			
222			
EG. +72.4	13-06.1	✓	
221	12-01	✓	
+50	11-56	✓	
220	11-11	✓	
POG +50	10-26	✓	
219	9-01	✓	
+50	8-56	✓	
218	8-11	✓	
+50	7-26	✓	
217	6-01	✓	PI 217+226
+50	5-56	✓	D 27-32'
216	5-11	✓	D 3' 02
+50	4-26	✓	T 468'
215	3-01	✓	198 917.8
POG. +50	2-56	✓	Bubble down
214	2-11	✓	
+50	1-26	✓	
213	0-40.9	✓	
	45.4		
B.C. 213+546		✓	Bubble up

51°-35' W



244		
243		
242		
241		
240		
EG. +435	3°-15'	
239	3°-02'	
+50	2°-47'	✓
238	2°-32'	✓
+50	2°-17'	✓
237	2°-02'	✓
+50	1°-47'	✓
236	1°-32'	✓ P.O.C. FI 236+18.9
+50	1°-17'	✓ A 6°-30' R
235	1°-02'	✓ D 1°-0' R
+50	0°-47'	✓ T=325.4
234	0°-32'	✓ L.C. 650°
+50	0°-17'	✓
233	0°-02'	✓
BC. 232+93.5		
232		
231		
230		
229		
228		

518°30' W



265+74.0 PJ

65

64

63

262+57.5 BC.

262

261

260

259+00.6 POT

259

258

257

256

255

254

253

252+22.3 POT.

252

251

250

249

248

247

246

245

10-26-31
Rain Fall 6X

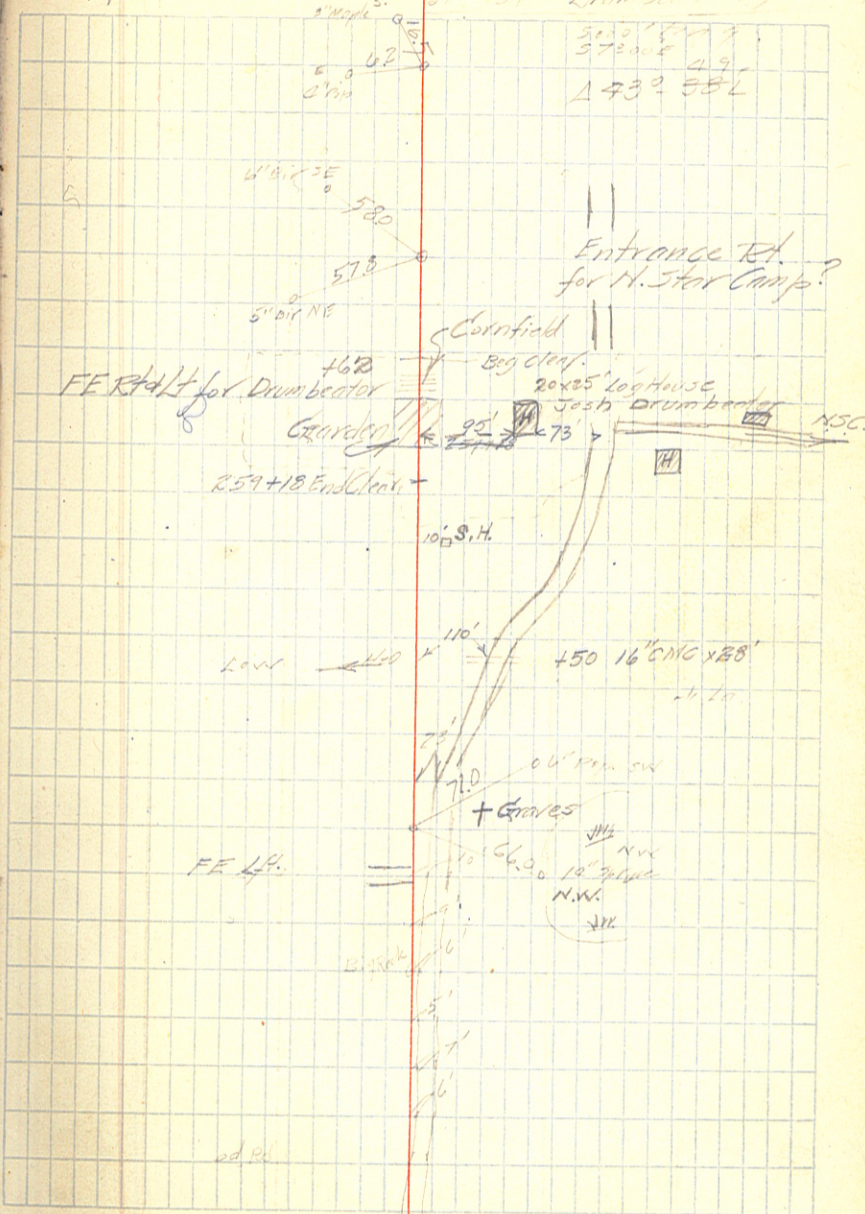
10-27-31

536-30 IN

5' dir S
5' dir NE
5' dir SE
5' dir SW

37° 30'
18° 49' 1/2 V
18° 48' 1/2 V Δ = 18° 49' R
37° 37' Drumbeater angle.

3000
57200
49
Δ 43° 55'



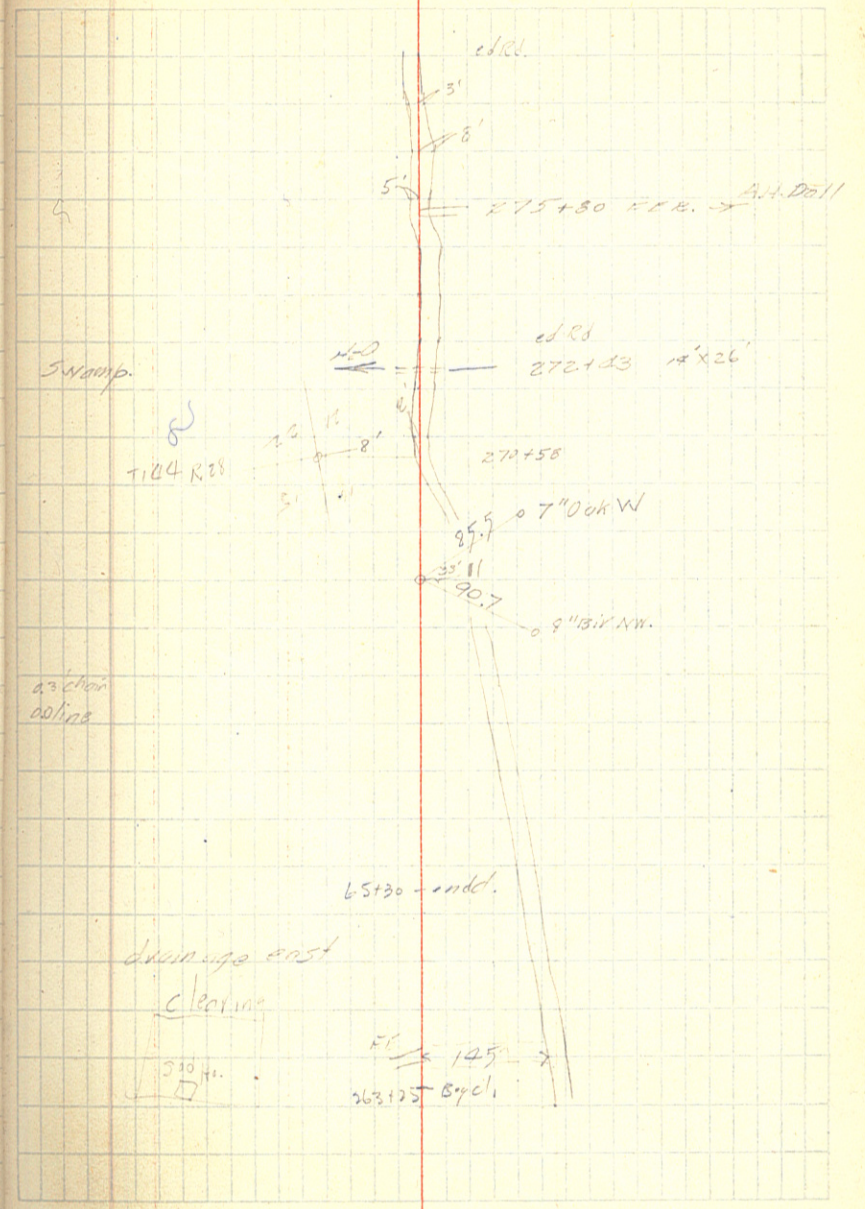
279			
278			
277			
276	FOT		
275			
274			
273			
272			
271			
270			
269			
E.C. 7847	9°24.5'	15.3	
268	8°08'	7-16.23	
+50	7°23'	2°01'	✓
267	6°38'	✓2°46'	✓
+50	5°53'		
266	5°08'		✓
+50	4°23'		✓
265	3°38'	P.O.C.	P.I. 265+74.0 A 18°49'R
+50	2°53'		D 3°CR
264	2°08'		T 316.5
+50	1°23'		L.C. 627.2
263	0°38.25'		✓
B.C. 262+57.5	42.5		

536°3'W

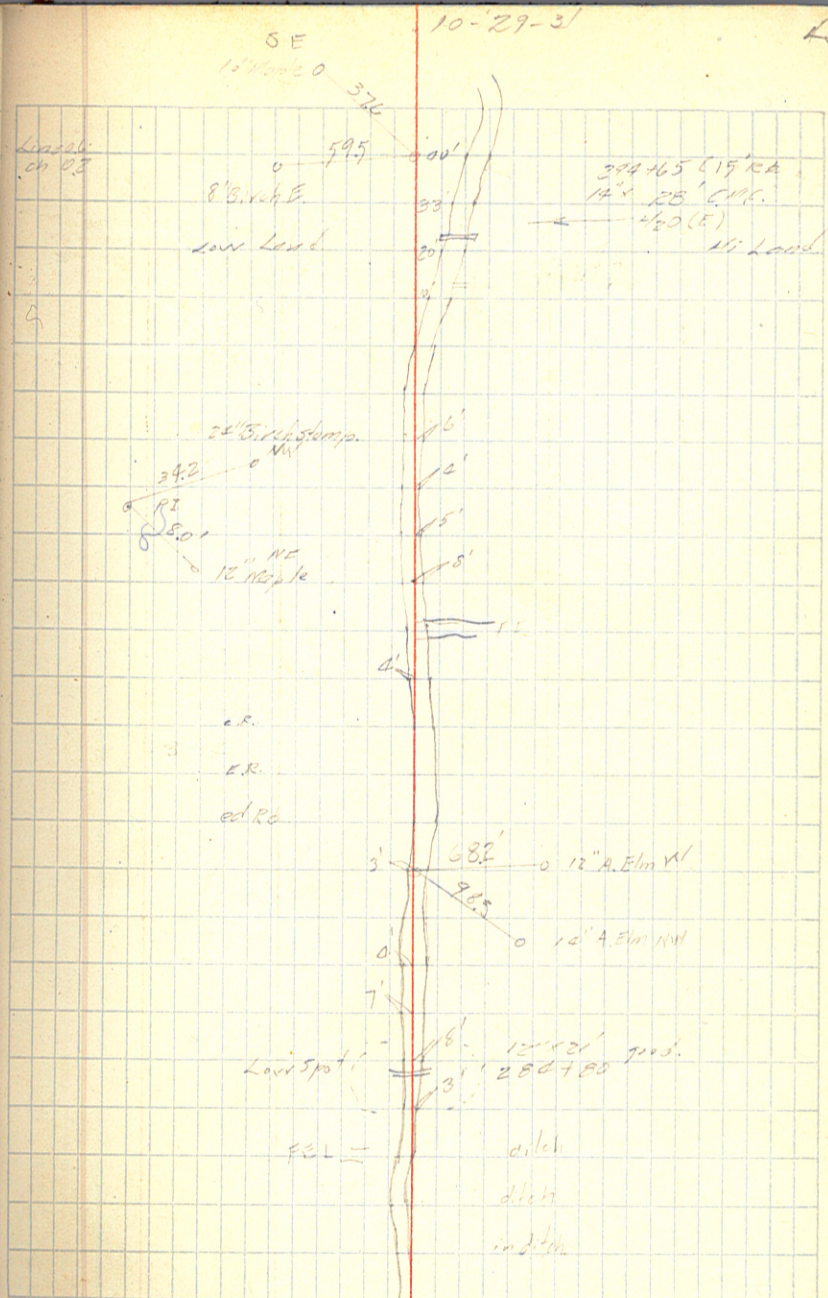
107
153
112.0

10-28-81 Rain
10-29-31 Rain.

120



296		69.5'	
EG. +30.5	21°-54.5'		
295	21°-00'		
+50	19°-30'		
294	18°-00'		
+50	16°-30'		P.O.C.
293	15°-00'		
+50	13°-30'		
292	12°-00'		
+50	10°-30'		PI 291+844
291	9°-00'		$\Delta 43^{\circ}-49' L (87^{\circ}-38' \frac{1}{2})$
+50	7°-30'		P.O.C. D 6° C L
290	6°-00'		T = 384.2
+50	4°-30'		L/C = 1730.3
289	3°-00'		289+82.3 P.O.T on S.T
+50	1°-29.64'		
BC 288+00.2			
288			
287			
286			
285			
284			
283			
282			
281			
280			

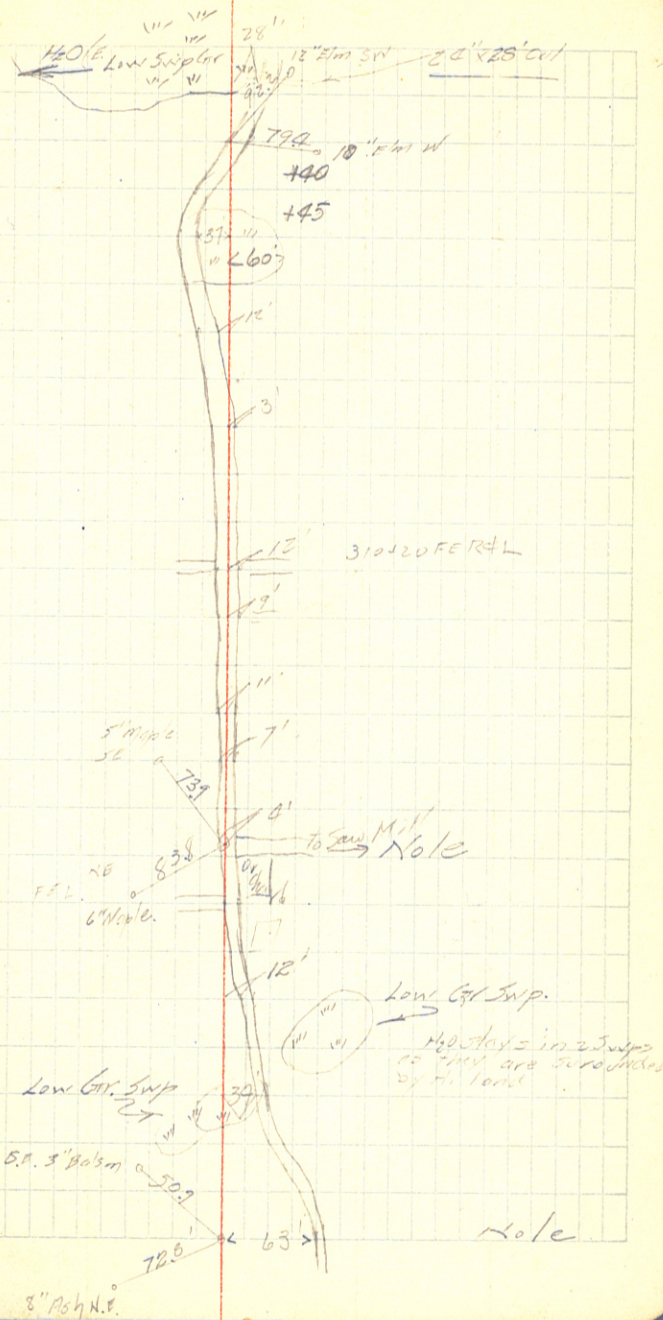


320
 319
 318+93.5 P.O.T. sedge Road.
 318
 317
 316
 315
 314
 313
 312
 311
 310
 309
 308
 307
 306
 305
 304+264 P.O.T.
 304
 303
 302
 301
 300
 299
 298
 297
 296+15.6 P.O.T.

4 1/2 yd Rock

10-29-31
10-30-31

144



341+84.5 P.I. $\Delta 35^{\circ}27' L (70^{\circ}09')$

BC 338+187

338 +54.7 P.O.T

337

336

335

334

333

332

331

330+17.7 P.O.T. \neq 500 Ry. track

330

329

328

327

326

325

324

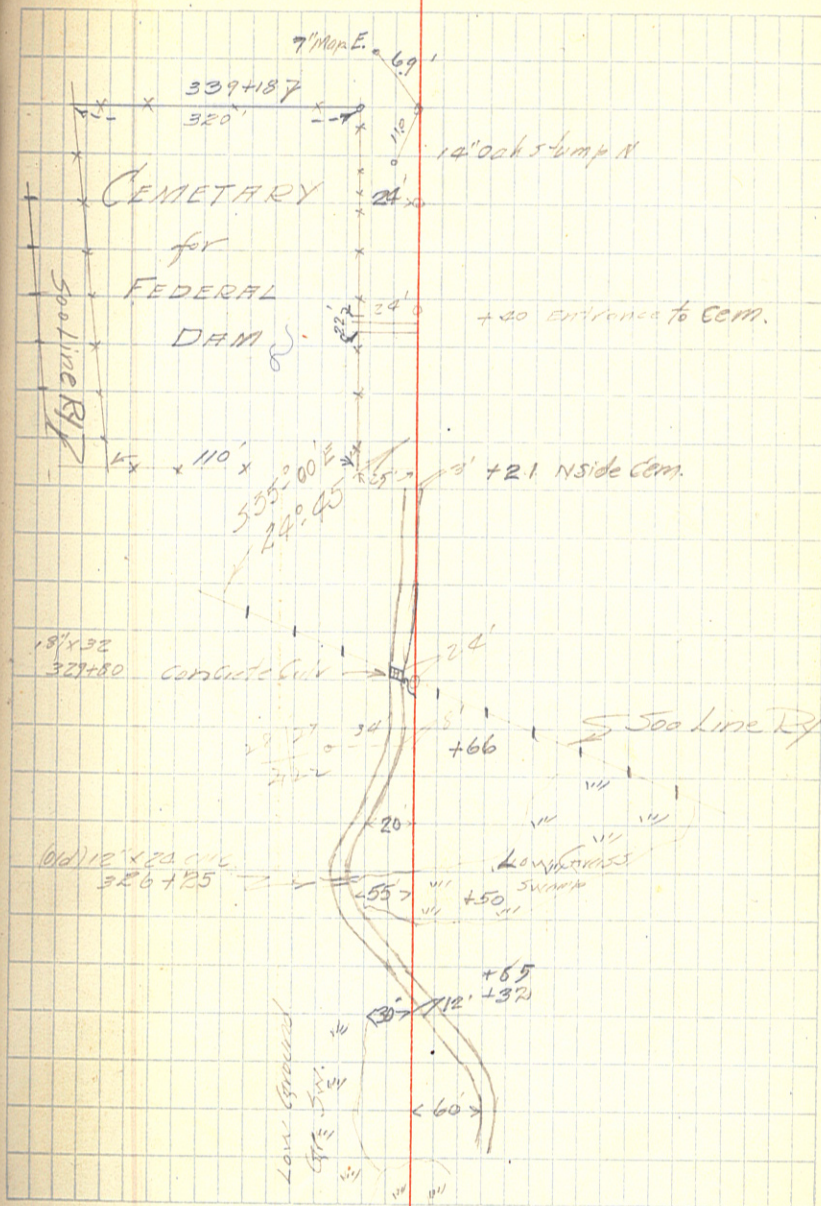
323

322

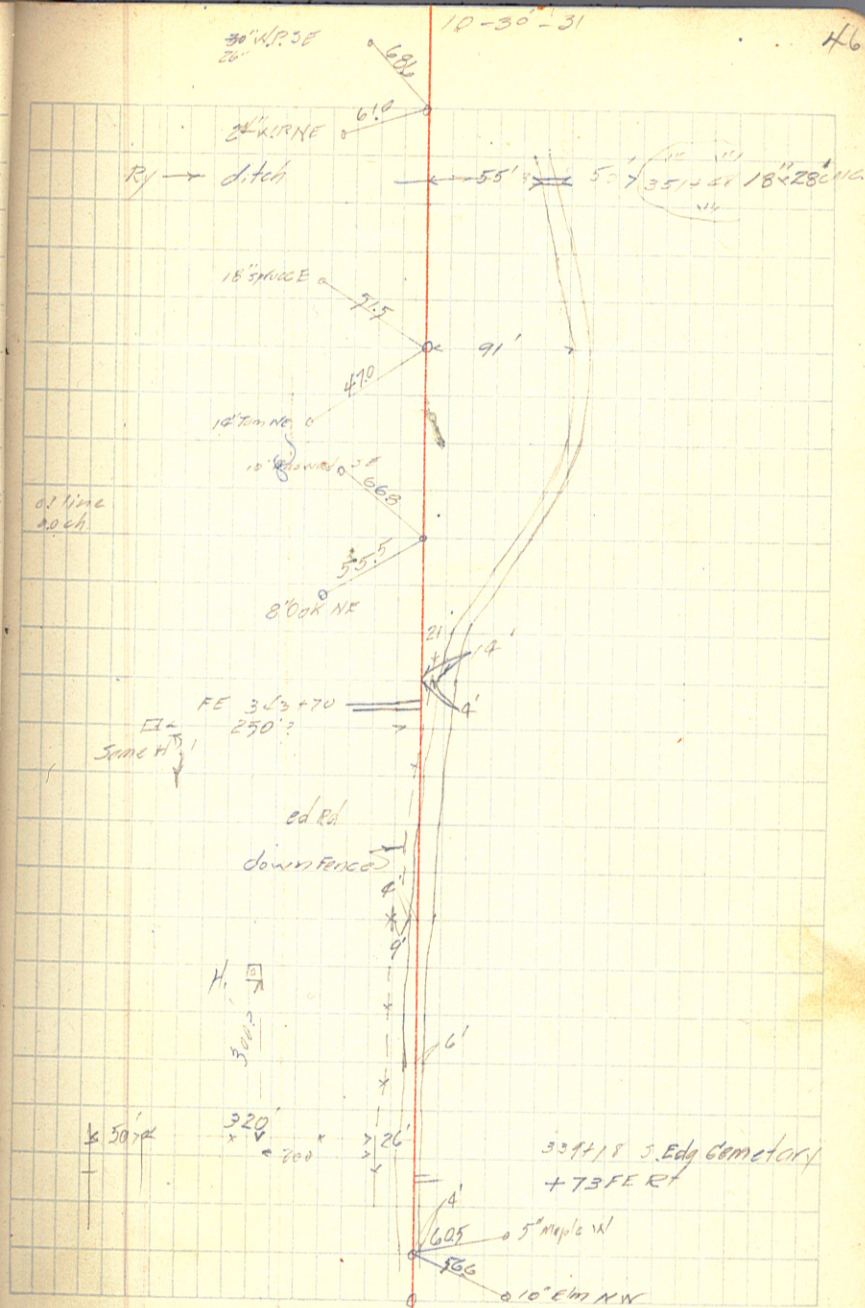
321

10-30-31

45



		10-37	
355+00	PI	$\Delta 5^{\circ} 19' R$	
352			
351			
350			
349			
348+87.3	P.O.T.		
348			
347			
346			
E.C. 126.7	17-02		
345	17-02		
+50	15-47		
344	14-32	✓ P.O.G.	
+50	13-19	✓	
343	12-02	✓	
+50	10-07	P.O.C.	
342	9-32	✓	
+50	8-17	✓ PI 341+84.5	
341	7-02	✓ $\Delta 35^{\circ} 24' L$	
+50	5-47	✓ D=5% L	
340	4-32	✓ T=365.8	
+50	3-17	✓ L/C=708.0	
339	2-02	✓	
+50	0-47	✓	
B.C. 338+18.7	31.3		



371-4.5 PI

368

367

366

365

364

363

362

361

360

359

358

EG. 465/R²-39.5

357 2°-20' ✓

+50 2°-05' ✓

356 1°-50' ✓

+50 1°-35' ✓

355 1°-20' ✓ PI 3557000

+50 1°-05' ✓ A 5°-19' R (10°-37')

354 0°-50' POG. D P R

+50 0°-35' ✓ T = 266°

353 0°-20' ✓ 40-531.7

+50 0°-04.8

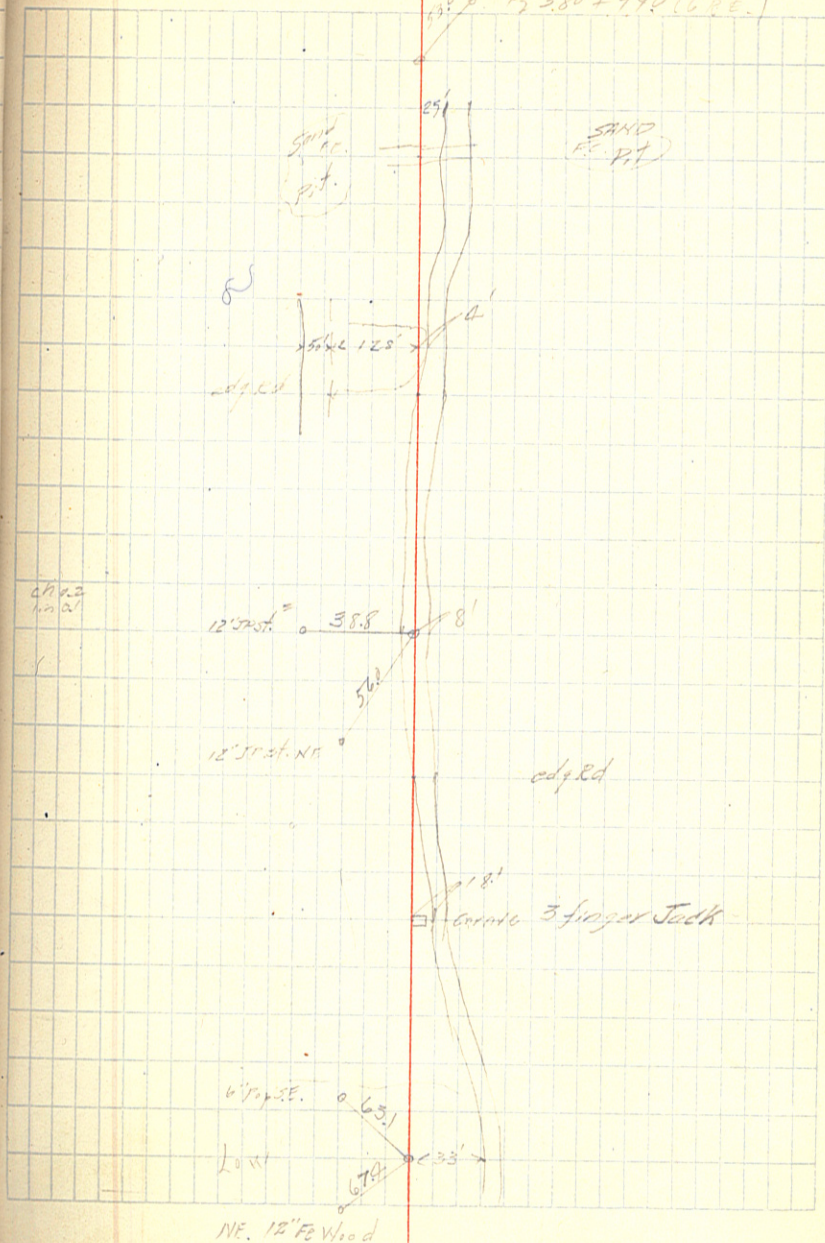
86 352+34.0

68° 55'
Δ 39° 28' R 58° 00' E

10-30-31 Cloudy-Rain.
10-31-31 Cold

47

13.8° K₂ 380+990 (6.0e.)



385
+ 586 POT

Rail Road Spike

384

383

382

381

380

379

378

377

376

375

374

F.C. +10.2 17°-14' ✓

373 16°-44' ✓

+50 14°-14' ✓

372 11°-44' ✓

+50 9°-14' ✓

371 6°-04' ✓

+50 4°-14' ✓

370 1°-49.5' ✓

BC 369+65.5

369

P.I. 371+63.5

Δ 34°-28' B

D=10° CB

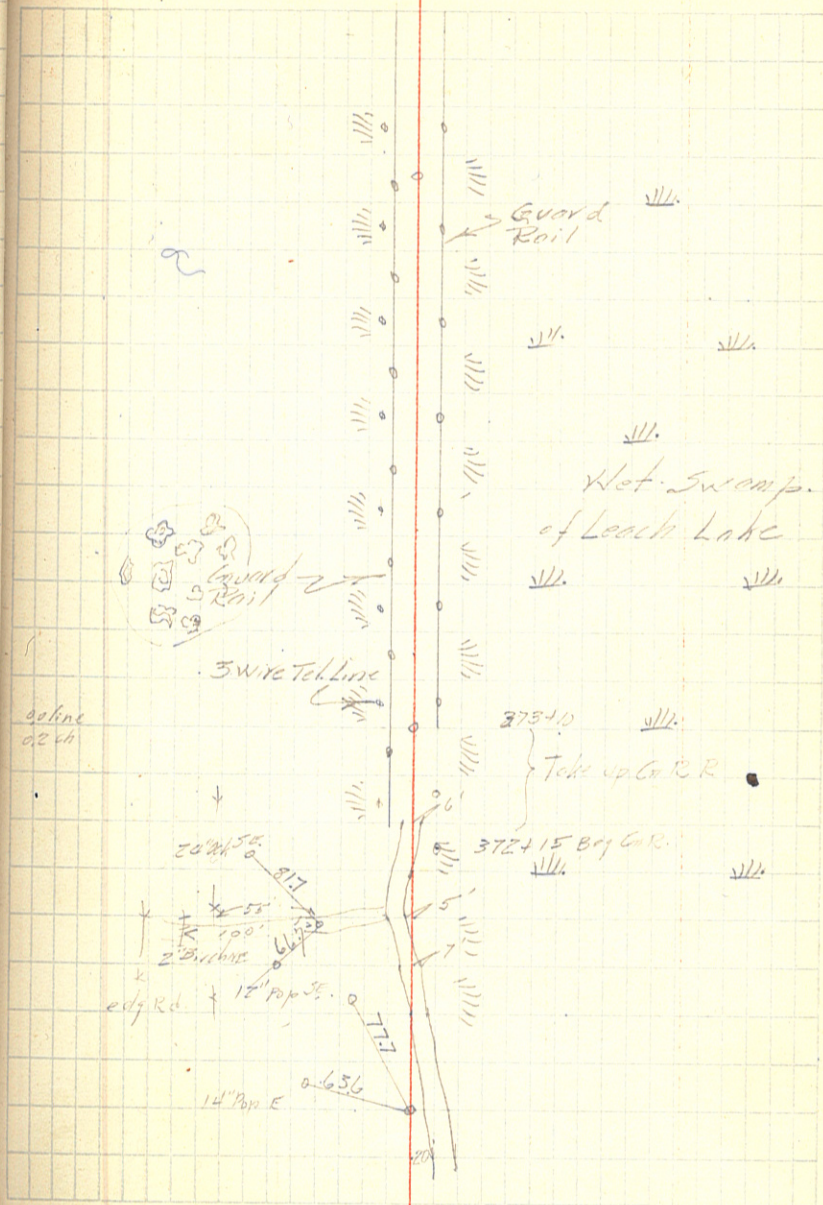
T=178°

170-344.7

371+32.2

110.8
10.8
80.8

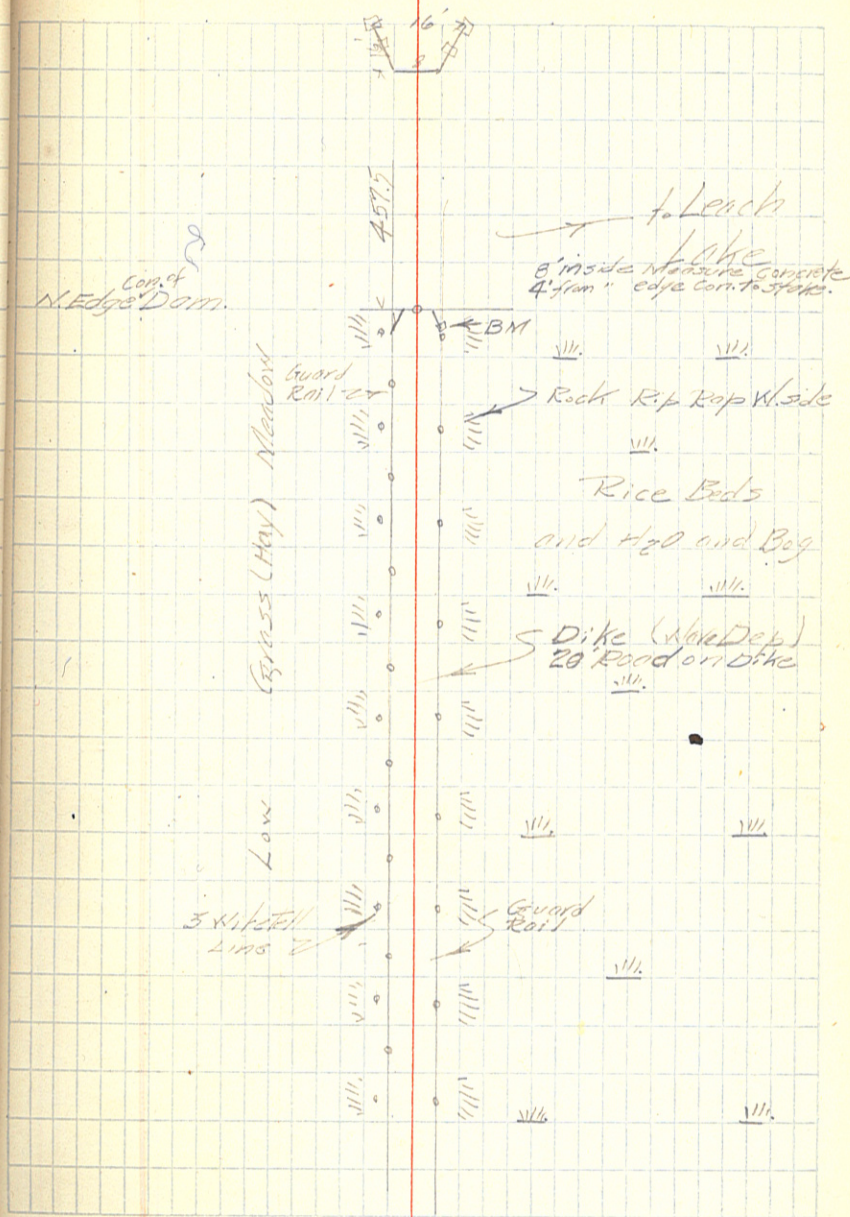
10-31-31
Cool Chas. W. of 2326-379 48
11-13-31 Ran Line on Dike
Fair - Cool



+638
 402
 401
 400
 399
 398
 397
 396
 395
 394
 393
 392
 391
 390
 389
 388
 387
 386

11-13-31

19



402 + 74 Bridge?

	45	NI	-5	B.M. Elev
TP #0	6.77	1313.47		1306.70 1306.70
	10.55	1320.19	7.14	1306.33
	4.24	1322.05	3.83	1309.64 ✓
	7.05	1320.12	2.38	1317.81 ✓
	17.4	1317.09	8.98	1313.07 ✓
old line B.M.#1			4.77	1315.35 ✓
	30.1	1317.69	3.93	1313.16 ✓
	15.1	1315.28	2.44	1314.65 ✓
	5.29	1314.76	3.92	1313.77 ✓
	6.72	1320.42	5.62	1309.07 ✓
B.M.#2			1.06	1313.70 ✓
			1.10	1319.32 ✓
TP	0.67	1319.99	1.10	1319.32 ✓
	3.06	1315.14	7.91	1312.08 ✓
	11.54	1324.88	4.80	1310.34 ✓
	3.33	1319.01	6.20	1315.68 ✓
B.M.#3			6.58	1312.73 ✓
TP	6.84	1319.27	0.89	1318.88 ✓
	7.09	1325.99	7.76	1318.21 ✓
	3.68	1321.89	10.62	1311.27 ✓
	11.56	1322.83		
B.M.#4			9.29	1313.54 ✓
TP	4.02	1316.23	10.62	1312.21 ✓
	6.78	1322.26	0.75	1315.48 ✓
	4.52	1320.61	6.17	1316.09 ✓

Cont. - Page 76

By Sp. in 20" W.Pine } SH#8
 BM 1306.70 }
 10' 100' Fed. Dam - Benz }
 5' 272 + 25 70' L }
 By Sp. in 10" J.P. 70' L 27+50 Abandoned ✓
 By Sp. in 16" J.P. 110' L 52+50 ✓
 By Sp. in 16" No. 78+00 (45' R) ✓
 (99+50 - 185 R)
 Spike head 30" No. 65' L 99+40 ✓

Stn	+5	HI	-5	Elev.	B.M.
T.P.	8.65	1315.35			1306.70
0			9.05	306.3	
1			5.78	309.6	
+49			3.95	311.1	
+60			4.50	310.9	
+85.5			4.65	310.7	
2			5.30	310.1	
3			6.80	308.6	
4			6.10	309.3	
5			5.70	309.7	
T.P.	12.50	1321.58	6.27	1309.08	4.
7			10.9	10.7	
8			10.3	11.5	

L	T
$\frac{2.0}{50}$	$\frac{+0.2}{30}$
$\frac{-0.2}{37}$	$\frac{+0.1}{15}$
$\frac{-0.1}{30}$	$\frac{+0.1}{11}$
$\frac{-0.5}{30}$	$\frac{-0.15}{15}$
$\frac{-0.5}{30}$	$\frac{-0.1}{24}$
$\frac{-0.5}{30}$	$\frac{-0.7}{40}$
$\frac{-0.7}{30}$	$\frac{-0.5}{30}$
$\frac{-0.5}{30}$	$\frac{-0.3}{30}$
$\frac{-0.5}{30}$	$\frac{-0.5}{30}$
$\frac{-0.2}{37}$	$\frac{0.0}{20}$
$\frac{-0.3}{12}$	$\frac{-0.3}{12}$
$\frac{+0.2}{7}$	$\frac{-0.2}{22}$
$\frac{-0.6}{32}$	$\frac{-0.6}{32}$
$\frac{+0.1}{14}$	$\frac{+0.1}{20}$
$\frac{+0.1}{14}$	$\frac{+1.0}{32}$
$\frac{-0.5}{32}$	$\frac{-1.5}{23}$
$\frac{-1.4}{18}$	$\frac{-0.3}{12}$
$\frac{+0.2}{10}$	$\frac{-1.6}{18}$
$\frac{-1.6}{25}$	$\frac{-0.3}{25}$
$\frac{-0.9}{33}$	$\frac{-1.5}{23}$
$\frac{-0.5}{13}$	$\frac{+0.1}{12}$
$\frac{+0.1}{12}$	$\frac{-1.1}{19}$
$\frac{-1.2}{29}$	$\frac{-0.2}{33}$
$\frac{0.2}{31}$	$\frac{+0.2}{23}$
$\frac{+0.3}{39}$	$\frac{+0.3}{39}$
$\frac{+0.3}{39}$	$\frac{+0.3}{39}$
$\frac{+0.5}{31}$	$\frac{+0.5}{31}$
$\frac{-0.2}{32}$	$\frac{+0.2}{28}$
	$\frac{0.0}{33}$

Sta	+S	HI	-S	ELFV.	B.M.
9		1321.58	8.1	13.5	
10			5.1	16.5	
11			4.2	17.4	
12			3.3	18.3	
13 AB abandoned.					
13			3.5	18.1	
14			4.6	17.0	
15			3.5	18.1	
T.P + 47.7	1.45	1320.18	2.85	1318.73	43/.
16			1.9	18.3	
17			4.9	15.3	
18			6.8	13.4	
19			8.8	11.4	
20			8.9	11.3	
21			6.7	19.5	

	$\frac{+0.2}{29}$	$\frac{+0.1}{26}$	$\frac{+0.3}{23}$	$\frac{0.0}{27}$	$\frac{-0.1}{32}$
		$\frac{-0.4}{26}$	$\frac{-0.3}{30}$	$\frac{-0.1}{30}$	$\frac{-0.3}{36}$
		$\frac{-1.0}{27}$	$\frac{-0.8}{24}$	$\frac{+0.5}{15}$	$\frac{+0.1}{23}$
		$\frac{-0.2}{33}$	$\frac{-0.9}{22}$	$\frac{+1.0}{12}$	$\frac{+0.2}{9}$
				$\frac{0.0}{17}$	$\frac{-0.1}{31}$
13 AB abandoned					
USE	$\frac{-0.3}{33}$	$\frac{-0.2}{22}$	$\frac{-0.9}{19}$	$\frac{+0.4}{15}$	$\frac{-0.2}{12}$
Notes				$\frac{+0.5}{10}$	$\frac{0.0}{15}$
				$\frac{-1.4}{19}$	$\frac{0.1}{21}$
				$\frac{-0.1}{21}$	$\frac{-0.2}{35}$
LP BK 172 Pg 43					
	$\frac{+1.0}{32}$	$\frac{-0.4}{28}$	$\frac{+0.2}{10}$	$\frac{+0.5}{10}$	$\frac{-0.1}{17}$
				$\frac{-0.9}{21}$	$\frac{-0.5}{28}$
				$\frac{-0.5}{28}$	$\frac{-1.0}{36}$
	$\frac{-1.5}{33}$	$\frac{-1.4}{20}$	$\frac{+0.3}{13}$	$\frac{+1.1}{9}$	$\frac{0.0}{23}$
				$\frac{-0.4}{33}$	
	$\frac{-0.5}{35}$	$\frac{-0.9}{25}$	$\frac{-1.6}{22}$	$\frac{+0.1}{14}$	$\frac{+1.2}{10}$
				$\frac{-0.1}{20}$	$\frac{-1.3}{23}$
				$\frac{-0.2}{25}$	$\frac{-1.0}{30}$
	$\frac{-0.3}{34}$	$\frac{-1.3}{29}$	$\frac{-1.7}{23}$	$\frac{0.0}{12}$	$\frac{+1.0}{19}$
				$\frac{+0.1}{8}$	$\frac{-0.7}{20}$
				$\frac{-0.7}{20}$	$\frac{-0.7}{30}$
L.O.	$\frac{+1.0}{25}$	$\frac{-0.3}{19}$	$\frac{-0.5}{15}$	$\frac{+1.7}{9}$	$\frac{+0.1}{8}$
				$\frac{+0.5}{12}$	$\frac{+0.1}{15}$
				$\frac{-0.3}{21}$	$\frac{+0.5}{25}$
				$\frac{+0.5}{25}$	$\frac{+0.5}{33}$
	$\frac{-0.3}{33}$	$\frac{0.0}{20}$	$\frac{-0.9}{27}$	$\frac{+0.4}{16}$	$\frac{+0.5}{12}$
				$\frac{+0.3}{11}$	$\frac{-0.2}{16}$
				$\frac{-1.6}{20}$	$\frac{-0.2}{22}$
				$\frac{-0.7}{22}$	$\frac{-0.7}{34}$
	$\frac{-0.4}{35}$	$\frac{-0.2}{23}$	$\frac{-1.2}{20}$	$\frac{-0.1}{17}$	$\frac{+0.5}{11}$
				$\frac{+0.7}{12}$	$\frac{+0.0}{16}$
				$\frac{-0.5}{19}$	$\frac{+0.0}{23}$
				$\frac{+0.0}{23}$	$\frac{+1.0}{29}$
				$\frac{+0.8}{35}$	
	$\frac{-0.2}{34}$	$\frac{-0.1}{22}$	$\frac{-1.0}{20}$	$\frac{0.0}{15}$	$\frac{+0.4}{10}$
				$\frac{+0.2}{16}$	$\frac{-1.1}{20}$
				$\frac{0.0}{23}$	$\frac{-0.1}{34}$
	$\frac{-0.1}{20}$	$\frac{0.0}{24}$	$\frac{-1.0}{20}$	$\frac{+0.1}{17}$	$\frac{+0.7}{9}$
				$\frac{-0.1}{15}$	$\frac{+0.2}{20}$
				$\frac{+0.9}{21}$	$\frac{+1.0}{31}$
				$\frac{+1.0}{31}$	$\frac{0.0}{36}$

Abandoned

Sta	+S	HI	-S	ELEV	B.M
		1320.18			
22			5.1	15.1	
23			4.2	16.0	
+50			2.9	17.3	
24			3.5	16.7	
25			6.9	13.3	
B.C. + 43.0			6.4	13.8	
T.P. 26	6.78	1319.20	7.76	131242	L.J.
+50			7.8	114	
27			6.8	124	
+50			6.5	127	
28			6.3	129	
+50			5.2	14.0	

L	X
$\frac{-0.8}{35} \frac{-0.8}{22} \frac{-0.1}{15}$	$\frac{+0.7}{12} \frac{0.0}{17} \frac{+0.7}{21} \frac{+0.3}{37}$
$\frac{-1.8}{37} \frac{-0.8}{29} \frac{-1.8}{20} \frac{-0.8}{18}$	$\frac{+0.5}{10} \frac{+0.1}{16} \frac{-0.1}{17} \frac{-0.8}{22} \frac{+1.0}{38}$
$\frac{-1.2}{38} \frac{-0.4}{23} \frac{-1.2}{20} \frac{-0.2}{17}$	$\frac{+0.6}{10} \frac{+0.2}{17} \frac{-0.1}{20} \frac{-0.1}{29} \frac{-0.3}{36}$
$\frac{-0.1}{37} \frac{-0.1}{23} \frac{-1.0}{21} \frac{+0.2}{17}$	$\frac{+0.1}{15} \frac{-0.8}{17} \frac{-0.3}{36}$
$\frac{-0.6}{33} \frac{-0.8}{27} \frac{-1.8}{20} \frac{-0.8}{18}$	$\frac{+0.7}{18} \frac{+0.3}{17} \frac{-1.0}{17} \frac{+0.4}{21} \frac{+0.1}{33}$
$\frac{+0.9}{37} \frac{+0.7}{22} \frac{-0.5}{20} \frac{+0.1}{18} \frac{+0.6}{10} \frac{-0.1}{9}$	$\frac{+0.2}{8} \frac{+1.5}{11} \frac{+0.2}{15} \frac{-1.0}{18} \frac{+0.3}{21} \frac{-0.1}{34}$
$\frac{+1.2}{35} \frac{+0.6}{28} \frac{-0.8}{27} \frac{+0.4}{21}$	$\frac{+0.7}{7} \frac{0.0}{10} \frac{-1.5}{13} \frac{-0.1}{15} \frac{-0.6}{32}$
$\frac{+0.5}{33} \frac{+0.7}{6} \frac{-0.3}{2}$	$\frac{+0.6}{10} \frac{+0.6}{20} \frac{+0.7}{35}$
$\frac{-0.4}{36} \frac{-0.5}{22} \frac{-2.0}{28} \frac{-0.3}{23}$	$\frac{0.0}{20} \frac{-0.1}{35}$
$\frac{-0.4}{35} \frac{-0.1}{20}$	$\frac{0.0}{20} \frac{-0.1}{35}$
$\frac{-0.5}{20} \frac{-0.7}{30}$	$\frac{-0.3}{20} \frac{-0.3}{35}$
$\frac{-0.1}{34} \frac{-1.4}{29} \frac{-0.2}{26}$	$\frac{-0.5}{20} \frac{-0.6}{37}$

Abandoned

Sta	+S	HI	-S	ELEV.	B.M.
		1319.20			
29 _s			4.8	14.4	
+ 50			4.3	14.9	
F.C. + 93.6			3.7	15.5	
30			3.7	15.5	
BM #1			6.06	1313.14	1313.14
31			2.9	16.3	
TBM-1h	Water Dep BM		6.23	1312.97	
BC 51472.4			4.7	14.5	
32			6.1	13.1	
+50			7.5	11.7	
T.P 33	9.02	1319.65	8.57	1310.63	± st.
+50			9.8	09.9	
34			6.9	12.8	
+13			6.8	12.9	

L	R
-0.4 35	-0.3 20
+0.5 17	-0.2 10
-1.5 7	-0.2 4
-0.1 24	-0.3 35
-0.3 31	-0.6 32
-1.8 28	-0.7 25
-0.7 3	-1.3 6
-0.2 9	+0.1 23
-0.3 37	
-0.7 32	-0.3 28
-1.6 21	-0.9 18
-0.1 6	-1.4 9
+0.1 11	+0.5 25
+0.5 39	
-1.0 31	-1.1 23
-2.1 20	-0.8 17
-0.4 9	-1.7 7
-0.2 9	+0.1 27
-1.1 37	
-0.9 31	-2.2 22
-0.7 18	-0.2 2
-1.3 5	+0.1 7
+0.5 33	
-0.7 34	-0.8 21
-2.2 21	-0.5 18
-0.2 9	-1.2 6
+0.2 8	+0.1 8
+0.1 22	0.0 33
-0.7 36	-0.3 25
-1.6 17	-0.2 13
+0.2 8	+0.8 13
+1.2 39	
0.0 32	0.0 16
-0.3 10.5	-1.4 8
-0.7 8	+0.4 17
-1.7 20.5	+0.1 23
+0.3 17	
+0.8 32	0.0 23
-0.1 9	-0.6 6
+0.2 10	+0.1 20
+0.7 39	+0.1 37
+4.6 40	+2.5 28
+1.1 15	-1.8 25
-2.9 26	-1.5 30
-1.8 39	-1.8 37
+7.8 36	+4.8 20
+4.1 17	+5.1 12
+5.0 70	+0.4 4
-1.7 76	-1.8 28
-0.9 30	-1.7 34

Abandoned

Sta	+S	HI	-S	ELFV	B.M.
		1319.65			
34+21			8.2	11.5	
+35			4.1	15.6	
+43			4.2	15.5	
+50			3.4	16.3	
35			6.6	13.1	
+50			7.8	11.9	
36.			9.3	10.4	
+50			8.8	10.9	
37			8.4	11.3	
E.C. +37.6			7.4	12.3	
38			6.8	13.4	
39			8.7	11.0	

L		R	
$\frac{+0.3}{37}$	$\frac{+7.0}{38}$	$\frac{+6.5}{29}$	$\frac{+3.4}{26}$
$\frac{+1.6}{17}$	$\frac{-1.4}{10}$	$\frac{-0.3}{20}$	$\frac{-0.8}{32}$
$\frac{-1.9}{35}$	$\frac{-0.5}{33}$	$\frac{-1.1}{20}$	
$\frac{+0.8}{31}$	$\frac{+3.0}{27}$	$\frac{-1.2}{21}$	$\frac{-1.6}{14}$
$\frac{+2.3}{9}$	$\frac{-2.9}{16}$	$\frac{-0.0}{32}$	
$\frac{+3.8}{20}$	$\frac{+0.1}{28}$	$\frac{+3.4}{12}$	$\frac{+1.2}{6}$
$\frac{-2.6}{20}$	$\frac{-0.0}{33}$		
$\frac{+2.5}{41}$	$\frac{+2.0}{26}$	$\frac{-2.0}{15}$	$\frac{-3.6}{33}$
$\frac{+1.1}{37}$	$\frac{+2.3}{18}$	$\frac{+0.9}{5}$	$\frac{-0.0}{20}$
$\frac{+1.3}{15}$	$\frac{+0.0}{33}$		
$\frac{-0.4}{35}$	$\frac{-0.9}{20}$	$\frac{-0.2}{20}$	$\frac{-0.7}{25}$
$\frac{-1.9}{29}$	$\frac{-2.0}{36}$		
$\frac{0.0}{30}$	$\frac{-0.1}{25}$	$\frac{-0.7}{20}$	$\frac{-0.6}{33}$
$\frac{-2.9}{42}$			
$\frac{-1.5}{37}$	$\frac{-1.5}{25}$	$\frac{0.5}{22.5}$	$\frac{-2.2}{28}$
$\frac{5.0}{29}$	$\frac{-1.6}{33}$		
$\frac{+1.0}{35}$	$\frac{+0.5}{24}$	$\frac{0.0}{17}$	$\frac{+0.2}{10}$
$\frac{-1.0}{24}$	$\frac{0.0}{35}$		
$\frac{+0.6}{36}$	$\frac{0.8}{31}$	$\frac{+1.4}{5}$	$\frac{+0.8}{18}$
$\frac{+1.6}{19}$	$\frac{+1.4}{22.5}$	$\frac{+2.2}{24}$	$\frac{+1.8}{26}$
$\frac{1.6}{35}$			
$\frac{+0.1}{35}$	$\frac{+0.6}{20}$	$\frac{+0.6}{17}$	$\frac{+1.0}{21}$
$\frac{+0.9}{28}$	$\frac{0.0}{25}$	$\frac{+1.0}{28}$	$\frac{0.0}{25}$
$\frac{+1.0}{27}$	$\frac{+1.0}{33}$		
$\frac{-0.3}{36}$	$\frac{-1.2}{21}$	$\frac{-0.1}{9}$	$\frac{-1.0}{8}$
$\frac{+0.3}{6}$	$\frac{+0.7}{4}$	$\frac{+0.2}{3}$	$\frac{-0.4}{16}$
$\frac{0.0}{17}$	$\frac{-0.5}{20}$	$\frac{-1.4}{22}$	$\frac{-0.5}{24}$
$\frac{-0.3}{35}$			

Sta	+S	HT	-S	ELEV	B.M.
		1319.65			
T.P. 40	4.30	1317.27	6.68	1312.97	± 57K
	+20		2.6	14.7	
41			7.3	10.0	
Abandoned					
42			6.1	11.2	
43			5.8	11.5	
44			7.2	10.1	
45			9.9	07.4	
46			9.8	07.5	
47			9.9	07.4	
+50 T.P. +50	10.25	1320.26	7.26	1310.4	copy
48			12.7	07.6	
49			13.1	07.2	
50			12.4	07.9	

L		R	
-0.1 37	+0.8 25	+1.7 2	+0.4 22
			+1.1 23
			+0.2 25
			+1.4 27
			+0.8 35
	-2.5 35	-1.6 20	-0.1 2
			-1.9 4
			-0.8 7
			-1.2 26
			-0.4 28
			-1.5 30
			-0.6 32
LP Notes BK 12343			
-1.1 33	-0.7 20	+2.2 22	+1.0 28
		+2.2 26	+2.5 41
Sta 13 to 41 - Begin L 741 + 638 = L 037 + 682			
	-1.5 35	-1.3 23	+1.6 35
	0.0 35	2.0 20	-0.4 23
			-0.5 35
	-0.1 35	-0.3 25	-0.3 20
			-0.3 33
	-0.5 35	-0.4 21	-0.1 20
			+0.8 35
	-0.3 33	0.0 20	-0.3 20
			-0.1 33
	0.1 31	+0.8 20	+1.4 19
			0.5 16
			-0.2 25
			-0.1 35
	+0.4 35	+0.5 25	+0.3 20
			+0.5 37
			L.O.
	-0.4 35	-0.8 20	-0.2 20
			-0.1 35
	+0.1 38	-0.1 26	-0.2 22
			2.0 35
	+0.1 34	-0.3 20	+0.8 20
			0.0 32
			L.O.

Sta	+S	HI	-S	ELEV. B.M.						
		1320.26								
T.I. 51			10.7	09.6		-0.5 34	-0.1 20	+0.1 20	+1.0 33	✓
B.C. +16.5			9.5	10.8		-0.5 34	-0.1 20	+0.9 20	+1.3 34	✓
52			7.4	12.9		-0.5 40	-0.8 32	-0.2 25	+1.4 22	✓
5						+1.6 48	-0.4 40	-0.5 25	+1.2 25	✓
+50			4.7	15.6		+0.2 25	+0.2 25	-0.2 15	+0.5 8	✓
B.M. #2			0.93	1319.33						
53			9.8	10.5		+3.0 43	+2.6 27	+1.2 25	0.0 24	✓
+50			8.4	11.9					-1.5 40	✓
54			10.9	09.4		+1.0 35	+1.1 23	-2.1 18	-2.6 28	✓
+50			11.3	09.0					-2.6 37	✓
+60			10.6	09.7					-2.1 28	✓
55			7.4	12.9		+2.1 33	+1.1 20	-0.3 20	-0.8 35	✓
+45			8.5	16.8		1.0 37	+0.9 20	-0.4 20	-0.3 35	✓
+50			6.6	13.7						✓
T.P. 56	4.60	1318.41	6.45	1313.81	\$ S+K 53+5					✓
			4.1	14.3						✓
+50			8.8	09.6						✓

Sta	+ s	HI	- s	ELEV	B.M
		1318.41			
T. 56+78			9.0	09.4	
57			6.9	11.5	
EG. +58.1			6.9	11.5	
58			6.0	12.4	
58+70					
59			7.9	10.5	
60			10.0	08.4	
T.P. + 62	6.11	1315.74	8.78	1309.63	Spike Spruce
59+39			4.8	10.9	
+ 50			5.8	09.9	
61			7.1	08.6	
+ 55			5.7	10.0	
62			6.4	09.3	
C. Road + 75			5.15	10.5	

Party - J.S. Walker π
 Bl. Schuster \square
 M. Duncan \times L \square
 11-9-31 Rain 0:30 PM.
 Cloud-Cool

	+3.0 36	+2.3 30	+1.8 18	-0.2 20	-0.9 34	
	+1.7 34	+1.1 22	-1.9 17	-2.4 36		
	-1.2 36	-1.1 24	+0.1 8	-0.2 19	-1.5 29	-1.8 35
	+0.2 34	+0.3 20	-0.1 17	-0.9 26	-1.2 33	
58+70 Sec.	+0.3 32	-0.1 24	+0.2 17	+0.4 19	+0.1 19	+0.1 32
	-0.3 36	+0.1 27	-0.4 17	+0.4 10	-0.1 23	-1.0 35
	+2.2 40	+0.7 20	-0.8 20	-0.5 32	1.0	
	-1.2 32	-0.6 20	-0.2 21	-1.2 35		
	+0.5 36	-0.4 23	-0.3 20	-0.3 20	-0.3 33	
	+1.1 35	+0.8 21	-0.4 18	-0.1 32		
	+0.4 35	-0.4 20	-0.3 15	-0.2 32		
	+1.1 37	+0.5 25	-0.8 22	+0.6 19	+0.6 6	-0.6 23
	-0.3 38	-0.8 19	-2.2 16	-0.7 18	-1.0 12	-2.3 14
				-0.2 16	-0.8 16	-1.1 34

Sta.	+S	HI	-S	ELEV	B.M.
		1315.74			
T. 63			6.5	09.2	
	+6		4.3	11.4	
64	-		4.7	11.0	
65	S		6.8	08.9	
66			7.6	08.1	
	+30		6.3	09.4	
	+60		7.2	08.5	
67			7.5	08.2	
68			7.3	08.4	
T. 69			7.4	08.3	
70			6.6	09.1	
T.P.	9.48	1319.24	5.98	1309.76	Sp. insn

L		R	
$\frac{+1.4}{34}$	$\frac{+0.8}{29}$	$\frac{+0.5}{9}$	$\frac{+1.1}{4}$
$\frac{-1.2}{2}$	$\frac{+0.5}{23}$	$\frac{-1.0}{28}$	$\frac{0.0}{30}$
$\frac{-0.5}{34}$	$\frac{-0.9}{20}$	$\frac{-1.5}{22}$	$\frac{-2.7}{24}$
$\frac{-2.0}{27}$	$\frac{-1.6}{38}$	$\frac{-1.3}{32}$	$\frac{-1.5}{37}$
$\frac{-1.6}{35}$	$\frac{-1.6}{29}$	$\frac{-0.9}{18}$	$\frac{+0.6}{20}$
$\frac{+0.6}{29}$	$\frac{+0.6}{29}$	$\frac{-1.3}{32}$	$\frac{-1.5}{37}$
$\frac{-0.6}{37}$	$\frac{-0.4}{20}$	$\frac{0.0}{23}$	$\frac{-0.2}{37}$
$\frac{+0.4}{34}$	$\frac{-0.1}{20}$	$\frac{+0.6}{22}$	$\frac{+0.8}{33}$
$\frac{-1.3}{33}$	$\frac{-0.8}{26}$	$\frac{0.0}{20}$	$\frac{-0.1}{33}$
Beginning of bog	$\frac{-0.2}{33}$	$\frac{-0.4}{21}$	$\frac{-0.3}{20}$
	$\frac{0.0}{31}$	$\frac{-0.2}{20}$	$\frac{-0.1}{20}$
		$\frac{0.0}{32}$	$\frac{0.0}{32}$
			L.O.
$\frac{-0.3}{37}$	$\frac{-0.3}{22}$	$\frac{-0.2}{20}$	$\frac{-0.2}{34}$
$\frac{+0.5}{32}$	$\frac{0.0}{20}$	$\frac{-0.2}{20}$	$\frac{+0.4}{30}$
			L.O.
$\frac{-1.2}{35}$	$\frac{-0.7}{21}$	$\frac{-0.6}{21}$	$\frac{-1.0}{35}$

Sta	+S	HI	-S	ELFV	B.M.					
		1319.24								
70+20			10.6	086		$\frac{+0.1}{37}$	$\frac{-0.2}{24}$	$\frac{+0.3}{16}$	$\frac{+0.8}{26}$	$\frac{+0.7}{32}$
+56			6.1	13.1		$\frac{-0.6}{36}$	$\frac{-0.2}{25}$	$\frac{0.0}{20}$	$\frac{+0.1}{31}$	
71			4.2	15.0		$\frac{-0.5}{33}$	$\frac{-0.3}{20}$	$\frac{+0.5}{19}$	$\frac{+0.2}{37}$	
		Abandoned								
		5	0.8	18.4		$\frac{-1.5}{36}$	$\frac{-1.2}{25}$	$\frac{-0.5}{22}$	$\frac{-0.4}{33}$	
72			0.8	18.4		$\frac{-1.0}{37}$	$\frac{-0.8}{24}$	$\frac{+0.6}{27}$	$\frac{+0.5}{37}$	
7.P.	1.62	1320.51	0.35	1318.89	71+13.9 Spike in stump					
+50			4.6	15.9						
73			4.7	15.8		$\frac{+0.1}{37}$	$\frac{0.0}{24}$	$\frac{-0.2}{22}$	$\frac{-1.2}{24}$	$\frac{+0.8}{27}$
+33			4.5	16.0		$\frac{+0.7}{38}$	$\frac{+0.5}{26}$	$\frac{0.0}{14}$	$\frac{-1.2}{15}$	$\frac{+0.4}{19}$
74			6.7	13.8		$\frac{-0.5}{36}$	$\frac{-0.4}{22}$	$\frac{0.0}{2}$	$\frac{-1.0}{3}$	$\frac{+0.8}{6}$
								$\frac{+0.1}{27}$	$\frac{-0.1}{27}$	$\frac{+1.6}{29}$
75			6.3	14.2		$\frac{+0.4}{36}$	$\frac{-0.4}{19}$	$\frac{-0.9}{11}$	$\frac{-0.1}{8}$	$\frac{-0.2}{9}$
								$\frac{-1.6}{11}$	$\frac{-0.2}{15}$	$\frac{-0.5}{33}$
76			4.9	15.6		$\frac{+0.9}{39}$	$\frac{+0.3}{22}$	$\frac{+0.8}{17}$	$\frac{-1.2}{16}$	$\frac{+0.5}{14}$
								$\frac{+0.2}{13}$	$\frac{+0.2}{13}$	$\frac{+0.2}{10}$
								$\frac{0.0}{3}$	$\frac{-0.8}{6}$	$\frac{+0.1}{30}$

See Note Book #172 P-38 - Abandoned



Abandoned.

11-9-31

60

Sta	+S	HI	-S	ELEV	B.M.	L	R
		1320.51					
76+65			4.0	16.5		$\frac{-0.8}{37}$ $\frac{-0.8}{18}$ $\frac{-4.8}{16}$ $\frac{+0.1}{12.5}$	$\frac{+0.1}{4}$ $\frac{+1.5}{22}$ $\frac{+1.7}{34}$
77			4.8	15.7		$\frac{+0.1}{37}$ $\frac{+0.6}{15}$ $\frac{-0.3}{14}$	$\frac{-0.3}{7}$ $\frac{+0.8}{8}$ $\frac{+1.3}{33}$
+50			6.6	13.9		$\frac{+1.1}{39}$ $\frac{-0.8}{15}$ $\frac{-4.6}{13}$ $\frac{-0.2}{11}$	$\frac{+0.2}{5}$ $\frac{-1.9}{9}$ $\frac{-0.8}{10}$ $\frac{-1.6}{37}$
78			6.1	14.4		$\frac{+1.6}{37}$ $\frac{+1.1}{18}$ $\frac{-0.7}{15}$ $\frac{+0.1}{12}$	$\frac{-0.1}{6}$ $\frac{-2.3}{8}$ $\frac{-1.1}{10}$ $\frac{-2.3}{34}$
+35			5.4	15.1	CK B.M.-0	$\frac{+1.8}{35}$ $\frac{+1.4}{19}$ $\frac{-0.5}{14}$ $\frac{-0.1}{11}$	$\frac{-0.8}{6}$ $\frac{-1.9}{9}$ $\frac{-0.8}{11}$ $\frac{-2.6}{25}$ $\frac{-3.2}{34}$
BM #3			8.12	1312.43	1312.39		
	6.45	1318.88		1312.43			
79			4.1	14.8		$\frac{+0.1}{33}$ $\frac{+0.1}{17}$ $\frac{-4.6}{16}$ $\frac{+0.1}{12}$	$\frac{-0.1}{6}$ $\frac{-1.9}{8}$ $\frac{-0.5}{10}$ $\frac{-1.7}{24}$ $\frac{-2.9}{32}$
80			5.5	13.4		$\frac{+1.7}{37}$ $\frac{+0.8}{17}$ $\frac{-1.0}{16}$ $\frac{-0.2}{13}$	$\frac{-0.1}{6}$ $\frac{-0.9}{8}$ $\frac{+0.6}{10}$ $\frac{+1.2}{30}$
81			6.4	12.5		L.O. $\frac{-1.1}{37}$ $\frac{-1.1}{13}$ $\frac{-2.1}{12}$ $\frac{-0.9}{9}$	$\frac{-0.2}{15}$ $\frac{-2.1}{10}$ $\frac{-1.3}{17}$ $\frac{-1.4}{36}$
B.C. +36.3			6.4	12.5		$\frac{-0.8}{34}$ $\frac{-1.1}{18}$ $\frac{-1.7}{10}$ $\frac{-0.2}{7}$	$\frac{-0.8}{15}$ $\frac{-2.0}{16}$ $\frac{-4.1}{17}$ $\frac{-1.0}{37}$
82			4.9	14.0		$\frac{-0.2}{34}$ $\frac{+0.2}{13}$ $\frac{-1.1}{11}$ $\frac{0.0}{9}$	$\frac{+0.5}{19}$ $\frac{-0.3}{16}$ $\frac{+0.4}{18}$ $\frac{+0.4}{26}$ $\frac{+1.6}{37}$
+50			3.4	15.5		$\frac{+0.8}{34}$ $\frac{+0.5}{12}$ $\frac{-1.1}{10}$ $\frac{+0.1}{8}$	$\frac{0.0}{11}$ $\frac{-0.9}{13}$ $\frac{-0.1}{14}$ $\frac{-0.7}{21}$ $\frac{+0.9}{23}$ $\frac{+1.2}{36}$

Abandoned

Sta	+s	H.I.	-s	Elev	B.M.
		1318.88			
83 TP	10.81	1326.94	2.75	1316.13	
	+50		9.3	17.6	
84 +80			8.1	18.8	
84			8.3	18.6	
	+50		9.5	17.4	
85			9.4	17.5	
	+50		8.7	18.2	
86			7.7	19.2	
	+50		5.6	21.3	
	+80		5.0	21.9	
87			5.4	21.5	
	+50		6.9	20.0	

11-9-31

41

	L				R				
L.O.	+0.2	0.0	+1.0	+0.1	+0.2	-0.9	+0.3	+6.0	+0.3
	30	7	8	5	14	76	79	37	36
L.S.	+0.4	+0.8	-0.5	+0.8	-0.3	1.0	+0.9		
	30	7	5	5	21	23	71		
	+0.5	+1.0	+1.1		+0.6	-1.1	+1.4	+0.3	
	30	18	2		21	24	26	39	
L.O.	+1.1	+1.2			+0.3	-1.9	-0.3	-1.0	
	30	2			18	27	25	40	
	+1.8	+1.4	+1.1	-0.2	0.0	-1.7	-1.8	-2.5	
	31	24	5	4	76	20	21	35	
	+0.6	+0.8	-1.1	-0.1	-0.1	-1.8	-3.2		
	34	12	10	7	9	13	33		
	-0.4	+0.3	-1.1	0.0	-0.1	-1.2	+0.3	-1.1	
	36	15	13	11	7	10	15	32	
	0.0	0.0	-1.4	+0.4	-0.1	-1.2	-0.5	-1.1	
	34	15	14	10	9	11	13	35	
	-0.1	+0.3	-1.3	+0.3	0.0	-0.3	+0.7	+1.9	
	32	12	10	7	6	22	18	37	
	-0.3	+0.5	-1.3	+0.3	0.0	-0.8	+0.8	+0.8	
	32	8	7	3	17	19	22	34	
	-0.3	+0.1	+0.5	-1.1	+0.1	-0.2	-0.6	+1.1	
	38	27	6	5	3	19	20	21	37
	+0.7	+0.6	+0.5	-0.2	+0.8	-0.2	1.2	1.4	
	32	20	3	7	21	23	25	39	

Abandoned

Sta	+S	HI	-S	ELEV	B.M.
		1326.94			
88			7.0	19.9	
+50			7.9	19.0	
89			9.5	17.4	
+50			10.1	16.8	
90			12.6	14.3	
+50			12.3	14.6	
91 T.P.	6.53	1321.16	12.31	1314.63	R. STR
+50			6.5	14.7	
92			4.9	16.3	
+50			2.6	18.6	
93			5.0	16.2	
E.C. +80.3			10.1	11.1	

11-9-31

$\frac{-0.6}{32}$	$\frac{+0.2}{7}$	$\frac{-1.5}{6}$	$\frac{-0.2}{7}$	$\frac{-0.2}{18}$	$\frac{+1.0}{19}$	$\frac{+1.1}{30}$
$\frac{-0.9}{36}$	$\frac{-0.4}{18}$	$\frac{-1.7}{17}$	$\frac{0.0}{14}$	$\frac{-0.2}{12}$	$\frac{-0.1}{4}$	$\frac{-0.1}{7}$
$\frac{+0.3}{34}$	$\frac{+0.9}{24}$	$\frac{-0.8}{23}$	$\frac{+0.3}{19}$	$\frac{+1.2}{2}$	$\frac{+1.6}{16}$	$\frac{+3.1}{27}$
$\frac{-0.1}{37}$	$\frac{-0.2}{26}$	$\frac{-1.7}{25}$	$\frac{-0.4}{22}$	$\frac{-0.5}{6}$	$\frac{-1.2}{3}$	$\frac{0.0}{8}$
$\frac{+0.4}{41}$	$\frac{+0.3}{25}$	$\frac{-0.4}{23}$	$\frac{+0.8}{21}$	$\frac{+1.0}{5}$	$\frac{-0.6}{2}$	$\frac{+0.1}{7}$
$\frac{-2.6}{34}$	$\frac{-0.4}{21}$	$\frac{-2.0}{20}$	$\frac{0.0}{19}$	$\frac{0.0}{7}$	$\frac{-1.7}{3}$	$\frac{-0.6}{5}$
$\frac{0.0}{32}$	$\frac{-0.6}{12}$	$\frac{-1.5}{11}$	$\frac{-0.8}{9}$	$\frac{-0.4}{9}$	$\frac{+1.3}{17}$	$\frac{-0.2}{19}$
$\frac{-0.7}{31}$	$\frac{-0.8}{18}$	$\frac{0.0}{1}$	$\frac{-1.3}{2}$	$\frac{+0.8}{5}$	$\frac{+1.1}{24}$	$\frac{+0.3}{26}$
$\frac{-2.7}{33}$	$\frac{-1.9}{22}$	$\frac{-1.1}{13}$	$\frac{+3.2}{20}$	$\frac{+0.2}{24}$	$\frac{+0.9}{25}$	$\frac{+1.3}{27}$
$\frac{-1.7}{32}$	$\frac{+1.0}{20}$	$\frac{+0.9}{19}$	$\frac{+1.1}{35}$	$\frac{-2.5}{15}$		
$\frac{+0.4}{34}$	$\frac{+0.4}{27}$	$\frac{+0.2}{13}$	$\frac{-0.8}{22}$	$\frac{-1.6}{4}$	Up!	
$\frac{-1.3}{35}$	$\frac{-1.0}{21}$	$\frac{0.0}{12.6}$	$\frac{+0.9}{21}$	$\frac{+1.6}{31}$	$\frac{+2.9}{23}$	
$\frac{-0.9}{32}$	$\frac{-0.1}{20}$	$\frac{+0.3}{20}$	$\frac{+0.6}{30}$			

93+50xsec

Sta	+S	HI	-S	Elev	B.M.
		1321.16			
94	Bot. Hill		11.7	09.5	
95			12.3	08.9	
96			11.9	09.3	
97			12.2	9.0	
T.P	10.03	1319.96	11.29	1309.73	sp 97402
98			12.5	09.5	
+35			10.2	09.8	
99			6.2	13.8	
BM#4		SA Head in 56'	6.37	1313.5	
		net 65' (44+4)			
+75		9.93	7.5	16.6	
+85			4.3	19.2	
100			4.7	18.8	
+30			2.7	20.8	
pot. 101			3.6	19.9	

63

11-9-31
R.A.
Sta 99-11-10-31
L.R.

	$\frac{+0.5}{30}$	$\frac{+0.2}{19}$	$\frac{0.2}{20}$	$\frac{+0.2}{32}$	
	$\frac{+0.3}{29}$	$\frac{+0.5}{19}$	$\frac{+0.1}{20}$	$\frac{+0.3}{32}$	
	$\frac{+0.2}{34}$	$\frac{-0.1}{25}$	$\frac{-0.4}{21}$	$\frac{-0.2}{30}$	
	$\frac{0.0}{33}$	$\frac{+0.1}{20}$	$\frac{0.0}{20}$	$\frac{-0.2}{29}$	
	$\frac{-0.2}{30}$	$\frac{-0.4}{20}$	$\frac{0.0}{16}$	$\frac{+0.3}{29}$	
	$\frac{+0.2}{30}$	$\frac{-0.1}{20}$	$\frac{-0.1}{28}$	$\frac{+0.2}{35}$	L.O.
	$\frac{-1.1}{36}$	$\frac{-1.9}{26}$	$\frac{-0.4}{7}$	$\frac{-1.6}{5}$	$\frac{-0.2}{3}$
	$\frac{-0.8}{20}$	$\frac{-1.6}{25}$	$\frac{-1.2}{28}$	$\frac{-1.0}{34}$	
	$\frac{+1.6}{53}$	$\frac{+2.8}{44}$	$\frac{-0.4}{39}$	$\frac{-0.3}{31}$	$\frac{+1.3}{24}$
	$\frac{-0.1}{5}$	$\frac{+1.7}{1}$	$\frac{0.0}{16}$	$\frac{-2.0}{33}$	
	$\frac{+2.0}{47}$	$\frac{-1.2}{44}$	$\frac{+0.3}{37}$	$\frac{-0.6}{30}$	$\frac{-1.8}{11}$
	$\frac{0.0}{3}$	$\frac{-1.5}{19}$	$\frac{-3.6}{33}$	$\frac{-5.2}{43}$	
	$\frac{-1.2}{47}$	$\frac{-1.0}{39}$	$\frac{-2.0}{37}$	$\frac{-0.6}{34}$	$\frac{-1.9}{12}$
	$\frac{-2.6}{8}$	$\frac{+0.1}{7}$	$\frac{-1.9}{15}$	$\frac{-4.0}{28}$	$\frac{-6.0}{42}$
	$\frac{-3.4}{50}$	$\frac{-2.7}{44}$	$\frac{-1.8}{38}$	$\frac{-1.4}{35}$	$\frac{-1.1}{31}$
	$\frac{-1.5}{11}$	$\frac{-0.2}{8}$	$\frac{-0.9}{18}$	$\frac{-2.0}{30}$	$\frac{-3.2}{40}$

Abandoned

Sta	+5	HI	-5	Gr. Elev	B.M.
		1323.52			
101 + 64			5.0	18.5	
+79			7.8	15.9	
102 T.P.	0.89	1316.61	7.74	1815.76	2 stakes
BC + 20.5			0.8	15.8	
+50			1.8	14.8	
103			3.2	13.4	
+50			4.2	12.4	
104			4.6	12.0	
+50			5.0	11.6	
105			5.1	11.5	
+50			5.1	11.5	
106			5.2	11.4	

11-10-31

64

L	R
-3.1 -2.5 -3.6 40 30 28	-2.0 -1.3 25 2
-0.9 -2.1 -3.1 18 31 37	
-2.6 +0.1 -0.7 +0.5 +0.8 40 28 26 22 4	+2.6 +2.8 +0.9 +1.1 4 18 35 42
-0.6 -0.3 -1.5 -1.5 +0.6 +0.6 37 32 30 26 20 2	-0.6 +2.7 +2.8 +0.9 3 8 24 34
C.S. -0.8 -0.1 -1.6 -1.4 +0.3 38 26 24 20 15	+0.1 -1.8 +0.8 +0.6 -0.7 4 11 16 30 40
L.O. +0.8 +0.8 -1.7 -1.2 +0.2 33 29 19 15 12	-0.1 -1.4 -0.6 -1.1 -1.5 C.S. 6 11 14 24 31
-1.2 -1.5 -2.2 -2.1 35 19 18 13	-0.1 -1.7 -1.0 -1.9 -1.8 6 9 11 26 32
-0.5 -0.4 -1.3 -1.5 -0.1 35 25 24 18 14	+0.1 -1.5 -1.9 5 8 30
-0.1 -0.2 2.1 -1.2 +0.4 34 24 23 19 15	0.0 -0.2 -1.6 5 7 29
-1.3 -2.9 +0.2 27 18 13	+0.1 -1.5 -1.2 L.O. 6 9 27
L.O. -2.0 -2.0 -2.0 +0.1 34 18 16 12	+0.1 -1.6 -2.2 L.O. 4 11 28
L.O. -1.5 -1.2 -2.4 +0.2 28 14 13 8	+0.1 -1.6 -2.1 10 16 34

570 +5 HI -5 GRY FLV B.M.

11-10-31

106+50		1316.61	5.1	11.5
107			5.2	11.4
+50			5.3	11.3
108			5.5	11.3
Abandoned				
TRIP	11.98	192341	5.18	1311.43
E.C. +35.9				
109			11.5	11.9
110			7.7	15.7
+70			4.5	18.9
111			4.5	18.9
Pot +52.3			3.2	20.2
112			4.9	18.5
+75			12.4	11.0

L R

L.O	-17	-15	-2.2	-0.1	-0.1	-17	-11	L.O
	31	12	11	7	12	16	92	
-16	-14	-13	-2.4	+0.2	+0.1	-14	-11	L.O
33	28	9	8	5	15	20	32	
-16	-14	-2.6	0.0	0.0	0.0	-16	-18	
27	9	8	4	15	20	39		
-16	-12	-2.5	+0.2	+0.1	-12	-14		
35	7	6	2	16	21	30		

abandoned

see Note BK #172 Pg. 40

-11	-12	-1.0	0.0	+0.2	-11	-11							
32	24	24	2	16	20	38							
109+60+0.9+0.7+0.6-0.8+0.9+0.2+1.7 13 +0.6-1.4 -1.4+18-2.1													
2.0	-0.6	+0.1	-1.1	-0.7	0.0	+0.5	-1.5	-2.5	+2.8				
36	30	10	8	3	2	20	28	31	37	47			
-0.5	-0.4	+0.3	-0.9	-0.7	+0.2	-1.3	-1.6	+0.7	+2.5				
32	25	8	6	2	23	30	35	34	46				
-1.1	-0.1	+0.7	+0.9	+0.8	-0.3	-0.7	+1.0	+1.0					
34	18	7	5	25	28	33	35	44					
-1.1	-0.5	+0.1	-1.7	-1.2	-1.3	-0.1	+0.1						
38	27	4	5	8	31	32	42						
C.S.	-1.7	-0.9	+0.4	-1.2	-0.7	-1.2	-1.0	+0.1	+0.1				
	31	16	4	6	11	13	93	36	43				
L.O.	-0.4	-0.3	+1.4	+0.1	+2.4	+3.0	+2.5	-2.8	+3.3	+2.0	+3.7	+4.1	
	29	16	11	12	16	19	21	37	38	42	45	49	

Std	+S	HI	-S	Elev	B.M.
113	S	1323.41	12.6	10.8	
+27			12.6	10.8	
+70			9.6	13.8	
114 T.P	6.55	1320.54	9.42	1313.99	
114 +66					
115			4.1	16.4	
+49				14.4	
+67				16.0	
116			7.1	13.4	
117			8.0	12.5	
+36				12.4	
118			10.0	10.5	
+43			10.4	10.1	
119			6.9	13.6	

11-10-31

66

		H.R.	
L.O.	-1.0 -0.6	+0.6 +2.5 +2.2 +2.7	
	29 17	15 19 21 37	
-67	-1.3 -0.3	+0.8 +0.2 +1.4 +2.0 +2.6	
	36 18	11 13 17 19 38	
-1.5	-0.5	+0.1 -1.1 -0.5 -0.2 -1.3 -0.6 -0.9	
	36 14	7 8 11 29 32 34 38	
L.O.	-0.8 -0.7	0.0 -0.8 -0.2 +0.1 -1.6 -1.3 -2.2	
	38 19	1 2 5 22 25 26 36	
114 +66	-0.1 +0.7 +0.7 -0.7 -0.2	1.0 -0.1 -1.0 -1.0 -1.2 +1.6	
	36 28 15 11 9	10 12 15 31 36	
	+1.5 +0.8 -1.0 +0.1	+0.1 -1.2 0.0 -0.5 -0.8	
	36 19 17 14	4 7 8 23 37	
+1.2	-1.0 -0.9 +0.7 +0.4	0.0 -1.4 -0.7 -1.5 -2.1 -1.2	
	36 25 31 18 17	2 4 6 19 30 40	
+2.0 +1.9	-0.4 +1.0 +1.1 +1.4	+1.1 +2.1 +2.3 +2.6	
	39 28 24 22 4	2 20 30 39	
+3.4	+2.5 +0.5 +1.4 +1.6 +1.8	+1.8 +1.3 +1.0 +0.6	
	39 28 27 24 4 3	2 18 28 36	
+0.9	-0.2 -1.2 +0.2	+0.1 -1.0 -0.4 +0.8 -0.1 +1.3 +1.6 +2.0	
	34 22 20 16	2 6 15 19 27 29 36	
-0.2	-1.1 -2.2 -0.2	-0.1 -1.8 +0.5 +1.8	
	33 17 16 11	8 12 13 34	
L.O.	-0.5 -0.9 -1.3	+1.1 +1.4 -0.4 +1.0	
	32 7 6	2 21 24 36	
-0.5	+2.1 +2.6 +2.8 +1.1 +3.0 +3.2		
	30	6 26 27 30 32 41	
-1.1	+0.7 -0.6	+1.4 +1.1 -0.7 +0.9 +3.0 L.O.	
	30 3 2	5 27 31 32 41	

Sta.	+S	HI	-S	Elev	BM
120	5	1320.54	5.1	15.4	
121			6.8	13.7	
122			5.9	14.6	
Rot. +1.3			3.9	16.6	
+47				16.8	
+63			3.5	17.0	
+67			6.6	13.9	
+86			7.6	12.9	
123			6.5	14.0	
+10			6.1	14.4	
+13			4.1	16.4	
+75			11.0	9.5	
124712	6.85	1315.86	11.53	1909.01	± Stake

L	R
	+0.1 -17 +0.1 -0.1 23 27 29 37
-1.1 -0.4 -0.1 -2.0 35 24 7 5	
50.3 -6.2 -2.1 -0.2 597 16 14 10	+0.1 -17 -0.7 -0.3 10 14 16 33
L.O. -0.9 -15.17 +1.4 0.0 -0.2 +0.3 -2.0 +0.2 57 37 30 27 26 11 9 6 4	+0.1 +0.4 L.O. 18 31
L.O. -0.5 -2.9 -2.7 -1.4 -1.1 -1.4 -0.8 -2.3 -1.1 47 44 41 35 34 18 16 12 9	-0.4 -0.7 L.O. 21 39
0.7 -0.5 -3.7 -3.5 -0.6 -1.3 -1.1 -1.1 -3.4 -2.5 -0.1 57 55 51 47 37 35 19 17 11 5 3	-0.7 -0.5 C.S. 31 40
+0.4 -3.8 -2.7 -0.9 -1.4 -1.7 -1.1 -2.8 -2.1 58 54 47 34 38 22 20 14 8	-0.8 -1.3 C.S. 26 42
-0.2 +0.4 +2.1 +1.7 +1.4 +1.9 +0.2 +0.6 +2.8 +1.7 55 45 40 37 22 19 14 8 11 38	
+0.4 +1.5 +3.1 +2.4 +1.8 +2.3 +0.2 +1.1 83 51 49 41 23 21 12 6	-0.5 +2.7 +1.8 18 26 40
L.O. -1.1 +1.7 +0.9 +0.8 -1.0 -1.1 +0.7 53 45 43 24 16 9 5	-0.3 +1.9 -0.1 -1.1 11 15 32 41
-3.7 -1.9 -2.3 -1.7 -3.9 -4.2 57 47 27 24 18 9	-3.1 -4.0 24 34
+3.5 +3.4 +3.9 +1.8 40 29 28 19	-0.1 -0.2 L.O. 24 34
+3.8 +3.1 +3.5 +1.8 36 29 27 21	+0.4 +0.5 L.O. 26 36

Sta.	+S	H.I.	S	Elev	B.M.
		1315.86			
125			6.7	9.2	
126			6.6	9.3	
127			6.2	9.7	
128			4.6	11.3	
129			5.1	10.8	
130			4.9	11.0	
131			5.2	10.7	
M.P. 132	8.63	1319.82	4.67	1311.19	± Stake
	+29		7.9	11.9	
	+55			9.7	
133			10.8	9.1	
134			10.4	9.4	
135			10.4	9.0	
B.C. +52.0			10.2	9.6	

11-10-31

68

		L		R	
		+2.0 30	+2.0 21	+0.6 17	+0.1 29
				+0.8 33	L.O.
		+0.1 37	+2.1 32	+1.7 31	+1.7 15
				+0.3 12	+0.2 24
				+0.9 38	
		-0.8 31	+1.6 25	+1.1 8	-0.2 4
				+0.3 26	+0.2 42
					L.O.
		-2.0 34	-2.5 23	-0.2 16	-1.7 4
				-2.1 26	-2.1 38
		L.O.	-1.7 32	-1.7 16	+0.3 10
				-0.1 8	-1.7 13
				-1.1 33	L.O.
		L.O.	-1.9 29	-2.4 8	+0.6 3
				-0.1 13	-2.0 20
				-1.5 35	L.O.
		L.O.	-1.9 29	-0.8 2	+1.0 2
				+0.9 20	-0.9 25
					-1.5 41
		L.O.	-2.3 29	-1.8 14	-0.2 9
				+0.5 10	-2.5 15
				-2.0 31	L.O.
		L.O.	-2.6 30	-2.3 29	-0.9 22
				-2.0 8	-1.8 36
				+1.1 40	+2.0 18
				+0.6 11	-0.5 18
					L.O.
				+1.0 35	+0.2 21
				+0.1 21	+0.1 34
		L.O.	-0.1 38	0.0 22	-0.1 24
				-0.3 37	L.O.
		L.O.	0.0 34	+0.1 21	0.0 20
				+0.1 35	L.O.

Sta	+S	HJ	-S	Elev	B.M.
		131982			
136			101	9.7	
+50			7.7	12.1	
137			5.6	14.2	
+50			4.8	15.0	
138			6.5	13.3	
B.M.#5	78M-7L US War Dept	RR Sph in 12" dia. 95' L-Std 158	4.99		1314.83
+50			8.2	11.6	
139			6.2	13.6	
+50			6.0	13.8	
140			7.0	12.8	
EC+33.7			5.8	14.0	
141			6.1	13.7	
+57			6.6	13.2	

L		R	
+0.1	20	+0.5	-0.1
51	19	21	36
+0.1	20	+0.2	+0.1-0.1
37	30	18	17 30 38
-0.8	-0.3-0.2	-0.8	0.0+0.3
40	32 20	21	34 40
+0.1	20	+0.1	-0.1-0.2
59	25	20	33 44
+0.1+0.1		-0.5	-1.0-1.6
83	16	16	23 34
+1.6	+1.1-1.3	+0.1	+0.4+0.6
39	27 21 20	20	20 35
10.1-0.5-2.3	-0.3	+0.2	-1.8 0.0
36 85	28	18	4 2 28 40
-0.7	-0.5	-2.0-0.5	
35	21	18 17	
-0.1	-1.5	+0.2	+0.3
11	14 18	30	37
+0.4	+0.5	+0.9	-0.7
84	22 8	2	
+0.9+2.3	+0.6+2.8	+3.6	
2	30 34 56	23	
-1.8	-1.2	+0.1	0.6
37	21	6	7 12 23 27 56 55
-1.6	-1.0	+0.5	+1.1-1.3
34	26	24	29 30 52 55 58
-0.5	-0.6	+0.2	+3.1+1.9
36	23	13	27 29 33 46

Sta	+S	H I	-S	Elev	B.M.
		1319.82			
142			3.0	16.8	
+25			1.5	18.3	
+80			2.5	17.3	
T.P. 143	8.46	1327.51	0.77	19.05	☐ Stake
+41			6.1	21.4	
144			7.8	19.7	
145			5.1	22.4	
Post. +22.8			4.2	23.3	
146			5.2	22.3	
+45			3.2	24.2	
147			5.3	22.2	
148			9.9	17.6	

71-10-31

70

$\frac{-4.8}{35} - \frac{-3.1}{28}$	$\frac{+2.8}{27} + \frac{+1.6}{26} + \frac{+3.4}{32} + \frac{3.4}{38}$
$\frac{-0.4}{37} - \frac{-3.5}{23}$	$\frac{+2.8}{29} + \frac{+0.5}{26} + \frac{+2.6}{36} + \frac{+8.7}{37}$
$\frac{-3.0}{22} - \frac{-2.4}{30}$	$\frac{+3.7}{21} + \frac{+2.5}{22} + \frac{+0.7}{26} + \frac{+3.7}{37}$
$\frac{-0.3}{41} - \frac{-3.4}{33}$	$\frac{+2.5}{18} + \frac{+1.3}{20} + \frac{+2.5}{23} + \frac{+2.3}{35}$
$\frac{-6.4}{48} - \frac{-3.1}{28}$	$\frac{-0.4}{18} - \frac{-2.4}{20} - \frac{-1.0}{24} - \frac{-0.7}{40}$
$\frac{+2.4}{42} + \frac{+0.1}{24}$	$\frac{-0.2}{12} - \frac{-1.0}{14} + \frac{+0.5}{20} + \frac{+0.2}{37}$
$\frac{-1.5}{40} - \frac{-1.7}{36}$	$\frac{+0.6}{5} - \frac{-1.4}{7} + \frac{+0.4}{12} + \frac{+0.5}{33} + \frac{+1.1}{37}$
$\frac{-1.8}{42} - \frac{-0.7}{27}$	$\frac{+0.2}{3} - \frac{-1.7}{5} + \frac{+0.3}{7} + \frac{+0.5}{10} + \frac{+0.2}{38} - \frac{-1.0}{40} - \frac{-1.1}{42} - \frac{1.9}{49}$
$\frac{+0.7}{40} + \frac{+1.1}{31} + \frac{+1.4}{3}$	$\frac{+1.4}{12} + \frac{+2.0}{8} + \frac{+1.7}{31} - \frac{-0.9}{36} - \frac{-1.0}{43} + \frac{+2.8}{51} + \frac{1.0}{40}$
$\frac{-2.1}{40} - \frac{-1.7}{29} - \frac{-0.4}{8} - \frac{-2.0}{6} - \frac{-0.5}{3}$	$\frac{-0.6}{28} - \frac{-3.2}{33} - \frac{-3.3}{13} + \frac{+0.1}{56}$
$\frac{+1.3}{36} + \frac{+1.1}{24} + \frac{+1.5}{13} - \frac{-1.0}{9} + \frac{+0.2}{7}$	$\frac{-0.4}{22} - \frac{-2.5}{27} - \frac{-2.7}{43} - \frac{-0.8}{46}$
$\frac{+2.2}{37} + \frac{+1.7}{19} - \frac{-0.2}{16} + \frac{+0.2}{11}$	$\frac{-0.2}{13} - \frac{+1.1}{16} - \frac{-2.8}{34}$

Sta	+s	HI	-s	Elev	B.M.
		1327.51			
149			11.6	15.9	
150			9.5	18.0	
+60			6.6	20.9	
T.P	8.06	1326.04	9.53	1319.98	± Stake Sta. 150
151			6.6	19.4	
152			6.6	19.4	
P.O. 153			4.7	21.3	
+90			7.4	18.6	U
154			5.9	20.1	
155			8.5	17.5	
B.M. #6		Spike Head in 34" White Pine 192.154+80	7.03	1319.01	
156			4.0	22.0	
157			2.6	23.4	
T.P 158	1.74	1323.60	4.18	1321.86	± Stake

11-10-31

71

L	R
$\frac{+0.3}{33}$	$\frac{-0.9}{24}$
$\frac{-2.8}{21}$	$\frac{+0.1}{15}$
$\frac{+0.2}{4}$	$\frac{-1.9}{7}$
$\frac{-0.6}{8}$	$\frac{-2.8}{13}$
$\frac{-2.8}{27}$	$\frac{-2.3}{27}$
$\frac{+2.1}{42}$	$\frac{+2.9}{17}$
$\frac{+2.2}{34}$	$\frac{+2.2}{31}$
$\frac{+0.5}{37}$	
$\frac{+1.6}{29}$	
$\frac{+0.9}{2}$	
L.O.	
$\frac{-0.4}{34}$	$\frac{-1.1}{38}$
$\frac{-2.9}{32}$	
$\frac{-0.6}{28}$	
$\frac{-0.7}{8}$	
$\frac{-2.5}{7}$	
$\frac{+0.6}{50}$	$\frac{-0.5}{18}$
$\frac{0.0}{32}$	$\frac{1.3}{37}$
$\frac{-1.4}{35}$	
$\frac{+0.1}{31}$	
$\frac{+0.1}{10}$	
$\frac{-1.7}{6}$	
$\frac{-0.1}{3}$	
$\frac{-0.1}{42}$	$\frac{-0.5}{21}$
$\frac{-0.1}{27}$	$\frac{-0.6}{34}$
$\frac{-1.1}{16}$	
$\frac{+0.2}{13}$	
$\frac{+0.6}{46}$	$\frac{-1.1}{20}$
$\frac{+0.7}{28}$	$\frac{-2.2}{33}$
$\frac{-1.5}{24}$	
$\frac{+0.1}{21}$	
$\frac{+3.1}{40}$	$\frac{-1.7}{19}$
$\frac{+2.9}{31}$	$\frac{-2.3}{33}$
$\frac{+0.2}{27}$	
$\frac{+2.4}{25}$	
L.O.	
$\frac{+1.7}{32}$	$\frac{-1.9}{18}$
$\frac{-0.6}{22}$	$\frac{-3.3}{27}$
$\frac{+1.9}{26}$	$\frac{-4.3}{34}$
$\frac{+1.5}{28}$	
$\frac{+2.6}{35}$	$\frac{-1.0}{23}$
$\frac{+2.2}{22}$	$\frac{-1.1}{35}$
$\frac{+0.2}{16}$	
$\frac{+0.2}{15}$	
$\frac{+0.8}{35}$	$\frac{-0.4}{20}$
$\frac{+0.8}{19}$	$\frac{-2.1}{23}$
$\frac{-1.4}{11}$	$\frac{-0.5}{26}$
$\frac{+0.2}{4}$	$\frac{-0.6}{35}$
$\frac{-0.2}{34}$	$\frac{-0.5}{23}$
$\frac{-0.6}{18}$	$\frac{-2.1}{25}$
$\frac{-0.5}{23}$	$\frac{-0.1}{28}$
$\frac{-2.1}{25}$	$\frac{-0.1}{38}$
$\frac{-0.1}{28}$	
$\frac{-0.1}{38}$	
$\frac{+0.5}{37}$	$\frac{-0.5}{22}$
$\frac{+0.1}{19}$	$\frac{+0.5}{34}$

Std	+S	H.I.	-S	Elev	B.M.
		1323.60			
P.O.T. 158 + 22.9			1.3	22.3	
159			3.1	20.5	
160			3.2	18.4	
161			6.9	16.7	
162			4.9	18.7	
163			4.7	18.9	
TP	1.39	1319.95	5.04	1318.56	Spikes in W.P. no.
164			3.4	16.6	
165			3.2	16.8	
P.O.T. 166			5.4	14.6	
167			7.4	12.6	
B.C. + 12.2			7.8	12.2	
+ 50			9.9	10.1	

11-10-31

73

L	R
$\frac{-0.4}{35}$	$\frac{+0.7}{27}$
$\frac{-0.9}{24}$	$\frac{-0.2}{39}$
$\frac{-0.2}{33}$	$\frac{-0.5}{22}$
$\frac{-0.4}{21}$	$\frac{-0.5}{32}$
$\frac{+0.6}{33}$	$\frac{+0.5}{20}$
$\frac{-0.2}{20}$	$\frac{0.0}{33}$
$\frac{-0.3}{33}$	$\frac{0.0}{22}$
$\frac{+0.3}{19}$	$\frac{-0.3}{35}$
$\frac{+1.1}{37}$	$\frac{+1.0}{27}$
$\frac{0.2}{7}$	$\frac{-1.6}{10}$
$\frac{-0.3}{13}$	$\frac{+0.2}{22}$
$\frac{0.0}{15}$	$\frac{-1.4}{17}$
$\frac{+0.1}{21}$	$\frac{+0.2}{34}$
$\frac{+0.2}{33}$	$\frac{+0.3}{13}$
$\frac{+1.2}{41}$	$\frac{+1.9}{32}$
$\frac{+0.4}{29}$	$\frac{+1.8}{26}$
$\frac{+1.1}{2}$	$\frac{+1.1}{2}$
$\frac{0.0}{23}$	$\frac{+0.5}{35}$
$\frac{+0.2}{33}$	$\frac{-0.1}{11}$
$\frac{-1.3}{8}$	$\frac{+0.3}{6}$
$\frac{0.0}{21}$	$\frac{-0.3}{34}$
$\frac{+0.2}{35}$	$\frac{+0.1}{18}$
$\frac{-1.2}{10}$	$\frac{+0.1}{9}$
$\frac{-0.1}{20}$	$\frac{-0.1}{34}$
$\frac{-0.1}{36}$	$\frac{-0.1}{16}$
$\frac{-1.1}{12}$	$\frac{-0.2}{10}$
$\frac{+0.3}{19}$	$\frac{+0.4}{37}$
$\frac{+2.1}{37}$	$\frac{+1.9}{16}$
$\frac{+0.4}{12}$	$\frac{+0.6}{11}$
$\frac{-0.2}{29}$	$\frac{-0.2}{35}$

Sta	+S	H.I.	-S	Elev.
		1319.95		
168			10.7	09.3
+50			10.7	09.3
169			9.8	10.7
+50			8.7	11.3
170			9.6	10.4
+50			11.4	08.6
T.P 171	5.82	1314.87	10.70	1309.05
+50			5.2	9.7
172			5.3	9.6
+50			5.3	9.6
173			5.0	9.9
+50			4.3	10.6

L		R	
$\frac{+17}{35}$	$\frac{+19}{15}$	$\frac{+9}{7}$	$\frac{+11}{8}$
$\frac{-1.0}{23}$	$\frac{-1.2}{35}$		
$\frac{+17}{42}$	$\frac{+10}{33}$	$\frac{-0.2}{28}$	$\frac{+10}{34}$
$\frac{+16}{10}$	$\frac{-0.5}{5}$	$\frac{-0.6}{23}$	$\frac{-0.5}{36}$
$\frac{+0.2}{37}$	$\frac{0.0}{25}$	$\frac{-1.4}{23}$	$\frac{-0.2}{20}$
$\frac{-0.7}{9}$	$\frac{-1.8}{6}$	$\frac{-0.9}{7}$	$\frac{-0.0}{11}$
$\frac{-1.9}{35}$			
L.O.	$\frac{-1.2}{28}$	$\frac{-2.2}{25}$	$\frac{-1.5}{19}$
	$\frac{-0.2}{9}$	$\frac{-0.5}{11}$	$\frac{-2.1}{14}$
	$\frac{-0.6}{16}$	$\frac{-1.1}{32}$	
$\frac{+0.9}{31}$	$\frac{+0.2}{22}$	$\frac{-1.0}{17}$	$\frac{-1.3}{7}$
$\frac{+0.3}{20}$	$\frac{-1.6}{28}$	$\frac{-0.5}{26}$	$\frac{-0.6}{33}$
$\frac{0.0}{29}$	$\frac{+0.2}{19}$	$\frac{+1.1}{31}$	$\frac{+1.3}{24}$
		$\frac{-0.2}{27}$	$\frac{-0.3}{33}$
$\frac{-1.2}{33}$	$\frac{-1.4}{17}$	$\frac{-2.1}{9}$	$\frac{+0.3}{18}$
		$\frac{-1.7}{22}$	$\frac{-1.2}{32}$
L.O.	$\frac{-2.3}{26}$	$\frac{-2.4}{10}$	$\frac{-0.4}{7}$
	$\frac{+0.1}{13}$	$\frac{-2.6}{17}$	$\frac{-2.2}{29}$
L.O.	$\frac{-1.7}{30}$	$\frac{-2.6}{12}$	$\frac{-0.4}{8}$
	$\frac{-0.3}{9}$	$\frac{-2.3}{14}$	$\frac{-1.4}{23}$
		$\frac{-1.2}{23}$	$\frac{-1.2}{36}$
L.O.	$\frac{-1.3}{28}$	$\frac{-1.6}{15}$	$\frac{-0.1}{11}$
	$\frac{-0.2}{7}$	$\frac{+1.2}{13}$	$\frac{-1.1}{11}$
		$\frac{-1.1}{11}$	$\frac{-1.1}{29}$
L.O.	$\frac{-2.0}{31}$	$\frac{-1.3}{16}$	$\frac{-2.1}{15}$
	$\frac{-0.5}{12}$	$\frac{-0.5}{7}$	$\frac{-0.1}{9}$
	$\frac{-1.5}{9}$	$\frac{-0.9}{11}$	$\frac{+0.4}{30}$
$\frac{-1.5}{33}$	$\frac{-1.0}{19}$	$\frac{-1.5}{17}$	$\frac{-0.4}{12}$
	$\frac{-0.1}{7}$	$\frac{-1.4}{11}$	$\frac{-1.0}{12}$
		$\frac{-1.2}{12}$	$\frac{-1.2}{29}$

End of curve

✓
✓
✓

Sta	HS	HI	-S	Elev
		1314.87		
174			4.1	10.8
+50			4.7	10.2
175			4.9	10.0
+50			4.9	10.0
+76.8			4.9	10.0
176			4.9	10.0
177			5.1	9.8
179 175			4.9	10.0
T.P. 180	7.70	1317.87	4.70	1310.17
+180			5.9	12.0
+181			5.1	12.8
Abandoned see Note BK 172				
183			4.4	13.5
BM#7			6.12	CK. 03 1311.75

176
 177 (-100)
 178 } 177

11-11-31

74

	L	R									
L.O.	$\frac{-0.6}{29}$	$\frac{-2.5}{26}$	$\frac{-1.8}{18}$	$\frac{-0.1}{13}$	$\frac{-0.9}{8}$	$\frac{-1.1}{10}$	$\frac{-1.1}{13}$	$\frac{+0.5}{15}$	$\frac{+0.1}{32}$	✓	
L.O.	$\frac{-0.9}{29}$	$\frac{-2.0}{27}$	$\frac{-1.7}{18}$	$\frac{-0.4}{12}$	$\frac{-0.4}{9}$	$\frac{-1.4}{12}$	$\frac{-0.5}{13}$	$\frac{-0.4}{32}$		✓	
	$\frac{-1.0}{33}$	$\frac{-1.2}{15}$	$\frac{-0.8}{11}$	$\frac{0.0}{8}$	$\frac{-1.3}{12}$	$\frac{-1.4}{30}$	L.O.			✓	
L.O.	$\frac{-2.0}{31}$	$\frac{-2.1}{13}$	$\frac{-0.4}{10}$	$\frac{-0.2}{8}$	$\frac{-2.7}{13}$	$\frac{-1.7}{16}$	$\frac{-1.5}{31}$			✓	
L.O.	$\frac{-2.5}{30}$	$\frac{-1.8}{15}$	$\frac{-0.1}{10}$	$\frac{+0.1}{7}$	$\frac{-2.5}{13}$	$\frac{-1.9}{15}$	$\frac{-1.7}{34}$			✓	
	$\frac{-1.9}{34}$	$\frac{-2.9}{15}$	$\frac{-0.9}{10}$	$\frac{-0.1}{9}$	$\frac{-2.4}{12}$	$\frac{-2.2}{15}$	$\frac{-1.9}{34}$			✓	
L.O.	$\frac{-1.8}{30}$	$\frac{-2.5}{14}$	$\frac{-0.4}{8}$	$\frac{-0.1}{8}$	$\frac{-2.3}{14}$	$\frac{-1.0}{16}$	$\frac{-1.5}{31}$	L.O.		✓	
L.O.	$\frac{-2.1}{31}$	$\frac{-1.4}{16}$	$\frac{0.9}{10}$	$\frac{+0.1}{10}$	$\frac{-0.7}{13}$	$\frac{-0.6}{31}$	L.O.			✓	
L.O.	$\frac{-0.8}{29}$	$\frac{-0.2}{19}$	$\frac{-1.1}{10}$	$\frac{0.0}{6}$	$\frac{-0.5}{12}$	$\frac{-1.6}{14}$	$\frac{-0.5}{19}$	$\frac{-2.1}{24}$	$\frac{-3.1}{33}$	✓	
	$\frac{+1.9}{13}$	$\frac{+2.0}{34}$	$\frac{-1.1}{28}$	$\frac{-1.6}{12}$	$\frac{-0.1}{7}$	$\frac{+0.1}{15}$	$\frac{-1.1}{20}$	$\frac{-1.2}{24}$	$\frac{+0.2}{26}$	$\frac{-0.4}{34}$	✓
Pg 35 — Abandoned											
	$\frac{+1.2}{32}$	$\frac{+0.9}{24}$	$\frac{-2.2}{21}$	$\frac{-1.4}{15}$	$\frac{-0.1}{10}$	$\frac{-0.3}{12}$	$\frac{-0.4}{13}$	$\frac{+0.1}{16}$	$\frac{-1.0}{33}$	✓	

Abandoned.

Sta	+S	HI	-S	Elev
		1317.87		
184			5.8	12.1
185	S		5.8	12.1
B.C. +51.5			5.2	12.7
186			5.1	12.8
+50			6.4	11.5
187			6.8	11.1
T.P. +50	11.75	1323.18	6.44	1311.43
188			11.9	11.3
+50			11.1	12.1
189			9.6	13.6
+50			7.1	16.1
190			6.4	16.8

8-11-31

75

		L				R				
		$\frac{+0.9}{37}$	$\frac{+0.1}{23}$	$\frac{+0.1}{13}$	$\frac{-1.4}{12}$	$\frac{+0.1}{9}$	$\frac{-0.4}{10}$	$\frac{-1.3}{13}$	$\frac{-0.8}{14}$	$\frac{-1.5}{30}$
		L.O.	$\frac{-1.2}{27}$	$\frac{-0.9}{17}$	$\frac{-1.2}{13}$	$\frac{-0.4}{10}$	$\frac{-0.6}{9}$	$\frac{-1.1}{12}$	$\frac{-0.1}{19}$	$\frac{-0.2}{33}$
		$\frac{0.0}{29}$	$\frac{+0.7}{16}$	$\frac{-1.1}{15}$	$\frac{-0.1}{12}$	$\frac{-0.7}{9}$	$\frac{-1.5}{12}$	$\frac{+2.6}{19}$	$\frac{+0.5}{33}$	
		$\frac{+0.7}{35}$	$\frac{+0.6}{20}$	$\frac{-0.5}{16}$	$\frac{0.0}{14}$	$\frac{-0.8}{8}$	$\frac{-0.5}{10}$	$\frac{-0.1}{11}$	$\frac{-1.0}{37}$	
		$\frac{-1.8}{34}$	$\frac{-1.5}{25}$	$\frac{-2.2}{23}$	$\frac{+0.2}{19}$	$\frac{+0.4}{3}$	$\frac{-1.5}{7}$	$\frac{-2.4}{29}$	L.O.	
		$\frac{-2.2}{34}$	$\frac{-2.1}{25}$	$\frac{0.0}{21}$	$\frac{-0.3}{5}$	$\frac{-1.2}{5}$	$\frac{-2.1}{25}$	L.O.		
		$\frac{-1.1}{36}$	$\frac{-0.4}{26}$	$\frac{+0.4}{24}$	$\frac{+0.4}{3}$	$\frac{-0.4}{10}$	$\frac{-0.3}{33}$			
		$\frac{+0.5}{35}$	$\frac{+0.6}{29}$	$\frac{-0.2}{26}$	$\frac{+0.3}{22}$	$\frac{+0.9}{7}$	$\frac{+0.6}{19}$	$\frac{+0.8}{33}$		
		$\frac{+0.8}{38}$	$\frac{+0.9}{24}$	$\frac{-0.1}{23}$	$\frac{+0.4}{17}$	$\frac{+0.1}{7}$	$\frac{-0.4}{7}$	$\frac{+0.9}{17}$	$\frac{+0.6}{34}$	
		$\frac{+0.4}{31}$	$\frac{+0.7}{16}$	$\frac{-1.1}{12}$	$\frac{-0.6}{10}$	$\frac{-0.2}{10}$	$\frac{-0.6}{14}$	$\frac{+0.3}{21}$	$\frac{+0.9}{34}$	
		$\frac{+2.2}{28}$	$\frac{+1.8}{8}$	$\frac{-0.2}{5}$	$\frac{+0.1}{4}$	$\frac{+0.9}{8}$	$\frac{+0.1}{20}$	$\frac{0.0}{23}$	$\frac{+1.4}{25}$	$\frac{+1.1}{41}$

11-10-31

cont. from page 74.

	+ S	H I	- S	ELEV	B.M.
T.P.		1320.61	6.00	1314.61	✓
	1.41	1316.02	4.73	1311.29	✓
	8.03	1319.32			✓
B.M.#5			4.50	1314.82	1314.82 ✓
T.P. to B.M.	6.56	1321.38	1.15	1320.23	✓
	5.28	1325.51	3.99	1321.52	✓
	4.99	1326.51			✓
B.M.#6			7.43	1317.08	1317.08 ✓
	9.29	1328.37	9.77	1318.60	✓
	5.23	1323.83	5.20	1318.63	spike in wa ✓
			11.85	1311.98	✓
	3.45	1315.43	5.21	1310.22	✓
	7.53	1317.75			✓
B.M.#7		<small>Spike in 12" W.P. Sta. 183 65' R</small>	5.97	1311.78	1311.78 ✓
T.P.			5.63	1312.12	✓
	11.08	1323.20	1.87	1321.91	✓
	6.30	1327.61	3.27	1324.32	✓
	1.84	1326.16			✓
B.M.#8		<small>Spike in 12" Pop. 55' L (200+50)</small>	7.43		1318.73 ✓
	7.43	1326.16	1.70	1324.46	✓
	4.03	1328.17	1.72	1326.77	✓
	4.11	1330.88			✓
B.M.#9		<small>R.R. Spike in 8" Birch 40' R Sta. 219+50</small>	4.60	1326.78	1326.28 ✓
T.P.	0.26	1321.67	9.47	1321.41	✓
	7.28	1328.40	0.55	1321.12	✓

76

30
Ry sp. 12" Pop. 75' L 138+00 (Killed Dip. Marked B.M. 4-L) ✓

Sp. head. 36' White Pine 17' L 154+80 ✓

Sp. in 24" White Pine 65' R 182? 183+00 ✓

Sp. in 12" Pop 55' L 19199-60' L 200+50 (Spike head) ✓

Ry sp. in 8" Birch 40' R 219+50 ✓

	+ S	H/I	- S	Elev	B.M.
		1828.40			
T.P.	3.48	1328.40 ✓	3.45	1324.95 ✓	
	8.02	1334.27 ✓	2.18	1326.25 ✓	
TR-B.M.# 10		R.R. SPIKE IN 12" Maple 56' R. (250+100)	2.62	1331.65 ✓	1331.65 ✓
	4.23	1335.88 ✓	5.63	1330.25 ✓	
	7.30	1337.55 ✓	7.66	1329.89 ✓	
	2.73	1332.62 ✓			
B.M.# 11		R.R. SPIKE IN 12" Birch R (268+50)	2.88		1329.71 ✓
T.P.	3.36	1327.23 ✓	8.75	1323.87 ✓	
	4.65	1323.81 ✓	8.07	1319.16 ✓	
TR-B.M.# 12		R.R. SPIKE IN 10" Basswood 33' L (291+50)	4.09	1319.72 ✓	1319.72 ✓
	5.65	1325.37 ✓	1.54	1323.83 ✓	
	7.58	1331.38 ✓	11.61	1319.77 ✓	
	0.24	1320.01 ✓	2.30	1311.71 ✓	
	1.20	1312.91 ✓			
B.M.# 13		R.R. SPIKE IN 8" Pop. 50'L Sta (318+27)	4.58		1308.33 ✓
T.P.	5.67	1312.33 ✓	6.25	1306.66 ✓	
	7.48	1313.67 ✓	6.14	1306.19 ✓	
	12.10	1319.62 ✓	6.15	1307.52 ✓	
B.M.# 14		R.R. SPIKE IN 28" Nor. 60'L Sta (336+56)	5.86		1313.76 ✓
T.P.	3.88	1317.64 ✓	9.15	1308.49 ✓	
	4.35	1312.84 ✓	4.93	1307.91 ✓	
B.M.# 15		R.R. SPIKE IN 26" W.P. 60'L Sta. 355+00	5.59		1306.97 ✓
T.P.	5.32	1309.42 ✓	8.46	1304.10 ✓	
TR-B.M.# 16		R.R. SPIKE IN 24" W.P. 45'L Sta. 365+00 T.B.M. 11-L WAT DEPT.	2.19		1307.23 ✓

11-13-31

20

Ry Sp. in 12" Maple 36' R 250+00 ✓

Ry Sp. in 10" Birch 95' R 268+50 ✓

Ry Sp. in 10" Basswood 33' L 291+50 ✓

Ry Sp. in 8" Pop 50' L 318+27 ✓

Ry Sp. in 28" Nor. 60' L 336+50 ✓

Ry Sp. in 26" White Pine 60' L 355+00 ✓

Ry Sp. in 24" Nor. 45' E 365+00 ✓

Marked T.B.M. 11-L (W. Side Tree)

+S	H.I	-S	Elev.
	1308.06	4.68	1303.39
4.79	1308.18	5.25	1302.93
5.33	1308.26	4.68	1303.58
4.53	1308.11	4.58	1303.53
5.52	1309.05		
B. NH17		4.60	1304.15
Water level 0.00 Govt. Gudge	1.38	1305.83	
		12.06	1293.77

Cor. Elev.
W. of D. W.
1293.76

11-13-31

North West concrete Block - NW corner
+ Mark

402x48 RB
N.W. Cor. Iron railing of Dam.

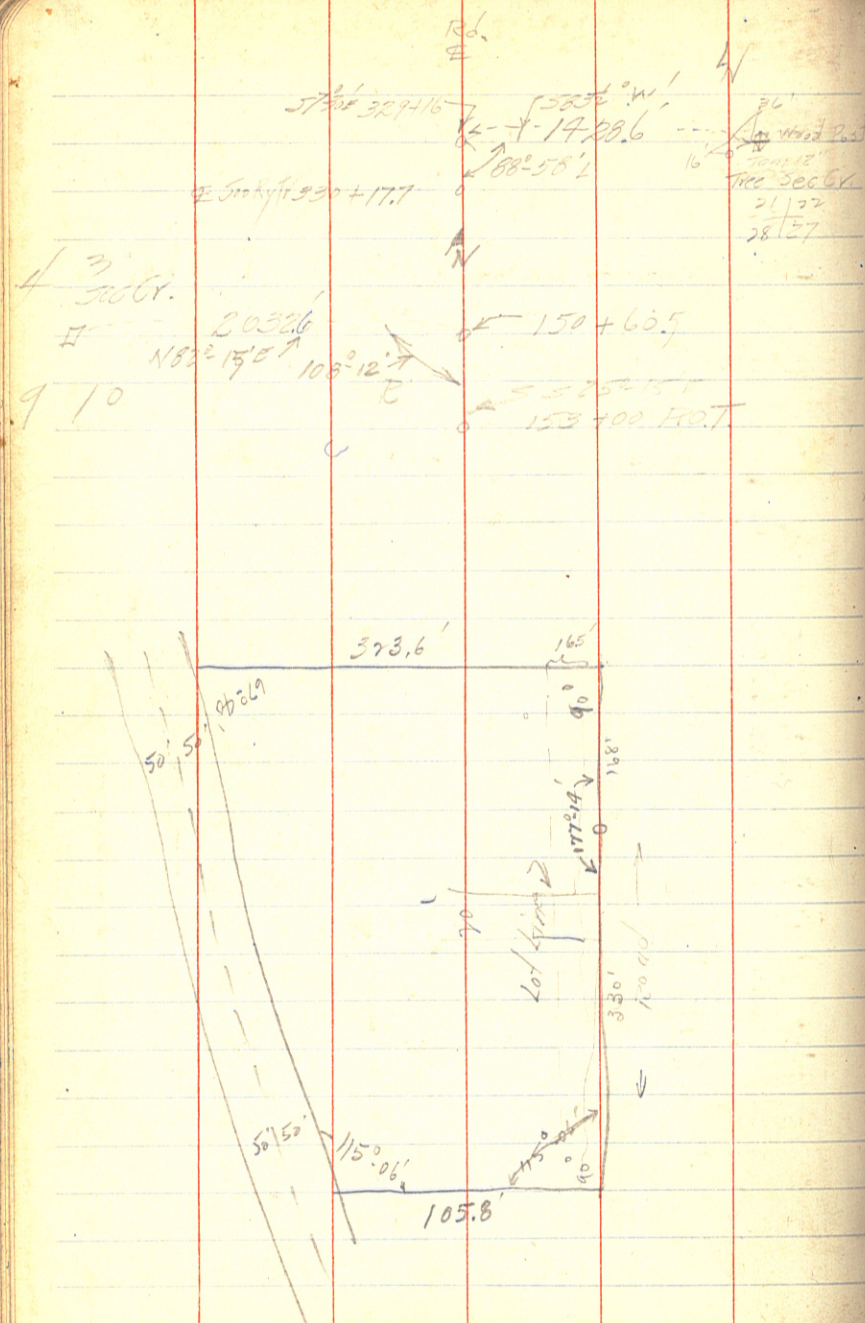
1293.77 - 92 = 1292.85 Water Level Nov. 13, 1931

Sta		Depth	
45	long grass	3.5'	Hard Sand
46	"	3.5'	Hard sand
48	grass swamp	3.1'	Hard blue sand
49	grass swamp	6.0'	Hard sand
54	Tan bog	2.0'	"
54+75 (20'E)	"	3.0'	"
60+75	Together Big	3.0'	Hard Blue Sand
65+50	Together Big	2.0'	"
67+00	live tan swamp	3.5'	solid Black muck
68+00	✓ ✓ ✓	6.6'	✓ Black sand
67+00	✓ ✓ ✓	4.2'	✓ Black muck
70+00	✓ ✓ ✓	3.0'	✓ ✓ ✓
95+00	✓ ✓ ✓	5.5'	✓ Black sand
96+00	live tan swamp	0.4'	Good solid Black Sand
97+00	✓ ✓ ✓	3.0'	✓ ✓ sand
97+80	✓ ✓ ✓	4.0'	✓ ✓ Blue ✓
106 (20'R)	✓ ✓ ✓	2.0'	✓ ✓ white ✓
125	grass swamp	5.5'	✓ ✓ Black
126	✓ ✓ ✓	6.1'	✓ ✓ sand
127 (10'E)	✓ ✓ ✓	7.0'	✓ ✓ ✓
128 15'R	✓ ✓ ✓	6.6'	✓ Black muck
129 20'R	✓ ✓ ✓	6.8'	✓ ✓ ✓
130 20'R	✓ ✓ ✓	6.4'	✓ ✓ ✓
131 20'L	✓ ✓ ✓	3.4'	✓ ✓ Sand
133	✓ ✓ ✓	4.0'	✓ ✓ ✓

10-29-31
Reis

79

134	grass swamp	6.0'	solid Bottom
127	✓ ✓ ✓	5.0'	✓ ✓
135+70	✓ ✓ ✓	3.0'	✓ ✓
171 (20'E)	grass swamp	3.2'	✓ sand Bottom
171 20'R	✓ ✓ ✓	3.0'	✓ Bottom
175+168 EG	open grass	2.0'	✓ ✓
175+76.856	together	2.0'	✓ Black Sand
187+00 10'R	grass bog	2.5'	✓ ✓ ✓



12 57 45
 25° 55' 30"
 192 + 103.3
 2/32 - 3/40
 59° 04'
 29° 32'

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
 ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.
 FOR SINGLE TRACK EMBANKMENT.

	0	1	2	3	4	5	6	7	8	9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

21 1/2
 10 1/2
 10.7

MADE IN GERMANY.
R.