Open File Envelope No. 3131

EL 362

LAKE GAIRDNER

FINAL REPORT AT LICENCE SURRENDER FOR THE PERIOD 17/10/1977 TO 10/3/1978

Submitted by
CRA Exploration Pty Ltd
1978

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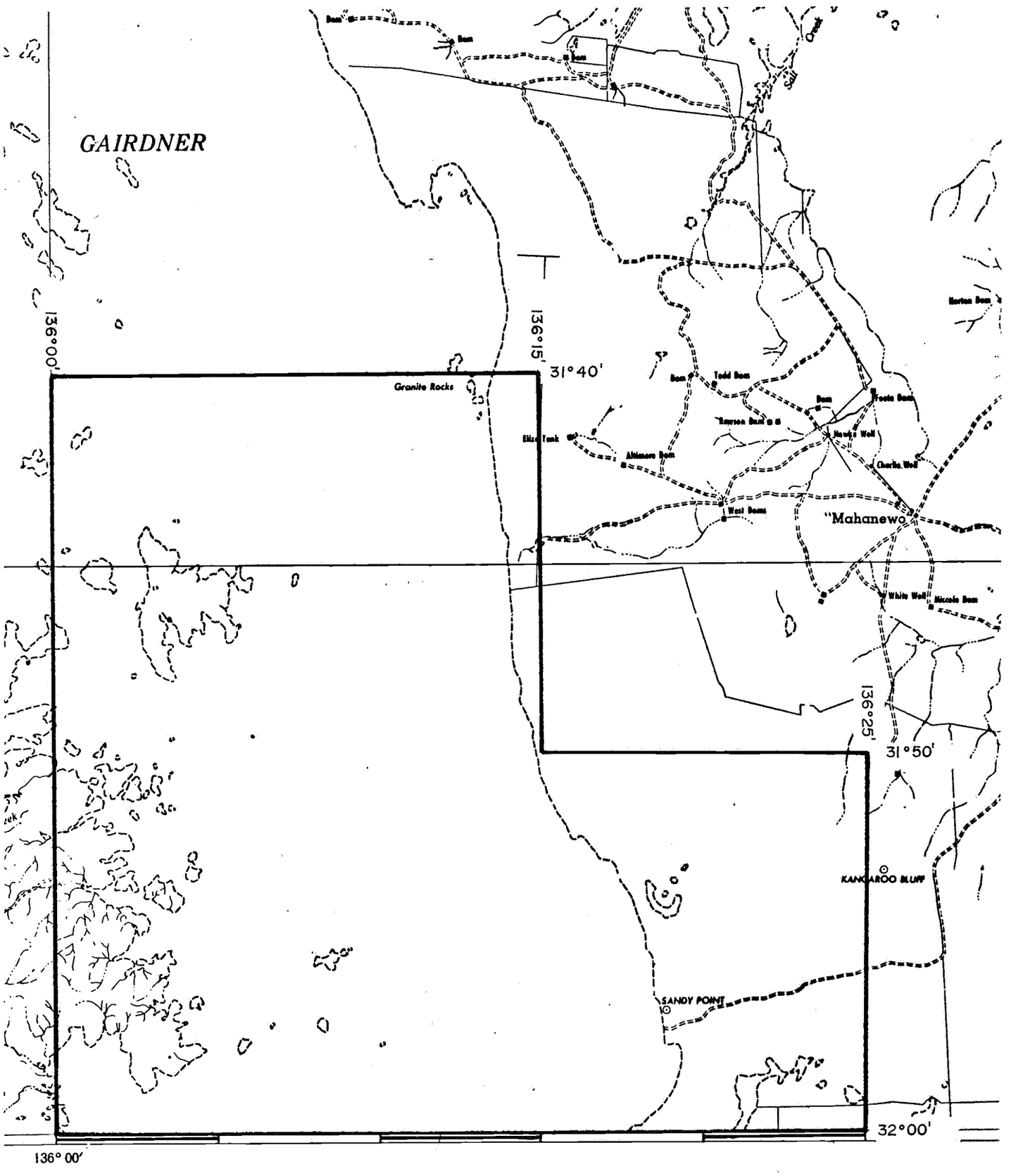
Government of South Australia
Primary Industries and Resources SA

SCHEDULE A



SCALE 1:250 000

KILOMETRES 5 0 5 10 15 20 25 KILOMETRES

APPLICANT: C.R.A. EXPLORATION PTY. LIMITED

D.M.: 319/77

AREA: 1166 Square kilometres

1: 250000 PLANS: GAIRDNER

SURRENDERED

LOCALITY: LAKE GAIRDNER AREA — APPROX. 90km. S.W. OF WOOMERA

EXPIRY DATE: 16·10·78

SURRENDERED

E.L. No.: 362

CONTENTS ENVELOPE 3131

TENEMENT: E.L. NO. 362

TENEMENT HOLDER: CRA Expl. Pty. Ltd.

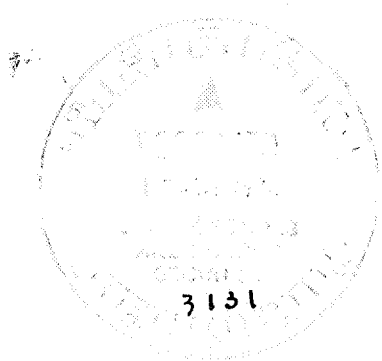
C.R.A. EXPLORATION PTY. LIMITED

FINAL REPORT ON LAKE GAIRDNER E.L. 362, SOUTH AUSTRALIA

Author: G.D. KLINGNER

Submitted to: J. COLLIER

Date: 22nd December, 1977.



CONTENTS

1. INTRODUCTION

Exploration Licence EL 362 covers an area of 1166 square kilometres over Lake Gairdner situated approximately 400 km north west of Adelaide, Plan No. S.A.a 147. Title was granted to the area on 16th October, 1977.

The ground was applied for to cover a 6 milligal residual gravity anomaly observed on the published Gairdner 1:250,000 Gravity Station Value Sheet. It was considered that the anomaly may have been associated with Roxby Downs type mineralisation. This report sets out the work carried out on the title and the conclusions reached.

2. GEOLOGY

EL 362 covers portion of the western fringe of the Stuart Shelf where flat lying sediments of Adelaidean age lap onto Gawler Range Volcanics.

Outcrop in the area is virtually nil apart from small islands of dark red brown Yardea Dacite to the west and south west and Quarternary gypsiferous sand dunes along the eastern margin of the lake.

To the east of the EL however, outcrops of massive to flaggy grey sandstone of the Simmons Quartzite Member of Marinoan Age were observed to outcrop.

3. GEOPHYSICS

Solo Geophysics and Co. were contracted to carry out a ground magnetic and gravity survey. A 12 km by 12 km grid was pegged centred over the residual gravity anomaly detected on the 1:250,000 sheet (Plan S.A.a 147). Gravity stations were spaced at 500 m intervals along north-south lines 2 km apart. Magnetic stations were spaced at 125 m intervals along lines 2 km apart.

A copy of the results are appended to this report.

The magnetics are dominated by a major north west - south east trending high which is portion of a major linear feature detectible on the State 1:1,000,000 map (Plan S.A.a 148).

Apart from this feature the magnetics are not very informative (Appendix 1 profiles and Plan S.A.a 148).

The gravity results are shown on Plan S.A.a 149 and in profile form in Appendix 1. No marked features are apparent. There is an indication of a broad fairly weak gravity high in the southern portion of the area centred on line 8W. This high is too far displaced and in any case is not large enough to correspond with the one shown on the regional survey.

4. CONCLUSIONS & RECOMMENDATIONS

There is no feature of either the ground magnetic survey or the gravity survey to suggest mineralisation might occur within the surveyed area. Apart from the large linear magnetic feature which is probably a basic dyke there is nothing to suggest that there is any significant variation in the geology in this area from the regional setting of a thin veneer of Simmens Quartzite lying on Yardea Dacite. Even the quartzite may be absent here.

The residual gravity high shown on the 1:250,000 Gairdner Sheet (Station Identification No. 69E5.1922) was not confirmed by more detailed work. There is a suggestion from the original field data (C. Anderson, South Australian Mines Department pers comm) that this station and other stations on the same line have barometric levelling errors. It is concluded therefore that as the anomaly for which the title application was originally made has been shown not to exist, Exploration Licence 362 should be relinquished.

G.D. KLINGNER

LIST OF ATTACHMENTS

Appendix 1: Gravity Levelling & Magnetic Survey.

Plan S.A.a 147: Geophysical Grid, Lake Gairdner EL 362.

Plan S.A.a 148: Geophysical Grid Mag. Lake Gairdner.

Plan S.A.a 149: Geophysical Grid Gravity Lake Gairdner.

Appendix 1

C.R.A. EXPLORATION PTY.LTD.

GRAVITY LEVELLING AND MAGNETIC SURVEY

AREA: LAKE GAIRDNER S.AUST.
E.L. No.~~326~~ 362

PERIOD: AUGUST/NOVEMBER 1977

FIELD NOTES

GRAVITY, MAGNETICS AND LEVELLING SURVEY

Area: Lake Gairdner S.Aust. E.L. No. ~~326~~ 362

Equipment used during the course of the survey included
a Suzuki FWD vehicle fitted with balloon tyres and an
accurate distance meter calibrated for the tyre size.
A Honda tricycle to complete the survey after the rains.
A Worden gravity meter No . 274 Cal. .09161 Mg/S div.
A Lacoste " " No. G-37 " as per chart encl.
A Pentax precision automatic level and staff.
A Topofil cotton chain distance measuring device.

Access: Across country, see details on enclosed map.

Grid layout: Latitude control from fence north of the grid.
Grid lines 12Km long, 2Km apart running true north.
Lines 00W to 12W extend 6Km N/S of base line 00S.
Baseline extends from 12W to 0.7E
Crosslines are pegged at 250m intervals.
A headland on line 00W was also used as a further latitude control.
See details on enclosed map in pocket on back cover.
Latitude of baseline is 31.833 decimal degrees south.

Conditions of lake surface:

Hard salt west of drainage path roughly indicated on the map.
Rain halted survey in August, restarted survey in November.

Magnetics: Taken at 125m stations with drift and level corrections applied.
A Geometrics proton magnetometer was used.

Gravity: Gravity stations at 500m intervals.
A Worden meter was used for the initial survey. A Lacoste was used to complete the project.
00W/00S was used as initial gravity base station. This was tied to 4W/ 00S with the Worden and this instrument was used to survey lines 00W and 4W.
The Lacoste was used to survey lines 6W, 8W, 10W, 12W.
00S/4W was used as the base station.
A tie was made between 00S/00W and 00S/.7E (the permanent marker)
All data was calculated relative to 00S/.7E
Because of the drainage the tie between 00S/00W & 00S/4W was not repeated with the Lacoste.
An elevation of 100m was assumed for 00W/00S.
The level of 00S/.7E is 101.395m and indicated by a dumpy peg set in concrete at the base of a steel dropper.

The Survey: A total of three days organisation, four days travel one supply day and fifteen and a half field operating days were required to complete the survey.

NB. Lines 6W, 8W, 10W and 12W were considered flat and an elevation of 98.7m was used in the calculations.

00010

Pl.

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: OOW
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: WORDEN No. 274
METER CALIBRATION: .09161 Mg/S div.
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: -1.14 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: 29th August & ~~November~~ 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
A1 00W/00S.	1450.6	9:30	100.00	0.14	0.15	0.16
500	1456.2	9:38	99.95	0.26	0.27	0.29
750	1457.4	9:44	99.93	0.18	0.19	0.20
1000	1459.5	9:49	99.90	0.17	0.18	0.20
1500	1461.3	9:52	99.81	-0.05	-0.04	-0.02
2000	1470.0	10:00	99.70	0.35	0.36	0.38
2500	1477.4	10:05	99.63	0.64	0.65	0.67
3000	1483.1	10:11	99.54	0.77	0.78	0.80
3500	1489.9	10:15	99.47	1.00	1.02	1.04
4000	1496.3	10:20	99.41	1.20	1.22	1.24
4500	1501.6	10:25	99.35	1.31	1.32	1.34
5000	1508.3	10:37	99.27	1.52	1.54	1.56
5500	1514.1	10:42	99.27	1.68	1.69	1.72
6000S	1520.6	10:48	99.21	1.89	1.90	1.93
A1 00W/00	1452.6	11:15				

Notes:

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SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 00 W.
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: WORDEN No. 274
METER CALIBRATION: .09161 Mg/S div.
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: 0.18 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: 29th August & ~~November~~ 1977

	Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
A,	00W/00S.	1452.6	11.15	100:00	0.14	0.15	0.16
	600N	1448.4	11.21	100.07	.13	.14	.16
	1000	1441.5	11.25	100.13	−.12	−.11	−.10
	1500	1436.0	11.30	100.28	−.23	−.22	−.21
	2000	1430.7	11.34	100.88	−.22	−.22	−.21
	2500	1420.2	11.39	103.62	−.23	−.25	−.27
	3000	1421.4	11.45	101.89	−.13	−.13	−.14
	3500	1411.6	11.50	102.43	−.54	−.55	−.56
	4000	1389.0	12.03	109.08	−.81	−.87	−.96
	4500	1383.0	12.12	108.99	−1.01	−1.07	−1.16
	5000	1377.5	12.20	108.68	−1.22	−1.28	−1.36
	5500	1366.2	12.30	110.15	−1.57	−1.64	−1.74
	6000N	1359.2	12.39	111.04	−1.66	−1.73	−1.84
A,	00W/00.	1452.3	12.56				

Notes:

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SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
METER: WORDEN No. 274

AREA: E.L. 362
METER CALIBRATION: .09161 Mg/S div.

GRID: Lake Gairdner
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.

LINE: 4000 W
DRIFT CORRECTION: 0.0 Scale div/hr

LINE MAGNETIC BRG: 353°
AREA MAGNETIC VARIATION: 7° E

BASE STATION: 700E/00S

BASE NOMINAL GRAV:

BASE NOMINAL ELEVN:
OPERATOR: G.Rau.

BASE LATITUDE: 31° 49' 58" S
DATE: 29th August & ~~November~~ 1977

	Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
Δ_1	00W/00S	1451.7	13.40	100.00			
Δ_2	4W/00S	1477.4	13.52	98.64	2.20	2.22	2.25
	500 S	1490.5	13.56	98.74	3.06	3.08	3.11
	1000	1497.5	14.00	98.76	3.34	3.36	3.39
	1500	1504.3	14.04	98.76	3.60	3.62	3.65
	2000	1507.3	14.07	98.73	3.50	3.53	3.55
	2500	1514.1	14.10	98.62	3.74	3.76	3.79
	3000	1518.5	14.15	98.71	3.80	3.82	3.85
	3500	1522.4	14.17	98.70	3.79	3.81	3.84
	4000	1528.5	14.22	98.55	3.96	3.98	4.01
	4500	1535.5	14.26	98.55	4.23	4.26	4.29
	5000	1534.1	14.29	98.55	3.74	3.77	3.80
	5500	1537.9	14.33	98.37	3.69	3.71	3.75
	6000S	1540.2	14.38	98.38	3.54	3.56	3.60
Δ_2	00/4000W	1477.4	14.48				

Notes:

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P4.

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 4000W.
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: WORDEN No. 274
METER CALIBRATION: .09161 Mg/S div.
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: 0.30 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: August & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
D2 00/4W	1477.4	14.48	98.64	2.20	2.22	2.25
500N	1471.4	14.52	97.75	1.82	1.85	1.89
1000	1469.0	14.57	97.77	1.97	2.00	2.04
1500	1468.2	15.00	97.76	2.26	2.29	2.33.
2000	1461.1	15.05	97.77	1.98	2.01	2.05
2500	1453.4	15.10	97.74	1.63	1.66	1.70
3000	1451.0	15.14	97.67	1.76	1.79	1.83
3500	1440.1	15.18	97.53	1.10	1.13	1.17
4000	1429.1	15.25	97.76	0.50	0.53	0.57
4500	1418.5	15.33	(97.80	-0.09	-0.06	-0.02
5000	1412.3	15.45		-0.29	-0.26	-0.22
5500	1408.0	15.55	} APPROX ELEV	-0.32	-0.29	-0.25
6000 N	1402.5	16.11		-0.45	-0.42	-0.38
D2 00/4000W	1476.9	16.27				

Notes:

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P5.

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
METER: WORDEN No. 274

AREA: E.L. 362
METER CALIBRATION: .09161 Mg/S div.

GRID: Lake Gairdner
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.

LINE: TIE-IN. 00S/00W & 00S/4000W.
DRIFT CORRECTION: 0 Scale div/hr

LINE MAGNETIC BRG: 353°
AREA MAGNETIC VARIATION: 7° E

BASE STATION: 700E/00S

BASE NOMINAL GRAV:

BASE NOMINAL ELEVN:
OPERATOR: G.Rau.

BASE LATITUDE: 31° 49' 58" S
DATE: 29th August & ~~November~~ 1977

	Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
Δ_2	00S/4000W	1476.9	16.27				
Δ_1	00S/00W	1451.2	16.47				
Δ_2	00S/4000W	1476.9	16.56				
Δ_1	00/00W	1451.2	17.05				

Notes:

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SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE:
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

	Station	Obs. Grav. s./divs.	Time	Elevn.	ρ_1 ρ_2 ρ_3 BOUGUER GRAV. ρ_1	ρ_2	ρ_3
Δ_0	700E/00S	2964.44	20.10				
Δ_1							
	00W/00S	2964.86	20.20				
Δ_0	700E/00S	2964.44	20.30				
Δ_1	00W/00S	2964.86	20.40				

Notes:

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY 00016

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 6000 N
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: .05 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
Δ_2 00S/4000W	2966.99	7.08	98.00			
00S/6000W	67.70	7.25		2.97	2.99	3.02
500N	67.00	7.37		2.60	2.63	2.66
1000	66.77	7.40		2.73	2.75	2.78
1500	66.00	7.43		2.29	2.31	2.34
2000	65.80	7.47		2.44	2.46	2.49
2500	65.61	7.52		2.61	2.63	2.66
3000	64.95	2.57		2.28	2.30	2.33
3500	64.46	8.01		2.13	2.16	2.19
4000	64.01	8.06		2.03	2.05	2.08
4500	63.53	8.10		1.89	1.91	1.94
5000	63.12	8.14		1.83	1.85	1.88
5500	62.31	8.18		1.34	1.36	1.40
6000N	61.21	8.23		0.56	0.58	0.61

Notes:

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SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

P.S.

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 8000 N/
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
6000 N	2961.18	8.37	98.70	0.53	0.56	0.58
5000 N	62.86	8.49		1.57	1.60	1.62
5500	61.77	8.44		0.79	0.81	0.84
4500	63.29	8.55		1.66	1.69	1.72
4000	63.67	9.00		1.70	1.72	1.75
3500	64.32	9.05		2.02	2.04	2.07
3000	64.85	9.10		2.22	2.24	2.27
2500	65.31	9.14		2.34	2.36	2.39
2000	66.15	9.17		2.86	2.88	2.91
1500	66.66	9.22		3.03	3.05	3.08
1000	66.65	9.26		2.66	2.68	2.71
500	67.74	9.31		3.44	3.46	3.49
00	68.07	9.36		3.43	3.45	3.48
500S	68.70	9.41		3.73	3.75	3.78
1000	69.14	9.45		3.83	3.85	3.88
1500	70.07	9.49		4.44	4.46	4.49
2000	70.68	9.54		4.72	4.74	4.77
2500	70.81	9.59		4.50	4.52	4.55
3000	71.35	10.34		4.72	4.74	4.77
3500	72.06	10.08		5.08	5.11	5.14
4000	73.61	10.13		6.35	6.37	6.40
4500	73.38	10.22		5.75	5.77	5.80
5000	73.83	10.49		5.87	5.89	5.92
5500	74.37	10.54		6.08	6.10	6.13
6000S	74.74	11.00		6.11	6.13	6.16

Notes:

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SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 6000W
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: .03 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
6000 S	2973.81	11.15	98.70	5.14	5.16	5.19
5500	73.85	11.22		5.55	5.57	5.60
5000	73.36	11.40 ✓		5.41	5.43	5.46 ✓
4500	73.01	11.35		5.40	5.42	5.45
4000	72.44	11.50		5.18	5.20	5.23
3500	71.88	11.56		4.96	4.98	5.01
3000	71.25	12.03		4.66	4.69	4.71
2500	70.51	12.10		4.26	4.28	4.31
2000	70.83	12.14		4.96	4.98	5.01
1500	69.71	12.20		4.15	4.17	4.20
1000	68.49	12.25		3.24	3.26	3.29
500. S	68.35	12.31		3.46	3.48	3.51
A3 00²/4W	66.81	12.45.				
END OF LOOP						

Notes:

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P10.

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 10,000 oW.
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: -0.01 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
00S/4000W	2966.81	12.45	98.70			
00S/10000W	67.78	13.26		3.22	3.24	3.27
500 N	67.57	13.31		3.36	3.39	3.42
1000	66.66	13.37		2.77	2.80	2.82
1500	66.76	13.42		3.24	3.26	3.29
2000	66.40	13.47		3.23	3.25	3.28
2500	66.16	13.52		3.34	3.36	3.39
3000	64.82	13.57		2.29	2.32	2.35
3500	64.99	14.02		2.83	2.86	2.89
4000	63.56	14.07		1.70	1.73	1.75
4500	62.99	14.11		1.46	1.49	1.52
5000	62.77	14.15		1.60	1.62	1.65
5500	62.21	14.20		1.37	1.39	1.42
6000N	61.88	14.25		1.39	1.41	1.44

Notes:

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 12000 W.
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: -0.01 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	ρ_1 ρ_2 ρ_3 BOUGUER GRAV. ρ_1	ρ_2	ρ_3
6000N/12000W.	2962.58	14.33	98.70	2.12	2.14	2.17
5500	62.93	14.38		2.12	2.14	2.17
5000	63.60	14.42		2.46	2.48	2.51
4500	63.91	14.46		2.42	2.44	2.47
4000	63.84	14.50		1.98	2.01	2.04
3500	64.44	14.55		2.25	2.27	2.30
3000	64.95	15.10		2.42	2.44	2.47
2500	64.99	15.04		2.10	2.12	2.15
2000	65.84	15.10		2.62	2.65	2.68
1500	66.10	15.21		2.53	2.55	2.58
1000	66.71	15.26		2.81	2.83	2.86
500N	67.59	15.30		3.37	3.39	3.42
00	68.06	15.34		3.49	3.53	3.56
500S	68.29	15.37		3.37	3.39	3.42
1000	69.02	15.41		3.77	3.79	3.82
1500	69.35	15.45		3.75	3.78	3.81
2000	70.15	15.51		4.23	4.25	4.28
2500	70.84	15.55		4.59	4.61	4.64
3000	71.39	15.59		4.80	4.82	4.85
3500	72.06	16.04		5.14	5.16	5.19
4000	72.46	16.07		5.19	5.22	5.24
4500	72.83	16.12		5.22	5.24	5.27
5000	73.21	16.16		5.25	5.27	5.30
5500	73.97	16.21		5.68	5.71	5.74
6000S	74.22	16.25		5.58	5.60	5.63

Notes:

00021

SOLO GEOPHYSICS AND CO. GRAVITY SURVEY

P12.

CLIENT: CRA EXPLORATION
AREA: E.L. 362
GRID: Lake Gairdner
LINE: 100S/00W
LINE MAGNETIC BRG: 353°
BASE STATION: 700E/00S
BASE NOMINAL GRAV:
BASE NOMINAL ELEVN:
BASE LATITUDE: 31° 49' 58" S

METER: LACOSTE No. G- 37
METER CALIBRATION: as per chart
BOUGUER DENSITY: 2.2 2.4 2.67 gms/cc.
DRIFT CORRECTION: -0.01 Scale div/hr
AREA MAGNETIC VARIATION: 7° E
OPERATOR: G.Rau.
DATE: ~~August~~ & November 1977

Station	Obs. Grav. s./divs.	Time	Elevn.	P_1 P_2 P_3 BOUGUER GRAV. P_1	P_2	P_3
6000S/10000W	2974.51	16:32	918.70	5.88	5.91	5.94
5500	74.06	16:37		5.78	5.80	5.83
5000	73.61	16:41		5.67	5.69	5.72
4500	73.09	16:49		5.48	5.50	5.53
4000	72.58	16:55		5.31	5.33	5.36
3500	72.05	17:01		5.12	5.14	5.17
3000	71.45	17:05		4.85	4.87	4.90
2500	71.15	17:10		4.90	4.92	4.95
2000	70.42	17:15		4.50	4.52	4.55
1500	69.66	17:30		4.06	4.08	4.11
1000	69.00	17:25		3.73	3.75	3.78
500S	68.39	17:36		3.46	3.48	3.51
A2 00S/4000W	66.86	17:47				

Notes:

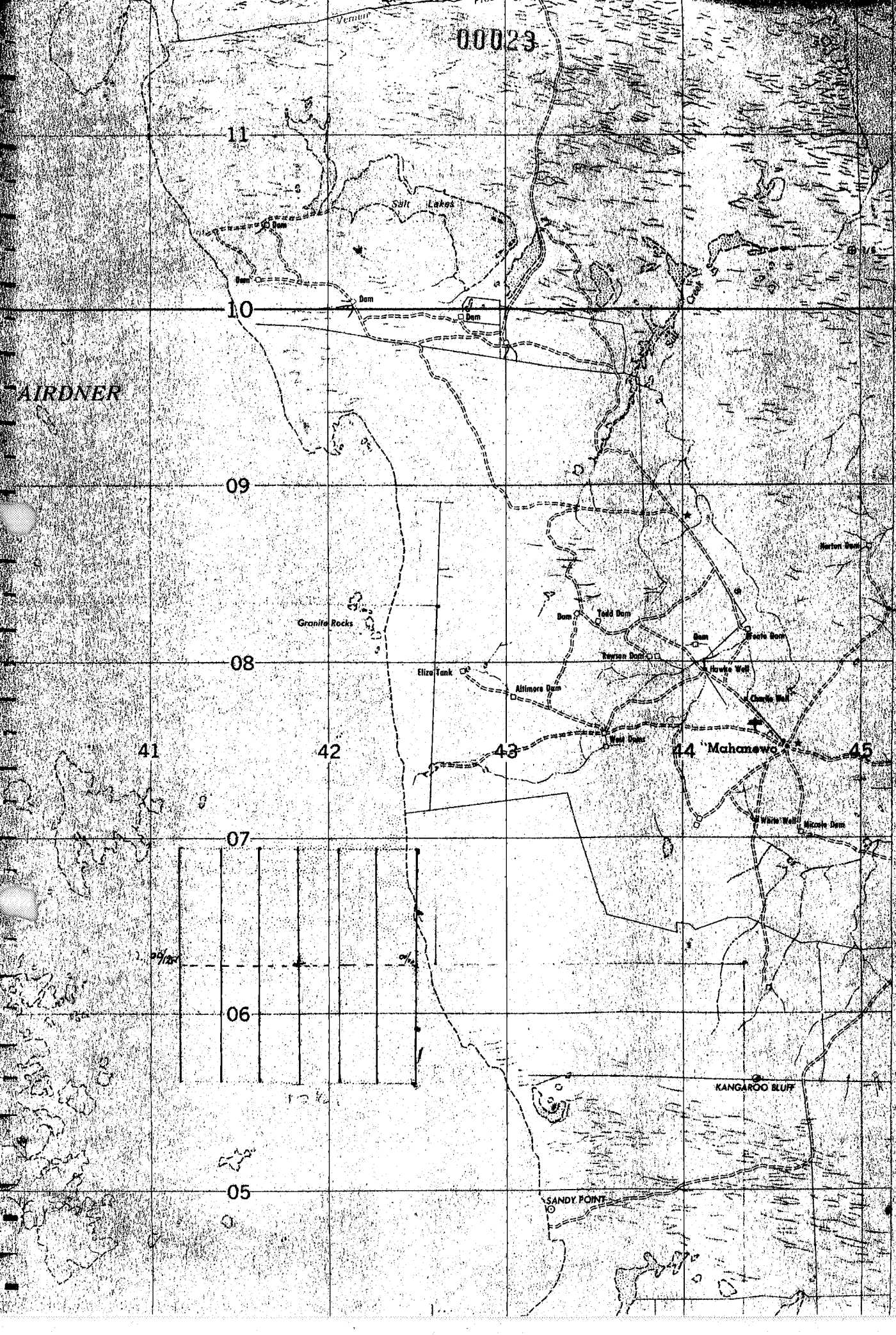
AD. UNI.

TABLE I

Milligal Values for LaCoste & Romberg Model G Gravity Meter #37

Counter Reading*	Value in Milligals	Factor for Interval	Counter Reading *	Value in Milligals	Factor for Interval
000	000	1.04790			
100	104.79	1.04780	3600	3770.61	1.04840
200	209.57	1.04770	3700	3875.45	1.04855
300	314.34	1.04775	3800	3980.30	1.04865
400	419.11	1.04765	3900	4085.17	1.04875
500	523.88	1.04735	4000	4190.04	1.04885
600	628.61	1.04730	4100	4294.93	1.04895
700	733.34	1.04720	4200	4399.82	1.04900
800	838.06	1.04720	4300	4504.72	1.04910
900	942.78	1.04720	4400	4609.63	1.04915
1000	1047.50	1.04710	4500	4714.55	1.04920
1100	1152.21	1.04700	4600	4819.47	1.04920
1200	1256.91	1.04695	4700	4924.39	1.04915
1300	1361.61	1.04690	4800	5029.30	1.04905
1400	1466.30	1.04685	4900	5134.21	1.04910
1500	1570.98	1.04690	5000	5239.12	1.04910
1600	1675.67	1.04690	5100	5344.03	1.04900
1700	1780.36	1.04680	5200	5448.93	1.04885
1800	1885.04	1.04700	5300	5553.81	1.04875
1900	1989.74	1.04705	5400	5658.69	1.04870
2000	2094.45	1.04720	5500	5763.56	1.04860
2100	2199.17	1.04720	5600	5868.42	1.04845
2200	2303.89	1.04725	5700	5973.27	1.04830
2300	2408.61	1.04725	5800	6078.10	1.04810
2400	2513.34	1.04730	5900	6182.91	1.04790
2500	2618.07	1.04730	6000	6287.70	1.04770
2600	2722.80	1.04740	6100	6392.47	1.04745
2700	2827.54	1.04745	6200	6497.22	1.04725
2800	2932.28	1.04750	6300	6601.94	1.04700
2900	3037.03	1.04755	6400	6706.64	1.04675
3000	3141.78	1.04765	6500	6811.32	1.04650
3100	3246.55	1.04780	6600	6915.97	1.04625
3200	3351.33	1.04810	6700	7020.60	1.04595
3300	3456.14	1.04815	6800	7125.19	1.04560
3400	3560.96	1.04825	6900	7229.75	1.04520
3500	3665.78	1.04830	7000	7334.27	

NOTE: Right hand wheel on counter equals approximately .1 Milligal
AWS 1-25-53


AIRDNER
Salt Lakes
Dam
Dam
Dam
Dam
Dam
Granite Rocks
Todd Dam
Dam
Beatie Dam
Reynon Dam
Hawke Well
Elizo Tank
Altimore Dam
Castle Well
Well Dams
Mahamewo
Norton Dam
White Well
Nicole Dam
KANGAROO BLUFF
SANDY POINT
11
10
09
08
07
06
05
41
42
43
44
45
30'
45'

MAINE CHANNEL SAUST 00024

CLIENT: CRA EXPLORATION PTY LTD AREA: EL-362

LINE: DATE: AUGUST 1977

PERATOR: UNIT NO: LAT:

TATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
	MAGNETIC SURVEY				
	GEOMETRICS PROTON MAG				
	SERIAL NO. 484				
			SOLO GEOPHYSICS ANDCO.		

00025

CLIENT: CRA AREA: Lake Carey

LINE: 2W. DATE: 30.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
4625N	243	4.15	+5	8248	
750	236	4.16		58241	
875	229	4.17		233	
5000N	247	4.18		252	
125	251	4.19		256	
250	267	4.20		267	
375	287	4.21		287	
500	300	4.22		305	
625	255	4.23	+4	259	
750	252	4.24		256	
875	274	4.25		278	
6000N	240	4.26		244	
Δ 00/00	079	4.34	+4	58083	
	DRIFT +	8 in		132	mins.

00026

CLIENT: CRA AREA: LAKE GIRGARRA

LINE: 2W DATE: 30.8.77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
~~1875~~	~~317~~	~~3.49~~		~~324~~	
2000N	288	3.50	+7	335	
125	216	3.51	+6	222	
250	198	3.54		204	
375	287	3.58		288	
500	277	3.56		233	
625	295	3.57		301	
750	295	3.58		301	
875	371	3.59		377	
3000N	457	4.00		459	
125	278	4.01		284	
250	321	4.02		328	
375	378	4.03		384	
3500	330	4.04		336	
625	260	4.05		286	
750	262	4.06		268	
875	268	4.07	+5	273	
4000N	236	4.10		241	
125	228	4.11		233	
250	247	4.12		252	
375	273	4.13		278	
4500	230	4.14		235	

00027

CLIENT: CRA AREA: Lake Cargelligo

LINE: 2W DATE: 30.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
875	375	3.20	+8	58383	
750	359	3.21		357	
625	365	3.22		373	
500S	409	3.23		416	
375	460	3.25		468	
250	425	3.26		433	
125S	396	3.28		404	
00	393	3.30		401	
125N	394	3.31		402	
250	421	3.32		429	
375	392	3.33		400	
500	380	3.34		388	
625	360	3.35	+7	367	
750	327	3.36		374	
875	332	3.37		339	
1000	332	3.38		339	
1125	339	3.39		346	
1250	329	3.40		336	
1375	329	3.41		336	
1500	334	3.42		340	
1625	331	3.45		338	
1750	320	3.47		327	

00028

CLIENT: CRA AREA: LAKE GA

LINE: 2W, DATE: 30.8.77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
3500S	58363	259	+10	58373	
375	349	300		359	
250	350	301		360	
125	318	30Y		328	
30000S	280	303	+9	289	
875	286	304		295	
750	360	305		369	
625	407	306		416	
500	433	307		442	
375	427	308		436	
250	440	309		449	
125	433	310		442	
20000S	465	311		474	
875	415	31Y		424	
750	346	313		355	
625	315	314		324	
500	337	315		346	
375	38Y	316		391	
250	423	317		432	
125	436	318		445	
10000S	396	319	+8	404	

00029

CLIENT: CRA. AREA: Lake Gairdner

LINE: 2W. DATE: 30.8.77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
400/00	58071	2.22	+12	58083	
~~400~~			211		
6800S	756	2.39	+11	58767	
* 875	59052			59063	
* 750	59084	241		59095	
625	58753	242		58764	
5500	639	243		650	
375	558	244		569	
250	531	245		542	
125	495	246		506	
5800S	454	247	+10	464	
875	439	248		449	
750	470	249		480	
625	450	250		460	
4500	424	251		434	
375	429	252		439	
250	501	253		511	
125	643	254		653	
4800S	547	255		557	
875	469	256		479	
750	429	257		439	
625.	382	258		392	

00030

CLIENT: 12W/CRA AREA: LAKE GARDEN

LINE: DATE: 28.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
4500S	374	245	+13	58387	
4625	388	246		401	
4750	390	247		403	
4875	407	248		420	
5000	423	249		436	
5125	460	250		477	
5250	512	251		525	
5375	670	252		683	
5500	605	253		618	
5625	437	254		450	
5750	448	255		461	
5875	449	256		462	
6000	456	257		463	
00 tie on	518	305	+13	58531	
	DRIFT		-2 in	165 min.	

00031

CLIENT: CRA AREA: Hawk Co

LINE: 12W DATE: 8-8-77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
18755	315	214	+13	58328	
2000	338	215		351	
2125	334	216		347	
2250	344	217		357	
2375	367	218		380	
2500	370	219		383	
2625	365	220		378	
2750	373	221		386	
2875	377	222		390	
3000	413	223		426	
3125	414	224		427	
3250	392	225		405	
3375	428	226		441	
3500	481	227		494	
3625	463	228		476	
3750	425	229		438	
3875	393	230		406	
4000	391	231		404	
4125	412	232		425	
4250	448	233		461	
4375	410	234		423	

00032

CLIENT: 12W/CRA AREA: LAKE CO

LINE: DATE: 28.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
750	380	203	+12	58392	
625	367	204		374	
500	374	205		386	
375	397	206		404	
250	417	207		429	
125N	398	208		410	
00	361	209		373	
125S	354	210		366	
250	357	211	+13	370	
375	367	212		380	
500	402	213		415	
625	402	214		415	
750	408	215		421	
875	412	216		425	
1000	406	217		419	
1125	379	218		231	392
1250	344	219		232	357
1375	328	220		233	341
1500	324	221		234	337
1625	327	XX		235	340
1750	313	XX		236	326

00033

CLIENT: 12 CRA AREA: Lake Ga

LINE: DATE: 28-B

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
3375N	353	1 47	+12	58365	
3250	358	1 53		370	
3125	356	1 54		368	
3000	346	145		358	
2875	381	146		393	
2750	351	147		363	
2625	373	148		386	
2500	422	149		434	
2375	441	150		453	
2250	455	151		467	
2125	479	157		491	
2000	487	153		499	
1875	473	154		485	
1750	434	155		446	
1625	400	156		412	
1500	367	157		379	
1375	397	158		409	
1250	416	159		426	
1125	390	200		402	
1000	367	201		379	
875	377	202		389	

00034

CLIENT: GRA/12W AREA: LAKE CA

LINE: DATE: 28-8-

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
6000N	207	120	+12	58219	
5875	180	121		192	
5750	201	122		213	
5625	232	124		244	
5500	232	125		244	
5375	234	126		246	
5250	236	127		248	
5125	249	128		261	
5000	251	129		263	
4875	311	130		323	
4750	330	131		342	
4625	281	132		293	
4500	294	133		306	
4375	281	134		293	
4250	295	135		307	
4125	295	136		307	
4000	289	137		301	
3875	290	138		302	
3750	300	139		312	
3625	260	140		272	
3500	320	141		332	

00035

CLIENT: ERA AREA: LAKE CARGELLI

LINE: 10W DATE: 28.8.77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
5250N	288	108	+12	58300	
5375	264	110		276	
5500	280	111		292	
5625	267	114		279	
5750	228	114		240	
5875	180	115		192	
6000N	163	116		175	

00036

CLIENT: CRA AREA: LAKE GAIRDN

LINE: 10W DATE: 28.8.77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
2625N	520	1244	+11	58535	
2750	460	1245		471	
2875	398	1246		409	
3000	386	1247		397	
3125	399	1248		410	
3250	413	1249		424	
3375	377	1250		388	
3500	360	1251		371	
3625	343	1254		354	
3750	322	1253		333	
3875	368	1254		379	
4000	318	1255		329	
4125	290	1256		301	
4250	281	1258		292	
4375	291	1259		302	
4500	285	1 00		296	
4625	309	1 01	+12	321	
4750	320	1 02		332	
4875	296	1 04		308	
5000	306	106		318	
5125	293	107		305	

00037

CLIENT: CRA AREA: LAKE GARFIELD

LINE: 10W DATE: 28-8-77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
A 400 N	58 520	1220	+11	58531	
425 N	523	1221		534	
450	522	1224		533	
475	521	1225		532	
500	532	1226		543	
625	520	1227		531	
750	530	1229		541	
875	520	1230		531	
1000	525	1231		536	
1125	566	1232		577	
1250	586	1233		597	
1375	578	1234		589	
1500	599	1235		610	
1625	592	1236		603	
1750	565	1237		576	
1875	570	1238		581	
2000	553	1239		541	
2125	565	1240		576	
2250	583	1241		594	
2375	535	1242		536	
2500	481	1243		492	

00038

CLIENT: CRA AREA: LAKE GRACE

LINE: 10W DATE: 28.8.22

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
A4 7 50S	58518	11.34	-2	58516	
625	524	11.35		522	
500	502	11.36		500	
375	503	11.37		501	
250	513	11.39		511	
~~A4 125~~	521	11.40		519	
A4 10W 00S	533	11.42		531	A4 10W/00S
					BASE TIE OF
A3 10/1W	58489	11.50	-2	58487	TO 00/10W
	NO DRIFT.				IE A3 TO A4
A4 10W 00S	58533	11.57			
A3 0%/10W	58489	12.05			
A4 0%/10W	58531				00/10W L.H

00039

CLIENT: CRA AREA: LAKE CR

LINE: 10 W DATE: 28.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
33755	58432	11:10	-2	58436	
250	437	11:11		435	
125	434	11:12		432	
30000	456	11:13		454	
875	462	11:14		460	
750	464	11:15		462	
625	464	11:16		462	
500	481	11:17		479	
375	485	11:18		483	
250	503	11:19		501	
125	512	11:20		510	
20005	498	11:22		496	
875	473	11:23		471	
750	471	11:24		469	
625	491	11:25		489	
500	511	11:26		509	
375	532	11:27		530	
250	489	11:29		487	
125	480	11:30		478	
10005	487	11:32		485	
875	492	11:33		490	

00040

CLIENT: CRA AREA: Lake G

LINE: 10 W. DATE: 28.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
6000S	58547	10.44	-2	58545	
875	482	1045		480	
750	461	10.46		459	
625	531	10.47		429	529
500	517	10.48		515	
375	492	10.50		490	
250	517	10.51		515	
125	502	10.52		500	
5B000S	508	10.53		506	
875	500	10.55		498	
750	487	10.56		485	
625	455	10.57		453	
500	449	10.58		447	
375	471	11.00		469	
250	457	11.02		455	
125	426	11.03		424	
4000S	428	11.04		426	
875	467	11.05		465	
750	433	11.06		431	
625	433	11.07		431	
500	443	11.08		441	

00041

CLIENT: CRA AREA: Lake Gregory

LINE: 8W DATE: 28. 8. 77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
5125S	5480	10.26	-2	5478	
250	480	10.27		478	
375	472	10.28		470	
5500	492	10.29		490	
625	459	10.30		457	
750	450	10.31		448	
875	465	10.33		463	
6000S	464	10.34		462	

00042

CLIENT: CRA AREA: LAKE CHIKA

LINE: 8W DATE: 28-8-77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
2500S	58647	9:56		58645	
625	625	9:56		623	
750	611	10.01		609	
875	590	10.03		588	
30005	591	10.04		589	
125	575	10.06		573	
250	625	10.07		623	
375	589	10.08		587	
500	547	10.09		545	
625	479	10.11		477	
750	448	10.12		446	
875	440	10.13		438	
40005	470	10.14		468	
125	464	10.15		462	
250	456	10.16		454	
375	460	10.17		458	
500	485	10.19		483	
625	461	10.20		459	
750	458	10.21		456	
875	477	10.22		475	
50005	460	10.23		458	

00043

CLIENT: SW/CRA AREA: Lake Cobrook

LINE: 8W DATE: 23.8.22

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
00/4W	58489	9.23	-2	58487	
00/8W	581	9.28		579	✓
125	583	9.32		581	
250	584	9.33		582	
375	577	9.34		575	
500S	556	9.35		554	
625	574	9.36		572	
750	588	9.37		586	
875	614	9.39		612	
1000S	624	9.40		622	
125	654	9.41		652	
250	666	9.42		664	
375	655	9.43		653	
1500S	645	9.44		643	
625	660	9.45		658	
750	682	9.47		680	
875	732	9.50		730	
2000	722	9.51		720	
125	670	9.52		668	
250	655	9.54		653	
375	651	9.55		649	

00044

CLIENT: 8W JRA AREA: LAKE GABR

LINE: DATE: 27-8-77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
750N	596	1104	+14	58610	
625	603	1105		617	
500	609	1106		623	
375	604	1107		618	
250	585	1108		599	
125	568	1120		582	
00	—	—			
400W	1174	1125	+13	58487	
	DRIFT +6 IN. 130 MINS.				

00045

CLIENT: CRA AREA: Kwe Gwe

LINE: 8W DATE: 27.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
3375N	381	350	+15	58396	
250	371	351		386	
125	399	353		414	
3000N	426	354		441	
875	452	355		467	
750	468	356		483	
625	479	358		494	
2550N	464	359		479	
375	445	400		459	
250	475	401		490	
125	504	402		519	
2000	555	403	+14	569	
875	589	404		603	
750	610	405		624	
625	595	406		609	
1500N	603	407		617	
375	595	408		609	
250	604	409		618	
125	604	410		618	
1000N	584	411		598	
875	589	412		603	

00046

CLIENT: CRA AREA: LAKE GARDA

LINE: 8W DATE: 27.8

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
6000N	58 297	3.28	+16	58 313	
875	343	330		359	
750	346	331		362	
625	345	33Y		361	
5950	355	333		371	
375	38Y	334		398	
250	427	335		443	
125	434	336		450	
5000N	441	337		457	
875	448	338		464	
750	529	340		545	
625	693	341	+15	708	
4550	905	34Y		920	
375	720	343		735	
250	429	344		444	
125	335	345		350	
4000N	323	346		338	
875	296	346		311	
750	313	347		328	
625	338	348		353	
3500N	35Y	349		367	

00047

CLIENT: CRA AREA: KARRATHA

LINE: 6W DATE: 27.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
5375N	58238	3.09	+17	58255	
5500	230	3.12		247	
5625N	245	3.13		262	
5750	288	3.14		305	
5875	465	3.15		482	
6000N	441	3.16		458	
125N	350	3.18		367	

00048

CLIENT: CRA AREA: [illegible]

LINE: 6W DATE: 27.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
2750 N	58500	2.45	+18	58518	
875	435	2.46		453	
3000N	378	2.47		396	
125	360	2.49		378	
250	330	2.50		348	
375	353	2.51		371	
3500N	333	2.52		351	
625	331	2.54		349	
750	344	2.55		362	
875	354	2.56		372	
4000N	329	2.57		347	
125	310	2.58	+17	327	
250	309	2.59		326	
375	318	3.00		335	
4500N	290	3.02		307	
625	215	3.03		232	
750	172	3.04		189	
875	268	3.05		285	
5000N	246	3.06		263	
125	230	3.07		247	
250	230	3.08		247	

00049

CLIENT: CRA AREA: LAKE GAIR

LINE: 6W DATE: 27-8-72

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
00/4W	58468	2.15	+19	58487	
00/6W	367	2.17		386	
125N	407	2.18		426	
250	419	2.20		436	
375	420	2.22		439	
500N	424	2.23		443	
625	425	2.24		444	
750	435	2.25		454	
875	540	2.27		559	
1000N	669	2.28		688	
125	993	2.30		59012	
250	992	2.31		59011	
375	722	2.32		58741	
1500N	567	2.33		586	
625	471	2.35		490	
750	437	2.36		456	
875	385	2.37	+18	403	
2000N	367	2.38		385	
125	375	2.39		393	
250	351	2.40		370	
375	325	2.41		343	
2500N	364	2.42		382	
625	658	2.44		676	

00050

CLIENT: CRA 4W AREA: Lake Cargelligo

LINE: DATE: 27.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
A3 5375	58203	1232	+13	58216	
5500	222	1235		235	
5625	242	1238		255	
5750	264	1240	+14	278	
5875	274	1242		288	
6000	286	1244		300	
A3 00/4W	58470	1:00	+17	58487	
	DRIFT		-11	1486 mins.	

A4

00051

CLIENT: GRA AREA: Lake Grace

LINE: 4W DATE: 27.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
2650N	58271	11:58		58279	
875	280	11:59	+9	289	
3000N	276	12:00		285	
125	472	12:01		481	
3250	522	12:02		531	
375	463	12:03		472	
3500	430	12:04		439	
3625	390	12:05		399	
3750	368	12:06		377	
3875	353	12:08	+10	363	
4000N	349	12 09		359	
125	308	12 11		318	
250	282	1214		292	
375	279	1215	+11	290	
4500N	280	1217		291	
	241	1219		252	
4750	223	12.21		234	
	217	1223	+12	229	
5000	219	1226		231	
	218	1229		230	
5250	213	1229		225	

00052 D300/4W 58481 11:25 Corrn +6. 58487

CLIENT: CRA AREA: [illegible]

LINE: 4W DATE: 22-8-7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
125N	58468	11.34	+6	58476	
250	470	11.35		476	
375	455	11.36		461	
500	429	11.37		435	
625	413	11.38		419	
750	376	11.39		382	
875	380	11.40		386	
1000	361	11.41		367	
1125	341	11.42		347	
1250	303	11.43	+7	310	
1375	235	11.44		242	
1500	169	11.45		176	
1625	166	11.46		173	
1750	220	11.47		227	
1875	370	11.48		377	
2000	376	11.49		383	
	342	11.51	+8	350	
2250	316	11.53		324	
	315	11.54		323	
2500	300	11.55		308	
2625	284	11.56		292	

00053

CLIENT: 6W/CRA AREA: Mike Cr

LINE: DATE: 27.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
750 S	391	11:14	+6	5B397	
625	394	11:15		400	
500	377	11:16		383	
375	391	11:17		397	
250	402	11:18		408	
125	367	11:19		373	
00	379	11:20		385	
A3 (004W)	58491	11:25	+6	5B497	
	NO DRIFT				

A4

A3

5

5 N

00054

CLIENT: 6W/CRA AREA: ANKE GA

LINE: DATE: 22.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
3375	386	10.49	+6	5392	
3250	397	10.50		403	
3125	416	1051		422	
3000	415	10.52		421	
2875	395	1053		401	
2750	386	10.54		392	
2625	382	10.56		388	
2500	392	10.58		398	
2375	393	10.59		399	
2250	381	11.00		387	
2125	371	11.01		377	
2000	364	11.02		370	
1875	366	11.03		372	
1750	371	11.04		377	
1625	393	11 05		399	
1500	405	11 06		411	
1375	391	1107		398	
1250	391	11 08		397	
1125	387	1109		393	
1000	376	1110		392	
875	379	11 11		385	

00055

CLIENT: CRA AREA: Little Ga

LINE: 6W DATE: 22.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMA
6000S	299	10.25	+6	58305	
5875	278	10.26		284	
5750	213	10.28		219	
5625	312	10.29		318	
5500	330	10.30		336	
5375	368	10.31		374	
5250	485	10.32		491	
5125	379	10.34		385	
5000	355	10.35		361	
4875	334	10.36		340	
4750	345	10.37		351	
4625	354	10.38		360	
4500	363	10.39		369	
4375	354	10.40		360	
4250	360	10.41		366	
4125	353	10.42		359	
4000	341	10.43		347	
3875	321	10.44		327	
3750	348	10.45		354	
3625	360	10.46		366	
3500	370	10.47		376	

00056

CLIENT: CRA AREA: LAKEGA

LINE: 4W DATE: 27·8·

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMA
5250S	447	10.14	+6	58453	
5375	445	10.15		451	
5500	392	10.16		398	
5625	339	10.17		345	
5750	353	10.18		359	
5875	417	10.19		423	
6000	443	10.20		449	

00057

CLIENT: CRA AREA: LAKE G

LINE: 4W DATE: 27.8.

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REM
2625	546	9.51	+6	58552	
2750	633	9.52		639	
2875	701	9.54		707	
3000	722	9.55		728	
3125	696	9.56		702	
3250	719	9.58		725	
3375	494	9.59		500	
3500	357	10.00		363	
3625	350	10.01		356	
3750	356	10.02		362	
3875	369	10.03		375	
4000	379	10.04		385	
4125	396	10.05		402	
4250	417	10.06		423	
4375	456	10.07		462	
4500	479	10.08		484	
4625	450	10.09		456	
4750	435	10.10		441	
4875	414	10.11		420	
5000	408	10.12		414	
5125	421	10.13		427	

00058

CLIENT: CRA AREA: Lake Grace

LINE: 4W DATE: 27.8

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	
00 N	58481	9 26	+6	58487	
125 S.	483	9 29		489	
250	463	9 30		469	
375	483	9.31		489	
500	504	9.32		510	
625	497	9.33		503	
750	493	9.34		499	
875	489	9.35		495	
1000	490	9.36		496	
1125	517	9.37		523	
1250	578	9.39		584	
	571	9.40		577	
1500	680	9.41		686	
	766	9.43		772	
1750	449	9.44		455	
	412	9.45		418	
2000	416	9.46		422	
	424	9.47		430	
2250	443	9.48		449	
	415	9.49		481	
2500	492	9.50		498	

00059

CLIENT: CRA AREA: LAKE GA

LINE: 00W DATE: 26-8-7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
5250N	58321	2.57		58330	
375	297	3.00		306	
500	298	3.02		307	
625	284	3.04		293	
750	251	3.06	+8	259	
875	237	3.08		245	
6000N	227	3.11		235	
A1 00/00	58076	3.30	+7	58083	
DRIFT + 5 gammas in 125 mins.					
Δ_2 00/200E	58108	3.40			
A1 00/00W	58076	3.42			
Δ_2 00/200E	58103	3.45			
Δ_3 00/4W	58480	3.55			
A1 00/00W	58078	4.03			
Δ_3 00/4W	58482	4.11			
BASE TIE A1 00/00W TO Δ_3 00/4W.					
		58077 (A1) T		58481.5 (3)	
	+6 corrn	58083 A1			
Corrid rdg Δ_2 = 58487 Δ_2 (E)					

00060

CLIENT: CRA AREA: LAKEG

LINE: 00W DATE: 26·8·

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	
2625N	58328	2·05		58339	
750	243	2·06		254	
875	232	2·08		243	
3000N	308	2·11		319	
125	350	2·14		361	
250	382	2·16	+10	392	
375	395	2·18		405	
500	384	2·20		394	
625	319	2·23		329	
750	211	2·26		221	
875	197	2·29		207	
4000N	215	2·32		225	
125	223	2·34		233	
250	374	2·36		384	
375	555	2·40	+9	564	
500	508	2·42		517	
625	437	2·45		446	
750	446	2·47		455	
875	398	2·49		407	
5000N	335	2·51		344	
125	323	2·55		332	

00061

CLIENT: CRA AREA: LAKE G

LINE: 00W. DATE: 26·8

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	RE
0 OW/00N	58071	1·25	+12.	58083	
125N	144	1·27		156	
250	193	1·29		205	
375	262	1·32		274	
500	327	1·37		339	
625	286	1·40		298	
750	388	1·42		400	
875	422	1·43		434	
1000N	413	1·44		425	
1125	376	1·45		388	
1250	333	1·46		345	
1375	368	1·47		380	
1500	443	1·48		455	
1625	371	1·49		383	
1750	346	1·50		358	
1875	317	1·51	+11	328	
2000N	344	1·52		355	
2125	296	1·55		307	
250	305	1·57		316	
375	432	2·00		443	
500	376	2·03		387	

00062

CLIENT: CRA AREA: Lake Ga

LINE: 00W DATE: 26.8.7

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMARKS
5250S	58437	11.59		58443	
375	384	12:00		390	
5500S	336	12:01		342	
625	328	12:02		334	
750	348	12:04		354	
875	379	12:05		385	
6000S	400	12:06	+7	407	
Δ1 00W/00N	58076	12:15	58083	58083	
DRIFT -7 gammas in 75 mins.					

00063

CLIENT: CRA. AREA: LakeGn

LINE: 00 W DATE: 26·8·77

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMA
2625 S	58354	11:31	+3	58357	
750	345	11:33		348	
875	353	11.34		356	
3000S	405	11·35	———	408	
125	495	11:37	+4	499	
250	467	11:38		471	
375	347	11:40		351	
3500S	345	11:41		349	
625	366	11.42		370	
750	369	11.43		373	
875	378	11.45	———	382	
4000S	368	11.46	+5	373	
125	329	11.47		334	
250	316	11.48		321	
375	310	11.49		315	
4500S	354	11.50		359	
4625	432	11.52		437	
750	471	11.54		476	
875	457	11.55	———	462	
5000S	426	11.57	+6	432	
125	394	11.58		400	

00064

CLIENT: CRA AREA: LAKE G

LINE: OOW DATE: 26 8

OPERATOR: UNIT NO: LAT:

STATION	READ'G 1	TIME	CORR'N	READ'G 2	REMA
△ OOW 000	58083	11:00	0	58083	
125S	120	11:03		120	
250	143	11:05		143	
375	119	11:07	+1	120	
500S	161	11:09		162	
625	161	11:10		162	
750	220	11:11		221	
875	256	11:12		257	
1000S	240	11:14		241	
125	250	11:15		251	
250	262	11:17	+2	264	
375	267	11:18		269	
1500S	275	11:19		277	
625	311	11:21		313	
750	296	11:22		298	
875	314	11:23		316	
2000S	307	11:24		309	
125	373	11:25		375	
250	359	11:26	+3	362	
375	351	11:27		354	
2500S	344	11:29		347	

00065

C.R.A. EXPLORATION PTY. LIMITED
(INC. IN N.S.W.)
95 COLLINS STREET, MELBOURNE, AUSTRALIA 3001

P.O. BOX 384D
TELEPHONE: 63 0491
TELEGRAMS: "CONRIO"
TELEX AA 30108

2nd February, 1978.

The Director of Mines,
P.O. Box 151,
EASTWOOD, S.A. 5063

Dear Sir,

E.L. 362 - Lake Gairdner, South Australia
Final Statement of Expenditure

Expenditure of the above E.L. amounted to $9,385 comprising:

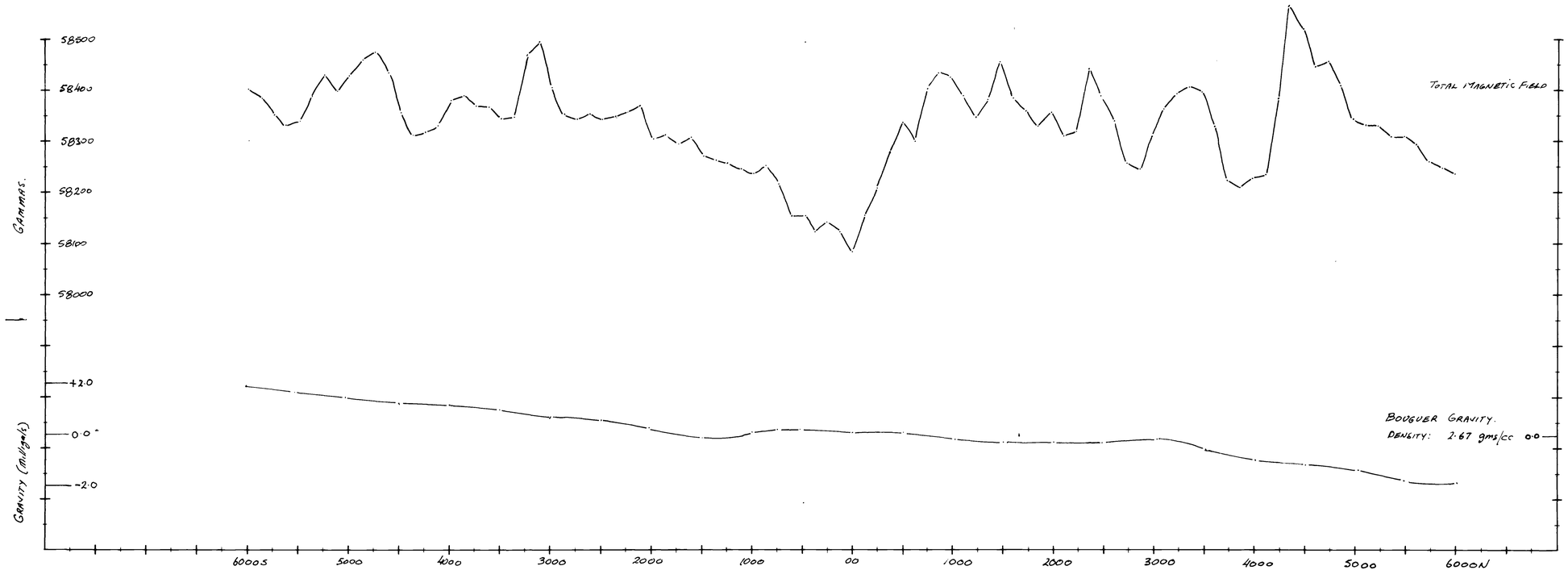
Salaries	$787
Wages	176
Vehicles	109
Contractors	6,743
General Overheads	1,570
	$9,385

Transparencies of plans accompanying the report are being prepared and will be forwarded to you as soon as they become available.

Yours faithfully,

SAF:jm

for: J. Collier
General Manager



SOLO GEOPHYSICS AND CO.

GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY. LTD.

AREA LAKE GAIRDNER S. AUST.

GRID E.L. No. 362

LINE 00W BRG 353°

GRAVITY METER WORDEN No. 274

CALIBRATION .0916 Mc/s.d.

DATA SCALE 1:25000

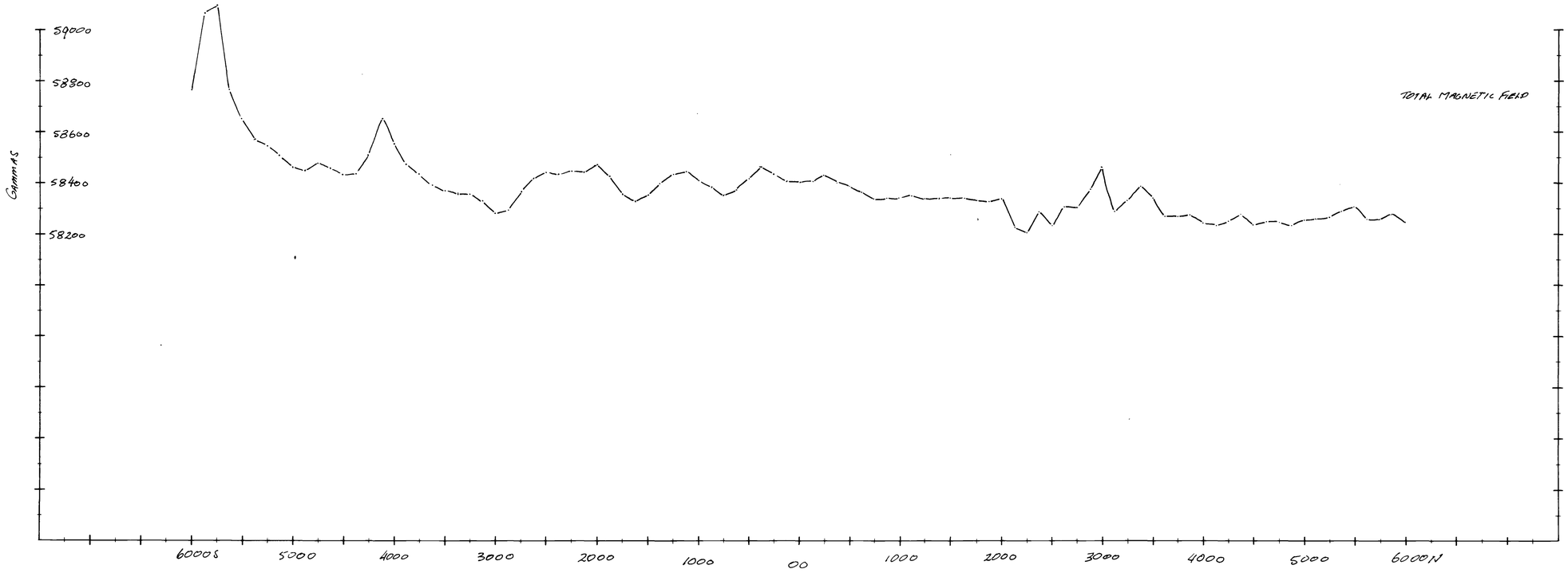
SURVEYORS G. RAU. R. JOHNSON

DATE OF SURVEY AUGUST 1977

PLOTTED BY G. RAU.

BOUGUER GRAVITY DENSITY 2.67 gms/cc

3131-1



SOLO GEOPHYSICS AND CO.

GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY LTD

AREA LAKE GAIRDNER S. AUST.

GRID E.L. No. 362

LINE 2W BRG 353°

GRAVITY METER WORDEN No 274

CALIBRATION 0916 m/g.u.

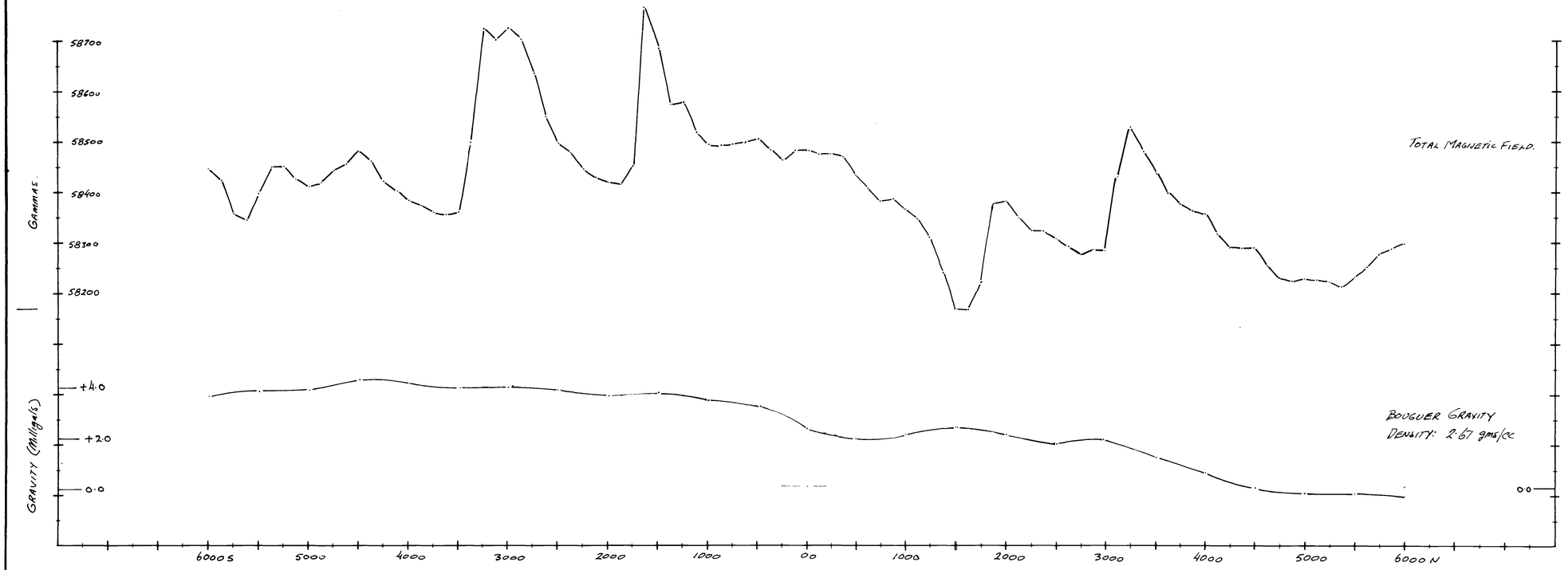
DATA SCALE 1:25000

SURVEYORS G. RAU. R. JOHNSON

DATE OF SURVEY AUGUST 1977

PLOTTED BY G. RAU

3131-2



SOLO GEOPHYSICS AND CO.

GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY LTD

AREA LAKE GAIRDNER S. AUST.

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CALIBRATION .0916 MGAL/D

DATA SCALE 1:25000

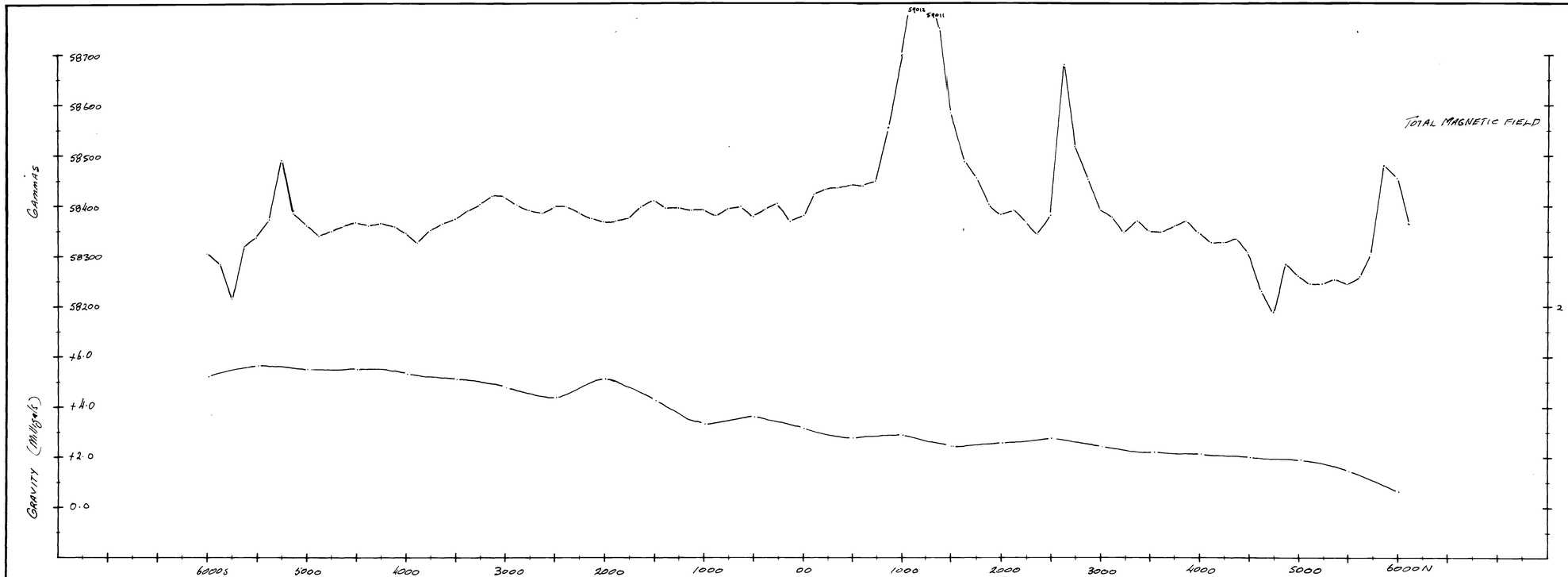
SURVEYORS G. RAU. R. JOHNSON

DATE OF SURVEY AUGUST 1977

PLOTTED BY G. RAU.

BOUGUER GRAVITY DENSITY 2.67 gms/cc

3131-3



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GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY LTD

AREA LAKE GAIRDNER S. AUST.

GRID EL. NO. 362

LINE 6W BRG 353°

GRAVITY METER LACOSTE NO. G37

CALIBRATION PER CHART

DATA SCALE 1:25000

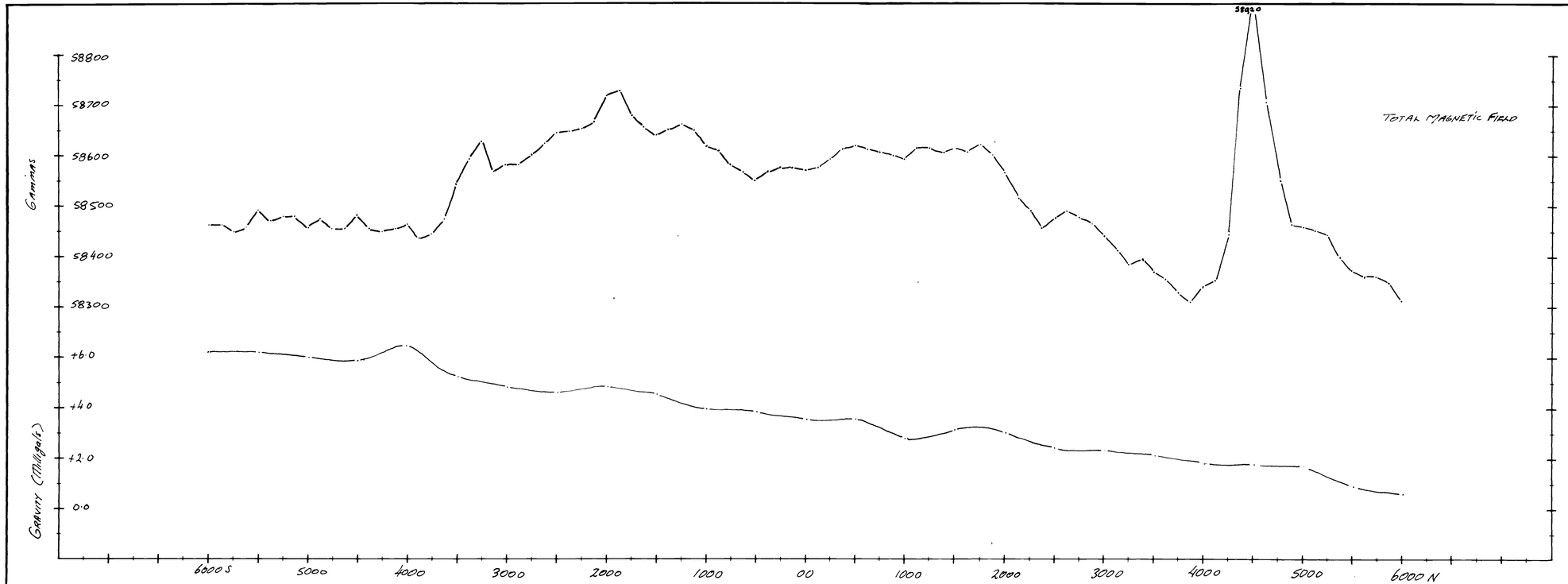
SURVEYORS G. RAU. R. JOHNSON

DATE OF SURVEY AUGUST 1977

PLOTTED BY G. RAU.

BOUGUER GRAVITY DENSITY 2.67 gms/cc

3131-4



SOLO GEOPHYSICS AND CO.

GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY.LTD

AREA LAKE GAIRDNER S. AUST.

GRID E.L. No 362

LINE 8W BRG 353°

GRAVITY METER LACOSTE No. G-37

CALIBRATION PER CHART

DATA SCALE 1:25000

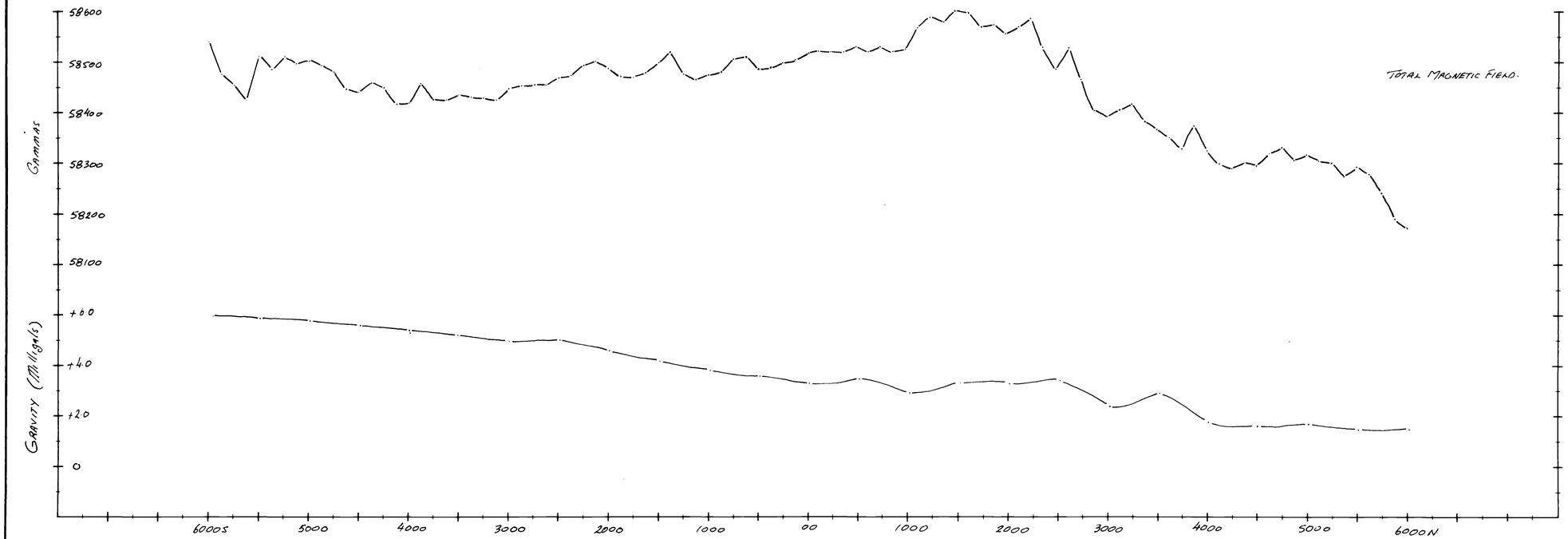
SURVEYORS G. RAO. R. JOHNSON.

DATE OF SURVEY AUGUST 1977.

PLOTTED BY G. RAO.

BOUGUER GRAVITY DENSITY 2.67 gms/cc

3131-5



SOLO GEOPHYSICS AND CO.

GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY LTD

AREA LAKE GAIRDNER. S. AUST.

GRID E.L. No. 362

LINE 10W BRG 353°

GRAVITY METER LACOSTE No. 2-37

CALIBRATION PER CHART

DATA SCALE 1:25000

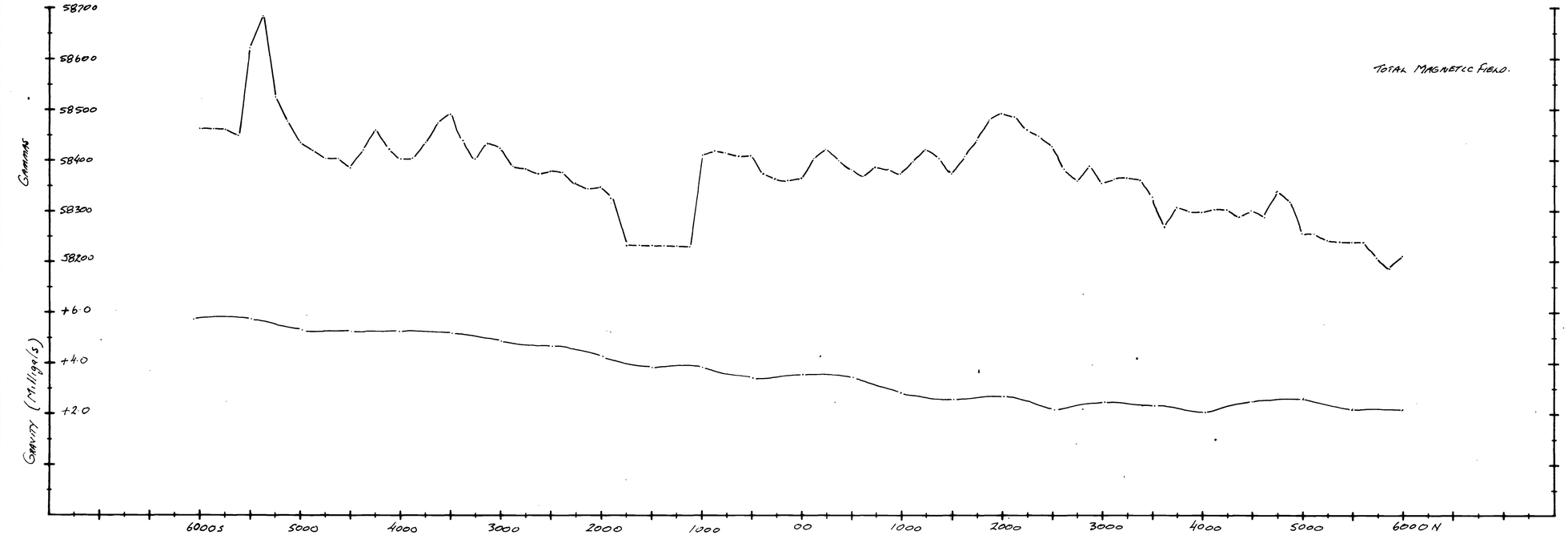
SURVEYORS G. RAU R. JOHNSON

DATE OF SURVEY AUGUST 1977

PLOTTED BY G. RAU

BOUGUER GRAVITY DENSITY 2.65 gm/cc

3131-6



SOLO GEOPHYSICS AND CO.

GRAVITY SURVEY WITH LEVELLING

CLIENT C.R.A. EXPLORATION PTY LTD

AREA LAKE GAIRDNER S. AUST.

GRID E.L. No. 362

LINE 12W. BRG 353°

GRAVITY METER LACOSTE No. G 37

CALIBRATION PER CHART.

DATA SCALE 1:25000

SURVEYORS G. RAO. R. JOHNSON.

DATE OF SURVEY AUGUST 1977.

PLOTTED BY G. RAO.

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LAKE GAIRDNER

HARD SALT SURFACE

BEARING 338 51° N

BEARING 155° T N

2.4 km

Elev 98.55 m

6000 N

1.8 km

ACTUAL POSITION LINE 12000 W

INTENDED POSITION LINE 12000 W

APPROX EDGE OF SALT CRUST DRAINAGE

136° 15' E

TO MAHANEWO STATION

1.65 km

6000 N

Elev 111.04 m

NO TRACK ACCESS ACROSS COUNTRY TO GATE

Elev 98.80 m

Elev 98.76 m

Elev 98.76 m

Elev 98.75 m

Elev 98.63 m

Elev 98.92 m

Elev 100.08 m

0.7 km

STEEL DROPPER 00/00

BENCH MARK INDICATED BY STEEL DROPPER SET IN CONCRETE ON SHORELINE. CO-ORDS 00 S/700 E (BASE ELEVATION ASSUMED ONLY)

31° 50' S

00 S / 12000 W

NO TRACK ACCESS ACROSS COUNTRY

TO NONNING STATION

6000 S

12000 W

Elev 98.66 m

10000 W

8000 W

6000 W

4000 W

Elev 98.38 m

2000 W

00 W

Elev 99.21 m

6000 S

SCALE

1 0 1 2 3 4 5 KMS

136° 15' E

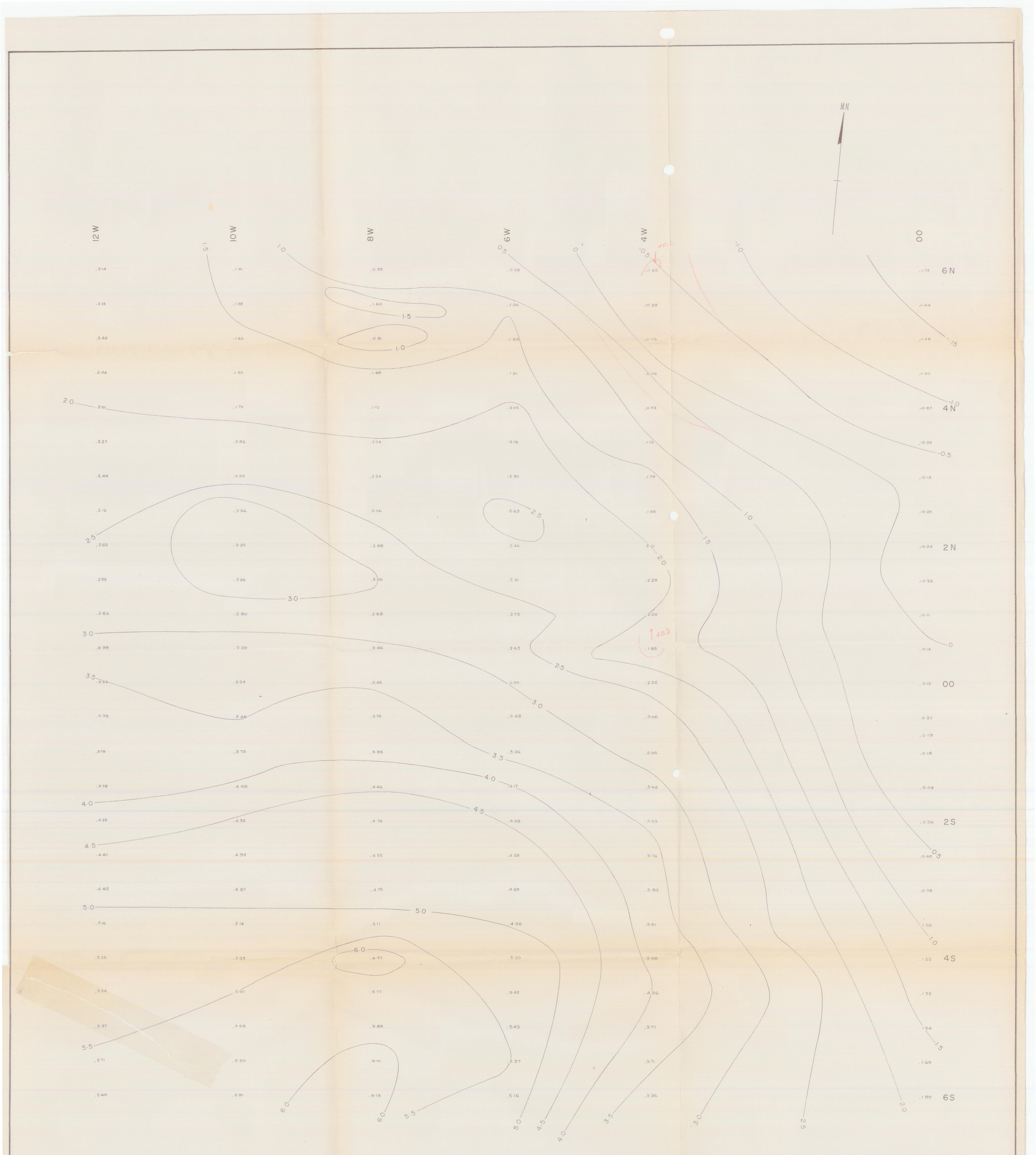
3131-8

C.R.A. EXPLORATION PTY. LIMITED

LAKE GAIRDNER E.L. 362
GEOPHYSICAL GRID PLAN

SHEET REFERENCE: GAIRDNER SH 53-15

Grid set out by: SOLO GEOPHYSICS & COMPANY		Date: AUG 1977
Report No.	Drawn: D.R.W.	Plan No: SA g 147



3131-9

C.R.A. EXPLORATION PTY. LIMITED.

LAKE GAIRDNER E.L. 362

BOUGUER GRAVITY MAP

SHEET REFERENCE: GAIRDNER SH 53-15

Geophysics by: SOLO GEOPHYSICS & COMPANY			Date: AUG. 1977
Interp: D.L.A.	Drawn: D.R.W.	Scale: 1:25,000	Plan No. SAg 149

MN

12W 10W 8W 6W 4W 2W 00

6N 4N 2N 00 2S 4S 6S

3131-10

C.R.A. EXPLORATION PTY. LIMITED.

LAKE GAIRDNER E.L. 362

GROUND MAGNETIC MAP OF TOTAL INTENSITY

SHEET REFERENCE: GAIRDNER SH 53-15

Geophysics by: SOLO GEOPHYSICS & COMPANY.		Date: AUG & NOV 1977	
Interp.: D.L.A., D.R.W.	Drawn: D.R.W.	Scale: 1:25,000.	Plan No.: SAa 148