1963/165

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS

RECORDS:

011093

COMPILATION AND REVIEW OF THE GEOPHYSICS OF THE BONAPARTE GULF BASIN

by

A.L. BIGG-WITHER

1963/165

Vol. 1 Part 3.

(Appendices to accompany Vol. 1, Part 3 of Text)

PART 4 of 11

5928/65

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'A' PAGES

from

PORT KEATS SURVEY

Mines Administration Pty Ltd for Associated Australian Oilfields N.L.

Report: "Preliminary Geological and Geophysical Report, Port Keats Area, Northern Territory 1956" NT/BG.27 by S.S. Derrington, A. Warren and J.E. Burbury, 1957".

(This data has not yet been obtained by the B.M.R.).

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'B' PAGES 1 - 4

COMPUTATION SHEETS

PRELIMINARY GEOLOGICAL AND GEOPHYSICAL REPORT, PORT KEATS AREA, NORTHERN TERRITORY, 1956

NT/BG/27

by

S.S. Derrington, A. Warren and J.E. Burbury

MINES ADMINISTRATION PTY LTD

for

ASSOCIATED AUSTRALIAN OILFIELDS

PORT KEATS LAND SURVEY.

Stn.	Latitude	Red. Level	Theor. Grav. at M.S.L.	Obs. Grav.	Diff. (Obs. Theor)	Elev. D	Corr. Corr.	Anom.	Corr. Anom.
			978.0+	978.0+		2.0	0.06954		
1	14°20'46.8"	90.2	.36525	.38898	.02373		.00627	30.00	34.65
2	59.9"	61.5	.36540	.38951	.02411		.00428	28.39	33.04
3	21'12.9"	45.3	.36556	.39089	.02533		.00315	28.48	33.13
4	26.0"	32.9	.36572	.39106	.02534		.00229	27.63	32.28
5	39.0"	24.3	.36588	.39083	.02495		.00169	26.64	31.29
6	52.1"	21.2	.36605	.39088	.02483		.00147	26.30	30.95
7	22'05.4"	43.9	.36617	.39026	.02409		.00305	27.14	31.79
8	06.8"	26.2	.36621	.39220	.02599		.00182	27.81	32.46
9	08.2"	25.0	.36623	.39315	.02692		.00174	28.66	33.31
10	09.6"	22.4	.36624	.39361	.02737		.00156	28.93	33.58
11	11.0"	21.3	.36625	.39351	.02726		.00148	28.74	33.39
12	12.4"	20.7	.36626	.39406	.02780		.00144	29.24	33.89
13	13.8"	18.4	.36629	.39513	.02884		.00128	30.12	34.77
14	15.2"	24.9	.36631	.39524	.02893		.00173	30.66	35.31
15	16.6"	28.3	.36633	.39634	.03001		.00197	31.98	36.63
16	18.0"	28.7	.36634	.39731	.03097		.00200	32.97	37.62
17	19.4"	36.7	.36636	.39684	.03048		.00255	33.03	37.68
18	20.8"	47.0	.36638	.39709	.03071		.00327	33.98	38.63
19	22.2"	71.6	.36639	.39543	.02904		.00498	34.02	38.67
20	23.6"	60.4	.36641				.00420		
21	25.0"	58.0	.36643	.39528	.02885		.00403	32.88	37.53
22	26.4"	49.3	.36645	.39536	.02891		.00343	32.34	36.99
23	27.8"	73.3	.36647	.39348	.02701		.00510	32.11	36.76
24	29.2"	84.7	.36648	.39247	.02599		.00589	31.88	36.53
25	30.6"	131.5	.36650	.38896	.02246		.00914	31.60	36.25
26	32.0"	118.2	.36651	.38890	.02239		.00822	30.61	35.26
27	33.8"	75.1	.36653	.39001	.02348		.00522	28.70	33.35
28	35.2"	73.8	.36655	.38826	.02171		.00513	26.84	31.49
29	36.2"	106.1	.36655	.38452	.01797		.00738	25.35	30.00
30	54.1"	121.9	.36677	.38261	.01584		.00848	24.32	28.97
31	23'11.9"	129.6	.36698	.38110	.01412		.00901	23.13	27.78
32	29.8"	118.6	.36720	.38133	.01413		.00825	22.38	27.03
33	47.7"	127.6	.36742	.38011	.01269		.00887	21.56	26.21
34	24' 5.6"	115.2	.36763	.38042	.01279		.00801	20.80	25.45

Stn.	Latitude	Red. Level	Theor. Grav. at M.S.L.	Obs. Grav.	Diff. (Obs. Theor)	Elev. Corr. D	Corr. Corr.	Anom.	Corr. Anom.
35	14°24'14.0"	115.8	.36773	.38017	.01244		.00805	20.49	25.14
36	19.1"	129.8	.36779	.37820	.01041		.00903	19.44	24.09
37	24.1"	140.6	.36785	.37590	.00805		.00978	17.13	21.78
38	29.1"	161.7	.36791	.37100	.00309		.01124	14.33	18.98
39	34.2"	153.9	.36797	.36800	.00003		.01070	10.73	15.38
40	39.2"	139.7	.36803	.36659	.00144		.00971	8.27	12.92
41	44.2"	133.4	.36809	.36549	.00260		.00928	6.68	11.33
42	49.2"	116.6	.36815	.36540	.00275		.00811	5.36	10.01
43	54.4"	83.6	.36821	.36665	.00156		.00581	4.25	8.90
44	25'20.1"	84.4	.36852	.36740	.00112		.00587	4.75	9.40
45	45.8"	82.5	.36883	.36831	.00052		.00574	5.22	9.87
46	26'11.4"	81.1	.36913	.36940	.00027		.00564	5.91	10.56
47	37.1"	57.2	.36944	.37169	.00225		.00398	6.23	10.88
48	53.1"	46.1	.36964	.37278	.00314		.00321	6.35	11.00
49	58.1"	24.9	.36970				.00173		
50	27'00.8"	22.4	.36974	.37411	.00437		.00156	5.93	10.58
51	25.4"	14.9	.37003	.37563	.00560		.00104	6.64	11.29
52	50.1"	13.3	.37033	.37667	.00634		.00092	7.26	11.91
53	28'14.7"	12.6	.37063	.37773	.00710		.00087	7.97	12.62
54	39.4"	10.0	.37092				.00070		
55	27'05.8"	20.7	.36980	.37421	.00441		.00144	5.85	10.50
56	27.9"	16.7	.37007	.37515	.00508		.00116	6.24	10.89
57	43.0"	23.4	.37024	.37513	.00489		.00163	6.52	11.17
58	58.0"	12.2	.37043	.37657	.00614		.00085	6.99	11.64
59									
60									
61									
62	28'02.1"	10.4	.37047	.37662	.00615		.00072	6.87	11.52
63	06.1"	10.2	.37052	.37668	.00616		.00071	6.87	11.52
64	10.1"	10.2	.37057	.37666	.00609		.00071	6.80	11.45
65	14.2"	10.3	.37061	.37647	.00586		.00072	6.58	11.23
66	18.2"	10.4	.37067	.37616	.00549		.00072	6.21	10.86
67	34.8"	10.4	.37087	.37647	.00560		.00072	6.32	10.97
68	51.3"	9.9	.37107	.37673	.00566		.00069	6.35	11.00

Stn.	Latitude	Red. Level	Theor. Grav. at M.S.L.	Obs. Grav.	Diff. (Obs. Theor)	Elev. Corr. D	Corr. Corr.	Anom.	Corr. Anom.
69	14°29'07.9"	9.0	.37127	.37696	.00569		.00063	6.32	10.97
70	24.5"	9.7	.37148	.37734	.00586		.00067	6.53	11.18
71	41.1"	10.0	.37167	.37761	.00594		.00070	6.64	11.29
72	57.7"	9.3	.37188	.37787	.00599		.00065	6.64	11.29
73	30'14.2"	9.5	.37207	.37795	.00588		.00066	6.54	11.19
74	30.8"	9.5	.37228	.37815	.00587		.00066	6.53	11.18
75	47.4"	9.6	.37247	.37859	.00612		.00067	6.79	11.44
76	31'12.6"	10.0	.37279	.37950	.00671		.00070	7.41	12.06
77	37.8"	10.3	.37309	.38022	.00713		.00072	7.85	12.50
78	32'03.0"	10.7	.37340	.38090	.00750		.00074	8.24	12.89
79	28.2"	9.6	.37370	.38164	.00794		.00067	8.61	13.26
80	29'44.8"	9.0	.37172	.37845	.00673		.00063	7.36	12.01
81	30'05.0"	9.3	.37196	.37939	.00743		.00065	8.08	12.73
82	25.3"	9.5	.37220	.38005	.00785		.00066	8.51	13.16
83	45.5"	9.0	.37246	.38068	.00822		.00063	8.85	13.50
84	31'05.8"	10.0	.37270	.38098	.00828		.00070	8.98	13.63
85	28'06.0"	12.9	.37052	.37745	.00693		.00090	7.83	12.48
86	21.8"	10.2	.37072	.37810	.00738		.00071	8.09	12.74
87	37.7"	10.4	.37090	.37861	.00751		.00072	8.23	12.88
88	53.6"	10.8	.37110	.37888	.00778		.00075	8.53	13.18
89	29'09.4"	11.5	.37129	.37967	.00838		.00080	9.18	13.83
90	25.3"	10.7	.37148	.38078	.00930		.00074	10.04	14.69
91	41.2"	10.0	.37167	.38277	.01110		.00070	11.80	16.45
92	57.0"	10.0	.37187	.38511	.01324		.00070	13.94	18.59
93	30'12.9"	9.5	.37206	.38799	.01593		.00066	16.59	21.24
94	28.8"	10.2	.37226	.39069	.01843		.00071	19.14	23.79
95	29'03.9"	9.5	.37123	.37957	.00834		.00066	9.00	13.65
96	30.0"	12.0	.37154	.38059	.00905		.00083	9.88	14.53
97	56.2"	10.1	.37193	.38130	.00937		.00070	10.07	14.72
98	28'58.5"	10.3	.37115	.37608	.00493		.00072	5.65	10.30
99	32.5"	10.1	.37083	.37467	.00384		.00070	4.54	9.19
100	06.5"	9.8	.37053	.37314	.00261		.00068	3.29	7.94
101	27'40.5"	10.5	.37021	.37145	.00124		.00073	1.97	6.62
102	16.9"	10.6	.36994	.36959	.00035		.00074	0.39	5.04

Stn.	Latitude	Red. Level	Theor Grav. at M.S.L.	Obs. Grav.	Diff. (Obs. Theor)	Elev. D	Corr. Corr.	Anom.	Corr. Anom.
103	14°26.53.3"	10.8	.36964	.36806	.00158		.00075	0.83	3.82
104	29.7"	13.9	.36936	.36615	.00321		.00097	2.24	2.41
105	25'51.1"	28.5	.36890	.36340	.00550		.00198	3.52	1.13
106	24.9"	39.8	.36858	.36147	.00711		.00277	4.34	0.31
107	01.8"	56.3	.36830	.35832	.00998		.00392	6.06	1.41
108	24'37.0"	80.9	.36800	.35433	.01367		.00563	8.04	3.39
109	18.5"	109.7	.36779	.35089	.01690		.00763	9.27	4.62
110	23'58.6"	106.6	.36755	.34875	.01880		.00741	11.39	6.74
111	38.3"	149.8	.36729	.34412	.02317		.01042	12.75	8.10
112	18.7"	201.2	.36707	.34033	.02674		.01399	12.75	8.10
113	22'53.8"	213.8	.36677	.33899	.02778		.01487	12.91	8.26
114	30.7"	233.4	.36649	.33738	.02911		.01623	12.88	8.23
115	05.2"	240.8	.36618	.33651	.02967		.01675	12.92	8.27
116	21'41.6"	206.9	.36590	.33811	.02779		.01439	13.40	8.75
117	18.8"	199.0	.36563	.33834	.02729		.01384	13.45	8.80
118	20'48.9"	186.2	.36527	.33848	.02679		.01295	13.84	9.19
119	24.6"	216.7	.36498	.33601	.02897		.01507	13.90	9.25
120	19'51.1"	224.9	.36457	.33505	.02952		.01563	13.89	9.24
121	28.0"	214.1	.36430	.33546	.02884		.01489	13.95	9.30
122	18'58.0"	228.4	.36393	.33400	.02993		.01588	14.05	9.40
123	37.2"	202.2	.36368	.33533	.02835		.01406	14.29	9.64
124	9.2"	150.1	.36335	.33846	.02489		.01043	14.46	9.81
125	17'45.2"	132.0	.36306	.33952	.02354		.00918	14.36	9.71
126	21.7"	112.6	.36278	.34085	.02193		.00783	14.10	9.45
127	03.2"	102.2	.36256	.34123	.02133		.00711	14.22	9.57
128	16'41.8"	90.9	.36231	.34169	.02062		.00632	14.30	9.65

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'D' PAGES 1 - 3

TOPOGRAPHIC SURVEY STATISTICS

PRELIMINARY GEOLOGICAL AND GEOPHYSICAL REPORT,
PORT KEATS AREA, NORTHERN TERRITORY, 1956.
NT/BG/27

by

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MINES ADMINISTRATION PTY LTD

for

ASSOCIATED AUSTRALIAN OILFIELDS

PORT KEATS AREA

GRAVITY SURVEY
SURVEY STATISTICS

Line	Bearing	Distance	R.L.	Latitude	
1			90.2	14° 20	46.8
1.2	299° 56'	2640	61.5		59.9
2.3	" "	"	45.3	21	12.9
3.4	" "	"	32.9		26.0
4.5	" "	"	24.3		39.1
5.6	" "	"	21.2		52.1
6.7	" "	2680	43.9	22	05.4
7.8	266° 56'	2640	26.2		06.8
8.9	" "	"	25.0		08.2
9.10	" "	"	22.5		09.6
10.11	" "	"	21.3		11.0
11.12	" "	"	20.7		12.4
12.13	" "	2700	18.4		13.8
13.14	" "	2580	24.9		15.2
14.15	" "	2640	28.3		16.6
15.16	" "	"	28.7		18.0
16.17	" "	"	36.7		19.4
17.18	" "	"	47.0		20.8
18.19	" "	"	71.7		22.3
19.20	" "	"	60.5		23.6
20.21	" "	"	58.0		25.0
21.22	" "	"	49.3		26.4
22.23	" "	"	73.3		27.8
23.24	" "	"	84.7		29.2
24.25	" "	"	131.5		30.6
25.26	" "	"	118.2		32.0
26.27	" "	3240	75.1		33.8
27.28	" "	2640	73.8		35.2
28.29	" "	1905	106.1		36.2
29.30	226° 56'	2640	121.9		54.1
30.31	" "	"	129.6	23	11.9
31.32	" "	"	118.6		29.8
32.33	" "	"	127.6		47.7
33.34	" "	"	115.2	24	05.6
34.35	" "	1249	115.8		14.0
35.36	258° 56'	2640	129.8		19.1
36.37	" "	"	140.6		24.1
37.38	" "	"	161.7		29.1
38.39	" "	"	153.9		34.2
39.40	" "	"	139.7		39.2
40.41	" "	"	133.4		44.2
41.42	" "	"	116.6		49.2
42.43	" "	2692	83.6		54.4
43.44	168° 56'	2640	84.4	25	20.1
44.45	" "	"	82.5		45.8
45.46	" "	"	81.1	26	11.4
46.47	" "	"	57.2		37.1
47.48	" "	1641	46.1		53.1
48.49	258° 56'	2640	24.9		58.1
49.50	" "	1392	22.4	27	00.8
50.51	199° 43'	2640	14.9		25.4
51.52	" "	"	13.3		50.1
52.53	" "	"	12.7	28	14.7
53.54	" "	"	10.0		39.4
50.55	258° 56'	2650	20.7	27	05.8
55.56	211° 02'	2595	16.7		27.9
56.57	233° 29'	2640	23.4		43.0
57.58	" "	"	12.2		58.0
58.62	261° 09'	"	10.4	28	02.1
62.63	" "	"	10.2		06.1
63.64	" "	"	10.2		10.1
64.65	" "	"	10.3		14.2
65.66	" "	"	10.4		18.2
66.67	230° 42'	"	10.4		34.8
67.68	" "	"	9.9		51.3
68.69	" "	"	9.0	29	07.9

Line	Bearing	Distance	R.L.	Latitude
69.70	230° 42'	2640	9.7	14° 29 24.5
70.71	" "	"	10.0	41.1
71.72	" "	"	9.3	57.7
72.73	" "	"	9.5	30 14.2
73.74	" "	"	9.5	30.8
74.75	" "	"	9.6	47.4
75.76	195° 51'	"	10.0	31 12.6
76.77	" "	"	10.3	37.8
77.78	" "	"	10.7	32 03.0
78.79	" "	"	9.6	28.2
70.80	140° 42'	"	9.0	29 44.8
80.81	" "	"	9.3	30 05.2
81.82	" "	"	9.5	25.3
82.83	" "	"	9.0	45.5
83.84	" "	"	10.0	31 05.8
52.85	172° 19'	"	12.9	14° 28 06.0
85. 86	" "	"	10.2	21.8
86.87	" "	"	10.4	37.7
87.88	" "	"	10.9	53.6
88.89	" "	"	11.5	29 09.4
89.90	" "	"	10.6	25.3
90.91	" "	"	10.0	41.2
91.92	" "	"	10.0	57.0
92.93	" "	"	9.5	30 12.9
93.94	" "	"	10.2	28.8
81.95	178° 54'	"	9.50	29 03.9
95.96	" "	"	11.99	30.0
96.97	" "	"	10.11	56.2
70.98	353° 10'	"	10.29	28 58.5
98.99	" "	"	10.06	32.5
99.100	" "	"	9.84	06.5
100.101	" "	"	10.49	27 40.5
101.102	334° 23'	"	10.63	16.9
102.103	" "	"	10.75	26 53.3
103.104	" "	"	13.88	29.7
104.T1	352° 48'	2000	24.60	10.0
T1.105	24° 13'	2090	28.52	25 51.1
105.106	06'	2640	39.78	24.9
106.T2	"	760	45.49	17.4
T2.T3	342° 23'	1400	54.66	04.2
T3.107	353° 01'	245	56.32	01.8
107.T4	334° 15'	1530	68.70	24 48.1
T4.108	338° 28'	1200	80.90	37.0
108.T5	322° 12'	350	84.20	34.3
T5.T6	330° 12'	900	–	26.5
T6.109	331° 08'	924	109.68	18.5
109.T7	315° 42'	1200	–	10.0
T7.110	315° 28'	1619	106.55	23 58.6
110.T8	307° 54'	1720	116.94	48.0
T8.111	295° 05'	2320	149.85	38.3
111.T9	304° 27'	763	175.86	34.0
T9.T10	322° 21'	895	178.13	27.0
T10.112	336° 25'	918	201.24	18.7
112.T11	15° 43'	717	–	11.8
T11.T12	26° 38'	456	212.54	07.8
T12.113	343° 55'	1464	213.76	22 53.8
113.T13	335° 00'	407	225.74?	50.2
T13.T14	340° 00'	461	..	45.9
T14.T15	330° 10'	303	221.05	43.3
T15.T16	311° 27'	621	225.36	38.2
T16.T17	319° 36'	480	233.15	35.6
T17.114	323° 22'	618	233.40	30.7
114.T18	327° 29'	535	227.83	26.2
T18.T19	321° 48'	510	228.82	22.2

Line	Bearing		Distance	R.L.	Latitude		
T19.T20	352°	24'	313	224.94	14°	22	19.2
T20.T21	322°	24'	769	230.35			13.1
T21.115	344°	27'	824	240.85			05.2
115.T22	3°	29'	357	250.56			01.7
T22.T23	339°	13'	278	250.61		21	59.1
T23.T24	335°	26'	740	-			52.5
T24.T25	349°	38'	657	209.70			46.1
T25.116	337°	48'	491	206.88			41.6
116.T26	327°	34'	473	207.32			37.6
T26.T27	343°	31'	737	210.73			30.6
T27.T28	20°	01'	401	206.91			26.9
T28.117	356°	47'	816	198.97			18.8
117.T29	6°	01'	960	186.89			09.4
T29.T30	23°	29'	970	177.21			00.6
T30.118	348°	46'	1200	186.19		20	48.9
118.T31	356°	16'	1291	204.62			36.1
T31.T32	13°	27'	131	208.86			34.8
T32.T33	346°	15'	586	215.02			29.2
T33.119	11°	05'	478	216.66			24.5
119.T34	355°	47'	1179	224.91			12.9
T34.T35	3°	32'	311	225.50			9.9
T35.T36	330°	02'	604	232.58			4.7
T36.120	4°	18'	1373	224.86		19	51.1
120.T37	2°	59'	709	221.51			44.1
T37.T38	356°	23'	1202	212.97			32.2
T38.121	327°	59'	502	214.13			28.0
121.T39	357°	27'	533	214.10			22.7
T39.T40	19°	19'	769	217.99			15.5
T40.T41	16°	38'	572	218.88			10.0
T41.T42		26'	452	221.62			05.6
T42.122	18°	44'	808	228.35		18	58.0
122.T43	351°	09'	729	217.00			50.8
T43.T44	2°	36'	604	215.25			44.8
T44.123	1°	21'	765	202.24			37.2
123.T45	22°	45'	867	179.24			29.3
T45.T46	354°	26'	613	170.00			23.3
T46.T47	8°	32'	614	159.26			17.2
T47.124	20°	23'	867	150.11			9.2
124.T48	5°	47'	879	140.02			0.5
T48.T49	343°	41'	652	138.28		17	54.3
T49.T50	336°	40'	269	136.72			51.9
T50.125	328°	59'	781	132.01			45.2
125.T51	344°	23'	477	128.74			40.7
T51.T52	335°	05'	547	123.81			35.8
T52.T53	313°	11'	490	120.97			32.4
T53.126	328°	16'	1214	112.64			21.7
126.T54	347°	29'	781	106.62			14.1
T54.T55	7°	57'	573	105.33			08.5
T55.127	1°	24'	532	102.25			03.2
127.T56	357°	09'	1313	94.33		16	50.2
T56.T57	5°	10'	518	95.12			45.1
T57.128	40°	56'	456	90.88			41.8
105.T58	249°	07'	253	26.34			
T58.A.W.1	2°	45'	322	27.31			
A.W.1	GL.			26.60			
BM -	A.W.1	85°	22'	27.13			

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'A' PAGES 1 - 3

FIELD SHEETS

DALY RIVER CROSSING - PORT KEATS
B.M.R. September, 1957

(The above traverse is part of the survey in the Darwin-Katherine area - Records No. 1959/74).

by

P.M. Stott and W.J. Langron

GRAVITY SURVEY

Area: Darwin - Katherine Traverse: Daly River Extension Observer P.M. Stott

Instrument: Heiland 58 Scale Value 0.110 m.gals/scale division

Date: 9.9.57			Remarks
Station	Time	Reading	
D11	09.29	488.2	
D11	09.32	488.3	
D51	10.03	514.8	(Land Rover rear wheel came off).
Date: 13.9.57			
D11	09.43	487.7)	
D51	10.11	512.6)	
D52	10.39	456.2)	Very Rough Track.
D11	11.20	487.8)	
D52	12.06	457.2)	
D53	12.30	384.0)	
D54	12.46	400.1	
D52	13.22	456.8	
D54	14.53	399.7	
D55	15.07	399.5	
D56	15.24	425.5	
D57	15.40	440.4	
D54	16.14	399.2	
D57	16.47	442.4	Very Rough.
D58	17.03	469.8	
D59	17.18	487.7	
D60	17.33	511.3	Rough.
Date: 15.9.57			(High Range +510)
D62	09.27	57.7	
D61	09.47	16.2	
D60	10.05	478.7	(middle Range).
D62	10.31	58.4	

GRAVITY SURVEY

Area: Darwin - Katherine Traverse: Port Keats Observer: P.M. Stott
Instrument: Heiland 58 Scale Value: 0.110 m.gals/scale division

Date 22.9.57 High Range +510

Station	Time	Reading
A.A.08	14.41	267.6
A.A.011	14.57	282.6
A.A.08	15.12	267.6
K26	15.32	251.3
K25	15.53	242.0
K24	16.13	187.4
A.A.08	17.01	267.9

Date 23.9.57

K22	11.57	200.7
K23	12.14	206.2
K24	12.35	184.1
K22	13.05	199.8
K22	13.58	200.0
K21	14.23	226.1
K20	14.44	192.7
K22	15.23	200.3
K20	16.04	192.9
K19	16.25	191.8
K18	16.50	150.0
K20	17.24	192.7

Date 24.9.57 (All on high range +510)

K16	08.32	155.9
K17	08.51	133.3
K18	09.08	148.8
K16	09.38	154.3
K15	09.58	142.6
K14	10.18	156.8
K16	10.50	154.5
K14	13.58	157.9
K13	14.18	177.0
K12	14.35	153.1
K14	15.01	156.8
K12	16.11	154.9
K11	16.27	179.8
K10	16.42	175.3
K 9	16.58	177.4
K12	17.30	154.8

Area: Darwin - Katherine Traverse: Port Keats Observer: P.M. Stott

Instrument: Heiland 58 Scale Value: 0.110 m.gals/scale division

Date: 25.9.57 (High Range +510)

Station	Time	Reading
K 9	09.06	174.8
K 7	09.30	153.3
K 8	09.45	168.0
K 9	09.59	174.2
K 7	11.26	151.1

Date 26.9.57

D16	09.39	16.9
D62	09.56	58.9
K 1	10.10	78.5
D61	10.24	16.3
K 1	10.38	78.1
K 2	10.50	124.3
K 3	11.04	152.9
K 4	11.18	168.7
K 1	11.47	79.2
K 4	12.18	169.7
K 5	12.32	160.1
K 6	12.45	152.7
K 4	13.30	168.8

Date 26.9.57

D62	15.09	59.3
D63	15.29	68.1
D64	15.48	87.8
D65	16.05	96.6
D62	16.42	59.1
D65	17.21	98.2
D66	17.51	100.3
D67	18.20	146.8
D68	18.38	68.7
D65	19.47	96.0

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS.

APPENDIX 'B' PAGES 1 - 3

COMPUTATION SHEETS

from

DALY RIVER CROSSING - PORT KEATS B.M.R. SEPTEMBER, 1957

(The above traverse is part of the survey in the Darwin - Katherine area).

Records 1959/74

by

P.M. Stott and W.J. Langron

GRAVITY SURVEY

Station	Latitude	Elevation	Observed Gravity	Normal Gravity	0.094 Free Air Correct. (+)	Free Air Anomaly	0.025 Bouguer Correct. (-)	Bouguer Anomaly
			978	978				
D61	13°51.8'	26.3	346.24	344.71	2.47	+4.00	[illegible].66	+3.34
K1	54.1'	40.5	53.09	46.31	3.81	+10.59	1.01	+9.58
K2	55.9'	50.0	58.17	47.57	4.70	+15.30	1.25	+14.05
K3	57.7'	55.0	61.30	48.83	5.17	+17.64	1.38	+16.26
K4	58.9'	55.6	63.02	49.68	5.23	+18.57	1.39	+17.18
K5	14°00.3'	67.9	61.99	50.66	6.38	+17.71	1.70	+16.01
K6	01.8'	75.0	61.19	51.71	7.05	+16.53	1.88	+14.65
K7	02.9'	85.2	61.27	51.86	8.01	+17.42	2.13	+15.29
K8	03.2'	92.2	62.92	52.70	8.67	+18.89	2.31	+16.58
K9	04.3'	101.9	63.61	53.48	9.58	+19.71	2.55	+17.16
K10	06.1'	115.1	63.38	54.76	10.82	+19.44	2.88	+16.56
K11	07.1'	128.2	63.87	55.46	12.05	+20.46	3.21	+17.25
K12	08.3'	171.0	61.11	56.31	16.07	+20.87	4.28	+16.59
K13	09.0'	126.2	63.70	56.81	11.86	18.75	3.16	+15.59
K14	09.8'	108.0	61.57	57.37	10.23	+14.43	2.72	+11.71
K15	10.7'	107.2	60.01	58.02	10.08	+12.07	2.68	+9.39
K16	10.9'	55.7	61.31	58.16	5.24	+8.39	1.39	+7.00
K17	11.4'	68.3	58.87	58.53	6.42	+6.76	1.71	+5.05
K18	12.9'	87.7	60.62	59.59	8.24	+9.27	2.19	+7.08
K19	13.6'	60.1	65.23	60.09	5.65	+10.79	1.50	+9.29
K20	14.6'	41.0	65.35	60.81	3.85	+8.39	1.03	+7.36
K21	16.4'	48.0	69.05	62.10	4.51	+11.46	1.20	+10.26
K22	17.1'	92.1	66.20	62.59	8.66	+12.27	2.30	+9.97
K23	18.3'	99.6	66.83	63.45	9.36	+12.74	2.49	+10.25
K24	18.9'	94.5	64.44	63.88	8.88	+9.44	2.36	+7.08
K25	20.1'	39.9	70.48	64.75	3.75	+9.48	1.00	+8.48
K26	20.6'	30.0	71.50	65.11	2.82	+9.21	0.75	+8.46
AH08	22.0'	?30.8	73.30	66.12	2.89		0.77	
AA011	22.2'	25.9	74.95	66.26	2.43	+11.12	0.65	+10.47

Area: Darwin - Katherine Traverse: Port Keats Date of Survey: 22-26 September, 1957

Meter: Heiland 58 Sensitivity: 0.1106 Density Factor: 2.0

Worked: Checked:

For Station Locations See Vol. IV, Part IV, Plates 73 and 74.

GRAVITY SURVEY

Station	Latitude	Elevation	Observed Gravity	Normal Gravity	Free Air Correction	Free Air Anomaly	Bouguer Correct-	Bouguer Anomaly
			978	978				
D11	13°46.6'	37.7	338.55	341.08	-3.55	+1.02	-1.28	-0.26
D51	46.8	29.3	341.29	341.22	2.76	2.83	-1.00	+1.83
D52	46.2	69.8	335.09	340.81	6.57	0.85	-2.38	-1.53
D53	45.6	53.5	327.06	340.39	5.03	-8.30	-1.82	-10.12
D54	45.4	13.5	328.84	340.26	1.27	-10.15	-0.46	-10.61
D55	45.4	26.5	328.83	340.26	2.49	-8.94	-0.90	-9.84
D56	45.7	67.7	331.70	340.46	6.37	-2.39	-2.31	-4.70
D57	47.4	53.6	333.35	341.65	5.04	-3.26	-1.83	-5.09
D58	48.4	19.6	336.38	342.34	1.84	-4.12	-0.67	-4.79
D59	49.3	19.5	338.37	342.97	1.83	-2.77	-0.66	-3.43
D60	13°50.8'	26.8	340.98	344.01	2.52	-0.51	-0.91	-1.42
D61	52.1	26.3	346.24	344.92	2.47	+3.79	-0.90	+2.89
D62	53.5	45.4	350.84	345.89	4.27	9.22	-1.55	7.67
D63	53.3	68.1	351.81	345.75	6.41	12.47	-2.32	10.15
D64	52.6	100.1	353.99	345.27	9.42	18.14	-3.41	14.73
D65	53.0	184.2	354.96	345.54	17.33	26.75	-6.28	20.47
D66	53.0	250.0	355.23	345.54	23.52	33.21	-8.52	24.69
D67	51.6	145.4	360.40	344.57	13.68	29.51	-4.96	24.55
D68	52.2	222.0	351.85	344.99	20.88	27.74	-7.57	20.17

Area: Darwin - Katherine Traverse: Daly River (Extension) Date of Survey: 15.9.57

Meter: Heiland 58 Sensitivity 0.1106 Datum: Darwin Density Factor: 2.67

Worked: PMS

For Station Locations See Vol. IV, Part IV, Plates 69 and 72.

GRAVITY SURVEY

Station	Latitude	Longitude	Elevation	Obs. Gravity	Normal Gravity	Free Air Corr.	Free Air Anom.	Boug. Corr.	Boug. Anom.
				978	978				
D1	13°51'.0	130°35.9'	94.2	335.59	344.15	+8.86	+0.30	-3.21	-2.91
D2	50.9		94.6	334.97	344.08	8.90	-0.21	-3.22	-3.43
D3	50.6		84.4	331.58	343.87	7.94	-4.35	-2.88	-7.23
D4	50.6		103.8	327.71	343.87	9.76	-6.40	-3.54	-9.94
D5	50.5		88.0	331.03	343.80	8.28	-4.49	-3.00	-7.49
D6	50.4		100.1	335.13	343.73	9.42	+0.81	-3.41	-2.59
D7	50.7		89.4	337.18	343.94	8.41	+1.65	-3.05	-1.40
D8	50.9		56.5	339.24	344.08	5.31	0.47	-1.93	-1.46
D9	51.4		42.4	339.48	344.43	3.99	-0.96	-1.44	-2.40
D10	13°51'.4		27.5	339.07	344.43	2.59	-2.77	-0.94	-3.71
D11	46.6		37.7	338.55	341.08	3.55	+1.02	-1.28	-0.26
D12	46.4		47.3	337.35	340.95	4.45	0.85	-1.61	-0.76
D13	42.1		114.7	330.40	337.98	10.79	3.21	-3.91	-0.70
D14	37.9		102.6	332.35	335.09	9.65	6.91	-3.50	+3.41
D15	36.3		103.5	332.21	334.00	9.74	7.95	-3.53	+4.42
D16	34.8		109.2	330.33	332.97	10.27	7.63	-3.72	3.91
D17	33.4		122.8	327.01	332.00	11.55	6.56	-4.19	2.37
D18	32.3		146.8	324.00	331.26	13.81	6.55	-5.00	1.55
D19	31.6		206.7	319.38	330.78	19.44	8.04	-7.04	1.00
D20	13°31'.7		210.0	318.98	330.85	19.75	7.88	-7.16	0.72
D21	32.8		349.0	309.16	331.60	32.83	10.84	-11.89	-1.05
D22	33.5		304.5	313.11	332.07	28.64	9.68	-10.38	-0.70
D23	34.6		302.3	313.57	332.83	28.43	9.17	-10.30	-1.13
D24	36.0		360.9	310.73	333.79	33.95	10.89	-12.30	-1.41
D25	35.4		364.3	312.01	333.37	34.27	12.91	-12.42	+0.49
D26	35.8		405.8	312.42	333.65	38.17	16.94	-13.83	3.11
D27	36.4		412.2	312.53	334.06	38.77	17.24	-14.05	3.19
D28	36.9		330.6	317.94	334.40	31.10	14.64	-11.27	3.37
D29	37.2		264.3	322.25	334.61	24.86	12.50	-9.01	3.49
D30	37.9		236.8	323.22	335.09	22.27	10.40	-8.07	2.33

Area: Darwin - Katherine Traverse: Daly River

Meter: Heiland 58 Sensitivity 0.1106 m/gals / Datum: Darwin Density Factor: 2.67

Worked: Checked: Date: 4/2/58

For Station Locations See Vol.IV, Part IV, Plates 69 and 72.

Location Map for stations D14 to D50 not yet available from D. of I.

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'E' PAGES 1 - 7

DENSITY DETERMINATIONS. DARWIN KATHERINE AREA

from

Records 1959/74

by

P.M. Stott and .W.J. Langron

TABLE 1

CANNON HILL TRAVERSE (2)

Stn	Rock type	Density	Between Stations	% Rock types along traverse line	Av. Density	Remarks
G1	Siltstone	2.70	0-1	70% Siltstone 30% Greywacke	2.70	
2	Granite	2.63	1-2	20% Siltstone 80% Granite	2.65	
G.2	Granite	2.63	2-12	100% Granite	2.63	
G13	Limestone	2.72	12-13	70% Granite 30% Limestone	2.67	% of granite could be greater underground
G14	Siltstone & Gwke	2.70	13-14	20% Limestone 60% Chert 20% Siltstone	2.67	
G18	Siltstone & Gwke	2.70	14-18	100% Siltstone & Gwke	2.70	
G19	Qtz. Siltstone	2.65	18-19	50% Siltstone 50% Qtz: Siltstone	2.67	Volcanics have max. thickness of 1000'. However densities of volcanic and underlying sediment are similar
G20	Andesite	2.66	19-20	10% Qtz: Siltstone 90% Andesite	2.66	
G21	Qtz: Gwke	2.68	20-21	20% Andesite 80% Silt & Gwke	2.68	
G22	Siltstone	2.70	21-22	10% Basic Rock 90% Siltstone & Gwke	2.72	50' thick Cretaceous S'st not allowed for
G23	Siltstone	2.70	22-23	30% Basic Rock 70% Siltstone & Gwke	2.75	
G24	Qtz: Gwke	2.68	23-24	100% Siltstone & Gwke	2.70	
G25	Qtz: Gwke	2.68	24-25	100% Siltstone & Gwke	2.70	
G26	Siltstone	2.70	25-26	Siltstone & Gwke	2.70	
G27	Colrwong Gwke	2.66	26-27	80% Silt & Gwke 20% Qtz: Gwke	2.69	This section closely underlain by basement (S.G. 3.1, c.f. Table 4)
G28	Basic Rock	2.85	27-28	10% Basic Rock 90% B.I.F. & Siltstone	2.95	
G29	Qtz: Siltstone	2.65	28-29	50% Basic Rock 50% Qtz: Silt	2.75	
G30	Basic Rock	2.85	29-30	30% Basic Rock 70% Siltstone	2.75	
G31	Basic Rock	2.85	30-31	100% Basic Rock	2.85	Possibly some silts near surface beneath basic rock

From Records 1759/72

No.	Rock type	Density	Between Stations	Rock types along traverse line	Av. Density	Remarks
32	Basic Rock	2.85	31-32	70% Basic Rock 30% Siltstone	2.80	
33	B.I.F.	3.00	31-33	10% Basic Rock 90% Silts & B.I.F.	2.95	This section covered by alluvium and extent of B.I.F. uncertain
34	QTZ:Gwke sheared qtz.	2.65	33-34	50% B.I.F. & Silts 50% QTZ: Gwke	2.82	
35	Gwke & Siltstone	2.68	34-35	100% Qtz. Gwke & Silts	2.68	
44	Gwke & Siltstone	2.65	35-44	100% Qtz. Gwke & Silts	2.68	
44 - G75 Samples for density determinations not available						

after Table 1

TABLE 2.

BURRUNDIE TRAVERSE (3).

Stn.	Rock Type	Density	Between Stations	% Rock Types Along Traverse Line	Av. Dens.	Remarks
B38	Siltstone & Gwke Silt	2.70				
B35	Siltstone & Gwke Silt	2.70	38-35	100% Silt & Gwke Silt	2.70	
B34	Qtz. Silt	2.65	35-34	40% Silt 60% Qtz. Silt	2.67	
B33	Qtz. Gwke	2.68	34-33	20% Basic Rocks 50% Qtz. Silt 30% Qtz. Gwke	2.70	
B31	Qtz. Gwke	2.68	33-31	Qtz. Gwke & Silt	2.70	
B30	Silt.Metamorphosed	2.70	31-30	40% Basic Rock 60% Siltstone	2.70	
B29	Qtz. Gwke	2.75	30-29	90% Qtz. Gwke & Silt 10% Metamorphics	2.71	
B28	Granite	2.63	29-28	30% Metamorphics 70% Granite	2.67	
B24	Granite	2.63	28-24	100% Granite	2.63	
B23	Qtz. Gwke	2.68	24-23	60% Granite 40% Qtz. Gwke	2.65	
B22	Qtz. Gwke	2.68	23-22	50% Qtz. Gwke 50% Silt.	2.70	Av. Density may vary as there is lead in the sediments (Namoona Prospect)
B21	Siltstone	2.76	22-21	100% Silt.	2.76	
B20	Siltstone	2.76	21-20	100% Silt.	2.76	
B19	Siltstone	2.70	20-19	50% Qtz. Gwke 50% Silt.	2.69	
B18	Siltstone	2.70	19-18	Siltstone	2.70	
B17	Qtz. Gwke	2.68	18-17	50% Qtz. Gwke 50% Silt.	2.69	This section is probably closely underlain by basement (S.G.-3.1)
B16	Chert	2.62	17-16	30% Basic Rock 10% Qtz. Gwke 60% BIF & Silt.	2.86	
B15	Basic Rock	2.85	16-15	60% Basic Rock 40% Cherts	2.76	
B14	Siltstone	2.70	15-14	20% Basic Rock 80% Cherty Silt	2.70	
B13	Siltstone	2.70	14-13	100% Siltstone	2.70	
B12	BIF	3.00	13-12	90% Siltstone 10% BIF	2.73	
B11	BIF	3.00	12-11	100% BIF	3.00	
B10	Siltstone	2.70	11-10	20% BIF 80% Siltstone sheared	2.76	
B9	Siltstone	2.70	10-9	Siltstone & Qtz. Gwke	2.70	
B1	Silt. & Qtz. Gwke	2.70	9-1			

TABLE 3.

DALY RIVER TRAVERSE (4a)

Station	Type	Dens.	Density Between Stations
D1	Igneous Complex	2.75	
D2	" "	2.75	2.75
D3	" "	2.75	2.75
D4	Alluvium (Noltenius Formation)	2.70	2.73
D5	Alluvium	2.70	2.70
D6	(Noltenius) Siltstones, Greywacke, Qtz. Greywacke Pebble Cong.	2.70	2.70
D7	" " "	2.70	2.70
D8 Giant's Fault	" " "	2.70	2.70
D9	" " "	2.70	2.70
D10 Giant's Fault	" " "	2.70 2.70	2.70 2.70
D11 Daly River	" " "		
D12	" " "	2.70	2.70
D13	" " "	2.70	2.70
D14	" " "	2.73	2.72
	Plus some schists, andalusite mica		2.74
D15	Andalusite, tourmaline mica schists. Sediments as above and granite below surface	2.75	2.75
D16	As D15	2.75	2.75
D17	" "	2.75	2.75
D18	" "	2.75	
D19	" "	2.75	
D20	" " Metamorphics	2.73	
D21	Depot Sandstone	2.44	The Depot Sandstone (P/Ed) is here 200ft. thick maximum developement elsewhere is 1000 ft. The Stray Sandstone (P/Es) is here absent (max. elsewhere= 1000 ft.) Cambrian (Emd) max. Thickness here is 300ft. Byrne's Creek Volcanics (Pzb) are nowhere more than 100 ft. thick (density = 2.82.)
D22	Volcanics & Depot Sandstone	2.82	
D23	Cambrian Limestone	2.68	
D24 to D37	" "	2.68	

Station	Type	Dens.	Density Between Stations
D37	Cambrian Limestone	2.68	2.69
D38	Siltstones and Greywacke (Burrell Creek formation)	2.70	
Fault	(with vertical displacement - West block down)		
D39	Cherts and siltstones and mica schists (Golden Dyke formation)	2.65	
Granite	(Mount Shoebridge)		2.63
D40	Cherts and Siltstones and mica schists	2.65	
D41-D43	" " " "	2.65	
D44	Diorite (Golden Dyke formation)	2.86	
	Boundary between Golden Dyke and Burrell Creek formation		
D45-D48	Siltstones and Greywackes	2.70	

DENSITIES used			Weighted average used
	Hermit Hill Complex: Migmatite	2.79)	
	Garnetiferous Granite	2.74)	2.75
	Quartzite	2.65)	
	Noltenius Formation: Siltstone	2.70	)
	Greywacke	2.68 (sl.weathered)	2.70
	Qtz. Greywacke	2.70	)
	Tourmaline Schists	2.86	)
	Andalusite Schist	2.84	) 2.85
	Mica Schist	2.71 (weathered)	
	Granite (Soldiers Creek) (Same type outcropping to south of traverse)	2.64	
	Depot Sandstone	2.44	
	Cambrian Limestone	2.68	
	Byrnes Creek Volcanics	2.82	
	Burrell Creek Formation: Greywacke	2.68	
	Siltstone	2.70	
	Golden Dyke Formation: Chert	2.65	
	Qtz. Siltstone	2.65	
	Diorite	2.86	

TABLE 4.

MISCELLANEOUS SAMPLES.

Locality	Type	Density
Stuart Highway between Hayes Creek and Pine Creek	Cullen Granite (probably a marginal phase)	2.57
Yeuralba	Yeuralba Granite at drill depth of 200'	2.50
George Creek Prospect	Greywacke (Noltenius formation) at drill depth 100'	2.86
George Creek Prospect	Siltstone (Noltenius formation) at drill depth 100'	2.78
Moyle River (K21) (Similar rock at K3-K5)	Dolerite (? Hermit Hill Complex)	3.08

TABLE 5.

DENSITY DETERMINATIONS OF DRILL CORE SAMPLES FROM BROWN'S DEPOSIT, RUM JUNGLE.

SLATE:

D.D.H. No.	Depth (ft.)	Density
171	99	2.69
	123	2.88
	150	2.83
	165	2.79
	180	2.85
	219	2.77
	283	2.72
	463	2.79
170	417	2.73
160	201	2.75
	300	2.79
163	450	2.94
156	354	2.77
154	57	2.56
157	100	2.78
81	80	2.58
	Average	2.76

LIMESTONE:

170	482	3.06
	505	3.03
171	508	2.95
172	383	3.06
	403	3.00
157	214	2.84
160	390	2.90
	Average	2.98

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'A' PAGES 1 -- 3

FIELD SHEETS

GRAVITY SURVEY, BURT RANGE BASIN, NORTHERN TERRITORY

by

J.E. Burbury

MINES ADMINISTRATION PTY LTD

for

WESTRALIAN OIL LIMITED.

FIELD SHEET FOR GRAVITY SURVEY.

Area, Burt Range. Obs., J.E. Burbury. Sheet No. 1

Station	Time	Reading	Base Reading	Diff. Divs.	Diff. M Gals.	Observed Gravity
SP488	0820	4933				45655
R52	0900	4860	4949	-89	-81	45574
53	0915	4778	4954	-176	-160	45495
54	0925	4920	4958	-38	-34	45621
55	0940	5200	4963	237	215	45870
56	0950	5337	4967	370	336	45991
SP488	1120	5001				
R17	1550	3928				44700
19	1600	3575	3926	-351	-319	44381
20	1605	3428	3925	-497	-452	44248
21	1610	3306	3925	-619	-563	44137
22	1615	3177	3924	-747	-679	44021
24	1625	3296	3922	-626	-569	44131
25	1630	3385	3921	-536	-491	44209
23	1640	3344	3919	-575	-523	44177
18	1655	3727	3917	-190	-173	44527
R17	1700	3916				
R21	0600	3225				44137
57	0605	3188	3226	-38	-35	44102
58	0615	3570	3230	340	309	44446
59	0620	3990	3230	760	691	44828
60	0630	4058	3234	824	749	44886
61	0635	4108	3235	873	794	44931
62	0637	4100	3235	865	787	44924
63	0642	4008	3236	772	702	44839
64	0647	4033	3238	795	723	44860
65	0652	4058	3240	818	744	44881
66	0657	3958	3240	718	653	44790
67	0700	4184	3242	942	857	44994
68	0710	4157	3244	913	830	44967
69	0717	4399	3246	1153	1049	45186
70	0725	4633	3248	1385	1260	45397
71	0730	4801	3250	1551	1410	45547
R21	0830	3266				

FIELD SHEET FOR GRAVITY SURVEY.

Area, Burt Range. Obs., J.E. Burbury. Sheet No. 2

Station	Time	Reading	Base Reading	Diff. Divs.	Diff. M Gals.	Observed Gravity
R25	0940	3359				44209
26	0945	3310	3361	-51	-46	44163
27	0950	3230	3362	-132	-120	44089
28	0955	3172	3364	-192	-175	44034
29	1000	3036	3366	-330	-300	43909
30	1005	2790	3367	-577	-525	43684
31	1010	2620	3369	-749	-681	43528
32	1015	2458	3370	-912	-829	43380
33	1020	2773	3372	-599	-545	43664
34	1025	2905	3374	-469	-426	43783
35	1028	2870	3375	-505	-459	43750
36	1035	2967	3377	-410	-377	43832
R25	1115	3390				
R36	1207	2964				
R37	1215	2758	2968	-210	-191	43641
R38	1220	2680	2970	-290	-264	43568
R36	1230	2974				
R36	1230	2974				43832
39	1237	3350	2973	377	343	44175
40	1245	3688	2973	715	650	44482
41	1250	3977	2972	1005	914	44746
42	1257	4122	2972	1150	1043	44875
36	1315	2970				
42	1435	4115				44875
43	1440	4240	4115	125	114	44989
44	1450	4394	4114	280	255	45130
46	1500	4500	4113	387	352	45227
47	1505	4657	4113	544	495	45370
48	1515	4741	4112	629	572	45447
49	1522	4873	4112	761	692	45567
50	1530	4930	4111	819	745	45620
51	1540	5046	4111	935	846	45721
45	1620	4442	4108	334	304	45179
42	1635	4107				

FIELD SHEET FOR GRAVITY SURVEY.

Area, Burt Range. Obs., J.E. Burbury Sheet No. 3

Station	Time	Reading	Base Reading	Diff. Divs.	Diff. M Gals.	Observed Gravity
R9	0652	4857				45609
R10	0700	4832	4860	-28	-25	45584
11	0705	4846	4863	-17	-15	45594
12	0720	4941	4869	72	65	45674
9	0750	4882				
9	0752	4882				45609
8	0805	4964	4889	75	68	45677
7	0810	4956	4892	64	58	45667
9	0825	4900				
9	0825	4900				45609
51	0835	5028	4905	123	112	45721
9	0845	4910				
R51	0835	5028				45721
" 6	0850	5029	5033	-4	-4	45717
5	0900	5144	5036	108	98	45819
4	0902	5133	5037	96	87	45808
3	0907	5021	5039	-18	-16	45705
2	0912	4941	5040	-99	-90	45631
1	0916	4700	5042	-342	-311	45410
415	0925	4690	5045	-355	-326	45395
R51	1000	5056				
415	1121	4719				45395
R13	1132	4637	4723	-86	-78	45317
14	1138	4584	4725	-141	-128	45267
15	1145	4380	4727	-347	-315	45080
16	1150	4134	4729	-595	-541	44854
17	1156	3970	4731	-761	-695	44700
415	1220	4739				

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'B' PAGES 1 - 2

Computation Sheets

GRAVITY SURVEY, BURT RANGE BASIN, NORTHERN TERRITORY

by

J.E. Burbury

MINES ADMINISTRATION PTY LTD

for

WESTRALIAN OIL LIMITED

Area, Burt Range. Company, Westralian Oil Ltd. Obs. J.E. Burbury
(Mines Administration Pty. Ltd.) Sheet No. 1

Stn.	Latitude	Red. Level	Theor. Gravity	Obs. Gravity	Diff. (Obs. Theor.)	Elev. Corr.	Boug. Anom.
R 1	15°41'36"	112.1	42587	45410	2823	765	35.88
2	54"	112.9	42611	45631	3020	771	37.91
3	42'14"	115.5	42636	45705	3069	788	38.57
4	38"	118.3	42668	45808	3140	808	39.48
5	42"	119.9	42673	45819	3146	818	39.64
6	59"	125.3	42695	45717	3022	855	38.77
7	43'19"	125.8	42721	45667	2946	859	38.05
8	38"	121.1	42746	45677	2931	827	37.58
9	44'03"	125.1	42778	45609	2831	854	36.85
10	25"	129.4	42806	45584	2778	883	36.61
11	42"	128.6	42829	45594	2765	878	36.43
12	51"	121.8	42840	45674	2834	831	36.65
13	41'38"	108.6	42590	45317	2727	741	34.68
14	58"	108.5	42616	45267	2651	741	33.92
15	42'17"	123.0	42641	45080	2439	840	32.49
16	38"	154.7	42668	44854	2186	1056	32.42
17	43'01"	172.1	42697	44700	2003	1175	31.78
18	23"	190.2	42726	44527	1801	1298	30.99
19	46"	206.7	42756	44381	1625	1411	30.36
20	44'06"	221.5	42782	44248	1466	1512	29.78
21	22"	239.4	42802	44137	1335	1634	29.69
22	43"	252.4	42830	44021	1191	1723	29.14
23	45'07"	224.0	42862	44177	1315	1529	28.44
24	31"	229.0	42893	44131	1238	1563	28.01
25	55"	217.5	42925	44209	1284	1485	27.69
26	46'19"	216.0	42956	44163	1207	1474	26.81
27	45"	227.3	42990	44089	1099	1551	26.50
28	47'11"	234.4	43025	44034	1009	1600	26.09
29	32"	249.3	43051	43909	858	1702	25.60
30	47"	273.7	43071	43684	613	1868	24.81
31	56"	298.2	43083	43528	445	2035	24.80
32	54"	315.2	43080	43380	300	2151	24.51
33	52"	272.1	43077	43664	587	1857	24.44
34	50"	247.5	43074	43783	709	1689	23.98

Area, Burt Range. Company, Westralian Oil Ltd. Obs. J.E. Burbury

(Mines Administration Pty. Ltd.) Sheet No. 2

Stn.	Latitude	Red. Level	Theor. Gravity	Obs. Gravity	Diff. (Obs. Theor.)	Elev. Corr.	Boug. Anom.
R35	15°47'26"	253.4	43043	43750	707	1730	24.37
36	02"	247.2	43012	43832	820	1687	25.07
37	46'56"	252.8	43004	43641	637	1726	23.63
38	50"	268.0	42996	43568	572	1829	24.01
39	47'15"	210.7	43029	44175	1146	1438	25.84
40	21"	199.2	43037	44482	1445	1360	28.05
41	16"	185.9	43030	44746	1716	1269	29.85
42	46'54"	176.5	43002	44875	1873	1205	30.78
43	29"	166.8	42969	44989	2020	1138	31.58
44	07"	152.6	42940	45130	2190	1042	32.32
45	45'43"	147.9	42909	45179	2270	1009	32.79
46	18"	145.0	42877	45227	2350	990	33.40
47	44'54"	134.8	42845	45370	2525	920	34.45
48	31"	129.4	42814	45447	2633	883	35.16
49	07"	123.5	42783	45567	2784	843	36.27
50	43'43"	122.3	42752	45620	2868	835	37.03
51	21"	115.9	42724	45721	2997	791	37.88
52	38'53"	96.4	42375	45574	3199	658	38.57
53	39'07"	97.2	42393	45495	3102	663	37.65
54	21"	121.5	42411	45621	3210	829	40.39
55	36"	165.9	42431	45870	3439	1132	45.71
56	53"	180.1	42453	45991	3538	1229	47.67
57	44'01"	251.8	42775	44102	1327	1719	30.46
58	43'40"	197.9	42748	44446	1698	1351	30.49
59	19"	153.0	42721	44828	2107	1044	31.51
60	13"	157.8	42713	44886	2173	1077	32.50
61	13"	166.3	42713	44931	2218	1135	33.53
62	"	180.7	42713	44924	2211	1233	34.44
63	"	208.9	42713	44839	2126	1426	35.52
64	"	216.9	42713	44860	2147	1481	36.28
65	"	222.9	42713	44881	2168	1521	36.89
66	"	247.4	42713	44790	2077	1689	37.66
67	"	224.7	42713	44994	2281	1534	38.15
68	"	231.0	42713	44967	2254	1577	38.31

Sheet No. 3

69	15°43'13"	200.1	42713	45186	2473	1366	38.39
70	"	172.1	42713	45397	2684	1175	38.59
71	"	157.6	42713	45547	2834	1076	39.10
SP 415	41'18"	106.3	42564	45395	2831	726	35.57
448	38'39"	96.4	42356	45655	3299	658	39.57

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'D' PAGES 1 - 7

Elevation from Field Books 421 & 422

GRAVITY SURVEY, BURT RANGE BASIN, NORTHERN TERRITORY

by

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MINES ADMINISTRATION PTY LTD

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APPENDIX 'D'

ORIGINAL ELEVATIONS FROM FIELD BOOKS 421 AND 422

I. S.P. 464 (DATUM)

Station	Elevation
S.P. 464	112.50
R2	112.93
R3	115.54
R4	118.30
R5	119.91
R6	125.28
R7	125.85
R8	121.06
R9	125.06
R10	129.45
R11	128.60
R12	121.78
R51	115.92
R50	122.29
R49	123.54
R48	129.36
R47	134.84
R46	144.97
R45	147.89
R44	152.63
R43	166.78
R42	176.49
R41	185.87
R40	199.19

III. S.P. 448 (DATUM)

Station	Elevation
S.P. 448	96.35
R52	26.41
R53	97.25
R54	121.54
R55	165.94
R56	180.10

II. S.P. 415 (DATUM)

Station	Elevation
S.P. 415	106.30
R13	108.60
R14	108.54
R15	123.05
R16	154.73
R17	172.06
R18	190.23
R19	206.66
R20	239.49
R21	239.44
R22	252.45
R23	223.97
R24	228.96
R25	217.51
R26	216.05
R27	227.28
R28	234.38
R29	249.30
R30	273.72
R31	298.24
R32	315.20
R33	272.07
R34	247.48
R35	253.41
R36	247.25
R37	252.82
R38	267.96
R39	210.71
R40	199.47
R57	251.82
R58	197.86
R59	153.02
R60	157.84
R61	166.33
R62	180.67
R63	208.91
R64	216.92
R65	222.88
R66	247.40
R67	224.74
R68	231.02
R69	200.09
R70	172.12
R71	157.62

APPENDIX 'D'

ELEVATIONS CORRECTED FOR ERROR IN DATUM VALUE AT S.P.415 AND S.P.464

Correction - .01FT.

I. S.P.464 (DATUM)

Station	Elevation
S.P. 464	112.49
R2	112.92
R3	115.53
R4	118.29
R5	119.90
R6	125.27
R7	125.84
R8	121.05
R9	125.05
R10	129.44
R11	128.59
R12	121.77
R51	115.91
R50	122.28
R49	123.53
R48	129.35
R47	134.83
R46	144.96
R45	147.88
R44	152.62
R43	166.77
R42	176.48
R41	185.86
R40	199.18

III. S.P. 448 (DATUM)

Station	Elevation
S.P. 448	96.35
R52	26.41
R53	97.25
R54	121.54
R55	165.94
R56	180.10

Correction + .41 FT.

II. S.P. 415 (DATUM)

Station	Elevation
S.P. 415	106.71
R13	109.01
R14	108.95
R15	123.46
R16	155.14
R17	172.47
R18	190.64
R19	207.07
R20	221.90
R21	239.85
R22	252.86
R23	224.38
R24	229.37
R25	217.92
R26	216.46
R27	227.69
R28	234.79
R29	249.71
R30	274.13
R31	298.65
R32	315.61
R33	272.48
R34	247.89
R35	253.82
R36	247.66
R37	253.23
R38	268.37
R39	211.12
R40	199.58
R57	252.23
R58	198.27
R59	153.43
R60	158.25
R61	166.74
R62	181.08
R63	209.32
R64	217.33
R65	223.29
R66	247.81
R67	225.15
R68	231.43
R69	200.50
R70	172.53
R71	158.03

APPENDIX 'D'

ELEVATION CORRECTED FOR:-

1. ERROR IN DATUM AT S.P. 464
2. ERROR IN DATUM AT S.P. 415
3. ERROR IN DATUM AT BENCH MARK NEAR KIMBERLEY RESEARCH STATION.

DATUM: M.L.W. WYNDHAM

Station	Elevation	Station	Elevation
S.P. 464	137.59	S.P. 415	131.81
R2	138.02	R13	134.11
R3	137.63	R14	134.05
R4	143.39	R15	148.56
R5	145.0	R16	180.24
R6	150.37	R17	197.57
R7	150.94	R18	215.74
R8	146.15	R19	232.17
R9	150.15	R20	247.00
R10	154.54	R21	264.95
R11	153.69	R22	277.96
R12	146.87	R23	249.48
R51	141.01	R24	254.47
R50	147.38	R25	243.02
R49	148.63	R26	241.56
R48	154.45	R27	252.79
R47	159.93	R28	259.89
R46	170.06	R29	274.81
R45	172.98	R30	299.23
R44	177.72	R31	323.75
R43	191.87	R32	340.71
R42	201.58	R33	297.58
R41	210.96	R34	272.99
R40	224.28	R35	278.92
		R36	272.76
		R37	278.33
		R38	293.47
		R39	236.22
		R40	224.68
		R57	277.33
		R58	223.37
		R59	178.53
		R60	183.35
		R61	191.84
		R62	206.18
		R63	234.42
		R64	242.43
		R65	248.39
		R66	272.91
		R67	250.25
		R68	256.53
		R69	225.60
		R70	197.63
		R71	183.13

III.

Station	Elevation
S.P. 448	121.45
R52	51.51
R53	122.35
R54	146.64
R55	191.04
R56	205.20

Fig 8

DIAGRAMMATIC LOOP CLOSURE CHART (LEVELS)

CENTRAL BURT RANGE SURVEY

Reference

158·03 Elevations (Shot point 415 as datum)

121·79 Elevations (Shot point 464 as datum)

R59 Station numbers

LOOP MISCLOSURE

→	←
	74·55
133·14	73·34
34·28	13·35
167·42	161·24
+ B.M.R. Difference	5·80
	167·04

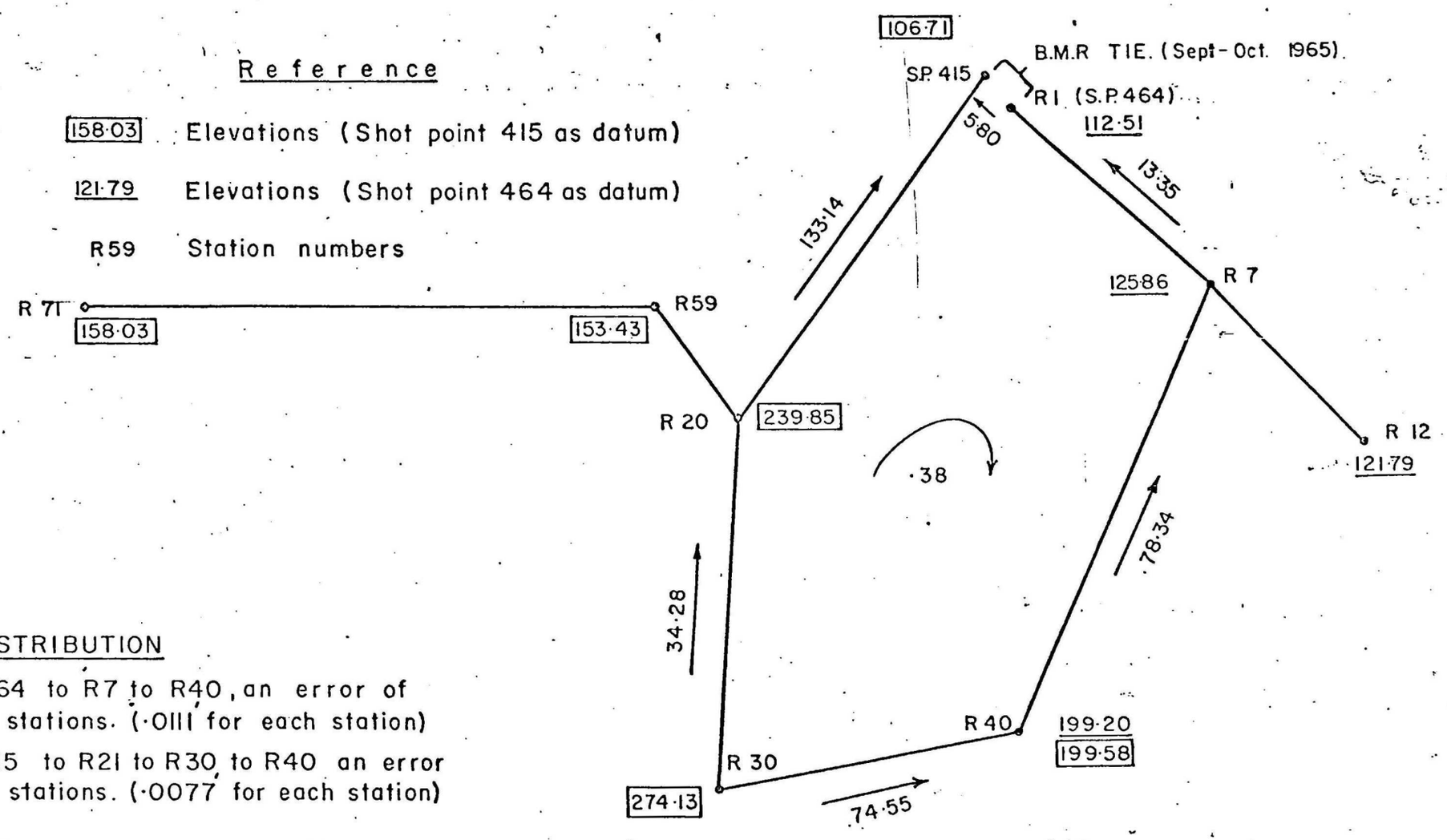
→	←
167·42	167·04

·38

ERROR DISTRIBUTION

For right side of loop, S.P. 464 to R7 to R40, an error of ·19 feet distributed over 18 stations. (·0111 for each station)

For left side of loop, S.P. 415 to R21 to R30 to R40 an error of ·19 feet distributed over 26 stations. (·0077 for each station)



Bureau of Mineral Resources, Geology and Geophysics. May 1965

To accompany Record No 1963/165

METHOD ADOPTED FOR DISTRIBUTION OF LOOP CLOSURE ERROR OF .38 FT:

The loop consisted of two parts. The right portion of the loop was from R1 (S.P. 464) to station R7, R7 to R51 and thence in decreasing order of station numbers to R40. It consisted of 18 station intervals from R1 to R40 and half the misclosure of .18 ft was distributed between R1 and R40 by adding .0111 ft: to the 1st station after R1 (S.P. 464) and progressive multiples of .0111 to each succeeding station.

The left position of the loop was from S.P. 415 to station R13 and from R13 to R40. It consisted of 26 station intervals from S.P. 415 to station R40 and half the misclosure of .18 ft was distributed between S.P. 415 and station R40 by taking .0077 ft from the 1st station after S.P. 415 and progressive multiples of .0077 from the succeeding stations.

The stations on the traverses which join the loop viz - R57 to R71, R8 to R12 and R37 - R38 were adjusted by the same amount as the stations of the loop to which they tie viz - R21, R7 and R36.

APPENDIX 'D'

ELEVATIONS CORRECTED FOR:-

1. ERROR IN DATUM AT S.P. 464
2. ERROR IN DATUM AT S.P. 415
3. ERROR IN DATUM AT BENCH MARK NEAR KIMBERLEY RESEARCH STATION.
4. LOOP CLOSURE ERROR

DATUM:- MEAN LOW WATER WYNDHAM

Stations in Loop		Stations in Loop	
S.P. 464	137.59	S.P. 415	131.81
R2	138.03	R13	134.10
R3	140.65	R14	134.03
R4	143.42	R15	148.54
R5	145.04	R16	180.21
R6	150.43	R17	197.53
R7	151.01	R18	215.69
R51	141.09	R19	232.12
R50	147.47	R20	246.94
R49	148.73	R21	264.88
R48	154.56	R22	277.88
R47	160.05	R23	249.39
R46	170.19	R24	254.38
R45	173.12	R25	242.92
R44	177.88	R26	241.45
R43	192.04	R27	252.67
R42	201.76	R28	259.77
R41	211.15	R29	274.68
R40	224.48	R30	299.09
		R31	323.60
		R32	340.56
		R33	297.42
		R34	272.82
		R35	278.74
		R36	272.57
		R39	236.03
		R40	224.48

APPENDIX 'D'

ELEVATIONS OF STATIONS ON BRANCH TRAVERSES TIED TO LOOP

I. Elevation of station R36 = 272.76 ft: before adjustment.
Elevation of station R36 = 272.57 ft: after adjustment.

As stations R37 & R38 are tied to station R36 of the loop their values must be decreased by .19 ft.

DATUM M.L. WYNDHAM

Station	Elevation
R36	272.57 ft
R37	278.14 ft
R38	293.28 ft

II. Elevation of station R21 = 264.95 ft: before adjustment
Elevation of station R21 = 264.88 ft: after adjustment.

As stations R57 - R71 are tied to station R21 of the loop their values must be decreased by .07 ft.

DATUM M.L.W. WYNDHAM

Station	Elevation	Station	Elevation
R57	277.40	R65	248.46
R58	223.44	R66	272.98
R59	178.60	R67	250.32
R60	183.42	R68	256.60
R61	191.91	R69	225.67
R62	206.25	R70	197.70
R63	234.49	R71	183.20
R64	242.50		

III. Elevation of Station R7 = 150.94 ft: (before adjustment)
Elevation of Station R7 = 151.01 ft: (after adjustment)

As station R8 to R12 are tied to station R7 of the loop their values must be increased by .07 ft.

DATUM M.L.W. WYNDHAM

Station	Elevation
R7	151.01
R8	146.22
R9	150.22
R10	154.61
R11	153.76
R12	146.94

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'B' PART 1, PAGES 1 - 4

SURVEY DATA SUPPLIED BY MINAD TO B.M.R.
from FILE B106/WNT/1/2

PRELIMINARY GEOLOGICAL AND GEOPHYSICAL REPORT, PORT KEATS AREA, NORTHERN TERRITORY, 1956.

NT/BG/27

by

S.S. Derrington, A. Warren, and J.E. Burbury

MINES ADMINISTRATION PTY LTD

for
ASSOCIATED AUSTRALIAN OILFIELDS.

PORT KEATS COASTAL SURVEY.
MINAD 1957.

Sheet No. 2.

Area, P.Keats Coastal Survey. Traverse Field Sheet No.

D = 2.0 Corr.0.06954

Stn.	Latitude	Elev'n Rel.to D.T.D.	Theor. Grav. at	Obs. Grav.	Diff. (Obs. Theor)	Elev. Corr.	Anom.	Corr. Anom.	Remarks
B1	13°22'25"	12.0	32454	37470	5016	83	50.99	55.64	
B2	24'40"	15.0	32607	37311	4704	104	48.08	52.73	
B3	26'35"	19.0	32738	37041	4303	132	44.35	49.00	
B4	27'30"	22	32799	36755	3956	153	41.09	45.74	
B5		25		36547		174			
B6	32'00"	14	33105	34427	1322	97	14.19	18.84	
B7	31'50"	11	33094	34456	1362	76	14.38	19.03	
B8	31'40"	16	33083	35136	2053	111	21.64	26.29	
B9	30'10"	21	32981	35435	2454	146	26.00	30.65	
B10	29'15"	24	32918	35457	2539	167	27.06	31.71	
B11	28'50"	25	32889	35572	2683	174	28.57	33.22	
B12	28'10"	27	32845	35748	2903	188	30.91	35.56	
B13	27'30"	28	32799	35935	3136	195	33.31	37.96	
B14	31'10"	29	33049	33112	63	202	2.65	7.30	
B15	32'10"	11	33117	33377	260	76	3.36	8.01	
B16	33'45"	13	33225	33468	243	90	3.33	7.98	
B17	34'45"	14	33294	33508	214	97	3.11	7.76	
B18	35'40"	16	33356	33551	195	111	3.06	7.71	
B19	36'20"	19	33402	33601	199	132	3.31	7.96	
B20	37'10"	27	33459	33680	221	188	4.09	8.74	
B21	45'40"	13	34044	34657	613	90	7.03	11.68	
B22	44'30"	12	33964	34663	699	83	7.82	12.47	
B23	43'20"	11	33883	34556	673	76	7.49	12.14	
B24	42'25"	10	33820	34458	638	69	7.07	11.72	
B25	41'30"	9	33757	34347	590	63	6.53	11.18	
B26	40'40"	10	33699	34200	501	69	5.70	10.35	
B27	39'40"	11	33630	34055	425	76	5.01	9.66	
B28	57'00"	27	34834	34425	409	188		2.44	-2.21
B29	58'00"	15	34905	34626	279	104		2.90	-1.75
B30	58'40"	12	34951	34625	326	83		2.22	-2.43
B31	14°01'10"	9	35127	34667	460	63		0.68	-3.97
B32	01'20"	10	35138	34608	530	69		0.04	-4.61
B33	01'50"	11	35173	34557	616	76		-0.75	-5.40

PORT KEATS COASTAL SURVEY.
MINAD 1957.

Sheet No. 3

Area, Port Keats. Traverse, Field Sheet No.

Stn.	Latitude	Elev'n Rel.to D.T.D.	Theor. Grav. at	Obs. Grav.	Diff. (Obs. Theor.)	Elev. Corr.	Corr. Anom.	Remarks
B34	14°02'20"	12	35209	34521	688	83	-1.40	-6.05
B35	40"	14	35232	34443	789	97	-2.27	-6.92
B36	03'00"	27	35256	34330	926	188	-2.73	-7.38
B37	05'20"	27	35421	34153	1268	188	-6.15	-10.80
B38	04'30"	15	35362	34171	1191	104	-6.22	-10.87
B39	03'20"	13	35279	34133	1146	90	-5.91	-10.56
B40	00"	11	35256	34449	807	76	-2.66	-7.31
B41	04'00"	13	35327	34525	802	90	-2.47	-7.12
B42	05'00"	15	35398	34503	895	104	-3.26	-7.91
B43	30"	26	35433	34312	1121	181	-4.75	-9.40
B44	15°02'18"	20	39577	39066	511	139	0.93	-3.72
B45	14°53'30"	24	38919	38979	60	167	6.92	2.27
B46	00"	17	38882	39019	137	118	7.20	2.55
B47	30"	14	38919	39124	205	97	7.67	3.02
B48	14°56'00"	16	39105	39379	274	111	8.50	3.85
B49	49'30"	26	38622	39685	1063	181	17.09	12.44
B50	40'30"	18	37958	39390	1432	125	20.22	15.57
B51	33'20"	25	37434	38127	693	174	13.32	8.67
B52		(30)?	37370	38050	680	209		8.89?
B53	24'40"	27	36804	37921	1117	188	17.70	13.05
B54	23'30"	25	36720	37901	1181	174	18.20	13.55
B55	22'00"	24	36612	37670	1058	167	16.90	12.25
B56	21'10"	21	36552	37541	989	146	16.00	11.35
B57	19'50"	14	36456	37299	843	97	14.05	9.40
B58	00"	12	36396	36919	523	83	10.71	6.06
B59	18'10"	11	36336	36682	346	76	8.87	4.22
B60	17'20"	28	36275	36307	32	195	6.92	2.27
B61	15'40"	12	36157	36294	137	83	6.85	2.20
B62	14'00"	21	36038	35924	114	146	4.97	0.32
B63	08'20"	27	35633	34515	1118	188	-4.65	-9.30
B64	13'40"	19	36014	35646	368	132	2.29	-2.36
B65	12'50"	16	35955	35467	488	111	0.88	-3.77
B66	12'00"	15	35895	35297	598	104	-0.29	-4.94
B67	11'10"	13	35836	35075	761	90	-2.06	-6.71

PORT KEATS COASTAL SURVEY.
MINAD 1957.

Sheet No. 4

Area, Port Keats. Traverse, Field Sheet No.

Stn.	Latitude	Elev'n Rel.to D.T.D.	Theor. Grav. at	Obs. Grav.	Diff. (Obs. Theor.)	Elev. Corr.	Corr. Anom.	Remarks
B68	14°10'40"	11	35800	34962	838	76	-2.97	-7.62
B69	09'50"	10	35739	34834	905	70	-3.70	-8.35
B70	09'00"	11	35681	34736	945	76	-4.04	-8.69
B71	14'20"	30	36061	34716	1345	209	-6.71	11.36
B72	08'00"	17	35610	34328	1282	118	-6.99	-11.64
B73	20"	18	35633	34395	1238	125	-6.48	-11.13
S2	13°22'10"	23	32439	37572	5133	160	57.58	52.93
S3	18'50"	21	32214	36993	4779	146	53.90	49.25
S4	19'00"	19	32235	37245	5020	132	56.17	51.52
S5	20'00"	19	32293	37314	5021	132	56.18	51.53
S6	30"	24	32327	37352	5025	167	56.57	51.92
S7	21'20"	23	32382	37430	5048	160	56.73	52.08
S8	32'00"	25	33105	34123	1018	174	16.57	11.92
S9	31'30"	15	33071	33692	621	104	11.90	7.25
S10	29'50"	16	32957	33510	553	111	11.29	6.64
S11	28'40"	19	32878	33398	520	132	11.17	6.52
S12	27'40"	21	32810	33342	532	146	11.43	6.78
S13	00"	23	32765	33138	373	160	9.98	5.33
S14	28'50"	21	32889	33128	239	146	8.50	3.85
S15	30'10"	16	32981	33264	283	111	8.59	3.94
S16		12		33155		83		
S17	30'10"	19	32981	33054	073	132	6.70	2.05
S18	46'40"	22	34113	34596	483	153	11.01	6.36
S19	47'50"	13	34194	34630	436	90	9.91	5.26
S20	49'00"	13	34276	34468	192	90	7.47	2.82
S21	50'00"	9	34345	34272	73	62	4.54	-0.11
S22	51'00"	9	34415	33892	523	62	0.04	-4.61
S23	52'00"	16	34485	33699	786	111	-2.10	-6.75
S24	54'10"	11	34636	33753	883	76	-3.42	-8.07
S25		9		33893		62		
S26	55'00"	10	34694	34258	436	70	0.99	-3.66
S27	56'00"	13	34764	34407	357	90	1.98	-2.67
S28	14°05'50"	28	35456	34188	1268	195	-6.08	-10.73
S29	04'10"	20	35339	34197	1142	139	-5.38	-10.03

PORT KEATS COASTAL SURVEY.
MINAD 1957.

Sheet No. 5

Area, Port Keats. Traverse, Field Sheet No.

Stn.	Latitude	Elev'n Rel.to D.T.D.	Theor. Grav. at	Obs. Grav.	Diff. (Obs. Theor.)	Elev. Corr.	Corr. Anom.	Remarks
S30	14°02'20"	18	35209	33886	1323	125	-7.33	-11.98
31	01'30"	13	35150	33743	1407	90	-8.52	-13.17
32								
33	55'48"	14	39091	39151	60	97	6.22	1.57
34		15		39507		104		
35	51'54"	28	28800	39294	494	195	11.54	6.89
36	52'24"	22	38837	39381	544	153	11.62	6.97
37	54'12"	23	38971	39280	309	160	9.34	4.69
38	15°03'48"	21	39689	38911	778	146	-1.67	-6.32
39	02'48"	25	39614	38887	727	174	-0.88	-5.53
40	02'12"	18	39569	39019	550	125	0.40	-4.25
41	01'00"	13	39479	39042	437	90	1.18	-3.47
42	00'00"	11	39404	39108	296	76	2.45	-2.20
43	14°59'00"	10	39329	39110	219	70	3.16	-1.49
44				38127				
45	32'00"	16	37336	37867	531	111	11.07	6.42
46	30'00"	13	37190	37537	347	90	9.02	4.37
47	29'00"	12	37118	37419	301	83	8.49	3.84
48	28'00"	22	37045	37427	382	153	10.00	5.35
49	26'50"	25	36960	37280	320	174	9.59	4.94
50	25'50"	27	36888	37242	354	188	10.07	5.42
51	25'50"	28	36888	37837	949	195	16.09	11.44
52	06'40"	21	35515	34393	1122	146	-5.11	-9.76
53	07'40"	16	35585	34435	1150	111	-5.74	-10.39
54	08'20"	13	35633	34390	1243	90	-6.88	-11.53
55	10'20"	11	35775	34403	1372	76	-8.31	-12.96
56	07'00"	11	35539	34371	1168	76	-6.27	-10.92
57	06'00"	12	35469	34310	1159	83	-6.11	-10.76
58	11'30"	12	35860	34587	1273	83	-7.25	-11.90
SA1		22		34690		153		
128		110	36231	34169	2062	765	-8.32	12.97

PORT KEATS COASTAL SURVEY.

MINAD 1957.

Sheet No. 6

Area, Port Keats. Traverse, Field Sheet No.

Stn.	Latitude	Elev'n Rel.to D.T.D.	Theor. Grav. at	Obs. Grav.	Diff. (Obs. Theor.)	Elev. Corr.	Corr. Anom.	Remarks
A1	14°51'50"	26	38793	38504	289	181	3.57	-1.08
A2	52'20"	19	38830	38740	90	132	5.07	0.42
A3	50"	14	38868	38960	92	97	6.54	1.89
A4	53'15"	8	38900	39213	313	56	8.34	3.69
A5	53'15"	25	38900	39125	225	174	8.64	3.99
A6	10"	25	38894	39152	258	174	8.97	4.32
A7	10"	25	38894	39248	354	174	9.93	5.28
A8		5	38868	39454	586	35	10.86	6.21
A9	55'10"	27	39045	39783	738	188	13.91	9.26
A10	56'00"	9	39105	39844	739	63	12.67	8.02
A11	42"	7	39157	39788	631	49	11.45	6.80
A12	57'48"	5	39240	39738	498	35	9.98	5.33
A13	55'48"	14	39091	39151	60	97	6.22	1.57
K1	15°19'24"	17	40872	40574	298	118	2.85	-1.80
K2	30"	17	40880	40584	296	118	2.87	-1.78
K3	36"	17	40888	40601	287	118	2.96	-1.69
K4	19'36"	17	40888	40599	289	118	2.94	-1.71
K5	30"	17	40880	40566	314	118	2.69	-1.96
K6	15"	17	40861	40517	344	118	2.39	-2.26
K7	18'00"	17	40765	40307	458	118	1.25	-3.40
K8	17'00"	17	40689	40178	511	118	0.72	-3.93
K9	16'00"	17	40613	40046	567	118	0.16	-4.49
K10	14'10"	17	40475	39631	844	118	-2.66	-7.26
	13'30"	24	40423	39595	828	167	-1.96	-6.61
K11	13'30"	17	40423	39550	873	118	-2.95	-7.55
K12	12'30"	16	40347	39436	911	111	-3.40	-8.00
K13	11'00"	15	40233	39250	983	104	-4.19	-8.79
K14	09'18"	14	40105	39159	946	97	-3.89	-8.49

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'A' PAGES 1 - 10

DARWIN - WYNDHAM

(Underwater Gravity Survey)

from

Records 1959/156

by

L.W. Williams and S. Waterlander.

UNDERWATER GRAVITY SURVEY (B.M.R. 1958)

Area: Timor Sea

WORDEN

Date	Time	L.D.	S.D.		Station
10/7	15.20	153	408.2		Sea level near Jetty
	15.32	"	371.0		B.M.R. Office
	15.46	"	408.0		Sea level near Jetty
	Pendulum Station Air port, to B.M.R. Office - 2.3. m.g.				
15/7	13.58	558.5	31.2 +0.4		Port Darwin (80)
16/7	8.34	586.5	69.6 -0.2	(12°19.5')	Near Marker (81)
16/7	12.28	659.8	75.7 -0.4	(12°25.0')	(82)
16/7	15.18	652.4	77.9 -0.3	(12°42.5')	(83)
16/7	18.34	691.4	22.4 -0.4	(13°00.0')	(84) Near Point Blase
17/7	10.32	Read. 464.3	Depth 25.8 -0.3	Lat. (13° 75.5')	(85) Peron Is.
17/7	15.18	544.7	27.0 -0.6	(13°34.0')	(86) B16*
17/7	15.54	552.0	47.7 -0.6	(13°34.0')	(86A)
17/7	16.18	558.6	59.9 -0.7	(13°24.0')	(86B)
17/7	16.40	571.7	67.3 -0.7	(13°33.5')	(86C)
17/7	17.15	577.0	68.3 -0.8	(13°33.0')	(86D)
17/7	18.16	545.4	27.4 -0.9	(13°34.0')	(86)
18/7	8.28	579.3	71.2 -0.3	(13°33.0')	(86D)
18/7	9.00	558.0	71.6 -0.2	(13°33.0')	(86E)
18/7	9.26	531.4	73.5 -0.1	(13°33.0')	(86F)
18/7	9.52	506.4	80.5 -0.2	(13°33.0')	(86G)
** 18/7	12.10	591.1	32.3 +0.2	(13°40.5')	(87) (B26)*
18/7	12.30	596.4	44.7 +0.3	(13°40.4')	(87A)
** 18/7	10.16	487.1	83.2 -0.2	(13°33.0'	(86H)

* Company No.

Area: Timor Sea

Date	Time	Read.	Depth	Lat.	Station	
18/7	12.50	579.6	32.4 +0.3	(13°40.3')	(87B)	
18/7	13.12	568.5	42.7 +0.4	(13°40.2')	(87C)	
18/7	13.30	536.1	44.3 +0.4	(13°40.1')	(87D)	
18/7	13.54	512.9	57.9 +0.4	(13°40.0')	(87E)	
18/7	14.16	489.0	62.5 +0.3	(13°39.9')	(87F)	
18/7	14.36	481.8	66.8 +0.2	(13°39.8')	(87G)	
18/7	15.50	588.6	35.5 +0.1	(13°40.5')	(87)	
18/7	17.20	560.3	14.4 +0.2	(13°47.8)	(88)	(S18)*
19/7	7.56	550.6	41.8 -0.5	(13°47.7')	(88A)	
19/7	8.24	514.1	47.2 -1.3	(13°47.6')	(88B)	
19/7	8.46	485.0	51.8 -1.4	(13°47.5')	(88C)	
19/7	9.08	471.0	57.2 -1.2	(13°47.4')	(88D)	
19/7	9.30	464.7	63.0 -1.2	(13°47.3')	(88E)	
19/7	9.52	462.1	69.6 -1.2	(13°47.2')	(88F)	
19/7	10.14	463.6	74.0 -1.3	(13°47.1')	(88G)	
19/7	11.22	552.2	31.5 -1.3		(88A)	

Area: Bonaparte Gulf

* Company No.

19/7	13.20	489.6	20.4 -1.2	(13°53.8')	(89)	(S24)*
19/7	13.40	484.9	30.8 -1.2	(13°53.7')	(89A)	
19/7	13.58	484.4	38.6 -1.2	(13°53.6')	(89B)	
19/7	14.18	485.1	37.6 -1.3	(13°53.5')	(89C)	
19/7	14.38	488.1	48.7 -1.3	(13°53.4)	(89D)	
19/7	14.58	483.5	38.4 -1.4	(13°53.3')	(89E)	
19/7	15.20	481.6	34.1 -1.4	(13°53.2')	(89F)	
19/7	15.46	489.5	57.6 -1.5	(13°53.1')	(89G)	

* Company No.

Area: Bonaparte Gulf

Date	Time	Read.	Depth	Lat.	Station
19/7	16.05	491.0	63.9 -1.5	13°53.0'	(89H)
19/7	17.17	485.7	38.3 -1.5		(89A)
19/7	18.40	494.7	75.0 -1.3		(89H)
20/7	8.18	489.4	39.2 -0.6	13°52.9'	(89I)
20/7	8.46	502.7	86.8 -0.7	13°52.8'	(89J)
20/7	9.10	507.5	90.4 -0.7	13°52.7'	(89K)
20/7	9.35	517.4	93.6 -0.6	13°52.6'	(89L)
20/7	10.00	528.9	94.0 -0.7	13°52.5'	(89M)
20/7	10.26	536.6	89.0 -0.6	13°52.4'	(89N)
20/7	11.43	490.8	67.3 -0.8	13°52.9'	(89I)
20/7	14.08	537.3 Time	18.3 -0.7 SD	14°03.5'	(90 (Near Company
	WORDEN	15.00	153.0 521.3		(No. B37
21/7	9.40	597.0	56.0 -0.3	14°01.5'	(91)
21/7	10.38	657.2	75.3 -0.2	14°05.8'	(92)
21/7	11.36	725.3	69.8 -0.2	14°10.4'	(93)
		Current to strong had to work closer to land		14°14.5	(94)
21/7	14.00	804.1	42.5 +0.4	14°19.2'	(95)
21/7	15.20	852.2	20.0 +0.1	14°24.8'	(96)
21/7	16.15	969.0	122.2 RESET	14°27.0'	(97)
	16.19	690.9	+0.5		
21/7	16.56	719.0 +288.1	80.6 +0.7	14°29.0'	(98)
21/7	17.30 17.34	763.5 +288.1 450.8 RESET	95.9 +0.9	14°30.5'	(99)
21/7	18.10	467.6 +600.8	86.0 +0.7	14°31.8'	(100)
21/7	22.00	509.5+600.8	83.9 0.0	14°32.2'	(101)

Area: Bonaparte Gulf

Date	Time	Read.		Depth	Lat.	Station
21/7	22.34	509.8	+600.8	74.4 -0.4	14°34.9'	(102)
21/7	23.04	510.7	"	75.3 -0.4	14°36.2'	(103)
21/7	23.38	504.1	"	65.6 -0.4	14°37.8'	(104)
22/7	00.15	493.0	"	71.8 -0.5	14°39.2'	(105)
	Off temp.	═══	RESET			
22/7	WORDEN		12.25	L.D. 161	S.D. 591.3	(105) (A9)*
22/7	23.02	644.4		29.8 -3.2	14°54.2'	(106)
23/7	7.54	645.8		21.6 -0.5		(106)
23/7	8.56	647.8		24.4 -0.8	14°49.6'	(107)
23/7	9.44	643.3		36.8 -0.6	14°49.0'	(108)
23/7	11.30	625.4		34.0 -1.0	14°48.4'	(109)
23/7	12.10	612.4		39.8 -0.7	14°47.8'	(110)
23/7	12.46	550.2		37.2 -0.2	14°47.2'	(111)
23/7	13.10	495.8		34.8 -0.8	14°46.6'	(112)
23/7	13.50	466.3		42.4 -1.0	14°46.0'	(113)
23/7	14.20	445.3		45.0 -1.0	14°45.4'	Pelican Is. (114)
23/7	14.50	430.2		51.8 -0.7	14°44.8'	(115)
23/7	15.22	422.0		45.5 -0.6	14°44.2'	(116)
23/7	15.56	465.5		43.5 -0.7	14°43.6'	(117)
23/7	16.22	470.8		54.2 -0.0	14°43.0'	Rocky Is. (118)
23/7	16.56	439.3		54.5 -0.6	14°43.2'	(119)
23/7	17.30	438.0		24.8 -0.8	14°43.4'	(120)
23/7	18.00	455.2		20.2 -0.8	14°43.6'	(121)
23/7	18.30	484.0		19.0 -0.8	14°43.8'	(122)

* Company No.

Area: Bonaparte Gulf

Date	Time	Read.	Depth	Lat.	Station
23/7	19.00	479.5	22.8 -0.8	14°44.0'	(123)
23/7	19.32	485.8	21.8 -1.0	14°44.2'	(124)*
23/7	20.02	526.7	39.6 -0.8	14°45.2'	(125)
23/7	20.36	636.0	57.6 -0.6	14°46.6'	(126)
24/7	8.42	646.2	60.9 -2.0	14°48.5'	(127)
24/7	9.18	637.3	67.0 -1.0	14°50.0'	(128)
24/7	9.50	624.3	72.8 -1.7	14°51.2'	(129)
24/7	10.20	615.7	70.4 -1.6	14°53.4'	(130)
24/7	10.56	726.0	74.1 -1.2	14°55.2'	(131)
24/7	11.28 11.34	733.0 RESET 654.6	76.6 -1.2	14°57.2'	(132)
24/7	12.08	677.8 +78.4	76.0 -1.2	14°59.2'	(133)
24/7	12.40	732.0 +78.4 552.0 RESET	130.4 -1.0	15°00.8'	(134)
24/7	13.16	574.4 +258.4	115.8 -1.0	15°02.0'	(135)
24/7	13.48	573.8 +258.4	89.5 -1.0	15°04.2'	(136)
24/7	14.28	581.4 +258.4	63.9 -1.0	15°06.0'	(137)
24/7	15.04	575.6 +258.4	-63.4 -1.0	15°09.2'	(138)
24/7	16.02	585.0 +258.4	52.6 -1.0	15°12.5'	(139)
24/7	16.32	578.5 +258.4	40.8 -0.8	15°14.4'	(140)
24/7	17.30	593.0 +258.4	68.3 -1.0	15°17.0'	(141)
24/7	18.16	580.5 +258.4	23.9 -1.2	15°20.0'	(142)
24/7	18.56	592.4 +258.4	36.3 -0.8	15°22.2')	(143)
24/7	19.42	605.0 +258.4	30.8 -0.8	15°24.8'	(144)
25/7	8.44	597.3 +258.4	33.3 -2.8	15°27.0'	(145) (Jetty Wyndham)
	WORDEN	L.D.	S.D.		S.D.
25/7	13.30 14.32	165	548.2 Jetty 546.8 "	14.00	544.0 Air Port

Area: Bonaparte Gulf

Date	Time	Read.	Depth	Lat.	Station
28/7	13.10	596.7	54.8 -0.3		(145) Wyndham Jetty
(same water level 200 yards further into the harbour).					
29/7	21.00	302.4	46.5 - 2.0	14°50.2'	(146)
		WORDEN			
		L.D.	S.D.		
29/7	11.08	162	441.6		A
	12.04	"	394.2		B
	13.04	"	437.0		C
	13.56	"	469.5		D
	14.45	"	505.7		E

Area: Cambridge Gulf

Date	Time	Read.	Depth	Lt.	Station
30/7	8.20	28.27	36.2 -1.0	14°58.5'	147
		WORDEN			
		L.D.	S.D.		
30/7	8.04	162	430.9		F
	8.40	"	442.8		G
	9.06	"	448.1		H
	9.34	"	451.5		I
	10.16	"	495.5		J
	10.56	"	517.5		K
	11.40	"	549.8		L
	12.20	"	511.7		M
	13.06	"	506.9		N
	14.20	"	486.0		O
	17.30	"	448.6		A
		Read.	Depth		
31/7	6.34	310.9	50.3 +6.0		(146)
		WORDEN			
31/7	8.06	162	432.2		F
31/7	7.44	280.0	36.3 +1.3		(147)
31/7	9.34	399.1	62.1 +1.2	14°52.0'	(148)
31/7	10.08	345.6	40.6 +1.6	14°55.0'	(149)

Area: Cambridge Gulf

Date	Time	Read.	Depth	Lat.	Station
31/7	10.52	348.7	47.5 +1.3	14°57.0'	(150)
31/7	11.42	329.0	23.8 +1.4	15°00.2'	(151) (O)
31/7	16.16	569.9	58.6 +1.8	15°07.5'	(152) (P)
		WORDEN			
		L.D.	S.D.		+ 8 ft. MSL
1/8	7.22	166	483.7		(152) P
1/8	7.44	"	473.6		Q
1/8	8.34	"	482.5		R
1/8	9.12	"	495.2		S
1/8	9.40	"	497.2		T
1/8	10.24	"	506.3		U
1/8	11.10	"	505.3		V
1/8	11.48	"	506.9		W
1/8	14.30	"	484.0		P + 8 ft. MSL
1/8	17.00	597.2	52.5 +0.8		Wyndham Jetty 145
		WORDEN (Wyndham)			
		L.D.	S.D.		
2/8	9.10	165	603.5		Jetty
	10.00	"	599.6		Air Port
	10.40	"	605.0		Jetty
		At air port			
		L.D.	S.D.		
		172	099.5		
		162	822.7		
		172	099.6		
		162	822.7		
		WORDEN	72.31		
10/8	1710	152	607.1 37.1 (previous observed) 644.2 (sea level)		Darwin B.M.R. Office
11/8	9.40	634.0 RESET	32.3 +2.4		Jetty, Darwin
11/8	15.32	655.2	59.4 +1.8		(79)
12/8	10.20	485.3	38.8 +3.2	12°02.6'	153

Area: Cambridge Gulf

Date	Time	Read.	Depth	Lat.	Station
12/8	11.32	476.8	49.5 +3.0	12°05.9'	154 Ruby Is.
12/8	12.38	485.7	33.7 +3.6	12°07.2'	155
12/8	13.40	397.9	45.6 +3.6	12°06.6'	156
12/8	14.40	377.2	39.6 +3.8	12°06.0'	157
12/8	15.36	416.4	53.2 +3.7	12°05.4'	158
12/8	16.32	466.1	45.0 +3.8	12°04.9'	159
Van Diemens Gulf					
12/8	17.26	426.4	38.2 +3.4	12°04.3'	160
12/8	18.24	409.6	60.8 +3.4	12°03.8'	161
13/8	8.28	460.1	53.8 +1.6	12°03.2'	162
13/8	9.26	550.8	81.8 +1.8	12°02.7'	163
13/8	10.24	520.9	53.0 +1.6	12°02.1'	164
13/8	11.24	518.3	64.0 +1.4	11°59.8'	165
13/8	12.26	511.7	29.4 +1.2	11°57.6'	166 Field Is.
13/8	13.30	469.0	27.8 +1.2	11°57.2'	167
13/8	14.30	414.0	49.2 +2.0	11°56.2'	168
13/8	15.38	410.5	86.8 +2.0	11°51.6'	169
13/8	16.34	408.5	91.5 +1.8	11°48.4'	170
13/8	17.30	424.8	121.6 +2.0	11°43.4'	171
13/8	19.28	317.0	29.3 +1.6	11°38.0'	172
14/8	8.46	375.0	72.8 +0.7	11°38.6'	173
14/8	9.44	348.4	51.8 +0.8	11°39.2'	174 (unsteady reading)
14/8	10.40	326.7	113.8 +0.7	11°36.0'	175

Area: Van Diemens Gulf

Date	Time	Read.	Depth	Lat.	Station
14/8	11.38	237.8 RESET 720.8	115.5 +0.9	11°31.0'	176 Very Shaky reading
14/8	12.30	704.1-483.0	51.4 +0.8	11°28.4'	177
14/8	13.32	830.9 -483.0 644.8 RESET	136.2 +0.6	11°25.2'	178
14/8	14.30	687.2 -288.9	60.9 +0.6	11°21.4'	179
14/8	17.44	701.0 -288.9 426.2 RESET	68.3 +0.8	11°19.8'	180
15/8	10.08	506.3 -14.1	61.0 -0.6	11°22.8'	181
15/8	10.54	515.6 -14.1	58.9 -0.8	11°17.6'	182
15/8	11.50	493.3 -14.1	53.6 -0.8	11°14.3'	183
15/8	12.45	467.6 -14.1	34.1 -1.2	11°12.7'	184
	got shock while unclamped just after reading				
	13.10	705.6 RESET			

Area: Timor Sea

15/8	14.18	706.4 -252.1	87.9 -1.4	11°11.2'	185
15/8	15.16	682.8 -252.1	43.5 -1.3	11°13.0'	186
15/8	16.24	625.4 -252.1	41.0 -1.3	11°15.2'	187
16/8	7.32	615.0 -252.1	19.1 -0.8	11°19.7'	188
16/8	8.56	630.7 -252.1	31.0 -1.2	11°17.6'	189
16/8	9.54	667.0 -252.1	31.8 -1.4	11°18.2'	190
16/8	10.52	662.6 -252.1	40.6 -0.8	11°21.2'	191
16/8	12.24	641.3 -252.1	13.5 -2.8	11°24.0'	192
		WORDEN (Snake Bay)			
		L.D	S.D.		
16/8	13.30	149	627.0	(beach approx. MSL)	
	14.18	"	536.8	air strip	
	14.36	"	627.3	beach	

Area: Timor Sea

Date	Time	Read	Depth	Lat.	Station
19/8	9.30	905.2 -252.1	42.4 +0.3		Darwin Jetty
		WORDEN Darwin L.D.	S.D.		
19/8	10.00	153	590.0 37.1	627.1 (sea level)	B.M.R. Lab.
		WORDEN Darwin S.D.			
19/8	10.34	572.3			B.M.R. Lab.
	10.50	571.6			BM No.1.
	11.12	584.2			GS 6
	11.35	592.9			PS 32
	11.56	571.3			B.M.R. Lab.
	12.06	571.1			BM No.1
	12.18	583.5			GS 6
	12.26	592.7			PS 32

	L.D.	S.D.
19/8	160	096.3
	150	792.2
		695.9

BUREAU OF MINERAL RESOURCES,

GEOLOGY AND GEOPHYSICS

APPENDIX 'B' PAGES 1 - 10

DARWIN - WYNDHAM

(Underwater Gravity Survey)

from

Records 1959/156

by

L.W. Williams and S. Waterlander

GRAVITY SURVEY

FA = 0.06777

B = 0.012377

+4.65

Station	Latitude	Longitude	Depth	Observ. Gravity	Normal Gravity	Free Air Correction	Bouguer Correction	Bouguer Anomaly
				978	978	(0.06954)		
B16 *	13°33'45"	129°48.5'	+13	334.68	332.24		+0.90	+8.0
86	13°34.0'	129°48.5'	-24.8	337.14	332.42	-1.68	+0.31	+8.0
86A	13°34.0'	47.2'	-46.8	338.01	332.42	-3.17	+0.58	+7.7
86B	13°34.0'	45.8'	-57.7	338.83	332.42	-3.91	+0.71	+7.9
86C	13°33.5'	44.4'	-64.2	340.51	332.07	-4.35	+0.79	+9.5
86D	13°33.0'	43.1'	-63.7	341.18	331.73	-4.32	+0.79	+10.6
86E	13°33.0'	41.9'	-63.5	338.36	331.73	-4.30	+0.79	+7.8
86F	13°33.0'	40.6'	-66.6	335.07	331.73	-4.51	+0.82	+4.3
86G	13°33.0'	39.3'	-75.6	331.91	331.73	-5.12	+0.94	+0.6
86H	13°33.0'	38.1'	-79.8	329.42	331.73	-5.41	+0.99	-2.1
B26 *	13°40'40"	129°46.5'	+10	342.00	336.97		+0.69	+10.4
87	13°40.5'	46.5'	-36.4	344.65	336.88	-2.47	+0.45	+10.4
87A	13°40'4'	45.5'	-49.3	345.33	336.81	-3.34	+0.61	+10.4
87B	13°40.3'	44.4'	-37.7	343.25	336.74	-2.55	+0.47	+9.1
87C	13°40.2'	43.3'	-48.3	341.85	336.67	-3.27	+0.60	+7.2
87D	13°40.1'	42.3'	-50.1	337.78	336.60	-3.39	+0.62	+3.1
87E	13°40.0'	41.3'	-63.6	334.85	336.53	-4.31	+0.79	-0.6
87F	13°39.9'	40.2'	-68.0	331.85	336.46	-4.61	+0.84	-3.7
87G	13°39.8'	39.2'	-71.9	330.96	336.39	-4.87	+0.89	-4.8
S18 *	13°46.40"	129°47.4'	+22.0	345.96	341.11		+1.53	+11.0
88	13°47.8'	47.4'	-9.9	348.82	341.92	-0.67	+0.12	+11.0
88A	13°47.7'	46.2'	-31.3	347.09	341.85	-2.12	+0.39	+8.2
88B	13°47.6'	44.9'	-37.5	342.48	341.78	-2.54	+0.46	+3.3
88C	13°47.5'	43.6'	-42.6	338.77	341.72	-2.89	+0.53	-0.7
88D	13°47.4'	42.3'	-48.7	336.96	341.65	-3.30	+0.60	-2.7
88E	13°47.3	40.9'	-55.3	336.15	341.58	-3.75	+0.68	-3.8
88F	13°47.2	39.6'	-63.8	335.78	341.51	-4.32	+0.79	-4.6
88G	13°47.1'	38.3'	-69.2	335.92	341.44	-4.69	+0.86	-4.7

Area: Bonaparte Gulf Traverse: 06/87/88 Date of Survey: July, 1958

Meter: Marine Gravity Meter Sensitivity 0.12665 Datum: * Company land station Density Factor : 2.0

Date: October, 1958.

GRAVITY SURVEY

+4.65

Station	Latitude	Longitude	Depth	Observ. Gravity	Normal Gravity	Free Air Correction	Bouguer Correction	Bouguer Anomaly
				978	978			
S24	13°54'10"	129°43'	+11	337.53	346.34		+0.76	-3.4
89	13°53.8'	43.0'	-27.6	339.58	346.10	-1.87	+0.34	-3.4
89A	13°53.7'	41.6'	-38.4	338.86	346.03	-2.60	+0.47	-4.7
89B	13°53.6'	39.8'	-46.7	338.69	345.96	-3.16	+0.58	-5.2
89C	13°53.5'	38.2'	-45.9	338.67	345.89	-3.11	+0.57	-5.1
89D	13°53.4'	36.6'	-56.6	338.95	345.82	-3.84	+0.70	-5.4
89E	13°53.3'	35.0'	-46.2	338.25	345.75	-3.13	+0.57	-5.4
89F	13°53.2'	33.4'	-41.2	337.91	345.68	-2.79	+0.51	-5.4
89G	13°53.1'	31.8'	-63.5	338.75	345.61	-4.30	0.79	-5.7
89H	13°53.0'	30.2'	-68.7	338.87	345.54	-4.66	+0.85	-5.8
89I	13°52.9'	28.6'	-47.3	335.67	345.48	-3.20	+0.58	-7.8
89J	13°52.8'	27.0'	-76.6	337.53	345.41	-5.19	+0.95	-7.5
89K	13°52.7'	25.4'	-80.5	338.07	345.34	-5.45	+1.00	-7.1
89L	13°52.6'	23.8'	-84.3	339.23	345.27	-5.71	+1.04	-6.1
89M	13°52.5'	22.2'	-85.8	340.64	345.20	-5.81	+1.06	-4.7
89N	13°52.4'	20.6'	-82.0	341.50	345.13	-5.56	+1.01	-3.5
B37 *	14°05'20"		+27.0	341.53	345.22		+1.88	-6.2
90	14°03.5'	129°34.0'	-25.6	343.54	352.98	-1.73	+0.32	-6.2
91	14°01.5'	29.4'	-46.4	351.26	351.50	-3.14	+0.57	+1.8
92	14°05.8'	27.2'	-64.8	358.89	354.54	-4.39	+0.80	+5.4
93	14°10.4'	24.9'	-60.5	367.50	357.81	-4.10	+0.75	+11.0
94	14°14.5'	22.8'						
95	14°19.2	22.8'	-41.9	377.36	364.10	-2.84	+0.52	+15.6
96	14°24.8'	21.1'	-24.9	383.38	368.14	-1.69	+0.31	+18.5
97	14°27.8'	19.9'	-128.7	398.15	370.31	-8.72	+1.59	+25.4
98	14°29.0'	18.7'	-87.3	402.97	371.18	-5.92	+1.08	+31.6
99	14°30.5'	17.5'	-101,9	408.61	372.27	-6.91	+1.26	+35.3
100	14°31.8'	16.3'	-91.0	410.76	373.21	-6.17	+1.13	+37.2
101	14°33.2'	15.1'	-76.4	416.24	374.24	-5.18	+0.95	+42.4

Area: Bonaparte Gulf Traverse: 89/ (90-105) Date of Survey: July, 1958

Meter: Marine Gravity Meter Sensitivity 0.12665 Datum: * Company land station Density Factor: 2.0

Date: October, 1958.

GRAVITY SURVEY

FA = 0.06777
B = 0.012377

+4.65

Station	Latitude	Longitude	Depth	Observ. Gravity	Normal Gravity	Free Air Correction	Bouguer Correction	Bouguer Anomaly
				978	978			
102	14°34.9'	129°13.9'	-66.7	416.29	375.48	-4.52	+0.83	+41.8
103	14°36.2'	12.7'	-67.6	416.40	376.43	-4.58	+0.84	+40.9
104	14°37.8'	11.5'	-58.6	415.56	377.59	-3.97	+0.73	+39.4
105	14°39.2'	10.3'	-66.2	414.14	378.62	-4.49	+0.82	+36.5
A9 *	14°55'10"		+27	397.83	390.43		+1.88	+13.9
106	14°54.2'	129°03.7'	-25.0	400.33	389.71	-1.69	+0.31	+13.9
107	49.6'	01.2'	-22.8	400.59	386.29	-1.55	+0.28	+17.7
108	49.0'	128°59.0'	-32.2	400.06	385.85	-2.18	+0.40	+17.1
109	48.4'	57.0'	-26.6	397.81	385.40	-1.80	+0.33	+15.6
110	47.8'	54.9'	-32.3	396.14	384.96	-2.19	+0.40	+14.0
111	47.2'	53.0'	-29.8	38..24	384.52	-2.02	+0.37	+6.7
112	46.6'	50.9'	-28.7	381.34	384.07	-1.94	+0.35	+0.3
113	46.0'	48.8'	-38.3	377.59	383.63	-2.60	+0.47	-3.5
114	45.4'	46.7'	42.2	374.89	383.18	-2.86	+0.52	-6.0
115	44.8'	45.0'	-50.8	372.94	382.74	-3.44	+0.63	-8.0
116	44.2'	42.6'	-46.4	371.89	382.30	-3.14	+0.57	-8.3
117	43.6'	40.0'	-46.4	377.37	381.85	-3.14	+0.57	-2.4
118	43.0'	37.9'	-58.6	378.00	381.41	-3.97	+0.72	-2.0
119	43.2'	35.2'	-60.2	373.99	381.56	-4.08	+0.74	-6.3
120	43.4'	33.8'	-31.9	373.80	381.70	-2.16	+0.39	-5.0
121	43.6'	31.7'	-27.8	375.96	381.85	-1.88	+0.34	-2.8
122	43.8'	29.2'	-26.7	379.62	382.00	-1.81	+0.33	+0.8
123	44.0'	27.1'	-30.3	379.04	382.15	-2.05	+0.37	-0.1
124	44.2'	25.0'	-28.6	379.84	382.30	-1.94	+0.35	+0.6

Area: Bonaparte Gulf

Traverse: 90-105
106-124

Date of Survey: July, 1958

Meter: Marine Gravity Meter

Sensitivity 0.12665

Datum: * Company land station

Density Factor: 2.0

Date: October, 1958.

GRAVITY SURVEY

Station	Latitude	Longitude	Depth	Obs. Gravity	Normal Gravity	Free Air Corr.	Free Air Anom.	Boug. Corr.	Boug. Anom.
				978	978				
134	15°00.8'	128°08.0'	124.3	412.88	394.64	-8.42	+9.82	+2.60	+12.4
135	02.0'	06.7'	109.6	415.69	395.54	-7.43	+12.72	+2.29	+15.0
136	04.2'	06.8'	83.8	415.60	397.20	-5.68	+12.72	+1.75	+14.5
137	06.0'	05.7'	59.1	416.54	398.55	-4.01	+13.98	+1.24	+15.2
138	09.2'	06.0'	60.0	415.77	400.97	-4.07	+10.73	+1.26	+12.0
139	12.5'	06.2'	51.8	416.91	403.47	-3.51	+9.93	+1.08	+11.0
140	14.4'	05.9'	41.2'	416.03	404.91	-2.79	+8.33	+0.86	+9.2
141	17.0'	05.9'	69.7	417.86	406.89	-4.72	+6.25	+1.46	+7.7
142	20.0'	05.0'	26.3	416.22	409.18	-1.78	+5.26	+0.55	+5.8
143	22.2'	05.5'	40.3	417.67	410.86	-2.73	+4.08	+0.84	+4.9
144	24.8'	06.2'	36.4	419.22	412.87	-2.47	+3.88	+0.76	+4.6
145	27.0'	05.8'	38.3	418.13	414.55	-2.60	+0.98	+0.80	+1.8
146	14°49.5'	23.4'	43.4	382.45	386.22	-2.94	-6.71	+0.91	-5.8
147	53.0'	23.9'	29.4	379.58	388.82	-1.99	-11.77	+0.62	-10.6
148	52.0'	18.9'	57.9	394.14	388.07	-3.92	+2.15	+1.21	+3.4
149	53.4'	20.5'	38.4	387.36	389.12	-2.60	-4.36	+0.80	-3.6
150	56.0'	20.1'	48.2	387.71	391.05	-3.27	-6.61	+1.01	-5.6
151	59.1'	21.0'	26.8	385.19	393.36	-1.82	-9.99	+0.56	-9.4
152	15°10.9'	07.6	58.0	415.74	402.25	-3.93	+9.56	+1.21	+10.8

Area: Cambridge Gulf

Date of Survey: July, August, 1958.

Meter: North American Marine Gravity Meter

Sensitivity: 0.12665

Datum: Wyndham P.S. M.S.L.

Density: 2.67

GRAVITY SURVEY

Station	Latitude	Longitude	Depth	Obs. Gravity	Normal Gravity	Free Air Corr.	Free Air Anom.	Boug. Corr.	Boug. Anom.
				978	978				
104	14°37.8'	129°11.5'	58.6	397.12	377.59	-3.97	+15.56	+1.23	+16.8
105	39.2'	10.3'	66.2	395.70	378.62	-4.49	+12.59	+1.39	+14.0
106	54.2'	03.7'	25.0	392.67	389.71	-1.69	+1.27	+0.52	+1.8
107	49.6'	01.2'	22.8	392.92	386.29	-1.55	+5.08	+0.48	+5.6
108	49.0'	128°59.0'	32.2	392.38	385.85	-2.18	+4.35	+0.67	+5.0
109	48.4'	57.0'	26.6	390.11	385.40	-1.80	+2.91	+0.56	+3.5
110	47.8'	54.9'	32.3	388.43	384.96	-2.19	+1.28	+0.68	+2.0
111	47.2'	53.0'	29.8	380.51	384.52	-2.02	-6.03	+0.62	-5.4
112	46.6'	50.9'	28.7	373.59	384.07	-1.94	-12.42	+0.60	-11.8
113	46.0'	48.8'	38.3	369.82	383.63	-2.60	-16.41	+0.80	-15.6
114	45.4'	46.7'	42.2	367.11	383.18	-2.86	-18.93	+0.88	-18.1
115	44.8'	45.0'	50.8	365.15	382.74	-3.44	-21.03	+1.06	-20.0
116	44.2'	42.6'	46.4	364.09	382.30	-3.14	-21.35	+0.97	-20.4
117	43.6'	40.0'	46.4	369.55	381.85	-3.14	-15.44	+0.97	-14.5
118	43.0'	37.9'	58.6	370.17	381.41	-3.97	-15.21	+1.23	-14.0
119	43.2'	35.2'	60.2	366.14	381.56	-4.08	-19.50	+1.26	-18.2
120	43.4'	33.8'	31.9	365.94	381.70	-2.16	-17.92	+0.67	-17.3
121	43.6'	31.7'	27.8	368.09	381.85	-1.88	-15.64	+0.58	-15.1
122	43.8'	29.2'	26.7	371.73	382.00	-1.81	-12.08	+0.56	-11.5
123	44.0'	27.1'	30.3	371.14	382.15	-2.05	-13.06	+0.63	-12.4
124	44.2'	25.0'	28.6	371.93	382.30	-194	-12.31	+0.60	-11.7
125	45.2'	22.6'	44.8	377.10	383.04	-3.04	-8.92	+0.94	-8.0
126	46.6'	21.7'	61.8	390.93	384.07	-4.19	+2.67	+1.29	+4.0
127	48.5'	20.6'	63.9	391.10	385.48	-4.33	+1.29	+1.34	+2.6
128	50.0'	18.4'	67.3	390.97	386.59	-4.56	-0.18	+1.41	+1.2
129	51.2'	16.5'	72.1	389.35	387.48	-4.89	-3.02	+1.51	-1.5
130	53.3'	14.8'	68.3	388.26	389.12	-4.63	-5.49	+1.43	-4.1
131	55.2'	12.8'	70.1	402.24	390.46	-4.75	+7.03	+1.47	+8.5
132	57.2'	11.0'	71.4	403.12	391.95	-4.84	+6.33	+1.49	+7.8
133	59.2'	09.2'	70.6	406.03	393.44	-4.78	+7.81	+1.48	+9.3

Area: Bonaparte Gulf Traverse: Darwin - Wyndham Date of Survey: July, 1958

Meter: North American Marine Gravity Meter Sensitivity: 0.12665 Datum: Darwin - Wyndham P.S. M.S.L. Density: 2.67

GRAVITY SURVEY

Station	Latitude	Longitude	Depth	Obs. Gravity	Normal Gravity	Free Air Corr.	Boug. Corr.	Boug. Anom.
				978	978			
A	14°49.3'	128°23.9'	0	379.31	386.07	-	-	-6.8
B	51.3'	26.7'	0	374.17	387.55			-13.4
C	53.1'	27.8'	0	378.78	388.89			-10.1
D	56.0'	28.2'	0	382.24	391.05			-8.8
E	59.1'	30.5'	0	386.12	393.36			-7.2
F	53.3'	23.5'	0	377.65	389.04			-11.4
G	54.9'	23.0'	0	378.91	390.23			-11.3
H	56.1'	23.8'	0	379.50	391.12			-11.6
I	57.7	24.3'	0	379.83	392.32			-12.5
J	59.2'	25.7'	0	384.56	393.44			-8.9
K	15° 00.5'	26.8'	0	386.93	394.42			-7.5
L	02.5'	26.8'	0	390.37	395.92			-5.5
M	02.7'	25.4'	0	386.25	396.07			-9.8
N	00.9'	23.8'	0	385.71	394.72			-9.0
O	14°58.9'	21.6'	0	383.45	393.22			-9.8
P	15°11.2'	07.5'	8	412.26	402.48	+0.75	-0.20	+10.3
Q	12.0'	08.5'	0	411.14	403.09			+8.0
R	13.3'	10.7'	0	412.04	404.08			+8.0
S	14.7'	11.6'	0	413.34	405.14			+8.2
T	15.4'	12.2'	0	413.52	405.67			+7.8
U	16.5'	12.9'	0	414.40	406.51			+7.9
V	17.3'	13.8'	0	414.24	407.12			+7.1
W	18.6'	15.6'	0	414.31	408.11			+6.2

Area: Cambridge Gulf

Date of Survey: July, August, 1958.

Meter: Worden 260 Sensitivity: 0.10779 Datum: Wyndham P.S. M.S.L. Density 2.0

GRAVITY SURVEY

Station	Latitude	Longitude	Depth	Obs. Gravity	Normal Gravity	Free Air Corr.	Boug. Corr.	Boug. Anom.
				978	978			
125	14°45.2'	128°22.6'	-44.8	377.10	383.04	-3.04	+0.55	-8.4
126	46.6'	21.7'	-61.8	390.93	384.07	-4.19	+0.76	+3.4
127	48.5'	20.6'	-63.9	391.10	385.48	-4.33	+0.79	+2.1
128	50.0'	18.4'	-67.3	390.97	386.59	-4.56	+0.83	+0.6
129	51.2'	16.5'	-72.1	389.35	387.48	-4.89	+0.89	-2.1
130	53.4'	14.8'	-68.3	388.26	389.12	-4.63	+0.84	-4.6
131	55.2'	12.8'	-70.1	402.24	390.46	-4.75	+0.87	+7.9
132	57.2'	11.0'	-71.4	403.12	391.95	-4.84	+0.88	+7.2
133	59.2'	09.2'	-70.6	406.03	393.44	-4.78	+0.87	+8.7
134	15°00.8'	08.0'	-124.3	412.88	394.64	-8.42	+1.54	+11.4
135	02.0'	06.7'	-109.6	415.69	395.54	-7.43	+1.36	+14.1
136	04.2'	06.8'	-83.8	415.60	397.20	-5.68	+1.04	+13.8
137	06.0'	05.7'	-59.1	416.54	398.55	-4.01	+0.73	+14.7
138	09.2'	06.0'	-60.0	415.77	400.97	-4.07	+0.74	+11.5
139	12.5'	06.2'	-51.8	416.91	403.47	-3.51	+0.64	+10.6
140	14.4'	05.9'	-41.2	416.03	404.91	-2.79	+0.51	+8.8
141	17.0'	05.9'	-69.7	417.86	406.89	-4.72	+0.86	+7.1
142	20.0'	05.0'	-26.3	416.22	409.18	-1.78	+0.32	+5.6
143	22.2'	05.5'	-40.3	417.67	410.86	-2.73	+0.50	+4.6
144	24.8'	06.2'	-36.4	419.22	412.87	-2.47	+0.45	+4.3
Wyndham Jetty	145 27.0'	05.8'	-38.3	418.13	414.55	-2.60	+0.47	+1.5
146	14°49.5'	23.4'	-43.4	382.45	386.22	-2.94	+0.54	-6.2
147	53.0'	23.9'	-29.4	379.58	388.82	-1.99	+0.36	-10.9
148	52.0'	18.9'	-57.9	394.14	388.07	-3.92	+0.72	+2.9
149	53.4'	20.5'	-38.4	387.36	389.12	-2.60	+0.48	-3.9
150	56.0'	20.1'	-48.2	387.71	391.05	-3.27	+0.60	-6.0
151	59.1'	21.0'	-26.8	385.19	393.36	-1.82	+0.33	-9.7
152	15°10.9'	07.6'	-58.0	415.74	402.25	-3.93	+0.72	+10.3

Area: Cambridge Gulf

Date of Survey: July/August, 1958

Meter: Marine Gravity Survey

Sensitivity: 0.12665

Datum: Wyndham

Density Factor: 2.0

GRAVITY SURVEY

Station	Latitude	Longitude	Elev.	Obs. Gravity 978	Normal Gravity 978	Free Air Corr.	Free Air Anom.	Boug. Corr.	Boug. Anom.
A	14°49.3'	128°23.9'	0	379.31	386.07	-	-6.8	-	-6.8
B	51.3'	26.7'	0	374.17	387.55	-	-13.4	-	-13.4
C	53.1'	27.8'	0	378.78	388.89	-	-10.1	-	-10.1
D	56.0'	28.2'	0	382.24	391.05	-	-8.8	-	-8.8
E	59.1'	30.5'	0	386.12	393.36	-	-7.2	-	-7.2
F	53.3'	23.5'	0	377.65	389.04	-	-11.4	-	-11.4
G	54.9'	23.0'	0	378.91	390.23	-	-11.3	-	-11.3
H	56.1'	23.8'	0	379.50	391.12	-	-11.6	-	-11.6
I	57.7'	24.3'	0	379.83	392.32	-	-12.5	-	-12.5
J	59.2'	25.7'	0	384.56	393.44	-	-8.9	-	-8.9
K	15°00.5'	26.8'	0	386.93	394.42	-	-7.5	-	-7.5
L	02.5'	26.8'	0	390.37	395.92	-	-5.5	-	-5.5
M	02.7'	25.4'	0	386.25	396.07	-	-9.8	-	-9.8
N	00.9'	23.8'	0	385.71	394.72	-	-9.0	-	-9.0
O	14°58.9'	21.6'	0	383.45	393.22	-	-9.8	-	-9.8
P	15°11.2'	07.5'	8	412.26	402.48	+0.75	+10.53	-0.27	+10.3
Q	12.0'	08.5'	0	411.14	403.09	-	+8.0	-	+8.0
R	13.3'	10.7'	0	412.04	404.08	-	+8.0	-	+8.0
S	14.7'	11.6'	0	413.34	405.14	-	+8.2	-	+8.2
T	15.4'	12.2'	0	413.52	405.67	-	+7.8	-	+7.8
U	16.5'	12.9'	0	414.40	406.51	-	+7.9	-	+7.9
V	17.3'	13.8'	0	414.24	407.12	-	+7.1	-	+7.1
W	18.6'	15.6'	0	414.31	408.11	-	+6.2	-	+6.2

Area: Cambridge Gulf Date of Survey: July, August, 1958.

Meter: Worden 260 Sensitivity: 0.10779 Datum: Wyndham P.S. M.S.L. Density: 2.67

GRAVITY SURVEY

Station	Latitude	Longitude	Depth	Obs. Gravity	Normal Gravity	Free Air Corr.	Free Air Anom.	Boug. Corr.	Boug. Anom.
				978	978				
80	12°28.5'	130°50.5'	30.2	318.61	289.33	-2.05	+27.23	+0.63	+27.9
81	19.5'	39.5'	65.2	322.22	283.67	-4.42	+34.13	+1.36	+35.5
82	25.0'	16.3'	79.9	331.53	287.12	-5.41	+39.00	+1.67	+40.7
83	42.5'	10.0'	76.3	330.81	298.25	-5.17	+27.39	+1.60	+29.0
84	13°00.0'	08.4'	17.0	335.98	309.63	-1.15	+25.20	+0.36	+25.6
85	07.5'	129°59.5'	26.1	307.16	314.58	-1.77	-9.19	+0.55	-8.6
86	34.0'	48.5'	24.8	317.47	332.42	-1.68	-16.73	+0.52	-16.1
86A	34.0'	47.2'	46.8	318.34	332.42	-3.17	-17.25	+0.98	-16.3
86B	34.0'	45.8'	57.7	319.16	332.42	-3.91	-17.17	+1.21	-16.0
86C	33.5'	44.4'	64.2	320.84	332.07	-4.35	-15.58	+1.34	-14.2
86D	33.0'	43.1'	63.7	321.51	331.73	-4.32	-14.54	+1.33	-13.2
86E	33.0'	41.9'	63.5	318.69	331.73	-4.30	-17.34	+1.33	-16.0
86F	33.0'	40.6'	66.6	315.40	331.73	-4.51	-20.84	+1.39	-19.4
86G	33.0'	39.3'	75.6	312.24	331.73	-5.12	-24.61	+1.58	-23.0
86H	33.0'	38.1'	79.8	309.75	331.73	-5.41	-27.39	+1.67	-25.7
87	40.5'	46.5'	36.4	323.28	336.88	-2.47	-16.07	+0.76	-15.3
87A	40.4'	45.5'	49.3	323.96	336.81	-3.34	-16.19	+1.03	-15.2
87B	40.3'	44.4'	37.7	321.88	336.74	-2.55	-17.41	+0.79	-16.6
87C	40.2'	43.3'	48.3	320.48	336.67	-3.27	-19.46	+1.01	-18.4
87D	40.1'	42.3'	50.1	316.41	336.60	-3.39	-23.58	+1.05	-22.5
87E	40.0'	41.3'	63.6	313.48	336.53	-4.31	-27.36	+1.33	-26.0
87F	39.9'	40.2'	68.0	310.48	336.46	-4.61	-30.59	+1.42	-29.2
87G	39.8	39.2	71.9	309.59	336.39	-4.87	-31.67	+1.50	-30.2
88	47.8'	47.4'	9.9	328.20	341.92	-0.67	-14.39	+0.21	-14.2
88A	47.7'	46.2'	31.3	326.47	341.85	-2.12	-17.50	+0.65	-16.8
88B	47.6'	44.9'	37.5	321.86	341.78	-2.54	-22.46	+0.78	-21.7
88C	47.5'	43.6'	42.6	318.15	341.72	-2.89	-26.46	+0.89	-25.6
88D	47.4'	42.3'	48.7	316.34	341.65	-3.30	-28.61	+1.02	-27.6
88E	47.3'	40.9'	55.3	315.53	341.58	-3.75	-29.80	+1.16	-28.6
88F	47.2'	39.6'	63.8	315.16	341.51	-4.32	-30.67	+1.33	-29.3

Area: Bonaparte Gulf Traverse: Darwin - Wyndham Date of Survey: July, 1958

Meter: Marine Gravity Meter Sensitivity: 0.12665 Datum: Darwin & Wyndham P.S. M.S.L. Density: 2.67

GRAVITY SURVEY

Station	Latitude	Longitude	Depth	Obs. Gravity	Normal Gravity	Free Air Corr.	Free Air Anom.	Boug. Corr.	Boug. Anom.
				978	978				
88G	13°47'.1	129°38.3'	69.2	315.31	341.44	-4.69	-30.82	+1.45	-29.4
89	13°53.8'	43.0'	27.6	319.17	346.10	-1.87	-28.88	+0.58	-28.2
89A	53.7'	41.6'	38.4	318.44	346.03	-2.60	-30.19	+0.80	-29.4
89B	53.6'	39.8'	46.7	318.27	345.96	-3.16	-30.85	+0.98	-29.9
89C	53.5'	38.2'	45.9	318.25	345.89	-3.11	-30.75	+0.96	-29.8
89D	53.4'	36.6'	56.6	318.53	345.82	-3.84	-31.13	+1.18	-29.9
89E	53.3'	35.0'	46.2	317.83	345.75	-3.13	-31.05	+0.91	-30.1
89F	53.2'	33.4'	41.2	317.49	345.68	-2.79	-30.98	+0.86	-30.1
89G	53.1'	31.8'	63.5	318.33	345.61	-4.30	-31.58	+1.33	-30.2
89H	53.0'	30.2'	68.7	318.45	345.54	-4.66	-31.75	+1.44	-30.3
89I	52.9'	28.6'	47.3	315.25	345.48	-3.20	-33.43	+0.99	-32.4
89J	52.8'	27.0'	76.6	317.11	345.41	-5.19	-33.49	+1.60	-31.9
89K	52.7'	25.4'	80.5	317.65	345.34	-5.45	-33.14	+1.68	-31.5
89L	52.6'	23.8'	84.3	318.81	345.27	-5.71	-32.17	+1.76	-30.4
89M	52.5'	22.2'	85.8	320.20	345.20	-5.81	-30.81	+1.80	-29.0
89N	52.4'	20.6'	82.0	321.08	345.13	-5.56	-29.61	+1.72	-27.9
90	14°03.5'	129°34.0'	25.6	325.10	352.91	-1.73	-29.54	+0.54	-29.0
91	01.5'	29.4'	46.4	332.82	351.50	-3.14	-21.82	+0.97	-20.8
92	05.8'	27.2'	64.8	340.45	354.54	-4.39	-18.48	+1.36	-17.1
93	10.4'	24.9'	60.5	349.06	357.81	-4.10	-12.85	+1.27	-11.6
94	14.5'	22.8'							
95	19.2'	22.8'	41.9	358.92	364.10	-2.84	-8.02	+0.88	-7.1
96	24.8'	21.1'	24.9	364.94	368.14	-1.69	-4.89	+0.52	-4.4
97	27.8'	19.9'	128.7	379.71	370.31	-8.72	+0.08	+2.69	+2.8
98	29.0'	18.7'	87.3	384.53	371.18	-5.92	+7.43	+1.83	+9.3
99	30.5'	17.5'	101.9	390.17	372.27	-6.91	+10.99	+2.13	+13.1
100	31.8'	16.3'	91.0	392.32	373.21	-6.17	+12.94	+1.90	+14.8
101	33.2'	15.1'	76.4	397.80	374.24	-5.18	+18.38	+1.60	+20.0
102	34.9'	13.9'	66.7	397.85	375.48	-4.52	+17.85	+1.40	+19.3
103	14°36.2'	129°12.7'	67.6	397.96	376.43	-4.58	+16.95	+1.41	+18.4

Area: Bonaparte Gulf

Traverse: Darwin - Wyndham

Date of Survey: July, 1958

Meter: North American Marine Gravity Meter

Sensitivity: 0.12665

Datum: Darwin-Wyndham M.S.L.

Density: 2.67