DEPARTMENT OF MINES
SOUTH AUSTRALIA

~~J. Anderson~~
Records

R/B 70/17

PROGRESS REPORT NO. 5

GREAT AUSTRALIAN ARTESIAN BASIN

LEVELLING OF FLOWING BORES

by

N.H.EDWARDS
TECHNICAL ASSISTANT
(SURVEY)

CONTENTS

MAPS & PLANS USED

Title

Map of South Australia showing location of Flowing Bores in Great Australian Artesian Basin 70-58

Curnamona 4 Mile Geological Sheet
Callabonna 4 Mile " "
Prome 4 Mile " "
Marree 4 Mile " "

SURVEY EQUIPMENT

Level Books 357 and 394
Stadia Field Books 237 and 243
Wild Level N.2 D.M. No.27
Wild Theodolite T.I.A. D.M. No.10
Two Aluminium Staffs and Bubbles.

Rept.Bk.No. 70/17
G.S. No. 4405
Hyd. No. 2218
D.M. No. 477/67

6th February, 1970

DEPARTMENT OF MINES
SOUTH AUSTRALIA

Rept.Bk.No. 70/17
G.S. No. 4405
Hyd. No. 2218
D.M. No. 477/67

PROGRESS REPORT NO.5

GREAT AUSTRALIAN ARTESIAN BASIN

LEVELLING OF FLOWING BORES

INTRODUCTION

In previous survey trips to the Great Australian Artesian Basin (Rept. Bk.No. 64/124, 65/9, 65/78, 65/102) all accessible flowing bores north and west of the Strzelecki track had been relocated, photographed, and levelled to Department of Lands datum (MSL = 0 at Port Adelaide: (MSL.1)). This was to provide an accurate datum from each bore to enable geological interpolation of bore logs.

After the completion of the previous four survey trips, there remained to be surveyed all the flowing bores to the south and east of the Strzelecki Track, plus two to the north i.e. Junction and Meteor bores. This left a total of twenty five bores to be surveyed, and was the object of the 5th field trip in September and October, 1969.

FIELD WORK

The survey party left Adelaide on the 22nd September, 1969 in two Landrovers and towing two caravans and returning to Adelaide 17th October, 1969, a trip duration of four weeks. Seventeen flowing bores, one dry bore, one abandoned bore and one stock bore and mill were levelled for a total survey distance of 203 miles.

Traverse No. 1

The first traverse in this the 5th programme was to Junction bore (104000043) which because of the distance and the fact that the bore was reported to be abandoned was levelled by stadia. The report proved to be correct, the bore being completely abandoned. A peg was placed adjacent to the bore site so that a reduced level could be obtained to allow plotting of the bore log. The traverse distance was 10.3 miles.

Traverse No. 2

Consisted of a loop from D.L. BM. 3448 to Meteor Bore, (114000009) closing on D.L. BM. 3448 a total distance of 13.6 miles and a misclosure of -0.03.

Traverse No. 3

From D.L. BM. 3448 to Quart Pot Bore (114000017) closing on D.L. BM.3448 with T.B.M. pegs being placed every two miles as a control. Total traverse distance, 26.3 miles and misclosure of +0.08.

Traverse No. 4

From D.L. BM. 3452 to Deans Lookout Bore (114000022) closing On D.L.BM.3452. A traverse distance of 5.8 miles. No misclosure was found.

Traverse No. 5

From D.L. BM. 2462 to Montecollina Bore, (114000003) closing on D.L. BM.2462 No misclosure was found in this traverse in a distance of 2.1 miles. Difficulty was found in locating the D.L. BM. 2462 which had been buried under the new road so had to be unearthed. This took some time and a considerable effort with pick and shovel.

Traverse No. 6

From D.L. BM. 3458 to Lake Crossing Bore (114000025) closing on D.L. BM. 3458 with a misclosure of +0.03 over a distance of 3.4 miles.

Traverse No. 7

From Petermorra Bore to Dean's Lookout Bore, (114000022) closing on Petermorra Bore (114000023). Total survey distance 9.7 miles and a misclosure of -0.85. Deans Lookout Bore (114000022) was used in this case as origin of datum because we were unable to locate the D.L. BM. along the new road. Presumably the BM has been either removed by the grader or buried under the new road.

Traverse No. 8

From D.L. BM. 4977 to Woolatchi Bore (114000033). No traverse involved as the B.M. IS ALONGside the bore.

Traverse No. 9

From D.L. BM. 4994 to Woolawatana Bore (125000006). No traverse involved as the BM is alongside the bore.

Traverse No. 10

From D.L. BM. 5005 to Yandama Bore (124000008), closing on D.L. BM. 5005 a distance of 0.5 miles. No misclosure was found.

Traverse No. 11

From D.L. BM. 5017 to Coonanna Bore (124000007), closing on D.L. BM. 5017 a distance of 1.5 miles. No misclosure was found.

Traverse No.12

From D.L. BM. 5011 to Tilcha Bores Nos. 1 (124000005) and 2 (124000006). Stadia levelling was used in this case due to the inaccessibility of the bores. R.L. value of both bores given to the nearest foot. Total mileage of the traverse was 22.1 miles.

Traverse No. 13

From D.L. BM. 4994 to Cootabarlow No. 1 (125000007), Cootabarlow No. 3 (125000009), Lakeside (125000010), Black Oak (125000011), Coombs (126000068) and McKenzie (116000055) Bores, closing on D.L. BM. 5068. This was the longest traverse of the 5th programme being at total distance of 106.3 miles with a misclosure of -1.3 feet this is less than the allowable error for this work.

CONDITION OF BORES

Note: (1) Five digit number refers to photo index in records file in office.

(2) Nine digit number refers to bore index in records file in office.

TRAVERSE NO.1

104000043 JUNCTION BORE DM. Folder 1

Grid J.4

LOCATION

This bore is located in the creek bed at the junction of the Frome and Yerelina creeks, 10.3 miles north of Apollinaris Well. It is reached by a track running north from Apollinaris Well to Nursery Bore, then northwest to junction tank. Frome here the track runs northeast but is almost non-existent and extremely hard to follow.

DESCRIPTION

The bore no longer flows and is buried under the creek bed. The only evidence of the bore's original existence is a dry salt patch.

LEVEL REFERENCE

2" x 2" peg at the approximately position of the bore.

MISCELLANEOUS BORE IN TRAVERSE NO.1

NURSERY BORE DM. Folder

Grid J.4.

LOCATION

This bore is located 5.2 miles north of Apollinaris Well on the east bank of the Frome Creek.

DESCRIPTION

This bore is non-artesian and equipped with a mill and tank. The bore casing is 6" and is in good condition.

LEVEL REFERENCE

The R.L. is taken at top of casing and quoted to the nearest foot as it is levelled by stadia.

TRAVERSE NO.2

114000009 METEOR BORE DM. Folder 1.

Grid. K.4.

20283

LOCATION

The bore is reached by a well defined track leading northwest from the Blanchewater Ruins and Strzelecki Track, a distance of 12.5 miles. The bore is situated on the north bank of Six Mile Creek and 1 mile northwest of the yards.

DESCRIPTION

The bore is thought to be an 8" casing with a 6" outlet pipe laid horizontally for a distance of 12 ft. The bore head at the elbow joint is set in concrete but leaks slowly when the soil surrounding the concrete block is disturbed. The water flow is fairly strong. Water temperature 96°F.

LEVEL REFERENCE

The R.L. value is taken on the top of the concrete surround to the bore head. Also a 2 in. x 2 in. peg 50ft. north of the bore.

TRAVERSE NO.3

114000017 QUART PORT BORE

DM.Folder 2

Grid K. 4

20285

20284

LOCATION

This bore is reached by a reasonable track leading due south from the Strzelecki Track and Happy Throughts Well, a distance of 13.3. miles. The bore is situated on the east bank of the MacDonnell Creek.

DESCRIPTION

The bore has a 6 in. casing with a 5 in. overflow laid horizontally on concrete blocks for a distance of 20 ft. The general bore condition is good but the flow weak. Water temperature 95°F.

LEVEL REFERENCE

The R.L. is taken on top of outlet pipe also a 2 in. x 2 in. peg within the graveyard 90ft. east of bore.

TRAVERSE NO.4

114000022 DEANS LOOKOUT BORE

DM. Folder

Grid. K. 4

20288

LOCATION

Access to this bore is by a track running due south 2.9 miles from the Strzelecki crossing on the Petermorra Creek at D.L. BM. 3452. The bore is situated on the west side edge of the Petermorra Creek.

DESCRIPTION

This bore has a 6 in. casing and a 5 in. outlet set in a concrete block. The general bore condition is good with a fairly strong flow. Water temperature 126°F.

LEVEL REFERENCE

The R.L. value is taken on top of the outlet pipe, also on a 2 in. x 2in. peg 30ft. to the south of the bore under a tree.

TRAVERSE NO.5

114000003 MONTECOLLINA BORE DM.Folder 4.

Grid K.4.

No. 20301

LOCATION

This bore is found 1,000 ft. north of the Strzelecki Track, and 1 mile east of DL. BM. 2462. The bore is situated amongst numerous white sand hummocks commonly known as the Cobbler's.

DESCRIPTION

This bore consists of an 8 in. casing set in a concrete surround with a 6 in. outlet, with one gate valve. The flow is fairly strong, water temperature 103°F.

LEVEL REFERENCE

The R.L. value is taken on the Lower flange of reduction unit (8 in. to 6 in.) between 8 in. casing and 6 in. tee head unit. Also a 2 in. x 2 in. peg 4 ft. away from the bore by the southwest corner post of the surrounding fence.

TRAVERSE NO.6

114000025 LAKE CROSSING BORE

BM.Polder 1

Grid K. 4.

20304

20303

LOCATION

This bore is situated 0.5 miles south of the Strzelecki Track and D.K. BM.3458. Access is gained by way of a track which follows an old vermin proof fence fro 0.4 miles and then turns west to the bore.

DESCRIPTION

The bore is situated on the edge of a lake and is surrounded by a marsh. The bore head and outlet pipe, thought to be 6 in. casing, is under 3ft. of water in a man-made pit. The flow from the bore seems to be considerable.

Water temperature 115°F.

LEVEL REFERENCE

2 in. x 2 in. peg alongside the pit.

TRAVERSE NO.7

114000023 PETERMORRA BORE **DM.Folder 2**

Grid K. 4

20298 20299

LOCATION

Access to this bore is gained by way of Dean's Bore (114000022) (see Traverse No.4) and then 4.8 miles due east. The bore is on the north side of the Mount Hopeless Creek 0.25 miles from the main creek.

DESCRITPION

This bore has a 10 in. main casing with a reduction head. The head reduces from 10 in. to 8 in. and then through two gate valves into 6 in. outlet pipes 10ft. long, then into an 8 in. 'Y'junction which is jointed to a 12 in. outlet. The joint between the 'Y' junction and 12 in. outlet is encased in a concrete block. The main bore casing to 18 in. above the ground is also encased in concrete. The flow is good. Water temperature 105°F.

LEVLE REFERENCE

The R.L. datum is taken on top of the flange of the joint between the main casing and reduction head. A 2 in. x 2 in. peg is set amongst a pile of rocks 30ft. northwest of the bore.

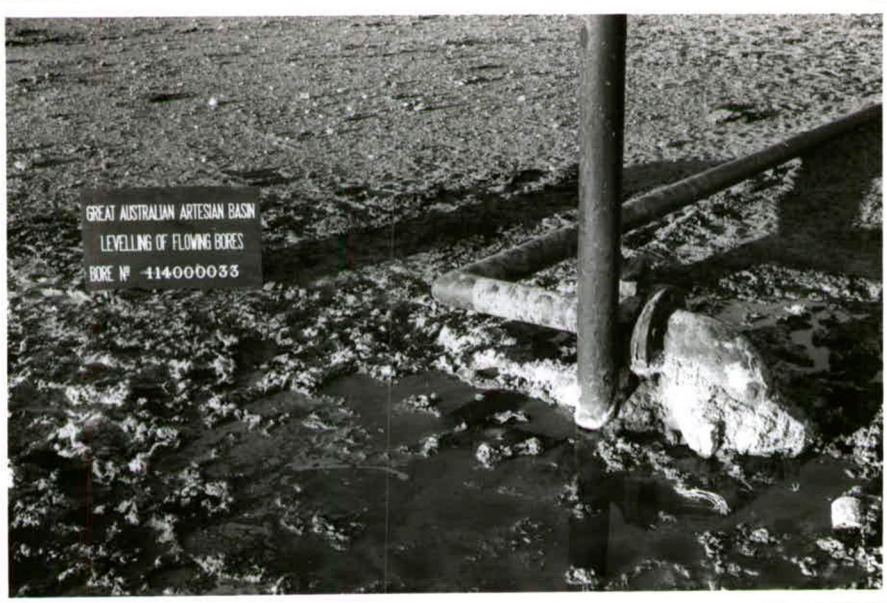
TRAVERSE NO.8

114000033 WOOLATCHI BORE

BM.Folder 3.

Grid K.4

20293



20294

LOCATION

This bore is on the east side of the main north south track from Mount Hopeless to Putnamutana Outstation and 0.2 miles north of D.L. BM.4977.

DESCRIPTION

The Woolatchi bore is just off the side of the track and consists of a 6 in. casing and 6 in. elbow joint at ground level, reducing to a 5

TRAVERSE NO.8 contd.

inch outlet pipe which leads to a tank and troughs. This bore is also equipped with a 5 in. vent pipe at the bore head. The bore seems to be in a reasonable condition although there is a pool of water at the bore head of unknown origin. Flow is intermittent but very hot, over 140°F, and much gas.

LEVEL REFERENCE

R.L. reference taken on the top of the outlet pipes at bore head. Also a 2 in. x 2 in. peg in the southwest corner of the tank yard.

TRAVERSE NO.9

125000006 MULOOWURTINA BORE

BM.Folder 2
Grid L.5

20295

20296

LOCATION

This bore is on the northern side of the main track from Patnamutana outstation to Hawkers Gate. The bore is alongside D.L. BM.4994.

DESCRIPTION

This bore consists of a 12in. casing with a reduction head of 12in. to 8in. and then 6 in., with one gate valve to 6 in. outlet. The bore is encased in concrete to within 3 in. of the underside of the main casing flange. All the equipment is in good condition and a good flow of water at 128°F.

LEVEL REFERENCE

R.L. Reference taken on flange of main casing and also a 2 in. by 2 in. peg 15ft. north of the bore under a bush.

TRAVERSE NO. 10

124000008 YANDAMA BORE BM. Folder 1.

Grid L.4.

LOCATION

This bore is located on the north bank of the Yandama Creek alongside the main track and 0.25 miles west of D.L. BM. 5005.

DESCRITPION

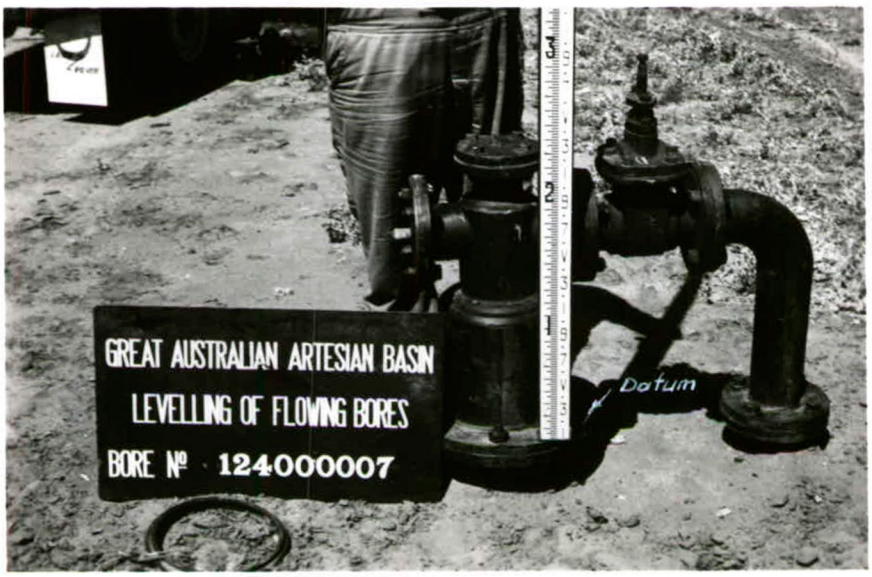
The main casing of the bore is 12 in., with a reduction head reducing to 8 in., and then to 6 in., through two gate valves. The outlet pipes from the two valves join at a 'Y' junction after 15 ft. and then onto a common outlet pipe for 60 ft. The bore is encased in concrete to 18 in. above ground level, and is generally in a good condition and has a fair flow. Water temperature 134°F

LEVEL REFERENCE

The R.L. datum is taken on top of the main to reduction casing flange. Also a 2 in. x 2 in. peg 20 ft. northwest of the bore under a bush.

TRAVERSE NO. 11 — BM. Folder 1

124000007 COONANDA BORE — Grid L. 4



20286

20287

LOCATION

This bore is found on the north side of the Yandoma Creek, 0.7 miles east of D.L. BM. 5017, and alongside the track 0.1 miles east of the Tilcha turn-off.

DESCRIPTION

The main casing of the bore is 8 in., with a reduction head, reducing to 6 in., then through one gate valve to a 5 in. outlet pipe. The outlet pipe is 45 ft. long and runs underground to the run-off drain. The bore is in good condition and has a fair flow. Water temperature 134° F.

LEVEL REFERENCE The R.L. Datum is taken on top of the main casing flange, also a 2 in. x 2 in. peg 20 ft. north of the bore under a bush.

TRAVERSE NO.12 (A)

124000005 TILCHA NO. 1 BORE DM.Folder 1.

Grid L. 4.

20292

LOCATION

Tilcha No.1 Bore is located on the south side of the Callabonna Creek at lat. 29°40'20"S. Long. 140°35'40" E. These coordinates were taken from S.A. Department of Mines Callabonna 4 mile sheet L66-101 Cd.

DESCRIPTION

Only the casing which is 8 in. is showing for 6 in. above ground level and is completely dry and abandoned.

LEVEL REFERENCE

The R.L. value is taken on the top of the casing.

TRAVERSE NO. 12 (B)

124000006 TILCHA NO. 2 BORE DN. Folder 1

Grid L.4

20289

20290

LOCATION

Tilcha No. 2 Bore is located on the north side of the Callabonna Creek at lat. 29°40'10"S. Long. 140° 36'10"E. These coordinates were taken from S.A. Department of Mines Callabonna 4 mile sheet. L66-101 Cd.

DESCRIPTION

The main casing is 8 in. encased in concrete to 18 in. above ground level. The head equipment is 10 in. with 6 in. outlets and one gate valve with 5 in. overflow 36 ft. long. The bore has a very strong flow and all equipment is in good repair. Water temperature 134° F.

LEVEL REFERENCE

The R.L. reference is taken on top of the main casing flange 10 in. above concrete surround. Also a 2 in. x 2 in. peg under bush 5ft. south of bore.

TRAVERSE 12 (B) contd.

20291

The Lake formed by the Tilcha (124000006) No.2 Bore one mile west of the bore outlet.

TRAVERSE NO.13 (A)

125000007 COOTABARLOW NO.1

DM. Fold vr 5

Grid L .5

20308

20310

LOCATION

This bore is located 3 miles east and 11.7 miles south of Mulcowurtina Bore (125000006) at lat. 30°16'40"S, long. 140°07'40"E. Access is gained by way of the north, south track from Mulcowurtina bore. These coordinate values were obtained from S.A. Department of Mines Frome 4 mile sheet

TRAVERSE NO.13(A)

(cond)

L66-103Cd.

DESCRIPTION

The daimeter of the main casing of this bore is 8 in. The head seems to be 6 in. with two gate valves with a 2 in breather pipe 8 ft. long rising vertically from the centre of the head. The outlet is 5 in. leading 20 ft. to the outlet. The water then falls 16 ft. into the drain which is cut into the sand dune in which the bore is situated and buried. To level the bore and gain access to the head we had to dig a reasonable amount of draft sand which covered it. The water flow is good and has a temperature of 125°F.

20309

LEVEL REFERENCE

The R.L. value is taken on the top plate of the bore head alongside the base of the breather pipe stop valve. Also a 2 in. x 2 in. peg 30ft. north of the bore under a bush.

TRAVERSE NO.15 (B)

125000009 COOTABARLOW NO. 3 Bk. Folder 3

Grid L.5

20306

LOCATION

This bore is 27 miles south and 4 miles east of the Mulcowurtina Bore and 4 miles east of the North south track at lat. 30°24'40" long. 140°11'40"E. These coordinate values were obtained from S.A. Department of Mines PROME 4 mile sheet L66-103Cd.

DESCRIPTION

This bore has 8 in. main casing with a reduction head which reduces to 6 in. diameter through 2 gate valves, then down to a 5 in outlet. The outlet is 20ft. long and leads into a small artificial pool and drain.

LEVEL REFERENCE

The R.L. value is taken on the top of the lowest collar 1 in. above ground level. A 2 in. x 2 in. peg is also placed 100ft. southwest of the bore under a tree.

TRAVERSE NO. 13 (C)

125000010 LAKESIDE BORE **D.H. Folder 4**

Grid L.5

20312

20311

LOCATION

Lakeside Bore is 23.4 miles north of Black Oak Bore (125000011) at lat. 30°43'20"S. long. 140°08'40"E. These coordinates were obtained from S.A. Department of Mines FROME 4 mile sheet L66-10XCd.

DESCRIPTION

This bore is thought to have a 6 in. main casing. The reason for the uncertaintly is that the bore is surrounded by a mound of concrete and salt sand. There also appears to be a leak from below the head. The bore is equippped with one gate valve and a 6 in. outlet, reducing to 3 in. after 5ft. from the valve. The outlet pipe leads to a tank and cattle trough.

Apart from the slow leak at the head all the equipment is in reasonable condition. There is a slow water supply which at times is intermittent. The water temperature is 115°F.

LEVEL REFERENCE

The R.L. datum is taken on the top sealer plate of the head. Also a 2 in. x 2 in. peg. 10ft. from the bore under the outlet pipe.

Apart from the slow leak at the head all the equipment is in reasonable condition. There is a slow water supply which at times is intermittent. The water temperature is 115°F.

LEVEL REFERENCE

The R.L. datum is taken on the top sealer plate of the head. Also a 2 in. x 2 in. peg. 10ft. from the bore under the outlet pipe.

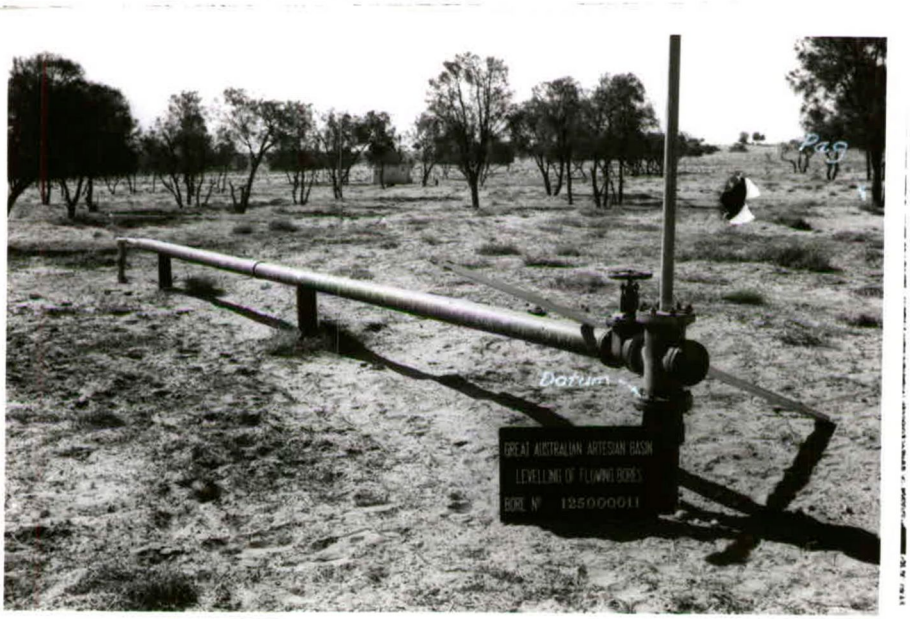
TRAVERSE NO.13 (D)

125000011 BLACK OAK BORE — **BM. Folder 5**

Grid L.5

20314

20313



LOCATION

This bore is 23.5 miles south of Lakeside Bore (125000010) at lat. 31°00'20"S., long. 140°12'40"E. These coordinates were obtained from S.A. Department of Mines CURNAMONA 4 miles sheet L67-88P1.

TRAVERSE NO. 13 (D) (contd.)

DESCRIPTION

This bore has a 6 in. main casing with a 6 in. head unit, and agate valve reducing to a 5 in. outlet 30ft. long. A 2 in. breather pipe is fixed vertically on the top scalar plate of the head. The outlet after 30ft. is reduced to 3 in. and is connected to a tank 150 ft. west of the bore. The flow is weak and intermittent and has a temperature of 100°F.

LEVEL REFERENCE

R.L. datum taken on the top of the lower flange of the head 22 in. above the ground. Also a 2 in. x 2 in. peg under a tree 50 ft. northwest of the bore.

TRAVERSE NO. 13 (E)

126000068 COOMBES BORE

D.M. Folder

Grid L. 6.

20318

LOCATION

Coombes Bore is 11 miles southwest of Black Oak Bore, (125000011) alongside the main track to Napiers Well and Prome Downs Station, and is situated at lat. 31°03'30"S. long. 140°02'20"E. These coordinates were obtained from S.A. Department of Mines CURNAMONA 4 mile sheet L67-88 F1.

DESCRIPTION

This bore has a 6 in. main casing which extends to 12ft. above ground level with a 2 in. outlet and stop valve 6 in. above ground level. The outlet is connected to a tank and trough 120 ft. south of the bore. The flow is very weak and has a water temperature of 95°F.

LEVEL REFERENCE

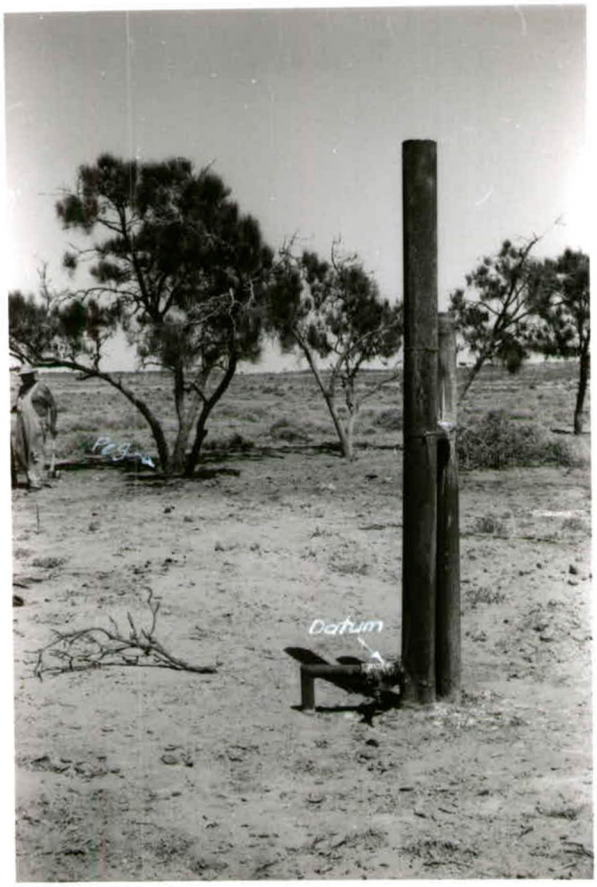
The R.L. datum is taken on the top of the outlet pipe next to the main casing. Also a 2 in. x 2 in. peg under a tree 40 ft. west of the bore.

TRAVERSE NO.13 (F)

116000011 McKENZIE BORE

D.M. Folder 5

Grid K.6



20315

LOCATION

This bore is alongside the main track from Napiers Wells to Black Oak Bore (125000011) and 6.7 miles north of Napiers Wells, at lat. 31°07'30"S. long, 139°58'20"E. These coordinates were obtained from S.A. Department of Mines CURNAMONA 4 mile sheet L67-88 F1.

DESCRIPTION

The main casing of this bore is 6 in. and extends to 12 ft. above ground level, with a 1½ in. outlet 12 in. above ground level connected to a tank and troughs 150 ft. northwest of the bore. The flow is very weak and has a water temperature of 95°F.

LEVEL REFERENCE

The R.L. datum is taken on the top of the outlet alongside the main casing. Also a 2 in. x 2 in. peg 6 ft. north in the bore enclosure.

SURVEY PHOTOGRAPHS

Typical sand dunes encountered during most of the 5th programme. The ones below were encountered on the Tilcha (124000006) bore traverse.

20320

Sand as encountered on the east side of Lake Frome

20319

CONCLUSIONS

It was proposed that the twentyfive flowing bores in the Great Australia Artesian Basin, that still remained to be levelled, should be attempted in a field trip of four weeks. This was thought to be possible, even allowing for the accuracy required. Unfortunately because of vehicular breakdown, we were unable to achieve our aim, but managed to complete nineteen bores. Of the six remaining bores, at least four have a difficult and ill-defined access, due to deterioration of the access tracks. It is thought that these bores could be levelled in a three week field trip.

Difficulty was encountered on several traverses where Department of Land bench marks were not apparent after a lengthly search. In all these instances it is thought that the bench marks have been buried during recent road widening of the Strzelecki Track.

In the case of Junction bore (104000043) and the Tilcha bores Nos. 1 (124000005) and 2 (124000006) stadia levelling was used throughout due to the inaccessibility of these bores. The resultant reduced level value is quoted to the nearest foot, even though both faces of the instrument were read. Because the average distance of sight was 1000 ft. combined with atmospheric influences and also a reasonable strain on the staff man, who is required to hold the 14 ft. staff vertically for at least 40 seconds at a time. This is very difficult to do even in a slight breeze, as was encountered during most of the survey. Even so it is accepted as being more accurate than barometric levelling which produces results quoted to ± 5 feet when used under the same conditions.

Nearly all the bores were reasonably easy to locate being well plotted on S.A. Department of Mines plans, or being easily identifiable from photographs and photo-mosaics. The only exception to this was Cootaberlow No. 3 (125000009) which had to be located and identified on the ground. The only information avail for this bore was obtained from the S.A. Department of Mines Seismic Survey. The

bore was located after an extensive reconnaissance of the approximate area, and has now been levelled and photo plotted. This information has now been transferred to the S.A. Department of Mines PROMR 4-Mile sheet L66-105 Cd.

NHE:JDH:JKD
6.2.1970

N.H. EDWARDS
TECHNICAL ASSISTANT
(SURVEY)

TABULATED LEVEL RESULTS

DATE: 9.12.69

S.A. DEPARTMENT OF MINES

DATUM: M.S.L. = 0 at Port Adelaide

Borehole level survey of G.A.A.B.

Surveyor: N. Edwards

Level book 357, 394, SFB.237,243

BORE NAME	Bore No.	State No.	R.L. Peg		R.L. Reference	Water Temp. °F.	Casing	Length of Traverse	Misclosure	Traverse No.	REMARKS
JUNCTION	43	104000043	312.00	95	No Access	-		10.3M	-	1	SFB 237, Page 31
MONTECOLLINA	3	11400003	29.26	9	30.40	103°	8"	2.1M	-	5	LB 394, " 34
METEOR	9	11400009	132.39	40	133.00	96°	8"	13.6M	-0.03	2	" 394, " 22
QUART POT	17	114000017	317.55	97	315.74	95°	6"	26.8M	+0.08	3	" 394, " 28
DEANS LOOKOUT	22	114000022	167.96	51	166.31	126°	6"	5.8M	-	4	" 394, " 32
PETERMORRA	23	114000023	182.64	56	183.27	105°	10"	9.7M	-0.05	7	" 394, " 35
LAKE CROSSING	25	114000025	36.67	//	No Access	115°		3.4M	+0.03	6	" 394, " 35
WOOLATCHIE	33	114000033	160.18	49	161.00	140°	6"	-	-	8	" 394, " 38
TILCHA No.1	5	124000005	-	59	193.00	-	8"	22.1M	-	12	SFB 243, " 40
TILCHA NO.2	6	12400006	201.00	61	203.00	134°	8"	22.1M	-	12	" 243, " 42
COONANNA	7	12400007	266.04	81	266.44	134°	8"	1.5M	-	11	LB 394, " 39
YANDAMA	8	12400008	122.34	37	123.33	134°	12"	0.5M	-	10	" 394 " 39
MULOOWURTINA	5	12500000	43.95	13	44.97	128°	12"	-	-	9	" 394 " 38
COOTABARLOW No.1	7	12500007	97.56	30	98.38	125°	8"			13A	" 394 " 43
COOTABARLOW NO.3	9	12500009	98.42	30	98.46	120°	8"			13B	" 394 " 48
LAKESIDE	10	12500010	129.78		132.97	115°	6"	106M	-1.3	13C	" 357 " 1
BLACK OAK	11	12500011	75.95		76.85	100°	6"			13D	" 357 " 6
McKENZIE	55	12600055	43.23		44.54	95°	6"			13E	" 357 " 9
COOMBES	68	12600068	38.93		39.17	95°	6"			13F	" 357 " 10
						MISCELLANEOUS BORES					
NURSERY	45	10400045			347.00	-	6"	5.2M	-	1	SFB 237 Page 22

OLD AND NEW BORE DATUM COMPARISON TABLE

NB: This is not a complete list of bore's levelled in the 5th programme but only those with datum previously applied

BORE	STATE NO.	OLD DATUM	YEAR	NEW DATUM	REMARKS
MONTECOLLINA	114000005	140.0	1919	30.40	
PETERBORRA	114000023	200.0	1899	183.27	
LAKE CROSSING	114000025	150.0	1897	36.67	Datum ground level
YANDAMA	124000008	160.0	1901	123.33	
LAKESIDE	125000010	153.9	1966	132.97	
COOTABARLOW	125000007	122.0	1966	98.38	
COOTABARLOW	125000009	121.0	1966	98.46	
COONANNA	124000007	275.0	1962	266.44	

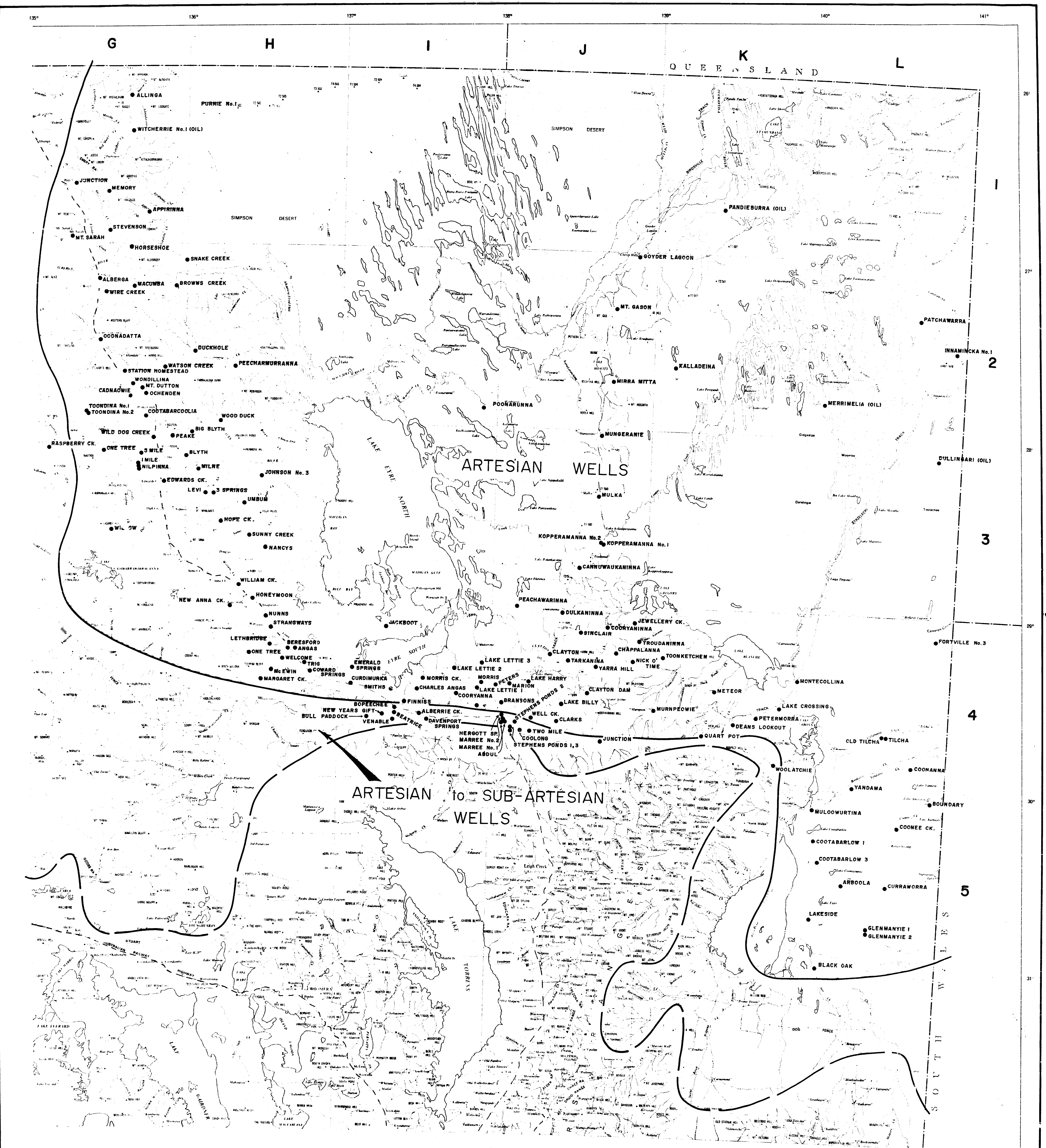


FIG. 4

	DEPARTMENT OF MINES–SOUTH AUSTRALIA	SCALE 1:1000000
COMPILED	GREAT ARTESIAN BASIN	DATE Nov. 1977
DRN R.H. CKD.	LOCATION OF WELLS INTERSECTING PRESSURE WATER	PLAN NUMBER 70–58