

FIELD BOOK No.

Surveyor *A. J. Bennett*

Containing Surveys in the
Districts *Lyndon*

Date *June - August*



SEP 10 1912

Table of Versed Sines for each 10 Minutes from 2° to 25° 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	2·13		50	5·93
4	...	·24	12	...	2·19	20	...	6·03
	10	·26		10	2·25		10	6·13
	20	·29		20	2·31		20	6·23
	30	·31		30	2·37		30	6·33
	40	·33		40	2·43		40	6·43
	50	·36		50	2·49		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	17·76		40	25·30
	50	11·67		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			

A.B.
15/6/12

1

1000

00

355.6.30

$\frac{673.55}{168^{\circ}28'45''}$

9900

9500

8600

7600

7400

6600

5600

4500

3700

Sand
hills

2800

1700

1000

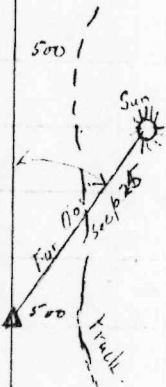
6°37'52" 025d



Plain
Country

Spinifex

Mullockbush



680

94

Sec FB 53
p 22

00
6°37'
6°37'45"

(5) FB 53.

Traverse of Indian Ocean

Con

12702
05.

AB 17/6/12

ceen

Indiat

300
40
50
100
400
400
200
100
600
800

CLIFF

CLIFF

2

1700

1000

00

343.42

1900

1000

00

18°35'15"

18700

18400

18000

17500

17400

16500

16200

15200

14200

13300

13000

12000

11000

10000

9300

8300

7800

7300

6300

5700

4700

3700

2700

1700

1000

533.0
133°15'0"

622.5
156°31'15"

Sand hill

713

94

AB 15 Jarrak post
171 cairn. m.c. 41.1.0

Mulkebrook

713

94

pr x
24/6/22
FB. 53.

X 25°40'

See FB 57
p. 1.

Lense
Boundary.

94°55'30"

stone pointers.

FB 57
p. 2.

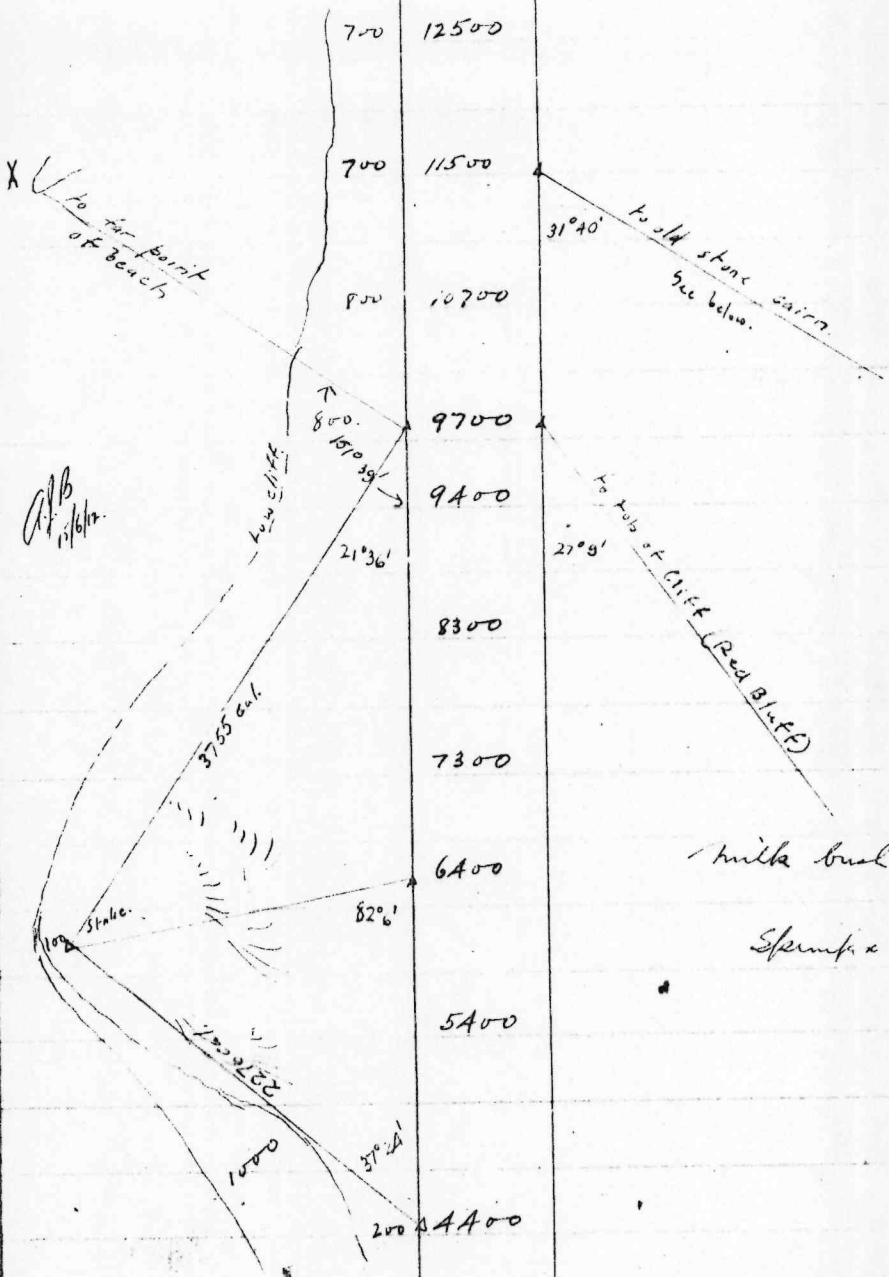
Mulkebrook

680

94

680

94



Indian Ocean

milkbush

A. J. B.
16/6/12x V to point of beach
see 9100 p. 3.

Indian Ocean

500	17300
300	16700
300	15700
20' 33"	14600
1000	13600
	13100
	12100
1200	11100
	10200
1000	9200
900	8200
800	7500
	6800

673.54
168° 28' 30"

fence

A. J. B.
16/6/12

Indian Ocean

	5900
	4800
	4700
	4400
Point Sand hills	
350	3400
100	3020
150	2400
200	2000
600	1000
31° 33' 45"	

Knee
5 m. from point

B post (14m)

656.19
169° 4' 45"

700	13700
	13500
	12500

C

5

4100

3100

2000

1000

353° 13' 15"
361° 13' 15"

15400

15200

14500

14327.8

14200

13200

12200

11200

10550

9900

8800

7800

6800

5800

5100

4100

4000

3700

2650

2000

1100

00

16° 54' 30"

1800

1200

1000

00

43° 5' 15"

913
16/6/12

714
94

Homestead
Flernington (Nichol).
Station (not visible from
mountain top)

Sec F.B. 57. p. 14

106° 47' 30"

1654
2
24

713
94

913
16/6/12

AB post
whiting
Laethol

713
94

1000
1/4
1

641.15
160° 18' 45"

Lease boundary

Drift Sand hill
18° 50' magnetic

Drift Sand
mills

Indian Ocean

Indian Ocean

Beach

100

1000

00

43° 5' 15"

9B
8/8/12

1623.13
155° 51' 0"

6

2000

(19)

34° 54' 45"

1900

(13)

1655.25
163° 51' 15"

1000

00

18° 46' 15"

13700

(12)

1674.23
168° 35' 45"

Drift Sand Hills

13000

Sackbrush

12500

Spurges

11000

10000

9000

Sackbrush

8000

Spurges

7000

change to line
with 705

Ref

5000

(18)

5869

Fence
6 wires
Transverse

5864.9

Sec F.D. 57 p 20

5100

98° 51'

9B
16/6/12

Indian Ocean

4100

3500

3100

2000

Rocky

1000

00

7° 22' 15"

1686.44
171° 41'

1500

(11)

1000

Plain
country

00

15° 40' 45"

4300

(10)

1616.10
161° 52' 30"

4100

Drift Sand Hills
very prominent

a/b
8/12

Gnarraloo Bay.

$\frac{1556.58}{146^{\circ} 44' 30''}$

4400

(18)

3600

3500

Trails.

2500

2000

Salt Pans.

1000

00

Landing place.

$89^{\circ} 48'$

7200

P.T.

$\frac{1577.47}{149^{\circ} 27' 15''}$

6300

46°

Mottummi Camp.

5300

33°

4300

Spur.

4000

3300

3000

2000

1000

00

$51^{\circ} 15' 45''$

940

$\frac{602.31}{150^{\circ} 37' 45''}$

00

$24^{\circ} 54'$

2450

$\frac{663.41}{165^{\circ} 57' 15''}$

2000

Windmill.
(Barleish water)

1000

00

$10^{\circ} 51' 30''$

a/b
8/12

Sandy point

Sand field

$49^{\circ} 30'$

Cliff Sand field

Cliff Sand field

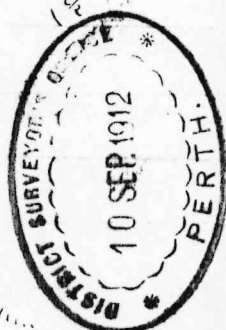
GJB
10/1/12

Indian Ocean

$\frac{657.18}{164^{\circ}44'30''}$

6597

AB
20 post



6400

5300

4500

3500

Sand hills

Windmill Well
(Brackish)

$38^{\circ}40'$

2500

1900

900

00

$31^{\circ}46'45''$

$\frac{642.31}{173^{\circ}2'45''}$

3200

Diff sand hills

2400

1900

ENCE SWIPES

1600

Sand hills
Sperms

600

00

$38^{\circ}34'30''$

$\frac{665.26}{166^{\circ}21'30''}$

2700

(20)

2000

1000

00

$52^{\circ}18'30''$

Sand hills
Sperms

2400

(19)

2600

1600

1000

600

00

$56^{\circ}32'$

Girralda Bay

$\frac{705.7}{175^{\circ}46'45''}$

Sun.

For Obs. see p. 24.
 $52^{\circ}18'25''06.8''$

H.W.M.

pracks

AJB
10/6/12

0 0 0 0 0

Ind 1 0 0 0

AJB
10/6/12

0 0 0 0 0

0

0

0

0

0

0

0

0

0

0

2640

2100

1700

1000

500

00

341° 2' 45"

11800

11700

10600

9800

9100

9000

8700

7700

7600

7100

6100

5000

4000

3000

2000

1800

700

00

16° 35' 45"

(582-47)
145° 41' 45"
at 2000

Well -
which will
(not result
from tunnel)

Drift sand
hills

Drift
sand

Drift

Drift
sand

Drift sand
hills

Drift

Quartzite
cliff

Scrubby
sand
hills

A.B.
12/14/12.

$\frac{612.57}{128^{\circ}14'15''}$

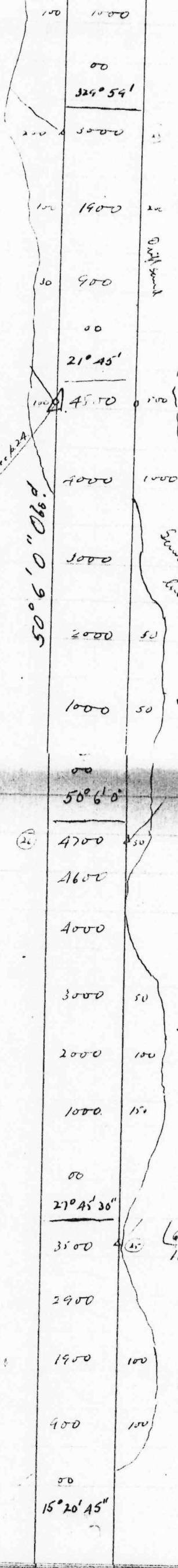
$\frac{606.36}{157^{\circ}39'}$ Post AB
21.



For Obs. see 424

50° 6' 0" Obs.

10



Drift sand

Cliff
Small hills

Drift
Sand
hills

Drift
Sand
hills

A.B.
12/14/12.

Indian Ocean

$\frac{630.36}{157^{\circ}39'}$

$\frac{670.19}{167^{\circ}34'45''}$

15° 20' 45"

11

5700

Sandy

Spurfs

550 4700

1100 3700

1100 3400

120 2700

350 1700

200 1000

200 50

8° 23' 30"

1625.53
156° 25' 15"

1700

1400

800 1000

50

31° 55' 15"

1000 6300

5700

Drift
Sand
hills

4750

4500

200 3500

100 3000

300 1000

500 1000

50

14° 6' 15"

2000

100 1000

1625.48
162° 10' 45"

62000

Sand
hills

543.31
135° 52' 45"

AGB
12/18/12

AGB
12/18/12

12

$\frac{1570.4}{147^{\circ} 32' 15''}$

AJB
12/18/12

Clear

To summit of hill

Sand & spindles

300 3700
200 3000
2000
1500
500
00

$66^{\circ} 40' 15''$

3500

$\frac{1576.31}{149^{\circ} 7' 45''}$

3000

2000

1000

00

$35^{\circ} 48' 15''$

600

$\frac{1656.30}{164^{\circ} 21' 30''}$

00

$51^{\circ} 34' 45''$

600

00

$39^{\circ} 44' 30''$

3200

$\frac{1553.46}{138^{\circ} 24' 15''}$

2400

1400

600

440

400

00

$357^{\circ} 4' 15''$

6100

$\frac{1775.4}{168^{\circ} 47' 10''}$

5700

Indian Ocean

H.W.M.

Drift Sand hill

$\frac{1668.16}{167^{\circ} 3' 45''}$

Well & Windmill (Bruckel)

210

1795'

32

C. J. B.
10/18/12
1000 ft. base
M.M.A.

7150 (30) 76° 31' 10"

8200

7200

6200

5700

4700

4000

3600

2600

1600

1000

800

00

3° 45' 30"

8400 (35)

7800

6800

5800

4800

4500

3800

3750

3000

2000

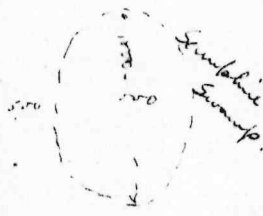
1000

00

34° 12'

Sur. *
For N.S. sub 24
Walter Windmill
0.5 2500
"Chingari"

Drift
Sand
hills



Truck

Drift
Sand
hills

X
Sand
drift

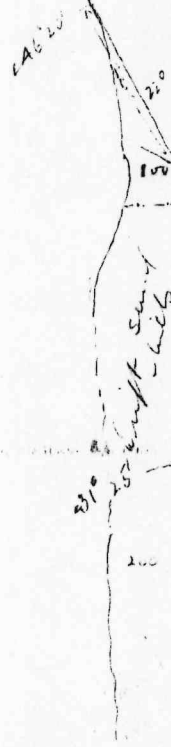
Truck
Spencer

Drafting
Yards.

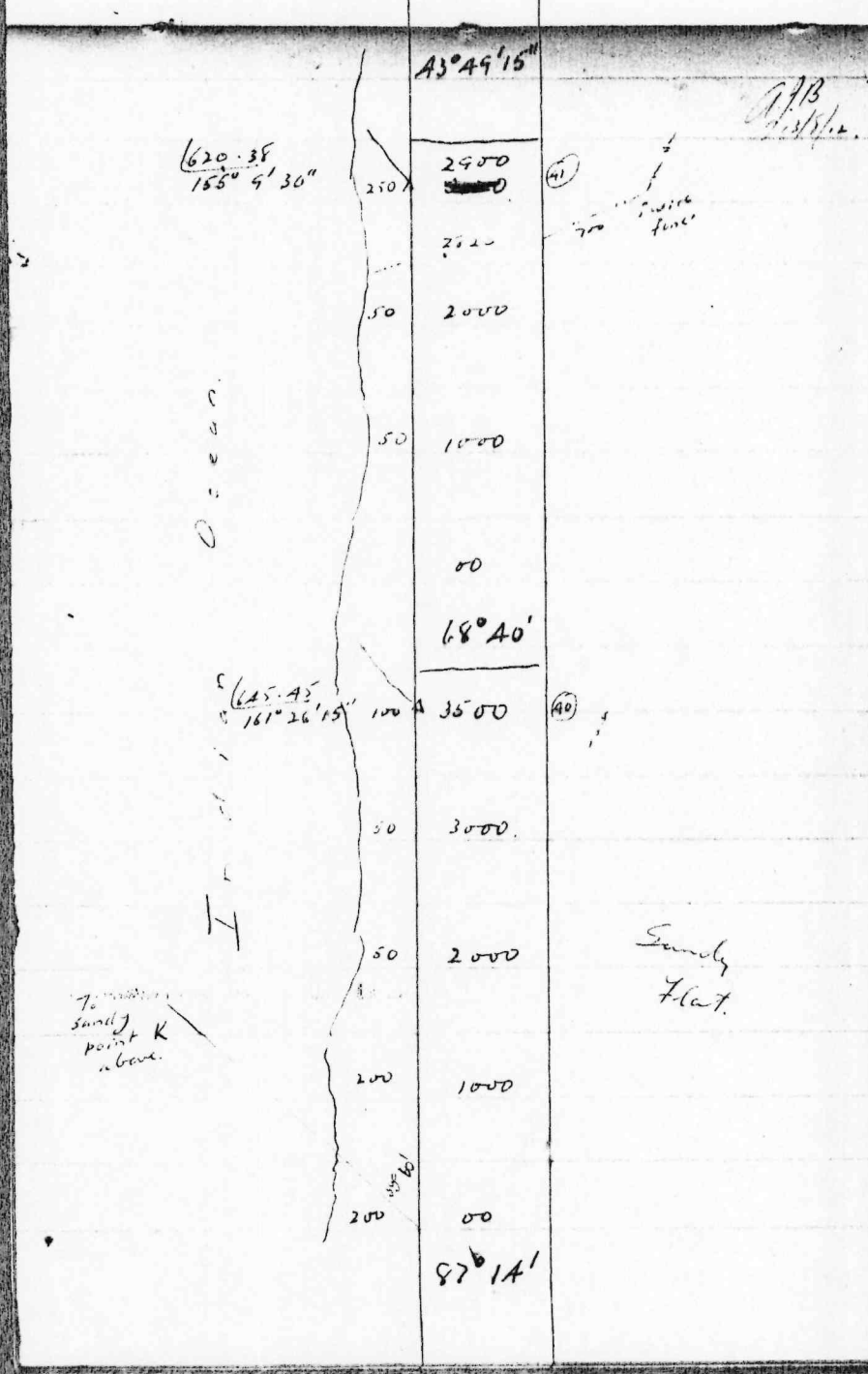
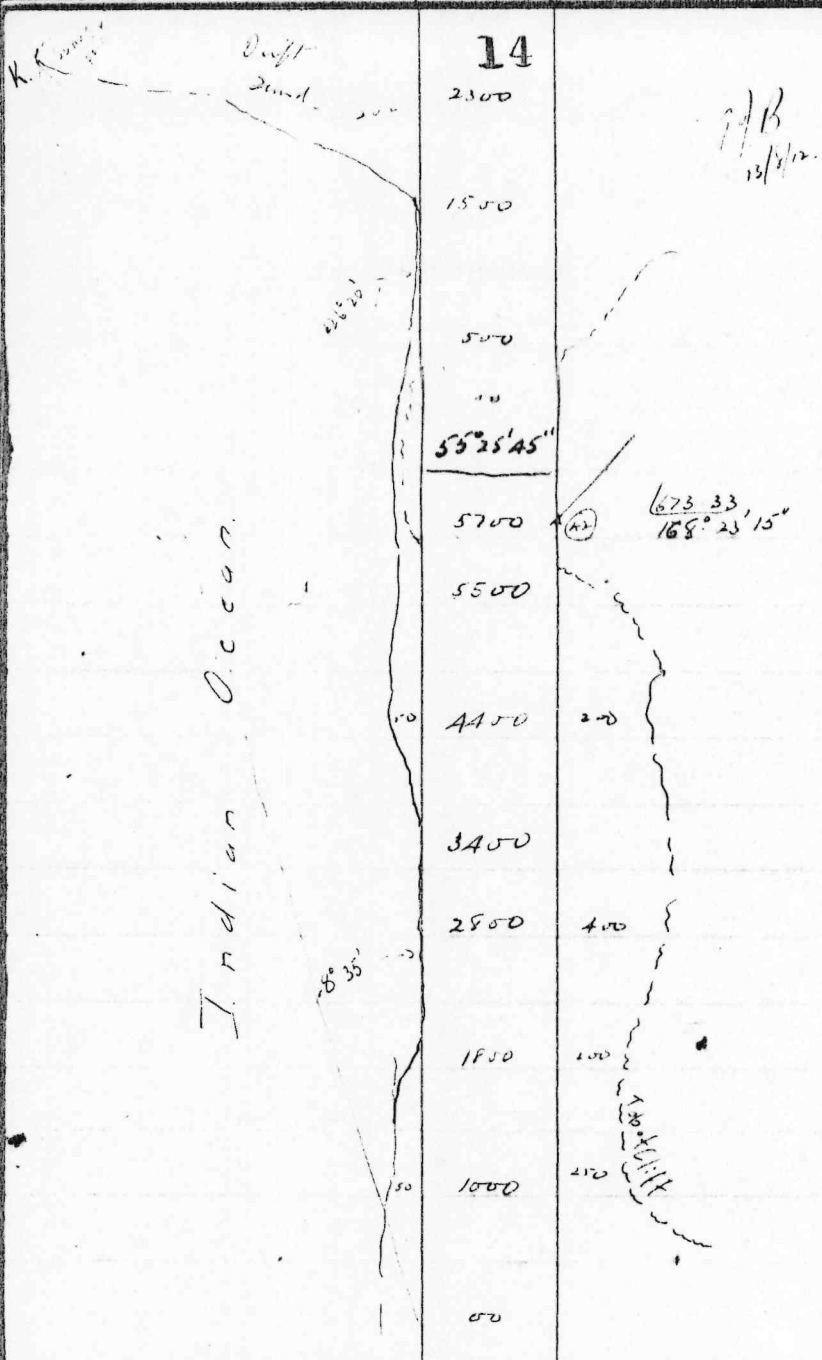
"6" Fine

Post
AB
22. Sandy

Spencer



1000 ft.
1000 ft.
1000 ft.



GJB
13/11/12

Indian Ocean

15

120	3700
100	2700
	2100
	1800
	2000
	1500
	00
	64° 50' 15"
100	5400
100	4300
100	3300
150	2300
300	1300

(45) $\frac{103.38}{175^{\circ} 54' 30''}$

Sandy

GJB
13/11/12
Indian Ocean

Drift Sand hills

200	300
200	500
200	65° 45' 15"
200	6600
	6300
	5300
	4300
	3600
	2600
	2000
	1000
	00
	22° 4' 30"
	3000
	2300

Sandy
Rust

(44) $\frac{545.36}{136^{\circ} 24' 0''}$

1200

400

$\frac{586.56}{146^{\circ} 44' 0''}$

Drift Sand hills

AB post
28
400

14/3
14/8/12.

16

1
2
3
4
5

655.24
172° 3' 15"

Bar at
mouth of creek

1
2
3
4
5
6
7
8
9
10
11
12

100	3400
100	3100
100	2800
350	1500
00	
	58° 30' 45"
250	10400
	9900
	9800
	9500
	9100
200	8900
250	7900
300	6900

AB
24 post.

Creek
Salt Pool

Sandy

14/3
14/8/12.

1
2
3
4
5
6
7
8
9
10
11
12

For Obs.
see p. 24.

61° 23' 30" 060"

Sun

100	5900
50	4900
	4000
50	3000
100	2000
200	1000
00	
	61° 23' 30"
200	4800
	4700
	3700

686.16
171° 34' 0"

(40)

Sand
Sandy.

Cliff

High
11/11

Indian 0-547.

	17
600	1000
	00
	18° 26'
300	9200
	8400
250	7400
	6600
200	6300
150	5300
100	4600
50	3600
0	2600
	2000

640.23
140° 5' 48"

Diff. 2nd hill

11/11/12

Indian 0-547.

650. A
162° 31' 0"

	1000
	00
	36° 1' 45"
	9400
	9200
	8200
250	7300
200	7200
150	6500
100	5900
50	5300
0	4400
	3400

Bluff point

Iron pipe in rock
12 feet high
Star mark. 68.

Rough

1826
7200

15.11.17
144° 14' 15"

13000

78° 0'

times run
2000 sail
Hawaii

3000 stones merely
a few stones
loosely put together.
A/B
12/15/12

O C E A N



Sun for 08.00 sec p. 22.

17 18 19 17

38° 25'

89° 35' 45"

1000

13000

(548.42
149° 40' 30"

3700

2700

1900

700

00

59° 20' 30"

200

1400

(682.39
170° 34' 45"

1100

Drift
Sand

50

50° 0' 15"

A/B
12/15/12

Indian Ocean

Drift Sand hill

600

5500

(51)

(420.17
155° 0' 15"

5100

4100

3100

2400

2000

1000

00

25° 0' 30"

Sandy point

(596.15
149° 4' 30"

3200

B

25 feet
6 wire fence stands
1000 stake stands

3100

2500

300

2000

1500

Drift

1500

Indian Ocean

6.7.12
17/8/12.

Indian Ocean

Low reef

394°
E. 100

Eden
C. 100

19

2600
2100
1600
1400
1300
1100
800

30° 31' 15"

5900

5000

4000

3000

2000

Well - Windmill.

"Bulburli"

(Good water)

29° 10'

220'

(57)

Plain
Semb
Country.

6.7.12
16/8/12.

Indian Ocean

Reef along beach

200

200

200

2000

00

58° 38' 30"

2900

2000

1000

00

41° 0'

2000

2000

1800

1000

00

53° 58' 30"

(56) 649.25
162° 21' 15"

Drift sand.

AB
26 post.



Sandy beach

Cliff

668.7
167° 1' 45"

61/B
11/12

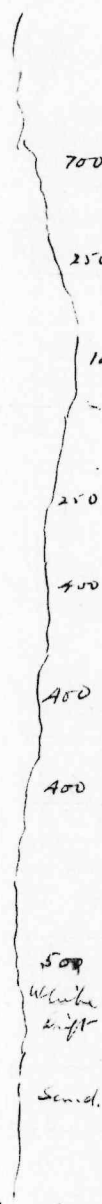
20

to Cairns AB

ce 97

19 d 197

J



10400
7350
8250
7200
6750
6200
5300
4300
3500
2900
2200
1300
300
50
9° 22'

Drift
sand
hills

wire fence

Drift sand
hills

667.0

166° 45' 0"

300

4200

AB

27

post

61/B
11/12

ce 97

cliff

635.7

158° 46' 45"

3700
2700
1400
700
00
22° 37' 15"
2900
2400
1400
10000

43° 51'

5100

4600

3600

2600

Plain
Scrub
Country

(59)

(58)

666.40

166° 40'

Drift sand
hills

Low sandstone cliffs
very broken

Indian

A/B
19/8/12

Reef from beach.

Clear

686.23
171° 35' 45"

Indian

21

600	6900
	6600
600	5600
	5500
400	4400
100	3400
	3000
	2000
	1000
90	
	7° 48' 45"
100	5200
10	4700
10	4000
	3000
	2000
10	1000

Clear

50
50

100

A/B
17/8/12

686.46
143° 26' 30"

Sun.  For obs. see p. 23.

Each has water in
in water, sand bar
at mouth.

Clear

Indian

16° 13'

1000	1700
	1500
0250 53° 46' 30"	1000
	500
	53° 46' 30"
100	3400
	3000
	2800
300	2500
	1500
200	1000
	500

(6)

Sandy
ridges

10

(2)

640.52
172° 38'

Sandy
sand
hills

46° 24' 45"

1200	
	11300
500	11000
	10400

(6)

571.45
142° 57'

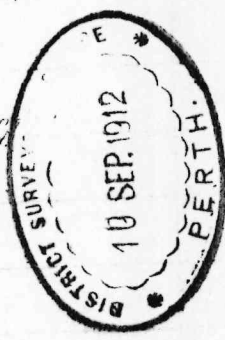
Sand
hills

19B
14/8/12

22

12700
12500
11950
11650
10950

500 ☐ Homestead.
Warroora Station



10750
9850
8850
7750

Office shed

Scrub

6700
5700

Spunk

4550
4700

2000
Fence
Swine fence

3700

Ull
Rumstone

2700
2000

Spunk

1000

00

19B
14/8/12

Cairn found in good order (pole broken) Mahant

Cairn A. 13.

177° 16' 15"

3700

(272.49
69° 12' 15"

3689.6

3400

2400

Spunk

1400

1100

found Mahant
remained.

800

trough

1500
00

Fence

65° 25' 30"

2900

(66)

2100

1100

00

134° 24' 15"

Post AB 28

8600
8594
8000

AB 28

(213.35
53° 24' 30"

6900

Small hills

Indian Ocean

Sun Obs. at station (53) p. 15. Aug 14th 1912

Latitude 23° 33' 0"

R.M. 360°

Return 360°

4 p.m.

+	ay	61° 2' 20"	}	alt	25° 17' 0"
+		61° 12' 0"			
+		240° 28' 20"	}	coalt.	65° 25' 0"
+		240° 37' 40"			

Line bearing of R.M.

239° 20' 35"

239° 20' 32"

23/10/12
C.B. PI page 10Sun Obs. at station (63) page 21. Aug 17th 1912.

Latitude 23° 29' 0"

R.M. 360°

Return 360°

4 p.m.

+	ay	66° 51' 20"	}	alt	27° 16' 40"
+		67° 1' 20"			
+		246° 15' 0"	}	coalt	63° 26' 0"
+		246° 25' 20"			

Line bearing of R.M.

233° 46' 30" 23/10/12
C.B. PI page 10

Sun Obs. at 13600. Island.

Aug 19th 1912.

Latitude 23° 29'

R.M. 360°

Return 360°

4 p.m.

+	ay	301° 27' 40"	}	alt	25° 58' 20"
+		301° 38' 0"			
+		120° 53' 40"	}	coalt	64° 41' 40"
+		121° 4' 20"			

Line bearing of R.M.

357° 16' 15"

357° 16' 33"

23/10/12
C.B. PI page 10

Large well

13660

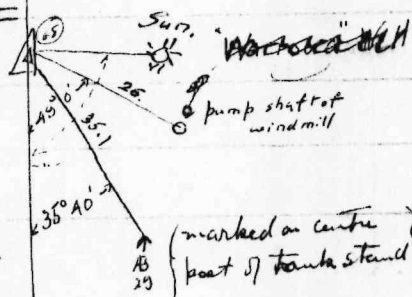
13640

20 Small well.

13600

12900.

"Warroora"



300 yards per (flask).

177° 16' 15"

Sun Obsⁿ. at station (20) p. 8. Aug 8th 1912.Latitude $23^{\circ} 45' 40''$ R. M. 360° Return 360°

Line 3-30.

†	avg.	$73^{\circ} 58'$	}	act.	28°
†		$74^{\circ} 5'$			

†		$253^{\circ} 17'$	}	coalt.	$61^{\circ} 45'$
†		$253^{\circ} 24'$			

Line bearing of R. M.

 $232^{\circ} 18' 25''$ $232^{\circ} 18' 54''$ 25/10/12
C.B.P.I. page 9Sun Obsⁿ. at post B. p. 10. Aug 10th 1912.Latitude $23^{\circ} 42' 0''$ R. M. 360° Return 360°

Line 4-30

†	avg.	$65^{\circ} 21'$	}	act	$20^{\circ} 35' 20''$
†		$65^{\circ} 32'$			

†		$247^{\circ} 44' 17''$	}	coalt	$70^{\circ} 16' 40''$
†		$248^{\circ} 0'$			

Line bearing of R. M.

 $230^{\circ} 6' 0''$ $230^{\circ} 6' 10''$ 25/10/12
C.B.P.I. page 9Sun Obsⁿ. at 4000 page 13. Aug 12th 1912.Latitude $23^{\circ} 38' 0''$ ✓R. M. 360° Return 360°

Line 4-30.

†	avg.	$114^{\circ} 13'$	}	act	$20^{\circ} 54' 20''$
†		$114^{\circ} 25'$			

†		$293^{\circ} 43'$	}	coalt	$69^{\circ} 46' 20''$
†		$293^{\circ} 55'$			

Line bearing of R. M.

 $183^{\circ} 45' 25''$ $183^{\circ} 45' 25''$ 25/10/12
C.B.P.I. page 9Sun Obsⁿ. at 4000. page 16th - Aug 13th 1912.Latitude $23^{\circ} 35' 20''$ ✓R. M. 360° Return 360°

Line 4-pass.

†	avg.	$59^{\circ} 35' 20''$	}	act	$25^{\circ} 29' 40''$
†		$59^{\circ} 45' 20''$			

†		$239^{\circ} 3' 0''$	}	coalt	$65^{\circ} 11' 0''$
†		$239^{\circ} 12' 40''$			

Line bearing of R. M.

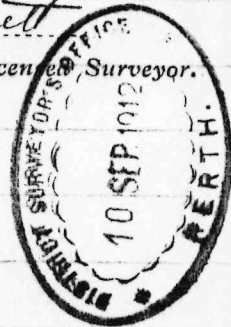
 $241^{\circ} 23' 30''$ $241^{\circ} 23' 47''$ 25/10/12
C.B.P.I. page 10

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, *20/8/12.*



INDEX.

Traverse of Indian Ocean.
Lynda District

Plains. 7 1/2/300 7 1/300 94/300.

Sun Obs. Taken at 450 p.m. 15-6-12.

Latitude by scale. 23° 56' 50"

R. M. 360° Return 360°

<i>⊗</i>	<i>7h. E. by</i>	<i>42° 17' 30"</i>	}	<i>alt 22° 59' 30"</i>
<i>⊗</i>		<i>42° 11' 30"</i>		
<i>⊗</i>		<i>221° 36' 0"</i>	}	<i>coalt 66° 21' 0"</i>
<i>⊗</i>	<i>9h 12m.</i>	<i>221° 30' 0"</i>		

Line bearing of R. M.

6° 37' 35"

6° 37' 52"

6° 37' 35"



25/10/12

EB P1 page 9