

57

FIELD BOOK NO.

Surveyor *A J Bennet*

Containing Surveys in the
Districts *Lydon*

Date *July 1884*

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	1·94		20	5·64
	30	·19		30	1·99		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	2·35		30	6·33
	40	·33		40	2·43		40	6·43
	50	·36		50	2·50		50	6·54
5	...	·38	13	...	2·56	...	...	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	...	23·89
	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			

Indian

Occur.

to Tip of Cliff
Red Bluff.

3700

3550

3500

2900

2400

1400

1200

1000

270° 2'

7800

Low
CliffPost in cairn
stone pointers

ridge

ridge 713

94

ridge

ridge

ridge

hickory

transverse line

Post marked
stone pointersJ.B.
12/12

680

94

Sand

Sand

1829.42
44° 55' 30"Sec F.B. 54
page 2North Boundary of Pastoral
Lease 680/
94Lynden District
Plan 71/300.

Undulating
country
ridges running
north & south.

2000'

23600

22500

21400

86 peg & trenches.

20500

Gravel

19600

Sandy

713

18600

680

94

17500

94

Sandy

16500

75
peg & trenches.

hard mallee

15400

14300

13300

Sand

Spinifex

12500

84 peg & trenches

12200

11100

to old stone cairn

with
Sand
267' 40"
66° 56' 30"

10060

ridge

9200

8500

83 peg & trenches.

8300

Sand

7300

Spinifex

6300

5500

Mulleebah

713

4500

82 peg & trenches.

680

94

94

Sandy

3500

Spinifex

2500

2300

truck

1500

1000

to old stone cairn

240' 22"
65° 5' 30"

F.B. 54. p. 2.

0

00

90° 2'

peg
stone pointers.



A.B.
1/11/12

Soil sandy soil

Knobs

713
94

Wangye

Sun

Poplar

Poplar

Undulating country
numerous small
steep ridges

Poplar or
matured bush

Semb.
713
94

Semb.

Ob.

For 02.5
50° P. 6.

89° 58' 20" 02s.

89° 55'

90° 0'

52100

51400

50300

49300

48300

47300

46600

45600

44600

43400

42500

41400

41600

40500

40300

39260

38400

37400

37500

36500

35400

34340

33600

33000

32400

31400

30400

29300

28500

28100

27700

26700

25600

24600

23600

713
peg & trenches

Poplar

Spruce

680
94

712
peg & trenches

Poplar

Sandy

711
peg & trenches

Semb.

Spruce

710
peg & trenches

Semb.

Wangye

709
peg & trenches

680
94

708
peg & trenches

Semb.

Spruce

707
peg & trenches

5. Obs. 45600 CT 45600 b.3.

1A-7-12.

Earth by side. 23° 55' 20" S.

R.A. 360° R.A. 360°

40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"
40° 17' 20"	40° 22' 0"	213° 37' 40"	213° 41' 40"	39° 2' 0"	39° 2' 0"

66° 13' 0"

23° 4' 40"

269° 58' 20"

269° 57' 43"

6/11/12 CB Pl. page 25

Sec F.B. 56. p. 22.

Part 27

669.27
16.7° 21' 45" ✓

18137

17572

16572

15572

14572

13572

12572

11572

10572

10072

9072

8172

7272

6272

5272

4272

4072

3072

2072

1072

100

50

266°

Marsh Hill Trig.

see note
p. 7.

Connection to Marsh Hill Trig (see next page)
 Traverse of Salt Lake (

Corr

12702
- 0.5A/B
22/12

Saltbush

Saltbush

Saltbush

Plain

Low range

Low Limestone Hills

A/B
22/12

Wangye

Limestone

Saltbush

Marsh Hill Trig.

see note
p. 7.

Note.

I found it impossible to pick out the caverns on Marsh Hill & K. 65 during the course of the Traverse up the lake.

On arrival at the point marked by the post ^x 27 I was enabled to pick up the bearings of the locality and I could then see what turned out to be the pole at the Marsh Hill Trig. I could not however see any sign of K. 65.

I proceeded to the Marsh Hill and found that the cairn had fallen down and the scrub had grown up round it. I had the cairn re-built ^{renewed} and the scrub cleared.

I was unable to get any shots at distant points from the Trig. On my arrival there on the 21st rain commenced to fall and continued all the afternoon and the following morning though the rain had cleared the atmosphere was very hazy so that distant objects could not be seen

AJB
22/7/12.

Obs. to Sun at X 28

23/7/12.

Saltbush 23° 37' 58" S.

R.M. (pole cairn X 29).

360°

Return 300°

Ap. m. 170° 48' 40" alt 29° 26' 40"

170. 54. 0

350. 9. 0 alt 66° 15' 20"

350. 14. 0

True bearing of R.M.

136° 51' 24"

136° 51' 23"

CB P. 1 page 19

30/10/12

1.1B 23/7/12.



Self 5.50 p.m.

(717.22 175° 35' 20")

post. X 28

2425.3

2000

1500

50

317° 17' 30"

4181

3781

2751

2300

1781

1081

100

50

316° 38' 0"

1995

1985

Pole of cairn X. 29.

Gorge.

K 65 p p 8

309° 4' 45"

Connection from K. 65 - X29 to

lake house.

C. J. B.
28/2/12

11

18350

Scrub

Poplars

17750

16850

4

15750

Sandy ridge

Poplars

15150

Scrub

Low sandy

14150

ridge

Scrub

13650

Scrub

713

94

12550

For Obs.
Sep. 25

714

94

3

11550

Sandy ridge

Dunes

10950

Scrub

713

25/2/12

9850

Sun.

8750

Poplars

2

8050

Wangye

tranches

7550

6550

5550

Sandy

ridge

5450

Dunes

713

27/2/12

1

4050

714

94

94

tranches

3050

hillsbush

2050

Scrub

Saltbush

1050

$\frac{1313.22}{78^{\circ} 20' 30''}$

post

100

269.57'

A.

3400

F.B. 56. p. 13.

Station
(15)

Salt Lake

X
68
41

Boundary between Pastoral Leases

713/94

714/94

76B
8/12/12

Van mallee

2700 2725

42900

42400

41400

40450

peg 8
franchises

39340

713
94

38350

Mallee

37300

Sand

peg 9
franchises

36300

35250

35000

34000

33000

Up

peg 8
franchises

32100

Sandy

31100

30100

Mallee

29100

peg 7
franchises

28100

27100

Poplars
Soul

26100

25100

peg 6
franchises

24200

23200

Mallee

22200

21200

peg 5
franchises

20200

20100

19300

18300

Donc sand

ridge

4-5 Sun
From 016ⁿ
Sec p. 22.

Kanara

ridge

714
94

Sandy soil

ridge

Sand

ridge Sandy

Poplars

Mallee

Limestone

714
94

Fair sandy soil

ridge

Sandy ridge

Mallee

G.P.B.
3/8/12

on the ridge
Sandy
thin

13
63200
63100

ridge
thin

62500

Dense scrub.

61400

thin

on the ridge
peg & trench
thin

60350

thin
thin

Poplars

54500

Scrub

713
94

on the ridge

55500

thin

thin

Dense

58200

Scrub

on the ridge

57100

thin

thin

56500

peg & trench
thin

55000

Dense

56200

Scrub

on the ridge
thin

54400

thin

hedges

53900

Scrub

52900

G.P.B.
3/8/12

on the ridge
peg & trench
thin

52100

thin ridge

Dense

52200

Scrub

Fence

51190

posts - 5 wires

51100

50100

hedges

Scrub

49100

Spinifex

713
94

peg & trench
thin

48100

714
94

on the ridge
Sandy
thin

47600

thin ridge

47100

46100

hedges

Poplars

45100

Scrub

peg & trench
thin

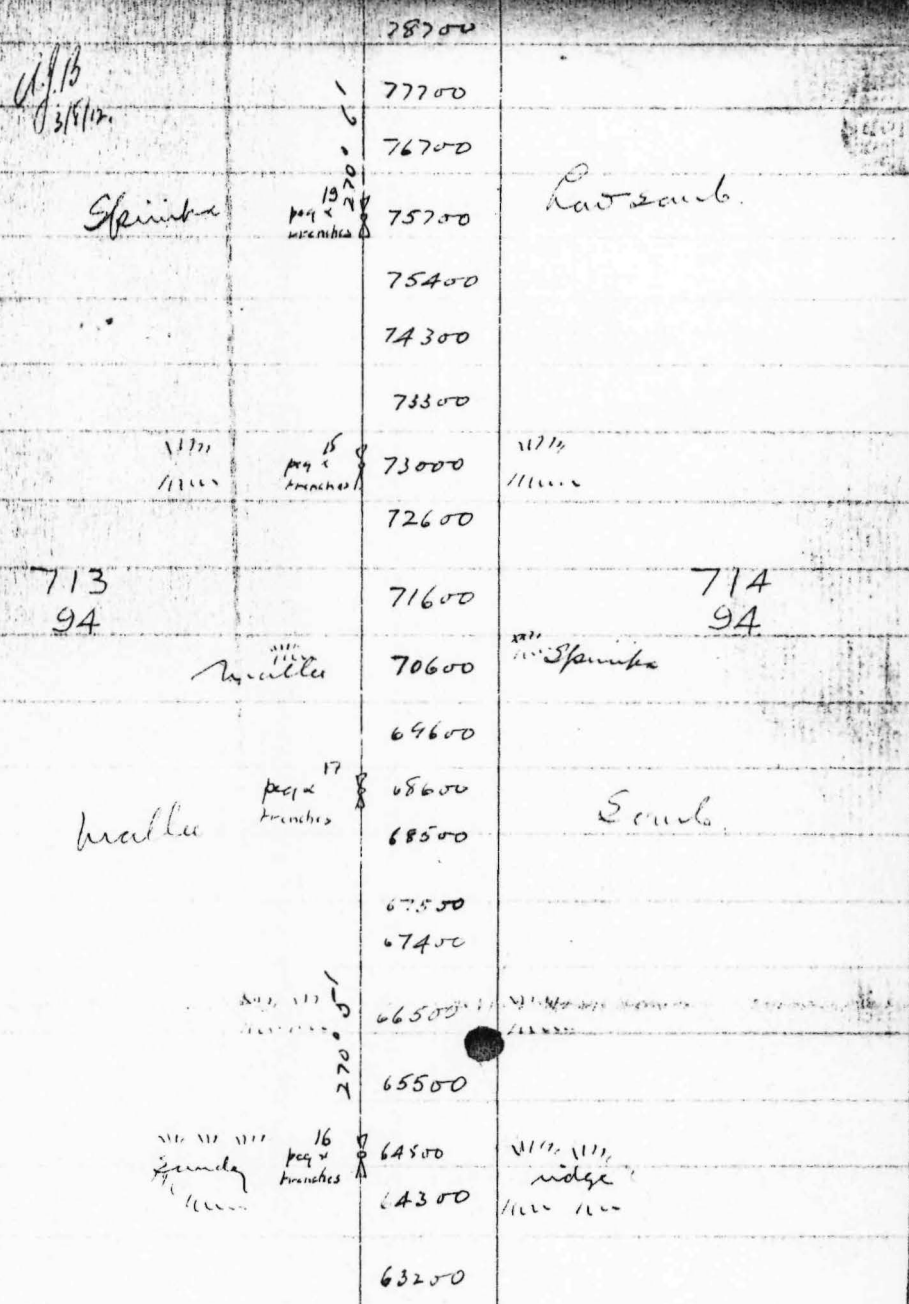
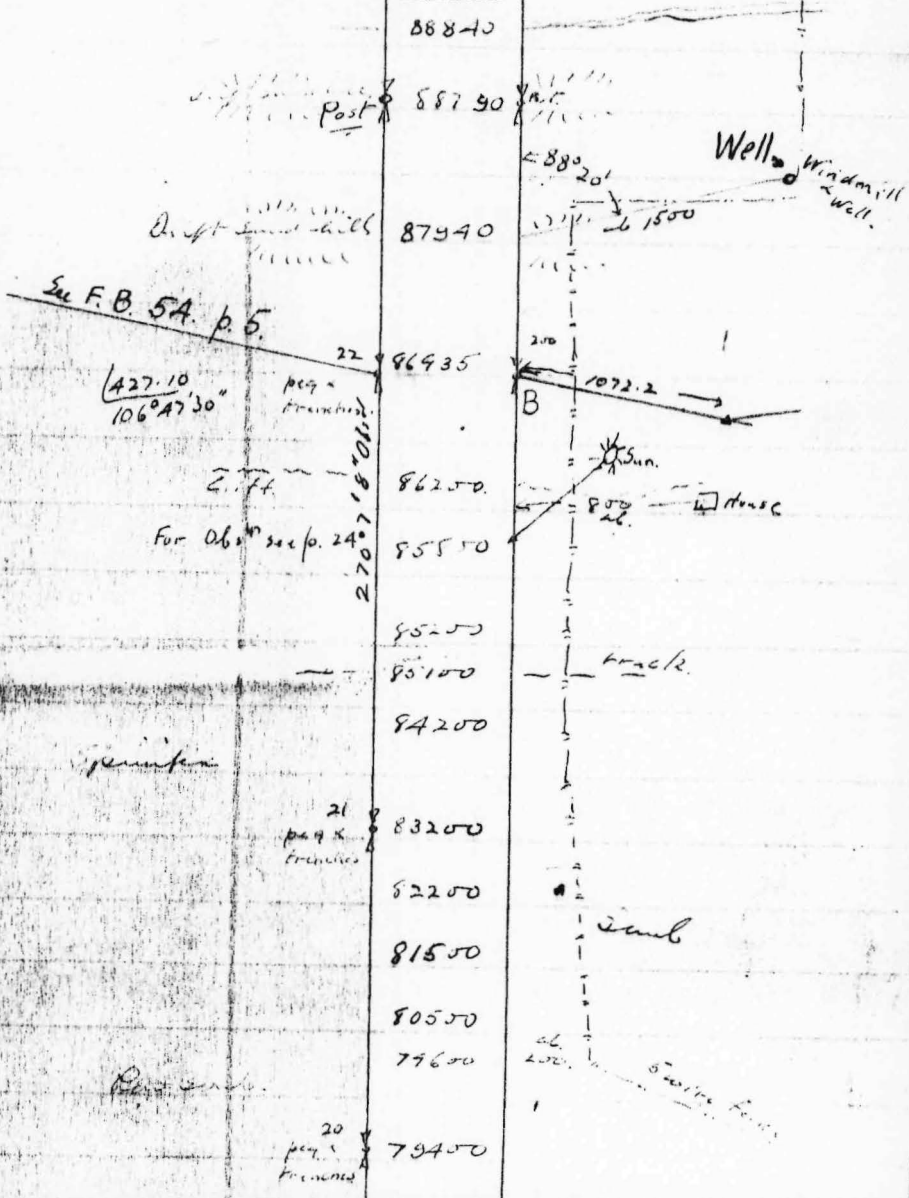
44100

43500

42900

Indian

Ocean



1913
10/2/13

(716.29
179° 7' 15"

Scrub

Sandy

Scrub

Sandy

Scrub

Open

2000

1000

00

307.30.45

10-150

4800

1500

8600

7600

6600

5600

5000

4000

P. plane

Ridge

Scrub

Scrub

Scrub

Ridge

Scrub

Dense scrub

Scrub

1913
10/2/13

Scrub

(200.32
50° 8'

X 18.0

Sec. F.B. 56 p. 13.

729

1000

2000

1500

1000

100

00

308° 23' 0"

Fence
4 wires

Lake

Traverse of present fence dividing
Flemington Station (lease held by G. Nicholl)
from Sunnyside Station (lease held
by F. Bretham).

Fence is a six wire fence with iron standards
and is in good order.

AJB
30/1/12.

16

1100

00

270° 57'

1775

718.36
179° 39'

huller

1200

Poplar
Samb.

200

00

270° 55' 30"

718.7
179° 31' 45"

Sandy
huller

3600

ridge

3200

huller

2000

Poplar

Samb.

1000

500

00

271° 5' 30"

717.35

179° 23' 15"

Sandy
huller

4500

ridge

3500

Samb.

Poplar

huller

3100

AJB
30/1/12.

Sandy
huller

2100

2000

1000

00

271° 40'

718.40

179° 40'

3300

ridge

Dense

2400

Samb.

1400

400

ridge

00

271° 55' 30"

717.54

144° 28' 30"

4174

Poplar

3000

Wangye
Karama.

2000

N.B.
2/8/12.

17
1000

618.55
179° 35' 45" Sandy

269° 14'
266° 35"

ridge

Karara

Wanya
Mulle

618.55
179° 44' 30"

269° 35'
266° 35"

Ruby ridge

Karara

Sand.

618.54
179° 43' 30" Dense

269° 50' 30"
266° 35"

Sand.

N.B.
2/8/12

Wanya

Karara

619.35
179° 53' 45"

270° 7'

ridge

617.4
179° 16'

270° 13'

Poplar

Sandy
Poplar

ridge
Sandy

Sun. (For Obs.
see p. 23)

G.B.
2/1/12

111111
111111

111111
111111

111111
111111

111111
Sandy
111111

111111
Low
111111

111111
111111

111111
Sandy
111111

18
8500

7500

7100

6100

5700

4700

4200

3200

2200

2100

1000

50

268° 38'

5100

4700

111111
201

111111
5 wire fence
Spurks

111111
111111

111111
ridge
111111

111111
ridge
111111

111111
Spurks

111111
ridge
111111
117.4.1
174° 16'

G.B.
2/1/12

111111
111111

117.15
179° 18' 45"
Fence
5 wires

111111
111111

117.24
179° 21'
Sandy
111111

3700

2700

1700

1000

50

267° 54'
~~268° 38'~~

2300

2000

1400

1000

50

268° 35'
~~267° 54'~~

3300

2700

1700

1000

111111
111111

111111
Spurks

111111
111111

111111
Sant.

111111
ridge
111111

111111
Sant.

Ag B
4/8/12

19

5500

5600

7500

7100

6100

5100

4100

3100

2800

1800

1750

1000

00

268° 30' 45"

1100

1100

00

266° 8'

8900

8000

Spurgen

Sun
for also in p. 23

710.30
77° 37' 30"

715.48
178° 57'

7000

6600

5600

4600

4000

3000

2000

1000

00

267° 11'

7900

9000

8500

Spurgen

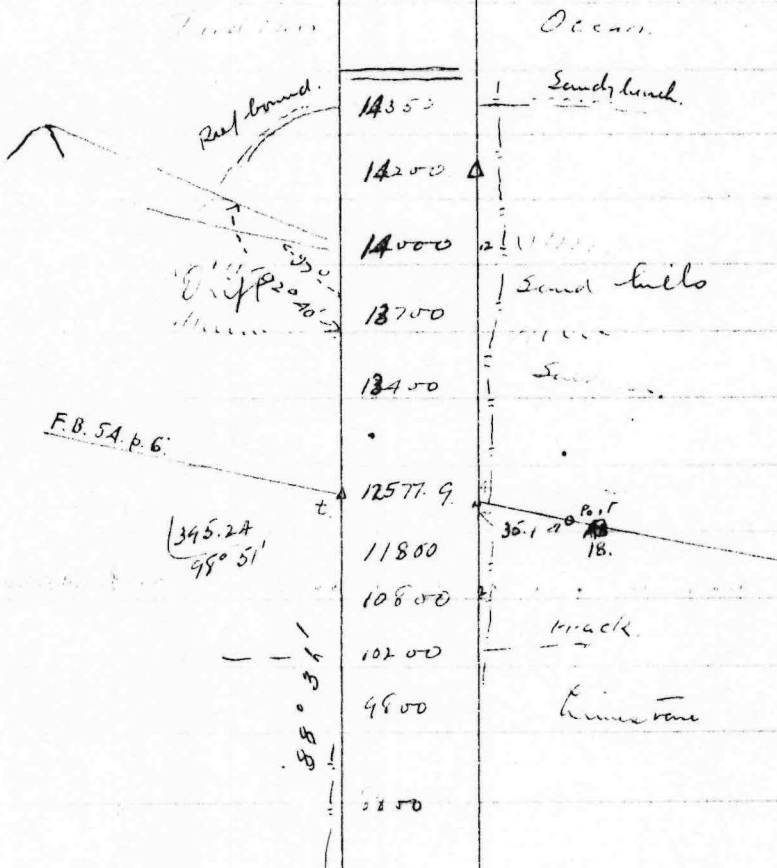
Wulke

Samb.

714.11
178° 32' 45" Sand

ridge

A.B.
AK/12



Sun Obs. at 3400 p. 17.

Aug 2nd 1912

9.15 a.m.

Latitude by scale.

23° 47' 40"

R.M. 360°

Return 360°

* wgy	324° 27' 0"	}	act	24° 18' 30"
* wgy	324° 25' 0"			
* wgy	143° 52' 30"	}	coast	64° 58' 30"
* wgy	143° 50' 30"			
* wgy	323° 15' 30"	}	act	25° 41' 30"
* wgy	323° 13' 0"			

Line bearing of R.M.

90° 57' 6"

90° 56' 23" ~~3/11/12~~ CBPI page 19

C.B. 119

Sun Obs. at 1800 p. 19.

Aug 4th 1912

9.20

Latitude by scale.

23° 47' 40"

R.M. 360°

Return 360°

* wgy	324° 52' 0"	}	act	27° 25' 0"
* wgy	324° 48' 0"			
* wgy	144° 11' 30"	}	coast	61° 48' 30"
* wgy	144° 7' 30"			

Line bearing of R.M.

88° 30' 37"

88° 30' 00" ~~3/11/12~~

CBPI page 20

24

Sun Obs. Taken at 41400 p. 12.

July 31st 1912

4 p.m.

Latitude by scale

23° 49' 0"

R. M. 360°

Return 360°

+	ay.	217° 50' 0"	}	alt 27° 15' 0"
p		217° 56' 0"		
+		37° 7' 0"	}	count 63° 25' 0"
p		37° 12' 0"		

Line bearing of R. M.

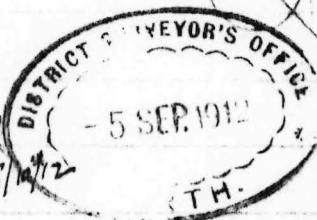
90° 2' 25"

90° 2' 45"

C.B. 1/38 CRD
6/11/12

90° 3' 13"

C.B. P1 page 19



Sun Obs. at 85850 p. 14

Aug 4th 1912

3645m.

Latitude by scale

23° 49'

R. M. 360°

Return 360°

+	ay	218° 10' 0"	}	alt 29° 12' 40"
p		218° 14' 0"		
+		37° 24' 0"	}	count 61° 29' 0"
p		37° 28' 20"		
+		216° 45' 0"	}	alt 27° 46' 40"
p		216° 50' 0"		

Line bearing of R. M.

90° 7' 8"

90° 7' 55" 30/10/12

C.B. P1 page 19

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.

Chas. J. Bennett

Licensed Surveyor.

Date, *9/8/12*

INDEX.

- Page 1. North Boundary of P.L. *680/94.*
6. Connection from Marsh Hill Ldg Station to Traverse of Salt Lake.
9. Connection from mine at K.65 to Traverse of Salt Lake.
11. Boundary between P.L. *713/94* & *714/94.*
15. Traverse of fence between Indian Ocean and Salt Lake and as boundary between Flemington & *San Jose station.*

Sun Observation taken at *12500* p. 11.

July 28th 1912 about 9 a.m.

Latitude by scale *23° 49' 0" S.*

R. M. 90°

Return 90°

<i>a</i>	<i>54° 15' 40"</i>	}	<i>act. 23° 37' 20"</i>
<i>p</i>	<i>54° 23' 0"</i>		
<i>a</i>	<i>233° 57' 0"</i>	}	<i>coact 65° 41' 0"</i>
<i>p</i>	<i>233° 45' 0"</i>		

Line bearing of R. M.

89° 59' 25"

89° 59' 3"

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