

Water Resources Assessment of the Sturt Plateau Region

TECHNICAL DATA REPORT

STURT PLATEAU BEST PRACTICE GROUP INCORPORATED



**LANDS PLANNING
ENVIRONMENT**
Northern Territory Government

WATER RESOURCES ASSESSMENT

of the

STURT PLATEAU

TECHNICAL DATA

REPORT

Report 31/2000D
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1.0 INTRODUCTION

This report has been compiled to accompany the Water Resources Development maps and Commentary Notes produced as part of the Water Resources Assessment of the Sturt Plateau. It represents a summary of intrinsic information used in this assessment.

This report is accessible in electronic format on the disk which accompanies this report.

2.0 NATURAL RESOURCES DIVISION REPORTS

A list of reports held by the now Natural Resources Division (NRD) of the Department of Lands, Planning and Environment is provided in Annex 1. This Division has previously been located within other NT Government departments including:

- Water Resources Division of the Department of Lands, Planning and Environment
- Water Resources Division of the Power and Water Authority
- Water Resources Division of the Department of Mines and Energy
- Water Division of the Department of Transport and Works

Prior to 1977, the Water Resources Division (then the Water Resources Branch) was administered by the Commonwealth Government.

Most reports were produced internally by the 'NRD'. These reports are available in paper copy at the NRD libraries in Darwin and Alice Springs and should soon be available in digital format.

3.0 GROUNDWATER INFORMATION

Each bore on the NRD database has a unique registered number (RN) and requests for information should refer to this number. Annexures 2 and 7 were sourced directly from data available in the NRD's *HYDSYS* database. Minor errors may be present.

Annex 2 – General Bore Data

Annex 3 – Bores with Water Level Monitoring Record

Annex 4 – Registered Number of Bores that have been Tested

Annex 5 – Lithology, Stratigraphy and Gamma Logs of Selected Bores

Annex 6 – Registered Number of bores with Gamma Logs

Annex 7 – Water Chemistry

Annex 8 – Isotope Chemistry

4.0 SURFACE WATER INFORMATION

The stream gauging stations currently in operation in the Sturt Plateau are listed in Annex 9. Examples of data available include:

- river height data
- river flow data
- maximum flow
- flow duration analysis

This information is stored on the NRD's *HYDSYS* database and is available on request.

Daily read rainfall data is available for a number of stations across the Sturt Plateau. The stations are listed in Annex 10. One station is maintained by the NRD (the information is available on *HYDSYS*) while all other stations are maintained by the Bureau of Meteorology.

A number of sites on the Sturt Plateau (Annex 11) were sampled to determine clay content in the soil profile. This work was conducted using an auger rig generally sampling to a depth of 6m where possible. The hand textured results are presented in Table 11b.

ANNEX 1

**NRD Reporting
within the
Sturt Plateau Study Area**

DOHERTY, J., 1983. Sunday Creek Resistivity Soundings. Hydrogeophysical Report Number 83/11.

DOHERTY, J., 1983. Western Creek Resistivity Soundings. Hydrogeophysical Report Number 83/12

FURNESS, P., 1982. Sunday Creek Resistivity Survey. Hydrogeophysical Report Number 82/10.

KNAPTON, A., 2000, Water Resource Assessment of the Sturt Plateau, Geophysical Investigation. Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No. 32/2000D.

MATTHEWS, I., 1998. Railway Corridor Land Acquisition, Bore Drilling Program - Alice Springs to Darwin. Territory Groundwater Services for Department of Lands Planning and Environment. Report Number 21/98E

MOSER, A., 1994. Bore Completion Report RN 29012, RN 29013, RN 29090. Stuart Highway and Delamere Road Production Bores. Report Number 31/94D

SANDERS, R., 1993. Bore Completion report - Carpentaria and Stuart Highway Road Bores 1991/92. Report Number 23/93D

YIN FOO, D., 2000. Water Resources Development Map and Commentary Notes - Avago, Birdum Creek, Maryfield, Middle Creek, Sunday Creek, Tarlee, Vermelha and Western Creek Stations. Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No: 08/2000D.

YIN FOO, D., 2000. Water Resources Development Map and Commentary Notes - Bloodwood Downs, Cow Creek, Lakefield, Larrizona, Gilnockie, Margaret Downs, Nenen, Gorrie, Dry River and Wyworrie Stations. Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No: 06/2000D.

YIN FOO, D., 2000. Water Resources Development Map and Commentary Notes - Elsey Station and Wubalawun Aboriginal Land Trust, Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No: 07/2000D.

YIN FOO, D., 2000. Water Resources Development Map and Commentary Notes - Kalala Station and Hidden Valley Station, Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No: 07/2000D.

YIN FOO, D. and Matthews, I., 2001. Hydrogeology of the Sturt Plateau, 1:250 000 Scale Map Explanatory Notes, Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No: 17/2000D.

YIN FOO, D., 2000. Water Resources of the Sturt Plateau Region – Overview Report, Natural Resources Division, Department of Lands Planning and Environment, Darwin. Report No: 18/2000D.

Baseflow Water Quality Surveys in Rivers in the N.T. Volume 11. Roper, Wilton & Hodgson Rivers. Report Number 10/88

ANNEX 2

General Bore Data

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
53	Abandoned	McCorrey bore	321838	8182114	242.3	110.0	83.8	..	1.1	83.8
89	Abandoned	No. 530	310593	8273930	177.7	61.5	55.2	..	1.4	53.3
145	..	Army No. 522	300000	8304800	178.7	51.8	44.2	..	1.1	..
307	Abandoned	No. 394	312500	8271600	181.0	60.9	..	..	1.8	8.5
310	Abandoned, windmill & tank	No. 387	311420	8271204	169.3	83.2	79.3	..	0.4	73.2
319	Cased	Army Bore	324700	8275220	181.3	..	..	..	1.5	..
320	Abandoned	No. 532	312463	8271680	181.1	53.3	45.7	..	2.2	44.2
326	Abandoned	No. 527	313400	8273100	180.3	..	..	..	0.1	..
345	Abandoned	Army No 528 bore	197200	8271100	193.4	..	..	..	1.0	75.8
550	..	No. 1 Gorrie	296690	8294050	159.7	39.3	..	..	1.8	46.9
551	Abandoned	No. 2	309130	8269150	177.6	78.6	..	..	4.5	53.6
553	Abandoned	No. 2	311622	8271822	173.3	45.7	..	..	1.8	32.0
554	Abandoned	No. 3 Birdum S/R.	327200	8248200	183.2	57.9	48.7	57.9	1.8	44.5
555	Abandoned	No.4 Birdum S/R.	329200	8220400	196.8	76.2	..	76.2	1.8	46.9
556	Abandoned	Aerodrome	326407	8200954	206.9	74.3	13.6	60.6	1.2	60.7
557	..	No. 5	321800	8182100	241.2	104.5	82.2	..	1.8	78.6
558	Equipped-Diesel	No. 2 Town Supply	326124	8201468	207.0	68.3	..	..	1.8	54.2
902	Abandoned	Dry River S/R No. 3	221800	8327900	144.3	69.5	60.9	69.5	1.0	..
903	Lister/Mono	Dry River S/R No. 4	204950	8314180	151.9	74.6	61.0	75.0	60.9	..
904	Mill, Lister/Mono	Dry River S/R No. 5	194655	8296003	163.5	116.7	55.7	113.1	2.0	..
905	Abandoned (tagged as 904)	Dry River S/R No. 6	181285	8264847	..	..	..	..	0.8	..
906	Disused windmill	Dry River S/R No. 7	183421	8244566	210.0	39.4	..	..	1.0	23.2
908	..	Pussycat Bore	181150	8155450	211.6	..	..	..	1.5	22.8
1438	..	Army No. 371	293100	8331200	145.8	45.1	..	..	0.6	22.8
1457	Abandoned	No. 521	305210	8274800	177.6	49.6	..	..	4.4	..

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
1982	SC pumpjack/Kubota	Scheme bore	265345	8185091	235.2	112.8	..	..	1.3	82.9
2186	Equipped-Diesel	Larrimah Water Supply	308300	8277400	183.3	..	..	..	1.0	..
2325		One Tree Bore	207950	8325600	186.7	30.4	..	..	1.0	55.0
2326	SC pumpjack/Kubota	No 1 Bore	321328	8334506	..	30.4	..	..	1.0	22.8
2379	SC pumpjack/Kubota	Drum Bore	332616	8338008	..	30.4	..	..	1.0	22.8
2778	Abandoned	Homestead Bore	320995	8209281	205.1	61.9	58.5	..	1.9	56.7
3395	Not capped	No. 1 Gorrie	296900	8294100	160.9	39.6	28.9	..	2.3	45.7
3544	..	..	299165	8348672	..	30.4	12.2	..	2.5	4.6
3545	SC pumpjack/Lister	No 5 Bore	335806	8342264	..	74.7	24.4	54.9	1.2	18.2
4142	Backfilled	..	336100	8354800	..	111.4	..	..	0.1	..
4495	Windmill	No. 6 Bore	349832	8351395	..	73.1	..	..	1.0	..
4529	Abandoned, submersible.	Moorak Bore	320757	8221308	198.6	67.1	59.7	62.2	2.2	59.7
5047	Windmill	Mt St. James - Bore No 7	356786	8350734	111.9	61.6	33.5	54.5	1.5	6.5
5149	..	A=39/65	291122	8338471	166.8	35.6	..	30.5	6.3	60.9
5152	Windmill	Red Lily Bore	330654	8350098	..	121.9	27.4	83.8	1.5	21.9
5395	..	Enora Nora Bore	327600	8201800	206.2	57.0	51.8	57.0	1.5	51.8
5425	..	Dry River S/R No. 8	163300	8245861	241.8	276.0	221.1	268.4	1.0	69.5
5492	Abandoned	Homestead Bore	329235	8249255	187.7	55.3	53.6	54.8	2.3	51.2
5544	..	..	163300	8245861	211.2	178.4	41.5	128.7	2.0	28.6
5557	SC pumpjack/Lister	Dagenhart Bore	345401	8338754	93.0	110.0	108.6	109.8	4.0	6.4
5760	Abandoned	Carpentaria Hwy Bore	335118	8196565	225.8	..	..	..	1.5	..
5877	Equipped-Diesel	Larrimah Water Supply	308250	8277400	183.1	73.2	54.9	..	1.3	54.9
5916	Abandoned	66/104 Western Creek Stn	250450	8266300	188.2	..	..	..	0.0	..
5917	Submersible	Larrikin Bore	247982	8281702	177.0	65.8	64.0	65.8	1.2	70.1
5928	Windmill	Homestead Bore	256800	8264400	195.7	53.9	50.2	53.9	1.2	48.8

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
5929	Mono/Kubota	No. 2 Bore	336515	8242634	187.5	72.5	51.8	..	2.3	50.6
5942	Not equipped	Carpentaria Hwy Bore	352410	8198471	239.9	104.2	88.4	..	1.5	85.4
6067	Abandoned	Carpentaria Hwy Bore	444775	8176479	276.7	138.6	128.0	..	1.9	128.0
6222	Submersible	Desert Bore	315136	8212803	205.0	73.2	59.4	70.1	1.8	59.4
6223	Mono/Yanmar	Monkeroo Bore	325089	8225926	196.2	52.8	48.8	..	1.8	45.7
6375	Abandoned	104/66 Western Ck Stn	250500	8264350	191.5	..	..	..	0.0	..
6678	..	Advice 1/67	202450	8181400	260.6	106.7	..	..	0.0	..
6706	Not capped	Bullocky Paddock	343189	8344929	109.9	131.2	88.6	..	0.1	..
6728	..	Advice 2/67	194300	8173200	243.6	115.8	..	..	0.0	..
6743	Cased	Sunday Creek Bore	294536	8237449	197.8	68.6	..	..	0.7	55.4
6743	..	114/69 Advice	295966	8226120	197.8	68.5	60.9	68.5	0.7	55.4
6744	Windmill, abandoned	Marah Bore	304468	8274199	166.0	44.2	39.6	44.2	1.3	30.5
6745	Mono/Kubota	Marang Bore	241473	8260618	190.7	0.9	..	..	1.0	60.9
6844	Dud - abandoned	96/69 Advice	254500	8278750	181.1	91.4	60.9	91.4	0.1	62.0
6845	Mono/Lister	Homestead Bore	206967	8293173	170.1	91.4	76.2	91.4	2.5	63.0
6854	..	Advice 3/67	191600	8193600	229.6	94.5	65.5	91.4	2.2	60.9
6881	..	No. 3 Bore	341500	8214400	..	62.5	..	..	0.0	..
6882	Mono	Western Bore	314563	8229149	194.1	74.6	48.8	61.0	3.1	..
6883	Submersible	Enoranora Bore	331515	8212803	201.2	61.0	54.9	..	2.5	45.7
7032	Abandoned, not sighted	Sandy Bore	338400	8211950	206.6	51.8	..	..	0.0	..
7157	..	Donkey Bore	162934	8230740	192.1	83.8	45.7	74.7	1.5	12.2
7191	Submersible	Top Bore	338623	8235135	190.6	53.6	44.5	..	2.8	43.6
7192	Submersible	Bluebush Bore	338844	8222270	193.3	58.0	52.4	..	2.3	52.4
7248	Abandoned, Mono/Lister	Lancewood Bore	335056	8198698	221.3	75.6	70.7	..	3.0	70.1
7321	Mono/Lister	Sandy Bore (repl)	338529	8212156	204.0	59.7	56.4	..	3.1	54.6

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
7323	Mono/Kubota	Junction Bore	344138	8344942	107.3	73.8	67.3	..	2.3	26.2
7686	Mono/Kubota	Konkerkinker Bore	351914	8220223	207.1	64.6	54.9	..	3.1	54.9
7687	Abandoned, Mono	Strangeway Bore	352659	8231056	198.1	65.2	54.9	..	3.7	51.8
7724	Abandoned, Mono/Lister	Griffith Bore	362106	8209575	242.6	109.7	..	..	3.8	103.6
7725	Abandoned, blockage	Safari Bore	350920	8203657	223.8	79.2	73.2	..	3.8	73.2
7741	Abandoned	Dingo Bore	319410	8204542	217.1	105.1	..	..	0.9	62.1
7754	Abandoned, Mono	Jump Up bore	362663	8221655	240.8	103.6	91.4	..	2.8	76.2
7755	Abandoned, Mono	'C' Bore	357239	8226573	214.7	67.4	61.0	..	1.4	61.0
7756	Submersible	No 2 Bore	255283	8276585	183.0	60.0	51.8	60.0	0.8	..
7872	Mono/Lister	'D' Bore	344947	8227263	196.8	102.1	76.2	99.0	1.5	76.2
7873	Mono/SC motor	'B' Bore	356814	8214751	217.9	91.4	62.5	86.9	2.3	65.5
7874	Submersible	Dingo Bore (repl)	319350	8204756	216.6	122.0	97.5	99.1	1.2	83.8
7875	Not sighted	Advice 72/1	344900	8220900	196.6	100.6	73.2	..	1.5	62.5
7876	Capped	'A' Bore	344705	8215174	200.6	137.2	114.3	..	2.3	52.5
8016	Rehab PVC, not equipped	Homestead Bore	299751	8212450	204.1	150.7	143.0	..	2.5	63.7
8017	Abandoned, never used	Gorey Bore	318910	8167179	269.7	160.0	134.1	..	3.0	..
8097	Cased	Mataranka Homestead	298900	8349000	..	30.5	11.6	21.9	12.6	18.0
8149	Mono; bore rehabilitated	Sandridge Bore	352442	8340283	79.5	48.8	..	..	2.0	4.6
8150	Backfilled	Dud hole	344960	8331720	107.7	76.3	..	..	0.0	..
8179	Mono/SC diesel	5 Mile Bore (repl)	320560	8189514	233.2	122.0	64.0	98.0	1.0	..
8241	Not capped	Quewarren Bore	344408	8332926	..	60.0	42.7	..	3.0	..
8361	Cased	Gibb Community No. 1	318550	8348200	..	22.3	16.0	21.0	25.0	7.3
8362	Cased	Gibb Community No. 2	318450	8348400	..	29.5	19.3	29.4	25.0	7.4
8513	Isuzu Generator/ submersible	Bravo Bore	289775	8212241	204.7	91.0	76.0	..	2.3	57.4
8514	..	Alpha Bore	301015	8226712	198.2	95.0	64.0	..	1.1	50.6

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
8684	..	Advice 35/74	335424	8253307	187.8	76.0	66.0	..	0.5	60.0
8699	Equipped	Larrimah Water Supply	308300	8277500	183.8	73.1	60.0	..	0.5	..
8856	Submersible	Bore No. 1 Town Supply	326127	8201263	207.1	95.0	82.6	..	1.0	59.6
8857	Abandoned	Aerodrome	326407	8200954	206.9	91.3	82.8	..	19.0	59.6
9081	..	H & W Site No. 1 Gorrie	295150	8318400	179.7	50.0	33.0	46.0	1.9	46.0
9082	..	H & W Site No.2 Gorrie	302850	8297550	176.8	69.0	66.0	..	2.5	84.5
20745	Cased	Djimbra No. 1	317150	8345700	..	9.0	7.0	..	2.0	5.5
20746	Cased	Djimbra No. 2	317100	8345700	..	16.0	12.5	..	6.0	5.5
20747	Cased	Djimbra No. 3	317200	8345700	..	13.5	10.0	..	6.0	5.5
20994	..	McCaskell Repl.	170755	8162127	198.0	43.0	18.0	25.0	5.0	3.5
21117	Dud - open to 23m	74/81 Advice	296169	8212380	202.5	114.0	96.0	..	0.9	68.0
21130	..	59/81 Advice	299850	8212400	205.2	174.0	..	..	0.1	..
21449	Submersible	Green Park	308600	8277300	183.6	71.0	..	..	1.0	..
21759	..	45/82 Advice	300100	8213900	203.4	120.0	..	..	0.0	..
21780	Dud - open to 21.72m	46/82 Advice	300037	8215239	202.6	103.0	..	..	0.0	..
21781	..	60/81 Advice	289000	8220000	202.0	95.0	..	..	0.0	..
21782	..	49/82 Advice	289000	8224300	198.8	77.0	..	..	0.0	..
21783	..	New Leaf Bore	300265	8211518	207.1	84.0	75.0	..	12.0	63.0
21784	Capped, SC pump jack	43/82	249570	8331877	165.6	58.6	48.0	58.6	4.0	41.0
22101	Submersible	48/83 Advice	194,120	8312437	175.3	90.5	54.0	..	12.0	58.0
22669	Abandoned - capped	Homestead Bore	328640	8248847	187.3	67.0	43.0	..	1.1	..
22670	Capped	Bulwaddy Bore	330890	8241895	187.1	67.0	..	..	1.2	44.6
22698	..	Advice 74/83	271500	8269000	190.6	73.0	..	..	0.0	..
22858	Not equipped (pump stuck)	Westside Bore	321245	8249039	187.7	72.0	..	..	1.1	50.7
22859	Abandoned	Rose's Bore	318547	8263084	174.1	67.0	..	..	2.0	36.0

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
22860	Mono/Kubota	Wallet Bore	336676	8254574	186.9	66.0	51.0	..	7.8	43.0
22861	Mono/Kubota	Ironstone Bore	327353	8248095	183.5	66.0	..	..	2.8	39.0
23377	..	Power House	326350	8200400	207.5	81.0	70.0	..	2.0	61.0
23652	Cased, PVC	Mataranka Homestead	299100	8349200	..	34.0	24.0	..	4.5	7.0
23662	Mono/Kubota	Rose's bore (repl)	318547	8263084	174.1	57.0	51.0	..	9.0	46.0
23833	Not capped	Gorrie Road Bore	270139	8305490	176.0	31.0	24.0	..	0.0	52;
23859	Submersible	Homestead Bore	251301	8294551	178.2	60.0	..	..	1.2	50.9
24074	Cased	Mataranka Homestead	299100	8349150	..	30.0	12.0	24.0	10.0	8.0
24455	Cased	Homestead Road Bore	297500	8348800	..	30.0	21.0	..	10.0	10.0
24534	Abandoned, pump stuck	Adder Bore	334263	8189027	237.0	152.0	..	..	1.0	112.0
24535	Abandoned, submersible	Stewart Bore	334138	8179100	253.7	128.0	..	..	2.2	82.0
24536	Submersible	Safari Bore (repl)	350920	8203657	223.8	109.0	..	..	1.2	73.0
24602	Capped	Chinaman Bore	323957	8346687	..	50.0	39.0	44.0	3.8	21.0
24612	Capped	29/86 Advice	190496	8312942	177.3	103.0	40.0	..	40.0	57.1
24616	Cased, capped, abandoned	Birdum Bore	304468	8274199	166.6	81.6	35.0	57.0	2.4	30.4
24617	Backfilled	Pipeline Bore	326671	8190079	227.0	96.0	85.0	..	2.0	57.0
24780	..	Advice 113/86	188650	8182800	214.6	65.0	50.0	..	3.0	41.0
24781	..	Advice 85/86	194900	8177800	235.3	120.0	86.0	..	1.1	58.0
24782	..	Advice 84/86	203000	8191400	244.5	168.0	90.0	..	0.4	79.0
24783	Mono/Kubota	Bulltrap Bore	218129	8224922	219.9	105.0	91.0	..	2.0	43.0
24784	Mono/Kubota	Homestead Bore	222604	8242108	208.2	65.0	50.0		5.0	48.0
24785	Mono/Kubota	Black Eye Bore	218900	8238180	210.5	150.0	66.0	150.0	0.5	95.0
24790	Cased	Farm Block Bore	294670	8350340	..	18.0	16.0	..	13.0	5.0
24815	Capped	Buchanan Hwy Bore	262000	8145270	255.4	159.6	..	..	2.0	88.3
24816	Capped	Buchanan Hwy Bore	221750	8147350	..	192.0	..	..	6.0	106.4

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
24817	Capped	Buchanan Hwy Bore	240350	8145950	266.7	200.0	..	..	8.0	115.1
25209	..	88/75 Advice	295750	8207600	207.6	115.0	82.0	..	3.0	78.6
25258	Cased	Farm Block Bore	294670	8350340	..	22.0	17.0	..	10.0	4.0
25279	Mono/Kubota	Lily Waterhole Bore	254880	8284417	169.4	62.0	45.0	55.0	3.0	54.5
25290	Submersible	6000 Bore	241503	8284919	180.4	80.0	66.0	72.0	7.0	105.4
25436	..	No. 2 Bore (BMR)	250573	8266766	187.5	..	..	..	0.1	
25437	Submersible	No. 5 Bore (BMR)	297524	8293430	161.9	29.9	..	..	1.0	60.0
25802	..	Advice 88/1	184230	8186700	214.3	75.0	48.0	..	5.0	43.0
26053	Dud	88/47 Advice	253541	8315971	168.9	103.0	81.0	..	0.0	36.0
26054	Dud; backfilled	88/46 Advice	258049	8315358	173.2	100.0	..	..	0.0	45.0
26055	Dud; backfilled	88/112 Advice	267150	8314250	170.2	80.0	..	..	0.0	..
26111	Mono	Chowying Bore	243504	8276436	175.3	80.0	65.0	75.0	2.5	..
26112	Submersible	Booster Bore	248342	8286018	176.4	100.0	86.0	96.0	2.0	..
26113	Mono/Kubota	No. 1 Homestead Bore	260965	8319215	170.5	66.0	38.0	..	8.0	53.0
26114	Dud	..	265940	8317260	165.1	66.0	..	..	0.0	56.0
26115	Not capped	Gorrie Road Bore	266175	8302272	193.5	46.0	34.0	..	7.0	7.8
26116	Mono/Lister	Irrigation Bore	202278	8294031	..	89.0	54.0	77.0	10.0	38.0
26160	..	Pilters No. 5	806348	8181671	..	42.0	18.0	30.0	5.5	17.0
26205	Mono/Kubota	12 mile Bore	202876	8189718	..	86.0	78.0	..	1.0	72.0
26206	..	Advice 88/116	190600	8172400	235.6	110.0	98.0	..	3.5	78.0
26265	..	No 2 Bore	262800	8307650	182.0	36.0	28.0	..	2.0	81.0
26303	Backfilled	Hidden Valley H'stead	276173	8168991	255.5	150.0	..	..	0.0	..
26314	Mono/Kubota	Purdys Bore	350794	8247173	177.3	72.0	..	..	1.0	49.0
26315	Mono/Kubota	CW Bore	327173	8264917	182.4	72.0	44.0	..	1.0	44.0
26316	Mono/Kubota	New Bore (Giles Bore)	313210	8249727	179.7	90.0	50.0	..	6.0	49.0

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
26317	Not equipped	Pipeline Bore	311290	8261060	182.9	80.0	..	..	4.0	45.5
26363	Cased	Park Bore	308510	8345600	..	50.0	15.7	22.0	0.4	..
26366	..	..	303600	8273400	171.5	89.0	..	..	0.5	..
26367	..	New Bore	302966	8272120	177.2	83.0	..	..	1.0	49.7
26368	..	Advice 88/126	277000	8270200	187.9	70.0	51.9	..	1.7	..
26546	Casing stuck - hole aband	89/57 Advice	6625	8244348	212.8	120.0	..	..	0.0	55.0
26549	Mono/Kubota	New Bore	226765	8233304	216.9	91.0	78.0	..	5.0	..
26553	Mono/Kubota	Pops Bore	206164	8225105	227.6	105.0	86.0	..	4.5	39.0
27090	Mono/Kubota	Pussycat No. 2	181100	8155400	212.7	75.0	69.0	..	5.5	39.6
27124	Submersible	Homestead bore	221000	8318000	172.0	70.0	51.0	64.0	3.0	47.0
27126	..	..	155688	8306539	205.1	83.0	33.0	67.0	4.6	29.0
27306	..	..	275700	8265300	194.4	71.0	..	..	0.0	..
27328	Submersible	Homestead Bore	321005	8209337	205.1	77.0	54.5	58.9	5.0	54.5
27330	Mono/Kubota	No. 3 Bore	344788	8248475	187.2	80.0	..	..	3.0	49.0
27331	Jet pump	Homestead bore	276170	8169065	256.7	170.0	..	..	0.3	105.4
27332	Mono/Kubota	Franks Bore	337892	8264194	175.7	50.0	39.0	..	2.5	37.0
27336	Backfilled	90/72 Western Ck Stn	246900	8268200	185.8	..	..	..	0.0	..
27337	Mono/Kubota	Rosewood Bore	240657	8254124	199.9	3.0	..	..	3.0	56.0
27338	Backfilled	Dud bore	247600	8254124	199.5	0.5	..	..	0.5	60.0
27339	Backfilled	Dud bore	250400	8267750	186.1	..	..	..	0.0	..
27340	Dud - backfilled	90/153 Advice	284936	8191170	218.5	126.0	..	..	0.0	..
27341	Mono/ Kubota	Gunja Bore	285034	8170522	241.2	116.0	100.0	..	2.0	89.0
27533	Capped	McManus-1, CRA, Kalala	353306	8239350	189.0	1617.3	..	..	2.0	..
27534	Capped	Altree-2, CRA, Maryfield	369988	8238966	213.0	1699.9	65.0	82.0	12.0	..
27535	Capped	Walton-2, CRA, Kalala	354746	8240798	192.0	198.2	40.0	..	2.0	..

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
27668	..	Site 3, Delamere	169779	8257253	214.5	43.0	38.5	..	10.0	14.9
27793	Capped; not equipped	Lakefield Stn	268439	8313208	172.3	75.0	55.0	..	2.0	25.6
27794	Capped; not equipped	Lakefield Stn	275722	8310430	155.6	75.0	48.0	..	5.0	27.6
27940	Capped	Mason-1, CRA, Hayfield	365446	8150261	..	151.3	..	..	10.0	107.0
27941	Capped	Mason-2, CRA, Hayfield	365446	8150261	..	136.0	..	..	10.0	107.0
27957	Abd mineral; marker post	Sever 1 - Bloodwood Downs	268339	8313082	172.7	1259.9	152.0	..	34.0	..
27958	Capped	Jamison 1	368483	8313102	173.0	1767.0	..	..	1.0	..
28082	Capped	Road Bore	309550	8275150	178.5	203.2	54.0	..	5.0	45.0
28085	Not equipped	Carpentaria Hwy Bore	414006	8181048	305.0	177.7	..	..	5.0	154.0
28086	Cased	Resources Bore	214959	8261368	191.7	96.8	59.7	..	2.7	..
28087	Equipped	WRD Inv.	260654	8234540	208.4	86.8	68.5	114.0	1.0	62.4
28088	Backfilled	WRD Inv.	245636	8234353	219.6	..	..	..	0.0	..
28089	Backfilled	WRD Inv.	305628	8186993	243.1	50.5	..	..	0.0	..
28190	Equipped	WRD Inv.; Larrizona Stn	221900	8287250	172.9	266.5	68.5	84.0	1.5	..
28191	50mm PVC, monitoring bore	WRD Inv.; Gorrie Road	261200	8298000	176.7	55.6	34.0	..	0.1	..
28314	..	Pacific Oil & Gas 4/93	366048	8204483	237.5	121.0	102.0	..	2.5	55.0
28623	..	Homestead Bore	360150	8360600	68.6	..	..	..	2.0	..
28795	Capped	Schuberts Bore	294869	8159008	245.2	114.0	96.0	..	4.0	76.1
29012	Capped, used for road works	Stuart Hwy Bore	298700	8310800	179.5	121.8	58.6	69.3	10.0	41.6
29013	Not equipped (pump stuck)	Stuart Hwy Bore	329200	8245000	185.7	103.3	3.5	..	3.5	42.6
29014	Submersible	Larrimah Sports Oval	308500	8277200	183.1	91.3	63.5	..	5.0	47.4
29087	..	1/95 Del. W. Range	806100	8274400	..	103.0	..	..	0.1	38.0
29090	Capped	Buntine Hwy Bore	818700	8200200	..	171.0	146.0	..	1.5	32.4
29091	Capped, used for road works	Gorrie Road Bore	282200	8320400	152.6	173.4	19.3	27.5	40.0	96.5
29152	Submersible	Dillinya Bore	183421	8244566	210.0	61.0	57.0	..	2.3	39.0

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
29536	Submersible	Daves Bore	312955	8246038	180.3	73.0	48.0	..	3.3	43.5
29537	Mono/Yanmar	No. 4 (Cattle Ck) Bore	336559	8295629	159.3	48.0	42.0	..	10.0	34.0
29705	Backfilled	..	336544	8276916	166.6	36.0	..	..	0.0	..
29706	Mono/Yanmar	No. 9 (Cattle Ck S) Bore	337823	8277934	168.7	83.0	66.0	72.0	4.0	45.4
29707	Mono/Yanmar	No. 10 (Hospital) Bore	324191	8275277	180.7	72.0	60.0	..	2.0	51.8
29708	Submersible	No. 1 (Homestead) Bore	308527	8279363	186.0	77.0	65.0	..	2.0	57.7
29769	Mono/Kubota	Lucky Bore	250750	8270147	182.9	5.0	..	..	5.0	58.0
29770	Backfilled	..	248800	8268000	185.6	..	..	..	0.0	..
30335	Dud - abandoned	Railway Corridor	255760	8292130	180.1	59.5	..	..	0.0	45.5
30494	Line shaft/Cummins motor	Irrigation Bore	315536	8281071	187.8	106.0	54.0	..	100.0	48.9
30495	Backfilled	Dud bore	349037	8284438	163.9	60.0	..	..	0.0	..
30496	Backfilled	Dud bore	352212	8284083	148.5	90.0	..	..	0.0	..
30497	Backfilled	Dud bore	352474	8282550	144.3	102.0	..	..	0.0	..
30498	Mono/Yanmar	No. 7 (Midway) Bore	342962	8283450	176.1	60.0	48.0	..	4.0	44.0
30507	Backfilled	Railway Corridor	270340	8270500	189.7	90.0	..	..	0.0	43.5
30508	Backfilled	Railway Corridor	264540	8270435	187.1	75.0	..	..	0.0	46.6
30509	Dud - abandoned	Railway Corridor	258150	8295100	180.6	66.0	..	..	0.0	36.2
30653	Dud - backfilled	..	284681	8225102	199.3	85.0	..	..	0.0	..
30654	Dud - backfilled	..	277699	8224422	208.8	84.0	75.5	..	0.5	62.0
30655	Equipped	Turkey Beach Bore	274660	8211846	..	84.0	78.0	..	2.0	64.0
30656	Equipped,	Donna Bore	242156	8248029	206.9	3.0	..	..	14.0	74.0
30657	Backfilled	Dry Hole Bore	244820	8239520	218.1	..	..	..	0.0	..
30660	Submersible, not tagged	Banjo Bore	276076	8310272	159.7	..	..	..	1.0	..
30695	Water Level Monitor	Dry River Road Bore	205100	8306800	..	94.0	78.0	..	6.0	59.0
30708	Abandoned, open hole	Site A	273718	8222782	212.2	108.0	..	..	0.3	63.6

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30709	Abandoned, open hole	Maybe Bore	274030	8226640	209.3	87.0	..	..	0.3	57.2
30710	Submersible	Bullwaddy Bore	273927	8222597	208.8	78.0	..	..	1.3	63.4
30711	Dud - open hole	Site D	262095	8218732	..	94.0	..	..	0.1	..
30712	Dud - open hole	Site E	262545	8218832	234.6	94.0	..	..	0.1	..
30713	Dud - backfilled	Site F	263005	8223543	..	94.0	..	..	0.1	..
30714	Cased, not equipped	Wedgetail Bore	263301	8228138	219.6	101.0	86.0	..	1.0	72.6
30856	Cased, not equipped	Crab Hole Bore	241758	8235616	219.6	..	..	..	0.1	68.0
30865	Submersible	River Bore	218888	8320911	162.3	69.0	59.0	..	2.5	54.0
30866	Not equipped	South Bore	222446	8316972	170.4	69.0	61.0	..	2.0	52.6
30867	Dud, abandoned	..	196860	8319800	..	127.0	..	..	0.1	..
30869	Mono/Kubota	Corkwood Bore	329518	8257748	184.5	61.0	55.0	..	4.5	43.0
30870	Lister/submersible	Kings Bore	292475	8175926	229.2	92.0	81.0	..	2.0	68.0
30871	Lister/submersible	O'Haras Bore	284994	8187374	217.7	92.0	79.0	..	2.0	62.0
30872	Dud - abandoned	..	267043	8291536	173.8	..	..	..	0.0	..
30873	Submersible, not tagged	KTM Bore	261606	8297521	177.5	..	..	..	1.0	..
30878	..	Homestead Bore	793500	8200500	..	123.0	28.0	37.5	3.5	17.0
30915	Yanmar/Mono	No.3 (Normandy) Bore	326153	8290533	178.8	66.9	..	..	3.0	44.9
30950	Cased	WRD 1997	253860	8337100	176.5	196.7	..	..	10.0	..
30951	Abandoned, never used	Freshwater Bore	310800	8178213	255.7	..	..	..	1.0	97.7
30952	Abandoned, never used	Bulwaddy Bore	310491	8167427	259.1	131.2	..	..	1.0	105.4
30953	Abandoned, never used	Ironwood Bore	310685	8190050	246.7	..	..	..	1.0	..
30985	Cased	Rodeo Association	326059	8202226	207.8	133.3	98.8	114.3	4.0	58.4
30986	Cased, not equipped	WRD 1998 Investigation	248013	8232444	218.3	76.8	..	..	2.5	58.4
30987	Cased, not equipped	WRD 1998 Investigation	247734	8229574	219.2	103.3	..	..	5.0	61.5
30988	Cased, not equipped	WRD 1998 Investigation	247293	8221984	231.7	97.8	..	..	1.2	63.2

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
30989	Cased, not equipped	WRD 1998 Investigation	246546	8214321	245.2	109.3	..	..	1.0	81.6
30990	Dud - backfilled	WRD 1998 Investigation	280271	8231449	199.3	97.3	..	..	0.0	..
31108	Submersible	WRD 1997 Investigation	196954	8320688	199.6	154.6	127.5	..	1.0	92.0
31109	203mm casing; abandoned	WRD 1997 Investigation	192259	8275983	186.0	60.6	..	..	2.0	34.6
31111	..	Dave Francis Mineral Hole	316000	8253400	180.0	465.0	..	..	6.0	65.0
31133	PVC casing - not capped	Normandy Mineral Exploration	326170	8290603	178.6	332.2	..	..	5.0	44.8
31167	Mono/Yanmar	Daylights Bore	319962	8320138	161.7	42.0	39.0	..	1.5	32.0
31168	Dud - backfilled	..	341070	8319258	..	43.0	20.0	..	0.3	11.5
31336	Dud; abandoned	..	204240	8282630	..	77.0	48.0	..	0.1	56.0
31337	Dud; abandoned	..	201500	8285000	..	69.0	..	..	0.1	..
31380	Dud - backfilled	WRD 1997 Investigation	196343	8257809	199.9	56.0	..	..	0.1	..
31381	Not equipped	Dingo Bore	231463	8319669	168.9	67.7	..	..	10.0	..
31382	Not equipped	WRD 1997 Investigation	247662	8298771	181.2	80.6	..	..	2.0	57.7
31383	Dud; Backfilled	WRD 1997 Investigation	245816	8318229	173.2	61.7	..	..	0.0	..
31391	Cased, workover in 1998	WRD 1997 Inv. (Roads)	187600	8326000	225.7	243.8	..	..	4.0	117.3
31393	Dud - backfilled	WRD 1998 Investigation	191800	8258360	202.7	91.8	53.7	84.7	2.0	46.0
31394	Cased	WRD 1998 Investigation	203142	8282550	174.3	85.3	74.3	..	2.5	54.3
31395	Dud; abandoned	WRD 1998 Investigation	202407	8280751	176.0	97.3	..	..	0.1	45.1
31396	Cased	WRD 1998 investigation	230450	8290914	176.5	..	63.0	85.0	2.0	54.7
31397	Cased	WRD 1998 Investigation	265640	8281460	178.1	229.1	43.8	223.0	4.0	40.6
31398	Dud - backfilled	WRD 1998 Investigation	274812	8297823	177.1	49.3	..	..	0.1	13.5
31399	Dud - backfilled	WRD 1998 Investigation	272650	8295365	166.3	79.3	..	..	0.1	11.7
31480	Cased	WRD 1997 Investigation	244670	8336870	177.1	202.7	..	..	5.0	..
31489	Cased	WRD 1998 Investigation	193912	8258443	201.5	97.3	..	..	0.1	..
31594	Dud - backfilled	..	199114	8204054	244.4	100.0	..	..	0.1	..

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
31595	Dud - backfilled	..	203630	8204103	237.6	100.0	..	..	0.1	..
31596	Dud - open with PVC collar	..	204044	8212304	242.6	100.0	..	..	0.1	..
31597	Mono/Kubota	..	212808	8204233	..	109.0	99.0	..	0.9	90.0
31605	Dud - open to 50.75m	..	262420	8216445	..	..	..	..	0.1	dry
31606	Cased	..	290614	8226206	196.7	78.0	69.0	..	2.0	53.0
31617	Submersible/ Kubota	..	229995	8277330	176.0	..	..	..	1.0	57.1
31618	Not equipped	..	218137	8276884	175.9	..	..	..	1.0	53.4
31630	Submersible, not tagged	Emma Bore	261327	8281857	174.0	94.0	78.0	..	20.0	47.1
31738	Dud - open, surface casing		226600	8248931	199.0	80.0	..	..	0.1	..
31742	Mono/Yanmar	No. 11 bore (Laneway bore)	324887	8281767	177.1	70.0	..	..	3.0	43.0
31743	Backfilled	..	310644	8290581	180.3	87.0	..	..	0.1	..
31749	Dud - open to 85.12m	..	271982	8217056	221.0	86.0	..	..	0.3	70.5
31860	Dud - open to 24m	..	271339	8218177	221.0	76.0	..	..	0.2	..
31861	Cased , not equipped	..	273686	8217483	216.0	76.0	..	..	0.3	69.0
31862	Mono/Yanmar	No. 8	336664	8282541	162.1	55.0	44.5	..	4.0	31.3
31867	Dud	Roads	236413	8270120	180.0	..	..	..	0.1	..
31868	Dud	Roads	236339	8272995	176.7	..	..	..	0.1	..
31920	Backfilled	NRD 1/98	293576	8273337	198.1	72.8	..	..	0.0	..
31921	Backfilled	NRD 2/98	283550	8273250	199.7	84.6	..	..	0.3	46.8
31922	Dud - backfilled	WRD 1998 Investigation	267577	8270467	188.7	66.9	..	..	0.1	42.1
31923	Dud - backfilled	WRD 1998 Investigation	263950	8270461	187.2	72.1	..	..	0.1	
31924	Cased	WRD 1998 Investigation	261524	8270415	184.8	77.1	46.0	..	1.0	45.7
31925	Cased, not equipped	Damsite bore	248628	8254260	..	..	..	..	0.5	63.0
31926	Cased, not equipped	Water Resources bore	251623	8245528	..	..	..	..	0.5	..
31950	Dud - backfilled	WRD 1998 Investigation	299830	8233693	189.4	73.8	61.8	..	0.3	51.8

BORE RN	CURRENT STATUS	BORE NAME	EASTING	NORTHING	ELEV. (mAHD)	DEPTH DRILLED (m)	TOP OF FIRST AQ.	TOP OF SECOND AQ.	YIELD (L/s)	SWL (m BGL)
31951	Dud - backfilled	WRD 1998 Investigation bore	225593	8250478	200.0	73.8	..	..	0.1	..
31952	Dud - backfilled	WRD 1998 Investigation bore	225990	8249800	199.6	91.3	..	..	0.1	..
31953	Cased	WRD 1998 Investigation bore	310000	8318850	161.4	114.8	..	..	25.0	26.9
31963	Cased	NRD 2000 Investigation	243051	8199374		137.0			1.0	88.9
31965	Cased	NRD 2000 Investigation	347054	8255585		115.5			1.0	48.0
32035	Abandoned, Mono pump	Mudburra bore	319675	8177838	252.5	..	..	..	1.0	..
32037	Mono/Yanmar	No. 5 bore (Pampas bore)	354921	8295348	134.7	..	..	..	1.0	..
32038	Submersible	Creek bore	330718	8223562	195.0	..	..	..	1.0	..
32039	Submersible	Homestead bore (repl)	328545	8248812	187.0	..	..	..	1.0	..
32162	Cased	..	222573	8272219	..	93.0	..	..	1.3	53.3
32167	Backfilled	Dud	240400	8270200	..	72.0	..	..	0.1	..
32168	Backfilled	Dud	241139	8270196	180.6	72.0	..	..	0.1	..
32169	Submersible	road bore	243029	8272811	176.9	80.0	66.0	..	4.0	51.7
32213	Not equipped	Margaret Downs	192107	8275841	186.3	66.0	50.0	..	1.0	32.4
32448	Cased, 50 mm PVC	NRD 1999 Investigation	317355	8345839		103.8	20.0		30.0	73.9
32463	Capped	NRD 2000 Investigation	297850	8195956	201.0	84.0	72.0	77.0	2.0	60.7
32464	Cased	NRD 2000 Investigation	272864	8197526		100.0			1.0	70.7
32524	Cased	VT1	303796	8237995	..	84.0	..	..	..	47.6
32622	Backfilled	MC1	..	..	..	100.0	..	..	0.1	..
32623	Cased	MC3	272515	8266459	..	102.0	..	..	2.0	49.1
32625	Cased	VT3	289799	8238382	..	100.0	..	..	..	..
32626	Cased (dud)	VT2	296923	8237778	..	100.0	..	..	0.1	..
32627	Cased (dud)	VT12	285000	8238753	..	..	..	..	0.1	..

ANNEX 3

Groundwater Monitoring Information

Table 2 List of Bores with Water Level Monitoring Record

RN	LOCATION	m AHD (toc)	DATA LOGGER
5942	Kalala, Carpentaria Highway	236.9	
8857	Daly Waters	210.5	
24817	Murranji, Buchanan Highway	273.3	
28082	Larrimah, Stuart Highway	184.7	
28087	Tarlee Station	208 est.	Yes
29012	Elsey Station, Stuart Highway	172.7	
29013	Maryfield Station, Stuart Highway	185.4	
29091	Elsey Station, Gorrie Road	144.2	
30695	Dry River Station, Dry River Road	171 est.	Yes
30708	Avago Station	212 est.	
31483	Stylo Station	144.6	
31861	Avago Station	197 est.	

ANNEX 4

Bore Testing Summary

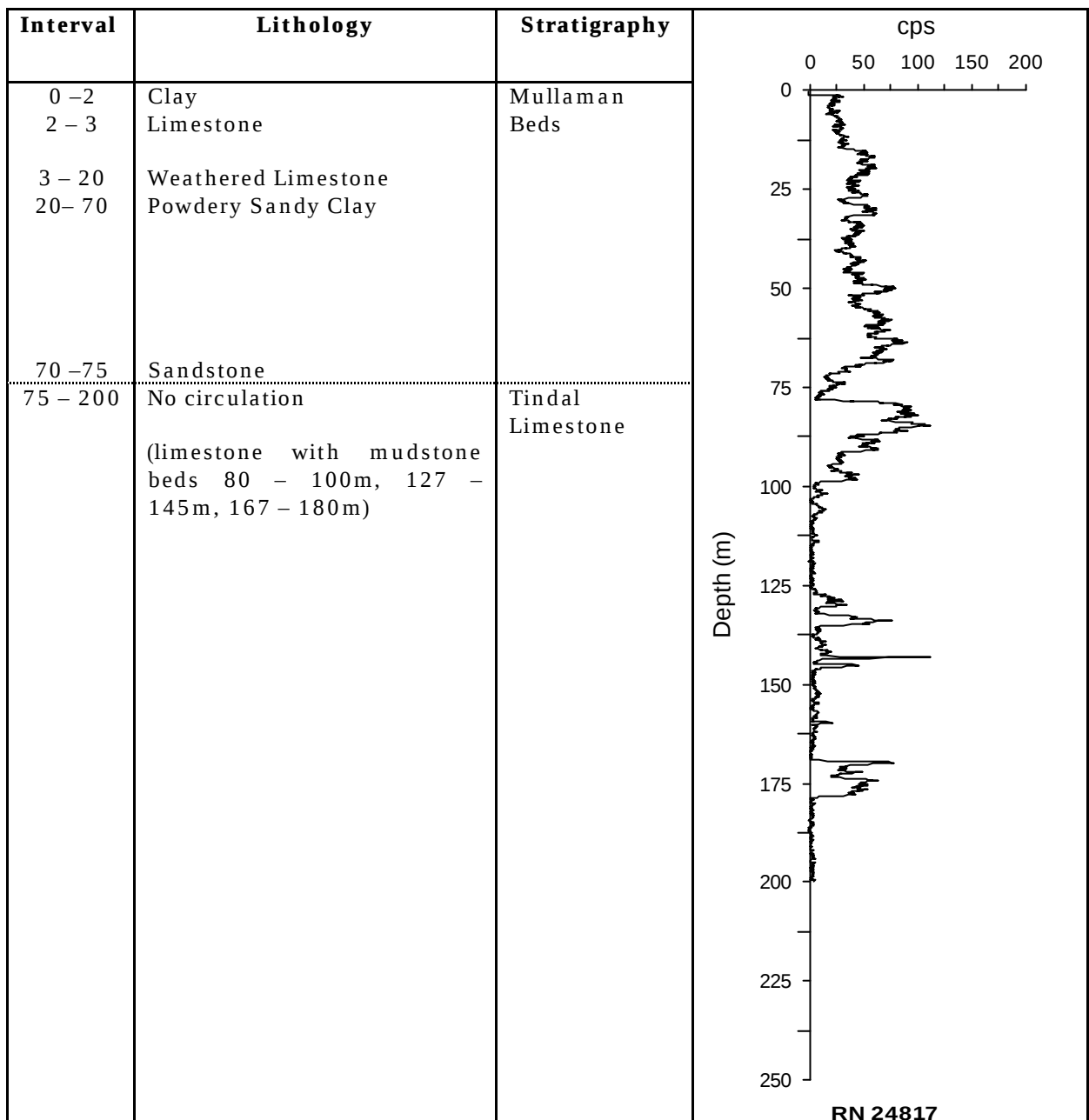
Table 4 List of Bores that have been Tested

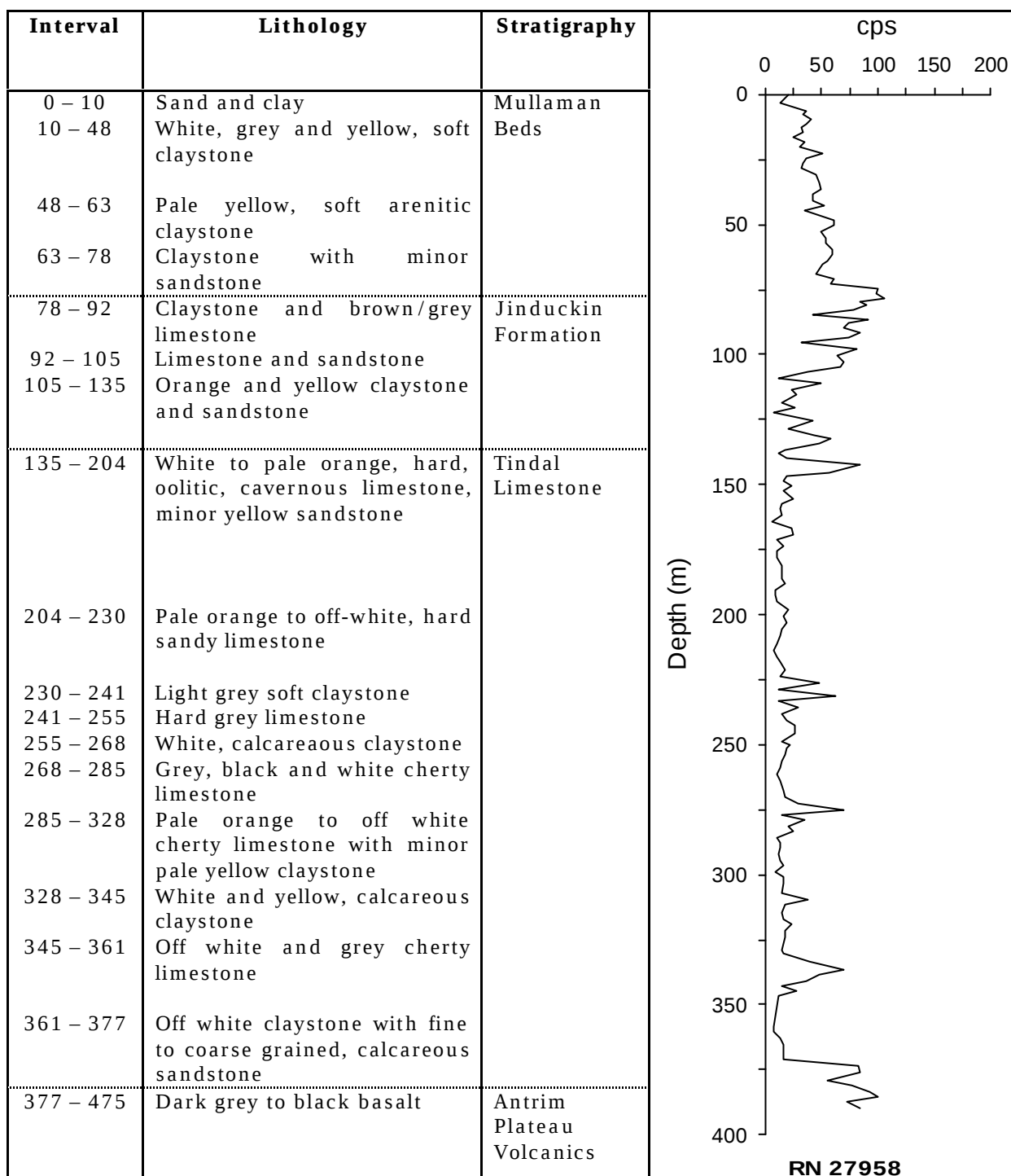
Referred by Bore Registered Number

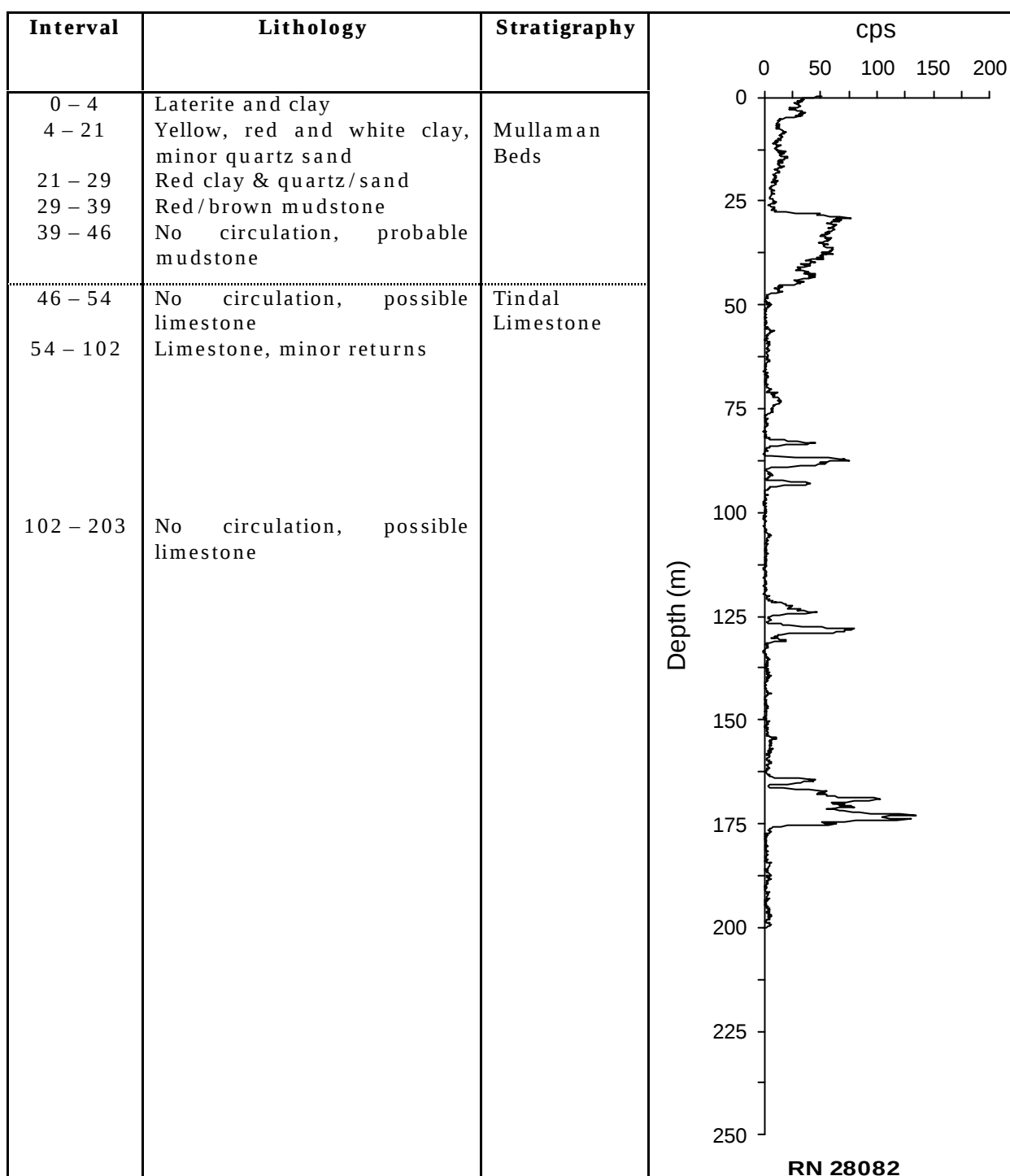
6845	24612	24815	24816
24817	26116	27794	28082
29012	29013	30660	30710
30714	30873	30986	30987
30988	30989	31108	31381
31382	31393	31394	31396
31397	31606	31617	31618
31630	31924	31925	31953
32162	31963	31965	32463
32464			

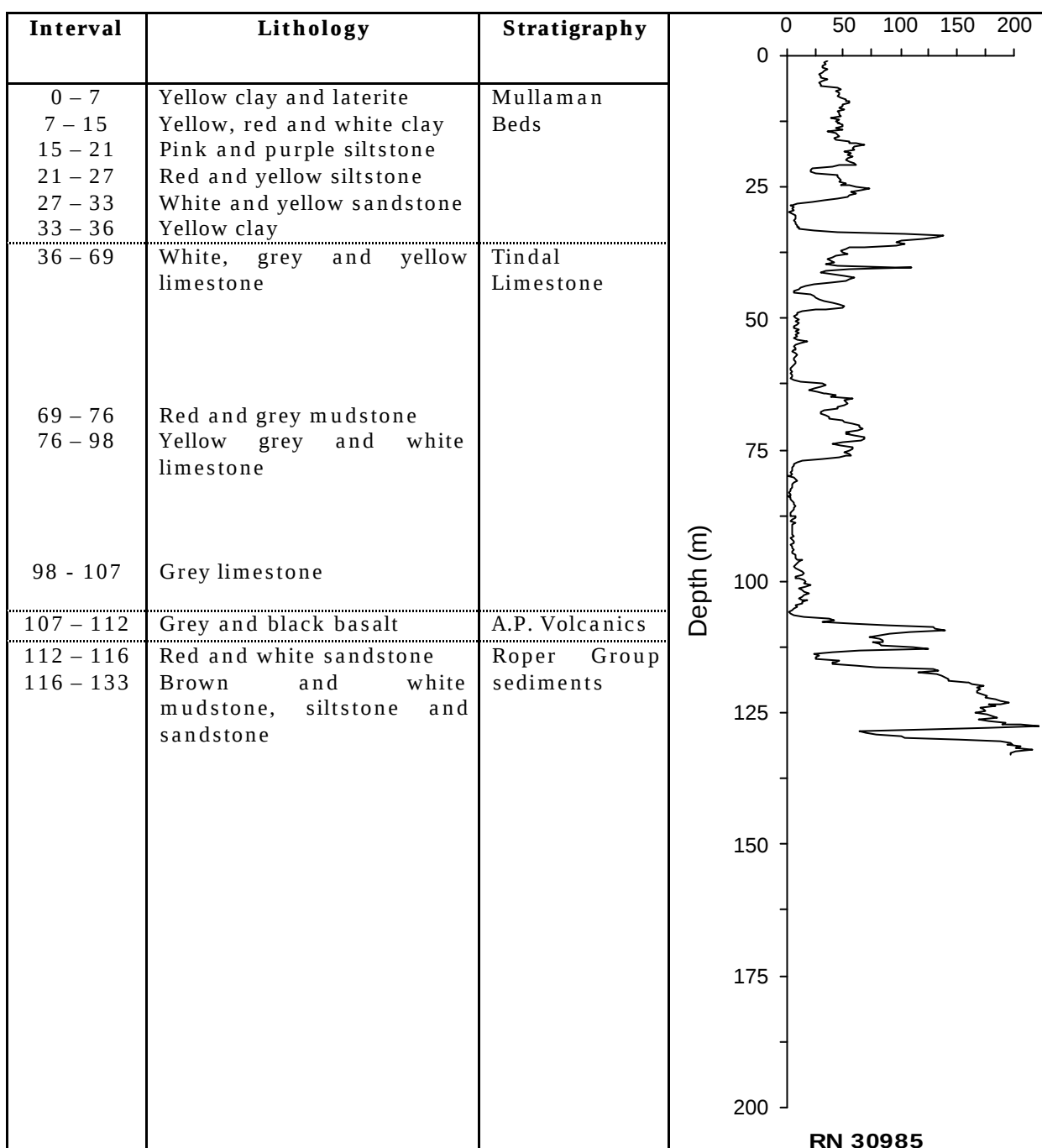
ANNEX 5

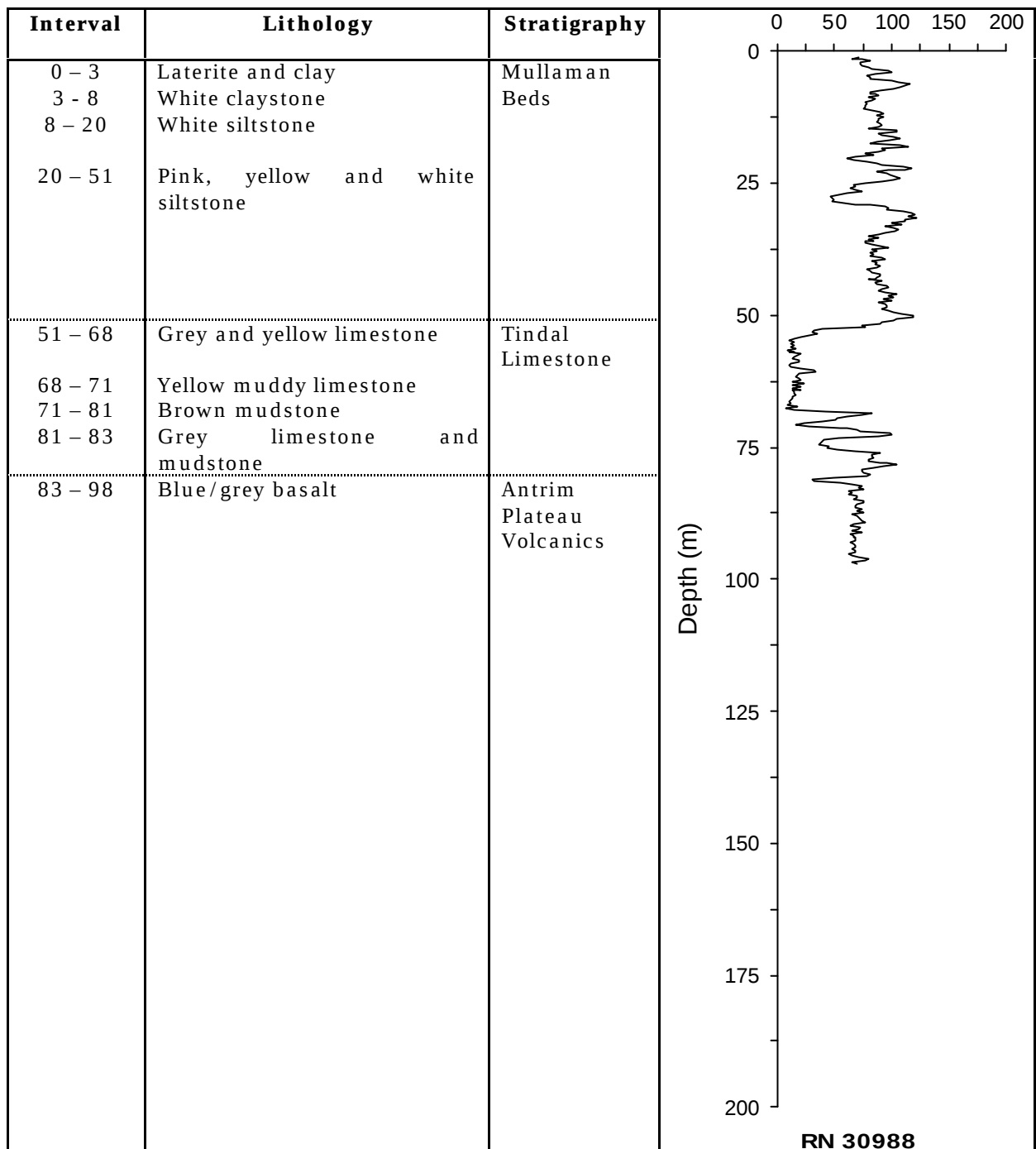
**Lithology, Stratigraphy and
Gamma Logs
of
Selected Bores**

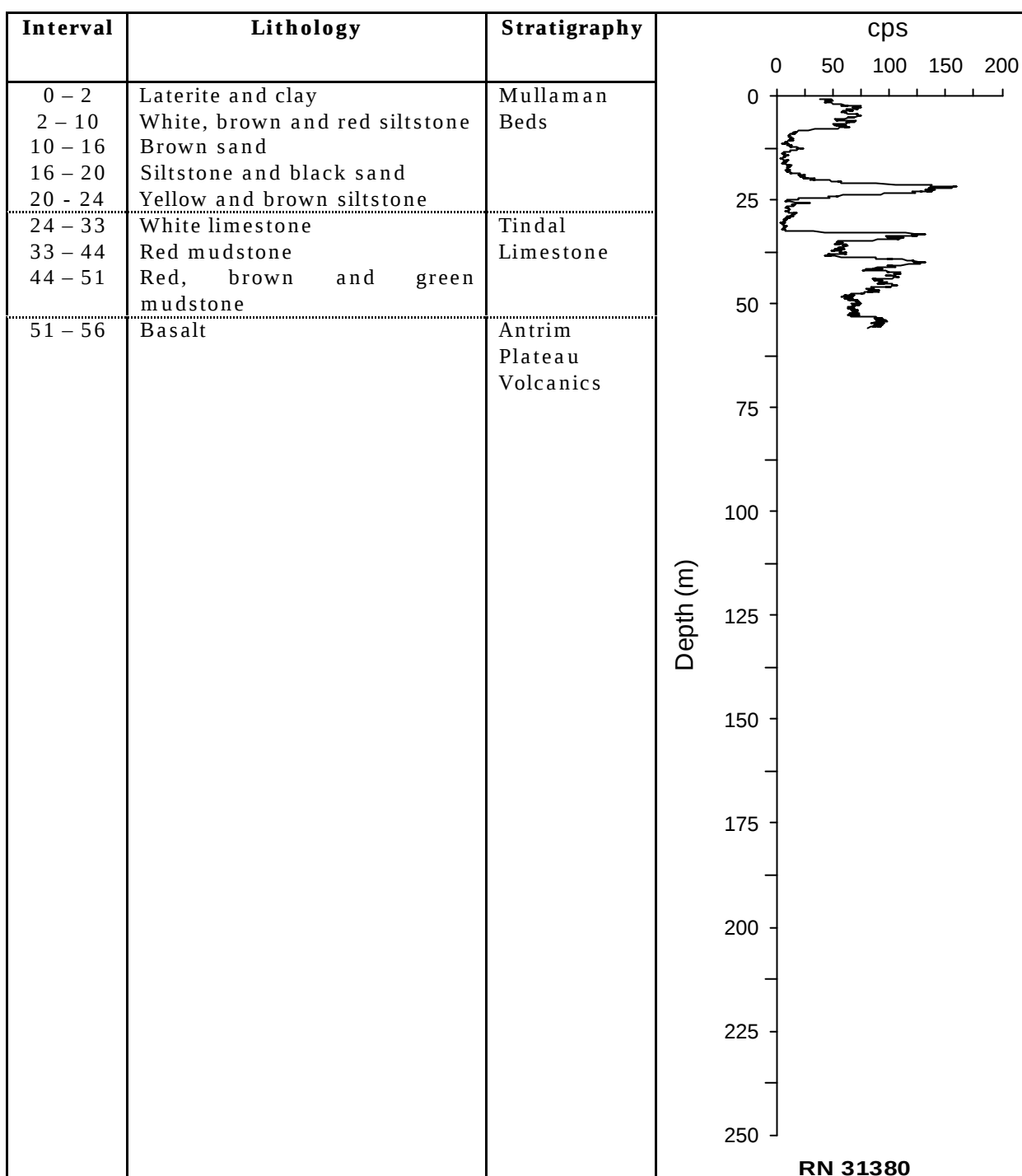
RN 24817


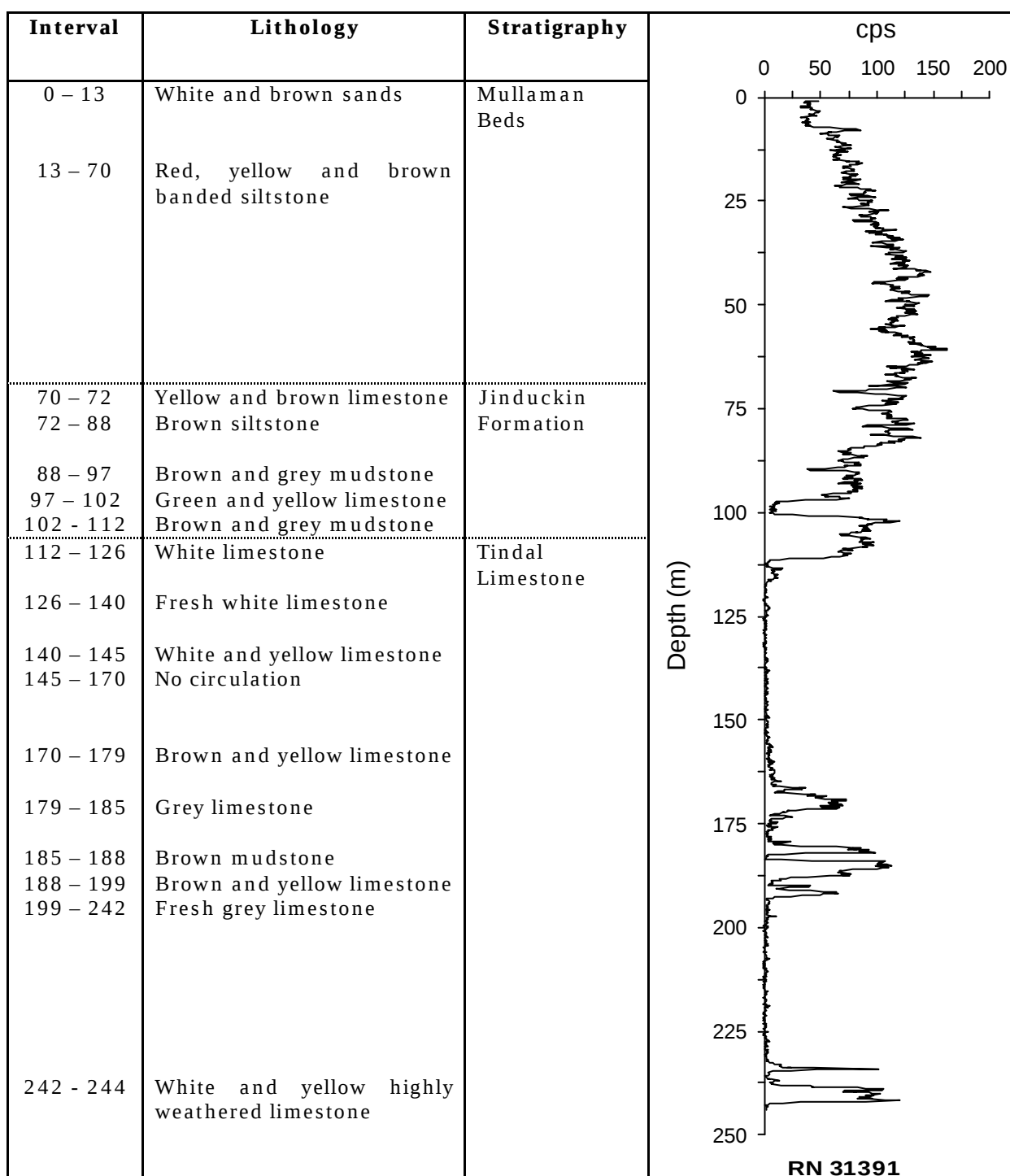
RN 27958


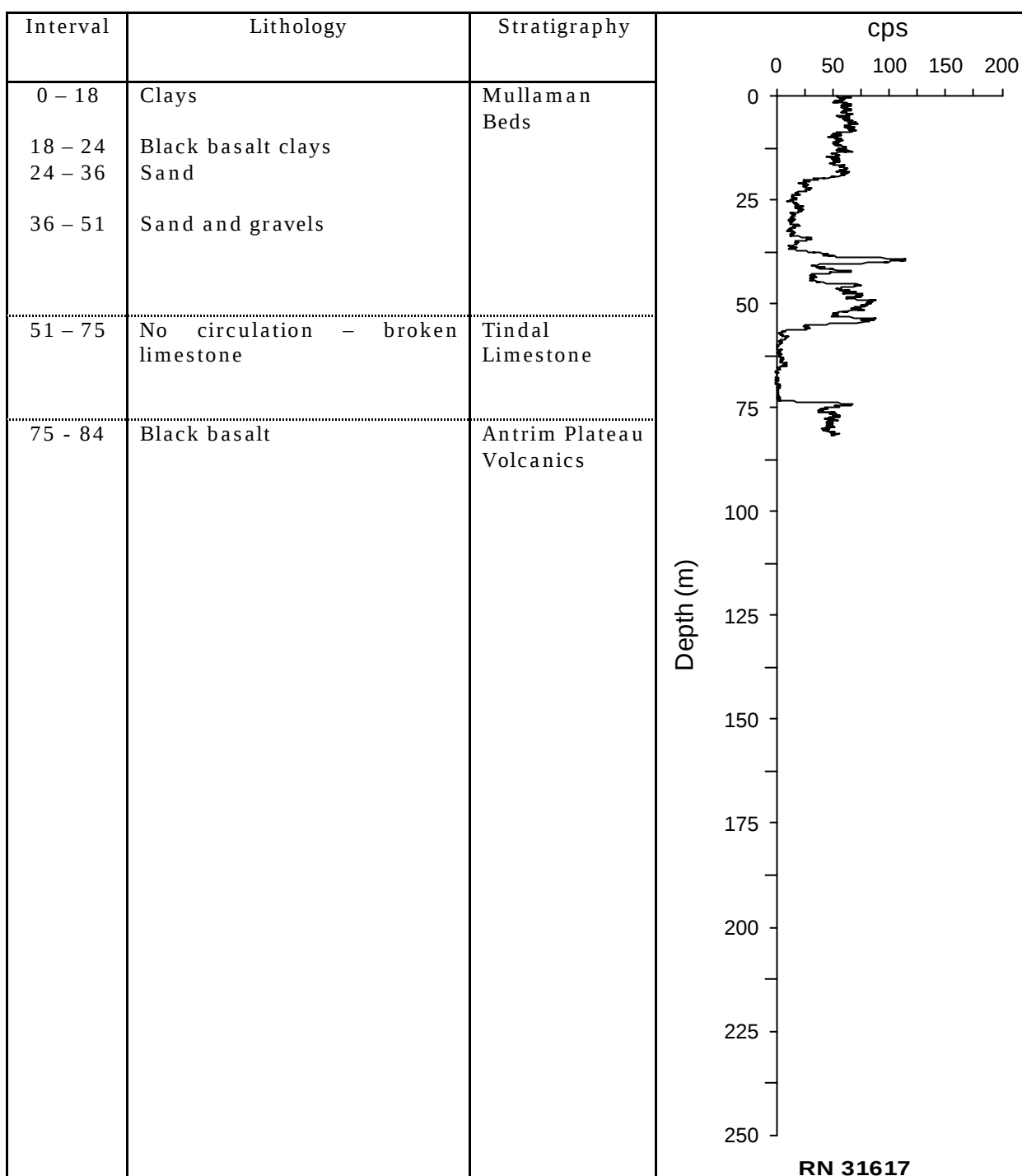
RN 28082


RN 30985


RN 30988


RN 31380


RN 31391


RN 31617


ANNEX 6

Available Gamma Logs

Table 6 List of Bores with Gamma Logs

Referred by Bore Registered Number

319	5425	5942	6767
7246	7710	7741	7876
8016	8017	8513	8514
8857	21545	21784	22670
22858	24612	24616	24815
24817	26111	26112	26115
26116	26317	26546	26549
26553	27327	27331	27668
27793	27794	27958	28082
28085	28086	28087	28088
28190	28795	29012	29013
29026	29090	29091	29429
29430	29510	30335	30494
30507	30508	30509	30621
30656	30660	30695	30708
30709	30710	30711	30712
30714	30856	30866	30867
30870	30871	30873	30950
30951	30952	30985	30986
30987	30988	30989	30990
31108	31111	31133	31199
31380	31381	31382	31383
31387	31388	31389	31390
31391	31392	31393	31394
31395	31396	31397	31398
31399	31480	31482	31483
31384	31485	31489	31596
31605	31606	31617	31618
31630	31738	31749	31861
31867	31868	31921	31922
31923	31924	31925	31926
31950	31951	31952	31953
32162	31963	31964	31965
32213	32463		

ANNEX 7

Physical Water Chemistry

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
550	03/10/68	1900	7.7	354	216	445	810	53	180		53		14	135	119	0.7	0.1		
	10/05/90	1680	6.8	514	627	573	1015	136	182	300	57		17	141	145	0.3	10.1		
	08/11/94	1650	7.0	514	627	604	1000	156	185	305	52	3	18	143	147	0.2	0.1	43	
	12/02/97	1648	7.5	103	126	682.8	969	55	186	306	133	3	10	127	164	0.5	9.2	26	1.2L/s, 38m, pumped
553	01/11/55				642	554	1427	97	265		76		11	175	155	1.6			
	03/10/68	1900	7.7	348	212	585	1060	75	315	8	87		14	190	170	0.8	0.7	49	pumped
554	01/11/55				354	285	790	8	165		64		3	115	81	0.5			
	08/02/68	1000	7.7	440	268	500	706	90	100		68		10	60	50		0.4	35	pumped
	03/10/68	900	7.3	322	196	338	540	42	98	1	44		6	65	58	0.7	0.1	31	pumped
555	01/11/55				525	484	1396	47	305		65		42	222	189	0.7			
	03/10/68	1900	7.5	328	200	445	1070	39	305		58		31	245	198	0.8	0.1		pumped as equipped
	10/05/70	1010	8.2	172	210	335	650	37	100	165	59		10	73	183	0.9	4.1		
556	28/08/68	2100	7.2	312	190	640	1315	175	465		70		24	240	175	0.6	0.2		
	10/06/70	2200	8.3	410	500	726	1650	160	520	852	77		21	252	176	0.5	0.5		pumped as equipped
557	11/11/55				588	550	1562	110	310		67		42	235	206	0.4			
	17/10/68	1900	7.4	362	221	540	1150	42	305		60		31	240	205	1.0	0.2		
558	02/10/68	1550	7.4	308	188	430	940	43	254		53		22	180	138	0.7	0.1		pumped as equipped
	09/05/69	1800	6.9	434	529	448	1130	130	266		54		24	210	157	0.5	0.5		
	19/02/72	1850	7.4	446	544	577	1120	137	272		57	6	21	180	161	0.7	0.1	31	pumped as equipped
	08/03/76	1980	6.9	415	506	566	1060	136	280	461	55	7	22	184	182	0.4	0.1	38	pumped as equipped
903	26/07/67	588	7.8	312	190	308	340	46	10		46		0.6	8	1		0.1		
	01/07/69	550	7.6	317	386	300	290	76	10		27		1	9	2	0.1	0.1		
904	26/07/67	1086	7.8	96	59	155	663	6	305		34		3.2	200	1	0.9	0.3		
	01/07/69	1050	7.55	108	132	106	640	30	294		5		3	195	3	1	0.4		
905	26/07/67	303	10.1	124	76	4	254	1	22		1		0.3	90	1	0.5	0.1		
	01/07/69	310	10	132			240	1	20		1		1	95	14	0.6	0.1		
906	26/07/67	471	7.88	234	143	202	311	5.5	14		45		2.8	30	2		0.2		
	01/07/69	470	7.45	258	315	226	340	60	12		16		3	32	2	0.2	0.2		

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
1982	06/06/98	702	6.3	401	489	392	398	101	2	3	34	1	5	3	11	0.1	0.7	28	0.5L/s, pumped as eq.
2186	08/10/56				522	513	1124	101	190		63		14	125	101				
	15/01/69	1450	7.2	498	304	585	960	145	180		52		13	138	104	1.3	0.2		
2326	15/10/68	1600	7.4	416	254	580	1010	65	200		78		7	160	201	0.6	0.1		
2379	15/10/68	395	7.3	222	135	218	200	50	6		5		2	3	2	0.1	0.3		
3545	15/10/68	430	7.9	220	134	190	250	27	16		28		5	22	2	0.4	6.1		
4142	15/10/68	530	7.9	276	168	72	310	14	14	23	8		7	105	2	0.2	0.2		
4495	14/10/68	690	7.8	342	209	286	360	43	16	26	44		4	39	17	0.6	0.4		
4529	12/10/64	1000	7.4	140		44	794		288										
	11/06/66	1670	6.9	527	321	690	1390	97	254		107		28	215	80	0.1	0.44		
	11/10/68	1800	7.9	1080	344	505	1080	65	295		81		22	210	203	0.8	0.3		pumped as equipped
5149	02/10/65	1900	8.1	362	192	620	1039	36	218		127		21.5	249	96		0.1		
5152	15/10/68	800	7.5	216	132	222	490	37	108		32		9	95	54	0.6	1.4		
5395	05/04/66	1900	7.2	466	284	498	1193	115	269		50		34.5	233	234	0.3	0.1		
5492	25/07/66	1552	6.8	544	332	640	1312	205	266		30.7		34	212	20	0.3	0.26		
	08/02/68	1950	7.5	436	266	520	1130	70	280		60		33	225	178	1.0	0.2	43	pumped
	06/07/82	2150	7.6	554	676	615	1350	146	270	440	61	3	46	222	198	0.9	0.3	42	2.2L/s, 55.3m
5557	01/09/66	758	7.8	320	195	280	422	26	56	99	52		8	60	5		0.6		
	15/10/68	700	8.1	326	199	292	390	43	60	100	43		7	55	4	0.5	0.3		
	01/09/67	1450	7.8	470	288	585	810	105	45		77	3	24	130	100		0.4		
5877	02/09/67	1500	7.8	478	291	610	922	102	45		83		23	125	100		0.2		
	05/10/67	1450	7.6	484	294	556	879	95	50		76	3.5	3	140	100		1.5		
	30/10/80	1780	6.9	481	586	580	960	135	190	305	59	4	13	131	128	0.2	0.1	43	pumped
	19/09/85	1550	7.3	436	531	530	940	120	176	290	56		12	121	131	0.2	0.3		
5928	09/07/92	845	6.7	467	570	490	520	135	20	34	37	3	4	6	20	0.1	1.6	37	1.2L/s, 53m, pumped

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
5929	20/07/99	1730	6.9	376	459	531	1060	124	218	359	54	5	27	245	180	0.5	0.1	37	pumped as equipped
6223	15/07/99	2240	7.1	445	543	632	1370	148	334	550	64	7	27	240	230	0.4	0.8	38	2 L/s, pumped as eq.
6744	01/11/69	1150	7.9	299	364	368	940	69	172		52	1	15	121	116	0.4	9.2	41	43m, pumped
	13/05/84	1630	6.8	484	590	552	930	134	180	300	53		18	134	124	0.3			
	23/05/84	1580	6.7	483	589	576	970	140	170	277	55		17	134	135	0.3	2.9		4.5L/s, 37.5m
	24/05/84	1600	6.7	485	591	576	980	140	180	293	55	2	17	135	135	0.3	2.7	43	4.5L/s, 37.5m
6745	01/11/69	700	7.7	482	588	416	550	112	12		44		5	12	15	0.2	0.1	38	1.5L/s, pumped as eq.
	03/06/98	831	6.4	459	560	463	493	126	5	8	36	1	4	8	24	0.3	0.1	39	
6845	21/01/70	445	8	228	278	240	340	82	12		11		4	7	23	0.1	0.7		2.5L/s, 90m
	01/10/70	360	8.6	202	227	167	210	11	8		34		4	12	9	0.2	3.8		
	05/06/98	677	6.4	365	445	355.5	400	134	9	15	5	1	2	4	15	0.1	2	26	
7191	11/11/70	1000	7.6	249	303	307	640	54	134		42	2	28	102	130	0.7	4.6	28	53m
7192	11/11/70	1140	7.7	274	334	341	680	59	136		47	2	18	105	126	0.6	0.2	29	1L/s, 58m, pumped as eq.
7321	10/10/71	1360	8.1	308	376	327	800	37	204		57	4	30	159	146	0.5	0.1	41	3L/s, 58m, pumped as eq.
7323	05/11/70	1100	8.3	551	672	268	650	7	67		61		18	170	22	1.1	4.4		6L/s, 61m
7686	28/07/71	1180	7.8	490	598	536	720	129	72		51		9	52	105	0.5	10		
7687	28/07/71	1210	7.5	442	539	520	760	129	89		48	1	62	48	134	0.5	6.4	29	pumped as equipped
	03/10/71	1050	7.4	296	361	400	610	78	97		50	1	11	65	129	0.5	9	30	pumped as equipped
7725	03/10/71	1160	7.5	404	493	488	710	118	85		47	1	10	62	113	0.5	2.9	29	
7755	03/10/71	800	7.4	363	443	390	470	87	30		42		6	24	52	0.4	0.9		
7872	19/05/72	900	8.1	187	228	364	620	52	90	148	57		10	64	205	0.2	1		1.5L/s, 102m, airlift
	01/11/99	1210	7.5	453	552	512	744	126	102	168	48	1	9	67	140	0.4	0.1	31	2 L/s, pumped as eq.
7873	30/05/72	960	8.2	156	190	289	640	33	125	206	50	1	18	93	185	0.7	5	45	2L/s, 102m, airlift
	17/03/80	560	7.3	248	302	252	264	58	7	12	26		1	5	11	0.1	0.1		0.6L/s
	01/11/99	981	7.5	395	482	443	634	110	57	94	41	6	7	40	89	0.3	0.2	32	2 L/s, pumped as eq.

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
7875	24/05/72	950	8.1	211	257	285	570	36	122	204	47	2	16	90	115	0.6	5.7	33	1.5L/s, 100m, airlift
7876	01/11/99	1470	7.4	425	518	589	906	139	188	310	59	1	7	87	150	0.3	0.1	32	2.5 L/s,pumped as eq.
8017	10/10/72	1590	8.2	262	320	331	930	34	269	443	60	1	32	200	176	0.4	0.8	59	airlift (as drilled)
8149	21/07/73	690	7.4	12	15	43	380	7	140	231	6	1	1	116	87	0.9	14	25	1.9L/s, 67m, airlift
8241	14/11/73	1010	6.9	122	148	243	650	48	141		30	3	1	120	198	0.3		12	3L/s, 60m, airlift
8361	18/07/74	2860	7.3	508	619	1000			470	775									19L/s, pumped
	18/07/74	2570	7.3	513	625	930			442	728									19L/s, pumped
8361	19/07/74	2650	7.3	510	622	940	1810	184	413	681	117	3	26	245	415	0.8	0.1	44	19L/s, pumped
8362	20/07/74	2560	7.3	511	623	940			403	664									24L/s, pumped
	20/07/74	2660	7.3	510	622	980			442	728									24L/s, pumped
	21/07/74	2570	7.3	518	631	912	1785	176	394	649	115	3	28	242	415	0.8	0.1	45	24L/s, pumped
8513	22/10/74	520	7.9	267	326	258	270	26	5	8	47	1	3	8	11	0.4	12	33	2.3L/s, 91m
8514	20/10/74	1070	7.8	312	380	462	690	76	68	120	64	2	6	43	176	0.5	6	23	1.1L/s, 73m, airlift
	07/06/98	1107	6.5	437	533	530	707	138	39	64	45	1	5	45	164	0.3	1.2	46	2L/s, pumped as eq.
8684	02/03/79	2100	6.8	545	665	630	1286	148	270	445	66	6	40	215	205	0.6	0.2	44	pumped as eq.
8699	08/07/75	1330	7.8	290	354	361	780	56	159	262	54	3	15	128	124	0.2	2.7	40	4.5L/s, 73m, airlift
	08/07/75	1610	7.7	299	365	381	780	62	186	307	55	4	16	137	124	0.2	1.6	40	4.5L/s, 73m, airlift
	15/04/81	1750	7.1	490	598	584	960	140	186	306	57	4	15	124	126	0.3	0.1	43	pumped as equipped
	17/04/84	1610	7.4	479	583	572	950	135	180	293	57	4	15	128	148	0.2	0.2	42	pumped as equipped
8856	17/05/76	1650	7.1	399	486	509	960	120	194	320	51	3	23	150	148	0.4	0.5	38	19.4L/s, pumped
	17/05/76	1880	7.5	407	496	521	1110	118	243	400	55	6	29	183	178	0.4	0.3	40	19.1L/s, pumped
	17/05/76	1990	7.3	387	472	533	1180	118	272	448	58	6	31	195	196	0.5	0.4	41	19.1L/s, pumped
	17/04/84	1800	8.2	431	526	576	1060	135	250	409	58	6	24	169	148	0.2	0.2	40	pumped as eq.
	19/09/85	1800	6.9	428	521	557	1140	129	240	390	57		20	154	151	0.3	0.6		pumped as eq.
	14/07/89	2130	7.3	458	559	555	1295	122	320	527	61	9	35	268	222	0.5	0.1	42	pumped as eq.
	08/06/98	2103	7.3	460	561	558	1281	120	305	503	63	8	31	230	230	0.4	0.2	39	2L/s, pumped as eq.

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
20745	15/04/81	1260	7.7	423	516	398	950	46	130	214	69		25	161	182	1.0	16		6L/s, 9m, airlift
	23/05/81	600	7.5	215	262	276	380	76	50	80	21		4	13	11	0.1	0.6		1.5L/s, 8m, pumped
20746	15/04/81	2420	7.5	436	531	707	1490	86	340	560	120		35	272	413	0.8			6L/s, 16m, airlift
	22/05/81	2740	7.5	533	650	815			387	638									4L/s, 12.3m, pumped
	22/05/81	2710	7.2	531	647	808	1700	120	378	620	124		38	290	430	0.8	4.4		4L/s, 12.3m, pumped
20747	16/04/81	2400	7.6	421	513	678	1490	86	342	564	113	2	34	274	415	0.9		52	6L/s, 13.5m, airlift
	23/05/81	2720	7.3	531	647	831	1690	124	390	644	127	1	37	290	423	0.8	0.8	53	6L/s, 9.1m, pumped
	28/09/93	1880	7.3	546	666	682	1160	138	211	348	82	1	22	164	228	0.5	0.4	52	pumped as equipped
	24/04/97	3050	7.5	543	662	861	2048	90	500	824	155	2	32	345	508	0.5	0.1	56	3L/s, 30m, pumped
21117	30/09/81	680	7.6	405	494	362	420	62	7	12	51	1	4	11	19	0.4	21.5	31	0.9L/s, 114m, airlift
	28/10/81	900	8.0	220	268	108	520	24	125	203	11	1	3	156	51	0.8	0.3	20	0.5L/s, 107m, pumped
21783	22/08/83	960	7.8	442	539	475	600	118	55	91	44	1	7	38	52	0.2	3.3	25	6L/s, pumped
	07/06/98	1015	6.5	437	533	456	584	115	58	96	41	2	6	40	56	0.1	0.1	32	3L/s, pumped as eq.
21784	27/09/82	280	7.2	148	181	146	150	42	4	8	10		3	1	5	0.1		12	4L/s, 58m, airlift
	21/11/97	312	6.6	168	205	150.1	172	42	2	3	11	1	2	1	8	0.2	0.2	15	4L/s, 58m, pumped
22101	30/06/83	750	7.5	300	366	335	440	89	38	63	29	3	6	38	56	1.3	1	24	8L/s, 90m, airlift
	02/05/86	855	7.2	413	504	445	495	124	30	48	33	1	3	22	30	0.1	0.1	36	Homestead tap sample
	20/06/86	825	7.6	413	503	416	520	122	34	56	27	1	3	22	29	0.2	1.2	33	12.2L/s, 74m, pumped
22669	24/08/83	1830	7.9	276	336	357	1040	46	270	440	59	6	40	224	207	0.6		42	1.1L/s, 67m, airlift
22670	25/08/83	1970	7.6	317	387	416	1180	58	310	510	66	5	41	246	234	0.6		46	1.2L/s, 67m, airlift
22858	19/06/84	1860	7.5	374	456	474	1120	88	290	473	62	3	24	201	198	0.3	3.9	42	1L/s, 78m, airlift
22859	21/06/84	1360	7.8	295	359	377	770	44	170	285	65	1	10	137	150	0.3		14	2L/s, 66m, airlift
22860	23/06/84	1780	7.6	405	494	429	1090	70	248	409	62	5	22	196	181	0.2		43	3L/s, 66m, airlift
	20/07/99	1460	7.1	402	490	530	897	130	149	246	50	2	18	113	150	0.4	0.1	34	pumped as equipped
22861	02/07/84	700	7.4	321	392	316	410	67	36	58	36	1	4	27	35	0.1	5	32	2.5L/s, 52m, airlift
	02/07/84	720	7.4	322	393	321	400	69	36	59	36	1	5	28	34	0.1	8	31	2.5L/s, 52m, airlift
	20/07/99	829	7.1	319	389	441	492	114	18	30	38	1	4	13	29	0.1	0.1	27	pumped as equipped

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23377	02/08/84	1970	7.3	306	373	409	1220	65	330	539	60	1	30	242	246	0.4		31	2L/s, 81m, airlift
23662	20/07/99	1940	7.0	443	540	606	1190	144	252	415	60	5	22	185	190	0.3	0.4	40	pumped as equipped
23833	03/05/85	330	7.4	135	165	73	260	8	24	40	13		3	41	11	0.6			
23859	26/06/85	770	6.8	420	512	419	480	130	12	20	23	1	2	11	13	0.2	0.2	55	1.2L/s, 54m, pumped
24612	24/05/86	650	8	200	250	210	400	20	60	100	40	1	5	50	45	0.1	0.3	50	20L/s, 103m, airlift
	19/06/86	1060	7.1	483	589	494	675	135	28	44	38	1	4	49	51	0.2	0.8	46	40L/s, 85m, pumped
24616	29/05/86	1410	7.8	365	445	441	860	106	180	293	43	2	18	145	139	0.2	10	42	4.8L/s, 80m, airlift
	27/11/87	1570	6.9	100	120	560	630	75	180	295	40	2	10	80	140	0.2	0.5	45	8L/s, 37.2m, pumped
24783	10/08/86	630	7.6	266	325	269	370	50	20	31	35		7	23	54	0.3	6.3	21	2L/s, 105m, airlift
24784	24/09/86	805	7.9	442	539	434	490	116	8	13	35	1	3	9	16	0.3	0.2	43	5L/s, 65m, airlift
	03/06/98	872	6.4	496	605	483.3	517	131	7	12	38	1	3	9	18	0.1	0.1	42	3 L/s, pumped as eq.
24785	12/08/86	645	7.7	294	358	273	365	45	8	13	39	1	6	30	60	0.3	15	17	0.5L/s, 150m, airlift
24815	04/05/87	850	7.2	400	488	407	490	97	21	35	40		7	16	24	0.2	0.2		3L/s, 157m, airlift
	04/05/87	830	7.3	389	474	393	465	93	22	36	39		6	16	24	0.2	0.6		3L/s, 157m, airlift
24816	14/05/87	850	7.1	408	498	440	505	104	23	38	44	1	5	13	20	0.4	0.6	37	6.6L/s, 192.5m, airlift
	14/05/87	840	7.2	402	490	410	470	103	22	36	37	1	5	12	19	0.4		35	6L/s, 192.5m, airlift
24817	11/05/87	800	7.3	340	415	357	430	85	27	45	35	1	6	22	33	0.5	1	26	8L/s, 201.5m, airlift
25209	13/01/95	862	6.5	486	592	520	494	139	10	16	42	1	3	8	18	0.2	1.9	31	3L/s, 115m, airlift
25279	31/08/87	610	7.3	308	376	317	385	94	13	21	20	1	2	5	13	0.2		40	3L/s, 62m, airlift
25290	29/08/87	495	7.6	267	326	249	310	55	10	18	27	2	3	8	9	0.2	1.3	40	7L/s, 80m, airlift
25437	10/05/90	1680	6.8	514	627	573	1015	136	182	300	57	3	17	141	145	0.3		45	pumped as equipped
26053	17/09/88	525	8.2	205	250	56	350	16	22	36	4	1	2	96	40	1.2		47	0.4L/s, 103m, airlift

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26112	01/10/88	1010	7.1	83	102	236	535	68	228	376	16		4	110	50	0.4	7.4		2L/s, 100m, airlift
26113	23/09/88	520	8.2	259	316	242	332	28	20	33	42		2	24	12	0.3	14.3		7L/s, 66m
26115	10/10/88	355	7.6	177	216	127	250	21	8	13	18	1	6	32	9	0.5	16.7	64	7L/s, 46m, airlift
	28/11/97	197	6	95	116	89.4	187	21	8	13	9	1	3.7	15	5	0.2	0.4	67	1L/s, 15m, pumped
26116	05/10/88	325	7.9	168	205	161	205	48	2	3	10	2	3	5	7	0.2	6.6	20	9L/s, 89m, airlift
	05/10/88	445	7.6	225	275	217	275	54	11	18	20	1	3	9	9	0.2		43	9.5L/s, 89m, airlift
	21/08/97	628	6.8	335	408	204	360	75	4	7	4	1	3	4	15	0.1	0.2	21	7 L/s, pumped as eq.
	03/06/98	778	6.36	434	529	411.8	465	127	13	21	23	1	2	10	17	0.1	0.1	39	13L/s, 70m, pumped
26265	19/09/88	405	7.8	160	195	160			36	59									2L/s, 36m, airlift
26314	20/07/99	1200	7.2	413	503	548	751	142	74	122	47	1	8	56	120	0.3	1	30	pumped as equipped
26315	20/07/99	1660	7.2	390	475	542	1030	130	196	323	53	4	23	148	170	0.5	0.2	36	pumped as equipped
26316	20/07/99	1760	7.0	427	520	575	1090	135	215	354	58	3	18	158	160	0.2	0.2	39	pumped as equipped
26366	06/07/89	1595	7.0	510	622	589	1005	142	179	295	57	3	15	142	140	0.3	2.6	47	0.7L/s, 64.3m, pumped
26367	07/07/89	2720	7.5	129	157	313	1560	94	795	1310	19	1	10	456	11	1.0	0.5	22	1.7L/s, 51.9m, pumped
26549	06/07/89	545	7.9	263	321	270	340	47	8	13	37	1	5	10	34	0.3	6	40	5L/s, 91m, airlift
	26/06/94	912	7.7	492	600	604	532	138	11	18	63	1	5	11	43	0.3	11.2	42	
26553	03/07/89	515	7.6	269	328	259	315	48	11	18	34	1	4	10	9	0.3		38	4.5L/s, 105m, airlift
27124	11/11/90	940	7.6	326	398	342	580	58	82	135	48	1	7	71	67	0.2	0.2	51	airlift (as drilled)
27328	07/05/91	1865	7.4	318	387	523	1120	112	350	577	59	5	21	205	152	0.2	6.3	38	1.5L/s, 77m, airlift
	15/07/99	2160		468.0	571	625	1290	150	352	580	61	6	20	199	180	0.3	0.1	39	pumped as equipped
27330	20/07/99	1250	7.0	461	562	515	763	132	94	155	45	1	10	66	120	0.3	0.2	28	pumped as equipped
27331	01/11/90	630	7.2	291	355	274	360	57	27	44	32	3	7	25	20	0.7	4	26	0.1L/s, 117m, pumped
	05/06/98	702	6.4	357	435	343	412	78	15	25	36	1	6	21	25	1.3	0.1	42	0.3L/s, pumped as eq.
27332	20/07/99	1560	7.0	500	609	551	936	135	163	269	52	2	18	115	150	0.4		32	pumped as equipped

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27337	03/06/98	853	6.4	476	580	479	510	126	6	10	40	1	4	9	30	0.3	0.1	42	1.5L/s, pumped as eq. 2L/s, pumped
	28/05/99	831	7.8	464	566	443	500	110	5	8	41	1	4	10	31	0.2	0.1	43	
27341	05/06/98	750	6.4	422	515	421	430	111	3	5	35	1	3	5	12	0.2	0.1	32	2L/s, pumped as eq.
27793	28/06/91	1160	7.7	284	346	310		57	191	315									1.5L/s, 73m, airlift
27794	29/06/91	1240	7.5	360	440	418		83	161	265									5L/s, 75m, airlift
	24/11/97	1492	6.9	518	632	542.5	898	135	169	279	50	1	4	108	106	0.6	1.4	54	17L/s, 65m, pumped
28082	28/05/92	1615	7.0	491	598	588	975	143	183	301	56	4	16	129	142	0.4	0.2	43	10L/s, 54m, pumped
28086	30/06/92	1010	7.9	91	111	228	520	60	243	400	19	1	4	96	8	2		41	5L/s, 85m, airlift
28087	02/07/92	825	7.5	445	543	432	480	112	12	20	37		4	15	19	0.3		38	65m, bailed
28190	07/08/92	880	7.5	285	348	342	500	89	117	193	29	1	4	56	15	0.2		35	2L/s, 68m, airlift
	28/07/92	3920	6.3	14	17	1088	2020	353	1238	2039	50	1	8	292	43	0.2		5	0.5L/s, 125m, airlift
	06/08/92	5420	7.5	109	131	292	3171	94	1792		14	0.6	18	1023	16				2L/s, 260m, airlift
	06/08/92	5460	7.8	89	109	320	3115	100	1733	2855	17	1	14	976	13	1.3		9	2L/s, 260m, airlift
28190	16/10/98	3900	7.5	245	299	254.7	2092	74	1188	1958	17	1	9	660	29	1	0.4	22	2 L/s, pumped as eq.
28314	25/06/93		7.8		397	435	670	102	83		44		8	80	114		0.1		
29012	11/01/94	1740	7.2	504	615	603	1080	149	190	313	56	4	28	164	175	0.4	0.2	42	18L/s, 76m, pumped
	28/11/97	1730	6.7	498	607	536	1060	126	211	348	54	4	24	155	190	0.1	0.2	39	1L/s, 45m, pumped
29013	15/01/94	2310	7.2	546	666	664	1360	157	282	465	66	4	37	242	232	0.4	0.1	48	10L/s, 51.5m, pumped
29014	14/01/94	1570	7.0	484	602	609	961	155	165	272	54	3	16	128	138	0.2	0.1	44	10L/s, 63.5m, pumped
29537	04/09/97	1371	6.6	238	290	307	818	59	204	336	39	6	14	144	159	0.4	3.8	29	3.3L/s, 73m
	04/09/97	1475	7.1	308	376	357	884	56	216	356	53	6	18	158	166	0.4	0.4	37	3.3L/s, 73m
	19/07/99	1250	7.3	504	614	541	776	131	82	135	52	1	8	58	110	0.4	0.1	43	pumped as equipped
29706	23/08/97	993	6.4	251	306	316	592	46	101	166	49	1	10	75	139	0.5		32	5L/s, 83m
	22/07/99	1330	7.3	496	605	540	819	134	101	166	50	1	11	72	130	0.4	0.1	30	pumped as equipped

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29707	24/08/97	1146	6.4	260	317	299	679	41	154	254	48	1	18	113	135	0.5		32	2L/s, 72m
	22/07/99	1480	7.3	494	602	515	888	124	151	249	50	2	18	110	130	0.4	0.1	32	pumped as equipped
29708	25/08/97	1301	6.7	283	345	333	772	51	182	300	50	1	15	128	145	0.5		29	2L/s, 77m
	19/07/99	1590	7.3	505	616	535	963	127	183	302	53	3	15	129	130	0.5	0.1	36	pumped as equipped
29769	02/09/94	741	7.1	424	517	442	450	116	3	5	37	1	3	11	14	0.2	0.1	46	5L/s, 78m, airlift
	28/05/99	869	7.5	509	620	462	520	111	2	3	45	1	3	12	20	0.2	0.1	48	pumped
30494	18/04/98	1581	8.0	332	405	390	935	61	208	343	58	4	26	159	183	0.4	0.8	45	20L/s, 91.4m, airlift
	26/05/98	1756	6.3	511	623	609	1057	142	204	336	62	4	25	162	176	0.4	0.2	39	93L/s, 65m, pumped
30498	22/04/98	842	8.0	277	338	332	522	54	71	117	48	1	7	46	98	0.4		46	3L/s, 60m, airlift
30507	05/06/98	621	6.3	278	339	208.6	375	49	32	53	21	1	4	48	21	0.3		48	Seepage, 60m, airlift
30654	10/06/96	516	7.6	262	319	254	290	26	10	16	46	2	5	14	23	0.2		33	0.5L/s, 76m, airlift
	13/08/96	911	7.1	522	636	508	532	113	6	10	55	1	4	10	26	0.3	2.1	46	0.3L/s, 76.8m, pumped
30655	11/06/96	678	7.4	344	419	319	375	52	14	23	46	1	6	14	27	0.2		47	2L/s, 79m, airlift
	15/08/96	834	7.2	454	553	438	498	95	11	18	49	1	5	12	26	0.3	0.1	51	2.5L/s, 77.4m, pumped
30656	01/06/96	451	7.1	236	288	237	250	62	6	10	20	1	2	5	17	0.3	3	24	3L/s, 77m, airlift
	21/08/96	797	7.0	429	523	423	474	128	8	13	25	1	3	7	27	0.2	0.2	31	14L/s, 77.4m, pumped
30660	18/04/96	1070	7.5	332	405	298	589	47	122	201	44	1	4	103	61	0.4		38	airlift (as drilled)
	23/08/96	1340	7.1	531	647	499	791	121	119	196	48	1	3	97	55	0.2	0.3	48	3L/s, 40m, pumped
30710	28/05/97	660	7.1	341	416	366	380	71	16	26	46	1	5	15	24	0.3	0.2	45	1.3L/s, 67m, airlift
	12/09/97	849	6.8	482	588.2	438	479	98	6	10	47	1	5	25	23	0.5	2.3	34	0.7L/s, 73.6m, pumped
30714	10/09/97	550	6.9	230	280	30	341	7	36	59	3	1	2	113	19	1.8	1.4	24	0.4 L/s, 83 m, pumped
	10/09/97	553	8.1	244	297	27	336	6	36	59	3	1	2	122	19	2.0	0.3	27	2.0 L/s, 83 m, pumped
30865	11/07/96	500	7.3	281	343	255	290	51	5	8	31	1	2	7	11	0.2	4.3	38	airlift (as drilled)
30866	12/07/96	639	7.6	299	364	279	378	51	29	48	37	1	3	26	30	0.2	4.5	53	airlift (as drilled)
30869	01/08/96	1472	7.6	333	406	399	888	71	194	320	54	3	23	143	166	0.5	2.9	36	4.5L/s, 61m, airlift
	21/07/99	1740	7.1	492	600	520	1040	121	218	359	53	4	26	161	170	0.4	0.1	34	pumped as equipped

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
30870	03/08/96	464	7.2	166	202	223	296	48	6	10	25	2	3	5	28	0.2	0.5	21	2L/s, 78m, airlift
	05/06/98	674	6.3	382	466	376	389	111	2	3	24	1	3	2	10	0.1	0.1	22	1.5L/s, pumped as eq.
30871	05/08/96	487	7.4	232	283	266	296	49	3	5	35	1	3	3	12	0.3		27	1.4L/s, 86.8, pumped
	24/08/99	748	7.4	430	524	426	432	108	2	3	38	1	3	4	17	0.1	0.1	27	
30873	27/08/96	468	7.3	238	290	124	288	30	13	21	12	1	2	61	7	0.2	0.1	52	2L/s, 46m, pumped
	05/08/96	421	8.1	214	261	79	273	12	13	21	12	1	2	65	9	0.4	1	49	2L/s, 60m, airlift
30915	19/07/99	1430	7.2	393	479	577	895	144	129	213	53	1	14	95	140	0.4	0.1	36	pumped as equipped
30985	22/08/98	1944	7.7	338	412	438	1166	72	312	514	63	6	27	217	247	0.3	6.1	36	4L/s, 133m, airlift
	13/10/98	2021	7.3	409	499	559	1226	122	332	547	62	5	24	197	233	0.4	0.2	32	6L/s, 95m, pumped
30987	26/08/98	654	7.7	358	436	327	390	57	10	16	45	1	5	8	14	0.2		34	4L/s, 92m, airlift
	10/10/98	873	7.3	497	606	467	479	113	9	15	45	1	5	6	29	0.2	0.4	36	5L/s, 88m, pumped
30989	29/08/98	583	7.7	321	391	299	356	64	6	10	34	1	4	7	14	0.2		25	1L/s, 109m, airlift
31108	31/07/97	741	6.9	343	418.8	341.1	403	61	31	51	46	1	5	27	33	0.4		40	8L/s, 155m, airlift
	15/06/98	903	6.7	445	543	449.7	536	111	24	40	42	1	3	25	36	0.1	0.8	47	12L/s, 100m, pumped
31381	12/06/98	1198	6.8	485	591	505.7	713	117	86	142	52	1	7	72	16	0.2	0.6	48	10L/s, 60m, pumped
31382	03/10/97	638	7.6	316	385	271.2	383	56	15	25	32	1	2	28	23	0.1	0.4	54	2L/s, 70m, airlift
	25/11/97	812	6.8	420	512	331.2	515	80	18	30	32	1	2	24	40	1.2	0.2	60	2L/s, 64m, pumped
31391	03/12/97	587	6.5	247	302	252.4	331	37	30	49	39	1	6	26	42	0.5	1.1	36	2.6L/s, 244m, airlift
	15/08/98	826	7.9	424	517	402.4	489	97	27	44	39	1	4	21	30	0.3	0.5	40	
31393	22/07/98	1160	8.2	229	279	157	649	30	177	292	20	1	2	150	78	0.7	7	36	2L/s, 92m, airlift
	25/09/99	1070	7.7	285	347	245	613	65	145	239	20	1	1	135	65	0.8	0.1	48	1.2L/s, 82m, pumped
31394	24/07/98	2010	6.0	62	76	127	1120	36	572	943	9	1	4	318	1	1.4		16	5L/s, 85.3m, airlift
	18/08/98	4370	7.7	38	46	336	2780	118	1392	2294	10	1	5	723	11	1.4	0.2	22	8L/s, 70m, pumped
	22/11/99	4480	8.0	30	37	411	2630	143	1470	2410	13	1	6	805	8	1.3	0.2	22	pumped as equipped
31396	28/07/98	562	6.3	302	368	269	341	60	4	7	29	1	3	6	8	0.1		34	6L/s, 91.3m, airlift
	03/10/98	742	7.3	410	500	378.9	395	104	11	18	29	1	3	8	23	0.2	0.4	36	6L/s, 69m, pumped

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
31397	29/07/98	452	8.0	126	154	84.6	293	24	48	79	6	1	1.3	56	26	0.6		37	0.5L/s, 61.8m, airlift
	01/10/98	510	8.3	153	187	38.2	326	12	59	97	2	1	1	92	35	0.8	1.9	41	1L/s, 120m, pumped
	03/08/98	2570	8.2	253	308	65.3	1359	13	660	1088	8	1	6	472	1	2.1		13	4L/s, 229m, airlift
	02/10/98	1260	8.2	198	242	40.7	691	13	282	465	2	1	3	243	57	1.7	0.3	28	4L/s, 120m, pumped
31398	04/08/98	742	6.8	322	392	68.5	505	11	23	38	10	1	5	133	50	0.2		51	0.3L/s, 49.3m, airlift
31606	11/05/98	546	6.6	282	344	272	337	63	15	25	28	1	4	16	4	0.1	6.7	24	2L/s, 78m, airlift
	26/08/99	716	7.4	395	482	391	433	112	8	13	27	1	3	8	16	0.1	0.1	37	0.7L/s, 64m, pumped
31617	14/10/97	372	6.6	224	273	209.1	257	41	6	10	26	1	3	8	15	0.2		30	4L/s, 84m, airlift
	09/06/98	806	6.7	441	538	428	474	122	13	21	30	1	3	10	18	0.2	0.1	35	3L/s, 70m, pumped
31618	15/10/97	1351	7	157	191	164.9	736	43	322	531	14	1	4	191	5	2	5.6	27	1L/s, 78m, airlift
	08/06/98	1425	6.3	174	212	184.9	747	51	339	559	14	1	4	209	19	1.6	0.9	33	0.5L/s, 62m, pumped
31742	21/07/98	1232	8.0	234	285	294	729	39	164	270	48	1	21	133	154	0.4		36	3L/s, 70m, airlift
	19/07/99	1590	7.2	499	608	528	969	126	171	282	52	3	20	128	150	0.4	0.1	34	pumped as equipped
31861	10/10/98	1390	7.5	199	243	310	872	78	327	539	28	2	4	166	19	1.4		27	0.1L/s, 77.2m, pumped
31862	19/07/99	1360	7.1	500	610	554	832	138	109	180	51	1	11	75	130	0.1		31	pumped as equipped
31921	05/08/98	568	8.1	213	260	83	341	15	47	77	11	1	4	83	25	0.3		37	0.3L/s, 72.8m, airlift
	05/08/98	490	8.4	204	241	64	302	11	38	63	9	1	3	79	13	0.3		30	0.3L/s, 66.8m, airlift
	05/08/98	477	8.0	206	251	62	296	10	31	51	9	1	2	81	32	0.3		31	0.3L/s, 60.8m, airlift
	05/08/98	670	8.5	209	247	96	397	17	69	114	13	1	6	101	48	0.8		21	0.3L/s, 60.8m, airlift
31924	13/08/98	605	8.0	208	253	259.4	369	48	66	109	34	1	3	21	32	0.2		43	Seepage, 77m, airlift
	29/09/98	883	7.3	490	598	457.2	511	114	18	30	42	1	3	11	27	0.2	0.5	52	1L/s, 52m, airlift
	07/09/99	884	7.3	526	597	485	526	122	14	23	44	1	3	11	20	0.2		50	1L/s, 51m, pumped
31925	17/08/98	513	7.6	260	317	269	306	70	6	10	23	1	3	7	18	0.2		27	0.5L/s, 73m, airlift
	04/11/98	686	7.4	383	467	184	406	39	3	5	21	1	2	3	17	0.2	3.3	27	0.5L/s, 87m, pumped
31926	19/08/98	679	7.7	358	437	351	449	88	9	15	32	1	4	8	31	0.3	11.9	35	0.5L/s, 97m, airlift
	06/11/98	777	7.4	434	529	246	461	46	7	12	32	1	3	8	19	0.2	1.6	35	1L/s, 88.9m, pumped
31953	18/08/99	1580	7.3	445	543	553	952	121	178	293	61	3	22	137	200	0.5	0.2	40	pumped

Bore RN	Sample Date	Specific Conduct. (uS/cm)	pH	Total Alkalinity (mg/L)	Bicarb- onate (mg/L)	Total Hardness (mg/L)	TDS (mg/L)	Calcium (mg/L)	Chloride (mg/L)	NaCl (mg/L)	Magn- esium (mg/L)	Nit- rate (mg/L)	Potass- ium (mg/L)	Sodium (mg/L)	Sulphate (mg/L)	Fluoride (mg/L)	Iron (mg/L)	Silica (mg/L)	Sampling Data
31963	08/09/00	778	7.1	415.8	507	366.7	452	86	15	24.72	37	0	7	34	35	0.6	u/s	34	0.5L/s, 100m, pumped
	08/09/00	844	7.2	455.2	555	427.2	505	102	17	28.02	42	0	7	23	35	0.5	0.6	42	2.3L/s, 100m, pumped
32037	22/07/99	1770	7.3	334	407	441	1070	83	257	424	57	1	3	215	240	0.3	1.1	38	pumped as equipped
32039	20/07/99	2100	7.5	556	678	618	1300	144	224	369	63	5	30	212	210	0.5	0.1	42	pumped as equipped
32162	09/09/99	907	7.3	313	382	332	584	87	111	183	28	1	4	59	12	0.4	0.1	40	1L/s, 82m, pumped
32169	25/10/99	617	7.8	346	422	349	379	74	5	8	40	1	3	7	17	0.2	0.1	41	pumped as equipped
32448	28/11/99	2450	8.0	371	452	621	1540	58	376	620	116	1	32	306	400	0.6		57	12m, airlift
	28/11/99	2470	7.9	447	545	651	1540	57	344	567	124	1	31	311	400	0.4		56	30 m, airlift
	29/11/99	2600	7.9	411	501	692	1650	70	399	658	126	1	32	300	430	0.4		54	66m, airlift
32463	27/11/99	550	7.5	303	370	277	303	45	6	10	40	1	3	5	14	0.1		28	2L/s, 78m, airlift
32464	11/09/00	708	7.4	410.9	501	395.6	416	91	5	8.2	41	0	4	4	22	0.2	u/s	30	0.25L/s, 73m, pumped
	11/09/00	738	7.2	431.4	526	418.1	437	100	7	11.5	41	0	4	4	20	0.2	0.8	33	0.5L/s, 78m, pumped

ANNEX 8

Isotope Chemistry

Table 8a Surface Water Isotopes

Date	Location	Deuterium	Oxygen 18
03/03/94	Newcastle Creek drainage channel	-70.6	-9.62
01/03/94	Katherine River, Low Level Bridge	-52.2	-8.00
02/03/94	Longreach Waterhole	-73.1	-10.27
01/03/94	23 km north of Daly Waters turn-off	-84.7	-11.86
01/03/94	King River, upstream of highway	-52.9	-7.96
01/03/94	Cullen River, upstream of highway	-36.9	-5.56
05/03/94	King River	-49.7	-7.88
02/03/94	Newcastle Creek, upstream of highway	-67.9	-10.36
02/03/94	Newcastle Creek causeway	-71.8	-10.22
01/03/94	Edith River	-46.5	-7.80
03/03/94	Newcastle Creek causeway	-70.1	-10.16
01/03/94	Coomalie Creek	-56.5	-8.55
01/03/94	Daly Waters Creek	-75.8	-11.21
03/03/94	Lawson Pond	-85.1	-12.11
04/04/94	Lake Woods north	-86.5	-11.58
01/04/94	Ferguson River, downstream of highway	-37.1	-6.18
01/03/94	Adelaide River downstream of highway	-56.3	-8.96
05/03/94	23 km north of Daly Waters turn-off	-73.5	-10.17
05/03/94	Edith River	-38.0	-6.23
01/03/94	Warloch Ponds	-88.9	-12.38
02/03/94	Longreach Lagoon	-77.3	-10.69
05/03/94	Newcastle Creek causeway	-73.6	-10.44
01/03/94	Elizabeth River	-52.9	-7.85
05/03/94	Newcastle Creek upstream of highway	-68.6	-9.94
05/03/94	Warloch Ponds	-55.2	-7.88
05/03/94	Daly Waters Creek	-79.1	-11.48
05/03/94	Roper River	-74.9	-10.55
05/03/94	King River	-53.8	-8.12
05/03/94	23 km north of Daly Waters turn-off	-73.5	-10.22
03/03/94	Newcastle Creek upstream of highway	-67.9	-9.83
03/03/94	Newcastle Creek causeway	-70.5	-9.79
04/04/94	Newcastle Creek causeway	-69.8	-9.79
03/03/94	Lake Woods north	-85.0	-11.40
02/03/94	Newcastle Creek, west channel	-70.2	-9.92
04/04/94	Newcastle Creek upstream of highway	-67.7	-9.86
03/04/94	Newcastle Creek opposite dune	-72.4	-10.35
23/03/00	Elsey Creek at Warloch Ponds	-81.9	-10.89
23/03/00	Elsey Creek at Roper Hwy	-67.0	-8.08
23/03/00	Salt Creek at Roper Hwy	-89.4	-11.74
24/03/00	Birdum Creek on Western Creek Road	-85.8	-11.57
05/04/00	Elsey Creek at Warloch Ponds	-68.8	-8.00
05/04/00	Elsey Creek at Roper Hwy	-75.9	-8.02
05/04/00	Salt Creek at Roper Hwy	-73.3	-8.98
05/04/00	Birdum Creek on Western Creek Road	-60.5	-6.98
13/04/00	Birdum Creek on Western Creek Road	-44.6	-4.51
13/04/00	Birdum Creek on Western Creek Road	-44.1	-4.52
14/04/00	Elsey Creek at Warloch Ponds	-52.2	-6.27
14/04/00	Elsey Creek at Warloch Ponds	-55.6	-6.25
14/04/00	Elsey Creek at Roper Hwy	-67.1	-7.91
14/04/00	Elsey Creek at Roper Hwy	-89.0	-11.87
14/04/00	Salt Creek at Roper Hwy	-57.7	-7.46
14/04/00	Salt Creek at Roper Hwy	-58.7	-7.78
12/05/00	Elsey Creek at Warloch Ponds	-25.3	-2.72
12/05/00	Birdum Creek on Western Creek Road	-19.5	0.14
22/05/00	Elsey Creek at Roper Hwy	-44.6	-5.22
22/05/00	Salt Creek at Roper Hwy	-57.4	-7.39

Table 8b Groundwater Isotopes

RN	Station	Bore Name	Easting	Northing	Deuterium	Oxygen 18	Carbon 14 (pmc)	Error	Carbon 14 (yrBP)	Error (yrs)
586	Murranji	No. 13 Bore	197677	8147490	-56.4	-8.05	56.5	1.1	4590	150
1982	Hidden Valley	Scheme Bore	270500	8189900	-72.3	-10.38	59.3	1.1	4200	150
8514	Sunday Creek	Alpha Bore	301000	8226700	-62.1	-9.12	60.9	1.1	3980	140
8856	Daly Waters	No. 2 bore (Town)	326090	8201300	-58.6	-7.84	53.4	1	5040	160
21784	Lakefield	Lake Duggan Bore	249570	8331877	-27.1	-2.24	67.5	2.7	3160	320
23713	Buchanan Downs	Station Bore	299306	8150836	-60.8	-8.35	63	1.2	3720	160
24784	Gilnockie	Homestead Bore	222598	8242086	-65.4	-8.92	93.8	1.4	510	120
26115	Bloodwood Downs	Road Bore	266175	8302272	-56.3	-8.44	83.2	1.3	1480	120
26116	Margaret Downs	Irrigation Bore	202278	8294031	-69.7	-9.97	96.9	1.4	260	120
26205	Birrimba	12 Mile Bore	202876	8189718	-59.9	-8.26	53.7	1.2	5000	170
27794	Lakefield	Station Bore	277250	8312700	-61	-8.72	88.2	1.3	1010	120
29012	Elsey	Road Bore	298700	8310800	-59	-7.91	62	1.1	3830	150
30710	Avago	Bulwaddy Bore	277699	8224422	-61.5	-8.64				
30710	Avago	Bulwaddy Bore	277699	8224422	-68.8	-9.67	68.6	1.1	3030	130
30714	Avago	Wedgetail Bore	263301	8228138	-63.6	-8.87	4.2	1.6	25450	3850- 2590
31108	Dry River		196954	8320688	-59	-8.33	76.2	1.3	2190	130
31381	Nenen	Dingo Bore	231463	8319669	-62.3	-8.73	86.1	1.3	1200	120
31382	Wyworrie		247662	8298771	-62.9	-8.7	96.4	1.7	290	140
31387	Flora River N.P.	WRD	133147	8365614	-60.2	-8.45	37.8	1	7820	200
31390	East Mathison	WRD	154448	8331313	-54.7	-8.05	-68.9	1.2	3000	130
31617	Larrizona	East Bore	229995	8277330	-64.7	-8.78	84.1	1.3	1400	130
31397	Gorrie	Deep Sample	265640	8281460	-59.2	-8.23	17.7	1.6	13890	760-690

ANNEX 9

Surface Water Stations

Table 9 Stream Gauging Stations

River and Location	Station No.	Period of Record	Easting	Northing	Mean annual runoff (mm)	Catchment Area (km²)
Dry River, southern Manbulloo Station	G0140011	1969 – continuing	221705	8330384	11.3	777
Elsey Creek, Warloch Ponds	G8030001	1967 – continuing	298370	8331362	5.2	18785
Daly Waters Creek, Daly Waters	G8030124	1978 – continuing	326295	8201468	23.4	6290

ANNEX 10

Rainfall Stations

Table 10 Daily Read Rainfall Stations

Location	Station No.	Period of Record	Easting	Northing
Mataranka	DR014610	1916 - continuing	292050	8348140
Dunmarra	DR014611	1963 - continuing	331165	8154800
Larrimah	DR014612	1952 - continuing	308780	8276350
Daly Waters	DR014618	1872 - continuing	327240	8200880
Elsey	DR014623	1984 - continuing	320770	8344680
Gilnockie	DR014639	1990 - continuing	219755	8238245
Top Springs	DR014858	1990 - continuing	798320	8168700
Dry River	DR014900	1968 - continuing	193950	8304630

ANNEX 11

Soil Analyses

Table 11a Soil Sampling Sites

Site	Station	Easting	Northing	Total Depth (m)	Comment	Land System Type
1	Elsey	303596	8338766	5.8		Elsey
2	Elsey	323724	8326926	6		Elsey
3	Elsey	312659	8337274	6		Warloch
4	Elsey	283130	8319182	3.2	hit Lst	Warloch
5	Elsey (repl)	283636	8319237	5.7	hit rock	Warloch
6	Cow Creek	263333	8295546	6		Elsey
7	Gorrie	249219	8277640	2	hard rock	Western
8	Gorrie (repl)	249474	8277106	6		Western
9	Gilnockie	192549	8238499	6		Sturt
10	Gilnockie	217265	8238419	6		Sturt
11	Gilnockie	234219	8252563	6.1	proposed damsite	Western
12	Gilnockie	230484	8270047	6		Larrimah
13	Western Creek	248028	8254181	6	Demonstration Dam	Banjo
14	Western Creek	248028	8254281	6	Demonstration Dam	Banjo
15	Western Creek	248128	8254281	6	Demonstration Dam	Banjo
16	Western Creek	248128	8254181	6	Demonstration Dam	Banjo
17	Bloodwood Downs	260213	8309906	6	hard drilling @	Elsey
18	Bloodwood Downs	255655	8314431	5.3	hit Lst	Larrimah
19	Wyworrie	249453	8294509	7.5	proposed damsite	Banjo
20	Wyworrie	260038	8295865	6	proposed damsite 2	Elsey
21	Nenen	219580	8309325	6		Jundee
22	Margaret Downs	195105	8295667	6	drilled in river bed	Warloch
23	Larrizona	210962	8292777	1.4	hit Lst	Larrimah
24	Larrizona (repl)	211568	8292807	6		Larrimah

Table 11b Hand Textured Analyses

Depth from (m)	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Depth to (m)	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5
Site 1	Ly S	lt S Cl L	lt S Cl L	sy Cl L	sy Cl L	sy Cl L	sy Cl L	sy Cl L	sy Cl L	lt Cl	lt Cl	lt Cl			
Site 2	Ly S	cy S	sy L	Cl L	Cl L	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl			
Site 3	sy Cl L	sy Cl L	sy Cl L	cy S	sy Cl	sy Cl	lt Cl	sy Cl	lt Cl	h Cl	h Cl	h Cl			
Site 4	m h Cl	m h Cl	m h Cl	m h Cl	m Cl	m Cl	m h Cl								
Site 5	m h Cl	m h Cl	m h Cl	m h Cl	m Cl	m Cl	lt Cl	m h Cl	m h Cl	lt m Cl	m Cl	h Cl			
Site 6	cy S	sy L	sy Cl L	lt Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl			
Site 7	lt Cl	lt m Cl	m Cl	m Cl											
Site 8	Cl L	lt m Cl	m Cl	m h Cl	m h Cl	m h Cl	m h Cl	m h Cl	m Cl	m Cl	m Cl	m Cl			
Site 9	lt sy Cl L	lt sy Cl L	lt sy Cl L	sy Cl L (h)	sy Cl L (h)	Cl L	lt Cl	lt m Cl	m h Cl	m h Cl	m h Cl	m h Cl			
Site 10	Cl L	Cl L	Cl L	lt Cl	lt m Cl	lt m Cl	lt m Cl	m Cl	m Cl	m Cl	m Cl	m h Cl	m h Cl		
Site 11	m Cl	h Cl	h Cl	h Cl	m Cl	m Cl	m h Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl		
Site 12	lt Cl	h Cl	h Cl	m h Cl	m h Cl	m h Cl	h Cl	h Cl	h Cl	m h Cl	m h Cl	m h Cl			
Site 13	Cl L	Cl L	m Cl	Cl L	lt Cl	m h Cl	m h Cl	m h Cl	m Cl	lt m Cl	lt m Cl	m Cl			

Table 11b continued

Site 14	lt Cl	lt m Cl	lt m Cl	lt m Cl	m Cl	m h Cl	m h Cl	m h Cl	h Cl	h Cl	h Cl	h Cl			
Site 15	sy Cl L	lt Cl	lt Cl	lt Cl	lt Cl	lt Cl	Sty Cl L (v.	Sty Cl L	Sty Cl L	Sty Cl L	lt m Cl	m h Cl			
Site 16	sy Cl L	Cl L	lt Cl	lt Cl	lt Cl	lt Cl	lt Cl	m Cl	m Cl	m Cl	m Cl	m Cl			
Site 17	sy L	sy Cl L	h sy Cl L	Cl L	Cl L	m Cl	m Cl	lt Cl							
Site 18	m h Cl	m h Cl	m h Cl	h Cl	m Cl	m h Cl	m h Cl	m h Cl	m Cl						
Site 19	Sty Cl L	Sty Cl L	Sty Cl L	Sty Cl	lt m Cl	m Cl	m Cl	m Cl	m h Cl	m h Cl	m Cl	m Cl	m Cl	lt m Cl	lt m Cl
Site 20	m Cl	m Cl	m Cl	lt m Cl	sy Cl L	sy Cl	sy Cl	sy Cl	sy Cl	lt sy Cl L	lt sy Cl L	lt sy Cl L			
Site 21	sy Cl L	Cl L	lt Cl	lt Cl	lt m Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl	m Cl			
Site 22	m Cl	m h Cl	m Cl	lt m Cl	m Cl	sy Cl L	sy Cl L	sy Cl L	sy Cl L	sy Cl L	sy Cl L	sy Cl L			
Site 23	m h Cl	m h Cl	m h Cl												
Site 24	lt m Cl	h Cl	h Cl	h Cl	h Cl	h Cl	lt m Cl	m h Cl	m Cl	m Cl	lt m Cl	m Cl			
RN 31383	Cl L	Cl L	lt Cl	lt Cl	m Cl	m h Cl	m h Cl	m h Cl	m h Cl	m h Cl	m h Cl	m h Cl			
RN 31382	sy Cl L	sy Cl L	Ly S	cy S	lt S Cl L	lt S Cl L	lt S Cl L	sy Cl L	no sampl	sy Cl	sy Cl	sy Cl			
RN 31380	lt Cl	Cl S	Cl S	Cl S	Cl S	Cl S	Cl S	Cl S	Cl S	Cl S	lt Cl	Sty Cl L			

CODES

lt	Light	Cl	Clay	cy	Clayey
m	Medium	S	Sand	sy	Sandy
h	Heavy	L	Loam	sty	Silty