WATER ANALYSIS REPORT

AMDEL COMPUTER SERVICES

SAMPLE NO. 75720096

JOB NO. 1902-76

CHEMICAL COMPOSITION

		MILLIGRAMS PER LITRE MG/L	MILLIEQUIVS. PER LITRE ME/L	%
CATIONS				
CALCIUM	(CA)	43	2.1	6
MAGNESIUM	(MG)	57	4.7	13
SODIUM	(NA)	598	26.0	81
POTASSIUM	(K)	94	2.4	
IRON	(FE)			
ANIONS				
HYDROXIDE	(OH)			
CARBONATE	(CO3)	7	.2	
BICARBONATE	(HCO3)	341	5.6	16
SULPHATE	(SO4)	389	8.1	24
CHLORIDE	(CL)	749	21.1	60
BROMIDE	(BR)			
FLUORIDE	(F)			
NITRATE	(NO3)	33	.5	
PHOSPHATE	(PO4)			

TOTALS AND BALANCE

CATIONS (ME/L)	35.3	DIFF =	.3
ANIONS (ME/L)	35.6	SUM =	70.8

DIFF*100. / SUM = .4 %

DERIVED AND OTHER DATA

CONDUCTIVITY (E.C.)
MICRO-S/CM AT 25 DEG. C 3460.

	MILLIGRAMS PER LITRE MG/L
TOTAL DISSOLVED SOLIDS	
A. BASED ON E.C.	
B. CALCULATED (HCO3=CO3)	2137.
C. RESIDUE ON EVAP. AT 180 DEG. C	

TOTAL HARDNESS AS CACO3	342.
CARBONATE HARDNESS AS CACO3	279.
NON-CARBONATE HARDNESS AS CACO3	63.
TOTAL ALKALINITY AS CACO3	290.
FREE CARBON DIOXIDE (CO2)	
SUSPENDED SOLIDS	
SILICA (SIO2)	
BORON (B)	

	UNITS	
REACTION (PH)	8.5	
TURBIDITY (JACKSON)		
COLOUR (HAZEN)		
SODIUM TO TOTAL CATION RATIO (ME/L)	73.9 %	

REMARKS

Bmr Lander River 6 bore
133°29'E, 20°35'S
Flow: 3000 gph

SFS3.1
684424

NAME- B.M.R.
ADDRESS-

DATE COLLECTED
DATE RECEIVED

BORE NO-
SECTION-
HOLE NO-
SUPPLY-
SAMPLE COLLECTED BY-

WATER OUT-
WATER LEVEL-
INTO HOLE-

RN 12399

-5-

APPENDIX 2 (Microfiche)

WATER ANALYSIS DATA — SOUTHERN WISO BASIN

Well	Flow l/hr	Ca mg/l	Ca me/l	Mg mg/l	Mg me/l	Na mg/l	Na me/l	K mg/l	K me/l	CO_3 mg/l	CO_3 me/l	HCO_3 mg/l	HCO_3 me/l	SO_4 mg/l	SO_4 me/l	Cl mg/l	Cl me/l	F mg/l	NO_3 mg/l	NO_3 me/l
[illegible]R Lander River 6	12000	43	2.1	57	4.7	598	26.0	94	2.4	7	0.2	341	5.6	389	8.1	749	21.1		33	0.5
[illegible]R Lander River 7	>>1200	58	2.9	85	7.0	735	32.0	88	2.3	7	0.2	361	5.9	494	10.3	989	27.9		46	0.7
Bore at 20°52'S, 133°32'E	>>1200	9	0.4	3	0.2	13	0.6	8	0.2	-		60	1.0	8	0.2	9	0.2		8	0.1
Bore at 20°40'S, 132°28'E	>>1200	7	0.3	4	0.3	90	3.9	73	1.9	7	0.2	220	3.6	41	0.9	57	1.6		8	0.1
[illegible]R Lander River 1	6000	73	3.7	96	7.9	850	37.0	80	2.0	-		447	7.3	658	13.7	1087	30.6		8	0.1
[illegible]R Lander River 5	6000	25	1.2	23	1.9	305	13.3	44	1.1	20	0.7	320	5.3	124	2.6	280	7.9		52	0.8
[illegible]R Bonney Well 3	1200	24	1.2	16	1.3	131	5.7	27	0.7	-		274	4.5	63	1.3	95	2.7		30	0.5
[illegible]R Lander River 3	3000	60	3.0	68	5.6	565	24.6	61	1.6	13	0.4	314	5.1	377	7.8	729	20.6		41	0.7
[illegible]R Bonney Well 2	6000	113	5.6	117	9.6	1025	44.6	110	2.8	-		491	7.9	774	16.1	1424	40.2		9	0.1
[illegible]R Lander River 2	6000	153	7.6	312	25.7	2574	112.0	228	5.8	-		634	10.4	2006	41.8	3517	99.2		6	0.1
Bore at 20°45'S, 132°51'E	>>1200	14	0.7	10	0.8	283	12.3	28	0.7	-		394	6.5	73	1.5	217	6.1		7	0.1
[illegible]R Green Swamp Well 1	[illegible]	51		72		560		87		-		425		421		675		2.2	26	
[illegible]R Green Swamp Well 2	3200	69		91		850		98		-		[illegible]		[illegible]		895		3.5	9	
[illegible]R Green Swamp Well 4 (cased to 91 m)	24000	32		39		290		45		-		[illegible]		[illegible]		[illegible]		0.6	24	
[illegible]R Green Swamp Well 4 (uncased)	24000	378		71		380		61		-		[illegible]		[illegible]		435		0.5	22	
[illegible]R Green Swamp Well 5	6000	108		184		575		315		-		[illegible]		-		1226		1.3	15	
Parklands Bore	5600	93		69		450		76		-		[illegible]		[illegible]		[illegible]		2.2	3	
[illegible]s Well	3000	87		125		890		114		5		661		[illegible]		[illegible]		0.0	40	
Austerity Well, 21°02'S, 132°55'E	3200	87		125		890		114		5		661		602		1105		1.6	40	

BMR LANDER RIVER 6

AGE	UNIT	GRAPHIC LOG	CORE	DEPTH (m)	THICKNESS (m)	LITHOLOGY
CAINOZOIC				3.0	3.0	Sand, red-brown, medium grained, moderately sorted, rounded to angular, poorly consolidated
?LATE PALAEOZOIC	LAKE SURPRISE SANDSTONE				100.3	Sandstone, white, generally fine-grained but grades from very fine to medium-grained, well sorted, contains white clay matrix in parts, poorly consolidated above 80m, laminated indistinctly in cores
				93.0		
				103.3		

BMR LANDER RIVER 7

AGE	UNIT	GRAPHIC LOG	CORE	DEPTH (m)	THICKNESS (m)	LITHOLOGY
CAINOZOIC				3.0	3.0	Sand, red-brown, medium-grained, subrounded to rounded, rare angular coarse grains, well sorted
				12.0	9.0	Sandstone, light brown, coarse-grained; grades to granule conglomerate at base, angular to rounded, poorly sorted
?LATE PALAEOZOIC	LAKE SURPRISE SANDSTONE				101.1	Sandstone, white, grades to light orange at top, generally fine-grained, grades from very fine to medium-grained, generally well sorted but grades to moderately sorted, well rounded, poorly consolidated, contains little matrix
				101.1		
				113.1		

AUS 1/1121

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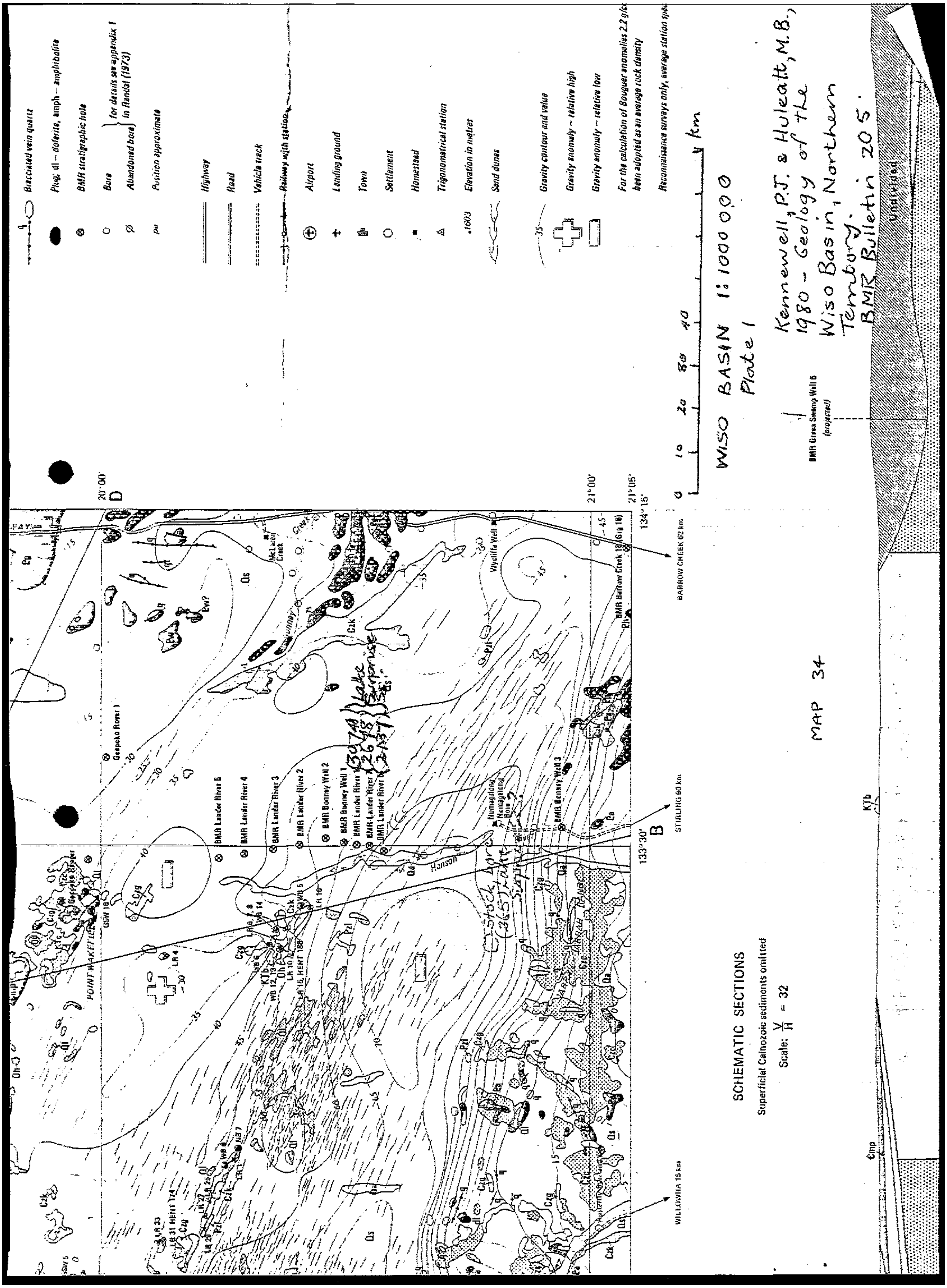
Kennewell, P.J. & Hulcatt, M.B., 1980 – Geology of the Wiso Basin, Northern Territory. Bureau of Mineral Resources Australia, Bulletin 205.


Brecciated vein quartz
Plug; dl – dolerite, amph – amphibolite
BMR stratigraphic hole
Bore
Abandoned bore
for details see appendix 1 in Randal (1973)
Position approximate
Highway
Road
Vehicle track
Railway with station
Airport
Landing ground
Town
Settlement
Homestead
Trigonometrical station
Elevation in metres
Sand dunes
Gravity contour and value
Gravity anomaly – relative high
Gravity anomaly – relative low
For the calculation of Bouguer anomalies 2.2 g/c been adopted as an average rock density
Reconnaissance surveys only, average station spac
0 10 20 30 40 km
WISO BASIN 1:1000000
Plate 1
Kennewell, P.J. & Huleatt, M.B., 1980 - Geology of the Wiso Basin, Northern Territory. BMR Bulletin 205.
SCHEMATIC SECTIONS
Superficial Cainozoic sediments omitted
Scale: V/H = 32
MAP 34
BMR Green Swamp Well 6 (projected)
Undivided
WILLOWRA 15 km
STIRLING 60 km
BARROW CREEK 62 km
133°30'
134°15'
20°00'
21°00'
21°05'
B
D
POINT WAKEFIELD
Geopoko River 1
BMR Lander River 5
BMR Lander River 4
BMR Lander River 3
BMR Lander River 2
BMR Bonney Well 2
BMR Bonney Well 1
BMR Lander River 1
BMR Lander River 7
BMR Lander River 6
BMR Bonney Well 3
BMR Barrow Creek 18 (Gig 18)
Numagalong
Wycliffe Well
McLaren Creek
Hanson
(3074) (2678) (2137) Lake Surprise
Stock bore (365) Lake Surprise

Regulation 8

N.T.A. 181

THE NORTHERN TERRITORY OF AUSTRALIA

Control of Waters Ordinance

RN 12399
CN 34/12

FINAL STATEMENT OF BORE

From	To	Description of Strata

Name of Bore: BMR LANCER RIVER No 6

Name of Property:

Description of Property: VCL

Name of Owner: BMR

Name of Contractor:

Name of Driller:

Location of Bore: (or supply sketch on back hereof) -

..... Miles
N NE
S SE
E NW
W SW
of (b) .....
.....

(a) Circle appropriate direction.
(b) Use known point such as existing bore, homestead, outstation etc.

Additional information of interest about the bore -

Map No: SF 53-1
Grid Reference: 684 424

Samples of strata and water supplies
Have ~~been~~*
Will ~~Be~~*
left at the following trading place:
..... Knott .....
.....
(Signature)

* Strike out which does not apply.

Date of Commencement:

Date of Completion: 1976

Total Depth:

Particulars of Casing:

Particulars of Perforations or Screens:

Water	1st Supply	2nd Supply	3rd Supply
Struck at			
Standing Water Level			
Pumping Supply G.P.H.	3000		
Duration of Pump Test			
Water Level During Test			
Quality: Good, Fair, Bad			

3.8 L/s

1/7/76 TDS 2137
NO_3 33

For office use only:
Plotted 15/10/79