

BORE DATA - MASTER INDEX - COMPUTER INPUT SHEET

REG 3 UPDATE

OK

CRINING BORE CONDITION GOOD
FEELRN 631 INDEX 28 47NAME (30) ORALINGIE NO1LOCATION (30) 17KM. EAST OF YAMBAH DAMCADASTRAL (35) STIRLING FL=7711ST REG TIDE 0645 EXCH 68°N 240 CT 26-3AMG (metric) ZONE 53 EASTING 412 355 NORTHING 7582 842LATITUDE 21° 51' 376 LONGITUDE 134° 09 104LOCATION PRECISION S TAKEN 150 MTS WEST OF BOREAWRC BASIN NUMBER 1208 (4)IMP GRID SFS3-6 192 276 BARROW CK 1-250000

RSP _____ DISCHARGE _____ LPS. DEPTH SAMPLED _____

SAMPLE NO. _____ TIME _____ HRS. P/SACK?
MILL? MUNE?
CONDUCTIVITY=2170 TANK TEMP. PH= NITRATE= ELC/SUB=

T-DEPTH IF MEASURED _____ METERS

SWL IF MEASURED _____ METERS TIME DATE

BORE EQUIPPED WITH 6" OD STEEL CASING 4" COIL 1" GWP RODS1/2" SX. 1x30. SAT F/GHASED 1x30. CONCRETE TANK 3x1/2" TROUBLESHOOTING STEEL TRAP YARD MILL HOOKED UPTO MOBIL PUMP SACK TANKS 3/4 FULL(BERRINGS U/S 2 IN HEAD)Tag ON MINE REG ON S/OFFINSPECTING OFFICER *[Signature]*DATE 15-9-87

WATER ANALYSIS

Department of Transport & Works
Water Division, Darwin N.T.



Laboratory Register No.

83/0513

Date received in Laboratory

9/3/83

WR 4/1A

Bottle No.

ZN05

Time of sampling

1815

Date of sampling

22/2/83

LOCATION AND DETAILS

STIRLING STATION CORALINGIE BORE RN 631 BWT 047 GR191270 MAP SF 53-6

RSP282

Proposed water use:- Domestic, Stock, Irrigation, other (specify)

SANDLER: McDONALD

ANALYSIS — PHYSICAL

☐ pH	7.3	☐ Colour (Hazen units)	
☐ Specific conductance (microsiemens/cm at 25° C)	2030	☐ Turbidity (NTU's)	
☐ Total dissolved solids (mg/l - by evaporation at 180° C)	1190	☐ Suspended solids (mg/l)	

ANALYSIS — CHEMICAL (mg/l)

☐ Sodium, Na	269	☐ Chloride, Cl	370
☐ Potassium, K	32	☐ Sulphate, SO ₄	190
☐ Calcium, Ca	74	☒ Nitrate, NO ₃	64
☐ Magnesium, Mg	56	☐ Bicarbonate, HCO ₃	300
☐ Total Hardness (as CaCO ₃)	415	☐ Carbonate, CO ₃	
☐ Total Alkalinity (as CaCO ₃)	246	☐ Fluoride, F	1.0
☒ Iron, (total) Fe	2.6	☐ Orthophosphate, PO ₄	
☐ Silica, SiO ₂	24	☐ NaCl (calc. from chloride)	610

ANALYSIS — ADDITIONAL (mg/l)

☐ Copper, Cu	☐ Lead, Pb	☐ Arsenic, As
☐ Manganese, Mn	☐ Zinc, Zn	☐ Cadmium, Cd
☐	☐	☐

The sample as analysed is considered suitable for:-

Drinking water —

Yes/No
~~xxx~~

Stock watering —

Yes/No

Irrigation —

Yes/No

Others (specify)

Yes/No



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Association of Testing Authorities, Australia. The test(s)
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its terms of registration. This document shall not be
reproduced except in full.

Analysed By: G. JOHNSTON

Date 24 /3/ 83

DEPT. OF TRANSPORT & WORKS
WATER DIVISION

28 MAR 1983

W. R. & I. ALICE SPRINGS

Boxes marked thus ☒ indicate levels considered undesirable for drinking water by the
Northern Territory Department of Health.

WATER ANALYSIS

Department of Transport & Works
Water Division, Darwin N.T.



Laboratory Register No.

82/1904

Date received in Laboratory

28/10/82

WR 4/1A

Bottle No.
ZN03

Time of sampling

Date of sampling

8/10/82

LOCATION AND DETAILS

STIRLING STATION CORLANGUE DR No. 1 RN 631 MAP SF 53-6 GR192270 WRA 6016

RSP282

Proposed water use:- Domestic, Stock, Irrigation, other (specify)

ANALYSIS — PHYSICAL

☐ pH	7.2	☐ Colour (Hazen units)	
☐ Specific conductance (microsiemens/cm at 25° C)	2130	☐ Turbidity (NTU's)	
☐ Total dissolved solids (mg/l - by evaporation at 180° C)	1290	☐ Suspended solids (mg/l)	

ANALYSIS — CHEMICAL (mg/l)

☐ Sodium, Na	280	☐ Chloride, Cl	370
☐ Potassium, K	38	☐ Sulphate, SO ⁴	210
☐ Calcium, Ca	68	☒ Nitrate, NO ³	62
☐ Magnesium, Mg	57	☐ Bicarbonate, HCO ³	292
☐ Total Hardness (as CaCO ³)	404	☐ Carbonate, CO ³	
☐ Total Alkalinity (as CaCO ³)	239	☐ Fluoride, F	0.9
☐ Iron, (total) Fe	0.1	☐ Orthophosphate, PO ⁴	
☐ Silica, SiO ²	24	☐ NaCl (calc. from chloride)	620

ANALYSIS — ADDITIONAL (mg/l)

☐ Copper, Cu	☐ Lead, Pb	☐ Arsenic, As
☐ Manganese, Mn	☐ Zinc, Zn	☐ Cadmium, Cd
☐	☐	☐

The sample as analysed is considered suitable for:-

Drinking water —

Yes/No

Stock watering —

Yes/No

Irrigation —

Yes/No

Others (specify)

Yes/No



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DEPT. OF TRANSPORT & WORKS
WATER DIVISION

18 JAN 1983

W. R. & I. ALICE SPRINGS

Analysed By: G. JOHNSTON

Date 11/1/83

Boxes marked thus ☒ indicate levels considered undesirable for drinking water by the
Northern Territory Department of Health.

Department of the Northern Territory

WATER RESOURCES BRANCH

WATER ANALYSIS

WR4/1

LABORATORY REGISTER No.

73/1761

Date received in laboratory

22/8/73

BOTTLE No.

Time of sampling (hrs.)

Date of sampling

1615

15/8/73 ✓

LOCATION AND DETAILS

STIRLING STATION CORALINGIE BORE RN 631 IN 28/47

PUMP DISCHARGE

ANALYSIS - PHYSICAL

pH	8.1	Colour (Hazen units)
Specific conductance (microsiemens / cm at 25°C)	2050	Turbidity (A.P.H.A. units)
Total dissolved solids (mg /L - by evaporation at 180°C)	1240	Suspended solids (mg /L)

ANALYSIS - CHEMICAL (mg /L)

Total dissolved solids (by summation)		Total alkalinity (as Ca CO ₃)	180
Sodium chloride (calc. from chloride)	621	Total hardness (as Ca CO ₃)	396
Chloride, Cl ⁻	377	Sodium, Na	246
Sulphate, SO ₄	203	Potassium, K	17
Nitrate, NO ₃	69	Calcium, Ca	65
Bicarbonate, HCO ₃	220	Iron (total), Fe	0.3
Fluoride, F	1.1	Silica, SiO ₂	49
		Magnesium, Mg	57

ANALYSED BY: MESA Laboratories for Water Resources Br DATE 25 / 2 / 74

REMARKS:

Excessive nitrate for infants, otherwise the sample as tested is chemically suitable for human consumption according to World Health Organisation International Drinking Water Standards.



THE TERRITORY ADMINISTRATION DEPARTMENT OF INDUSTRY

WATER ANALYSIS

Name of Water Starling Station		Reference : SN 56 / 307	
Dorafingee Bore 631		Analysis Advice No. 3111	
		Date Received : 14th February, 1956	
ANALYSIS (Results in parts per million)		HYPOTHETICAL COMPOUNDS (Results in parts per million)	
HARDNESS (calculated as CaCO ₃)		CALCIUM BICARBONATE	
Total 314		MAGNESIUM BICARBONATE	
Temporary 236		SODIUM BICARBONATE	
Permanent 78		POTASSIUM BICARBONATE	
FREE ALKALI (calculated as CaCO ₃) -		SODIUM SULPHATE	
CHLORIDE 380		MAGNESIUM SULPHATE	
SULPHATE 160		SODIUM SULPHATE	
FLUORIDE 1.24		POTASSIUM SULPHATE	
CALCIUM 33		CALCIUM CHLORIDE	
BICARBONATES 288		MAGNESIUM CHLORIDE	
CARBONATES 0		SODIUM CHLORIDE	
SODIUM 233		POTASSIUM CHLORIDE	
POTASSIUM 18		CALCIUM CARBONATE	
MAGNESIUM 57		MAGNESIUM CARBONATE	
SILICA, IRON, AND ALUMINIUM OXIDES		SODIUM CARBONATE	
Nitrates 23		POTASSIUM CARBONATE	
Total salts 1193		Total Salts	

General remarks of Analysing Officer in particular reference to suitability of the water for the purpose for which it is intended to be required.

The sample, as analysed, is suitable for all stock and human consumption.

SAMPLE No.
CLIENT
RECORDED
ANALYSED
REGISTERED 14.2.56
INDEXED
REGISTERED ANALYST
NUMBER 3377



RN000631

N.T.A. WATER RESOURCES BRANCH

BORE DATA SHEET

NAME <u>D/R No 1</u>				INDEX No. <u>28/47</u>			
LOCALITY <u>Stirling</u>				REG. No. <u>631</u>			
DEPTH <u>290'</u>				FILE No. <u></u>			
CASINGS <u>293' 8"</u>		<u>168' 5"</u>		PERFORATIONS SCREENS <u>40'</u>			
LOCATION <u>28 05 /23.75 E 2.25 N</u>		SURFACE LEVEL R.L. <u></u>		B M LEVEL R.L. <u></u>		DATUM <u></u>	
CONTRACTOR <u>M. Robinson</u>		DRILLER <u></u>		DATE STARTED <u>15/10/55</u>		DATE FINISHED <u>23/10/55</u>	

WATER				STRATA SECTION			
AQUIFERS	DEPTH FEET	CASING	ACQ. SEC.	STRATA			
DEPTH STRUCK				18	Ironstone and clay		
AQUIFER THICKNESS					Yellow clay and gravel		
STANDING WATER LEVEL	128			70			
PUMP TEST G.P.H.	1200	100					
DRAWDOWN LEVEL					Red clay and gravel		
PUMP LEVEL				167			
DURATION OF TEST		5'					
R.L. S.W.L.		200			Red clay and yellow clay		
WATER TEMPERATURE °C							
TRANSMISSIBILITY							
STORAGE COEFF.				280	Gravel and sand (water)		
ANALYSES		300	6'	290			
BINOMIAL CLASSIFICATION							
T. D. S.							
CONDUCTIVITY							
TOTAL HARDNESS							
CHLORIDE							
BICARBONATE							
CARBONATE							
SULPHATE							
NITRATE							
FLUORIDE							
SODIUM							
POTASSIUM							
CALCIUM							
MAGNESIUM							
REG. ANAL. No.							
EQUIPMENT. <u>25/45 SX mill, 30,000 gal tank</u>							
REMARKS.							

WATER ANALYSIS

Department of Transport & Works
Water Division, Darwin N.T.



Laboratory Register No.

83/0513

Date received in Laboratory

9/3/83

Bottle No.

ZN05

Time of sampling

1815

Date of sampling

22/2/83

WR 4/1A

LOCATION AND DETAILS

STIRLING STATION CORALINGIE BORE RN 631 RWT 047 GR191270 MAP SF 53-6

RSP282

28/47

Proposed water use:- Domestic, Stock, Irrigation, other (specify)

ANALYSIS — PHYSICAL

☐ pH	7.3	☐ Colour (Hazen units)	
☐ Specific conductance (microsiemens/cm at 25° C)	2030	☐ Turbidity (NTU's)	
☐ Total dissolved solids (mg/l - by evaporation at 180° C)	1190	☐ Suspended solids (mg/l)	

ANALYSIS — CHEMICAL (mg/l)

☐ Sodium, Na	269	☐ Chloride, Cl	370
☐ Potassium, K	32	☐ Sulphate, SO ₄	190
☐ Calcium, Ca	74	☒ Nitrate, NO ₃	64
☐ Magnesium, Mg	56	☐ Bicarbonate, HCO ₃	300
☐ Total Hardness (as CaCO ₃)	415	☐ Carbonate, CO ₃	
☐ Total Alkalinity (as CaCO ₃)	246	☐ Fluoride, F	1.0
☒ Iron, (total) Fe	2.6	☐ Orthophosphate, PO ₄	
☐ Silica, SiO ₂	24	☐ NaCl (calc. from chloride)	610

ANALYSIS — ADDITIONAL (mg/l)

☐ Copper, Cu	☐ Lead, Pb	☐ Arsenic, As
☐ Manganese, Mn	☐ Zinc, Zn	☐ Cadmium, Cd
☐	☐	☐

The sample as analysed is considered suitable for:-

Drinking water —

Yes/No

Stock watering —

Yes/No

Irrigation —

Yes/No

Others (specify)

Yes/No



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Analysed By: G. JOHNSTON

Date 24 / 3 83

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WATER ANALYSIS

Department of Transport & Works
Water Division, Darwin N.T.



Laboratory Register No.

82/1984

Date received in Laboratory

28/10/82

Bottle No.

Time of sampling

Date of sampling

WR 4/1A

ZN03

8/10/82

LOCATION AND DETAILS

STIRLING STATION OORLANGE DR. No. 1 RN 631 MAP SF 53-6 GR192270 WRA 6016

IN 28/47

RSP282

Proposed water use:- Domestic, Stock, Irrigation, other (specify)

ANALYSIS — PHYSICAL

☐ pH	7.2	☐ Colour (Hazen units)	
☐ Specific conductance (microsiemens/cm at 25° C)	2130	☐ Turbidity (NTU's)	
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Irrigation —

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Others (specify)

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Analysed By: G. JOHNSTON

Date: 1 83

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Department of the Northern Territory

WATER RESOURCES BRANCH

WATER ANALYSIS

WR4/1

LABORATORY REGISTER No.

73/1761

Date received in laboratory

22/8/73

BOTTLE No.

Time of sampling (hrs.)

1615

15/8/73

LOCATION AND DETAILS

STIRLING STATION COBALTINE BORE RN 631 IN 29/47

USE DISCHARGE

ANALYSIS - PHYSICAL

pH	8.1	Colour (Hazen units)	
Specific conductance (microsiemens / cm at 25°C)	2050	Turbidity (A.P.H.A. units)	
Total dissolved solids (mg /ℓ - by evaporation at 180°C)	1240	Suspended solids (mg /ℓ)	

ANALYSIS - CHEMICAL (mg /ℓ)

Total dissolved solids (by summation)		Total alkalinity (as Ca CO ₃)	180
Sodium chloride (calc. from chloride)	621	Total hardness (as Ca CO ₃)	396
Chloride, Cl	377	Sodium, Na	246
Sulphate, SO ₄	203	Potassium, K	17
Nitrate, NO ₃	69	Calcium, Ca	65
Bicarbonate, HCO ₃	220	Iron (total), Fe	0.8
Fluoride, F	1.1	Silica, SiO ₂	49
		Magnesium, Mg	37

ANALYSED BY: MESA Laboratories for Water Resources Br DATE 25 / 2 / 74

REMARKS:

Excessive nitrate for infants, otherwise the sample as tested is chemically suitable for human consumption according to World Health Organisation International Drinking Water Standards.

**GUIDELINES TO WATER QUALITY:
1971 WORLD HEALTH ORGANISATION
INTERNATIONAL STANDARDS FOR DRINKING-WATER**

SUBSTANCE OR CHARACTERISTIC	HIGHEST DESIRABLE LEVEL	MAXIMUM PERMISSIBLE LEVEL
Colour (Hazen units)	5	50
Turbidity (A.P.H.A. Units)	5	25
pH range	7.0 to 8.5	6.5 to 9.2
Total dissolved solids (by evaporation at 180°C)	500 mg/l	1500 mg/l
Chloride, Cl	200 mg/l	600 mg/l
Sulphate, SO ₄	200 mg/l	400 mg/l
Calcium, Ca	75 mg/l	200 mg/l
Magnesium, Mg	30 mg/l	150 mg/l
Iron (total), Fe	0.1 mg/l	1.0 mg/l

Note:

IRON gives rise to taste, discolouration, deposits and growth of bacteria, and turbidity.

NITRATES in some circumstances have been shown to present a health hazard to infants and possibly older children when present in concentrations greater than 45 mg/l.

FLUORIDE concentrations in drinking water are recommended according to ranges of the annual average of maximum daily air temperatures. e.g., for range 26.3°C to 32.6°C the recommended limits are, lower 0.6 mg/l F, upper 0.8 mg/l F.

The annual average of maximum daily air temperatures for the following locations are:-

DARWIN 32.4°C — TENNANT CREEK 32.0°C — ALICE SPRINGS 28.3°C

RECOMMENDED LIMITS FOR STOCK WATERS IN THE NORTHERN TERRITORY

SUBSTANCE OR CHARACTERISTIC	LIMIT
pH range	5.5 to 9.0
Total dissolved solids	8000 mg/l
Sodium chloride (calc. from chloride)	Not more than 75% when total dissolved solids near limit
Sulphate, SO ₄	2000 mg/l
Nitrate, NO ₃	400 mg/l
Fluoride, F	5.0 mg/l
Magnesium, Mg	300 mg/l

Note: Stock limits are intended as a guide only

N.T.A. 152

NORTHERN TERRITORY ADMINISTRATION—WATER RESOURCES BRANCHWATER ANALYSISSample No. 71/0240 Date received in Laboratory 11.3.71Time and date of sampling 29.1.71Location and details Stirling Station Ooralingie BoreD/R No. 1 R.H. 631 I.N. 28/47 290 ft 1200 gph S.W.L. 128 ft pumpAnalysis in parts per million— p.p.m. (unless otherwise stated)—

Appearance _____

Taste and odour _____

Conductivity (Micromhos/cm²)at 25°C 1910pH 8.0

Total dissolved solids _____

Hardness, total 390

Suspended solids _____

Hardness, temporary 250

Total solids _____

Hardness, permanent 140Anions—Cations—Chloride 374

Sodium _____

Sulphate _____

Potassium _____

Nitrate _____

Calcium _____

Nitrite _____

Magnesium _____

Carbonate _____

Ammoniacal nitrogen _____

Bicarbonate 305

Iron _____

Fluoride _____

Aluminium _____

Silica _____

Selenium _____

Boron _____

Arsenic _____

Alkalinity 250

Copper _____

Turbidity _____

Lead _____

Manganese _____

Analysed by Judith A. GrimesDate 28.5.71REMARKS: