PARTICULARS OF COMPLETED

RN022063

Registration No. 22063

Index No 80/2214

Advice No

20. Describe rock type, colour etc. any changes must be recorded.

From - To

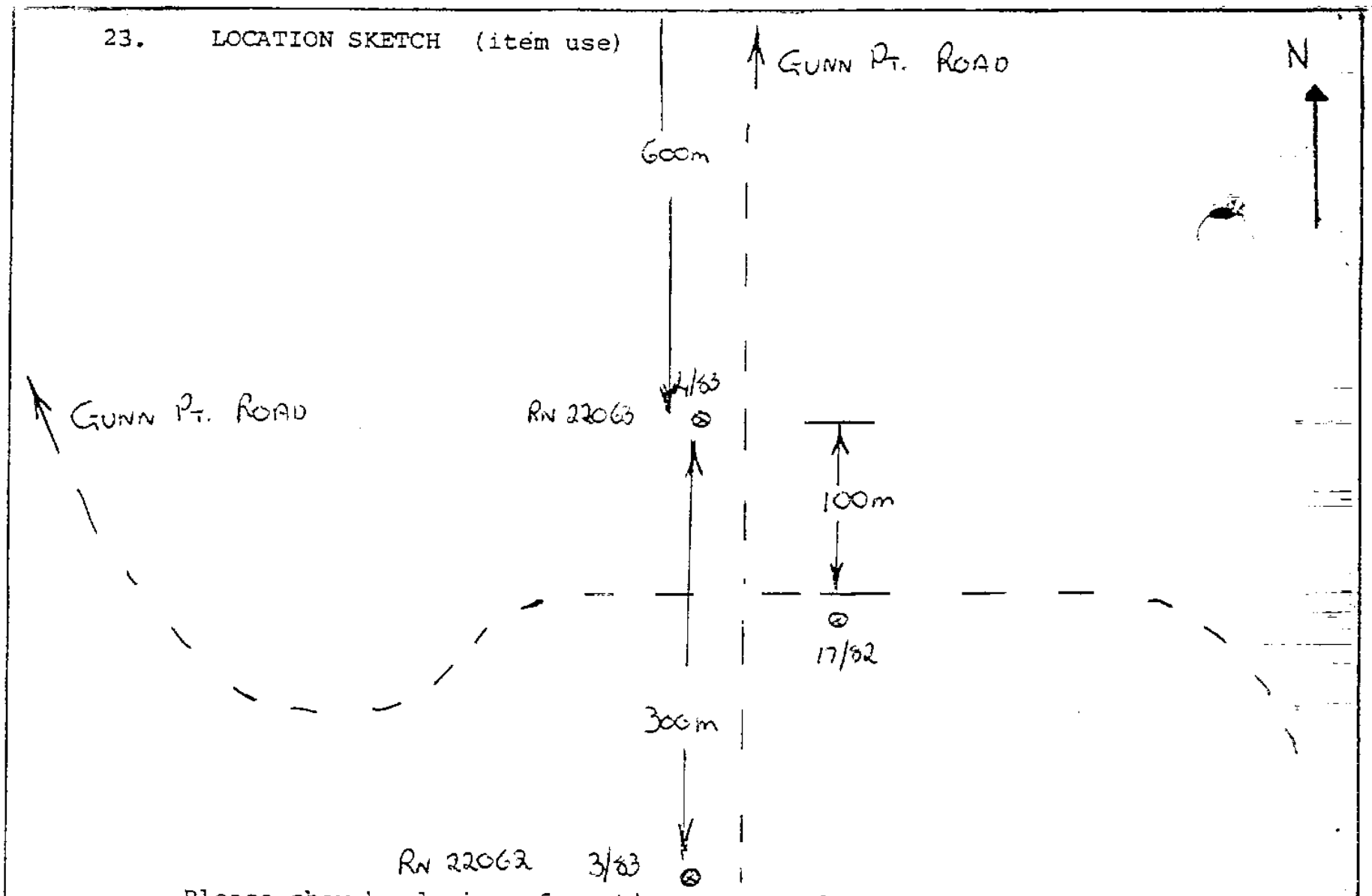
0 - 0.1m TOPSOIL
0.1 - 5.9m RED, WHITE & YELLOW CLAY & LATERITE
5.9 - 11.8m RED, WHITE & YELLOW CLAY
11.8m - 24.1m RED, WHITE & YELLOW CLAY & LATERITE
24.1 - 30.2m WHITE, YELLOW & RED CLAY
30.2 - 36.3m WHITE, YELLOW & RED CLAY & QUARTZ
36.3 - 39m WHITE CLAY & QUARTZ SAND
39 - 41.1m NO CIRCULATION
41.1 - 67.2m DOLOMITE

42.9 - 43.6m FRACTURED
43.8 - 44.3m FRACTURED
47.6 - 48.1m CAVITY
55.2 - 58.3m CAVITY

1. Name of Bore: Mc MINNS 4/83
2. Name of Property: KOOLPINYAH STN
3. Owner of Property:
4. Type of Lease: PASTORAL
5. Lease/Block No.:
6. Bore or Well: BORE
7. Name of Contractor: WATER DIV.
8. Name of Driller: I. BROUGHTON
9. Depth Recorded: 56m
10. Depth Drilled: 67.2m
11. Date Commenced: 29-6-83
12. Date Completed: 1-7-83
13. Proposed use of Bore ☐ Domestic ☐ Pastoral ☐ Stock Route ☐ Irrigation ☐ Town Supply ☐ Observation ☐ Investigation
14. Bore has been drilled by ☐ Rotary ☐ Cable Tool ☐ Jetting ☐ Other
15. Bore Drilled Using ☑ Air ☐ Mud ☑ Foam ☑ Water ☑ Degradable Polymer
Size of drilling Bit..9½".from.0...to.41.1m..
..7⅞".from.41.4m.to.41.7m..
5½" 41.7m - 67.2m
16. Casing Installed ☐ Steel ☐ ABS ☑ PVC ☐ Fibreglass ☐ Other.....
..2"...Dia from...0... to..56m....
.....Dia from..... to .....
Threaded Welded
17. Screens ☑ None installed ☐ Stainless Steel ☐ Bronze ☐ PVC
Dia.....Slot Size.....From.... to.....
Dia.....Slot Size.....From.... to.....
Screens are Screwed connected by Pack
18. Perforation in casing ☐ Percussion Slotted ☐ Oxycut ☑ Drilled Other.....
Slot/hole size..¼"...From.50... to.56m..
Slot.hole size.....From..... to.....
19. Is any strata cemented off ☑ Yes ☐ No
If so, give depth ..40.m. to .41m....
21. Sample of strata and water have been ~~will be left at~~ Darwin ~~Katherine~~ ~~Alice~~ Springs ~~Other~~.....

22. WATER	1st Supply	2nd Supply	3rd Supply	4th Supply	5th Supply	Remarks
Struck at	39 - 41.1m	WATER COMING FROM	HOST CIRCULATION	AREA		
Standing Water Level	13.5m					
Discharge	0 - 7 l/sec	FORMATION SLUMPING	- CASING	NOT SEATED		
Duration of Test	WHILE DRILLING					

23. LOCATION SKETCH (item use)



Please show boudaries of sections etc, and location of bore(s) within section. If more than one bore clearly identify each. Marked distance from boundaries if possible.

24. This bore has been constructed under by supervision and this report is true to the best of my knowledge.

Signature...R. Setchell.....Driller Date...1-7-83.....

PLEASE NOTE THE FOLLOWING:-

1. UNITS If possible please use metric units (metres, Millimetres, litres per second). Old units are acceptable (feet, inches, gallons per hour) but make sure you make it clear which you are using.

2. WATER SAMPLES Asample of not less than one litre of each water supply encountered during the drilling is required. Suitable plastic bottles can be obtained from the Water Resources Branch. Please rinse out all bottle properly before sampling. Completely fill the bottle leaving no entrapped air. Please label the bottle with the bore name and depth of supply.

3. STRATA SAMPLES A sample of not less than 0.2 kilograms of each 3m of stratum encountered during drilling is required. Please label all samples with the hole name and interval drilled. Plastic bags and tags can be obtained from Water Division.

4. LOCATION Please describe the location as accurately as possible giving distances from one or more features (such as other bores, dams,etc.) within a close distance. Preferably give a sketch of the area.

26. OFFICE USE ONLY: KOOLPINYAH SHEET SI73 EDT 1 SERIES R621 1:100,000

Map No:..... Plotted on Map Date:...26/7/83.....

AMG Co-ordinates:290224..... Traced to Master Map Date:...26/7/83.

Datum (A.H.D.):..... Checked by:..... Date.....

Geological Basin:..... Signature (Bore Inspector) Date.....

WATER ANALYSIS

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

WR 4/1A

Laboratory Register No.	83-84/0171
Date received in Laboratory	20/7/83

Bottle No.	Time of sampling	Date of sampling
DJ37	0800	1/7/83

LOCATION AND DETAILS
KOOLPINYAH SHEET 5173 EDT1 McMINNS 4/83 RN22063 DEPTH 44m DISC .7LPS MAP

SERIES RG21 GRID 290224 WRD8876 RSP1010

L.N. 80/2214

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

ANALYSIS — PHYSICAL

☐ pH	7.3	☐ Colour (Hazen units)	
☐ Specific conductance (microsiemens/cm at 25° C)	330	☐ Turbidity (NTU's)	> 100
☐ Total dissolved solids (mg/l - by evaporation at 180° C)	180	☐ Suspended solids (mg/l)	

ANALYSIS — CHEMICAL (mg/1)

☐ Sodium, Na	2	☐ Chloride, Cl	6
☐ Potassium, K	< 1	☐ Sulphate, SO^4	15
☐ Calcium, Ca	33	☐ Nitrate, NO^3	< 1
☐ Magnesium, Mg	21	☐ Bicarbonate, HCO^3	189
☐ Total Hardness (as $CaCO^3$)	170	☐ Carbonate, CO^3	
☐ Total Alkalinity (as $CaCO^3$)	155	☐ Fluoride, F	0.8
☐ Iron, (total) Fe	UNSUITABLE FOR ANALYSIS	☐ Orthosphosphate, PO^4	
☐ Silica, SiO^2	3	☐ NaCl (calc. from chloride)	8

ANALYSIS — ADDITIONAL (mg/1)

☐ 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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Analysed By: G. JOHNSTON Date 5 / 9 / 83

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

0614.828 A. B. CAUDELL, Government Printer of the Northern Territory

GEOPHYSICAL DOWN HOLE LOGGING

80.

80/2214
RN22063.

OPERATOR	ASM.
DATE	13/10/83
GAMMA RAY	4/6/2
RESISTIVITY	
S. P.	
CALIPER	
TEMP.	
GAMMA GAMMA	

WR 9/1

DRILLERS LOG

DATE Wed 29-6-83 BORE No. McMinns 4/83

RN 22063

Supervisor:

Driller: I. Broughton

Time	Depth	Metres drilled	Mins lapsed	Drillers remark, casing details	BIT DATA No.	Size	Type	Worn cond'n	STRING DATA Item	O.D.	Length	Prog. tally	MUD DATA		WATER SAMPLES No.	Depth
0730				Service rig		9½"	Drag		Bit	9½"	0.95	0.95				
0800				Commence drilling					D.P.	4½"	6.10	7.05				
0810	5.9	5.9	10	0.1 Topsoil, Red, white & yellow clay & laterite												
0824				Add D.C. & cont					D.C	5¼"	5.90	12.95				
0837	11.8	5.9	13	White, red & yellow clay												
0841				Add D.C & cont					D.C	5½"	6.20	19.15				
0853	14			Change to mud									½ Biogel			
0905				Continue												
0926	18.0	6.2	33	White, red & yellow clay & laterite												
0928				Add rod & cont					D.P.	4½"	6.10	25.25				
0958	24.1	6.1	30	As above												
1000				Add rod & cont.					D.P.	4½"	6.10	31.35				
1028	30.2	6.1	28	Red, white & yellow clay												
1031				Add rod & cont					D.P.	4½"	6.10	37.45				
1046	36.3	6.1	15	Red, white & yellow clay & quartz												
				Mix more mud									1 Biogel			
1119				Add rod & cont					D.P.	4½"	6.10	43.55				
1130	41.1	4.8	11	Quartz sand & white clay - last circ at 39m												
1135				Trip out												
1200				Change to R.R.		7⅞"	R.R.		Bit	7⅞"	0.55	43.10				
1210				Trip in												
1237				On bottom - no circulation												
1256	41.7	0.6	19	No circulation												
1257				Trip out & prepare to run 6" steel casing												

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WR 9/1

DRILLERS LOG

DATE Wed 29-6-83 BORE No. Mc Minns 4/83

RN 22063

Supervisor:

Driller: I Broughton

Time	Depth	Metres drilled	Mins lapsed	Drillers remark, casing details	BIT DATA No.	BIT DATA Size	BIT DATA Type	BIT DATA Worn cond'n	STRING DATA Item	STRING DATA O.D.	STRING DATA Length	STRING DATA Prog. tally	MUD DATA	WATER SAMPLES No.	WATER SAMPLES Depth
1315	41.7			Run casing											
			1/	6.43 m											
			2/	6.16 m											
			3/	6.35 m											
			4/	6.34 m											
			5/	6.35m											
			6/	6.16m											
			7/	6.35m											
				44.14m - cut casing											
1455				Trip in with 43.15		5½"	Button		Bit	5½"	1.20	1.20			
1527				Commence hammering					7D.P.	4½"	42.70	43.90			
1535	42.8	1.1	8	Quartz & dolomite											
1538				Add rod & cont					D.P.	4½"	6.16	50.00			
1600	44.8			Blowing up outside of casing											
				Fractured 42.9 - 43.6 m											
				43.8 - 44.3m											
				Clean out drain - Full of sandy clay											
				Bogged water truck											
1640				Clean up & knock off											

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WR 9/1

DRILLERS LOG

DATE Thurs 30-6-83 BORE No. Mc Minns 4/83

RN 22063

Supervisor:

Driller: I. Broughton

Time	Depth	Metres drilled	Mins lapsed	Drillers remark, casing details	BIT DATA No.	BIT DATA Size	BIT DATA Type	BIT DATA Worn cond'n	STRING DATA Item	STRING DATA O.D.	STRING DATA Length	STRING DATA Prog. tally	MUD DATA		WATER SAMPLES No.	WATER SAMPLES Depth
0730	44.8			Service rig		5½"	Button		Bit	5½"	1.20	1.20				
0800				Clean out hole					T.D.P.	4½"	42.70	43.90				
0807				Add rod & cont					D.P.	4½"	6.16	50.00				
0843	48.9	4.1	36	Dolomite - cavity 47.6 - 48.1m												
0847				Add rod & cont					D.P.	4½"	6.10	56.10				
1007	55.0	6.1	80	Dolomite - sand, clay & water washing up												
1013				Add rod & cont					D.P.	4½"	6.10	62.20				
1128	61.1	6.1	75	Dolomite - cavity 55.2 - 58.3m												
1133				Add rod & cont					D.P.	4½"	6.10	68.30				
1402	67.2	6.1	149	Dolomite - sand & clay washing up												
1403				Trip out & pull down 43-15 - clean & oil it												
1510				Glue 2" P.V.C. together												
1530				Run 2" P.V.C to 56m												
				PerSorated 50 - 56m												
				Flow varied from 0 - 7l/sec												
				Water coming From above dolomite in lost circulation zone												
				Cavities appeared to be dry but with water washing up outside casing it is hard to tell												
1630				Clean up & knock off												

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WR 9/1

DRILLERS LOG

DATE Fri 1-7-83 BORE No. McMinn 4/83 Supervisor:

Driller: I. Broughton

Time	Depth	Metres drilled	Mins lapsed	Drillers remark, casing details	BIT DATA No.	Size	Type	Worn cond'n	STRING DATA Item	O.D.	Length	Prog. tally	MUD DATA		WATER SAMPLES No.	Depth
0730				Service rig & shovel mud away from rig												
				Depth of hole = 44m												
				S.W.L = 13.5m												
0835				Run 1" galv. pipe												
				Mix 2 bags of cement												
0926				Pour cement down pipe & displace cement with water												
0943				Pull out 1" pipe												
0956				Start to pull 6" casing												
1047				6" casing out												
1053				Run 3m of 8⅝" surface casing												
				Cement casing												
				Clean up site - bogged backhoe												
1400				Move off												
				Cut access 5/83 & set up rig												
				Dig mud pit & drains; make fire breaks												
1645				Knock off												

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