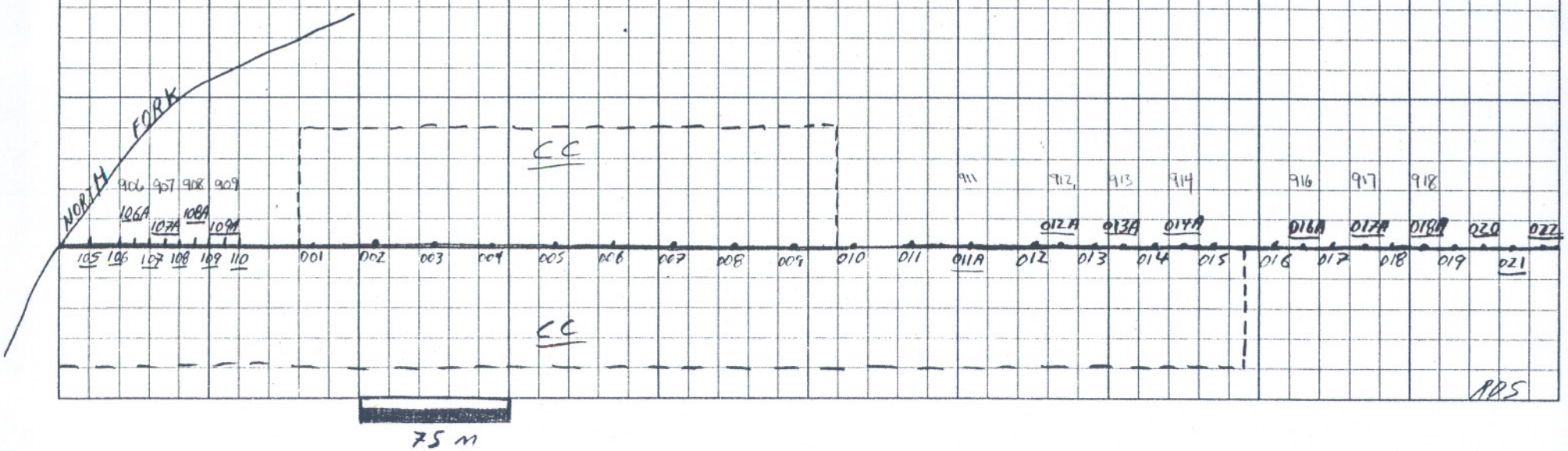
SOUTH FORK HAGENS X-SECTS



75 m

LOCATION: HAGEN SOUTH original 1-19
added 901-949 (1982)

SECTION #	yrs ab record	est. length cm	spacing (cm)		NOTES
1		2580			
2		2680	3120	1Z/2Z	
3		3280	3260	3Z/2Z	2760 3Z/3Za
4		2780	3650	4Z/3Z	4Z/3Za 870
5		2010	2420	4Z/5Z	
6		3150	1555	5Z/6Z	2770 6Z/6Za
7		2810	1210	7Z/7Za	
8		2330	1690	7Z/8Z	
9		3000	2770	9Z/8Z	
10		2810	3080	10Z/9Z	
11		2650	3130	11Z/10Z	
12		1640	5500	12Z/11Z	
13		2560	2680	13Z/12Z	
14		1680	2500	13Z/14Z	
15		2450	2460	14X/15X	
16		3010	2580	15X/16X	
17		1330	3670	16X/17X	
18		1610	2120	18Z/17Z	3360 18Z→18Za
19		1930	450	19Z/18Za	
011 A	1982	3025	3800	11AZ → 11Z	
12 A	82	2755	3010	12AZ → 12Z	
13 A		1670	1295	13AZ → 13Z	
14 A		2480	1970	14Z to 14AZ	
16 A		2710	1000	16Z to 16AZ	
17 A		1930	995	17aZ to 17Z	
18 A		1765	1920	18 AZ to 18Z	
20		2020	1270	20Z/19Z	
21		2325	1490	20Z/21Z	
22		2210	1470	21Z/22Z	

HAGEN SOUTH pg 2

SECTION #	Yrs of record	established length cm	spacing (cm)	
	estblish 1982			
105		2950	540	105Z → 106Z
106		2180		
106A		2395	390	106AZ → 107
107		2735	1570	107Z to 106Z
107A		2530	650	107AZ → 108Z
108		2325	1220	108 → 109Z
108A		2180	540	108AZ → 108Z
109		1980	1670	109Z → 110Z
109A		2200	850	110Z → 109AZ
110		2340	1670	110Z/109Z
TOTAL # HAG S X SECTS →	39			

LOCATION: HAGEN N

cross section #	years as record	length CM	spacing CM	
1		1810	1820 from 1z	
2		1580	1820 from 2z to 1z	
3		1470	168 from 3z to 2z	
4		1430	1923 from 4z to 3z	
5		1990	1637 from 5z to 4z	
6		1650	1585 6z/5z	730 from 6z to 6za
7		1530	1230 7z/6za	
8		1080	1370 8z/7z	940 from 8z to 8za
9		1640	1130 9z/8za	
10		2070	1690 10z/9z	
11		1880	1410 11z/10z	
12		2100	1930 12z/11z	
13		2390	2640 12z/13X	
14		2380	650 14z/13z	
15		1810	1010 14z/15z	
16		1290	2070 15z/16z	
17		1730	2030 16z/17z	
18		1710	1460 17z/18z	
19		2460	1770 19z/18z	
20		1760	1290 19z/20z	

STREAM TRANSECT LOCATION DATA

Project: HAGEN South Transect No.: 001 Date Established: 7/26/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)*
1z+/1z	210	N3W		1z/2z	3120	S42E	+110
1x+/1x	539	N17E		1z/1za	2000	S15E	-203 (HI=117)
1z/1x	2580	S25W		2z/1za	1600	N70W	-313 (HI=118)

Remarks Used ~~etao~~ baseline post for 1z post
1za is turn point, occupied by rangepole

Project: Hagen S Transect No.: 002 Date Established: 7/26/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	From/To	Dist (cm)	Az	ΔElev (cm)
2z+/2z	543	S23W		2z/1z	3120	N42W	-110
2x+/2z	1091	N17E					
2z/2x	2680	—					

Remarks

Project: Hagen S Transect No.: 003 Date Established: 7/26/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
3z+/3z	562	S32E		3z/2z	3260	N57W	-008 (HI=154)
3x+/3x	180	N30E		3z/3za	2760	S50E	-086
3z/3x	3280	S35W					

Remarks

Project: Hagen S Transect No.: 004 Date Established: 7/26/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
4z+/4z	172	N12E		4z/3z	3650	S40E	-99 (HI=133)
4x+/4x	272	N87W		4z/3za	870	N58W	-185
4z/4x	2780	S85W		4z/4za	2160	N80E	+40 (on trail)
				4z/5z	2420	N72W	+88

Remarks 4za turning point w/ rangepole is on trail

3 z+ (T= metal tag or permanent marker)

*ΔElev from bottom of post to bottom of post

STREAM TRANSECT LOCATION DATA

Project: Hagen S Transect No.: 005 Date Established: 7/26/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
5z+/5z	960	S18W		5z/4za	405	N87W	-48 (HI=140)
5x+/5x	514	N15W		5z/5za	1870	S63E	+42
5z/5x	2010	S32W		5z/6z	1555	N78W	-299

Remarks

Project: Hagen S Transect No.: 006 Date Established: 7/26/81 Personnel:

Points From/To	Dist (cm)	Az	ΔElev (cm)	From/To	Dist (cm)	Az	ΔElev (cm)
6z+/6z	273	S76E		6z/6za	2770	S80E	+16 (HI=128)
6x+/6x	456	S27E		(6z/Instr. at 6z = 245 cm at N33E to top instr)			
6z/6x	3150	S28W		~~7a/6z~~			

Remarks

Project: Hagen S Transect No.: 007 Date Established: 7/26/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
7z+/7z	220	S45E		7z/6za	1210	N7W	+48 (HI=131)
7x+/7x	393	N32E		7z/8z	1690	N40W	-105
7z/7x	2810	S57W					

Remarks

Project: Hagen S Transect No.: 008 Date Established: 7/26/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
8z+/8z	526	S20W					
8x+/8x	551	N40E					
8z/8x	2330	S32W					

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen So Transect No.: 009 Date Established: 7/26/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
9z+/9z	845	S2E		9z/8z	2770	S88W	+243 (HI=98)
9x+/9x	570	S55E					
9z/9x	3000	S27W					

Remarks

Project: Hagen S Transect No.: 010 Date Established: 7/26/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	From/To	Dist (cm)	Az	ΔElev (cm)
10z+/10z	373	S8E		10z/9z	3080	N75W	−110 (HI=112)
10x+/10x	497	N75E					
10z/10x	2810	S34W					

Remarks

Project: Hagen S Transect No.: 011 Date Established: 7/26/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
11z+/11z	411	N27W		11z/10z	3130	N54W	−133 (HI=154)
11x+/11x	927	S30W		11z/11xa	3450	S10W	−150
11z/11x	2650	S48W					

Remarks This begins a section of trail building abuse

Project: Hagen S Transect No.: 012 Date Established: 7/26/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
12z+/12z	526	N40W		12z/11xa	2970	N54W	−137 (HI=140)
12x+/12x	418	N27E		12z/11z	5500	N19W	+13
12z/12x	1640	S47W					

Remarks This profile lies 60m from 011 due to trail debris (rather than 30 m)

3 z^t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen S Transect No.: 013 Date Established: 7/26/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
13z+/13z	640	S40E		13z/12z	2680	N76W	-201 (HI = 169)
13x+/13x	334	N33E		13z/14x	3100	S52E	+77
13z/13x	2560	S31W		13z/14z	2500	S82E	+121

Remarks

Project: Hagen S Transect No.: 014 Date Established: 7/27/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	From/To	Dist (cm)	Az	ΔElev (cm)
14z+/14z	1850	N32E					
14x+/14x	138	N33E					
14z/14x	1680	~~N~~ S					

Remarks z tag on x side w/ x tag

Project: Hagen S Transect No.: 015 Date Established: 7/27/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
15z+/15z	2868	N47E		15x/14x	2460	N15W	-162 (HI = 148)
15x+/15x	473	N20E		15x/16x	2580	S42E	+30
15x/15z	2450	N45E					

Remarks z and x survey info on one tag on x side
z monument is rebar on rock face - set up on x side

Project: Hagen S Transect No.: 016 Date Established: 7/27/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
16z+/16z	773	S33W		16z/17x	3670	~~N7W~~ S7E	-167
16x+/16x	1070	N3W		16z/17z			-154
16z/16x	3010	S75W					

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen S Transect No.: 017 Date Established: 7/27/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
17z+/17z	234	N2W					
17x+/17x	1210	S60W					
17z/17x	1330	S47W					

Remarks X and Z monument info on one tag, Z side. X monument is rebar in rock face

Project: Hagen S Transect No.: 018 Date Established: 7/27/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
18z+/18z	526	N22E		18z/17z	2120	N75W	-124 (180 HI?)
18x+/18x	645	N15W		18z/18a	3360	N64W	+34
18z/18x	1610	S12W		~~18~~			

Remarks

Project: Transect No.: Date Established: Personnel:

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
19z+/19z	369	S87W		~~18~~ 19z/18a	450	S30W	-157 (093 HI?)
19x+/19x	2118	S34W		~~19z/10~~			
19z/19X	1930	S30W					

Remarks X and Z monument info on ~~Z side~~ one tag, Z side

Project: Transect No.: Date Established: Personnel:

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen N Transect No.: 001 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
1z/1x	1810	S52E					
1z+/1z	660	S43E					
1x+/1x	250	N57W					

Remarks

Project: Hagen N Transect No.: 002 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
2z/2x	1580	S83E		2z/1z	1820	S5W	-118 (HI=161)
2z+/2z	430	S7E					
2x+/2x	980	S65W					

Remarks

Project: Hagen N Transect No.: 003 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
3z/3x	1470	S55E		3z/2z	1618	S13W	-132 (HI=156)
3z+/3z	756	N55E					
3x+/3x	1382	N15W					

Remarks

Project: Hagen N Transect No.: 004 Date Established: Personnel:

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
4z/4x	1430	S27E		4z/3z	1923	S33W	-27 (HI=134)
4z+/4z	1208	N35W					
4x+/4x	285	~~S7E~~ S15E					
4							

Remarks Z and X reference info on same tag, ~~Z side~~ X side

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen N Transect No.: 005 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
5z/5x	1990	S37E		5z/4z	1637	S60W	-269 (HI = 140)
5z+/5z	841	S10E					
5x+/5x	2540	S22E					

Remarks 5z + 5x ref. info on one tag, z side

Project: Hagen N Transect No.: 006 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
6z/6x	1650	S55E		6z/5z	1585	S54W	~~-0~~ (HI = 154)
6z+/6z	593	S10W		6z/6za	730	S82E	-171
6x+/6x	2030	S20E					
~~6z/5z~~							

Remarks 6x is rebar in rock face
6z + 6x tag info on same tag on z side

Project: Hagen N Transect No.: 007 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
7z/7x	1530	S47E		7z/6za	1230	S20W	-382
7z+/7z	559	S37W					
7x+/7x	1680	S23E					

Remarks

Project: Hagen N Transect No.: 008 Date Established: 7/12/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
8z/8x	1080	S53E		8z/7z	1370	S47W	+240 (HI = 132)
8z+/8z	901	S9W		8z/8za	940	N53E	-96
8x+/8x	255	S20W					

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen N Transect No.: 009 Date Established: 7/13/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
9z/9x	1640	S70E		9z/8za	1130	S40E	-241
9z+/9z	839	S2W					
9x+/9x	334	N10E					

Remarks

Project: Hagen N Transect No.: ~~00~~ 010 Date Established: 7/13/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	From/To	Dist (cm)	Az	ΔElev (cm)
~~11z+/11z~~	~~528~~	~~S12E~~		10z/9z	1690	S34W	~~-190~~ -75
10z+/10z	482	S		10z/11z	1410	N47E	-130
10x+/10x	622	N					
10z/10x	2070	S47E					

Remarks

Project: Hagen N Transect No.: 011 Date Established: 7/13/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
11z+/11z	528	S12E		#			
11x+/11x	2270	S42E					
11z/11x	1880	S37E					

Remarks Reference info for 11x and 11z on one tag, z side

Project: Hagen N Transect No.: 012 Date Established: 7/13/81 Personnel: Hicks Osgood

Points

From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
12z+/12z	1160	S10E		12z/11z	1930	S62W	-175 (HI=163)
12x+/12x	842	N45E		12z/13x	2640	S67E	-9
12z/12x	2100	S17E					

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen N Transect No.: 013 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
13z+/13z	600	N85W					
13x+/13x	815	N					
13z/13x	2390	S					

Remarks

Project: Hagen N Transect No.: 014 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
14z+/14z	914	~~S4E~~ S9E		14z/13z	650	S38W	-192 (HI=150)
14x+/14x	3180	S35E		14z/15z	1010	N55E	-98 (HI=150)
14z/14x	2380	S58E					

Remarks Reference info for 14x and 14z on tag on z side

Project: Hagen N Transect No.: 015 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
15z+/15z	179	N40E					
15x+/15x	620	S45W					
15z/15x	1810	S42E					

Remarks

Project: Hagen N Transect No.: 016 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
16z+/16z	434	S32E		16z/15z	2070	S62W	-85 (HI=155)
16x+/16x	748	N60E		16z/17z	2030	N58E	+73
16z/16x	1290	S34E					

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

STREAM TRANSECT LOCATION DATA

Project: Hagen N Transect No.: 017 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
17z+/17z	657	S27E		17z/18z	1460	N75W	+28
17x+/17x	581	N45W					
17z/17x	1730	S2W					

Remarks

Project: Hagen N Transect No.: 018 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	From/To	Dist (cm)	Az	ΔElev (cm)
18z+/18z	960	S37W					
18x+/18x	152	S80W					
18z/18x	1710	S6E					

Remarks

Project: Hagen N Transect No.: 019 Date Established: 7/14/81 Personnel: Hicks Osgood

Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
19z+/19z	362	N66E		19z/18z	1770	S43W	~~40~~-282 ~~(H1=124)~~
19x+/19x	613	N50W					(H1=124)
19z/19x	2460	S7E		19z/20z	1290	N87E	-343

Remarks

Project: Hagen N Transect No.: 020 Date Established: 7/14/81 Personnel: Hicks Osgood

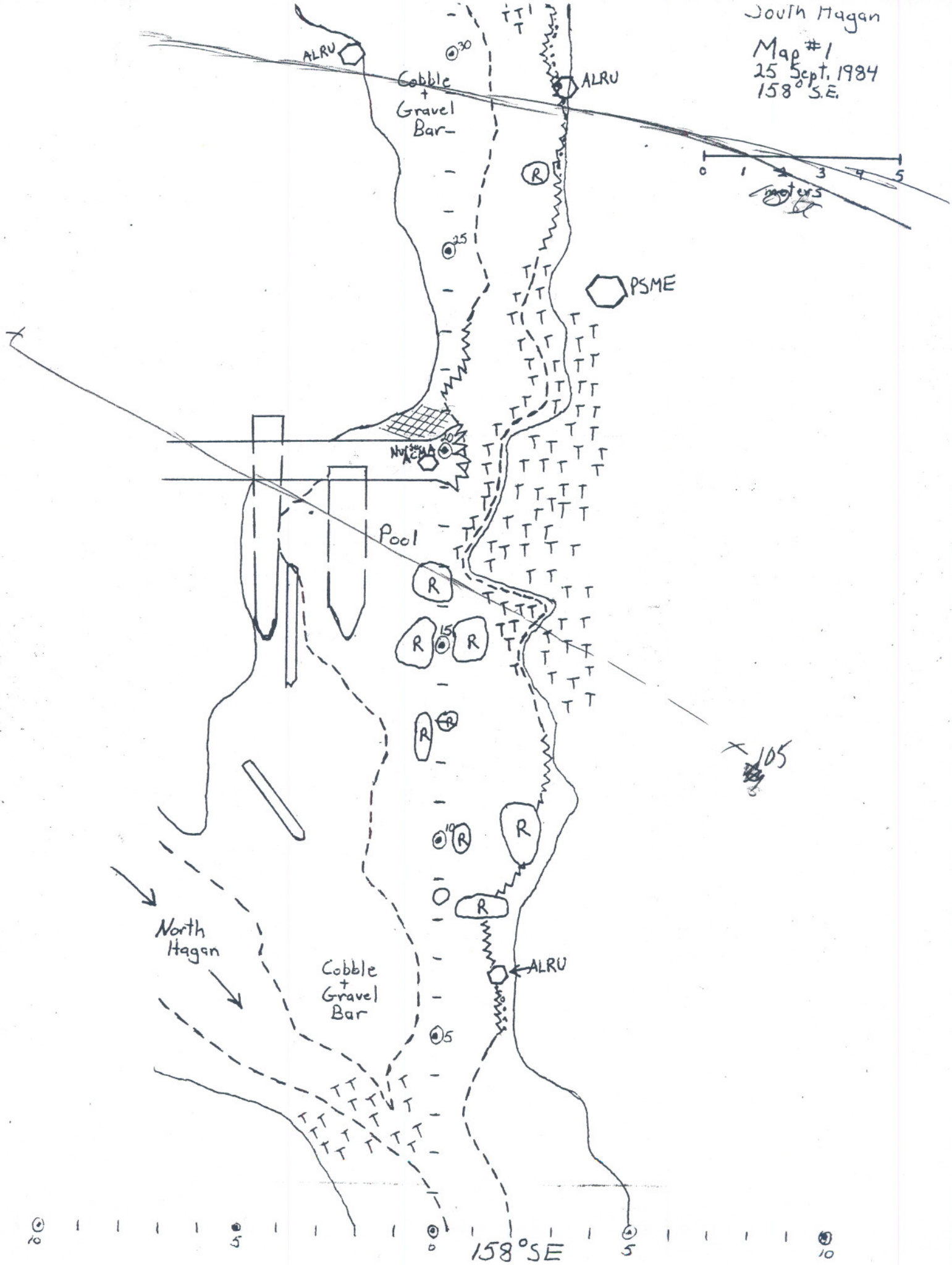
Points From/To	Dist (cm)	Az	ΔElev (cm)	Points From/To	Dist (cm)	Az	ΔElev (cm)
~~19~~ 20z+/20z	1256	S34E					
20x+/20x	363	N35W					
20z/20x	1760	S33E					

Remarks

3 ~~z~~t (T= metal tag or permanent marker)

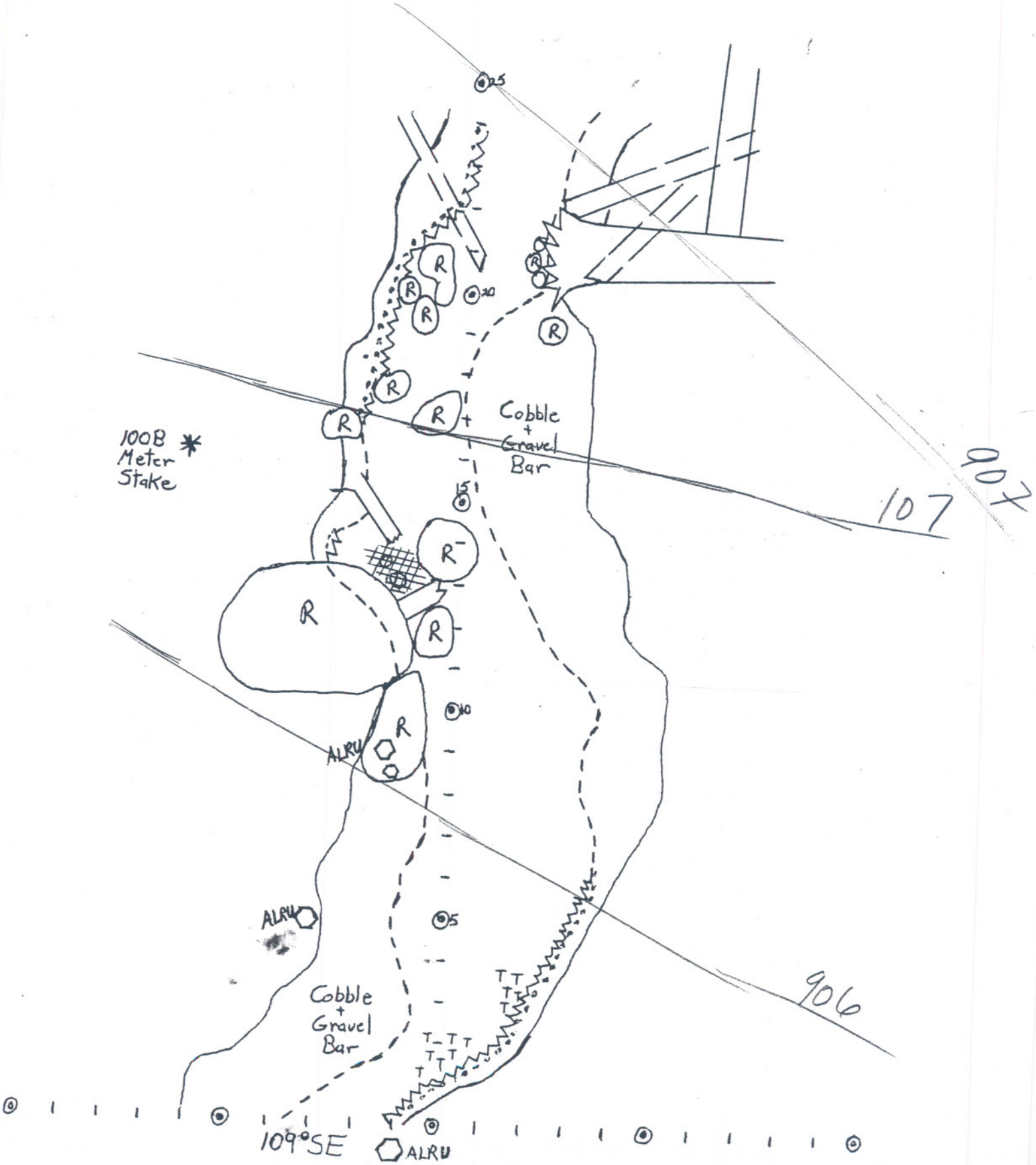
South Hagan

Map #1
25 Sept. 1984
158° S.E.



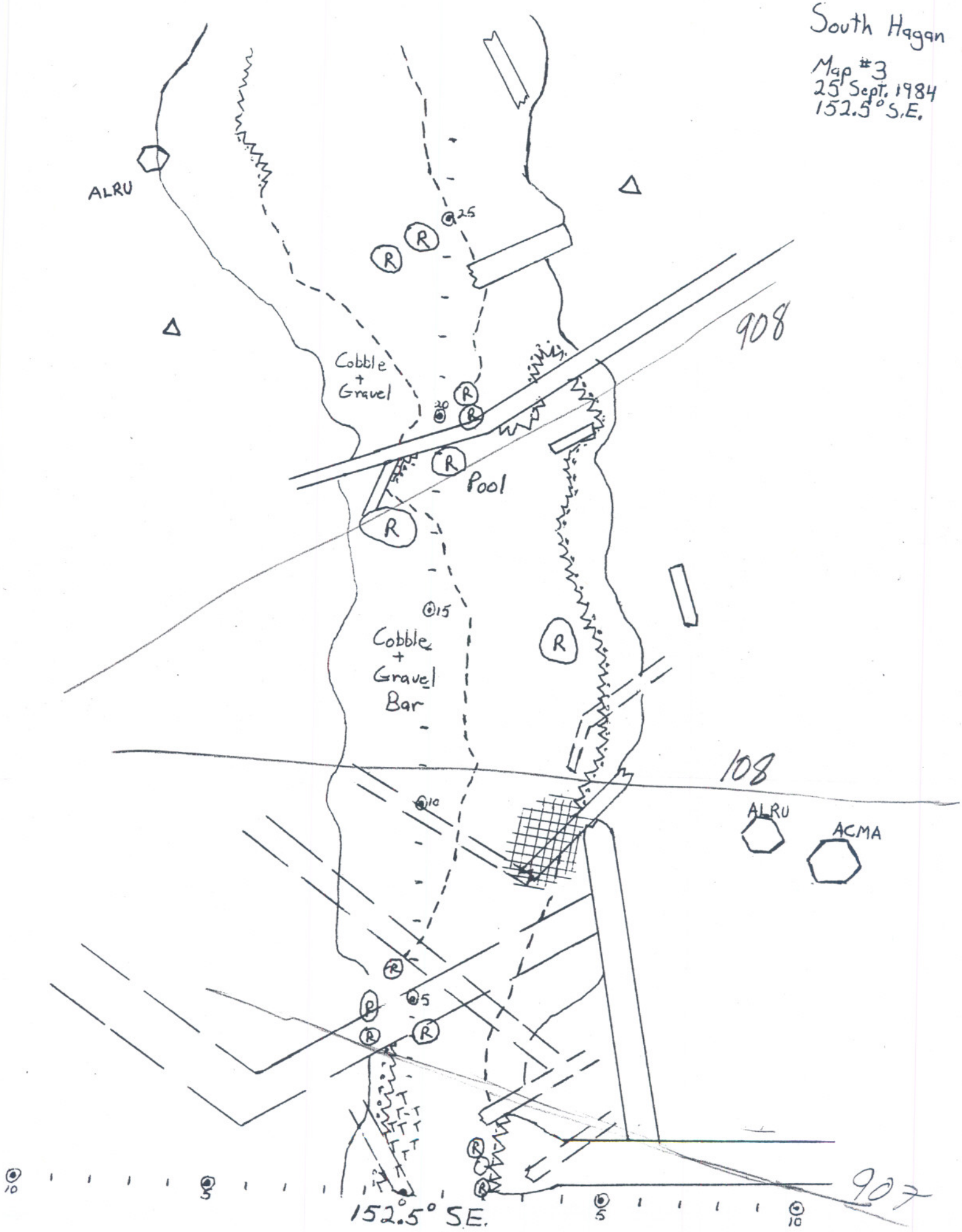
South Hagan

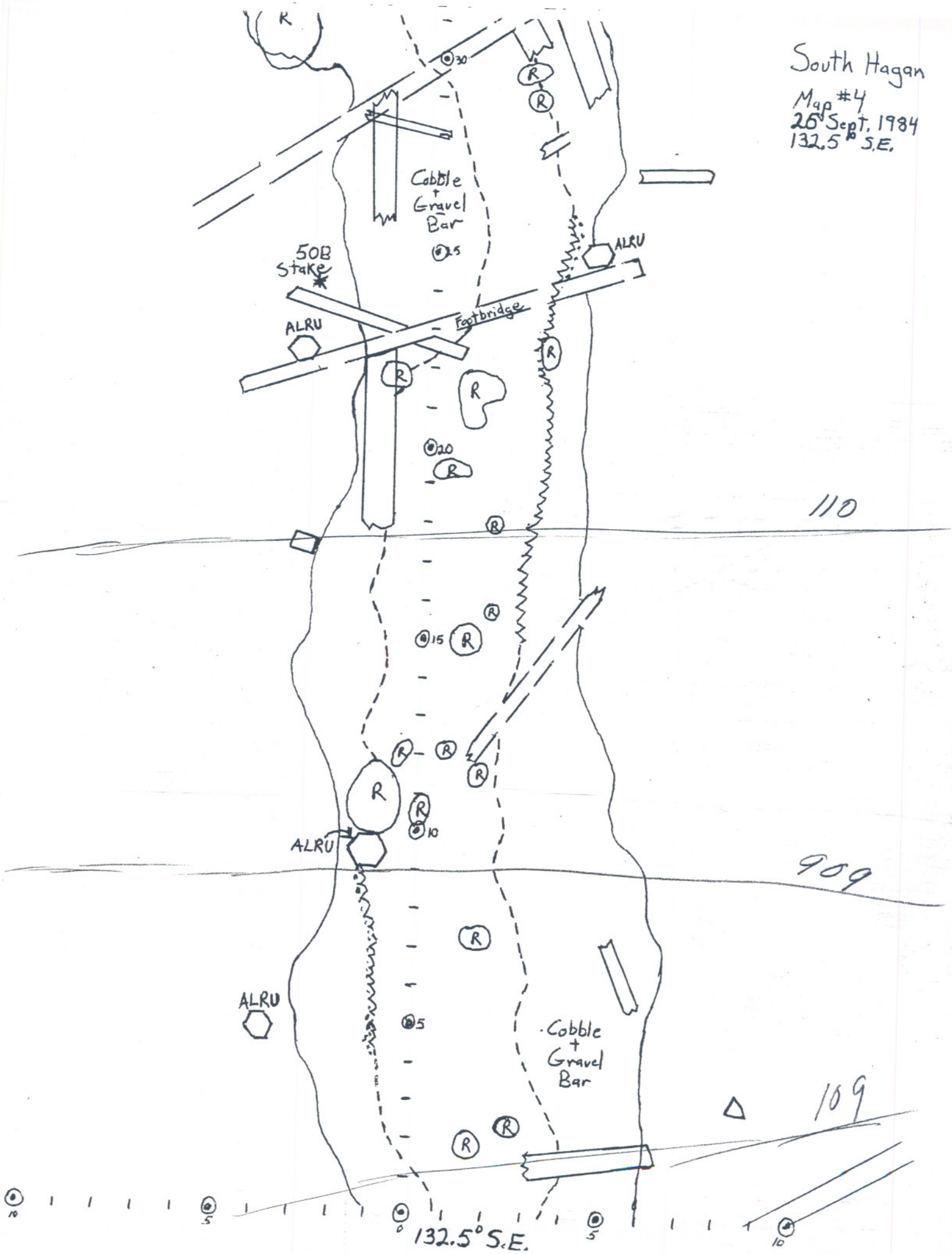
Map #2
25 Sept. 1984
109° S.E.



South Hagan

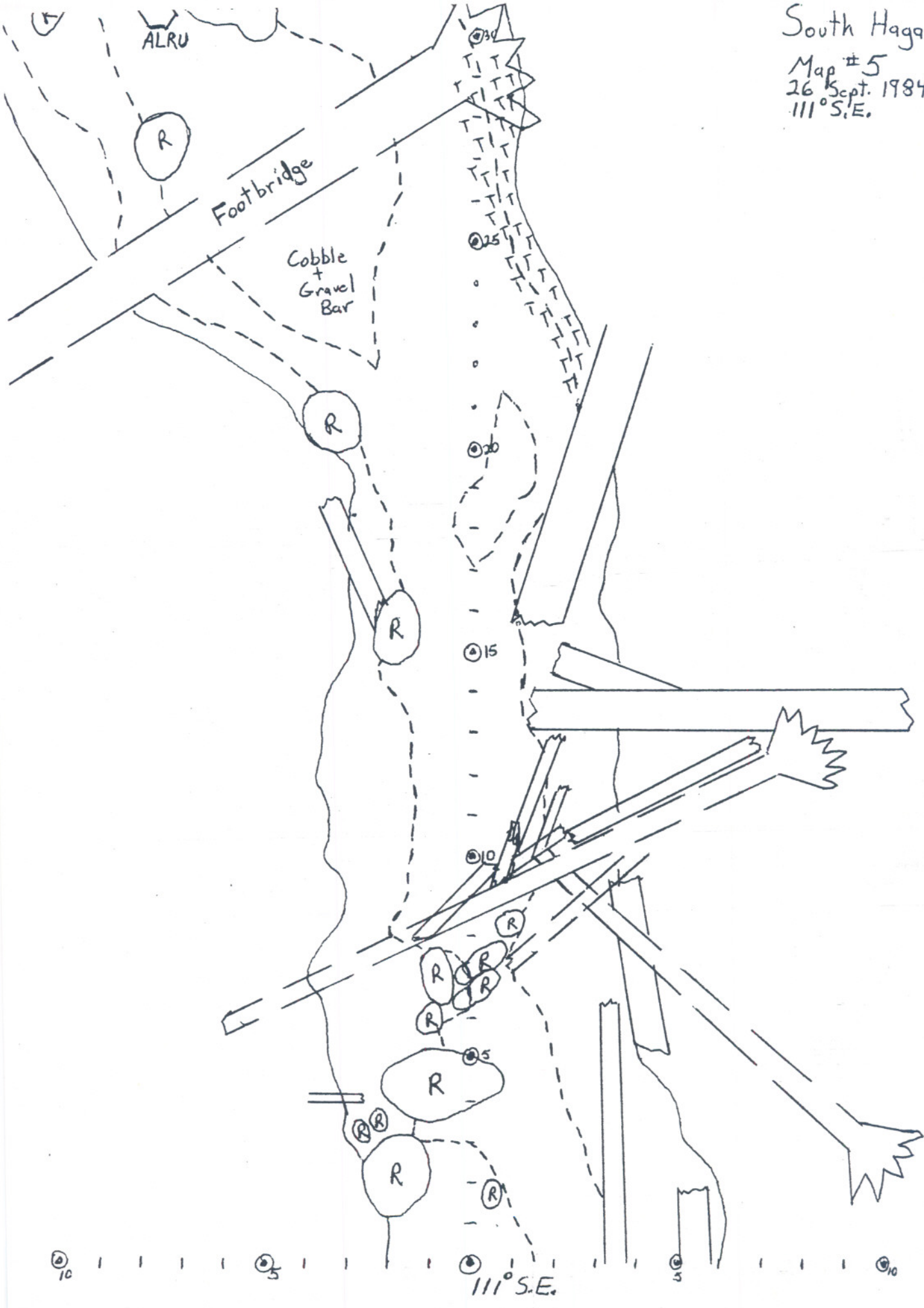
Map #3
25 Sept. 1984
152.5° S.E.




South Hagan
Map #4
26 Sept. 1984
132.5° S.E.
Cobble + Gravel Bar
50B Stake
ALRU
Footbridge
ALRU
ALRU
Cobble + Gravel Bar
110
109
132.5° S.E.

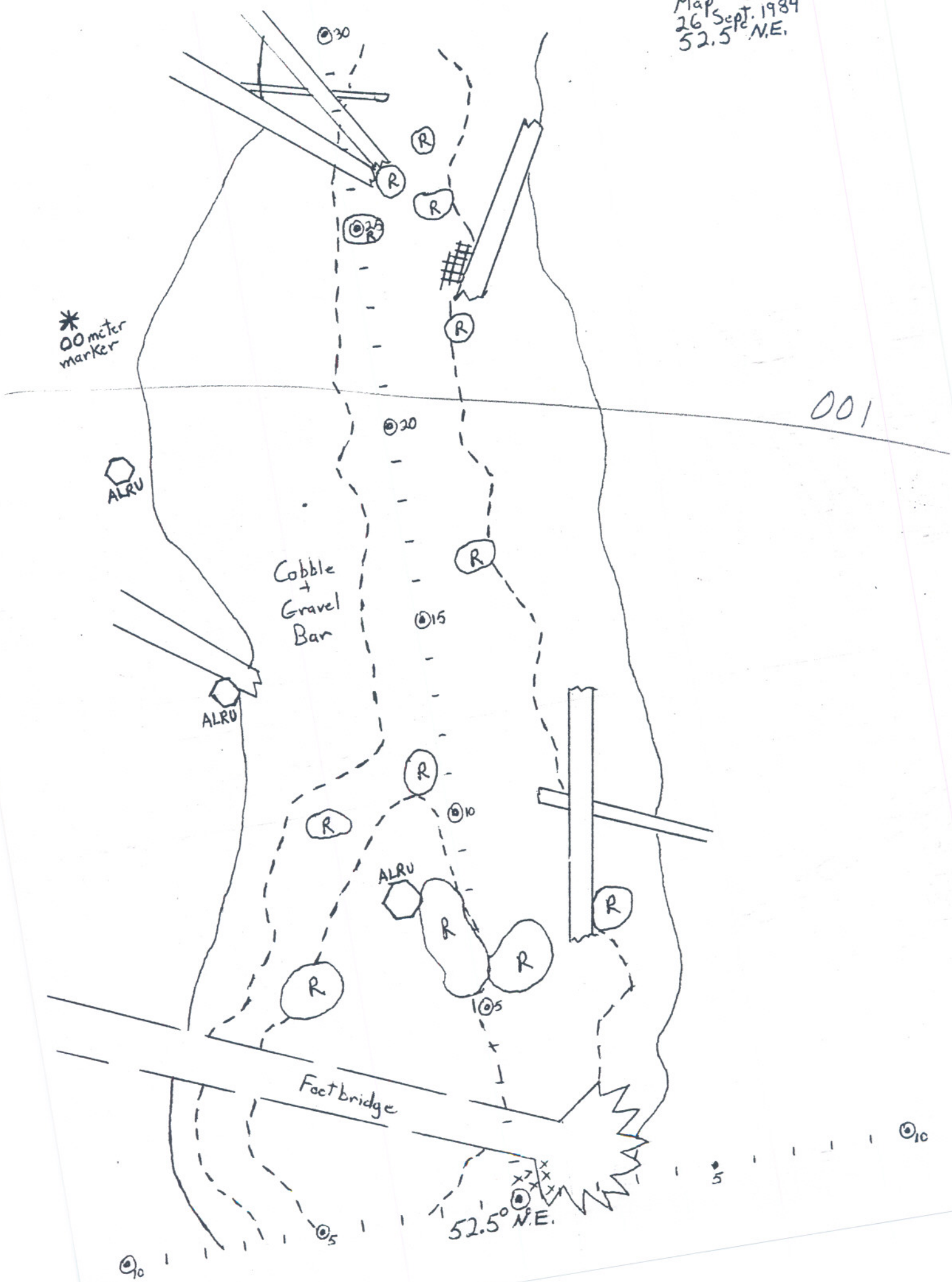
South Hagan

Map #5
26 Sept. 1984
111° S.E.



South Hagan

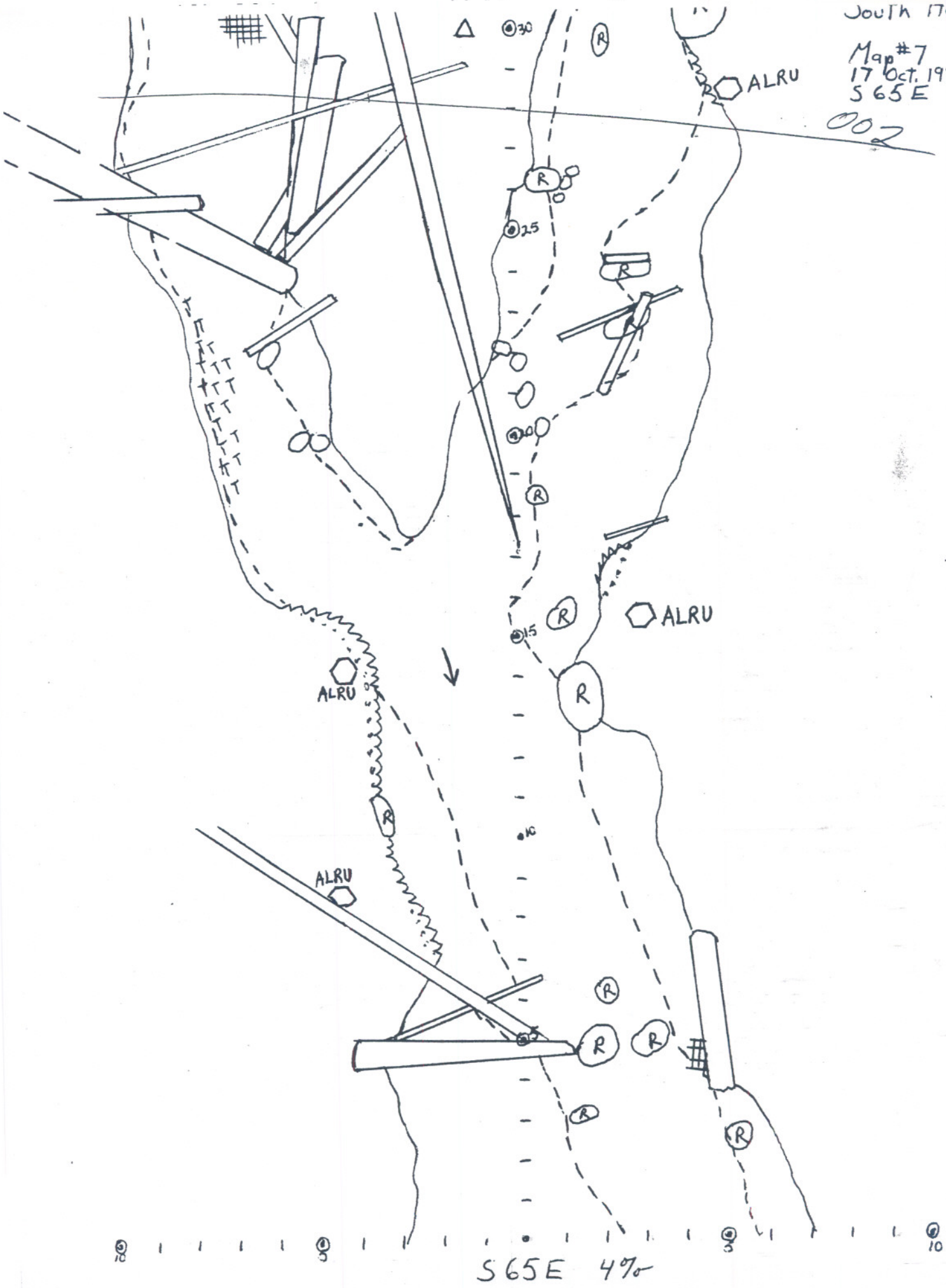
Map #6
26 Sept. 1984
52.5° N.E.

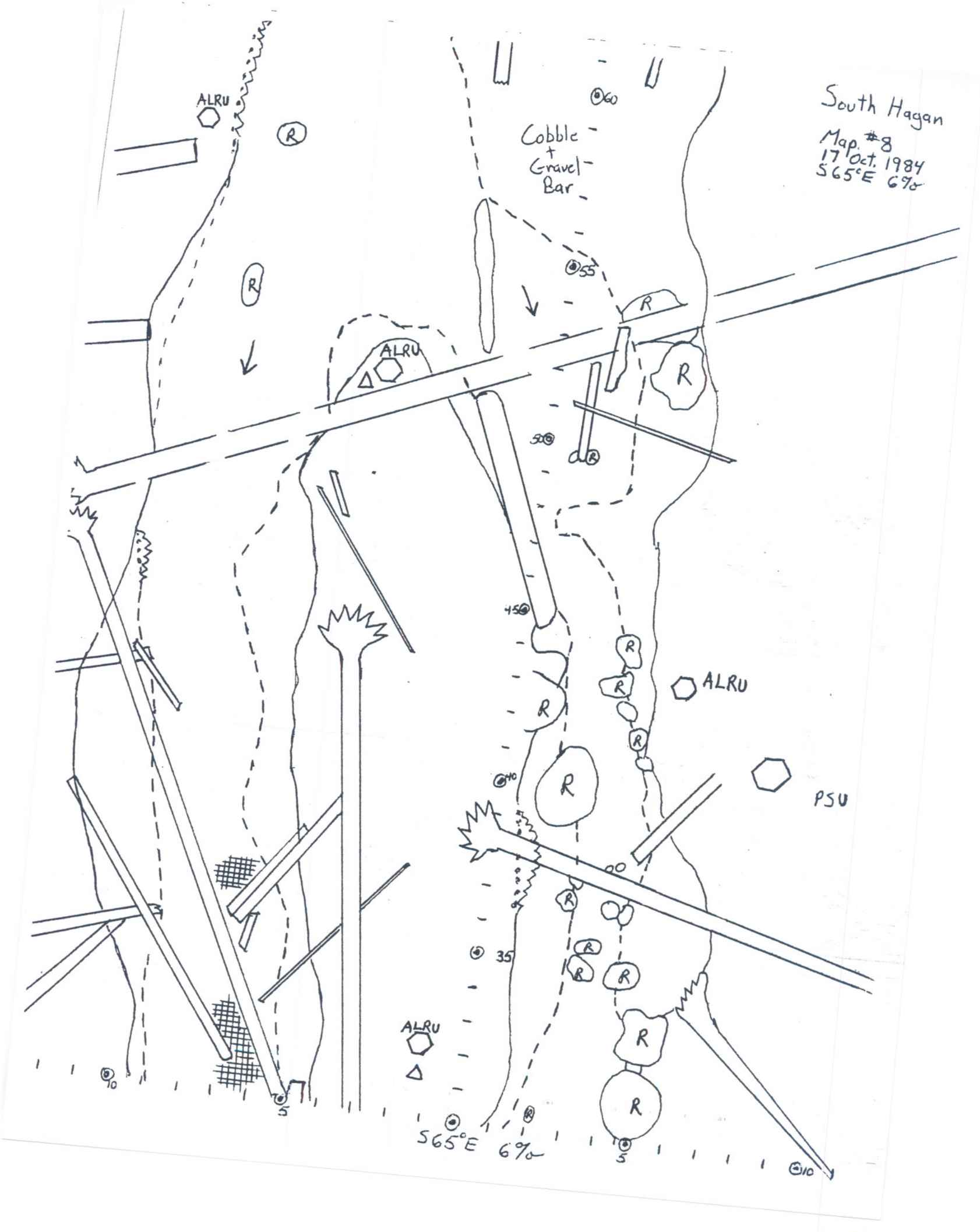


South Magan

Map #7
17 Oct. 1984
S 65 E 4%

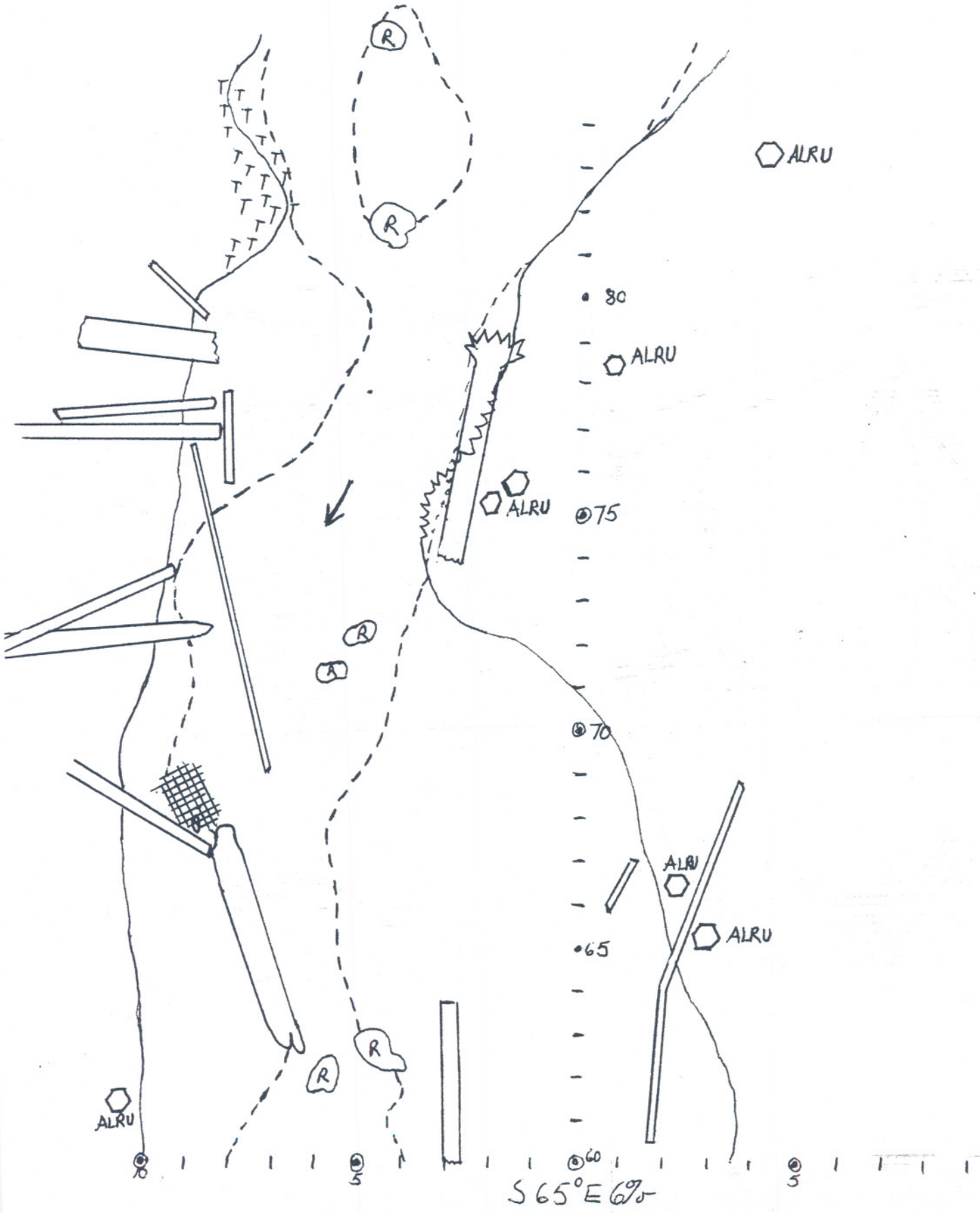
002




South Hagan
Map #8
17 Oct. 1984
S65°E 6%
Cobble + Gravel Bar
ALRU
R
60
55
50
45
40
35
30
5
10
PSU
S65°E 6%

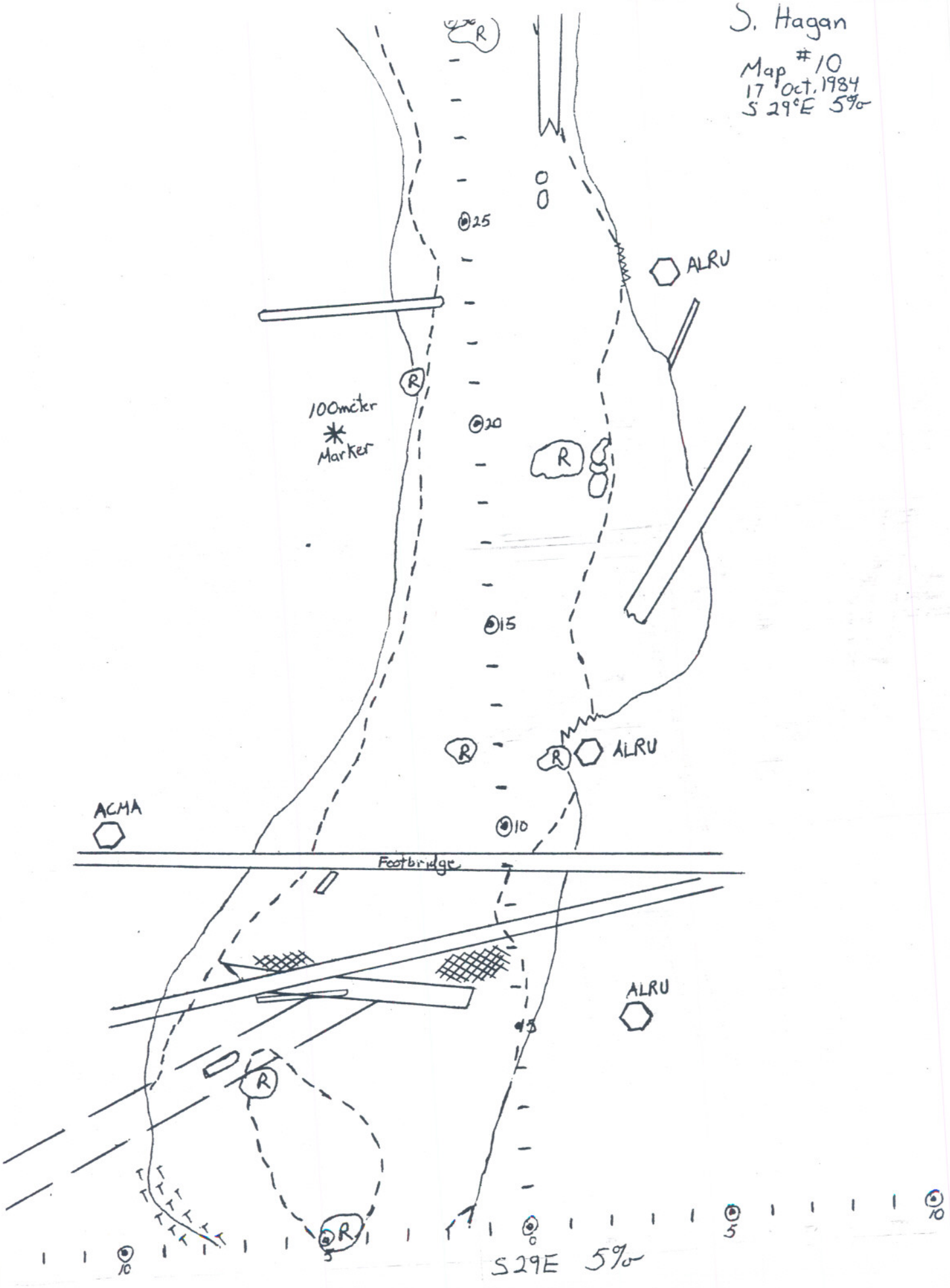
South Hagan

Map #9
17 Oct. 1984
S 65° E 6%



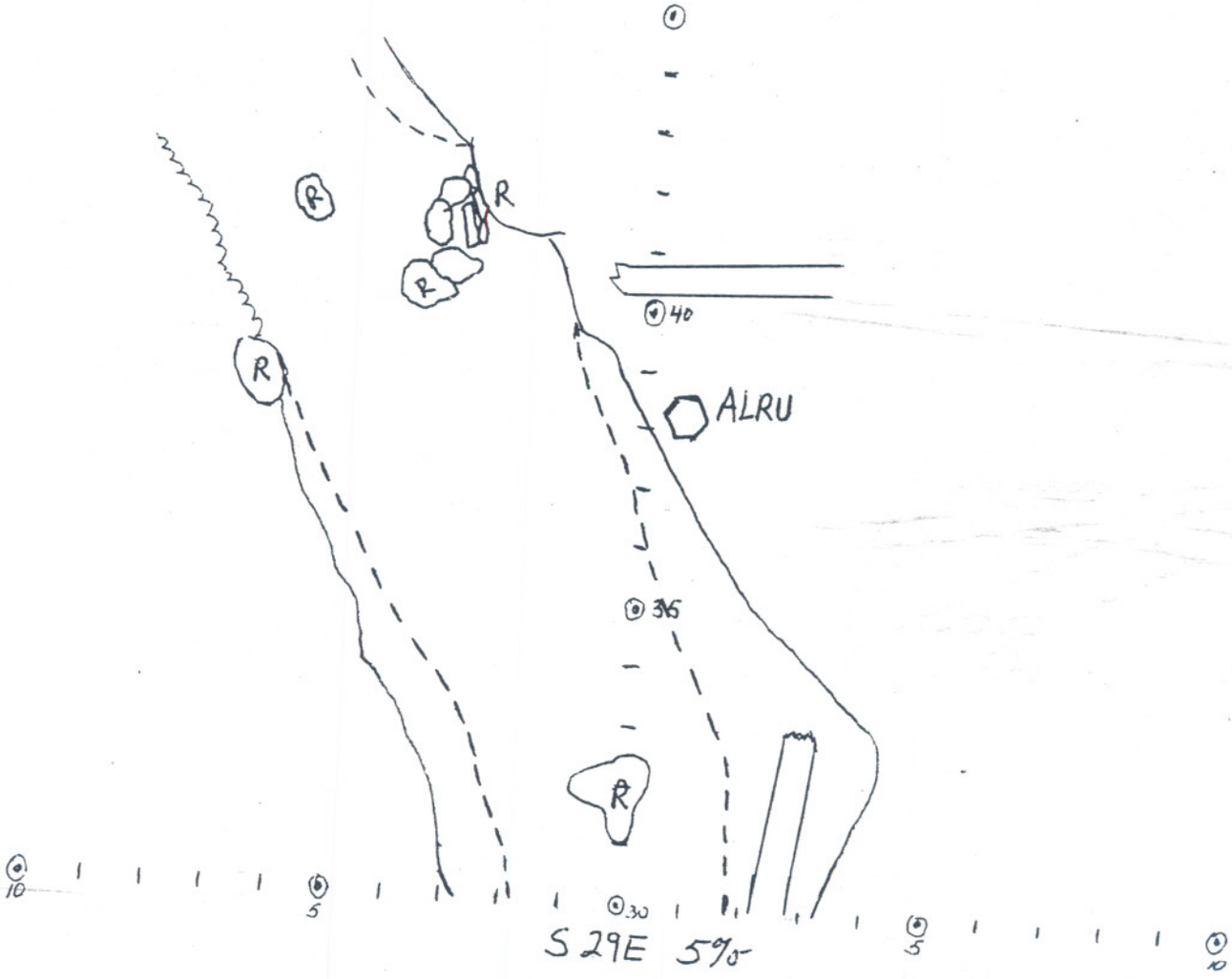
S. Hagan

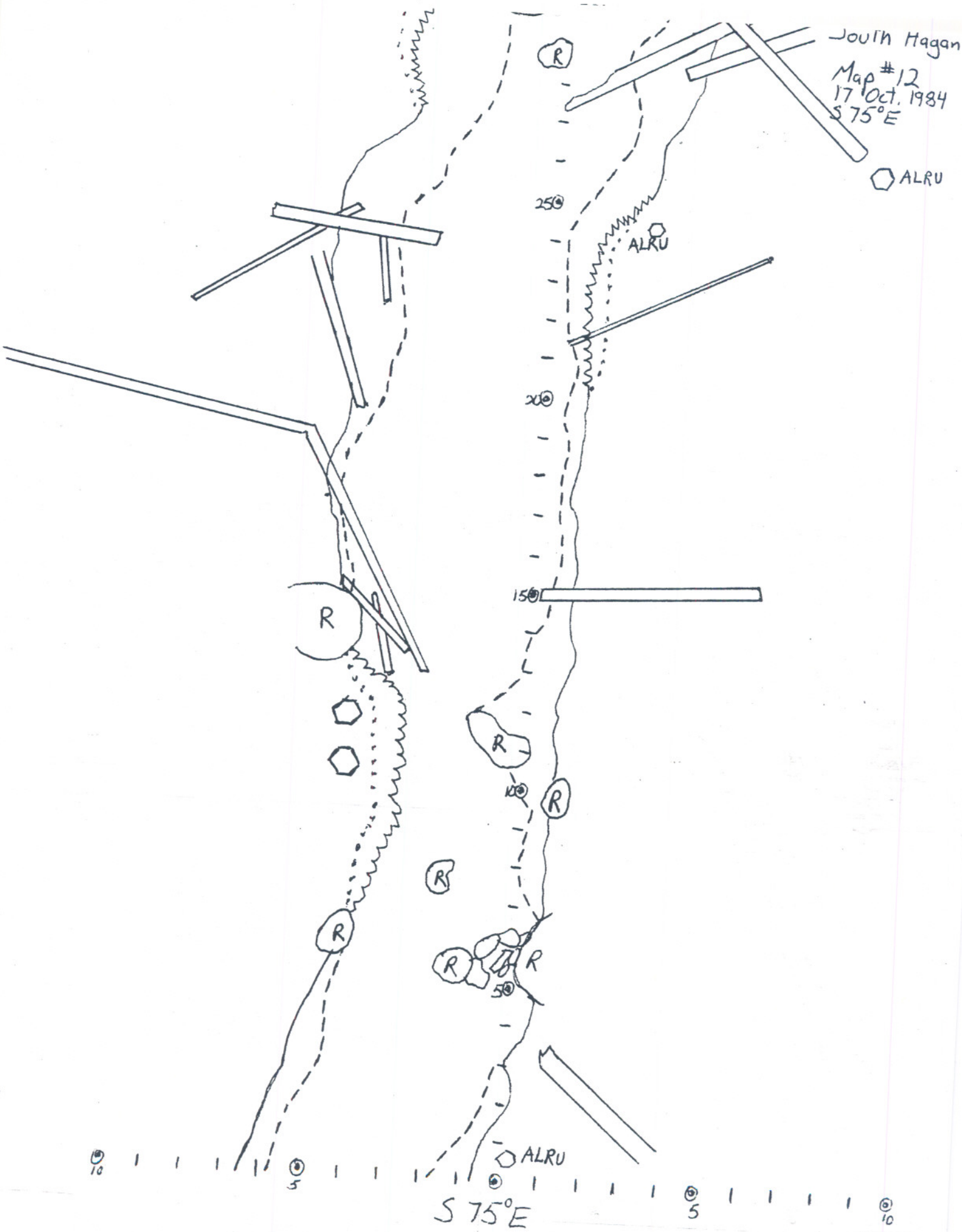
Map #10
17 Oct. 1984
S 29°E 5%

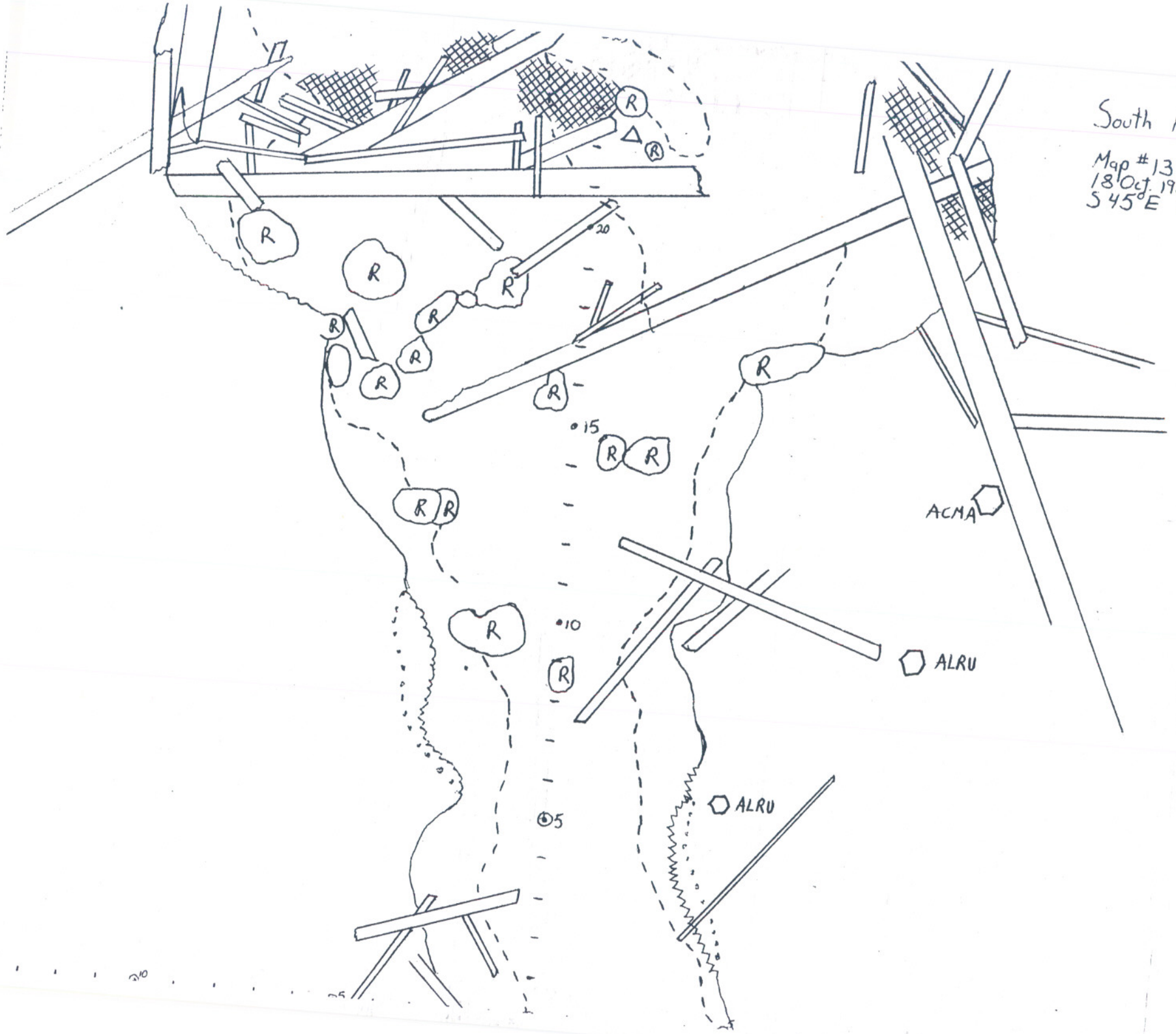


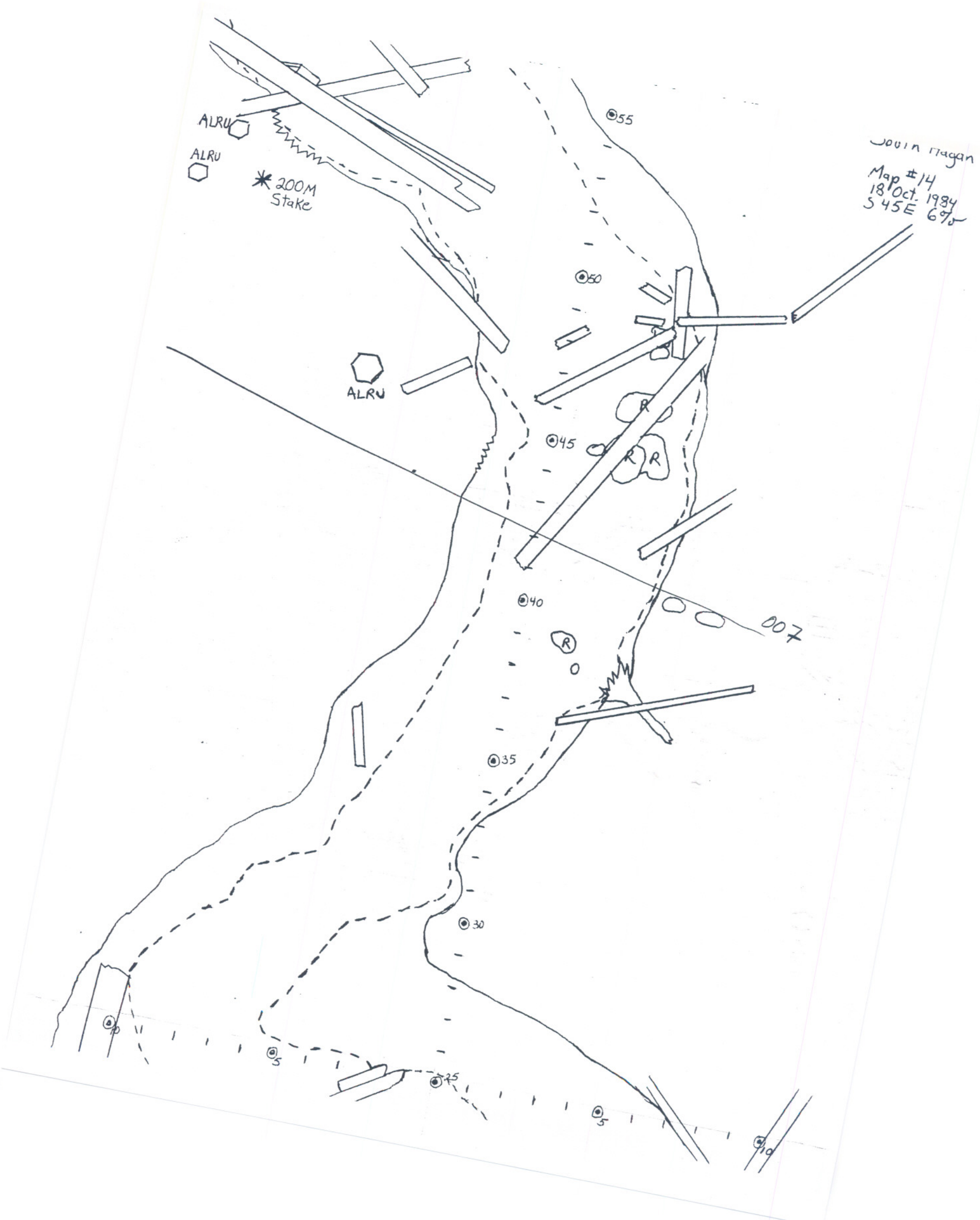
South Hagan

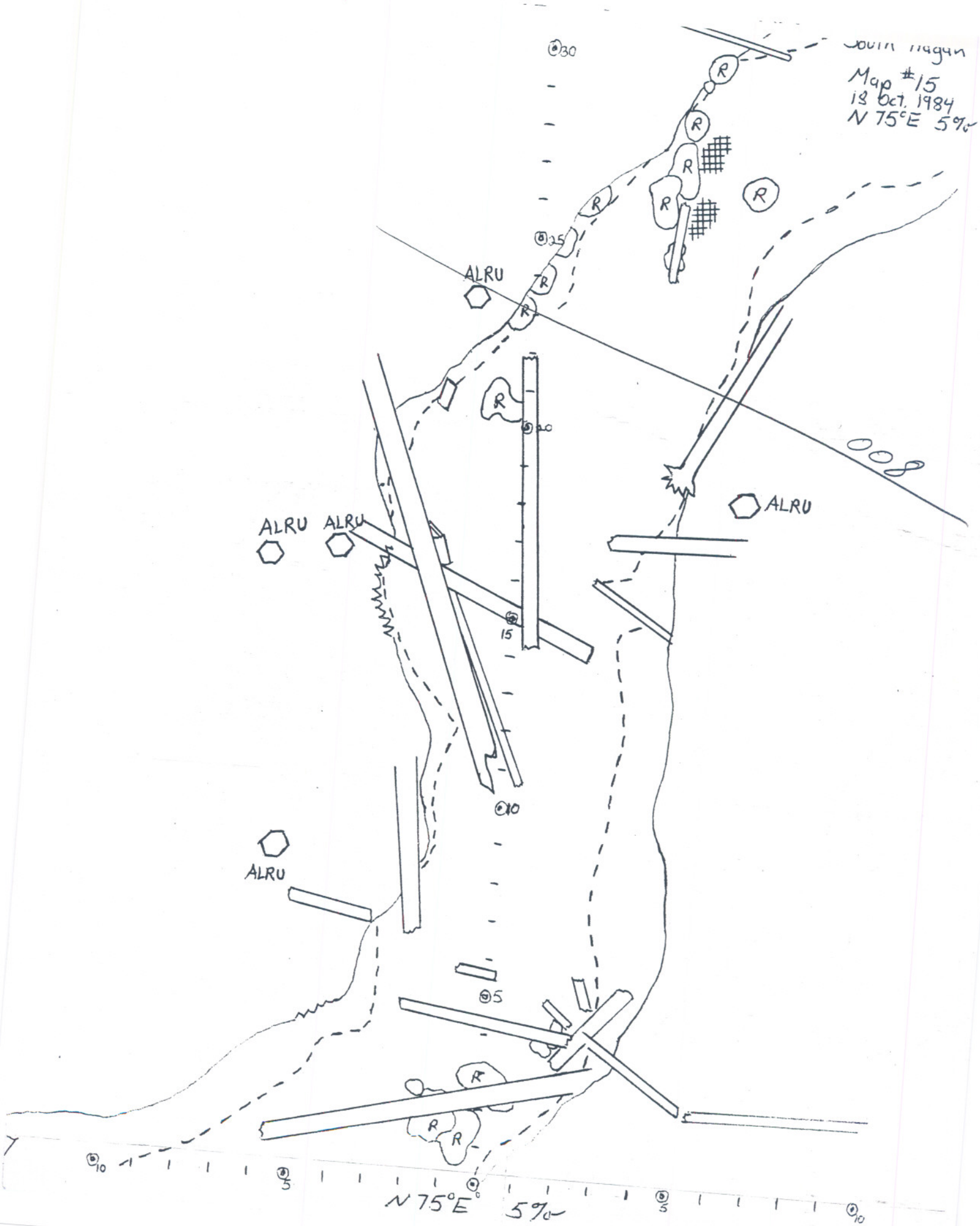
Map #11
17 Oct. 1984
S 29°E 5%



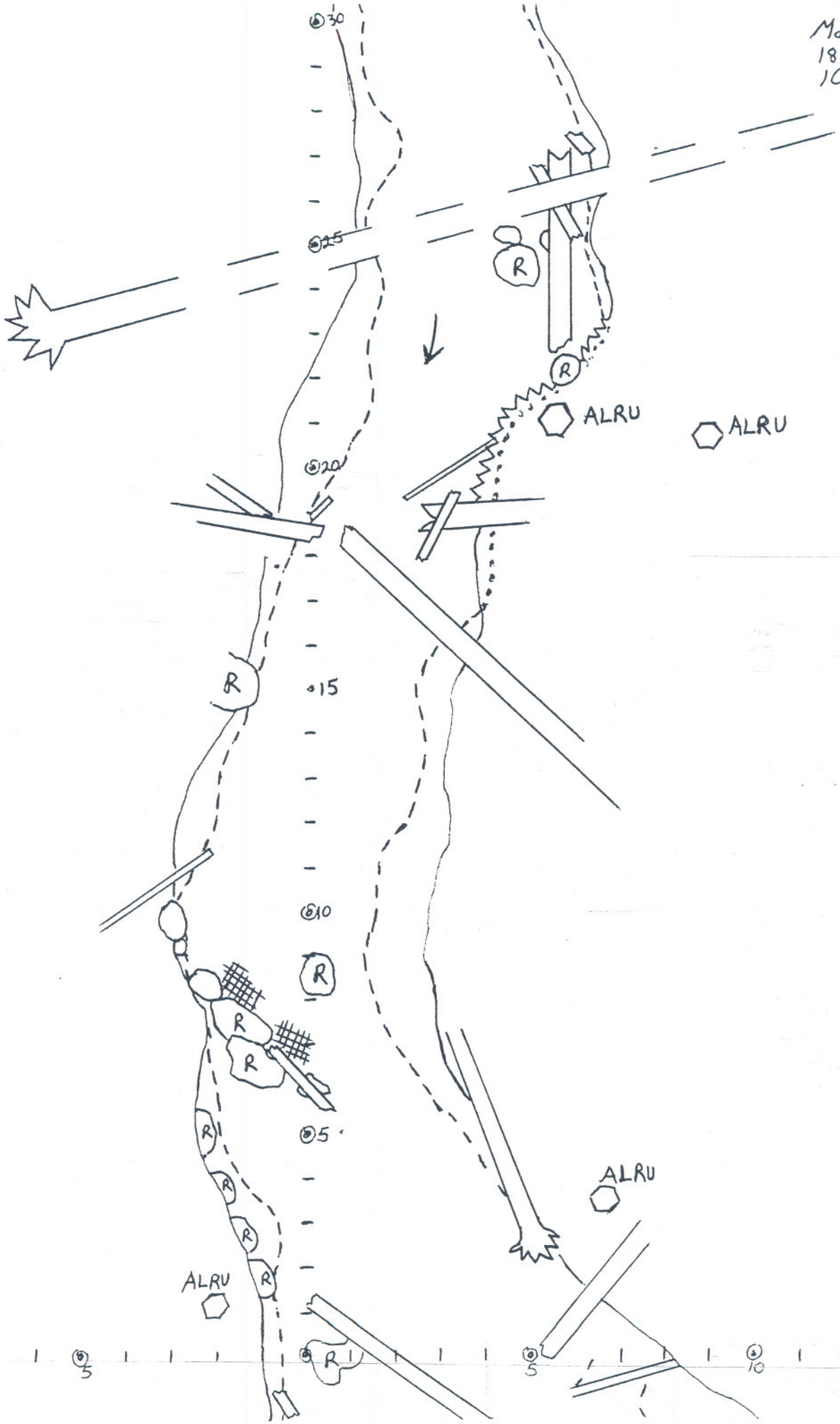

South Hagan
Map #12
17 Oct. 1984
S 75°E
ALRU
ALRU
ALRU
R
R
R
R
R
R
R
R
250
200
150
100
50
10
5
5
10
S 75°E


South Hagan
Map #13
18 Oct. 1984
S 45° E 8%
R
20
15
10
5
ACMA
ALRU
ALRU


ALRU
ALRU
200M Stake
ALRU
55
50
45
40
35
30
25
R
R
R
R
007
John Hagan
Map #14
18 Oct. 1984
S 45E 69'

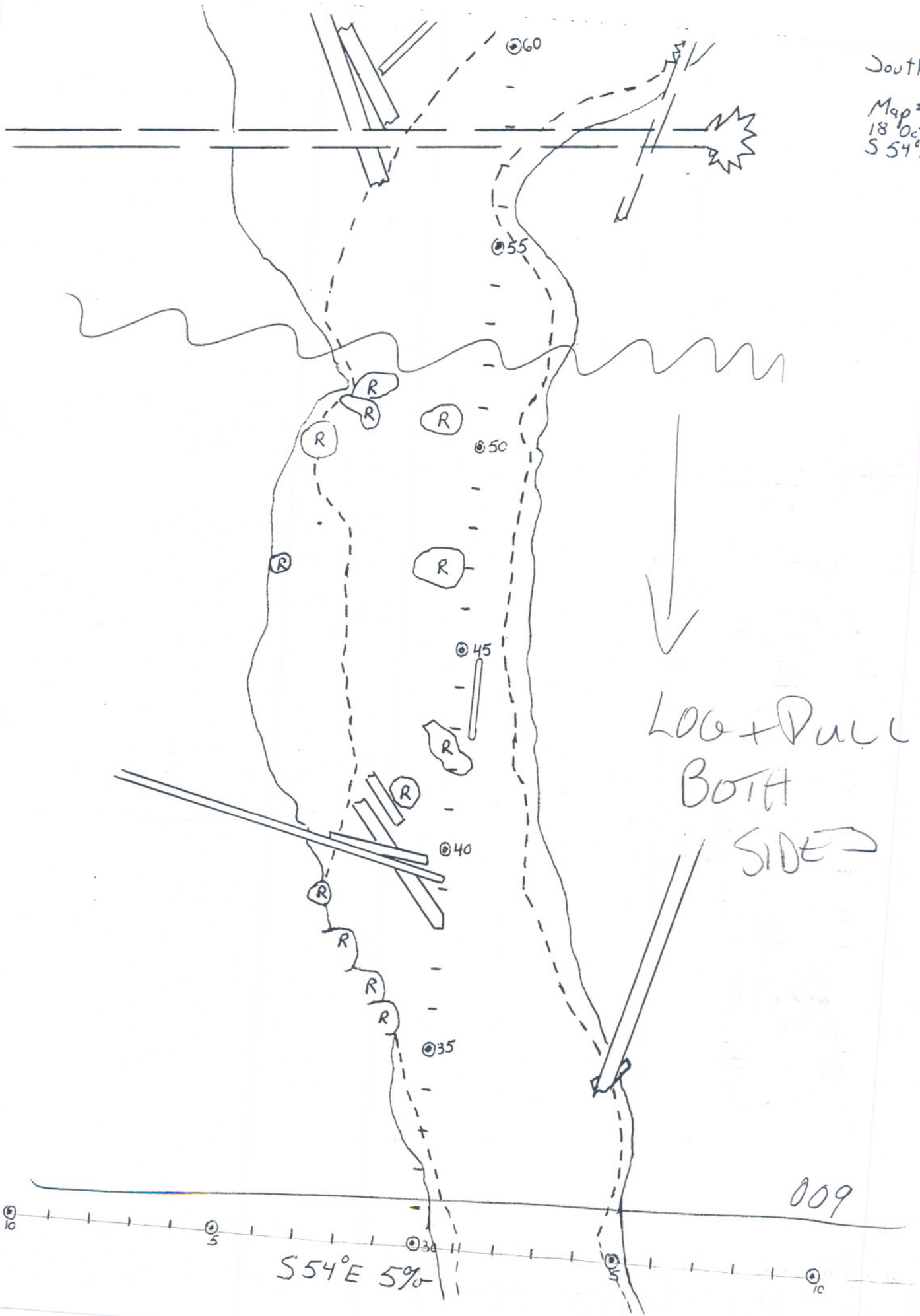

South Hagan
Map #15
18 Oct. 1984
N 75°E 5%
30
25
20
15
10
5
ALRU
ALRU
ALRU
ALRU
R
008
N 75°E 5%

Map #16
18 Oct. 1984
100.5° S.E.

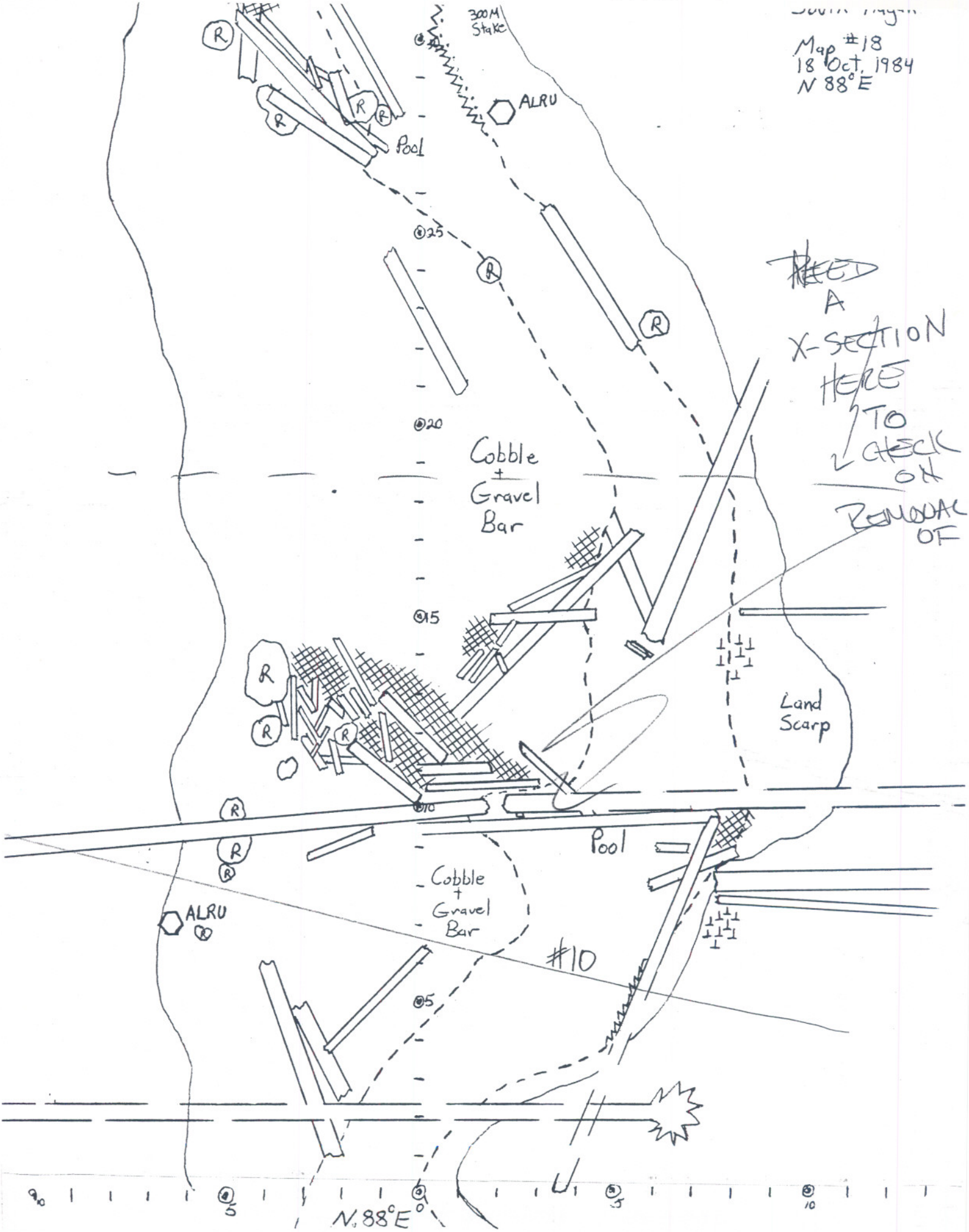


South Hagan

Map #17
18 Oct. 1984
S 54°E 5%

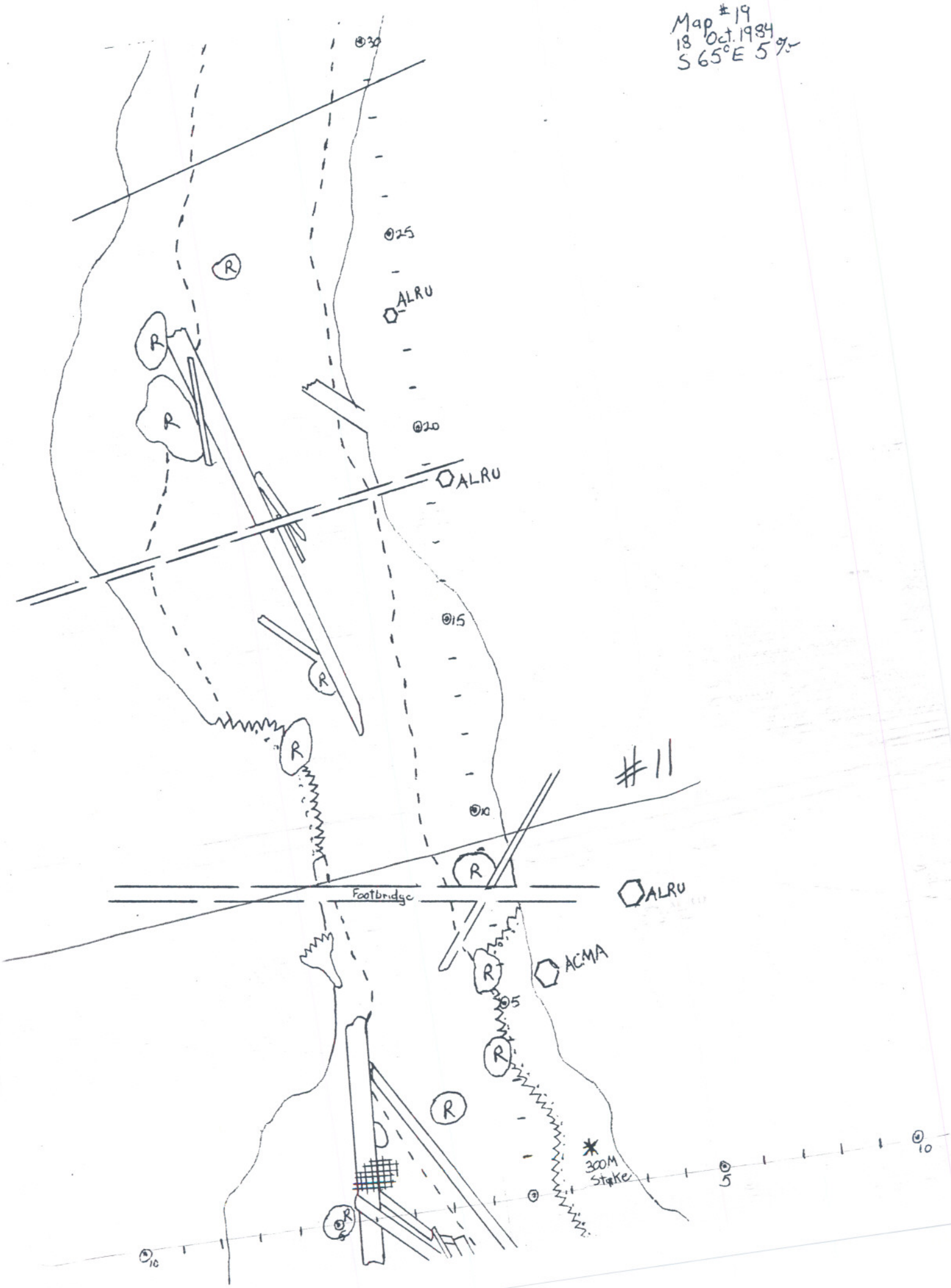


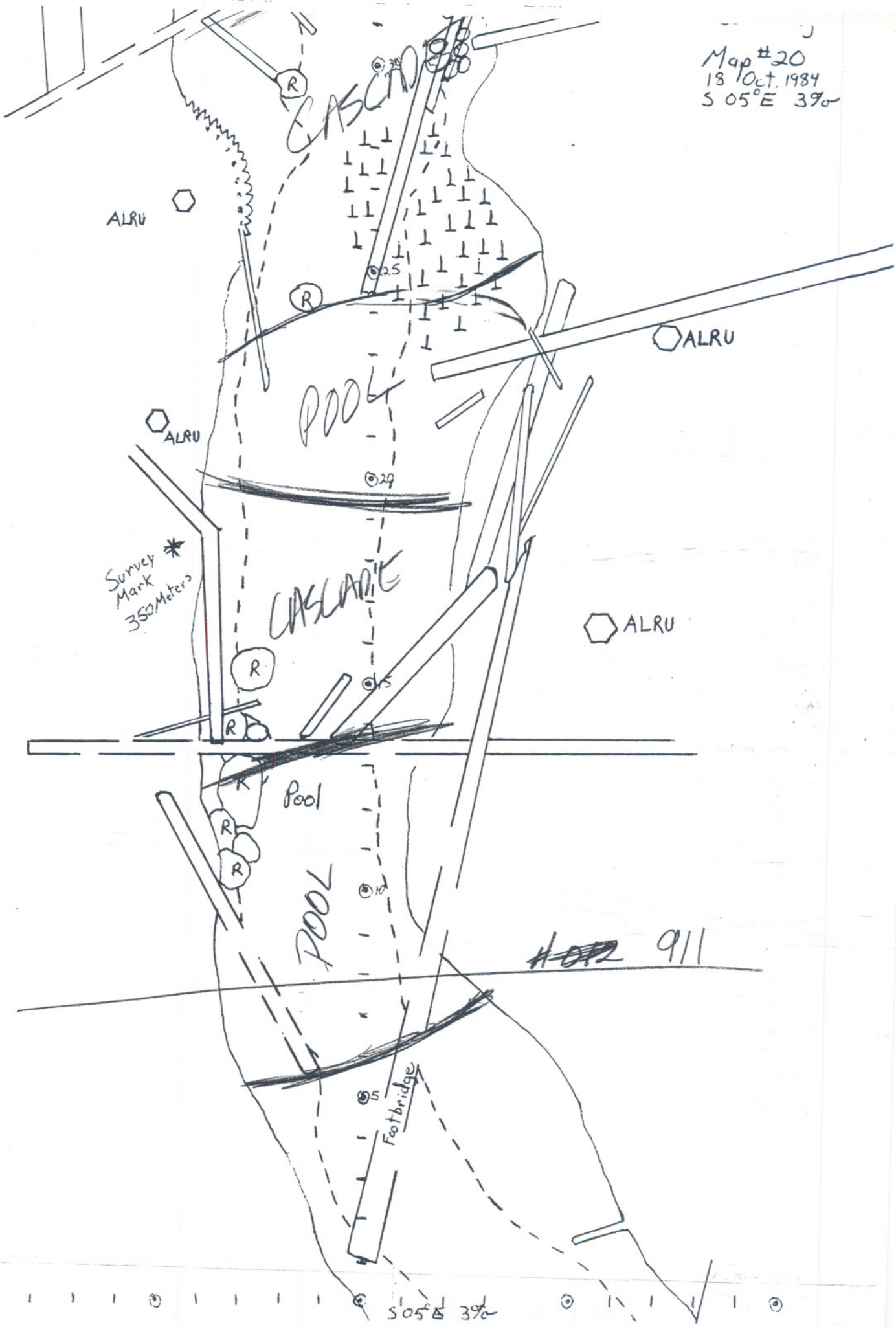
009


Map #18
18 Oct. 1984
N 88° E
300M Stake
ALRU
Pool
R
25
20
Cobble + Gravel Bar
15
10
Land Scarp
Pool
Cobble + Gravel Bar
ALRU
#10
5
N. 88° E
0
5
10
NEED A X-SECTION HERE TO CHECK ON RENDUAC OF

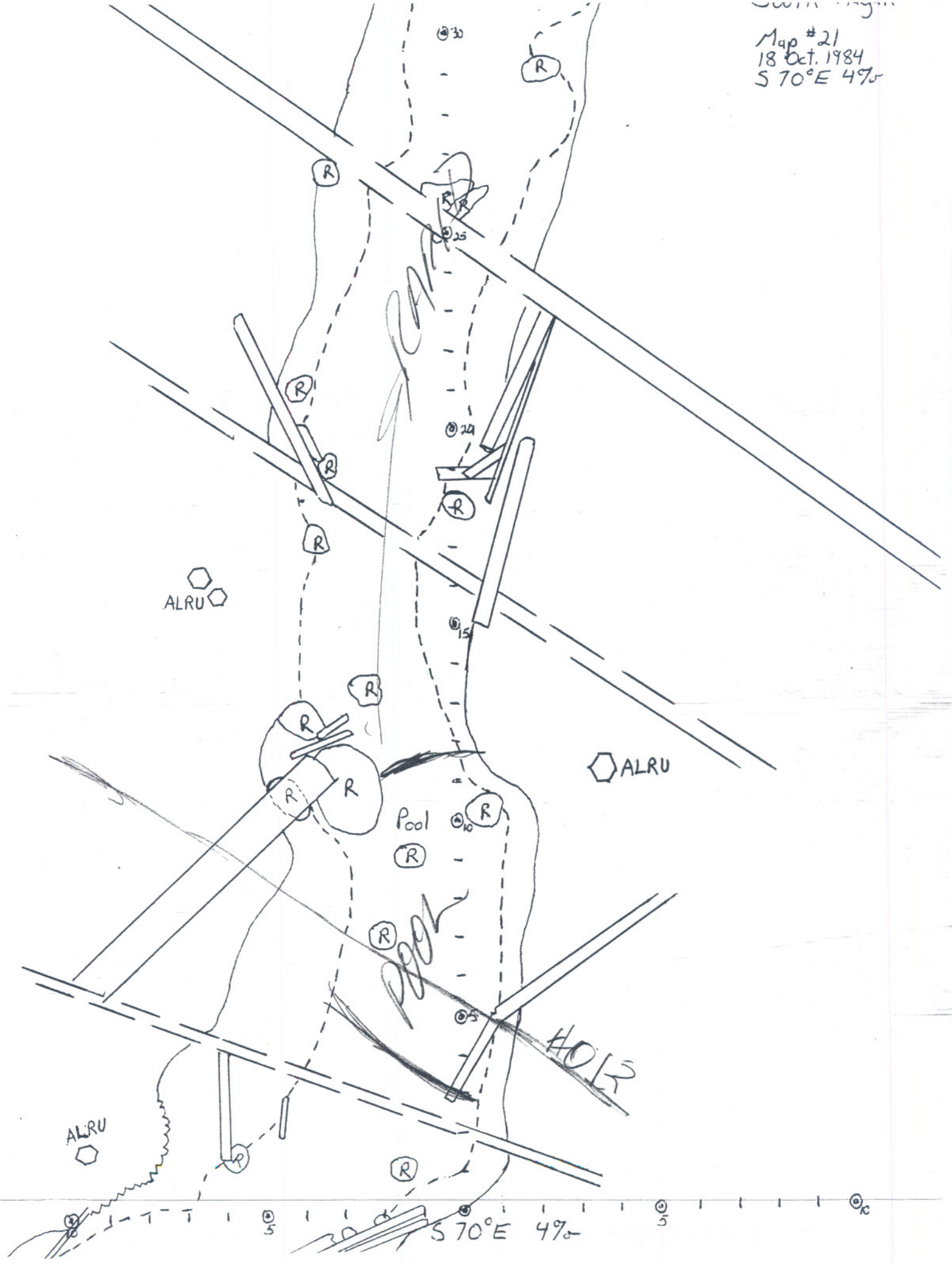
South Hagan

Map #19
18 Oct. 1984
S 65° E 5 m




Map #20
18 Oct. 1984
S 05° E 39m
CASCADE
ALRU
ALRU
ALRU
ALRU
POOL
CASCADE
Survey Mark 350 Meters
R
R
R
R
R
R
Pool
POOL
911
Footbridge
S 05° E 39m

Map #21
18 Oct. 1984
S 70°E 49%



South Hagan
S 10° E 29c

	110
	909
918	169
917	808
916	108
914	903
913	107
	906
911	106
30	105 + 20 22