

FIELD BOOK NO.

Surveyor

A. J. Bennett

Containing Surveys of the

Districts

London

Date

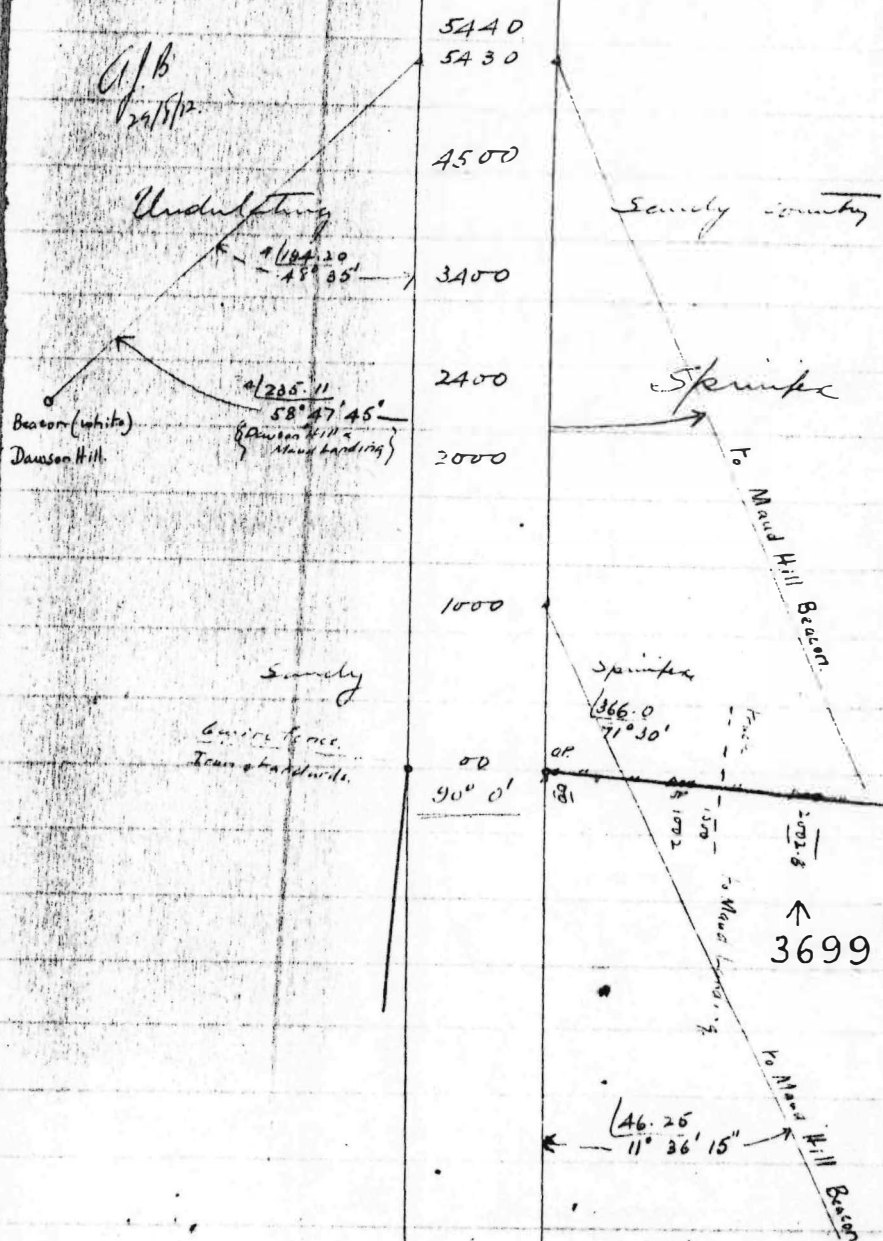
August - September 1912

Table of Versed Sines for each 10 Minutes from 2° to 26° inclusive.
Correction to 100 links for Slope.

Deg.	Min.	Vers. Sin.	Deg.	Min.	Vers. Sin.	Deg.	Min.	Vers. Sin.
2	...	·06	10	...	1·52	18	...	4·89
	10	·07		10	1·57		10	4·98
	20	·08		20	1·62		20	5·07
	30	·09		30	1·67		30	5·17
	40	·11		40	1·73		40	5·26
	50	·12		50	1·78		50	5·35
3	...	·14	11	...	1·84	19	...	5·45
	10	·15		10	1·89		10	5·54
	20	·17		20	1·95		20	5·64
	30	·19		30	2·01		30	5·74
	40	·20		40	2·07		40	5·83
	50	·22		50	2·12		50	5·93
4	...	·24	12	...	2·18	20	...	6·03
	10	·26		10	2·25		10	6·13
	20	·29		20	2·30		20	6·23
	30	·31		30	2·37		30	6·33
	40	·33		40	2·43		40	6·43
	50	·36		50	2·50		50	6·54
5	...	·38	13	...	2·56	21	...	6·64
	10	·41		10	2·63		10	6·75
	20	·43		20	2·69		20	6·85
	30	·46		30	2·76		30	6·96
	40	·49		40	2·83		40	7·06
	50	·52		50	2·90		50	7·17
6	...	·55	14	...	2·97	22	...	7·28
	10	·58		10	3·04		10	7·39
	20	·61		20	3·11		20	7·50
	30	·64		30	3·18		30	7·61
	40	·68		40	3·26		40	7·72
	50	·71		50	3·33		50	7·83
7	...	·74	15	...	3·41	23	...	7·95
	10	·78		10	3·48		10	8·06
	20	·82		20	3·56		20	8·18
	30	·86		30	3·64		30	8·29
	40	·89		40	3·71		40	8·41
	50	·93		50	3·79		50	8·53
8	...	·97	16	...	3·87	24	...	8·64
	10	1·01		10	3·95		10	8·76
	20	1·06		20	4·04		20	8·88
	30	1·10		30	4·12		30	9·00
	40	1·14		40	4·20		40	9·12
	50	1·19		50	4·28		50	9·25
9	...	1·23	17	...	4·37	25	...	9·37
	10	1·28		10	4·45		10	9·49
	20	1·32		20	4·54		20	9·62
	30	1·37		30	4·63		30	9·74
	40	1·42		40	4·72		40	9·87
	50	1·47		50	4·80		50	9·99

Table of Versed Sines for each 10 Minutes from 26° to 45° inclusive
—continued.

Deg.	Min.	Vers. Sin.	Deg.	Min.	Vers. Sin.	Deg.	Min.	Vers. Sin.
26	...	10·12	33	...	16·13	40	...	23·39
	10	10·25		10	16·29		10	23·58
	20	10·38		20	16·45		20	23·77
	30	10·51		30	16·61		30	23·96
	40	10·63		40	16·77		40	24·15
	50	10·77		50	16·93		50	24·34
27	...	10·90	34	...	17·10	41	...	24·53
	10	11·03		10	17·26		10	24·72
	20	11·16		20	17·42		20	24·91
	30	11·30		30	17·59		30	25·10
	40	11·43		40	17·75		40	25·30
	50	11·57		50	17·92		50	25·49
28	...	11·70	35	...	18·08	42	...	25·68
	10	11·84		10	18·25		10	25·88
	20	11·98		20	18·42		20	26·08
	30	12·12		30	18·59		30	26·27
	40	12·26		40	18·76		40	26·47
	50	12·40		50	18·93		50	26·67
29	...	12·54	36	...	19·10	43	...	26·86
	10	12·68		10	19·27		10	27·06
	20	12·82		20	19·44		20	27·26
	30	12·96		30	19·61		30	27·46
	40	13·11		40	19·79		40	27·66
	50	13·25		50	19·96		50	27·86
30	...	13·40	37	...	20·14	44	...	28·07
	10	13·54		10	20·31		10	28·27
	20	13·69		20	20·49		20	28·47
	30	13·84		30	20·66		30	28·67
	40	13·98		40	20·84		40	28·88
	50	14·13		50	21·02		50	29·08
31	...	14·28	38	...	21·20	45	...	29·29
	10	14·43		10	21·38			
	20	14·58		20	21·56			
	30	14·73		30	21·74			
	40	14·89		40	21·92			
	50	15·04		50	22·10			
32	...	15·19	39	...	22·28			
	10	15·35		10	22·47			
	20	15·50		20	22·65			
	30	15·66		30	22·83			
	40	15·82		40	23·02			
	50	15·97		50	23·21			



Connection to for part 5,
 Artesian Bore on tank from
 Maud Hill to Winding Pool.

Cor $\frac{9272}{58}$ D.O. $\frac{1481}{12}$
 Plan $\frac{34}{300}$

Low scrub

A.B.
6/29/12

24600

x Sprinkler

23600

22600

21800

59°
Swine fence

20900

20100

post. AB
30

19900

ab. 4000 to truck.

19300

Undulating sandy
country

18400

Sprinkler

17400

16400

15400

14300

A.B.
6/29/12

13300

12900

11800

10800

Undulating sandy country.

9790

Sprinkler

8990

8800

7800

6900

5840

5440

C.I.B.
30/4/12.

3

40500

40100

39800

39100

38600

38300

37300

37200

36100

35100

34700

34400

33900

33700

32700

32300

31300

30700

29700

28900

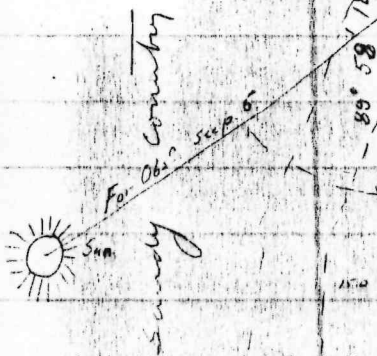
27900

26900

26000

25000

24600



Undulating

scrub.

Spruce

C.I.B.
30/4/12.

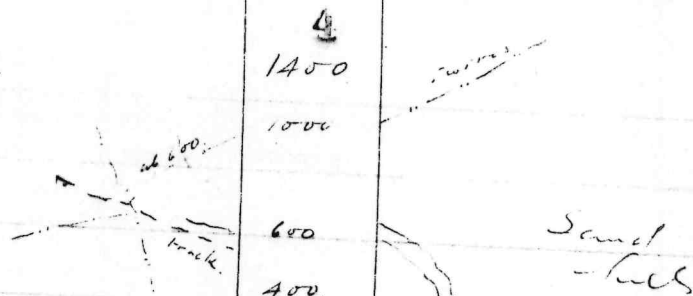
Scrub.

Spruce

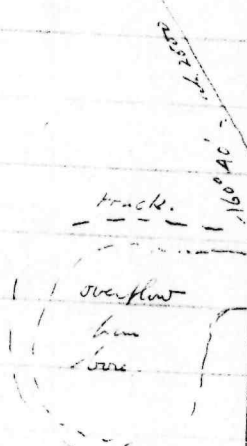
Undulating: Sandy country
Small limestone outcrops.

89° 58' 18"

Cl/B
30/9/12



Hut. □



Scrub.

Spunk

502 16
125° 34'

85.58

46660 (a) 46660

46100
46000

44900

44500

44100
44000

43100

42600

42100

41800

40800

Scrub

Spunk

Sum Obs. at 39100 p. 3.

30-8-12

Latitude (2)

23° 6' 30"

R. M.

360°

Return 360°

Ap. -

+

ay.

24° 30' 0"

act

27° 31' 20"

-

24° 43' 0"

+

203° 54' 40"

coalt.

63° 21' 0"

-

204° 8' 0"

Line Bearing of R. M.

269° 58' 18"

269° 58' 11"

CBP2P40

7/16
20/8/12

Channel

As F
B
31.

1310.

1300.

850

500.

00

33° 57'

1690.

1450

(354.22
76° 5' 30"

to Winning Post.
Bore.

60

55

50

45

40

35

30

25

20

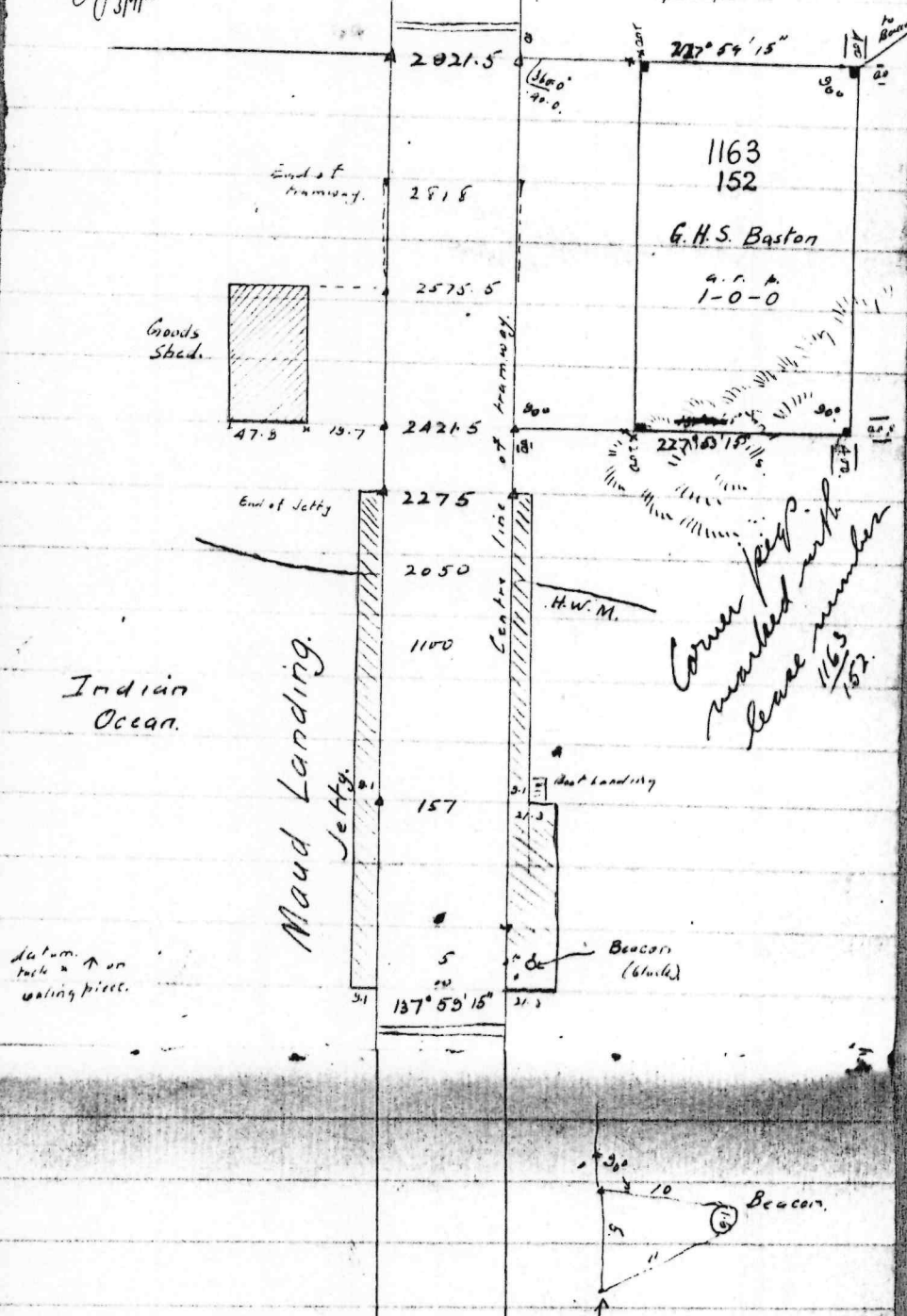
15

10

5

0

Reference marks consist of
bushes 9 inches below
surface and 5 links
-from posts.



Traverse of Indian Ocean from Mand
Landing northwards.

Survey of Special Lenses 1163
152 for G. H. S. Boston Loc.
(Lyndon District).

99B
3/9/12

Indian Ocean

1450

1500

64° 27'

3110

654.4-10
163° 12' 28"

Low Sand
Hills

2200
2100

200

(1510)

1610

150 W 1/2

Low Sand

1080

Low

Center line of Trench
p. 6.

30°

400

200

1163
152

00

47° 55' 15"

1722

620. 27.24
168° 11' 50"

94° 20'

Sandy

1 1/2
Sand Hills

700

500

100

Blackbearn Sand Hills
Maud Hill
72° 26' 05" 31'
A3-3

Surf. 6
p. 9.

(1)

23° 11' 15"

K.
Sep. 24. for sand samples
taken at this point

0000

15

875-0

875-0

7750

7500

6000

5000

455

3502

2250

2550

1100

1000

no.

40° 58'

AB
3/9/12.

[illegible]

to Point Maud

(609.40.40
152.25' 10"

1/2

1210.6

1000.

0-0.

36° 52'

5700

5400

4350

3400

2950

1400

(A)

3699.

Low-sandy ridge

A.B.
1/1/12.

Low
Surf

Indian Ocean

A.B.
1/1/12.

630.45.40
157° 42' 10"

Indian Ocean

9340.

8840.

400

7840

B post.

200

6990.

200

6270

High white
drift sand hills

150

5670

50

4650

4550

Drift
Sand
Hills

50

3450

3150

30

2150

50

1050

Coarse
drift
hills

00

15° 40'

150

15200

(6)

100

14700

50

13800

Low ridges
drift sand.

30

13100.

30

12100

Windmill.
61°
24° 20'

11020

B 51.5
60° 0' White
Bearing.

10500.



9800

9500

9750.

Low
ridges

10

7600

AJB
5/9/12.

6600

6500

Shrimp

5400

Jan 4

4400

3800

3300

From Pt. Clatsop

Shrimp

Track

2550

2300

Sand

to Mack Landing

1200

200

810 4'

470.2
117° 30' 30"

Traverse from Airey Hill

Continued on page 12.

AJB
5/9/12.

15160

1000

14360

Ocean

Sand hills

13760

Sand hills

6(371.33)
61° 55' 30"

12760

Airey Hill

to Airey Hill

11960

to pole on Airey Hill
to traverse to Airey Hill
6(117.25)
78° 34' 10"

11340

to Beacon
6(237.2)
38° 30' 20"

10340

Sand hills

600

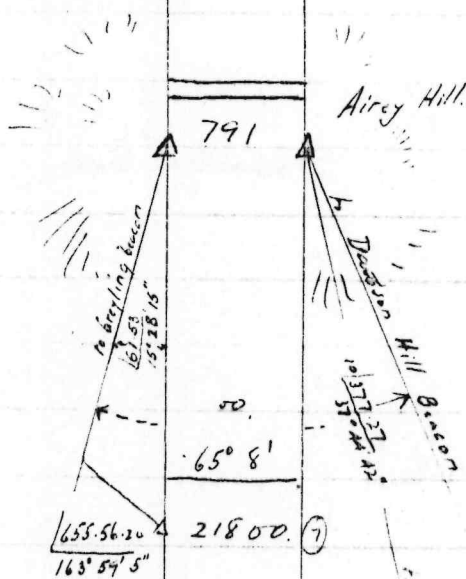
9340

AJB
5/9/12.
Greyling Hill.
Greyling beach
(white)
octagonal

Indian

to Mack Hill
Beacon
73° 45'
18° 26' 15"

GPB
5/9/12



pole found at top of hill
with bushy top
pole wedged in hole in rock
small cairn built

655.56.10
65° 54' 5"

21800

20800

19800

19000

17965

16965

Bare

Sand hills

16100

15500

14600

14200

Bare Sand

hills

13100

12000

11500

10500

9600

Sand

Steep

8000

7600

99B
6/9/12

12
3200

300

2100

1000

50

8° 50' 30"
8° 49' 30"

Trunk

Small
springs

(608. 39.24
152° 41' 50"

500

2100

250

1000

00

36° 40' 40"
36° 40' 30"

White Sand
beach analysis
March 1912

R.M. 360° Return 360°
June 1912

* 30° 2' 0" } aer
* 30° 7' 20" } 22° 52' 0" Red
* 26° 34' 20" } coast cliff
* 26° 35' 40" } 67° 54' 0"
Latitude 23° 2' 50"

June 1912 149° 34' 00"
150° 12' 00"

99B
6/9/12

19170

18570

18070

17300

16260

15160

High
Sand
hills

Indian

Small hills

Traverse of Indian Ocean
continued from page 10.

AB
6/11/12

13

9630

9130

8930

8030

6930

6030

5430

5230

4930

3930

3630

2900

Drift sand hills

Undulating
Sand
Springs

Ocean

Sand hills

500

300

Ocean

AB
6/11/12

Sand hills

1000

900

800

355° 36' 30"
358° 55'

7900

7200

6600

5700

4800

4000

3300

3200

Springs

667.4
166° 46'

300

250

250

350

Sand hills

Indian

To Mound Hill Beacon

To Greyling Hill Beacon
that are found
in the 6' Tol

328-23
54° 43' 50"
455-6-0
75° 51' 0"
375-45-20
62° 37' 33"
279-21-20
46° 33' 38"

Undulating
Sandy
Springs

To Dawson Hill Beacon

AB
33 post.

Indian Creek.

G.B.
6/9/12.

400 4500

Saltmarsh
flat
450.

8500

Clouds etc.

300 7500

6800

300 6400

300 5300

4500

800 3500

47° 20'

1500 2500

4600

1500

1000

Indian Ocean

Burubudja Pt.

Bay

Sand Hills

500

0. 47. 15
0. 43. 15

165° 22'

of Pt. Cloates Lighthouse

Iron pipe
6 feet high
1.3 inches diameter

Doublet Hill Trig.

8707.5

8706.2

G.B.
6/9/12.

8700.

661.25
165° 22'

8240.

8140

7040

6640

5540

4543.43.20
135° 55' 50"

165° 11' 45"

28° 25'

20° 53' 40"
17° 45' 25"

Burubudja Pt.

Indian Ocean

to Main Hill Beacon

to Greyling Beacon

AGB
7/9/12

Indian Ocean

Surf
Hill

16

8500

7000

6200

5200

5000

3900

2900

1900

1000

00

$348^{\circ} 39' 10''$
 348.34

Undulating
Sand
Spurfs

Sand hills

Spurfs

$167^{\circ} 27' 40''$
 $167^{\circ} 51' 55''$

to P. Clough's line



Indian Ocean

low sand hills

15800

15100

14100

13100

12300

11300

10300

9500

AGB
7/9/12

about 2 miles

(14)

Truck

Sandy

Spurfs

Highland hills

GPB
7/9/12

Ocean

Indian

Coast Hill
Light House

Coast Hill

73° 21' 20"
18° 20' 35"

17

50 24100
23800
23000
22950
22400
22000
21000
20000
19300
18300
17900
17500
16500

High
Sand
Hill

38°

Swire fence
South boundary of Clontar Station

Undulating

Sand

Spur

GPB
7/9/12

Coast Hill

Could not identify any old mark here.

High Sand Hill

15500

B post 36

Spur

15000

14000

13000

11900

Spur

Sand

10900

10600

78° 32'
46° 40'

prominent mark on distant hill probably ant hill

9600

400

9000

High Sand Hill

8000

Ocean

AJB
9/4/12

Indian Ocean

100 10000

18

11500

11000

9400

400 8700

8600

300 7500

7300

6700

250 5800

4800

Sand
hills

Undulating
Sand
Springs

Sand
hills

AJB
9/4/12

Indian Ocean

200 4000

200 3200

200 2500

1400

800

Undulating
Country

Small
rain shed.

Sand
hills

Sun.

Obs. 9 am. 8/4/12

Latitude $22^{\circ}54'20''$

$\begin{matrix} * & 101^{\circ}35'20'' \\ * & 101^{\circ}39'20'' \\ * & 280^{\circ}58'40'' \\ * & 281^{\circ}2'40'' \\ * & 100^{\circ}29'0'' \\ * & 100^{\circ}33'0'' \\ * & 279^{\circ}47'20'' \\ * & 279^{\circ}51'20'' \end{matrix} \left\{ \begin{matrix} \text{alt } 30^{\circ}53'30'' \\ \text{alt } 58^{\circ}19'30'' \\ \text{alt } 32^{\circ}26'30'' \\ \text{alt } 56^{\circ}44'30'' \end{matrix} \right.$

R. 2360° Return 360°
(very windy)

325°53'44"
G.B.

High
Sand
hills.

25840

25240

24800

24100

$\frac{629.21}{157^{\circ}20'15''}$

AJB
9/4/12

To Hand Hill Beacon
 $\frac{4/85.57.20}{21^{\circ}24'20''}$

19

GAB
Jat/1r.

Ocean

Ind in

Low rocky cliff with sandhills above

500

11900

Sandhills

Sandhills

11600

Spinks

10600

9600

700

8900

Spinks
flat

7400

500

6900

6600

400

6000

5700

Spinks

400

4600

3500

GAB
Jat/1r.

Ind in Ocean

St. Johns Lighthouse

600

2500

400

1400

Sandhills

700

Undulating

00

357° 38' 15"

357° 38' 30"

100

14150

13850

Twin Hill

Old pole found
and re-erected;
position very
uncertain.

617.3
154° 15' 45"

600

12900

Mo. Mud Hill Beacon

154° 17' 20"
39° 49' 20"

12200

600

11500

6+1.16.20
160.19.6"

20

800

28200

(16)

Sand hills

17500

27300

O.P.B.
1912

1100

26200

25200

24500

Sand
hills

24000

North Hill

old pole found on
ground
position uncertain
re-erected as shown.

M. 80.9
11.0 80.9

23400

AB post.

22300

22200

21200

21100

Conical hill at end of range

This is the
"Remarkable Hill"
shown in litho
in east portion of
map 683
96.

G.P.B. in
sand hills

O.P.B.
1912

150

10200

20100

High
Sand
hill

250

19200

Sand hills

15100

Sand
hills

17300

700

16300

15400

14300

13700

13300

12300

500

11900

Sand hills

Indian Ocean

Continued in F.B. 59.

A.B.
9/4/12

700

1600

A.B.
9/4/12

Indian
Ocean.

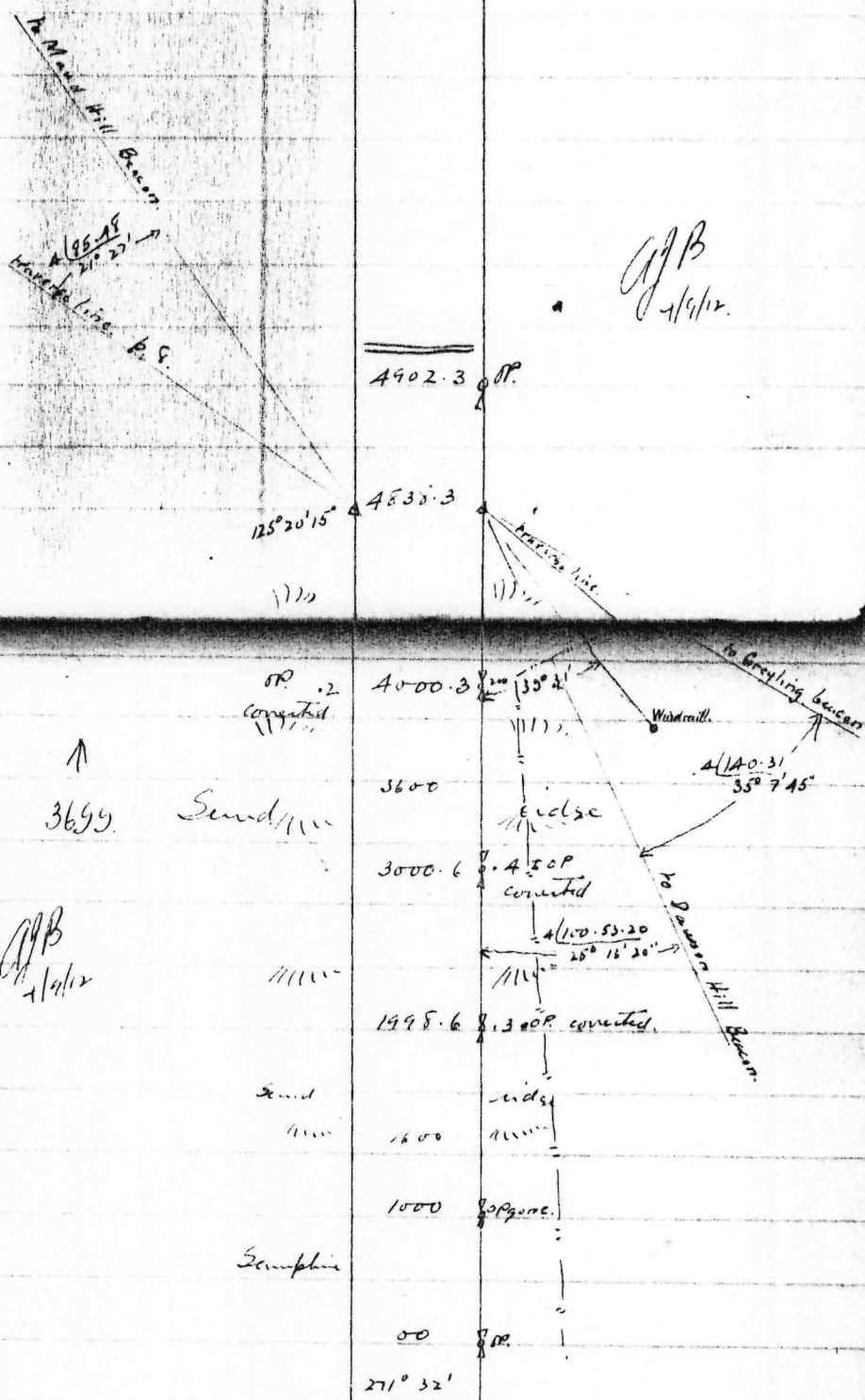
Sand
hills

1100.

Sand
Hills

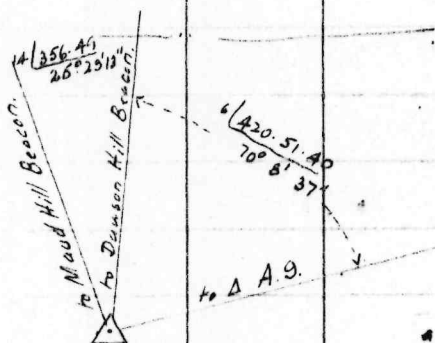
00

331° 51' 20"



Portion of north boundary of A 3699
re-ranged.

Searching for Trig station A10, I came on a heap of brushwood tied together with wire which I took to be the old station. The wood however was dead and had spread out flat so that the station was not visible from any distance. I erected a pole about 7 feet high with a beinut tree fastened to the top. The station is on top of a high sand hill and no stone was available to build a cairn.



Pole at A9 not visible. Cairn and I were doubtful about the cairn.

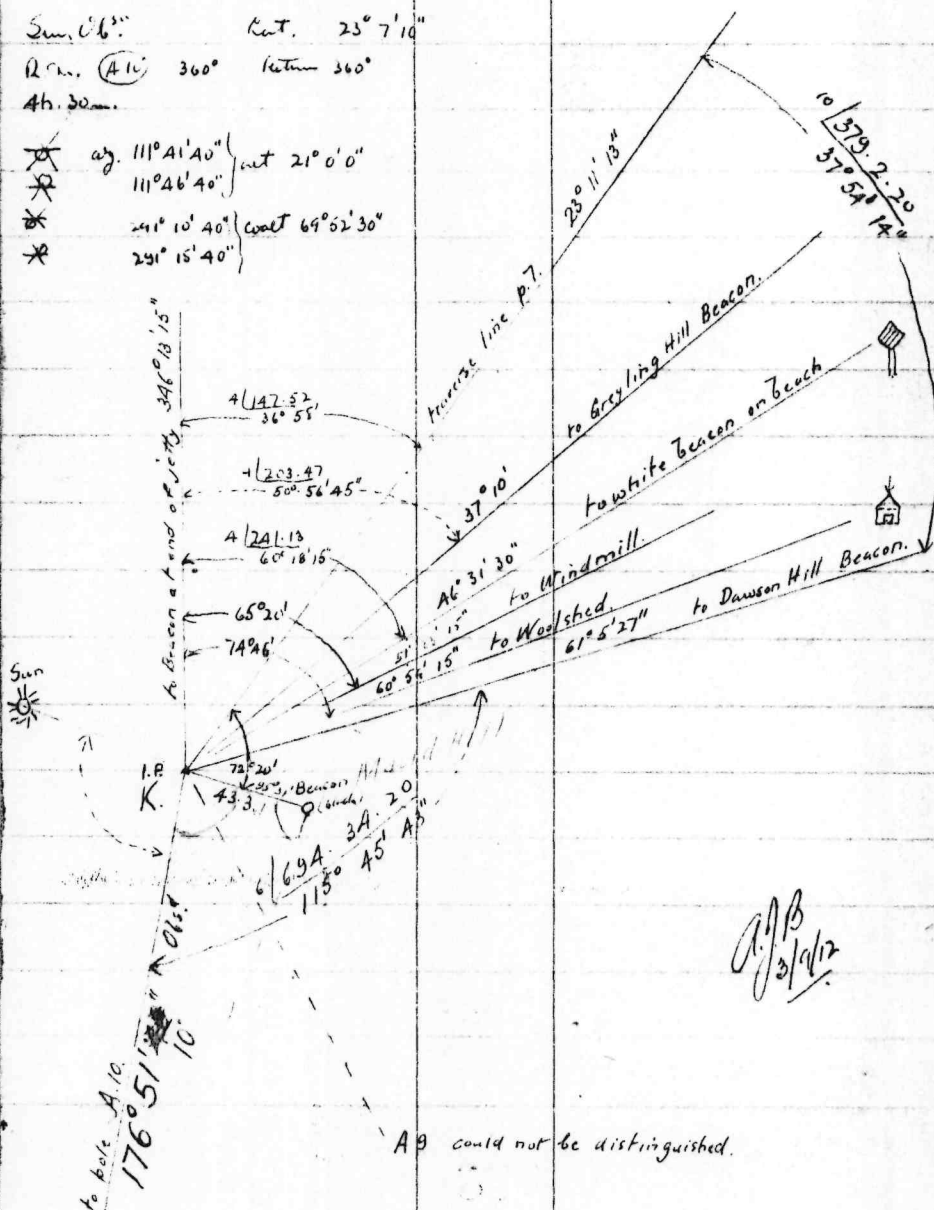
Could not distinguish A11.

A.J.B.
2/9/12.

Angles at Mand Hill.

Sun. 16.5" Cut. 23° 7' 10"
 Rm. (A10) 360° return 360°
 4h. 30m.

* az. 111° 41' 40" } cut 21° 0' 0"
 * 111° 46' 40" }
 * 241° 10' 40" } cut 69° 52' 30"
 * 231° 15' 40" }



A.J.B.
3/9/12

A9 could not be distinguished.

This is to certify that these field notes have been taken in the field by me personally (or under my own personal supervision, inspection, and field check), and are the actual results of the observations and measurements.

Arthur J. Bennett

Licensed Surveyor.

Date, *9/9/12.*

INDEX.

Page 1. Connection from $\uparrow 3699$ to anterior line on track

from Grand Landing to Winning Pool.

instructions in Corr. $\frac{6292}{08}$.

6. Special Lease $\frac{1163}{152}$. 1 acre.

Traverse of Indian Ocean from Grand
Landing Plan $\frac{91}{100}$.

23. Resurvey of further north boundary $\uparrow 3699$.

24. Angles at Grand Hill

Angles at Δ A 10.

