

**TERRAIN SURVEY
PORT AUGUSTA TO EUCLA**

This survey was made to test the feasibility of trenching and laying a trunk telephone cable between Port Augusta in South Australia and Eucla in Western Australia. The route proposed follows the Eyre Highway. Interest centres on the material between ground surface and a depth of five feet, and on hard rock as the principal hazard.

A traverse of 1,500 miles from Port Augusta to Eucla and return was carried out from 13th to 21st September, 1964. Geology was noted en route to Eucla, landform and plant associations on the return trip to Port Augusta.

Surficial materials (sediments, soils and weathered rocks) have been described for the various land units delineated, and the rippability of these materials has been described in general terms.

The information is presented in three volumes: Text and Tables, Plans, and Bore Logs. The tables supply information on the rippability of materials in each of the land units shown on the plans. Photographs are interleaved with table pages. The plans show the distribution of land units and contain comments on rock outcrop and local conditions along the route. Bore logs are supplementary and provide information on materials at depth and on the kind of quality of water available along the route. Plans, tables and photos are cross-referenced and are designed to be self-explanatory. Bore logs are arranged by plan and strip map number.

This survey can be later elaborated, if necessary, by photo-interpretation of alternate routes, and by photo-interpretation of proportions of the various materials traversed by the line within selected land units. Photo-interpretation is not expected to yield much useful information west of Ivy Tanks.

Rock samples are available for reference in the Department of Mines Core Laboratory at Thebarton.

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GEOLOGICAL SURVEY

Rept. Bk. 59/75
G.S. 2974
D.M. 1296/64

SPENCER GULF PROVINCE

Port Augusta to Lincoln-Eyre Highway Junction

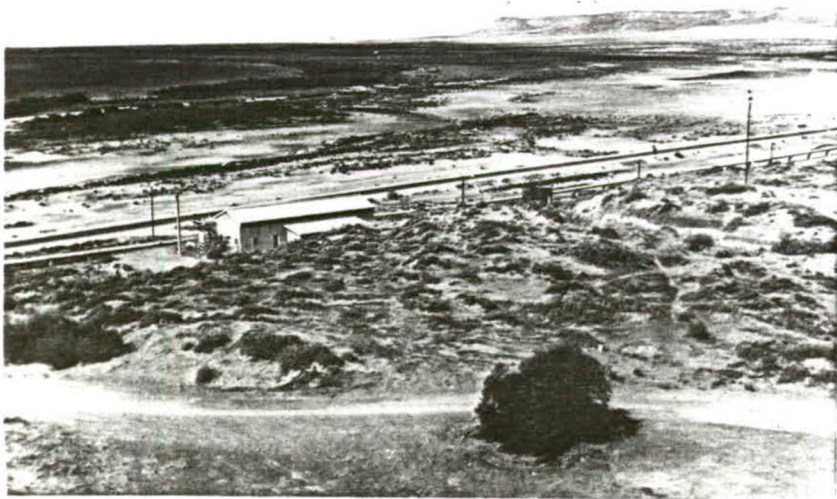
(Plan 1 Strip 1)

BASEMENT ROCKS: Sandstone, quartzite and shale

SURFICIAL DEPOSITS: Shelly sands and silts, deep sandy brown soils with soft lime horizons (kunkar), sands and clayey sands with lenses of gravel, shallow stony brown soils with hard kunkar at the base, talus.

REMARKS: See additional notes on plans. Flat valley floors offer no real problems, because a few feet of sand covers rippable gravel beds. Bedrock is closer to the surface below steeper slopes of valley walls and rises, but this is jointed and probably rippable to about 2 feet. Much hard ground can be avoided by keeping line away from tops of rises.

Plans: 64-640, 641, 642, 643, 644, 645, 646 and 756



1. Units 1,2,4 & 5. Plan 1. View from Lookout at Pt. Augusta across high level flats of Unit 2 to the tidal flats of Unit 1 on the left, and to the piedmont slopes of Unit 4 and the hills of Unit 5, both on the right.



2. Units 3 & 5. Plan 1, Strip 1. Looking south. Creek gravels of Unit 3, stoney brown soils of the flats in Unit 4, and hills of Unit 5.

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|---|---|---|
| 1 | Shelly sands and silts of the tidal flats. Saline, under water or saturated at high tide. See photo 1. | These deposits can be avoided by siting the line in the deep brown soils of the high level flats west of the Lincoln Highway. |
| 2 | Deep sandy brown soils with soft limy (kunkar) horizons. High level flats west of Port Augusta. See photo 1. | No trenching difficulties. |
| 3 | Sands and clayey sands with lenses of gravel found along creeks and in alluvial flats. Boulders of 12 ins. max. diameter common, large boulders occur in some places. See photo 2. | Easily rippable, but restricted to a narrow zone along creeks. |
| 4 | Stony brown soils with gypsum and lime in places. Gravel up to small boulder size. Found adjacent to alluvial deposits of the creeks and on the lower (piedmont) slopes. Deep near flats, becoming thin and bouldery near hills and rises. These deposits overlie Tricolana shale or slumped Simmons Quartzite. The base of the thin deposits near steeper slopes is marked by very hard residual (older) kunkar. These deposits give way to thin talus. (Angular gravel of granule to boulder size without a matrix) near the lower hill slopes. | Easily rippable to required depth near flats or to bedrock near hills and rises. |
| 5 | Quartzites and sandstones of the hills; Tricolana shale and slumped Simmons Quartzite of the foot-hills and lower hill (pediment) slopes. Quartzite is jointed near surface with joints about 1 foot apart. See photo 2. | Tricolana Shale rippable; sandstone and Simmons Quartzite can be ripped down an extra foot in places where jointing is close-spaced, but must be blasted elsewhere. |

MIDDLEBACK PROVINCE

Lincoln-Eyre Highway Junction to Section 9. Hd. of O'Connor

(Plan 1 Strip 1 to Plan 1 Strip 3)

- BASIMENT ROCKS: Schist, gneiss, calc-silicate rocks, hematite-iron formation, dolerite, porphyry and granite. Outliers of conglomerate and thin restricted veneers of sandstone in places.
- SURFICIAL DEPOSITS: Sands and gravels, brown soils (deep on the flats with softer kunkar, thin on the rises with hard sheet kunkar in places), brown and yellow clay under brown soil, variously weathered and jointed basement rocks.
- REMARKS: See notes on plans. Many rises and ridges where hard rock is near surface can be avoided by small variations in the route. The minimum depth of 2ft. can be achieved by ripping on most low rises, and full depth of 4 - 5 feet can be achieved by ripping on most of the flats.



3. Unit 8. Plan 1, Strip 1. View north west. Soils of the low rises in the Middleback Province. Tall "Myall" and other trees with a Mallee habit on the east side of the unit mark a somewhat deeper brown soil than usual.



4. Unit 7. Plan 1, Strip 3. Eucalypts with Mallee habit and "Myall" growing on a thin dark red brown soil over hard platy kunkar. Ferruginous gravel of an old land surface occurs at the base of the kunkar.

UNIT	MATERIAL	COMMENT
6	Sands and gravels of the creek courses	Rippable, but shallow in places over weathered bedrock.
7	Soils of the flats. Deep brown soils over kunkar from 18 to 24ins. Brown soils with poorly developed nodular kunkar over brown and yellow clay (residual soil derived from weathered bedrock)	Rippable to required depth in most places or to minimum depth where kunkar overlies bedrock. Easily rippable to full depth.
8	Soils of the low rises. Shallow brown soils with nodular or sheet kunkar over bedrock, or brown soils with hard kunkar at or near surface.	Most kunkar rippable. Depth of 2ft. can be achieved in most places. Bedrock (particularly quartz porphyry) will prevent ripping to greater depths and blasting will have to be carried out.
9	Weathered and jointed, but generally resistant basement rocks of the ridges and low rises. Sandstone; in places very hard, but jointed with blocks up to 2ft. x 2ft. Tregolana Shale; deeply weathered and jointed. Porphyry; weathered and veneered with platy talus Quartz-iron rock; generally hard, but deeply weathered and soft in patches. Quartzite; hard Granitic gneiss; weathered Dolerite; rotten, deeply weathered	Outcrops are shown on the maps. Rippable with difficulty to about 2ft. Rippable to at least 3ft. Not rippable, blasting required. Rippable only in patches. Blasting required elsewhere Can be picked easily to 6ins. May be rippable to 2ft. in most places. Where seen, veneered with soil. Probably rippable to at least 3 feet.

E Y R E P R O V I N C E

Section 9. Hundred of O'Connor to Karkulaby

(Plan 1 Strip 3 to Plan 2 Strip 3).

BASINMENT ROCKS: Granite and granitic gneiss with a thin veneer of Tertiary sands and clays.

SURFICIAL DEPOSITS: Sands, sandy brown soils (deep with weak kunkar horizons, shallow with hard kunkar in places), deep clays over weathered basement rocks.

REMARKS: In this unit shift off hill tops into valleys where hard rock occurs.



5. Unit 10. Plan 1, Strip 3. Weathered bedrock in quarry south of road. This is a shallow soil with sand over kunkar over weathered bedrock in the interdune swales.



6. Unit 11. Plan 2, Strip 1. View south showing deeply weathered rippable granite gneiss. This material is veneered with a thin sandy soil.



7. Unit 10. Plan 2, Strip 1. View south showing deep brown soil typical of this unit revealed in road cutting.



8. Unit 10. Plan 2, Strip 3. Deep brown soil typical of the unit.

10

Sandy soils, including brown soils, of the longitudinal dunes.

Sands: grey over yellow over reddish brown; 5-10 ft. thick with kunkar at the base in some places.

Rippable to base.

Sands of the interdune swales. Thin sand up to 1ft. thick over weathered bedrock; or 1ft. of sand over 2ft. of nodular kunkar over 2ft. of strongly weathered granite over about 5ft. of slightly weathered granite; or thin sand over Tertiary sands and clays.

Rippable through kunkar into weathered bedrock, but depths in granite in excess of 2ft. can only be achieved by blasting. Full depth can be achieved in soils on Tertiary sands and clays.

NOTE:

Deep soils with clay over weathered basement rocks are found between sand dunes in places.

Rippable to full depth.

11

Thin sandy soils of the marginal festoon dunes.

Soils with 6ins. of pale brown sand over 1ft. of mottled sandy clay over 1ft. of deeply weathered granite gneiss; or 6 to 12ins. of yellow-brown sand over sandy clay. Weak kunkar is present in some of the profiles.

Minimum depth can usually be easily achieved. Tertiary sands are rippable to full depth required. Some weathered gneiss is rippable to full depth except for hard bars, other gneiss under a thin veneer of sand cannot be ripped at all and blasting is necessary.

NOTE:

Deep soils with clay over weathered basement rock are found between sand dunes in places.

Rippable to full depth.

12

Large flats within the dune systems.

Shallow soils: 6ins. of sand over 6ins. of hard sheet kunkar over hard weathered basement rock; or 12ins. of sand over 2ft. of rubbly kunkar over 2ft. of weathered granite with hard granite lower.

Hard kunkar and hard granitic rocks require blasting.

Deep soils: sandy brown soil up to 2 feet deep over kunkar over weathered bedrock; or sand over residual clay soils developed on weathered granitic rocks; or sand over Tertiary Sands and clays.

Some weathered bedrock will require blasting if minimum depth is to be achieved. Other soils rippable to full depth.

S T R E A K Y B A Y P R O V I N C E

Karkultaby to Section 5, Hundred of Cohen

(Plan 2, Strip 3 to Plan 4, Strip 2)

BASEMENT ROCKS: Granite and granite gneiss overlain by Tertiary sands and clays and Pleistocene sands including "aeolianite." Granitic rocks crop out. Aeolianite does not crop out.

SURFICIAL DEPOSITS: Kunkar and younger brown soil with longitudinal dunes and poorly defined marginal dunes as a veneer.

REMARKS: See plans for comments along the route. Most of this area falls within Unit 13 where line construction is relatively easy.



9. Unit 13. Plan 2, Strip 3. Looking south west.
Thin dunes veneer heavy kunkar in this unit.



10. Unit 13. Plan 3, Strip 3. Roadside scrape in deep
brown soil typical of this area. See adjacent
profile on plan.

UNIT	MATERIALS	COMMENT
13	Brown soils on the southern margin of the longitudinal dunes. A poorly defined dune system with a N.W. - S.E. trend is usually apparent.	Minimum depth will be obtained throughout the unit. Maximum depth can be achieved in most places.
	These soils are usually at least 3ft. deep. Profiles up to 10ft. deep are not uncommon. Hard kunkar crops out at ground surface in some places. See photo 10.	
14	Thin brown soils with hard kunkar at or near ground surface near Capietha. Kunkar jointed in 6in. blocks in many places, but along some parts of the route blocks up to 5ft. x 3ft. x 2ft. occur. See photo 9.	Minimum depth can be achieved in most places. Greater depths rippable only with difficulty. Blasting required in some places.
15	Sands and silts of the tidal flats near Ceduna. Saline, saturated near ground surface.	Line could be routed due west from Section 9. Hundred of Benythen to by-pass Ceduna and this situation.

MOORABIE PROVINCE

Section 5. Hundred of Cohen to Section 24. Hundred of Miller.

(Plan 4 Strip 2 to Plan 5 Strip 1)

BASEMENT ROCKS: Granite and granite gneiss overlain by Tertiary sands and clays and Pleistocene "aeolianite" including sands. Granitic rocks do not crop out. "Aeolianite" does crop out.

SURFICIAL DEPOSITS: Munkar and younger brown soil. Longitudinal dunes and marginal dunes are not present, but the brown soils of the flats are deep in most places.

REMARKS: Small deviations could be made to avoid the hard material in Unit 18.



11. Unit 18. Plan 4, Strip 3. Heavy kunkar.
Blocks up to 4 x 2 x 1 feet (and some
larger) occur on all rises in this area.

UNITS

MATERIALS

COMMENT

- 16 Thin brown soils over aeolianite of the coastal zone. Not intersected by route in this unit.
- 17 Brown soils of the flats between resurrected aeolianite dune systems. Soils are at least 3 or 4 ft. deep in most places and contain weak platy kunkar. Heavy kunkar has been recorded in some places. Rippable to at least 3 feet. Full depth of 5ft. can be achieved in some places. Blasting may be required in the few places where residual kunkar occurs.
- 18 Soils of the stripped "aeolianite" dunes. Typically 6 ins. of light brown sand with hard nodular kunkar, over 6 ins. of platy and pebbly kunkar over 1 ft. red brown sand over hard calcareous sandstone (aeolianite). This material has joints about 2 ft. apart. See photo 11. Blasting will probably be required, but many difficult situations can be avoided by keeping the route off the rises.

NOTE: Blocks of heavy kunkar up to 4 x 2 x 1 ft. occur on all rises.
Brown soil in the valleys is at least 3ft. deep.

E U C L A P R O V I N C E

Section 24. Hundred of Miller to Eucla

(Plan 3, Strip 1 to Plan 7)

BASEMENT ROCKS:

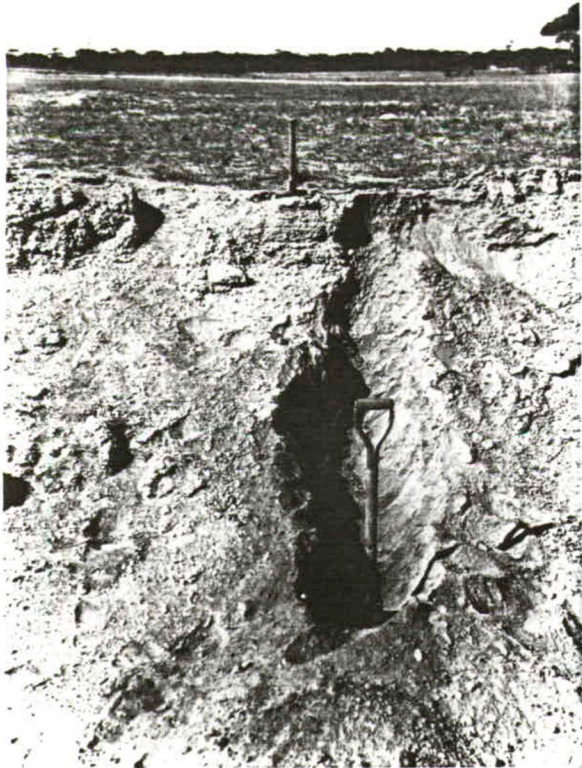
Nullarbor Limestone and other sediments of the
Eucla Basin.

SURFICIAL DEPOSITS:

Kunkar and younger brown soil.

REMARKS:

Numerous outcrops near sinkholes in the hard Nullarbor Limestone divert attention from the fact that much of this unit is veneered with sands and brown soils. These are quite deep in places and a minimum depth can probably be achieved without excessive blasting. The route should be chosen on the ground, diversions away from hard rock being made wherever possible.



12. Unit 19. Plan 5, Strip 1. Deep brown soils east of Colona Well.



13. Unit 19. Plan 5, Strip 1. Hard kunkar at or near surface near Colona Well.



14. Unit 21. Plan 5, Strip 2. Kunkar in sandy profile at least 5 feet deep developed in festoon dune.



15. Units 21 & 23. Plan 5, Strip 3. Soft kunkar near surface of dune in Unit 21. Beyond is flat ground of Unit 23.



16. Unit 23. Plan 5, Strip 3. Thin red brown sand over hard, brittle kunkar. Depth to Nullarbor Limestone not known.



17. Unit 25. Plan 6, Strip 3. Near Albalakaroo. Brown soil profile. Nullarbor Limestone crops out on ridge in distance.



18. Unit 26. Sinkhole in Nullarbor Limestone. Open mallee with sparse underbrush marks areas of shallow soil and outcrop in this unit.



19. Unit 27. Large sinkhole south of road. Some of the subsidence occurred post development of the deep brown soil profile.

UNITS

MATERIALS

COMMENT

- 19,20,21,22 Deep brown soils with nodular or thin platy humker of the undulating landform to the east of the Nullarbor Plain. Veneered with older poorly developed festoon dunes in places near Colona and Tallewan Tanks (Unit 19 - see photo 12), with younger well developed festoon dunes near Ivy Tanks (Unit 21 - see photos 14 and 15). Designated Unit 20 where no festoon dunes occur.
- NOTE:** Strongly undulating country near and between Colona and Tallewan has very hard humker on the tops of the hills. See photo 13. This may overlie hard Nullarbor Limestone. Deep brown soils in the valleys.
- NOTE:** Thin sand cover of the blow-out dune area west of Ivy Tank (Unit 22) does not significantly modify soils of Unit 19 which it overlies.
- 23,24,25,26 Combination of very shallow soils, (with hard humker over Nullarbor Limestone or hard limestone at surface), and very deep brown soils exposed to a depth of 5ft. and more in places. This situation appears as a north-west trending pattern of depressions and sandy rises. Probably a fossil dune system (Unit 23-photos 15 and 16); as a similar pattern with wide grassy flats (Unit 24); as a very thin and poorly developed festoon dune pattern (Unit 25-see photo 17) and as a plain with deeper soils marked by Mallee and Myall and with shallow soils over Nullarbor Limestone marked by open tracts vegetated with sparse under-shrubs (Unit 26-see photo 18). Large dolines, as at Wigunda Tanks, are almost completely in-filled to form shallow oval depressions.
- 27 Thin brown soils over Nullarbor Limestone. Deep brown soils do occur, but the transition from a deep brown soil to limestone and back to a deep brown soil can occur in as little as 30 feet. See photo 19.
- Rippable to full depth. Dunes near Ivy Tank easily rippable, but could hinder vehicle movement.
- Deviations could be made to take line away from tops of rises. Blasting required in some places despite minor deviations.
- Estimate of amounts of various materials is: Deep soil 40% shallow soil 30%, limestone with a thin discontinuous soil cover of sand. 10%. Some blasting may be required in shallow soil to achieve minimum depth particularly in Unit 19. Blasting will be required where route cannot be varied to avoid rock.
- Changes from one soil type to another occur at various distances between about 200 and 800 yards.
- Unit 22 west of Runaburie is characterized by shallow soils than elsewhere, but depths of at least 2ft. and up to 4 feet in places will probably be achieved.
- A combination of ripping and blasting will probably yield minimum depth across the unit. A suitable route may be selected by avoiding visible outcrop and more open ground.

M A D U R A P R O V I N C E

Eucla West

(Plan 7)

BASEMENT ROCKS:

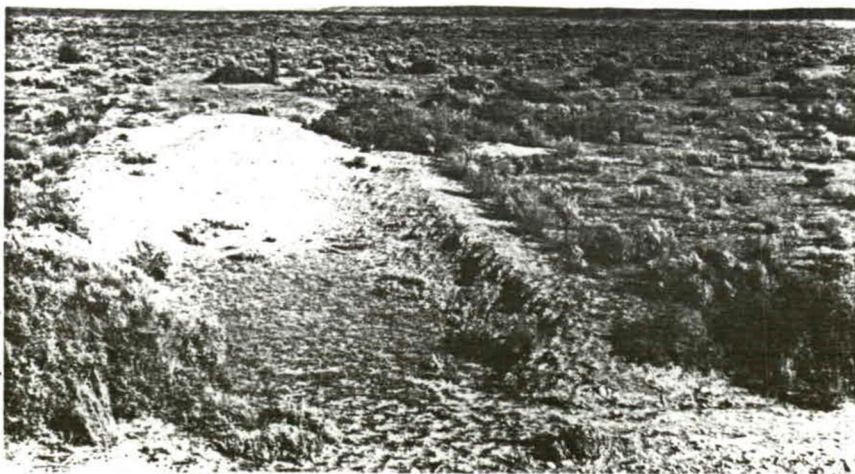
Tertiary limestone. (Mesozoic siltstone, mudstone and greensand rests upon a gneissic granite at depth).

SURFICIAL DEPOSITS:

Talus of the cliffs backing the plain, deep brown soils, sands of the beaches and modern dunes, Pleistocene shelly limestone.

REMARKS:

No difficulty is expected on the east end of the plain. The Pleistocene limestone occurs at ground surface in some places west of Eucla and this may require blasting.



20. Unit 28, Plan 7. Roadside scrape in brown soil between Eucla Pass and the Old Telegraph Station. The scarp in the background is a stranded marine cliff.



21. Unit 29, Plan 7. Sands of the modern dunes encroaching on the homestead near the Old Telegraph Station. This material may cover the line in this area and further east near Jubilee Well.

UNITS	MATERIALS	COMMENTS
28	Talus slopes of the stranded marine cliff at Eucla, deep brown soils of the coastal plain.	The line can be taken down to the plain through deep gravel (granule to pebble size) of the talus slopes. The brown soils of the plain should be rippable to full depth in most places.
29	Sands of the beaches and modern dunes.	Not important at present, but may cover the line eventually near the Old Telegraph Station at Eucla, and further east near Jubilee Well.

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	depth sea level	Strata passed through	Remarks
1	38	308°	308°	300°	-	451.40 809.47	2/585 9/2700		<u>Plan 1. Strip 1</u> 0° - 5° Gravel. 5 - 10° Do. 10 - 15° Do. 15 - 20° Sharp sandstone-loose boulders. 20 - 50° Do. 50 - 110° Pink slate. 110 - 165° Brown sandstone. 165 - 175° Solid pink slate. 175 - 220° Brown slate. 220 - 245° Soft slate. 245 - 308° Brown slate.	Bore A. Folder 14 Hd. Gillen A.J. & P.A. McBride.
1	PL1661 BLK807	519°	178°	100° 95° 95°	v. large 800 800	ATS1550 ATS1600 ATS2150	86/1329 101/18 107/1012		<u>Strip 2</u> 0 - 3° Travertine in sandy soil, traces ironstone grit. 3 - 12° Limy clay with traces ironstone grit, quartz sand and fragments of red shale. 12 - 24° Red clay with quartz sand and hematite grit. 24 - 33° Red sandy clay with quartz sand and hematite grit. 33 - 37° Stiff red clay with traces iron- stone grit. 37 - 50° Red clay with ironstone and quartz grit and white clay pellets. 50 - 65° Ditto. 65 - 80° Ditto, but more clayey. 80 - 87° Near white clay with white, quart- zite grit. 87 - 100° Near white clay with quartzite and ironstone grit. 100 - 103° } Pale pink and gray plastic clay 103 - 109° } with very little hematite grit. 109 - 115° Ditto but clay with yellow and gray patches. 115 - 124° Off-white plastic silty clay; no grit. 124 - 131° (Slightly greenish) gray plastic clay with 5% hematite. 131 - 145° } Ditto, almost no grit. 145 - 170° } 170 - 178° Ditto; also small pieces of gray and green shaly sandstone.	Bore 1. Folder 52/- D. Hines Is n Kach. Back- course Area.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	sea level			
1	PL1661 BLK807	519'	178'	100' 95' 95'	v. large 800 800	ATS1550 ATS1600 ATS2150	86/1329 104/18 107/1012	AT	178'	<u>Strip 2 (Contd.)</u> Struck water which rose to 100', ATS 1550.	Bore 1 Folder 52/- D. Hines Iron Knob. Race- course Area.
									178 - 183'	Brown clay with 20% grit (quartz, shale and minor hematite).	
									183 - 192'	Medium and coarse grit in clay (quartz, hematite, schist etc.). Hematite increasing with depth.	
									192 - 195')	Fine sand, 50% hematite, also limonite, quartz.	
									195 - 200')		
									200 - 205'	Ditto but higher proportion of limonite.	
									205 - 210'	Fine grit and clay (10% hematite, 10% red schist, also limonite).	
									210 - 215')	Red schist gravel, traces hematite.	
									215 - 220')		
									220 - 225')		
									225 - 230'	Ditto in stiff red clay.	
									230 - 235'	Ferruginous gravel with red clay.	
									235 - 240'	Ditto with much limonite and occasional white clay pellets.	
									240 - 245'	Ditto, no clay pellets and with fragments of hematite.	
									245 - 250'	Limonite and hematite gravel with red schist pebbles.	
									250 - 260')	Red schist gravel in clay (30% grit). Traces quartz.	
									260 - 275')		
									275 - 275½'	Core: Black, brown and red ferruginous clay, rich in iron.	
									275½ - 280'	Brown clay, 30% grit (quartzite, minor limonite).	
									280 - 282'	Very hard brown limonite, much hematite, some clay.	
									282 - 285'	Impure hematite and limonite with some clay - hard.	
									285 - 290')	As 282'-285', but slightly softer.	
									290 - 295')		
									295 - 300')		
									300 - 305')		
									305 - 312')		

Core	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	Depth feet sea level	Remarks	
1	PL1661 BLK807	519'	178'	100' 95' 95'	v. large 800 800	ATS1550 ATS1600 ATS2150	86/1329 104/18 107/1012	312 - 315' 315 - 320' 320 - 325' 325 - 330' 330 - 333' 333 - 335' 335 - 339' 339 - 344' 344 - 346' 346 - 350' 350 - 355' 355 - 360' 360 - 365' 365 - 370' 370 - 375' 375 - 380' 380 - 385' 385 - 390' 390 - 395' 395 - 400' 400 - 405' 405 - 407' 407 - 412' 412 - 415' 415 - 419' 419 - 425' 425 - 430' 430 - 435' 435 - 440' 440 - 450' 450 - 460'	Hematite sand, traces magnetite and red brown clay, soft boring. Ditto, less clay, moderately hard boring. Hematite and red brown clay, minor magnetite and limonite. Hematite, minor clay, magnetite and limonite. Hematite and red brown clay, minor magnetite and limonite. Hematite, minor clay and magnetite. Ditto with slightly more clay and hematite is coarser grained. Ditto, with more clay. Hematite and dark brown clay with minor magnetite, granulated, with some lumps to 1". Moderately hard boring. Hematite, big lumps common, less clay, otherwise similar to above. Black hematite, little or no clay, minor magnetite, very hard. Hematite and much dark red brown clay, limonite, white quartzite and minor red quartzite. Ditto, little quartzite. Pieces of concretionary earthy limonite-hematite. Red brown clay, red jaspery shale, black shale, white quartzite (?), less limonite and hematite than above. Clayey hematite, drusy quartzite, including some oolitic chert. Yellow and brown limonite, brown and red jaspery shale. Red brown clay with hematite fragments. Grit of ferruginous sandstone, quartzite, jaspery shale.	Bore 1. Folder 52/- D. Minas. Iron Knob Race course area. Co. Hanchester.

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	Sea level		Remarks
1	PL1661 Blk.807	519'	178'	100' 95' 95'	Large 800 800	ATS1550 ATS1600 ATS2150	86/1329 104/18 107/1012		Strip 2 (Cont.) 460 - 470' Dark red brown clay, traces of grit (hematite, quartzite and jasper shale). 470 - 480' Ditto, plus large fragments of quartzite and quartzite breccia. 480 - 497' Dark red-brown clay, plus large fragments of red, yellow and black banded oolitic clay rock, possibly a hematite ore in the process of development. 497 - 505' Dark red brown clay with a little grit of hematite, quartzite, red shale and hard white clay. 505 - 510' } Brown and greenish mottled silty clay schist; a little hematite, probably from above. Traces of quartz grit. 510 - 517' } 517 - 519' Coarse; Brown and greenish, mottled silty schist, very brecciated.	Bore 1. Folder 52/- D.Mines Iron Knob Race Course area. Co. Manches- ter.
2	PL1656 Blk.91	66'	11'	6'	-?	-?	-?		0 - 10' Sandy and clayey soil -redbrown. 10 - 15' Very sandy and gravelly (fine to coarse) clay - yellow brown. 15 - 35' Missing. 35 - 40' Very fine to coarse sandstone-yellow brown. 40 - 55' Fine to very coarse sandstone-consolidated in part. 55 - 66' Quartzite-reddish.	Bore S.N. 91/Gh. Bore No. 53. Out of Hds. Co. Hore-Ruthven Highway's Bore No.48.
3	PL1656 Blk.91	80'	15'	8'	-?	-?	-?		0 - 40' Missing. 40 - 50' Very fine to coarse quartz and quartzite sand and grit - rare mica - reddish brown. 50 - 80' As above.	Bore S.N. 102/Gh. Bore No. 54. Out of Hds.Co. Hore-Ruthven. Highway's Bore No.47
4	PL1825 Blk.218	190'	47'	30'	-?	-?	-?		0 - 15' Red calcareous clay-abundant limestone rubble. 15 - 35' Very fine to coarse ferruginous quartz sand - rare small limestone fragments. 35 - 47' Very fine to medium sandy clay - rare pockets of white clay. 47 - 60' Slightly clayey fine to medium quartz sand - some white clay pockets.	Bore S.N. 81/Gh. Bore No. 55 Out of Hds. Co. Hore- Ruthven. High- way's Bore 46.

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
4	PL1825 BLK218	190'	47'	30'	-7	-7	-7		60 - 75 ^{Strip 2 (Contd)} Slightly sandy and gritty clay - pale red brown. 75 - 85' Missing. 85 - 90' Fine sandy clay - gray and yellow mottled. 90 - 110' Very clayey fine to coarse sand (wellrounded) - light-brown - quartz grains often ironstained. 110 - 120' As above - light brown. 120 - 159' Missing. 159 - 171' Quartz and quartzite gravel - redbrown. 171 - 190' Missing.	Bore S.N. 81/64. Bore 55. Out of Hds. Co. Bore-Ruthven. Highway's Bore 46.
5	"	108'				salt			1 - 20' Red clay. 20 - 80' White pipe clay. 80 - 108' Blue pipe clay with salt water.	Bore No. 34 F. 1/10. Out of Hds. Co. Bore Ruthven. W.H. Heaslip.
6	"	128'	45-50' 110-128'	30'		salt	-	-	0 - 1' Not stated. 1 - 45' Pipe clay. 45 - 50' Gravel, struck salt water. 50 - 65' Gritty clay. 65 - 100' Soft clay. 100 - 110' Rock. 110 - 128' Yellow clay. Struck inexhaustible supply of salt water, rose to within 30' of surface.	Bore No. 2 F. 1/10 Out of Hds. Co. York W.H. Heaslip.
7	"		44' 109-117'	36'	1,000	AT31100-121/62 " " 12125/62			0 - 2' Light brown sandy clay with limestone nodules. 2 - 6' Brown sandy clay with abundant sub-angular quartz grit. 6 - 34' Red brown clayey fine sand with abundant subangular grit and gravel. 34 - 44' Pink clayey fine sand and grit. 44 - 60' Cream soft lateritic sandstone gravel with quartz grit and ironstone gravel. 60 - 100' Yellow brown clayey fine sand and grit. 100 - 109' Yellow and grey clays with lateritic sandstone gravel. 109 - 117' Gray coarse angular quartz grit and gravel. 117 - 128' Gray medium grained granitic gneiss.	Bore No. 1 F. No. 78/- Out of Hds. Co. York H.L.O.D. Bore No. 45.

BORE	EC ION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Remarks
									Plan 1. Strip 1
1	33	165°	28-35°	15°	700	AT31100+	LM118/62	0' - 1'6" Brown clayey fine sand. 1'6" - 23' Mottled brown and gray sandy clay. 23 - 28° Yellow brown and gray sandy clay. 28 - 42° Bluish gray sandy clay. 42 - 76° Yellow brown and gray sandy clay. 76 - 80° Pink and yellow clay with rounded ironstone gravel. 80 - 86° Red brown yellow and gray clay with ironstone gravel. 86 - 120° White gritty clay with lateritic sandstone gravel. 120 - 165° White gritty clay with mica.	Bore No. A Folder No.1/- Hd. O'Camor Vide Plan 62-432.
2	22	91°	74°	70°	2000 G.	ATS 1100+	LM573/61	0 - 1° Brown sandy soil. 1 - 20° Yellow brown and gray sandy clay. 20 - 27° Light brown clayey sand and grit. 27 - 36° Yellow clayey fine sand and grit. 36 - 43° Light gray sandy clay with abundant quartz grit. 43 - 65° Cream sandy clay with mica. 65 - 72° Cream gritty kaolin with fragments of mica schist. 72 - 76° Light gray weathered mica schist with quartz veins. 76 - 91° White dense quartz with fragments of mica schist.	Bore No. A, Folder No. 2/- Hd. Barna H.&L.G.D. Bore 27. Vide final plan 62-432.
3	Rd. ad. 6	175°	126°	110°	100	AT31100+	LM126/62	0 - 6" Light brown sandy soil. 6" - 2° Red brown sandy clay. 2 - 7° Light brown gritty clay. 7 - 35° Light brown clayey fine-coarse sand and grit. 35 - 37° Pink and white gritty clay. 37 - 101° Cream clayey fine-coarse sand and grit and gravel. 101 - 118° Cream and white gritty clay. 118 - 122° Light gray decomposed quartz felspar schist. 122 - 126° Cream gritty and micaceous clay.	Folder No.3/- Bore No. A. Hd. Hossley H.&L.G.D. Bore 49. Vide plan 62-432

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
									<u>Strata I (Contd)</u>	
3	Rd. Adj. 6	175°	126°	110°	100	ATSI100	LT126/62		126 - 134° White clay with abundant sub-angular quartzitic grit, gravel and boulders.	Folder No. 3/- Bore No. A Hd. Hossley H. & L.G.D. Bore 49 Vide Plan 62-432
									134 - 136° Light gray clayey quartz grit.	
									136 - 170° Cream micaceous and gritty clay.	
									170 - 175° Light gray mud schist with abundant quartz.	
4	Rd. Adj. 15	174°	98° 137°	75° 75° 95°	small 500 2000	ATSI100	LT121/62 " 122/62 " 123/62		0 - 2° Red brown sandy soil.	Bore No. A
									2 - 45° Light brown gritty clay.	Folder No.
									45 - 68° Pink clayey fine-coarse sand with pockets of white gritty clay and sub-angular grit.	2/- 2A/- Hd. Hossley H. & L.G.D. Bore 43.
									68 - 76° Buff clayey fine-coarse sand with abundant sub-angular grit.	Vide Plan 62-432.
									76 - 96° Light brown clayey fine-coarse sand and grit.	
									96 - 101° Brown and gray medium-coarse grained clayey sand.	
									101 - 105° Grey sandy clay with mica.	
									105 - 125° Buff clayey fine sand with mica.	
									125 - 134° Light grey fine sand and silt with abundant mica.	
									134 - 138° White clayey fine sand with abundant sub-angular quartz grit, gravel and green clay.	
									138 - 146° Green clay with abundant sub-angular grit and mica.	
									146 - 148° Yellow fine sand with abundant sub-angular grit.	
									148 - 168° Buff fine-coarse sand, grit and gravel with sub-angular quartzite boulders.	
									168 - 174° Cream medium grained sand and grit with coarse angular quartzite gravel.	

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
5	Crown Land 126° N.W. Corner of Hd.		112°	84°	100	MS1100+	P1014?		0 - 1' No sample - Driller reports chocolate clay. 1 - 23' Brown sandy clay with abundant sub-angular quartz grit. 23 - 28' Gray clay with mica and abundant quartz grit and gravel. 28 - 48' Brown sandy clay with grit. 48 - 72' Brownish grey sandy clay with abundant mica, and fragments of decomposed mica schist. 72 - 79' Brown sandy clay with abundant mica. 79 - 110' Light brown sandy clay containing fragments of weathered schist. 110 - 118' Gray sandy clay with quartz gravel and abundant mica. 118 - 126' Gray fine grained quartz mica schist.	Bore No. 1. Folder No. 4/- Hd. Kelly. E.L.J.D. Bore No. 50. Vide Plan No. 62-432.
6	126	50°							0 - 1'3" Brown and red brown mottled sandy clay with small lime pockets and occasional travertine nodules, increasing somewhat with depth. Hard and dry. 1'3" - 2'8" Pale reddish brown sandy, limy clay with abundant small lime pockets and some small travertine nodule. Small pockets of dark brown or red brown clay. 2'8" - 3'10" Mainly red brown clay, somewhat sandy with abundant whitish lime pockets and lime grit fragments. 3'10" - 4'8" Red brown clay with pockets of highly weathered granite (mainly angular quartz grains, yellow brown decomposed feldspar and ochreous material (increasing)). 4'8" - 8' Weathered granite i.e. mainly assorted coarse angular quartz grit with abundant white kaolin clay and fairly numerous fragments of yellow brown ochreous material. 8 - 10' Ditto, but becoming coarse angular quartz grains with abundant white kaolin clay. 10 - 12' Weathered granite i.e. coarse angular quartz grit, white kaolin clay and a little yellow brown ochreous material and decomposed biotite schist.	Bore No. 4 Folder No. 4/- Hd. Solomon. Bore No. 1 Folder No. 4/- Hd. Solomon

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
6	126	50'							<u>Stria 1 (Contd.)</u> 12 - 15' Highly weathered granite, consisting of small quartz grains, white kaolin and greenish grey weathered feldspar. Few small mica flakes and small fragments of yellow ochreous material. Soft and friable. 15 - 18' Friable whitish decomposed granite. Essentially fine grained angular quartz grains and soft powdery kaolin. Subordinate amount of brown and yellow brown material. 18 - 20' Friable whitish decomposed granite. Essentially fine grained quartz grains with fine powdery kaolin. Small pockets of yellow brown ochreous material. 20 - 45' Very highly decomposed leuco-granite consisting mainly of white kaolin and lesser coarse angular quartz grains. Some slight yellow brown and reddish brown ochreous material. Soft and friable. 45 - 50' Decomposed leuco-granite; i.e. coarse angular quartz grains with fairly abundant light yellow brown decomposed feldspar (clay) and ochreous material. Some whitish kaolin pockets.	Bore No. A Folder No. 4/- Hd. Solomon
7	"	4'1"							0 - 1'3" Brown and red mottled sandy clay with small lime pockets and occasional travertine nodules, increasing somewhat with depth. Hard and dry. 1'3- 2'8" Pale reddish brown sandy, limy clay with abundant small lime pockets and some small travertine nodules. Small pockets of dark brown or red brown clay. 2'8"- 3'10 Mainly red brown clay, somewhat sandy with abundant whitish lime pockets and lime grit fragments. 3'10- 4'8" Red brown clay with pockets of highly weathered granite (mainly angular quartz grains, yellow brown decomposed feldspar and ochreous material; (increasing).	Bore No. B Folder No. 5/- Hd. Solomon

Bore No.		Grains passed through		Remarks					
Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	sea level			
8	165	110°	60° 70°	60° 57°	small 80	AT31100+		<u>Strin 1 (contd)</u> 4 - 10° Red brown sandy and gritty clay. 10 - 20° Brown and grey sandy clay with quartz grit and lateritic gravel. 20 - 30° Pink clayey fine sand and grit. 30 - 61° Light brown silty fine sand with abundant grit and mica. 61 - 106° Light brown clayey fine sand and grit with abundant mica and fragments of weathered quartz feldspar gneiss. 106 - 110° Medium grained quartz feldspar gneiss and fine grained dark grey amphibolite.	Bore No. a Bore 13A. Folder No. 10/- Hd. Solomon Vide Plan 62-432. H.A.L.G.D. Bore No. 13A.
9	Rd. ad. Roz. 41	90°	60° 75-79° 60-75° 60-75° " " "	44° 45°	Small "	ATS 69 " 88	LN306/61 LN307/61 LN308/61 LN335/61 LN336/61 LN337/61 LN338/61 LN339/61 129/1469	1 - 3° Brown sandy soil. 3 - 8° Brown sandy clay with abundant sub-angular gravel. 8 - 15° Red brown sandy and gritty clay. 15 - 20° Light brown sandy and gritty clay. 20 - 46° Light brown clayey sand and grit. 46 - 56° Light brown clayey fine sand and grit with fragments of highly weathered gneiss. 56 - 60° Light brown clayey fine sand and silt with abundant mica and quartz grit. 60 - 74° Grayish brown micaceous clay with fine sand and abundant sub-angular quartz grit. 74 - 81° Light brown sandy and gritty clay with abundant mica. 81 - 90° Light Gray medium grained quartz feldspar gneiss.	Bore No. A Folder No. 8/- Hd. Solomon. H.A.L.G.D. Bore No. 13.

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BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	39	90' 87	64' 87	-	small small	1639.13 3 oz. 1839	3/896 Plan 61-1/1		<u>Plan 2. Strip 1</u> No details.	Bore No. A. Folder No. 1/2 Ed. Solomon. Balum Bah Govt. Bore. Abandoned
2	Rd. Res Adj. 27	66'	50'	29'	100	ATS 11004	LM 215/61		0' - 2'6" Light brown sandy soil. 2'6" - 6' Mottled grayish-brown sandy clay with pocket of white clay, quartz grit and mica. 6 - 18 Pink clayey fine sand with quartz grit and lateritic gravel. 18 - 30 Light brown clayey fine sand with angular quartz grit and lateritic gravel. 30 - 40 Cream slightly clayey fine sand with quartz grit. 40 - 50 Cream fine grained friable sandstone with abundant sub-angular quartz grit. 50 - 60 Buff sub-angular quartz grit with fine sand and mica. 60 - 64 Pink medium grained granite boulders with quartz grit and sand. 64 - 66 Pink medium grained weathered granite (dense).	Bore No. D. Folder No. 6/- Ed. Solomon. Vide Plan 62-432. Abandoned.
3	27	120'							No details.	Bore No. B. Ed. Solomon. Plan 61-1/1
4	27	180'		170'	small	1191.37	12/3/99		No details.	Bore No. A. Ed. Solomon. Jericho's Bore.
5	26	101'5"	101'	95'	small 200gpd	1 1/2 oz. 750	Plan 61-1/1		No details.	Bore No. A. Folder No. 1/1 Ed. Solomon. Government Bore Abandoned.
6	2'	172'	168'	160'	Seepage	ATS 11004	LM 37/62		0' - 1' Brown sandy soil. 1 - 5 Brown sandy clay with limestone nodules. 5 - 25 Red-brown sandy clay with sub-angular quartz grit. 25 - 45 Pink gritty clay with ironstone gravel. 45 - 65 Light brown gritty clay. 65 - 95 Pink and white clay with ironstone gravel. 95 - 145 Light brown gritty clay with fragments of dark grey amphibolite. 145 - 150 Grey clayey fine-coarse sand with abundant sub-angular quartz grit, and amphibolite gravel. 150 - 172 Brown gritty clay with gravel and boulders of dark grey amphibolite.	Bore No. A. Folder No. 10/- Ed. Panitya. Vide Plan S3003. Abandoned.

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
7	Rd. Res. Adj. 4	155'	122' 122'	75' 100'	1500 1500	ATS1100+ " 1100+	LW 485/6 LW 486/64		<u>Plan 2. Strip 1.</u> 0' - 6" Brown fine sand. 6" - 3' Brown sandy and gritty clay. 3 - 16 Light brown clayey fine sand and grit. 16 - 26 Red-brown sandy clay. 26 - 43 Grey sandy clay with abundant sub-angular grit. 43 - 93 Light brown sandy clay with pockets of grey gritty clay. 93 - 116 Light grey sandy clay. 116 - 122 Grayish-brown slightly clayey fine-coarse sand and grit. 122 - 129 Yellow-brown medium-coarse grained sand and grit. 129 - 131 Light grey sub-angular quartzitic gravel and coarse sand. 131 - 135 Light brown clayey fine sand and silt with abundant sub-angular grit. 135 - 140 Dark gray fine sand and silt. 140 - 155 Grayish-brown clay with mica.	Bore No. A. Folder Nos. 3/-, 3A, 2A. Hd. Panitya. Vide Plan 62-432
8	Rd. Res. Adj. 3	163'	77'	64'	small	ATS1100+	LW 489/64		0' - 1' Light brown fine sand. 1 - 9 Light brown clayey fine sand and silt. 9 - 18 Buff slightly clayey fine sand. 18 - 37 Light brown sandy clay with quartz grit. 37 - 47 Red-brown sandy clay. 47 - 60 Red-brown and grey gritty clay. 60 - 98 Yellow-brown and grey clayey fine-coarse sand and grit. 98 - 114 Light grey clayey fine-coarse sand and grit. 114 - 127 Yellow-brown and grey clayey fine-coarse sand and grit. 127 - 145 Grey clayey fine sand and silt with abundant mica. 145 - 163 Grey sandy and silty clay with mica and fragments of dark grey slate.	Bore No. A. Folder No. 6/- Hd. Panitya. Abandoned. Vide Plan 62-432.
9	Rd. Res. Adj. 4	182'	127' 127'	68' 68'	700 700	ATS1100+ " 1100+	LW 487/64 LW 488/64		0' - 4' Red-brown clayey fine sand. 4 - 17 Light brown clayey fine-medium grain- ed sand. 17 - 22 Yellow-cream fine silty sand with fragments of grey clay. 22 - 52 Red-brown and grey sandy clay with pockets of coarse yellow sand and gravel. 52 - 112 Grayish-brown medium-coarse grained clayey sand and grit. 112 - 114 Buff clayey fine-coarse sand and grit. 114 - 127 Light brown sandy and gritty clay with some grey clay. 127 - 131 Buff fine-coarse sand and grit and fragments of brownish-grey clay.	Bore No. B. Folder No. 4/- Hd. Panitya. Abandoned. Vide Plan 62-432

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
9	Rd. Res. (cont'd) 4	182'	127' 127'	68' 68'	700 700	ATS+100+ " 1100+	LE 87/64 LE 88/64		<u>Plan 2. Strip 1</u> 131' - 155' Dark brown fine-coarse sand and grit. 155 - 173 Dark brown fine-coarse sand with grit and gravel (partly cemented by pyrite). 173 - 182 Light gray silty clay with quartz grit.	Bore No. B. Folder No. 4/- Hd. Panitya. Abandoned. Vide Plan 62-432.
10	6	194'	78' 116' 158'	58'	small 2000 large	ATS+100+	LE 82/64		0' - 2' Gray slightly clayey fine sand. 2 - 60 Brownish-gray sandy clay with quartz grit, gray fine sand and silt. 60 - 78 Red-brown and gray sandy and gritty clay with some lateritic gravel. 78 - 95 Gray clayey fine sand with sub-angular quartz grit and gravel. 95 - 104 Gray clay with abundant sub-angular grit and gravel. 104 - 110 Light brown medium-coarse grained sand and sub-angular grit. 110 - 116 Buff clayey fine sand with sub-angular grit. 116 - 122 Buff medium grained sand and sub-angular quartz grit and gravel. 127 - 148 Dark gray lignitic fine-coarse sand and grit. 148 - 154 Black fine lignitic sand with mica. 154 - 158 Light gray fine-coarse quartz grit and gravel partly cemented with pyrite. 158 - 159 Brownish-gray fine-coarse angular quartz grit and gravel. 159 - 162 Light gray fine-coarse sand and grit partly cemented with pyrite. 162 - 163 Buff medium-coarse sand and grit. 0' - 162' Previously logged. 162 - 172 Light gray slightly clayey angular quartzitic gravel with some fine sand. 172 - 180 Gray fine-coarse quartzitic grit and gravel. 180 - 191 Gray coarse sub-angular quartzite gravel and boulders up to 2 1/2" long. 191 - 194 Green highly weathered mica schist with quartz veins.	Bore No. B. Folder No. 9/- Hd. Panitya. Vide Plan 62-432.

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
11	6	85'	70' 82'	82'					<u>Plan 2, Strip 1.</u> Drilled on sand dune. Water cut at 70' reported to be a small seepage of fresh water; salt water at 82'.	Bore No. D. Folder No. 5/3 Hd. Panitya. Abandoned.
12	6	80'	78'	78'		salt			Decomposed granite at 80ft.	Bore No. C. Folder No. 5/2. Hd. Panitya. Abandoned.
13	Road Res. 44, 6	185'	75' 110'	65' 65'	small, 200	ATS-1100	LW34, 3/64		0' - 2' Light brown fine sand. 2 - 20 Light brown slightly clayey fine sand. 20 - 40 Red-brown clayey fine sand, gritty in part. 40 - 70 Gray clayey fine-medium grained sand with some grit. 70 - 80 Light brown clayey fine-medium grained sand. 80 - 110 Light gray clayey fine-medium grained sand. 110 - 115 Light gray slightly clayey fine-coarse sand and grit. 115 - 116 Light gray sub-angular quartz gravel with fine-coarse sand. 116 - 121 Dark gray fine lignitic sand and silt with abundant angular quartz gravel. 121 - 155 Dark gray lignitic fine-coarse sand and silt. 155 - 185 Light brown clay with abundant mica and quartz grit (weathered bedrock).	Bore No. A. Folder Nos. 2/- and 2A/- Hd. Panitya. Abandoned. Vide Plan 62-432.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
14	17	117'6"							<u>Plan 2. Strip 1</u> 0' - 1' Brown slightly clayey fine sand. 1 - 4 Mottled red-brown sandy clay with nodules of soft lime. 4 - 10 Light brown medium grained friable sandstone with rounded quartz grit. 10 - 20 Red-brown medium grained friable sandstone. 20 - 30 Light pink fine grained friable sandstone. 30 - 35 Buff fine grained friable sandstone with abundant sub-angular quartz grit. 35 - 71 Cream slightly gritty clay with minor quantities of mica. 71 - 96 Light gray slightly gritty clay with mica and fragments of highly weathered gneiss. 96 - 106 Brownish-gray clay with abundant quartz grit, mica and fragments of highly weathered gneiss. 106 - 116 Gray fine grained gneiss (weathered). 116-117'6" Grayish-pink dense banded gneiss.	Bore No. A. Folder No. 1/- Hd. Panitya. Abandoned. Vide Plan 62-432
15	24	106'				Dry			0' - 1'6" Brown fine sand. 1'6" - 10' Light brown sandy clay. 10 - 24 Brown clayey fine-coarse sand and grit with ironstone gravel. 24 - 36 Brown clayey fine sand with pockets of white gritty kaolin. 36 - 74 Cream gritty kaolin. 74 - 80 Pink clayey fine sand and silt with mica. 80 - 106 Light brown gritty clay with abundant mica.	Bore No. A. Folder No. 6/- Hd. Caralus. Abandoned. Vide Plan 62-432
16	Rd. Res. 14J-11	148'	75'	70'	135	Saline			0' - 2' Cream gritty flour gypsum. 2 - 31 Red-brown and gray sandy clay. 31 - 51 Light gray sandy and gritty clay. 51 - 72 Light brown clayey fine sand with grit. 72 - 85 Buff fine-coarse slightly clayey sand. 85 - 96 Light gray sandy clay. 96 - 119 Gray clay with quartz grit, mica and fragments of weathered quartz felspar gneiss. 119 - 120 White coarse sand with sub-angular grit and coarse gravel. 120 - 123 Light brown clayey fine-coarse sand and grit. 123 - 128 Cream gritty clay. 128 - 132 Light brown clayey fine-coarse sand and grit. 132 - 148 Gray gritty clay with abundant mica.	Bore No. A. Folder No. 8/- Hd. Panitya. Abandoned. Vide Plan 62-432

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
17	Out of Secs.	120'	50'	42'	150				<u>Plan 2. Strip 1.</u> 0' - 1' Red-brown fine sand. 1 - 29 Red-brown and gray sandy clay with quartz grit. 29 - 31 Brown fine-medium grained sand. 31 - 35 Light gray clayey fine to medium grained sand. 35 - 42 Light brown fine-coarse sand. 42 - 50 Gray slightly clayey fine-coarse sand. 50 - 69 Buff fine-coarse sand and grit with pockets of white gritty kaolin. 69 - 118 Cream and white gritty kaolin with mica and angular quartz boulders. 118 - 120 Light gray clay with abundant quartz grit and mica.	Bore No. A. Folder No. 7/- Hd. Panitya. Abandoned. Vide Plan 62-432.
18	Bd. Res. Adj-12	139'	90' " " " " " " 122' 90' 90-122'	67' 88' 67' 67' 65' 67' 65'	small " " 30 140 160 200 160	ATS 382 " 462 " 547 " 594 " 704 " 795 " 789 817.2	LW497/61 LW498/61 LW499/61 LW500/61 LW501/61 LW502/61 LW503/61 126/452		0' - 2' Red-brown clayey fine sand. 2 - 18 Light brown clayey fine-coarse sand and grit. 18 - 31 Buff clayey fine sand and grit. 31 - 93 White clay with abundant sub-angular quartz grit. 93 - 104 White and gray gritty clay with abundant mica. 104 - 128 Light gray weathered quartz felspar gneiss with quartz veins. 128 - 139 Pink medium grained quartz felspar gneiss.	Bore No. A. Folder No. 1/- Hd. Koonawa. Abandoned.
19	Bd. Res. Adj-15	144'	135' " "	102' " "	40' 40	ATS 1100+ " 1100+	LW490/61 LW491/61		0' - 2' Red-brown fine sand. 2 - 45 Red-brown sandy clay with ironstone gravel and quartz grit. 45 - 52 Buff fine sand with abundant quartz grit. 52 - 88 White gritty kaolin with mica. 88 - 127 Light gray gritty kaolin with abundant mica and fragments of highly weathered gneiss. 127 - 135 Dense fine grained quartzite and quartz felspar gneiss. 135 - 144 Light gray medium grained dense quartz felspar gneiss.	Bore No. A. Folder No. 1/- Hd. Cootra. Abandoned. Vide Plan 62-433.
20	11	143'	70' 98' 134'	70' 83' 83'	500 gpd (12 gph) (36 ")	ATS 925 ATS 1010	LW603/61 132/11		5ft. clay rubble. 10ft. Travertine limestone, next 83ft. tale with quartz chips, next 36ft. mica schist, gray quartz chips - white tale cut 2nd water? Mica schist brown still haven't struck solid bottom.	Bore No. A. Folder No. 2/1 Hd. Koonawa. New Bore.

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	Sea level		Remarks
1	Rd. Res. Adj. 7	124'							Plan 2. Strin 2 0' - 8" Red-brown fine-coarse sand. 8" - 5' Light brown clayey fine sand with nodular limestone boulders. 5 - 28 Red-brown clayey fine sand with limestone nodules. 28 - 42 Red-brown and gray sandy clay with lateritic gravel. 42 - 48 Red-brown lateritic sandstone. 48 - 55 White quartz fragments of highly weathered quartz felspar gneiss, and lateritic sandstone. 55 - 124 Buff clayey fine sand and silt with abundant mica and pockets of white gritty clay.	Bore No. A. Folder No. 2/- Hd. Hamblin. Abandoned. Vide Plan 62-433.
2	23	129'	41' 116-118	33' 25'	Seepage Small	ATS1100+ " 1100+	LW492/61 LW552/61		0' - 1' Light brown sandy soil. 1 - 5 White gritty kaolin. 5 - 41 White and cream kaolin with abundant angular quartz grit. 41 - 51 White kaolin with abundant angular quartz grit and gravel. 51 - 64 Buff clayey fine silt. 64 - 98 Pale gray gritty kaolin with mica. 98 - 102 Light green clay with abundant sub-angular quartz grit. 102 - 107 Light brown and yellow clayey fine sand and silt with abundant mica and sub-angular quartz grit. 107 - 118 Light green clayey fine sand with abundant dark green mica and grit. 118 - 125 Light gray fine grained quartz. 125 - 129 Green fine grained partly decomposed schist.	Bore No. A. Folder No. 3/- Hd. Hamblin. Abandoned. Vide plan 62-433
3	19	83'	18'	11'	380	ATS1100+	LW496/61		0' - 9" Brown fine sand. 9" - 3' Light brown fine sand with nodules of limestone. 3 - 6 Buff fine grained dense sandy limestone. 6 - 18 Light brown sandy clay with fragments of dense sandy limestone. 18 - 19'6" Buff fine-coarse sand with sub-angular quartz grit. 19'6"-21' Light gray gritty clay. 21 - 69 Dark grayish-brown lignitic fine sand with quartz grit and fragments of lignite. 69 - 83 Light gray gritty clay with mica.	Bore No. A. Folder No. 3/- Hd. Wammanana. Abandoned. Vide Plan 62-433

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
4	Rd. Res. Adj. 13	49'	14'	7'	2000 2100	ATS1100+ DT 2940	LS558/61 131/2009		<u>Plan 2. Strip 2</u> 0' - 5' Gray clayey fine sand and silt. 5 - 14 Light gray clayey fine sand and grit. 14 - 22 Light brown fine sand and abundant sub-angular grit. 22 - 30 Brown medium-coarse grained sand and grit. 30 - 41 Dark gray lignitic fine-coarse sand and grit. 41 - 49 Cream gritty kaolin with mica.	Bore No. B. Folder No. 4/- Hd. Kannamana. Vide Plan 62-433.
5	Rd. Res. Adj. 13	46'	24'	30' 29' 30' " " " " 24'	1200+ " " " " " " " " " "	ATS2950 " 2950 " 2865 " 2750 " 2950 " 2835 DT3260	LW 24/61 LW 25/61 LW 26/61 LW 27/61 LW 28/61 LW 29/61		0' - 5' Brown slightly clayey fine sand. 5 - 28 Brown clayey fine sand with nodules of lime, and rounded quartz grit. 28 - 38 Brown clayey fine sand with abundant sub-angular quartz grit. 38 - 40 Gray sub-angular quartz grit and gravel with dark brown fine sand. 40 - 43 Gray sub-angular quartz grit and gravel with minor quantities of sand. 43 - 44 Light gray clayey fine sand and silt with abundant quartz grit. 44 - 46 Light brown fine-coarse sub-angular quartz grit.	Bore No. A. Folder No. 1/- Hd. Kannamana. Vide Plan 62-433
6	Rd. Res. Adj. 30	45'	23'	22'	400	ATS1100+	LS557/61		0' - 2' Light brown clayey fine sand and nodular sandy limestone. 2 - 5 Light brown clayey fine sand with angular quartz grit. 5 - 10 Gray sandy clay with pockets of brown fine sand. 10 - 20 Light gray clayey fine sand with sub-angular grit. 20 - 35 Yellow-brown fine-coarse sand and grit. 35 - 45 Buff fine-coarse sand and sub-angular grit.	Bore No. A. Folder No. 1/- Hd. Palahis. Abandoned. Vide Plan 62-433
7	Madina Rivay Res.	30'							0' - 6" Reddish-brown sandy and clayey loam. 6" - 1' Travertine nodules with some reddish-brown sandy loam. 1 - 2 Hard pale buff pisolitic travertine with some earthy lime & some light brown limy clay. 2 - 3 Hard pale buff pisolitic travertine. 3 - 5 Pale buff friable sandy marl with very abundant lumps and nodules of hard travertine. 5 - 6 As above but becoming darker in colour with less travertine. Nodules and some pockets of pale reddish-brown sandy clay.	Bore Sol T/A Folder No. 1/- Hd. Pygery.

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
7 (contd)	Radinn Rivay Res.	30'							<u>Plan 2. Strip 2.</u> 6' - 8' Moist soft to firm light reddish-brown to midreddish-brown very sandy clayey becoming more sandy with depth. Some specks of black staining. 8 - 16 Firm moist red-brown and pale gray-brown mottled very sandy clay. 16 - 18 As above but more sandy. 18 - 21 Red-brown and red mottled clayey sand to sandy clay, with occasional light red-brown and light gray-brown mottling. 21 - 27 Red-brown and light red-brown vaguely mottled clayey sand to sandy clay with some pockets of gray and light gray mottling. Stiff compact. Some pockets of fatty clay from 26-27'. 27 - 30 Pale red-brown sand with pockets of red-brown and gray-brown mottled clayey sand and pockets of red-brown and gray-brown mottled slightly sandy clay. Stiff compact.	Bore No. T/A Folder No. 1/- Hd. Pygery.
8	" " "	26'							0' - 6" Reddish-brown slightly clayey loam. 6" - 1' Pisolitic travertine nodules with some brown sandy clay. 1 - 3 Hard pisolitic travertine boulders, with some earthy marl. 3 - 10'6" Sealed tube samples. 10'6"-12'6" Red-brown very sandy clay to clayey sand. Firm to stiff. Compact. Earthy texture. 12'6"-14' Sealed tube sample. 14' -14'6" Reamed. 14'6"-16' Sealed tube sample. 16 - 19 Red-brown and gray-brown mottled very sandy clay to clayey sand. Stiff compact. 19 -20'6" Red-brown and light red-brown vaguely mottled clayey sand. Occasional gray-brown mottling. Stiff compact. 20'6"-22' As above with specks of white earthy lime. 22 - 25 Sealed tube samples. 25 - 26 Red-brown, light red-brown, gray and gray-brown mottled clayey sand. Stiff, compact.	Bore No. T/B. Folder No. 2/- Hd. Pygery.
9	Radinn Town Lot	125'	84'	80'	small	1100	LV 78/60		0' - 9" Light brown clayey fine sand with limestone nodules. 9" - 4'6" Light brown dense nodular travertine. 4'6"- 6" Light brown sandy clay with limestone nodules. 6 - 43 Light brown clayey fine sand with quartz grit and limestone fragments. 43 - 49 Red-brown sandy clay with quartz grit. 49 - 59 Light brown clayey fine sand with abundant quartz grit.	Bore No. T/C Folder No. 3/- Hd. Pygery. Railway Yards.

									Plum 2. Strip 2.		Remarks
		cut	level	per hour	gallon	Analysis No.	sea level				
9	Padinma (contd) Town Lot.	125'	84'	80'	small	ATS1100	LF 78/60	59' - 61'	Brown clayey fine-coarse sand with quartz grit.	Bore No. T/C. Folder No. 3/- Hd. Pygery. Railway Yard.	
								61 - 68	Red-brown clayey fine sand with abundant sub-angular quartz grit.		
								68 - 69	Gray-subangular quartz grit and gravel with fine light brown sand.		
								69 - 71	Light brown fine sand with abundant sub-angular quartz grit.		
								71 - 75	Buff clayey fine sand with abundant quartz grit.		
								75 - 94	Brown fine sand with abundant quartz grit, with some gravel and pockets of white clay.		
								94 - 125	Light brown and grey clay with angular quartz grit.		
10	" " "	90'	84'	80'	small	ATS1100+	LF 79/60	0' - 9"	Light brown clayey fine sand with nodules of limestone.	Bore No. T/D. Folder No. h/- Hd. Pygery. Railway Yard.	
								9" - 5'	Light brown dense sandy nodular travertine.		
								5 - 16	Light brown clayey fine sand and silt with limestone nodules and quartz grit.		
								16 - 32	Red-brown clayey fine sand with limestone nodules.		
								32 - 37	Red and grey clayey fine sand with sub-angular quartz grit.		
								37 - 60	Red-brown clayey fine sand with abundant sub-angular quartz grit.		
								60 - 65	Brown clayey fine sand with pockets of grey sandy clay.		
								65 - 77	Brown clayey fine sand with abundant sub-angular quartz grit.		
								77 - 84	Light brown clayey fine sand with sub-angular quartz grit and limestone nodules.		
								84 - 88	Gray sub-angular quartz grit and brown fine sand.		
								88 - 90	Light grey gritty clay.		
11	" " "	90'	84'	80'	small	TS1100+	LF 80/60	0' - 1'	Red-brown slightly clayey sandy soil with nodules of limestone.	Bore No. T/E Folder No. 5/- Hd. Pygery Railway Yard.	
								1 - 4	Brown sandy clay with abundant limestone nodules and fragments.		
								4 - 7	Bluff clayey fine sand with limestone nodules and pockets of red-brown sand.		
								7 - 53	Brown clayey fine sand with quartz grit and pockets of lime.		
								53 - 65	Brown clayey fine sand and silt with sub-angular quartz grit.		
								65 - 83	Red clayey fine sand with abundant sub-angular quartz grit.		
								83 - 87	Gray sub-angular quartz grit & brown fine sand.		
								87 - 90	Light grey gritty clay.		

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through Plan 2. Strip 2	Remarks
12	Tom Lot 14	216'	110'	75' 90'	Seepage	ATS1100+	LM484/61		0' - 1' Brown fine sand with nodules of limestone. 1 - 7 Brown clayey fine sand and boulders of dense nodular limestone. 7 - 37 Red-brown clayey fine-coarse sand and grit. 37 - 45 Pink clayey coarse sand and grit with ironstone gravel. 45 - 63 Light brown clayey fine-coarse sand and grit. 63 - 71 Yellow-brown clayey fine sand with abundant sub-angular grit. 71 - 86 Light gray gritty clay. 86 - 101 Cream gritty clay. 101 - 117 Cream clayey fine sand and silt with grit. 117 - 123 Gray silty clay with grit and mica. FURTHER WORK 123' - 155' Light yellow-brown fine to coarse sandy (well rounded) clay - slightly micaceous. 155 - 180 Gray and greenish-gray fine to coarse sandy clay - slightly micaceous - ?Bedrock derivative. 180 - 190 Gray and light yellow-brown fine to coarse sandy clay. 190 - 200 As above but becoming micaceous and feldspathic. 200 - 205 Mainly yellow-brown angular quartz and grit - some feldspar and iron-staining. 205 - 216 Fine to coarse very angular quartz sand with some feldspar.	Bore No. T/P Folder No. 7/- and 7A/- Hd. Pygery.
13	Rd. Res. Adj. 12	155'	62-145'	70'	80	ATS1745	LM23/61		0' - 1'10" Light brown sandy soil with nodules of lime. 1'10- 3' Brown slightly clayey fine sand with dense light brown nodular travertine. 3 - 15 Light brown clayey fine sand and silt with limestone nodules. 15 - 26'6" Brown fine-coarse sand and grit, with lateritic sandstone gravel. 26'6- 51' Light brown fine sand with abundant sub-angular quartz grit.	Bore No. A. Folder No. 6/- Hd. Pygery. Abandoned. Vide Plan 62-433.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
13 (contd)	Rd. Res. Adj. 12	155'	62-145'	70'	80	ATS 1745	LM 23/61		<u>Plan 2. Strip 2</u> 51' - 54' clayey Cream slightly/fine sand with abundant sub-angular quartz grit and pockets of white clay. 54 - 62 Light brown clayey fine sand with quartz grit and nodules of kaolin. 62 - 96' 6" Buff gritty clay. 96' 6" - 145' Light gray gritty fine sand and silt with pockets of kaolin. 145 - 155 Light gray coarse sand and grit with fragments of weathered granite felspar.	Bore No. A. Folder No. 6/- Hd. Pygery. Abandoned. Vide Plan 62-433
14	Rd. Res. Adj. 20	98'	24-43' 24' 24-43' 32' 40' 24'	24' 75' 26' 32' 40' 22'	1000+ 50 1600 " 1400 1200	ATS 1100+ " 1100+ " 1100+ " 1100+ " 1100+ DT 2460	LF 81/60 LF 82/60 LF 83/60 LF 84/60 LF 85/60 131/2008		3" - 1' Light brown sandy soil. 1 - 5 Light brown dense nodular sandy limestone. 5 - 17 Buff clayey fine sand with limestone nodules. 17 - 27 Buff clayey fine sand and silt with pockets of gray clay. 27 - 36 Grayish-pink clay with lime nodules and quartz grit. 36 - 43 Light brown and gray clayey coarse sand with pockets of yellow clay. 43 - 50 Grey gritty clay. 50 - 52 Light brown medium grained clayey sand and grit. 52 - 62 Dark brown clayey fine sand with abundant sub-angular quartz. 62 - 76 Buff silty clay with sub-angular grit and mica and silt. (continued over page).	Bore No. A. Folder No. 2/- Hd. Yanine. Vide Plan 62-433.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
									<u>Plan 2. Strip 2</u>	
14 (contd)	Rd. Res. Adj. 20	98'							76' - 95' Grayish-brown clayey fine sand and silt with quartz grit. 95 - 98 Gray clayey quartz grit with felspar and weathered granite.	Bore No. A. Folder No. 2/- Hd. Yaninec/ Vide Plan 62-433.
15	20	20'	9'	3'	small	ATS1100+	LS555/61		0' - 9' <u>DRILLER'S LOG</u> - No sludges available. Brown clay. 9 - 20 Blue clay.	Bore No. B. Hd. Yaninec. Folder No. 5/- Abandoned.
16	20	60'	35'	34'	Sat. 300	ATS1100+	LS554/61		0' - 5' Brown clay. } 5 - 15 Clay. } Driller's logs: 15 - 25 Red clay (dry) } no sludges. 25 - 40 Light grey sandy clay. } 40 - 55 Clay. } Driller's logs: 55 - 60 White clay. } no sludges.	Bore No. C. Folder No. 4/- Hd. Yaninec, Abandoned. Vide Plan 62-433
17	36	41'	38'	38'	small	ATS1100+	LS556/61		0' - 15' Brown soil and light brown sandy nodular limestone. 15 - 20 Buff clayey fine sand with nodules of limestone. 20 - 22 Pink clayey fine sand and silt. 22 - 30 Light brown clayey fine sand and sub-angular grit. 30 - 38 Greenish-gray sandy clay with sub-angular grit. 38 - 40 Light grey clayey fine sand and silt, with grit. 40 - 41 Light greyish-pink weathered quartz felspar gneiss.	Bore No. A. Folder No. 3/- Hd. Yaninec. Abandoned. Vide Plan 62-433

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	29	40'			Dry			330	<u>Plan 2. Strip 3.</u> Travertine. Sand. Stopped in fairly hard sandstone.	Bore No. A. Hd. Yaminee Plan 64/4.
2	Rd. Res. Adj. 1	208'		120'	seepage only	ATS2835	LM 22/61		0' - 1' Red-brown fine sand with limestone nodules. 1 - 3 Buff dense sandy travertine. 3 - 11 Light brown clayey fine sand with limestone nodules. 11 - 25 Yellow-brown clayey fine sand with sub-angular quartz grit. 25 - 45 Red-brown clayey fine sand with quartz grit. 45 - 82 Light brown medium grained clayey sand and dense fine grained lateritic sandstone. 82 - 90 Cream fine sand and silt. 90 - 103 White fine sand. 103 - 106 Grey gritty clay. 106 - 108 Yellow-brown and grey sandy clay with abundant quartz grit. 108 - 111 Buff clayey fine sand and sub-angular quartz grit. 111 - 114 Buff clayey fine sand with quartz grit and pockets of kaolin. 114 - 208 Cream gritty kaolin with mica.	Bore No. A. Folder No. 3/- Hd. Minnopa. Abandoned. Vide Plan 62-433.
3	9	60'			now dry	fresh		439	Travertine. Sand. Granite. 49'	Bore No. A. Hd. Minnopa.
4	Minnopa Blow yards	21'							0' - 1' Grey-brown slightly clayey sandy loam slightly calcareous. Moist, soft. 1 - 2'6" Brown slightly clayey medium grained sand; calcareous, soft, friable. 2'6" - 3' Light brown sandy marl with occasional small travertine nodules. Soft, damp. 3 - 5 Pale reddish-brown sandy marl with abundant hard travertine nodules increasing with depth. Moist, firm, friable. 5 - 5'6" Pale reddish-brown sandy marl with abundant hard travertine nodules. Moist, friable. 5'6" - 6' Hard nodular travertine layers with interstitial pale reddish-brown sandy marl. 6 - 8 Very pale reddish-brown sandy marl with moderate to occasional travertine nodules. Very moist, soft friable. 8 - 9'6" As above, but soft and very wet. 9'6" - 10' Red-brown very clayey sand to sandy clay with patches of earthy lime. Soft, very moist.	Bore No. A. Folder No. 4/- Hd. Minnopa.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
									Plan 2. Strip 3.	
4	Minnipa Railway yards	21'							10' - 12' Red-brown sandy clay to clayey sand. Occasional small pockets earthy lime. Soft and moist with very wet patches. 12 - 17'6" Red-brown clayey sand to sandy clay with occasional light gray mottling. Becoming more reddish in colour with depth. Firm, damp to moist. 17'6- 18' Red-brown and yellow-brown mottled clayey sand with irregularly abundant quartz grains (grit size). Moist, friable. 18 - 18'9" Red-brown clayey sand with yellow-brown mottling and pockets of iron-staining. Moderately abundant small quartz grains (grit size). Moist, soft, friable. 18'9- 19' As above with very abundant patches of ironstaining. 19 - 19'9" Yellow-brown, red-brown, maroon and white spotted clayey medium grained to coarse grained sand. Moderately abundant quartz grit particles. The maroon pockets are probably haematitic. 19'9- 20' As for 19'-19'9" but white colour predominating. 20 - 20'3" White clayey medium grained to coarse grained sand with some maroon and red-brown mottling. Heavily iron-stained with moderately abundant small quartz particles. Moist, friable. 20'3- 20'9" Decomposed granite. Soft, moist, friable with some ironstone nodules. 20'9- 21' As above but very hard with fragments hard fine to medium grained granite, and some hard siliceous ironstone.	Bore No. A Folder No. 1/- Hd. Minnipa.
5	" " "	18'6"							0' - 1' Gray-brown slightly calcareous slightly clayey sand. Moist, soft, friable. 1 - 2 As above with small pockets lime. 2 - 3 Light gray-brown calcareous sand with very small lime nodules. Moist, soft, friable. 3 - 4 Light brown to pale reddish-brown sandy marl with moderately abundant small travertine nodules. 4 - 7 As above with hard thin travertine layers. 7 - 17'6" Sealed tube samples. 17'6- 18'6" Sealed tube sample attempted but material became too hard causing tube to become detached and hole was abandoned.	Bore No. B. Folder No. 2/- Hd. Minnipa. Abandoned.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
									<u>Plan 2, Strip 3</u>	
6	Rd. Res. Adj. 9	92'							0' - 30' Light brown clayey fine sand with limestone nodules and quartz grit. 30 - 43 Yellow-brown clayey fine sand with abundant sub-angular quartz grit and lateritic gravel. 43 - 67 Pink medium grained friable sandstone - gritty in parts. 67 - 70 Red-brown fine-coarse sand and grit with pockets of white gritty kaolin. 70 - 74 Pink clayey fine-coarse sand and grit with some white gritty kaolin. 74 - 92 Cream gritty kaolin.	Bore No. A, Folder No. 1/- Hd. Carina, Abandoned. Vide Plan 62-434.
7	Rd. Res. Adj. 4	140'	127'	127'	200	AT31100+	LE553/61		0' - 7' 7 - 20 Cream dense nodular limestone. Light brown friable fine grained sandstone with limestone nodules and lateritic gravel. 20 - 43 Red-brown lateritic sandstone with limestone and grit. 43 - 67 Cream fine-medium grained friable sandstone, gritty in parts. 67 - 70 Cream clayey fine sand with pockets of white gritty kaolin. 70 - 127 White gritty kaolin. 127 - 140 White clay with abundant angular quartz grit.	Bore No. B. Folder No. 2/- Hd. Carina. Abandoned. Vide Plan 62-434.
8	Res. Adj. 30	140'							0' - 1' Red-brown sandy soil with boulders of buff dense nodular limestone. 1 - 8 Buff sandy limestone. 8 - 15 Buff medium grained sand with limestone nodules. 15 - 26 Light brown fine-medium grained sand with fragments of brown and white gritty clay. 26 - 31 Yellow-brown slightly clayey fine-medium grained sand. 31 - 38 Light brown and yellow slightly clayey fine sand. 38 - 51 Red-brown fine-medium grained sand. 51 - 60 White fine-coarse sand and grit. 60 - 70 Cream medium-coarse grained sand with nodules of white clay. 70 140 White gritty clay.	Bore No. A. Folder No. 10/- Hd. Carina. Abandoned. Vide Plan 62-434.

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Plan 2. Strip 3	Remarks
9	Rd. Res. Adj. 8	115'							0' - 10' Brown sandy soil and buff sandy limestone. 10 - 22 Cream medium grained sandstone. 22 - 29 Red-brown medium grained friable sandstone. 29 - 46 Cream medium grained friable sandstone. 46 - 61 Red slightly clayey fine grained friable sandstone. 61 - 79 Light brown fine sand with sub-angular quartz grit. 79 - 90 Light brown fine-coarse sand and grit with pockets of white gritty clay. 90 - 115 White gritty clay with mica.	Bore No. A. Folder No. 5/- Hd. Moorkitabic. Abandoned. Vide Plan 62-434
10	Rd. Res. Adj. 7	80'							0' - 25' Buff dense sandy nodular limestone. 25 - 33 Light brown medium grained friable sandstone. 33-43 Red-brown fine-medium grained sand and sub-angular grit. 43 - 50 Buff medium grained sandstone. 50 - 70 Cream clayey fine sand and grit. 70 - 80 White gritty clay with mica.	Bore No. A. Folder No. 6/- Hd. Moorkitabic. Abandoned. Vide Plan 62-434.
11	19	180-200' now 60'		200'?		salt		314	Thick travertine. Red-yellow and white soft sandstone. Sand. Clay.	Bore No. B. Folder No. 1/2 Hd. Karkultaby.
12	59	32'							0' - 1' Brown silty sandy liam with abundant travertine rubble. Friable. 1 - 2'4" Hard pale buff coloured nodular travertine. 2'4- 3' Off-white calcareous sand, with abundant travertine rubble and cemented sandy lumps. 3 - 5 Very pale brown sandy calcareous silt, with moderate small cemented lumps of same. Moderate small limestone rubble, increasing with depth. 5 - 6'2" Semi-consolidated silty sandy limestone with moderately abundant fragments of hard travertine limestone. 6'2- 7'6" Hard sandy travertine. 7'6- 8'3" As above but only cemented in parts. Damp. 8'3- 9'4" Cream silty sandy marl with semi-cemented lumps and occasional travertine nodules. Very slightly damp, friable.	Bore No. A. Folder No. 2/- Hd. Karkultaby. Poochera Railway Yards.

B R	CIT N	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
12 (cont)	59	32'							Plan 2, Strip 3.	Bore No. A. Foliar No. 2/- Hd. Karcultsky. Pocchere Railway Station.
									9'4- 10'8" As above but slightly reddish in colour, and becoming more compact with depth. 10'8- 11'8" Compact sandy travertine fragments, with loose dry friable interstitial material. 11'8- 14' Pale buff silty and finely sandy marl, semi-consolidated in parts. Friable to compact, dry. 14 - 16 Hard sandy travertine layer. 16 - 16'6" Compact semi consolidated pale buff silty and finely sandy marl. Dry. 16'6- 17' Cream silty and finely sandy moderately consolidated marl, slightly crystalline in parts. Frequent very hard, thin layers of travertine. Dry. 17 - 19 Off-white semi-consolidated finely sandy calcareous silt. Dry. 19 - 19'6" Off-white calcareous silty fine sand, with abundant consolidated lumps of same. Dry. 19'6- 20' As above but more silty with only moderate consolidated lumps. Dry. 20 - 21 Off-white sandy calcareous silt with semi-consolidated fragments of pale brown limestone. 21 - 23 White calcareous finely sandy silt, semi-compacted in parts. Dry, friable to loose. 23 - 27 White silty calcareous fine sand with hard lumps of a very pale buff colour, (probably resented lumps of the same) Dry. 27 - 31 Off-white friable silt calcareous very fine sand, with semi-compacted portions. Dry. 31 - 32 Loose dry silty calcareous very fine sand, with occasional semi-compacted portions.	
13	35	148'		146'		salt			0' - 148' Alluvium Ste } Red and yellow rock. sand } grit (ferrug. cement). clay, white.	Bore No. A. Foliar No. 1/3 Hd. Cengena. St. James Rth. Well

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	8	50'						272	<u>PLAN 1 SHEET 1</u> Travertine. Sandstone. Sand.	Bore No. A Ed. Cungeza Pamunary Well
2	77	150'				5oz.		323	0 - 150' Alluvium, etc. (red and yellow). Sand. Grit (ferrug.) Fine gr. thin white laminated shales whitish sand.	Bore No. A Folder 1/2 Ed. Cungeza
3	17	190'			1000 gpd.	very salt dry		313	0 - 190' Alluvium, etc, sand, grit, clay granite.	Bore No. A Folder No. 1/6 Pollilia Bore Ed. Walpuppie
4	17	176'		164'	1000 gpd. 1500	fresh			Trav. limestone, stone, sand, granite.	Well. A. Folder No. 1/5 Yantanaby Well
5	17	102'				dry			Trav. limestone, stone, sand decomposed granite-gray.	Well No. B Folder No. 1/2
6	57	34'							9 - 1' Brown fine grained to medium grained calcareous sand. Moist friable to loose.	Bore No. B Folder 1/- Wirrulla 4/way Yards Bore 2 Ed. Walpuppie
									1 - 2' Light gray-brown fine calcareous sand with frequent hard cemented lumps, tending towards a sandy travertine in some lumps. Damp.	
									2 - 5' As above but dry and loose.	
									5 - 8' Sealed tube samples.	
									8 - 9' Light gray-brown fine calcareous sand with pockets of earthy lime and moderately hard lime nodules. Dry loose.	
									9 - 13'6" Sealed tube samples.	
									13'6 - 19'6" Light red-brown very sandy marl. Semi-compact with moderately hard travertine nodules.	
									19'6 - 30' Sealed tube samples.	
									30 - 34' Brownish-yellow slightly clayey sand with occasional patches of gray mottling. Very compact.	
7	57	30'							0 - 1' Fine brown calcareous sand, very slightly clayey. Moist friable to loose..	Bore No. A Folder No. 2/- Railway Ids. Wirrulla Bore 1 Ed. Walpuppie
									1 - 2' Light brown calcareous sand with large hard fragments of sandy travertine. Moist.	
									2 - 3' Very pale brown calcareous sand with small travertine nodules. Moist friable to loose.	

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
7	57	30°							3 - 4' As above, but with very abundant hard sandy travertine fragments. Damp. 4 - 7' Fine to medium grained light-gray calcareous sand with hard cemented lumps. Loose, dry to lightly damp. 7 - 9' Pale gray-brown and white mottled very sandy marl with moderately abundant harder cemented lumps. Friable. 9 - 10' Pale gray-brown calcareous sand with pockets white earthy lime. Friable but compact in parts. 10 - 12' Pale-gray brown fine grained calcareous sand. Loose. 12 - 13' Pale gray and off-white very sandy marl with frequent hard nodules of travertine. Soft friable damp. 13 - 14' Pale buff sandy marl with occasional small travertine nodules. Soft friable damp. 14 - 15' Pale red-brown friable sandy marl with very abundant travertine nodules, grading to a pale red brown compact nodular travertine. 15 - 16' Pale red-brown sandy marl with abundant small to medium travertine nodules. 16 - 17' Pale gray-brown fine to medium grained calcareous sand with pockets of light red-brown sandy marl, and moderately abundant travertine nodules. Friable to compact. 17 - 19' Light red-brown sandy marl with moderately abundant travertine nodules. Semi-compact. 19 - 21' Pale reddish-brown compact friable marl with very abundant travertine nodules and pockets of reddish brown clayey sand. 21 - 22' As above with large travertine fragments and increasing amounts of sandy clay. Compact. 22 - 23' As above but with less travertine fragments. 23 - 25' Light red-brown clayey sand with pockets of cream sandy marl. Friable to compact with an earthy texture.	Bore No. A Folder No. 2/- Railway Yards Pirruia Bore 1 Hd. Walpuppie

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
7	57	30'							<u>Strin 1 Contd.</u> 23 - 26' Reddish-brown and yellow-brown mottled clayey sand with occasional pockets of earthy lime. Firm, slightly friable to compact with an earthy texture. 26 - 28' As above but no lime. 28 - 30' Stiff brownish yellow clayey sand with some gray mottling. Earthy texture.	Bore No. A Hd. Walpuppie
8	7	175'			small	salt			Dump shows, travertine, sandstone, sand, grits, clays.	Well No. A Folder No. 1/1 Blair's Well. Hd. Walpuppie.
9	103	102'		51'	30-40 gpd	6 1/2 oz.			Travertine stone, clay and gabbro-amphibolite.	Well No. A Folder No. 1/3 Hd. Perlubie
10	30	63'		63'		2oz.			Travertine, stone, sand a little clay.	Bore No. A Folder No. 1/3 Hd. Perlubie. Piaba Acla West Well.
11	W. Con. Res. 50	112' bilted to 92'		88'	good	2 1/2-3oz.			Travertine, stone, sand, clay a good deal mixed with L' quartz and quartz pebbles (may be gr. from bottom).	Well No. A Folder No. 1/4 Narcuttie Well
12	WCR 50	131' 6"	93'	79'		salt			0 - 6" Loam. 6' 6" - 6' 6" Hard flinty limestone. 6' 6" - 12' Yellow sandstone. 12 - 18' Red clay. 18 - 19' Hard ironstone boulders. 19 - 33' Quartzite. 33 - 36' Red sand, rock. 36 - 40' Red sand and boulders. 40 - 44' Brown rock with boulders. 44 - 45' 6" Quartzite. 45' 6" - 47' Red sandy rock. 47 - 113' Clay. 113 - 122' Granite boulders. 122 - 131' 6" Granite.	Bore No. B Folder No. 1/3 Narcuttie Bore.
									<u>Strin 2 (No Bore)</u> <u>Plan 1 Strin 1</u> No log,	
1	WCR Adj. 24	119'				fresh, stock salt.				Well. Folder No. 1/1. Merching Well. Hd. Wandana
2	Coduna 1/3 129	28'	24'	24'	300	brackish			0 - 12' Pinkish brown slightly clayey limestone numerous fragments of travertine limestone.	Bore 1/A. Folder 3/- Hd. Bonython

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata used through	Remarks	
2	Ceduna 129	1 1/8 28'	24'	24'	300	brackish			12 - 20'	Pinkish white very calcareous clay grading to reddish brown very fine sand.	Bore T/A Folder 5/- Ed. Bonython.
									20 - 28'	Very light grey to brownish hard siltstone to shale.	
3	25	52'6"	46'	46'	200	ATS694			10'	Surface Earth.	
									10'	Plum Pudding Limestone.	
										Clay - sand and clay.	
										Coarse red sand and water.	
4	40	72'	70'	65'	50	ATS2520	39/942		0 - 1'	Dark brown loam soil.	Bore No. A Folder No. 4/- Ed. Houlie.
									1' - 10'	Hard white nodular travertine limestone.	
									10 - 15'	Calcareous sand and clay-aeolianite.	
									15 - 23'	Brown calcareous clay containing considerable fine quartz sand.	
									23 - 34'	Fine red-brown ochreous siliceous sand and some clay slightly calcareous.	
									34 - 66'	Fine yellow ochreous siliceous sand and some grit.	
									66 - 70'	Fine red-brown siliceous sand (ochreous) with some grit.	
									70 - 72'	Medium coarse siliceous sand and grit, red-brown coloration due to ochre.	
5	BLK7AH	86'	86'	70'		769.12	19/5684			Limestone and clay. Granite 2 to 3 feet from water. Limestone, Clay Granite at 24 feet.	
6	8W	98'	95'	82'	30'	ATS1740	37/422		0 - 1 1/4'	Brown soil and limestone rubble.	Bore No. B Folder No. 3/- Ed. Houlie.
									1 1/4' - 8'	Hard white travertine limestone.	
									8 - 24'	Cream calcareous sand and clay-aeolianite.	
									24 - 31'	Fine red-brown ochreous siliceous sand, some grit.	
									31 - 51'	Fine-medium yellow ochreous quartz sand and considerable amount of quartz grit.	
									51 - 67'	Brick red medium siliceous sand with an ochreous cement.	
									67 - 98'	White kaolin clay and quartz grit-composed bedrock.	

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
7	8W	108'	106'	94'	50'	AT91740	37/418		<u>Strata No. 3 (Contd.)</u> 0 - 3' Dark brown surface soil and loam with nodules of travertine limestone. 3 - 13' Hard travertine limestone, pinkish brown. 13 - 41' Very fine yellow brown ochreous sandstone, some grit. 41 - 70' Very fine pinkish-yellow ochreous sandstone, some grit. 70 - 79' Brick red fine ochreous sand, with some grit and clay. 79 - 92' White and pink kaolin clay bearing quartz. 92 - 108' Cream coloured kaolin clay and quartz grit, decomposed gneiss.	Bore No. A Folder No. 2/- Hd. Nucle

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	1		50°						<u>PLAN A Strin 1</u> At about 50° to dense aplitic granite, traces of water in bottom, never equipped.	Chatana Trial Folder 1/1A Hd. Catt
2	1	68°				salt			No details.	Bore No.B. Hd. Catt.
3	17	54°				6 ozs.			No details.	Bore No.A Hd. Catt.
4	1	38°		35½°	65	440 589			No details.	Bore No.F Hd. Catt. Plan M7-1/1.
5	17	30°							Sand caving in.	Bore No.C Hd. Catt.
6	17	102°	72°	65°	30	AT324.00	100/1323		0 - 2° Limestone soil. 2 - 10° Light greenish brown sandy limestone. 10 - 20° Light yellow brown marl and limestone. 20 - 35° Light yellow brown limestone and weathered granite fragments.	Bore No.B. Folder 9/-. Hd. Catt.
7	50	270°	58°		seepage	AT31100	147114/62		35 - 102° Light gray weathered granite. 0 - 10° Light brown sandy limestone. 10 - 20° Buff fine grained dense nodular limestone. 20 - 22° Red brown and gray clayey fine sand with limestone nodules. 22 - 35° Buff fine ground dense nodular limestone. 35 - 55° Cream fine sand with grit and nodules of white clay. 55 - 155° Cream clay with mica and abundant quartz grit. 155 - 215° Samples missing. 215 - 240° Grey weathered medium grained granitic gneiss. 240 - 250° Grey soft weathered fine grained mica schist. 250 - 270° Grey fine grained granitic gneiss.	Bore No.A Folder 19/-. Hd. Catt.
8	27	28½°				Dry			0 - 8" Brown loam soil and limestone rubble. 8" - 2'6" Cream coloured calcareous clay and limestone rubble. 2'6" - 14" Hard nodular travertine limestone. 14 - 28" Pale yellow brown fine siliceous sand, occasional grit and gypsum crystals. 28 - 28'6 Hard gray granite bedrock (resembles black hill granite).	Bore No.A Folder 7/- Hd. Catt

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
9	32	150°	145°	135°	60	AT31200 salt	108/327		<u>Strata 1 (Contd.)</u> 0 - 18° Brown rubbly limestone. 18 - 35° Light brown rubbly marl. 35 - 150° Decomposed granite, very micaceous and poor in quartzite.	Bore No. A Folder 12/- Hd. Catt.
10	21	115°	110°	100	40	1072.5	108/1330		0 - 12° Pale brown fine carbonaceous sand and sandy limestone. 12 - 35° Brown sandy clay with limestone gravel. 35 - 52° Pink sandy clay with gravel and carbonaceous fragments. 52 - 65° Red brown clayey sand with quartz and limestone gravel. 65 - 78° Mottled red brown-gray sandy clay. 78 - 90° Pale brown sandy clay with rounded quartz gravel and particles of weathered gneiss. 90 - 110° White gritty clay with abundant muscovite. 110 - 114° Pale brown sandy clay with abundant mica, quartz and particles of decomposed gneiss. 114 - 115° Brownish gray coarse quartz gravel with feldspar and mica and some weathered gneiss.	Bore A Folder 17/- Hd. Catt.
11	22	65°							Line rubble. Limestone. Red clay. Yellow sand. Clay. Yellow sand. Red sand. Yellow sand. 65° Decomposed granite with mica.	Bore No. B Folder 1/4 Hd. Bagster.
12	22	145°		130°	20 p.d.	814.79	20/5811		Micaceous granite. Gneiss from 40°.	Well No. A.
13	6	150°	50° 70° 35° 75°	50° 49 1/2° 35° 75°	v. small 15 50 50	AT31140 AT32660 Brookish AT31200	28/8167 28/8168 108/1495		0 - 11° Travertine and pink clay. 11 - 16 1/2° Red sandy clay. 16 1/2 - 27° Yellow sand and clay. 27 - 133° Soft gray micaceous schist-seams of red gneiss. 133 - 134 1/2° Hard yellow micaceous gneiss. 134 1/2 - 150° Grey gneiss (quartz, feldspar, biotite).	Bore No. B Folder 2/- Hd. Bagster
14	6	58°							0 - 3° Brown sandy soil with some calcareous nodules. 3 - 20° Brown clay limestone gravel. 20 - 40° Red sandy clay with calcareous nodules.	Bore No. A Folder 10/- 1/2. Hd. Bagster

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
									Strin 1 (Contd.)	
14	6	58'							40 - 45' Brown fine sand with some clay and abundant muscovite.	Bore No. A
									45 - 65' Grayish brown highly weathered gneiss.	
15	6	125'	125'	120'	10	Salt ATSI 1300	108/1331		0 - 3' Brown sandy soil.	Bore No. A
									3 - 20' Pale brown clayey limestone rubble.	Folder 12/-
									20 - 40' Red brown clayey sand with some mica.	Hd. Bagster
									40 - 62' Pale brown clayey sand with calcareous nodules.	
									62 - 85' Pale brown clayey sand and grit with calc. frags.	
									85 - 100' Gray-white gritty clay with abundant mica.	
									100 - 110' No sample. Driller reports white clay with mica.	
									110 - 125' No sample. Driller reports white clay with mica.	
16	32	56'	50'	50'	20	Brackish ATSI 1200	108/1492		0 - 3' Soil.	Bore No. A
									3 - 20' Pinkish buff marly limestone.	Folder Nos.
									20 - 28' Red brown rubbly sandy marl.	1/3, 15/-
									28 - 34' Pinkish buff very micaceous quartz deficient decomp. granitic rock.	
									34 - 56' Offwhite ditto.	
17	5H	90'				salt			No details.	Well A
18	5H	90'				salt			No details.	Well B
19	4H	85'		67'	50'	519.38	20/5846		No details.	Well A
20	4H	113'	97'		15-20	1 1/2 tons.			Water in 8ft. of decomposed mica schist quartz pebbles.	Bore C
									97 - 100' Mica schist.	
									105 Calc. gravel - mica schist (Decomposed).	
21	5H	72'				salt			0 - 3' Sandy soil.	Bore A
									3 - 15' Brown rubbly limestone.	Folder 11/-
									15 - 20' Cream, brown and green rubble marl.	Hd. Bagster
									20 - 34' Light red brown very sandy marl.	
									34 - 58' Red marly sand.	
									58 - 72' Cream very micaceous silty-schist derivative.	
22	8	95'	93.95	83 1/2'	100 200	855.35 1057.1	51/2171 103/2471		0 - 1' Brown soil	Bore A.
									1 - 2 1/2' Brown calcareous clay.	Folder 11/-
									2 1/2 - 10 1/2' Hard nodular travertine limestone.	
									10 1/2 - 17' Grey sandy clay.	
									17 - 34' Brown sandy clay.	
									34 - 37' Pale yellow fine siliceous sand.	
									37 - 43' Pale yellow fine siliceous sand.	
									43 - 45' Brick red fine siliceous sand.	
									45 - 51' Fine yellow-brown siliceous sand.	

Bore		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	Sea level	Strain 2 Continued.		Remarks
									51 - 57'	57' - 85'	
22									White sand and grit.	Fine golden-yellow micaceous sand.	Bore A Folder 11/-
									Pale yellow micaceous sand.		
									Pale yellow micaceous sand and quartz grit. (water).		
23	9	40°			Dry				No details.		Fall B. Hd. Burgoyne.
24	9	76°	73°	73°		1006.09	48/1329		0 - 2'	Brown soil	Bore A
									2 - 4'	Pale brown calcareous clay.	Folder 7/-
									4 - 6'	Cream coloured calcareous clay and limestone rubble.	Hd. Burgoyne
									6 - 11'	Nodular travertine limestone.	
									11 - 16'	Brown calcareous clay and limestone rubble.	
									16 - 28'	Fine mottled gray and yellow clayey sand (siliceous).	
									24 - 50'	Yellow-brown clay (samples lost).	
									50 - 54'	Pale yellow and fine siliceous sand and some clay.	
									54 - 60'	Mottled white and yellow fine siliceous sand with some clay.	
									60 - 72'	Yellow siliceous sand and considerable muscovite.	
									72 - 76'	Coarse quartz sand.	
25	8	90°	85°	85°		Salt 2100	107/1087		0 - 6'	Creamy white travertine limestone.	Bore C
									6 - 15'	Gray brown travertine limestone and some marl.	Folder 12/- Hd. Burgoyne
									15 - 30'	Brick red silt and very fine sand.	
									30 - 35'	Brick red silt and very fine sand with ferruginous grit and gravel.	
									35 - 45'	Light brown silty and very fine sand.	
									45 - 60'	Dark brown silty fine sand with grit and gravel some of which amphybolitic.	
									60 - 75'	Pale pink micaceous clay.	
									75 - 90'	Whitish and blue mica and some clay.	
26	7	64°	44° 64°	45°	150	48/1326 (anal. no.) ATS1580			0 - 1'	Brown soil.	Bore A
									1 - 7'	Nodular travertine limestone. 7-15'	Folder 14/- Hd. Burgoyne
									Calcareous clay and limestone rubble. 15-36'		
									Brick red ochreous sandy clay. 36-40' Fine white siliceous sand-red mottlings. 40-51' Very fine white siliceous sand and sandstone. 51-64' Brick red ochreous fine siliceous sand.		
27	24	42°	40	26 27	500 5007	271.8 ATS120	107/1089 E221/62		0 - 10'	Cream travertine limestone.	Bore B
									10 - 20'	Creamy travertine limestone with some marl.	Folder 20/- Hd. Burgoyne
									20 - 38'	Pale pink marly fine sand with some calcareous grit and gravel.	
									38 - 42'	Yellowish cream slightly silty fine to coarse sand.	

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
									<u>STRIP 1 (Contd.)</u>	
28	24	31'	28'	25'	200	35.8 42 ANS 57	107/1093 Dep. Agric. LW220/62		0 - 5' 5 - 18' 18 - 25' 25 - 31'	Bore A Folder 15/- & 2/7. Hd. Burgoyne Pale pink travertine limestone. Pale brownish cream travertine limestone. Pale brownish cream travertine limestone with some marl. Brown marl with travertine limestone rubble.
29	From Lot 26	90'	60'	60'	10	1677.3 salt	107/1095		No details.	Bore TA. Folder No. 21/- Hd. Burgoyne
30	12	29'		19'	50-100	320.91 374.1	20/5806 ?		No details	Station Horse Well C. Hd. Burgoyne Plan 147-1/1
31	12	7'		6 1/2'	100-150	156.89	20/5801		No details	Bore No. A Hd. Burgoyne Vinyacola Well Plan 147-1/1
32	12	11' 6"			300	1 oz.			No details.	Bore No. B Folder 32/4 Hd. Burgoyne Racecourse.
33	8 1/2	35'		28'	40	111.63	20/5837		No details.	Well No. A Hd. Burgoyne Plan 147-1/1.
34	8 1/2	12'		11' 11' 3"		1 oz. 1 1/2 ozs.			No details.	Bore No. D Hd. Burgoyne. Folder 32/3 Racecourse

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	33	78			Dry				STRIP 2 Sunk in Amphibolite Schist	Well No. A Ed. Cohen
2	7	46		38	50	123.63	20/5838		Over whitish clay (or Marl)	Bore No. 2 B. Shipard Ed. Cohen
3	7	38			100	452.51	20/5839		No details	Well No. A B. Shipard Ed. Cohen
4	6	40	40	37	500	ATS 1050	125/216		5 ft. Clay 6 " Rock 20 " Hard rubble 9 " Rock	Bore No. D Ed. Cohen Folder No. 1/9 M.G. Oats, Penang
5	23	128	128		V. small	ATS1740	49/1719		0 2° Calcareous sandy topsoil 2 4 Pinkish sandy limestone 4 11½ Traverine 11½ 86 Pinkish sandy limestone 86 104 Pinkish medium grained very calcareous sand. 104 108 " " " " " " 108 128 slightly coarser. Red coarse slightly calcareous sand	Bore No. A Folder No. 3/- Ed. Cohen G.J. Edwards
6	6	25		24'6"		774.90	20/5851		No details	Well No. A Ed. Cohen R. Dunn
7	12A	17		15'3" 15'6"	175 150	318.18	20/5816		No details	Well No. A Ed. Giles G. Law
8	12A	36		32		salt			No details	Bore No. B Ed. Giles G. Law
9	12B	407		387 30	50	622.80 1½oz.	20/5819		No details	Well No. A Folder No. 1/8 Ed. Giles R. Dunn
10	8A	30		257	100	308.45	20/5853		No details	Bore No. A Ed. Giles C. Brook
11	7	77	74	74	80	1770	103/21467		0 20° Pink sandymarl and limestone 20 35 Pink sandy marl - some large quartz grains 35 52 Pink very sandy marl 52 77 Pink sandy marl	Bore No. A Folder No. 4/- Ed. Giles G.J. & J.L. Edwards Ceduna. Non-productive
12	16					salt			No details	Bore No. A Ed. Giles
13	8	27		23	100	78.58	20/5854		No details	Bore No. A Ed. Giles G. Law

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	sea level		Remarks
14	11	30			none	bitter			No details	Nanandilla Well No. B Folder No.1/6 Hd. Giles
15	10A	35		30	150-200	186.91	20/5809		No details	Garden Well A Hd. Giles G. Law
16	10A	27		20	150-200	505.50	20/5795		No details	Well No. B Folder No.1/3 Hd. Giles G. Law
17	9	47			small	stock- salt			No details	Well A Folder No.1/4 Hd. Giles
18	8	45	38	32	30	86.9	108/1328		0' 20' Pale brown sandy clay with limestone gravel 20 40 Pale brown early limestone with lime- stone gravel 40 45 Pale brown dense sandy clay with lime- stone nodules.	Bore No. A Folder No.8/- Hd. Magarey J.H. Murray & Sons
19	16		19	19	400	1oz.			Hard limestone to 19' Soft limestone - little pipe clay in bands rock bottom	Bore No. B Folder No.7/3 Hd. Magarey J. Miller
20	16		19	19	600				0 19' Hard limestone Soft limestone Little pipe clay in bands Rock bottom	Bore No. C Folder No.7/3 Hd. Magarey J. Miller
21	16		19	19	1500				0 19' Hard limestone Soft limestone Little pipe clay - in bands Rock bottom.	Bore No. D Folder No.7/3 Hd. Magarey J. Miller
22	16		20	20	400				0 19' Hard limestone Soft limestone Little pipe clay - in bands Rock bottom.	Bore B Folder No.7/3 Hd. Magarey J. Miller
23	W. Rec	43		15	175	426.78	20/5826		No details	Bookbale Govt. Well T/A Hd. Magarey F. Gray
24	62	22	20	18	400	116.8	108/1325		0 3' Brown sandy soil 3 17 Buff rubbly limestone 17 22 Pinkish-white limestone	Bore No. B Folder No.12/- Hd. Magarey F. Gray
25	62	19	17	15	200	ATS625	108/1326		0 3' Sandy soil 3 19 Light buff limestone	Bore No. A Folder No.11/- Hd. Magarey F. Gray
26	13	36	27 35	27	100 250	fresh			0 16' Limestone 16 27 Not stated 27 35 Sand-pipe clay 35 36 Gravel	Bore No. D Folder No. 7/4 Hd. Magarey J. Dunn

		Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	sea level		Remarks
27	13	36		30		1½ oz.			Limestone and calc ste	Old Well A Folder No. 1/8 Hd. Hagarey Dunn (not used)
28	12	36	36	25'6" 26	50	33.90 ATS 36	49/1709 52/2590		0 5' Brown calcareous soil 5 14 Pink calcareous clay 14 17 Brown gritty clay 17 19 Travertine limestone 19 30 Pinkish soft clayey limestone-aeolianite 30 36 Brown clay with limestone nodules	Bore No. C Folder No. 3/- Hd. Hagarey I.A. Gray
29	12	72	72	70		948.06	49/1710		0 1' Brown soil 1 16 Travertine limestone 16 36 Pink pale brown calcareous sand - aeolianite 36 51 Cream coloured calcareous sand-aeolianite 51 66 Yellow-orange fine sand and grit - slightly calcareous 66 72 White clay with ironstone nodules	Bore No. B Folder No. 4/- Hd. Hagarey I.A. Gray
30	13	125	70 120	70 50	100 10	450 1701.9	108/1333 108/1332		0 3' Soil 3 20 Light brown sandy limestone 20 32 Yellow brown very sandy marl 32 50 Yellow pink slightly gritty marl 50 68 White, pink and light brown silty clay 68 125 White and pink micc. kaolinitic gritty clay - (bedrock derivative)	Bore No. K Folder No. 9/- Hd. Hagarey L.J. Dunn Abandoned
31	12	57	57	55		128.81	49/1711		0 3' Light brown soil 3 18 Travertine limestone 18 33 Pale brown fine calcareous sand - some siliceous aeolianite 33 38 Orange coloured fine calcareous sand - some siliceous aeolianite 38 42 Hard sandy limestone-fine grained 42 56 Light brown calcareous sand - porcellanite pebbles aeolianite 56 57 Fine yellow siliceous sand	Bore No. D Folder No. 5/- Hd. Hagarey I.A. Gray
32	9	65	55	54	50	Brackish 1041.3	108/1329		0 4' Brown soil 4 17 Buff limestone and marl 17 32 Light brown to cream nodular rubbly limestone 32 51 Yellow calc. gritty sandstone 51 58 Light brown clay and grit 58 65 Red to maroon micaceous gritty clay -? granitic derivative.	Bore No. G Folder No. 10/- Hd. Hagarey G. Maher
33	9	62			v. small	½ oz.			62' Clay and cream sand to 62'	Well No. B Folder No. 1/2 Hd. Hagarey Maher's Well
34	9	73			400 day	ATS 760	92/1009		This sample was taken 3' below bottom of 70' fresh Bore No. H water well, which takes about 400 g.p.d. Fresh water in white pipe clay, quartz and quartz sand	Bore No. H Folder No. 2/10 Hd. Hagarey B. Maher
35	9	71		64	fair	½ oz.	Plan 60/118		Limestone on mica and hornblende schist and qtz with granite veins	Fennalumba Well C Folder No. 1/5 Hd. Hagarey

[illegible]

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	STRIP 3	Remarks
1	18A	51'	49'			16ozs.			0 - 15' Red clay. 30' Limestone. 50' Various clays. At 51' Sand, grey green.	Bore B. Folder 1/4 Hd. Caldwell
2	32	16'6"	15'6"			4ozs.			No details.	Bore No. A Folder 1/5 Hd. Caldwell
3	20B	64'	46'	44'	500	6ozs.			20' Limestone 24' Clay with gravel. 24' Granite.	Bore 7B Folder 1/3 Hd. Sturdee
4	B	20'		50'		AT81625	92/1080		Travertine, fossiliferous calc. est. Hornblende gneiss.	Well (S. enr.) Folder 2/5. Hd. Sturdee Well in hollow.
5	21	89'	65'	65'	10				0 - 15' Pinkish travertine. 15 - 25' Greenish to pale buff soft limestone.	Bore No. A Folder 12/- Hd. Sturdee
									25 - 40' Yellow fine sand. 40 - 58' Yellow fine sand some coarse fragments.	
									58 - 67' Red brown sandy marl. 67 - 89' Buff sandy marl.	
6	17	68'		54' 62' 60'	large 6,000	1oz. 335.91 AT8237	52/2593 92/1079		Nodular limestone. L.S. sand. Red. calc. sand.	Bore No. A Pintuba Well Folder 2/2 Hd. Sturdee
7	24	67'6"		60'6"		281.23 AT8238	42/1573 92/1078		0 - 66' Yellow fossiliferous calcarenite. Alluvium. Marine limestone. Yellow sand and etc.	Well A. Pintuba Well Folder 2/5 Hd. Sturdee.
8	16	75'	54' 70'	54'	120	fresh			No details.	Old Well C Folder 4/1 & 4/2. Hd. Sturdee
9	16	56'6"			100	3 ozs.			No details.	Folder 4/6 Bore No. A Hd. Sturdee
10	16	48'6"				2 1/2 ozs.			No details.	Bore No. B Folder 4/7 Hd. Sturdee
11	3	85-90'		74' 63' 65-70'	Moderate good "	1 oz. AT8203 " 199	52/2587 92/1077		0 - 3' Travertine. 3 - 20' Trav. sandstone. 20 - K.L. Timbered. Onelissic granite on dump.	Well A. Hd. Brown Folder 1/1 Koorngibbie Govt. Well.

		Total	Wa er cut	Static level	Ga ons per hour	Grains per gallon	Ana ysis No.	sea level			
12	3	58'6"	56'	± 50'	100gph	1/2 oz. 176.7	142/189		<u>Series 3</u> Continued		
									Limestone.	Bore No. 8. Folder No. 2/10 Hd. Miller.	
13	3	56-58'		50'		ATS104	52/2591		No details.	Well D. Folder 1/10 Hd. Miller.	
14	3			51'	3000d.	1/2 oz.			No details.	Well B Fox's Well Hd. Miller Folder 1/4	
15	4	61'		58'		240-50	52/2593		0 - 18'	Travertine and travertinised sandstone.	North Well No. A Folder 2/2 Hd. Miller.
									18 - 50'	White calc. rubble clay.	
									50 - 61'	Yellow (horizontal) fossilif- erous sandstone.	
16	4	63'		60'		1/2 oz.			No details.		Well D Folder 1/3 Hd. Miller
17	4	60'		50'		ATS200	52/2592		No details.		South Well C Folder 2/1 Hd. Miller
18	3	83'		81'		ATS 339	52/2586		Travertine and fossiliferous sandstone on dump.		Well C. Folder 1/9 Hd. Miller.
19	5 A	115'	113'		small	926.56	54/273		0 - 45'	Travertine.	Bore A. Folder 4/- Hd. Miller
									45 - 58'	Calcareous sandstone (aeolianite)	
									58 - 68'	Hard yellow aeolianite.	
									68 - 77'	Yellow clayey "	
									77 - 85'	Hard calcareous sandstone.	
									85 - 98'	Yellow aeolianite.	
									98 - 101'	Yellow calcareous coarse sand.	
									101 - 111'	Dark yellow calcareous sandy clay.	
									111 - 115'	Dark yellow quartz sand.	
20	16	85'				ATS46914	151/104		No details.		Stotts Well B Folder 2/1. Hd. Miller
21	16	72'		70'	good fair	424.58 1 oz.	52/2594			Travertine, sandstone, and fine sand on dump.	Well A. Folder 2/3 2 1/2
				54'	-	ATS 172	92/1089			Yellow fossiliferous calcarenite.	
				59'	good w/a	6457ATS	151/47		0 - 70'	Limestone on white green and yellow sand and clayey grit.	Hd. Miller

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
11	4 B	112	110	104	app.100	ATS 407	101/1799		No details	Bore No. C Folder No. 1/7 Hd. Lucy Yalata Lutheran Mission
12	B	684		200		758.56	15/4251		No details	White-Well A Hd. Lucy Colona Station
13	Adj. Sec. 5	113'6"		108 96	5000 day	1 1/2 oz. 626.17 681.66	15/4216 42/1872		Full Travertine-limestone and W/Bluff limestone	Colona Well A Folder No. 1/3 Hd. Lucy Yalata Lutheran Mission
				110 110	2500 2500	ATS 336 " 540	92/1076 101/1798			
14	13	145		160 134 134	500 day good 500 day	3/16oz. ATS 165 " 161 " 156	78/1363 92/1084 103/2127		Crystalline sand limestone on polyzoal limestone Fossiliferous limestone 0 141' Calc ste and polyzoal L.S.	Chinalumba Well A Folder No. 1/2 Hd. Lucy Yalata Mission
15	21	112'9"		102'2"		1 1/2 oz. ATS 765	92/1085		Travertine Full-Col., W/Bluff 1st. Cryst fossiliferous and softer chalky L.S. on clay and rubble (older III)	Waltabie Well A Folder No. 1/3 Hd. Lucy
16	15	108							Recent fixed sand ridges and trav. overlying Mullabor Limestone	Well A Hd. Lucy
17	10	178							Rec. Fixed sand ridges and travertine overlying Mullabor limestone.	Bore No. A Hd. Rice
1	BIR819	204		200'6" 100	200	ATS 460 460	92/1086 Plan 56/91		<u>STRIP 2.</u> 0 Travertine, Mullabor limestone Wilson's Bluff limestone Hard crystalline limestone and softer coralline and shell limestone on coarse sand grit, clay and 215' green argillaceous sand. (older III) Recent fixed sand ridges and travertine overlying Mullabor limestone.	Tallowan Well 3 Folder No. 1/3 Co. Hopetoun Out of hundreds Yalata Lutheran Mission
2	PL1637 BIR819	155								Hearing Well 1 Co. Hopetoun out of hundreds
1	PL1637 BIR818	681			1200	650	Plan 56-91		<u>STRIP 1.</u> Mullabor Plain travertinised Mullabor limestone outcropping of surface.	Jubilee White Well Bore 5 Grid C.6 Jubilee White Well Bore

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	16	100'6"	93			1 1/2 ozs.			PLAN 5. STRIP 1	Bore D Folder 2/9 Ed. Miller
2	16	125	103	103	100	ATS 2700 v/m ATS 15000 ppm	103/2455 151/51		53' 105' Brown clay 103 115 Fine white sand 115 125 Coarse yellow sand 0 30 Limestone on green and white clay and sand.	John's Bore C Folder No. 7/- & 1/3 H.R. Alchurch & E.H. Johns Hundred Miller
3	21	147	142	133	400	ATS 1020	94/1507		0' Old well limestone (SKETCH) pipe clay stone sandy clay 147' Water	Bore C Folder No. 2/5 Hundred Miller E.H. Johns & Sons.
4	21	142	138	138	100	ATS 2350	103/2456		0 30' Well 30 55 Gray clay sand 55 78 White clay sand 78 90 Gray sandy clay 90 103 Gray sandy clay 103 135 Soft brown sandstone 135 142 Gray sand	Bore A Folder No. 8/- Hundred Miller H.R. Alchurch
5	21	26	16	16	80-100	ATS 44	95/2015		No details	Bore B Folder No. 2/8 & 2/6 Orabi Pastoral Co. H d. Miller
6	21	100	93		large	12 ozs.			0 27' Limestone 27 100 Dark brown clay Yellow clay beneath	Big Paddock Bore D Folder No. 2/7 Ed. Miller Orabi Pastoral Co.
7	24	108				Dry			0 108' Fossil III limestone	Bore B Folder No. 1/7 Ed. Miller
8	6	100 (about 90')			Good	Stock	Folder		L.S. Conglom (Near Cryst fossil L.S. (Older Sand or sandstone)	Cadashy Well A Folder 1/1 Ed. Lucy
9	5					Dry			Dance cryst L.S. and soft white L.S. on greenish and yellow argillaceous sand or ste (older III)	Kidnippy Well A Ed. Lucy Folder No. 1/4
10	Adj. Sec. 113 4	108	103	80	436.8	103/2454			0 25' Limestone 25 34 Yellow clay 34 46 White limestone 46 60 Limestone rubble 60 85 Limestone 85 96 Gray clay 96 110 Buff clay 110 113 Limestone	Bore No. B Folder No. 2/- Ed. Lucy Aborigine Dept. Yalata Mission

BORE	S CH N	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	ve sea level	Stripped through	Remarks
1	PL1933 Blk882	777'	192 749 760 "	126	1500 62000 "	911.00 663.8 3 ozs. 549.11 810 1.51ozs. 675 ATS 8570	1/2A 1/2A 15/4252 87/1749 92/1091 151/206		PLAN 6 STRIP 1. 0' 1'6" Red loam 1'6" 120' Grey crystalline limestone with marine fossils 120 190 Polyzoal limestone 190 210 Soft white polyzoal limestone 210 403 White chalk with bands of flint or marine fossils 403 414 Yellow chalk with lumps of black clay and marine fossils 414 749 Black clay 749 753 Black sand, good water 753 768 " clay 768 772 Quarts, gravel and clay 772 777 Gravel 0 147' Through limestone. Shaft. 147 210 All boulders & solid white rock 210 218 Hard brown rock 218 258 White and yellow soft rock 258 260 Quarts pebbles, got salt water 2 1/2 ozs. 260 292 Pipe clay bands & rock 292 318 Sandy pipe clay 318 374 Pipe clay, soft white rock, quartz pebbles. 374 424 Yellow and brown clay, sticky clay. 424 428 Hard quartz rock 428 440 Green sandy shale with blue seams 440 444 Quarts rock 444 479 Sandy shale 479 484 Very hard gray sandstone with quartz 484 513 Sticky blue clay 513 515 Black rock 515 553 Blue clay 553 554 Grey rock 554 620 Blue clay 620 624 Hard black rock 624 699 Blue clay 699 735 " " 735 738 Quarts rock 738 743 Blue clay, struck water, rises to 240 feet. 743 750 Sandy gravel, water rises 200 ft. 750 753 Hard quartz pebbly rock 753 760 Sandstone rock and more water, rises 180' 760 775 Coarse gravel and mud, after pumping water rose to 170' from surface 775 785 Depth of bore, water rises to 157' from surface. No record of quality of water given. Coarse gravel and sand, after pumping water rose to 170ft. from surface. 787 Drill down to 787ft. The water bed is composed of granitic sand and pebbles.	Robert's well & bore No. 5 Folder No. 1/8-A Grid B.6 Mullabor Station
2	PL1933 Blk882	787	260 743 750 760 775 785	216 240 200 180 170 157		2 1/2 ozs. † 1 1/2 ozs hydrometer				Murraywidge bore & well 6 Grid B.6 Folder No. 1/5 -A 1/6 -A Mullabor Station

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
3	PL2084 Blk884	794	198	198		1409.45	2/383		Surface to bottom of shaft 190' 190' 235' Soft white limestone with hard white chert boulders every few feet. Last three feet slightly yellowish. 198 Struck water. Did not rise. 220 Gas bubbles in water 225 Whiting. 235 241 Hard white polyzoal limestone 241 244 Soft " 244 244'6" Very hard gray chert & L.S. rock. Turns brown on exposure to air. 244'6" 248 Creamy polyzoal limestone 248 270 White limestone, fairly hard. 270 280 White polyzoal limestone. Struck water. Rose to 190'. 280 463 White limestone, alternating hard & soft. Polyzoal at 330'. Whiting 400'. 463 464 Yellowish limestone. 464 467 Pea green clay. Turns brown on drying. Highly calcareous. Glauconite? 467 473 Dark brown clay. Sandy carbonaceous. 473 484 Greenish clay 484 627 Black shale with trace of oil. Lignite clay. Stated to burn after drying. 627 784 Blue shale, very sticky. 784 787 Blue clay with coarse gravel. Struck water, rose to 190'. 787 790 Fine gravel. Coarse L.S. SiO₂. Sand. 790 794 Very coarse gravel. Coarse quartz sand. Bottom of bore. Water rose to 139' and, on pumping with saw pump, to 131' from surface.	Muddugana Bore No. 7 Folder No. 1/10 Grid B.6 Nullabor Stn.
1	P.S.10 ^B Adj.PL 1971 Water Res.284	1500	182 240 900	267	large good	4 oz. 5 oz.			<u>STRIP 2</u> 0 38' Surface soil, travertine nodules and clay. 38 82 Hard crystalline limestone 82 85 Soft limestone 85 100 Crystalline limestone 100 528 White polyzoal limestone with flints 528 538 Clay and ironstone 538 833 Black clay 833 900 Blue shale 900 915 Sandy " 915 940 White pipe clay and gravel 940 960 Carbonaceous shale 960 1074 Pipe clay, gravel and iron pyrites. 1074 1100 Shale 1100 1132 Quartz-gravel, pyrites and lignite. 1132 1387 Blue shale 1387 1500 Igneous rock	Yanganabie Bore No. 2 Folder No. 1/9 Grid B.6 Nullabor Plains

BORE	SECTION	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
1	P.S. 10 ⁴ PL2067 W. Res. 39 Blk297	1277		975 1004 975	400 1200	3 1/2 oz. 3 1/2 oz. salt 1506.18	16/4751-		STRIP 3 0' 13' Surface loam. (Light red soil with nodular limestones) 13 45 Crystalline limestone 45 54 Plum pudding zone 54 59 Crystalline limestone 59 82 Tough limestone 82 131 Yellow " 131 148 White gritty limestone 148 171 Hard white " 171 187 Chalk and " 187 245 " , sandstone and flint 245 570 Yellow rock and clay 570 578 Sandy clay and gravel 578 599 Drift sand 599 600 Yellow clay 600 970 Blue " 970 975 Brown " 975 988 Coarse grey sand 988 989 White clay 989 995 Sand and quartz gravel 995 998 Light grey clay 998 1003 1/2 Sand and quartz gravel 1003 1004 White clay 1004 1010 Sand and quartz gravel 1010 1011 White clay 1011 1015 Light blue tough clay 1015 1018 " grey sandy " 1018 1020 Dark brown stiff " 1020 1022 Light grey sandy " 1022 1037 Coarse sand 1037 1039 Light blue stiff clay 1039 1042 Black sandy clay 1042 1062 Sand and quartz gravel 1062 1062 1/2 White clay 1062 1066 Sand 1066 1108 Light green clay 1108 1120 Brown " 1120 1141 Hard blue rock 1141 1144 Red gritty rock 1144 1154 Decomposed brown rock 1154 1195 Blue rock 1195 1196 Green " 1196 1253 Blue " 1253 1277 Granite	Gainswarra Bore 5 Folder No. 1/1 -A Abandoned Grid A.6 Nullabor Plains Bore No. 4
2	PL2067 Blk297	214	266	266		493/80 372.19 ATS 866	21/6203 21/6204 1287/62		No details	Bore No. 4 Folder No. 1/4 & 1/5 Grid A.6 C.R. Curney, Koon- alda Stn.
3	PL2067 W. Res. 40 Blk298	1084	665 740	270 290 420 490 420	400 420 500 gpd 700	3 1/2 oz. 1 1/2 oz. 1 1/2 oz. 36.68	15/4245		0' 70' Grey crystallized L.S. 70 148 Coralline rock 148 326 White polyzoal L.S. Flint at 170" 326 391 Bottom of shaft 391 416 Chalk (white) 416 463 White limestone. 6" white sandstone 463 475 Chalk & flint 475 532 White sandstone	Bore No. 3 Folder No. 1/2 & 1/3 A, B Nullabor Plains Bore No. 3 Grid A.6

Bore	Section	Total	Water cut	Static level	Gallons per hour	Grains per gallon	Analysis No.	above sea level	Strata passed through	Remarks
3	P.S. 10 PL 2067 W. Res. 40 Blk 298	Contd.							532 544 Chalk & flint 544 565 " " 565 632 Yellow clay. At 595' piece of timber wedged in bore and partly bored out. 632 667 Chocolate gravelly clay 667 937 Blue clay 937 940 Blue clay and sand 940 946 Brown clay 946 965 Blue clay 965 1043 White sandy clay 1043 1050 Granitic rock (syenite). 1050 1061 Black gritty rock 1061 1073 Hard blue rock 1073 1084 Red granite	Bore No. 3 etc.

Table No. 1

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

HundredCounty PLAN No. 7

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Grains per gallon	Analysis No.			
									No recorded information of Bore or Wells in Plan No. 7 area. Cocapana Sheds to West Aust. Border.	

EYRE HIGHWAY TERRAIN SURVEY

Pt. Augusta to W.A. Border

by J.B. Firman

RPT. BK. 59/75

TERRAIN SURVEY

PORT AUGUSTA TO EUCLA

This survey was made to test the feasibility of trenching and laying a trunk telephone cable between Port Augusta in South Australia and Eucla in Western Australia. The route proposed follows the Eyre Highway. Interest centres on the material between ground surface and a depth of five feet, and on hard rock as the principal hazard.

A traverse of 1,500 miles from Port Augusta to Eucla and return was carried out from 13th to 21st September, 1964. Geology was noted on route to Eucla, landform and plant associations on the return trip to Port Augusta.

Surficial materials (sediments, soils and weathered rocks) have been described for the various land units delineated, and the rippability of these materials has been described in general terms.

The information is presented in three volumes: Text and Tables, Plans, and Bore Logs. The tables supply information on the rippability of materials in each of the land units shown on the plans. Photographs are interleaved with table pages. The plans show the distribution of land units and contain comments on rock outcrop and local conditions along the route. Bore logs are supplementary and provide information on materials at depth and on the kind of quality of water available along the route. Plans, tables and photos are cross-referenced and are designed to be self-explanatory. Bore logs are arranged by plan and strip map number.

This survey can be later elaborated, if necessary, by photo-interpretation of alternate routes, and by photo-interpretation of proportions of the various materials traversed by the line within selected land units. Photo-interpretation is not expected to yield much useful information west of Ivy Tanks.

Rock samples are available for reference in the Department of Mines Core Laboratory at Thebarton.

J.B. Firman
Assistant Senior Geologist
GEOLOGICAL SURVEY

S P E N C E R G U L F P R O V I N C E

Port Augusta to Lincoln-Eyre Highway Junction

(Plan 1 Strip 1)

BASEMENT ROCKS: Sandstone, quartzite and shale

SURFICIAL DEPOSITS: Shelly sands and silts, deep sandy brown soils with soft lime horizons (kunkar), sands and clayey sands with lenses of gravel, shallow stony brown soils with hard kunkar at the base, talus.

REMARKS: See additional notes on plans. Flat valley floors offer no real problems, because a few feet of sand covers rippable gravel beds. Bedrock is closer to the surface below steeper slopes of valley walls and rises, but this is jointed and probably rippable to about 2 feet. Much hard ground can be avoided by keeping line away from tops of rises.



1. Units 1, 2, 4 & 5. Plan 1. View from Lookout at Ft. Augusta across high level flats of Unit 2 to the tidal flats of Unit 1 on the left, and to the piedmont slopes of Unit 4 and the hills of Unit 5, both on the right.



2. Units 3 & 5. Plan 1, Strip 1. Looking south. Creek gravels of Unit 3; sticky brown soils of the flats in Unit 4, and hills of Unit 5.

UNIT	MATERIAL	COMMENT
1	Shelly sands and silts of the tidal flats. Saline, under water or saturated at high tide. See photo 1.	These deposits can be avoided by siting the line in the deep brown soils of the high level flats west of the Lincoln Highway.
2	Deep sandy brown soils with soft limy (kunkar) horizons. High level flats west of Port Augusta. See photo 1.	No trenching difficulties.
3	Sands and clayey sands with lenses of gravel found along creeks and in alluvial flats. Boulders of 12 ins. max. diameter common, large boulders occur in some places. See photo 2.	Easily rippable, but restricted to a narrow zone along creeks.
4	Stony brown soils with gypsum and lime in places. Gravel up to small boulder size. Found adjacent to alluvial deposits of the creeks and on the lower (piedmont) slopes. Deep near flats, becoming thin and bouldery near hills and rises. These deposits overlie Tregolana shale or slumped Simmons Quartzite. The base of the thin deposits near steeper slopes is marked by very hard residual (older) kunkar. These deposits give way to thin talus. (Angular gravel of granule to boulder size without a matrix) near the lower hill slopes.	Easily rippable to required depth near flats or to bedrock near hills and rises.
5	Quartzites and sandstones of the hills; Tregolana shale and slumped Simmons Quartzite of the foot-hills and lower hill (pediment) slopes. Quartzite is jointed near surface with joints about 1 foot apart. See photo 2.	Tregolana Shale rippable; sandstone and Simmons Quartzite can be ripped down an extra foot in places where jointing is close-spaced, but must be blasted elsewhere.

MIDDLEBACK PROVINCE

Lincoln-Eyre Highway Junction to Section 9, Hd. of O'Connor

(Plan 1 Strip 1 to Plan 1 Strip 3)

BASEMENT ROCKS:

Schist, gneiss, calc-silicate rocks, hematite-iron formation, dolerite, porphyry and granite. Outliers of conglomerate and thin restricted veneers of sandstone in places.

SURFICIAL DEPOSITS:

Sands and gravels, brown soils (deep on the flats with softer kunkar, thin on the rises with hard sheet kunkar in places), brown and yellow clay under brown soil, variously weathered and jointed basement rocks.

REMARKS:

See notes on plans. Many rises and ridges where hard rock is near surface can be avoided by small variation in the route. The minimum depth of 2ft. can be achieved by ripping on ~~most low rises,~~ and full depth of 4 - 5 feet can be achieved by ripping on most of the flats.



3. Unit 8. Plan 1, strip 1. View north west. Colls of the low rises in the Middleback Province. Tall "yall" and other trees with a Mallee habit on the west side of the unit mark a somewhat deeper brown soil than usual.



4. Unit 7. Plan 1, strip 3. Eucalypts with Mallee habit and "yall" growing on a thin dark red brown soil over hard platy kunker. Ferruginous gravel of an old land surface occurs at the base of the kunker.

UNIT	MATERIAL	COMMENT
6	Sands and gravels of the creek courses	Rippable, but shallow in places over weathered bedrock.
7	Soils of the flats. Deep brown soils over kunkar from 18 to 24 ins. Brown soils with poorly developed nodular kunkar over brown and yellow clay (residual soil derived from weathered bedrock).	Rippable to required depth in most places or to minimum depth where kunkar overlies bedrock. Easily rippable to full depth.
8	Soils of the low rises. Shallow brown soils with nodular or sheet kunkar over bedrock, or brown soils with hard kunkar at or near surface.	Most kunkar rippable. Depth of 2ft. can be achieved in most places. Bedrock (particularly quartz porphyry) will prevent ripping to greater depths and blasting will have to be carried out.
9	Weathered and jointed, but generally resistant basement rocks of the ridges and low rises. Sandstone; in places very hard, but jointed with blocks up to 2ft. x 2ft. Tregolana Shale; deeply weathered and jointed. Porphyry; weathered and veneered with platy talus Quartz-iron rock; generally hard, but deeply weathered and soft in patches. Quartzite; hard Granitic gneiss; weathered Dolerite; rotten, deeply weathered	Outcrops are shown on the maps. Rippable with difficulty to about 2 ft. Rippable to at least 3ft. Not rippable, blasting required. Rippable only in patches. Blasting required elsewhere Can be picked easily to 6ins. May be rippable to 2ft. in most places. Where seen, veneered with soil. Probably rippable to at least 3 feet.

EYRE PROVINCE

Section 9. Hundred of O'Connor to Karkulaby.

(Plan 1 Strip 3 to Plan 2 Strip 3).

BASEMENT ROCKS

Granite and granitic gneiss with a thin veneer of Tertiary sands and clays.

SURFICIAL DEPOSITS:

Sands, sandy brown soils (deep with weak kunkar horizons, shallow with hard kunkar in places), deep clays over weathered basement rocks.

REMARKS:

In this unit shift off hill tops into valleys where hard rock occurs.



5. Unit 10. Plan 1, Strip 3. Weathered bedrock in quarry south of road. This is a shallow soil with sand over kunker over weathered bedrock in the interdune swales.



6. Unit 11. Plan 2, Strip 1. View south showing deeply weathered rippable granite gneiss. This material is veneered with a thin sandy soil.



7. Unit 10. Plan 2, Strip 1. View south showing deep brown soil typical of this unit revealed in road cutting.



8. Unit 10. Plan 2, Strip 3. Deep brown soil typical of the unit.

UNIT	MATERIAL	COMMENT
10	Sandy soils, including brown soils, of the longitudinal dunes. Sands: gray over yellow over reddish brown; 5-10 ft. thick with kunkar at the base in some places. Sands of the interdune swales. Thin sand up to 3ft. thick over weathered bedrock; or 1ft. of sand over 2ft. of nodular kunkar over 2ft. of strongly weathered granite over about 5ft. of slightly weathered granite; or thin sand over Tertiary sands and clays.	Rippable to base. Rippable through kunkar into weathered bedrock, but depths in granite in excess of 2ft. can only be achieved by blasting. Full depth can be achieved in soils on Tertiary sands and clays.
<u>NOTE:</u>		
	Deep soils with clay over weathered basement rocks are found between sand dunes in places.	Rippable to full depth.
11	Thin sandy soils of the marginal festoon dunes. Soils with 6ins. of pale brown sand over 1ft. of mottled sandy clay over 3ft. of deeply weathered granite gneiss; or 6 to 12ins. of yellow-brown sand over sandy clay. Weak kunkar is present in some of the profiles.	Minimum depth can usually be easily achieved. Tertiary sands are rippable to full depth required. Some weathered gneiss is rippable to full depth except for hard bars, other gneiss under a thin veneer of sand cannot be ripped at all and blasting is necessary.
<u>NOTE:</u>		
	Deep soils with clay over weathered basement rock are found between sand dunes in places.	Rippable to full depth.
12	Large flats within the dune systems. Shallow soils; 6ins. of sand over 6ins. of hard sheet kunkar over hard weathered basement rock; or 12ins. of sand over 2ft. of rubbly kunkar over 2ft. of weathered granite with hard granite lower. Deep soils; sandy brown soils up to 2 feet deep over kunkar over weathered bedrock; or sand over residual clay soils developed on weathered granitic rocks; or sand over Tertiary sands and clays.	Hard kunkar and hard granitic rocks require blasting. Some weathered bedrock will require blasting if minimum depth is to be achieved. Other soils rippable to full depth.

STREAKY BAY PROVINCE

Karkultaby to Section 5, Hundred of Cohen

(Plan 2, Strip 3 to Plan 4, Strip 2)

BASEMENT ROCKS:

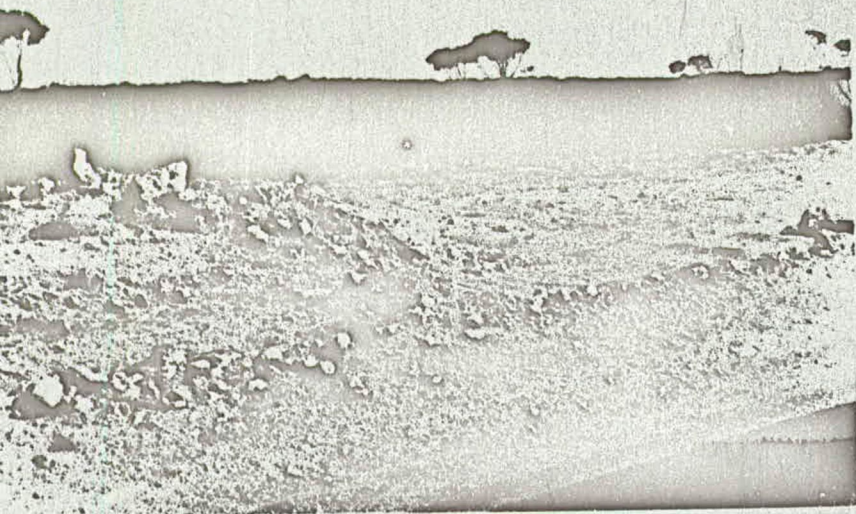
Granite and granite gneiss overlain by Tertiary sands and clays and Pleistocene sands including "aeolianite". Granitic rocks crop out. Aeolianite does not crop out.

SURFICIAL DEPOSITS:

Kumkar and younger brown soil with longitudinal dunes and poorly defined marginal dunes as a veneer.

REMARKS:

See plans for comments along the route. Most of this area falls within Unit 13 where line construction is relatively easy.



9. Unit 13. Plan 2, Strip 3. Looking south west.
Thin dunes veneer heavy kunkar in this unit.



10. Unit 13. Plan 3, Strip 3. Roadside scrape in deep
brown soil typical of this area. See adjacent
profile on plan.

MATERIALS

COMMENT

Brown soils on the southern margin of the longitudinal dunes. A poorly defined dune system with a N.W. - S.E. trend is usually apparent.

These soils are usually at least 3ft. deep. Profiles up to 10ft. deep are not uncommon. Hard kunkar crops out at ground surface in some places. See photo 10.

Minimum depth will be obtained throughout the unit. Maximum depth can be achieved in most places.

Thin brown soils with hard kunkar at or near ground surface near Capietha. Kunkar jointed in 6in. blocks in many places, but along some parts of the route blocks up to 5ft. x 3ft. x 2ft. occur. See photo 9.

Minimum depth can be achieved in most places. Greater depths rippable only with difficulty. Blasting required in some places.

Sands and silts of the tidal flats near Ceduna. Saline, saturated near ground surface.

Line could be routed as west from Section 9, Hundred of Bonython to by-pass Ceduna and this situation.

COORABIE PROVINCE

Section 5, Hundred of Cohen to Section 24, Hundred of Miller.

(Plan 4 Strip 2 to Plan 5 Strip 1)

BASEMENT ROCKS:

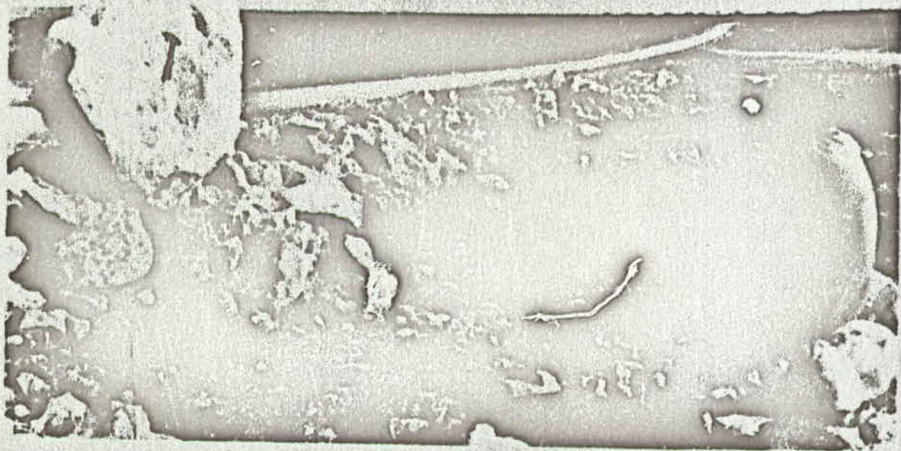
Granite and granite gneiss overlain by Tertiary sands and clays and Pleistocene "aeolianite" including sands. Granitic rocks do not crop out. "Aeolianite" does crop out.

SURFICIAL DEPOSITS:

Kunkar and younger brown soil. Longitudinal dunes and marginal dunes are not present, but the brown soils of the flats are deep in most places.

REMARKS:

Small deviations could be made to avoid the hard material in Unit 18.



11. Unit 18. Plan 4, Strip 3. Heavy kunkar.
Blocks up to 4 x 2 x 1 feet (and some
larger) occur on all rises in this area.

EUCLA PROVINCE

Section 24. Hundred of Miller to Eucla

(Plan 5, Strip 1 to Plan 7)

BASEMENT ROCKS:

Nullarbor Limestone and other sediments of the Eucla Basin.

SURFICIAL DEPOSITS:

Kankar and younger brown soil.

REMARKS:

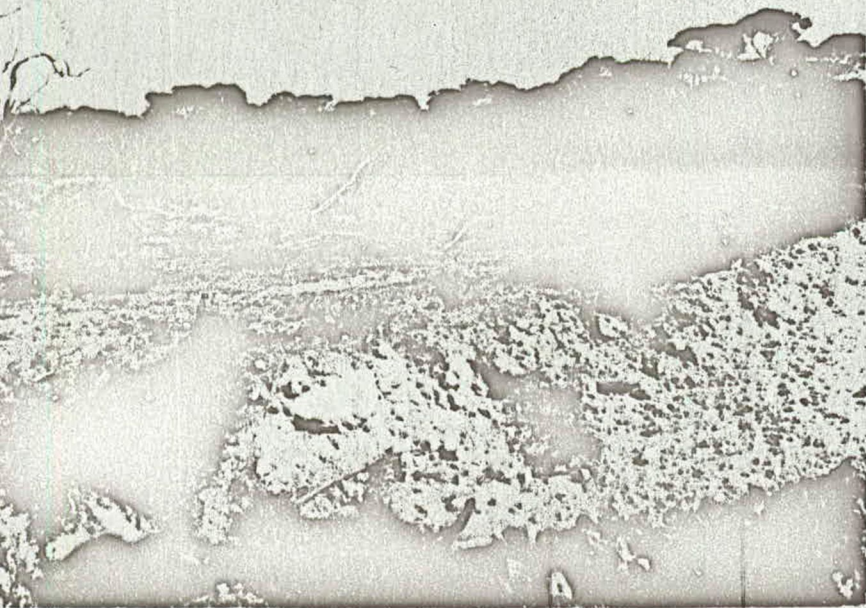
Numerous outcrops near sinkholes in the hard Nullarbor Limestone divert attention from the fact that much of this unit is veneered with sands and brown soils. These are quite deep in places and a minimum depth can probably be achieved without excessive blasting. The route should be chosen on the ground, diversions away from hard rock being made wherever possible.



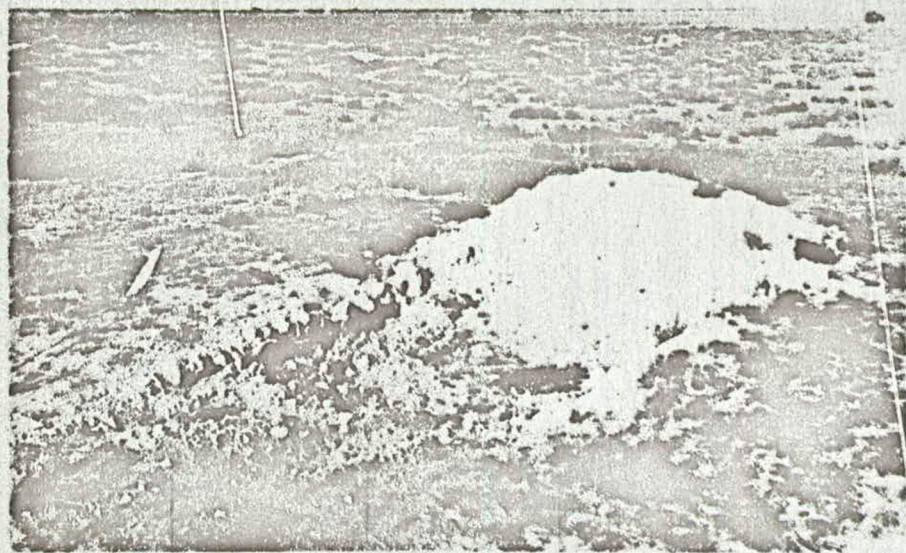
12. Unit 19. Plan 5, Strip 1. Deep brown soils east of Colona Well.



13. Unit 19. Plan 5, Strip 1. Hard kunkar at or near surface near Colona Well.



14. Unit 21. Plan 5. Strip 2. Kunkar in sandy profile at least 5 feet deep developed in festoon dune.



15. Unit 21 & 23. Plan 5. Strip 3. Soft kunkar near surface of dune in Unit 21. Beyond is flat ground of Unit 23.

UNITS

MATERIALS

COMMENT

- 16 Thin brown soils over aeolianite of the coastal zone. Not intersected by route in this unit.
- 17 Brown soils of the flats between resurrected aeolianite dune systems. Soils are at least 3 or 4 ft. deep in most places and contain weak platy kunkar. Heavy kunkar has been recorded in some places. Rippable to at least 3 feet. Full depth of 5ft. can be achieved in some places. Blasting may be required in the few places where residual kunkar occurs.
- 18 Soils of the stripped "aeolianite" dunes. Typically 6 ins. of light brown sand with hard nodular kunkar, over 6 ins. of platy and pebbly kunkar over 1 ft. red brown sand over hard calcareous sandstone (aeolianite). This material has joints about 2 ft. apart. See photo 11. Blasting will probably be required, but many difficult situations can be avoided by keeping the route off the rises.

NOTE: Blocks of heavy kunkar up to 4 x 2 x 1 ft. occur on all rises. Brown soil in the valleys is at least 3ft. deep.



16. Unit 23. Plan 5, Strip 3. Thin red brown sand over hard, brittle limestone. Depth to Nullarbor Limestone not known.



17. Unit 25. Plan 6, Strip 3. Near Albalakaroo. Brown soil profile. Nullarbor Limestone crops out on ridge in distance.



18. Unit 26. Sinkhole in Nullarbor Limestone. Low mallee with sparse underbrush marks areas of shallow soil and outcrop in this unit.



19. Unit 27. Large sinkhole south of road. Some of the subsidence occurred post development of the deep brown soil profile.

MATERIALS

COMMENT

20,21,22

Deep brown soils with nodular or thin platy kunkar of the undulating landform to the east of the Nullarbor Plain. Veneered with older poorly developed festoon dunes in places near Colona and Tallowan Tanks (Unit 19 - see photo 12), with younger well developed festoon dunes near Ivy Tanks (Unit 21 - see photos 14 and 15). Designated Unit 20 where no festoon dunes occur.

NOTE: Strongly undulating country near and between Colona and Tallowan has very hard kunkar on the tops of the hills. See photo 13. This may overlie hard Nullarbor Limestone. Deep brown soils in the valleys.

NOTE: Thin sand cover of the blow-out dune area west of Ivy Tank (Unit 22) does not significantly modify soils of Unit 19 which it overlies.

4,25,26

Combination of very shallow soils, (with hard kunkar over Nullarbor Limestone or hard limestone at surface), and very deep brown soils exposed to a depth of 5ft. and more in places. This situation appears as a north-west trending pattern of depressions and sandy rises. Probably a fossil dune system (Unit 23- photos 15 and 16); as a similar pattern with wide grassy flats (Unit 24); as a very thin and poorly developed festoon dune pattern (Unit 25-see photo 17) and as a plain with deeper soils marked by Nallie and Myall and with shallow soils over Nullarbor Limestone marked by open tracts vegetated with sparse under-shrubs (Unit 26-see photo 18). Large dolines, as at Wigunda Tanks, are almost completely infilled to form shallow oval depressions.

Thin brown soils over Nullarbor Limestone. Deep brown soils do occur, but the transition from a deep brown soil to limestone and back to a deep brown soil can occur in as little as 50 feet. See photo 19.

Rippable to full depth. Dunes near Ivy Tank easily rippable, but could hinder vehicle movement.

Deviations could be made to take line away from tops of rises. Blasting required in some places despite minor deviations.

Estimate of amounts of various materials is; Deep soil 40% shallow soil 50%, limestone with a thin discontinuous soil cover of sand, 10%. Some blasting may be required in shallow soil to achieve minimum depth particularly in Unit 19. Blasting will be required where route cannot be varied to avoid rock.

Changes from one soil type to another occur at various distances between about 200 and 800 yards.

Unit 22 west of Bunababie is characterized by shallower soils than elsewhere, but depths of at least 2ft and up to 4 feet in places will probably be achieved.

A combination of ripping and blasting will probably yield minimum depth across the unit. A suitable route may be selected by avoiding visible outcrop and more open ground.

MADURA PROVINCE

Eucla West

(Plan 7)

BASEMENT ROCKS:

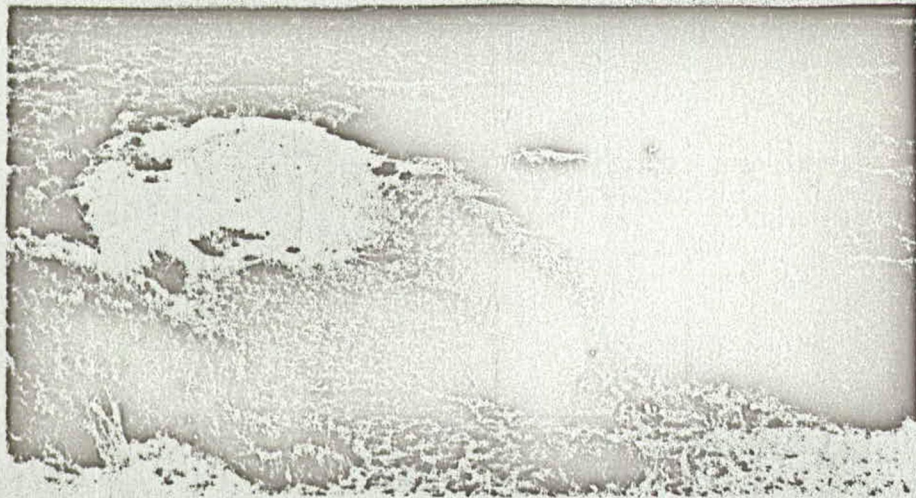
Tertiary limestone. (Mesozoic siltstone, mudstone and greensand rests upon a gneissic granite at depth).

SURFICIAL DEPOSITS:

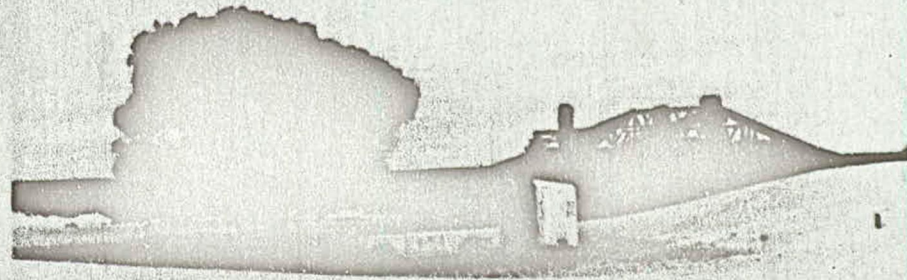
Talus of the cliffs backing the plain, deep brown soils, sands of the beaches and modern dunes, Pleistocene shelly limestone.

REMARKS:

No difficulty is expected on the east end of the plain. The Pleistocene limestone occurs at ground surface in some places west of Eucla and this may require blasting.



20. Unit 28, Plan 7. Roadside scrape in brown soil between UCLA Pass and the Old Telegraph Station. The scarp in the background is a stranded marine cliff.



21. Unit 29, Plan 7. Sands of the modern dunes encroaching on the homestead near the Old Telegraph Station. This material may cover the line in this area and further east near Jubilee Well.

UNITS

MATERIALS

COMMENTS

8

Talus slopes of the stranded marine cliff at Eucla,
deep brown soils of the coastal plain.

The line can be taken down to the plain through
deep gravel (granule to pebble size) of the
talus slopes.
The brown soils of the plain should be rippable
to full depth in most places.

9

Sands of the beaches and modern dunes.

Not important at present, but may cover the line
eventually near the Old Telegraph Station at
Eucla, and further east near Jubilee Well.

RPT BK 59/75

J.B. Harrison
Author copy

S.A. DEPT OF MINES

EYRE HIGHWAY

FROM PT. AUGUSTA TO WA. BORDER

TERRAIN SURVEY

FORE LOGS

Bores located along Eyre Highway from
Port Augusta to Toopoopora

DM-C3

S.A. DEPARTMENT OF MINES

Table No. 1

SUMMARY OF BORE RECORDS

Ground Water Survey

MINERAL

County PLAN No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	38	308'	308'	300'	-	451.40 809.47	2/585 9/2700		<u>Plan 1, Strip 1</u>	Bore A. Folder 1/1 Hd. Gillon A. J. & P. A. Mc Bride.
									0 - 5 Gravel. 5 - 10 Do. 10 - 15 Do. 15 - 20 Sharp sandstone - loose boulders. 20 - 50 Do. 50 - 110 Pink slate. 110 - 165 Brown sandstone. 165 - 175 Solid pink slate. 175 - 220 Brown slate. 220 - 245 Soft slate. 245 - 308 Brown slate.	
									<u>Strip 2</u>	
	PL1651 Blk 807	519'	178'	100' 95' 95'	V. large 800 800	ATB1550 ATB1600 ATB2150	85/1329 101/10 107/1012		0 - 3 Favourable in sandy soil, traces ironstone grit. 3 - 12 Limey clay with traces ironstone grit, quartz sand and fragments of red chalc. 12 - 24 Red clay with quartz sand and hematite grit. 24 - 33 Red sandy clay with quartz sand and hematite grit. 33 - 37 Stiff red clay with traces ironstone grit. 37 - 50 Red clay with ironstone and quartz grit and white clay pellets. 50 - 63 Ditto. 63 - 80 Ditto, but more clayey. 80 - 87 Deep white clay with white, quartzite grit. 87 - 100 Deep white clay with quartzite and ironstone grit. 100 - 105 Pale pink and gray plastic clay with very little hematite grit. 105 - 109 Ditto but clay with yellow and gray patches. 115 - 125 Off-white plastic silty clay; no grit. 125 - 131 (slightly greenish) gray plastic clay with hematite. 131 - 145 Ditto, almost no grit. 145 - 175 Ditto, almost no grit. 170 - 178 Ditto; also small pieces of gray and green chaly sandstone.	Bore 1. Folder 52/- D. Minnie Iron Knob. Racecourse Area.

SUMMARY OF BORE RECORDS

Ground Water Survey

PLAN No. 1

CORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	FL1664 Blk 807	519'	178'	100' 95' 95'	V. Large 800 800	AT81550 AT81600 AT82150	86/1329 104/18 107/1012	AT	<u>Strip 2 (Contd.)</u> 178 Struck water which rose to 100', AT8 1550. 178 - 183 Brown clay with 20% grit (quartz, chale and minor hematite). 183 - 192 Medium and coarse grit in clay (quartz, hematite, schist etc.). Hematite increasing with depth. 192 - 195) Fine sand, 50% hematite, also 195 - 200) limonite, quartz. 200 - 205 Ditto but higher proportion of limonite. 205 - 210 Fine grit and clay (10% hematite, 40% red schist, also limonite). 210 - 215) Red schist gravel, traces hematite. 215 - 220) 220 - 225) 225 - 230 Ditto in stiff red clay. 230 - 235 Ferruginous gravel with red clay. 235 - 240 Ditto with much limonite and occas- ional white clay pellets. 240 - 245 Ditto, no clay pellets and with fragments of hematite. 245 - 250 Limonite and hematite gravel with red schist pebbles. 250 - 260) Red schist gravel in clay (30% 260 - 275) grit), traces quartz. 275 - 275 1/2 Core: Black, brown and red ferrug- inous clay, rich in iron. 275 1/2 - 280 Brown clay, 30% grit (quartzite, minor limonite). 280 - 282 Very hard brown limonite, much hem- atite, some clay. 282 - 285 Impure hematite and limonite with some clay - hard. 285 - 290) 290 - 295) 295 - 300) 300 - 305) 305 - 312) As 282' - 285', but slightly softer.	Bore 1 Folder 52/- D. Mines Iron Knob. Racecourse Area.

Table No. 3

Bores located along Eyre Highway from
S.A. DEPARTMENT OF MINES Port Augusta to Toopoopora
SUMMARY OF BORE RECORDS
Ground Water Survey

DM-C3

Plan No. 4

CORE	SECTION	DEPTH to feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
1	LA 651 BIR 807	519'	178'	100' 95' 95'	V. large 800 800	AT84550 AT84600 AT82150	85/1329 104/18 107/1012		312 - 315) 315 - 320) 320 - 325) Hematite sand, traces magnetite and 325 - 330) red brown clay, soft boring. 330 - 333) 333 - 335) 335 - 339 Ditto, loss clay, moderately hard boring. 339 - 344 Hematite and red brown clay, minor magnetite and limonite. 344 - 346 Hematite, minor clay, magnetite and limonite. 346 - 350 Hematite and red brown clay, minor magnetite and limonite. 350 - 355 Hematite, minor clay and magnetite. 355 - 360 Ditto, with slightly more clay and hematite is coarser grained. 360 - 365 Ditto, with more clay. 365 - 370) Hematite and dark brown clay with 370 - 375) minor magnetite, granulated, 375 - 380) with some lumps to 1". Moderately 380 - 385) hard boring. 385 - 390) 390 - 395) Hematite, big lumps common, less 395 - 400) clay, otherwise similar to 400 - 405) above. 405 - 407) 407 - 412) 412 - 415) Black hematite, little or no clay, 415 - 419) minor magnetite, very hard. 419 - 425) Hematite and much dark red brown 425 - 430) clay, limonite, white quartzite and minor red quartzite. 430 - 435 Ditto, little quartzite. Pieces of excretionary earthy limonite - hematite. 435 - 440 Red brown clay, red jaspery shale, black shale, white quartzite (?), loss limonite and hematite than above. 440 - 450 Clayey hematite, drusy quartzite, including some colitic chert. Yellow and brown limonite, brown and red jaspery shale. 450 - 460 Red brown clay with hematite frag- ments. Grit of ferruginous sand- stone, quartzite, jaspery shale.	Bore 1 Folder 52/- D. Mines Iron Knob Race- course area. Co. Manchester

Table No. 4Bores located along Eyre Highway from
S.A. DEPARTMENT OF MINES Port Augusta to Toopoopora

DM-63

SUMMARY OF BORE RECORDS

Ground Water Survey

HOEHEK

CORRE Plan No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	PL1661 Blk. 807	519'	178'	100' 95' 95'	V. Large 800 800	ATS1550 ATS1600 ATS2150	86/1329 104/48 107/1012		<u>Strat 2 (Cont.)</u> 460 - 470 Dark red brown clay, traces of grit (hematite, quartzite and jasper shale). 470 - 480 Ditto, plus large fragments of quartzite and quartzite breccia. 480 - 497 Dark red-brown clay, plus large fragments of red, yellow and black banded collitic clay rock, possibly a hematite ore in the process of development. 497 - 505 Dark red-brown clay with a little grit of hematite, quartzite, red shale and hard white clay. 505 - 510) Brown and greenish mottled silty 510 - 517) clay schist; a little hematite, probably from above. Traces of quartz grit. 517 - 519 <u>Core:</u> Brown and greenish, mottled silty schist, very brecciated.	Bore 1, Folder 52/- D. Mines Iron Knob Racecourse area. Co. Manchester
2	PL1656 Blk. 91	66'	11'	6'	?	?	?		0 - 10 Sandy and clayey soil - redbrown. 10 - 15 Very sandy and gravelly (fine to coarse) clay - yellow brown. 15 - 35 Missing. 35 - 40 Very fine to coarse sandstone - yellow brown. 40 - 55 Fine to very coarse sandstone - consolidated in part. 55 - 66 Quartzite - reddish.	Bore S.W. 93/64. Bore No. 53. Out of Hds. Co. Hore-Ruthven Highway's Bore No. 48.
3	PL1656 Blk. 91	80'	15'	8'	?	?	?		0 - 40 Missing. 40 - 50 Very fine to coarse quartz and quartzite sand and grit - rare mica - reddish brown. 50 - 80 As above.	Bore S.W. 102/64. Bore No. 54 Out of Hds. Co. Hore - Ruthven. Highway's Bore No. 47
4	PL1825 Blk. 213	190'	47'	30'	?	?	?		0 - 15 Red calcareous clay - abundant limestone rubble. 15 - 35 Very fine to coarse ferruginous quartz sand - rare small lime- stone fragments. 35 - 47 Very fine to medium sandy clay - rare pockets of white clay. 47 - 60 Slightly clayey fine to medium quartz sand - some white clay pockets.	Bore S.W. 83/64. Bore No. 55 Out of Hds. Co. Hore - Ruthven. Highway's Bore 46.

Table No. 5

S.A. DEPARTMENT OF MINES Bore located along Eyre Highway from
Port Augusta to Toopoopora

DM-C3

SUMMARY OF BORE RECORDS

Ground Water Survey

PLAN No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
4	PL 825 BLR. 213	190'	47'	30'	?	?	?		Strip 2 (Contd.)	Bore S.N. 83/64. Bore 55. Out of Hds. Co. Hore - Ruthven. Highway's Bore 46.
									60 - 75	Slightly sandy and gritty clay - pale red brown.
									75 - 85	Missing.
									85 - 90	Fine sandy clay - grey and yellow mottled.
									90 - 110	Very clayey fine to coarse sand (well rounded) - light brown - quartz grains often ironstained.
									110 - 120	As above - light brown.
									120 - 159	Missing.
									159 - 171	Quartz and quartzite gravel - redbrown.
									171 - 190	Missing.
5	"	108'					salt		1 - 20	Red clay.
									20 - 80	White pipe clay.
									80 - 108	Blue pipe clay with salt water.
6	"	128'	45-50 110-123	30'			salt		0 - 1	Not stated.
									1 - 45	Pipe clay.
									45 - 50	Gravel, struck salt water.
									50 - 65	Gritty clay.
									65 - 100	Soft clay.
									100 - 110	Rock.
									110 - 128	Yellow clay. Struck inexhaustible supply of salt water, rose to within 30' of surface.
7	"	44' 109-117		36	1,000	ATS 1100		LM 24/62 LM 25/62	0 - 2	Light brown sandy clay with lime- stone nodules.
									2 - 6	Brown sandy clay with abundant sub- angular quartz grit.
									6 - 34	Red-brown clayey fine sand with abundant subangular grit and gravel.
									34 - 44	Pink clayey fine sand and grit.
									44 - 60	Green soft lateritic sandstone gravel with quartz grit and iron- stone gravel.
									60 - 100	Yellow brown clayey fine sand and grit.
									100 - 109	Yellow and grey clays with later- itic sandstone gravel.
									109 - 117	Grey coarse angular quartz grit and gravel.
									117 - 128	Grey medium grained granitic gneiss.

Table No. 6

SUMMARY OF BORE RECORDS

Ground Water Survey

RECAP

PLAN No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	33	165'	28-35'	15'	700	ATS1100	LN118/62		Plan 1, Strip 3	
									0 - 1'6" Brown clayey fine sand.	Bore No. A
									1'6" - 23 Mottled brown and grey sandy clay.	Folder No. 1/-
									23 - 28 Yellow brown and grey sandy clay.	Ed. O'Connor
									28 - 42 Bluish grey sandy clay.	Vide Plan
									42 - 76 Yellow-brown and grey sandy clay.	62-432.
									76 - 80 Pink and yellow clay with rounded ironstone gravel.	
									80 - 86 Red-brown yellow and grey clay with ironstone gravel.	
									86 - 120 White gritty clay with lateritic sandstone gravel.	
									120 - 165 White gritty clay with mica.	
2	23	91'	74'	70'	2,000	ATS1100	LN575/6		0 - 1 Brown sandy soil.	Bore No. A
									1 - 20 Yellow-brown and grey sandy clay.	Folder No. 2/-
									20 - 27 Light brown clayey sand and grit.	Ed. Barna
									27 - 36 Yellow clayey fine sand and grit.	H. & L.G. Dept.
									36 - 43 Light grey sandy clay with abundant quartz grit.	Bore 27
									43 - 65 Cream sandy clay with mica.	Vide final plan
									65 - 72 Cream gritty kaolin with fragments of mica schist.	62-432.
									72 - 76 Light grey weathered mica schist with quartz veins.	
									76 - 91 White dense quartz with fragments of mica schist.	
3	Ed. ad. 6	175'	126'	110'	100	ATS1100	LN25/62		0 - 6" Light brown sandy soil.	Folder No. 3/-
									6" - 2' Red-brown sandy clay.	Bore No. A
									2 - 7 Light brown gritty clay.	Ed. Mosely
									7 - 35 Light brown clayey fine-scarce sand and grit.	H. & L.G. Dept.
									35 - 37 Pink and white gritty clay.	Bore 49.
									37 - 104 Green clayey fine-scarce sand and grit and gravel.	Vide Plan 62-432
									104 - 118 Cream and white gritty clay.	
									118 - 122 Light grey decomposed quartz, foliated schist.	
									122 - 126 Cream gritty and micaceous clay.	

Table No. 7

U.S. DEPARTMENT OF MINES

DM-63

SUMMARY OF BORE RECORDS

Ground Water Survey

CHERRY PLAN No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
3	Rd. no. 6	175'	126'	110'	100	ATS1100	LN 126/62	126 - 134	White clay with abundant sub-angular quartzitic grit, gravel and boulders.	Folder No. 3/- Bore No. A Hd. Moseley H. & L. G. Dept. Bore 49 Vide Plan 62-432
								134 - 136	Light grey clayey quartz grit.	
								136 - 170	Cream micaceous and gritty clay.	
								170 - 175	Light grey mud schist with abundant quartz.	
3	Rd. no. 15	174'	93' 137' 137'	75' 75' 95'	1111 500 2000	ATS1100	LN 21/62 LN 22/62 LN 25/62	0 - 2	Red-brown sandy soil.	Bore No. A Folder Nos. 2/- 2A/- Hd. Moseley H. & L. G. Dept. Bore 43. Vide Plan 62-432.
								2 - 45	Light brown-gritty clay.	
								45 - 68	Pink clayey fine-coarse sand with pockets of white gritty clay and sub-angular grit.	
								68 - 76	Buff clayey fine-coarse sand with abundant sub-angular grit.	
								76 - 95	Light brown clayey fine-coarse sand and grit.	
								95 - 101	Brown and grey medium-coarse grained clayey sand.	
								101 - 105	Grey sandy clay with mica.	
								105 - 125	Buff clayey fine sand with mica.	
								125 - 134	Light grey fine sand and silt with abundant mica.	
								134 - 150	White clayey fine sand with abundant sub-angular quartz grit, gravel and mica.	
								150 - 146	Green clay with abundant sub-angular grit and mica.	
								146 - 148	Yellow fine sand with abundant sub-angular grit.	
								148 - 160	Dark fine-coarse sand, grit and gravel with sub-angular quartzite boulders.	
								160 - 174	Cream medium grained sand and grit with coarse angular quartzite gravel.	

SUMMARY OF BORE RECORDS

Ground Water Survey

1954-55

PLAN No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
5	Crown Land 126 N.W. Corner of Hd.	112'	84'		100	AT81100	Fiel67		0 - 1 No sample - Driller reports chocolate clay. 1 - 23 Brown sandy clay with abundant sub-angular quartz grit. 23 - 28 Grey clay with mica and abundant quartz grit and gravel. 28 - 48 Brown sandy clay with grit. 48 - 72 Brownish grey sandy clay with abundant mica, and fragments of decomposed mica schist. 72 - 79 Brown sandy clay with abundant mica. 79 - 110 Light brown sandy clay containing fragments of weathered schist. 110 - 118 Grey sandy clay with quartz gravel and abundant mica. 118 - 126 Grey fine grained quartz mica schist.	Bore No. A Folder No. 4/- Hd. Kelly H. & L.G. Dept. Bore No. 50 Vide Plan No. 62-432.
6	126	50'							0 - 1' 3" Brown and red-brown mottled sandy clay with small lime pockets and occasional travertine nodules, increasing somewhat with depth. Hard and dry. 1' 3" - 2' 8" Pale reddish brown sandy, limey clay with abundant small lime pockets and some small travertine nodule. Small pockets of dark brown or red-brown clay. 2' 8" - 3' 10" Mainly red-brown clay, somewhat sandy with abundant whitish lime pockets and lime grit fragments. 3' 10" - 4' 8" Red-brown clay with pockets of highly weathered granite (mainly angular quartz grains, yellow-brown decomposed feldspar and ochreous material (increasing). 4' 8" - 8' Weathered granite i.e. mainly assorted coarse angular quartz grit with abundant white kaolin clay and fairly numerous fragments of yellow-brown ochreous material. 8' - 10' Ditto, but becoming coarse angular quartz grains with abundant white kaolin clay. 10' - 12' Weathered granite i.e. coarse angular quartz grit, white kaolin clay and a little yellow-brown ochreous material and decomposed biotite schist.	Bore No. A Folder No. 4/- Hd. Solomon

S.A. DEPARTMENT OF MINES

Table No. 9

SUMMARY OF BORE RECORDS

Ground Water Survey

HOBART

ORIGIN PLAN No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
6	126	50'							<u>Strip 3 (Contd.)</u> 12 - 15 Highly weathered granite, consisting of small quartz grains, white kaolina and greenish grey weathered feldspar. Few small mica flakes and small fragments of yellow ochreous material. Soft and friable. 15 - 18 Friable whitish decomposed granite. Essentially fine grained angular quartz grains and soft powdery kaolin. Subordinate amount of brown and yellow brown material 18 - 20 Friable whitish decomposed granite. Essentially fine grained quartz grains with fine powdery kaolin. Small pockets of yellow brown ochreous material. 20 - 45 Very highly decomposed leucogranite consisting mainly of white kaolin and lesser coarse angular quartz grains. Some slight yellow brown and reddish brown ochreous material. Soft and friable. 45 - 50 Decomposed leuco-granite; i.e. coarse angular quartz grains with fairly abundant light yellow brown decomposed feldspar (clay) and ochreous material. Some whitish kaolin pockets.	Bore No. A Folder No. 4/- Hd. Solomon
7	"	4' 1"							0' - 1' 3" Brown and red mottled sandy clay with small lime pockets and occasional travertine nodules, increasing somewhat with depth. Hard and dry. 1' 3" - 2' 8" Pale reddish brown sandy, liney clay with abundant small lime pockets and some small travertine nodules. Small pockets of dark brown or red brown clay. 2' 8" - 3' 10" Mainly red-brown clay, somewhat sandy with abundant whitish lime pockets and lime grit fragments. 3' 10" - 4' 8" Red-brown clay with pockets of highly weathered granite (mainly angular quartz grains, yellow-brown decomposed feldspar and ochreous material; (increasing)).	Bore No. B Folder No. 5/- Hd. Solomon

SUMMARY OF BORE RECORDS

Ground Water Survey

REVISION

PLAN No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
8	165	110'	60' 70'	60' 57'	Small 80	ATS 1100	" "		<u>Strip 3 (Contd.)</u> 4 - 10 Red-brown sandy and gritty clay. 10 - 20 Brown and grey sandy clay with quartz grit and lateritic gravel. 20 - 30 Pink clayey fine sand and grit. 30 - 61 Light brown silty fine sand with abundant grit and mica. 61 - 106 Light brown clayey fine sand and grit with abundant mica and fragments of weathered quartz felspar gneiss. 106 - 110 Medium grained quartz felspar gneiss and fine grained dark grey amphibolite.	Bore No. A Bore 13A Folder No. 10/- Hd. Solomon Vide Plan 62-432 H. & L. G. Dept. Bore No. 13A.
9	Rd. adj. Res. 41	90	60 75-79' 60-75' 60-75' " " " "	44' 45'	Small "	ATS 69 " 88	LW306/61 LW307/61 LW308/61 LW335/61 LW336/61 LW337/61 LW338/61 LW339/61 129/1469		1 - 3 Brown sandy soil. 3 - 8 Brown sandy clay with abundant sub- angular gravel. 8 - 15 Red-brown sandy and gritty clay. 15 - 20 Light brown sandy and gritty clay. 20 - 46 Light brown clayey sand and grit. 46 - 56 Light brown clayey fine sand and grit with fragments of highly weathered gneiss. 56 - 60 Light brown clayey fine sand and silt with abundant mica and quartz grit. 60 - 74 Greyish brown micaceous clay with fine sand and abundant sub-angular quartz grit. 74 - 84 Light brown sandy and gritty clay with abundant mica. 84 - 90 Light grey medium grained quartz felspar gneiss.	Bore No. A Folder No. 8/- Hd. Solomon H. & L. G. Dept. Bore No. 13.

Table No. 1

Bore located along Eyre Highway from
S.A. DEPARTMENT OF MINES Toopoopora to Capietha.

DM-GI

Plan 622

SUMMARY OF BORE RECORDS

Ground Water Survey

Campy Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
1	39	90'	64'	-	Small	1639.13	3/896		Plan 2, Strip 1	Bore No. A Folder No. 1/2 Hd. Solomon. Balum Bah Govt. Bore. Abandoned.
					Small	3 oz. 1839		Plan 61-1/1	No details.	
2	Rd. Ror. Adj. 27	66'	50'	29'	100	AT811004	1.7215/6		0' - 2'6" Light brown sandy soil. 2'6" - 6' Mottled greyish-brown sandy clay with pocket of white clay, quartz grit and mica. 6 - 10 Pink clayey fine sand with quartz grit and interstitial gravel. 18 - 30 Light brown clayey fine sand with angu- lar quartz grit and interstitial gravel. 30 - 40 Green slightly clayey fine sand with quartz grit. 40 - 50 Green fine grained friable sandstone with abundant sub-angular quartz grit. 50 - 60 Buff sub-angular quartz grit with fine sand and mica. 60 - 64 Pink medium grained granite boulders with quartz grit and sand. 64 - 66 Pink medium grained weathered granite (donco).	Bore No. D. Folder No. 6/- Hd. Solomon. Vide Plan 62-432. Abandoned.
3	27	130'							No details.	Bore No. B. Hd. Solomon. Plan 61-1/1
4	27	180'		170'	Small	1191.37	12/3499		No details.	Bore No. A Hd. Solomon. Joricho's Bore.
5	26	101'5"	101'	95'	Small	11 oz. 260 ST			No details.	Bore No. A. Folder No. 1/4 Hd. Solomon. Government Bore Abandoned.
						750		Plan 61-1/1		
6	2	172'	168'	160'	Sealing	AT811004	1.7215/6		0 - 1 Brown sandy soil. 1 - 5 Brown sandy clay with limestone nodules. 5 - 25 Red-brown sandy clay with sub-angular quartz grit. 25 - 45 Pink gritty clay with ironstone gravel. 45 - 65 Light brown gritty clay. 65 - 95 Pink and white clay with ironstone gravel. 95 - 145 Light brown gritty clay with fragments of dark grey amphibolite. 145 - 150 Grey clayey fine-coarse sand with abundant sub-angular quartz grit, and amphibolite gravel. 150 - 172 Brown gritty clay with gravel and boulders of dark grey amphibolite.	Bore No. A. Folder No. 10/- Hd. Panityn. Vide Plan 83303. Abandoned.

Table No. 2

U. S. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

TENTATIVE

County Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
7	Rd. Res. A63-4	155°	122° 122°	75° 100°	1500 1500	ATS-1100 " 1100	W-185/6 W-185/6		<u>Plan 2, Strip 1</u> 0 - 6" Brown fine sand. 6" - 3" Brown sandy and gritty clay. 3 - 16 Light brown clayey fine sand and grit. 16 - 26 Red-brown sandy clay. 26 - 43 Grey sandy clay with abundant sub-angular grit. 43 - 93 Light brown sandy clay with pockets of grey gritty clay. 93 - 116 Light grey sandy clay. 116 - 122 Greyish-brown slightly clayey fine-coarse sand and grit. 122 - 129 Yellow-brown medium-coarse grained sand and grit. 129 - 131 Light grey sub-angular quartzitic gravel and coarse sand. 131 - 135 Light brown clayey fine sand and silt with abundant sub-angular grit. 135 - 140 Dark grey fine sand and silt. 140 - 155 Greyish-brown clay with mica.	Bore No. A. Folder Nos. 3/- 31, 21. Ed. Panitya. Vide Plan 62-432
8	Rd. Res. A63-3	163°	77°	62°	Small	ATS-1100	W-189/6		0 - 1 Light brown fine sand. 1 - 9 Light brown clayey fine sand and silt. 9 - 18 Buff slightly clayey fine sand. 18 - 37 Light brown sandy clay with quartz grit. 37 - 47 Red-brown sandy clay. 47 - 60 Red-brown and grey gritty clay. 60 - 98 Yellow-brown and grey clayey fine-coarse sand and grit. 98 - 114 Light grey clayey fine-coarse sand and grit. 114 - 127 Yellow-brown and grey clayey fine-coarse sand and grit. 127 - 145 Grey clayey fine sand and silt with abundant mica. 145 - 163 Grey sandy and silty clay with mica and fragments of dark grey slate.	Bore No. A. Folder No. 6/- Ed. Panitya. Abandoned. Vide Plan 62-432
9	Rd. Res. A63-2	102°	127° 127°	83° 63°	100 100	ATS-1100 " 1100	W-185/6 W-185/6		0 - 5 Red-brown clayey fine sand. 5 - 17 Light brown clayey fine-medium grained sand. 17 - 22 Yellow-brown fine silty sand with fragments of grey clay. 22 - 52 Red-brown and grey sandy clay with pockets of coarse yellow sand and gravel. 52 - 112 Greyish-brown medium-coarse grained clayey sand and grit. 112 - 144 Buff clayey fine-coarse sand and grit. 144 - 127 Light brown sandy and gritty clay with some grey clay. 127 - 134 Buff fine-coarse sand and grit and fragments of brownish-grey clay.	Bore No. B. Folder No. 4/- Ed. Panitya. Abandoned. Vide Plan 62-432

Table No. 3

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

FINDINGS

PLAN No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
9 (contd.)	Rd. Res. Adj. Ch.	182'	127' 127'	68' 68'	700 700	AT81100- " 1100-	LW487/6 LW488/6		<u>Plan 2, Strip 1</u> 131 - 155 Dark brown fine-coarse sand and grit. 155 - 173 Dark brown fine-coarse sand with grit and gravel, (partly cemented by pyrite). 173 - 182 Light grey silty clay with quartz grit.	Bore No. B. Folder No. 4/- Hd. Panitya Abandoned. Vide Plan 62-432.
10	6	194'	78' 116' 158'	58'	Small 2,000 Large	AT81100-	LW542/6		0 - 2 Grey slightly clayey fine sand. 2 - 60 Brownish-grey sandy clay with quartz grit, grey fine sand and silt. 60 - 78 Red-brown and grey sandy and gritty clay with some lateritic gravel. 78 - 95 Grey clayey fine sand with sub-angular quartz grit and gravel. 95 - 104 Grey clay with abundant sub-angular grit and gravel. 104 - 110 Light brown medium-coarse grained sand and sub-angular grit. 110 - 116 Buff clayey fine sand with sub-angular grit. 116 - 122 Buff medium grained sand and sub-angular quartz grit and gravel. 122 - 148 Dark grey lignitic fine-coarse sand and grit. 148 - 154 Black fine lignitic sand with mica. 154 - 158 Light grey fine-coarse quartz grit and gravel partly cemented with pyrite. 158 - 159 Brownish-grey fine-coarse angular quartz grit and gravel. 159 - 162 Light grey fine-coarse sand and grit partly cemented with pyrite. 162 - 163 Buff medium-coarse sand and grit. 0 - 162 Previously logged. 162 - 172 Light grey slightly clayey angular quartzitic gravel with some fine sand. 172 - 180 Grey fine-coarse quartzitic grit and gravel. 180 - 194 Grey coarse sub-angular quartzite gravel and boulders up to 2 1/2" long. 194 - 194 Green highly weathered mica schist with quartz veins.	Bore No. B. Folder No. 9/- Hd. Panitya Vide Plan 62-432

SUMMARY OF BORE RECORDS

Ground Water Survey

HYDRO

Plan No. 2.

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
11	6	85'	70' 82'	82'					<u>Plan 2, Strip 1</u> Drilled on sand dune. Water cut at 70' reported to be a small seepage of fresh water; salt water at 82'.	Bore No. D Folder No. 5/3 Hd. Panitya. Abandoned.
12	6	80'	78'	78'		Salt			Decomposed granite at 80 feet.	Bore No. C. Folder No. 5/2 Hd. Panitya Abandoned.
13	Recd. Ros. Ad. 6	185'	75' 110'	65' 65'	Small, 200	ATS 1100	LTB 43/6		0 - 2 Light brown fine sand. 2 - 20 Light brown slightly clayey fine sand. 20 - 40 Red-brown clayey fine sand, gritty in part. 40 - 70 Grey clayey fine-medium grained sand with some grit. 70 - 80 Light brown clayey fine-medium grain- ed sand. 80 - 110 Light grey clayey fine-medium grained sand. 110 - 115 Light grey slightly clayey fine-coarse sand and grit. 115 - 116 Light grey sub-angular quartz gravel with fine-coarse sand. 116 - 121 Dark grey fine lignitic sand and silt with abundant angular quartz gravel. 121 - 155 Dark grey lignitic fine-coarse sand and silt. 155 - 185 Light brown clay with abundant mica and quartz grit (weathered bedrock).	Bore No. A. Folder Nos. 2/- and 2A/- Hd. Panitya. Abandoned. Vide Plan 62-432.

Table No. 4

S.A. DEPARTMENT OF MINES

DM-08

SUMMARY OF BORE RECORDS

Ground Water Survey

~~Handwritten~~~~OGG~~ Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
14	17	117'6"							<u>Plan 2, Strip 1</u> 0 - 1 Brown slightly clayey fine sand. 1 - 4 Mottled red-brown sandy clay with modules of soft lims. 4 - 10 Light brown medium grained friable sandstone with rounded quartz grit. 10 - 20 Red-brown medium grained friable sandstone. 20 - 30 Light pink fine grained friable sand- stone. 30 - 35 Buff fine grained friable sandstone with abundant sub-angular quartz grit. 35 - 71 Cream slightly gritty clay with minor quantities of mica. 71 - 96 Light grey slightly gritty clay with mica and fragments of highly weath- ered gneiss. 96 - 106 Brownish-grey clay with abundant quartz grit, mica and fragments of highly weathered gneiss. 106 - 116 Grey fine grained gneiss (weathered). 116 - 117'6" Greyish-pink dense banded gneiss.	Bore No. A Folder No. 1/- Hd. Panitya Abandoned. Vide Plan 62-432
15	24	105'					Dry		0' - 1'6" Brown fine sand. 1'6" - 10' Light brown sandy clay. 10' - 24' Brown clayey fine - coarse sand and grit with ironstone gravel. 24' - 36' Brown clayey fine sand with pockets of white gritty kaolin. 36' - 74' Cream gritty kaolin. 74' - 80' Pink clayey fine sand and silt with mica. 80' - 106' Light brown gritty clay with abundant mica.	Bore No. A. Folder No. 6/- Hd. Caralue. Abandoned. Vide Plan 62-432
16	32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44	148'	75'	70'	135		Saline		0 - 2 Cream gritty flour gypsum. 2 - 31 Red-brown and grey sandy clay. 31 - 51 Light grey sandy and gritty clay. 51 - 72 Light brown clayey fine sand with grit. 72 - 85 Buff fine-coarse slightly clayey sand. 85 - 96 Light grey sandy clay. 96 - 119 Grey clay with quartz grit, mica and fragments of weathered quartz fels- par gneiss. 119 - 120 White coarse sand with sub-angular grit and coarse gravel. 120 - 123 Light brown clayey fine-coarse sand and grit. 123 - 128 Cream gritty clay. 128 - 132 Light brown clayey fine-coarse sand and grit. 132 - 148 Grey gritty clay with abundant mica.	Bore No. A Folder No. 8/- Hd. Panitya. Abandoned. Vide Plan 62-432

SUMMARY OF BORE RECORDS

Ground Water Survey

Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
17	Out of Secs.	120'	50'	42'	150				<u>Plan 2, Strip 1</u> 0 - 1 Red-brown fine sand. 1 - 29 Red-brown and grey sandy clay with quartz grit. 29 - 31 Brown fine-medium grained sand. 31 - 35 Light grey clayey fine to medium grained sand. 35 - 42 Light brown fine-coarse sand. 42 - 50 Grey slightly clayey fine-coarse sand. 50 - 69 Buff fine-coarse sand and grit with pockets of white gritty kaolin. 69 - 118 Cream and white gritty kaolin with mica and angular quartz boulders. 118 - 120 Light grey clay with abundant quartz grit and mica.	Bore No. A Folder No. 7/- Hd. Panitya. Abandoned. Vide Plan 62-432
18	Rd. Res. Adj. 12	139'	90' " 88' " 67' " 67' 122' 65' 80' 160' 67' 200' 80-122' 65' 160'	67' 88' 67' 67' 65' 140' 160' 200' 65'	Small " " " " 30 140 160 200 160	ATS 382 " 462 " 547 " 591 " 704 " 795 " 789 87.2	LW497/61 LW498/61 LW499/61 LW500/61 LW501/61 LW502/61 LW503/61 125/452		0 - 2 Red-brown clayey fine sand. 2 - 18 Light brown clayey fine-coarse sand and grit. 18 - 31 Buff clayey fine sand and grit. 31 - 93 White clay with abundant sub-angular quartz grit. 93 - 104 White and grey gritty clay with abundant mica. 104 - 128 Light grey weathered quartz felspar gneiss with quartz veins. 128 - 139 Pink medium grained quartz felspar gneiss.	Bore No. A Folder No. 1/- Hd. Koongava.
19	Rd. Res. Adj. 15	144'	135' "	102' "	40' 40	ATS 1100+ " 1100	LW490/61 LW491/61		0 - 2 Red-brown fine sand. 2 - 45 Red-brown sandy clay with ironstone gravel and quartz grit. 45 - 52 Buff fine sand with abundant quartz grit. 52 - 88 White gritty kaolin with mica. 88 - 127 Light grey gritty kaolin with abundant mica and fragments of highly weathered gneiss. 127 - 135 Dense fine grained quartzite and quartz felspar gneiss. 135 - 144 Light grey medium grained dense quartz felspar gneiss.	Bore No. A. Folder No. 1/- Hd. Coatra Abandoned. Vide Plan 62-433.
20	11	143'	70' 98' 134'	70' 83' 83'	600 gpd 12 gph 36 "	ATS 925 ATS 1010	LW603/61 132/11		5ft. clay rubble. 10ft. Travertine limestone, next 83ft. talc with quartz chips, next 36ft. mica schist, grey quartz chips - white talc cut 2nd water? Mica schist brown still haven't struck solid bottom.	Bore No. A Folder No. 2/1 Hd. Koongava. New Bore.

Table No. 6

S.A. DEPARTMENT OF MINES Bore located along Eyre Highway from Toopoola to Capietha. ~~BRFG222~~

DM-C8

SUMMARY OF BORE RECORDS

Ground Water Survey

Cape Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	Rd. Res.	124'							<u>Plan 2. Strip 2</u> 0 - 8 Red-brown fine-coarse sand. 8 - 5 Light brown clayey fine sand with nodular limestone boulders. 5 - 28 Red-brown clayey fine sand with limestone nodules. 28 - 42 Red-brown and grey sandy clay with lateritic gravel. 42 - 48 Red-brown lateritic sandstone. 48 - 55 White quartz fragments of highly weathered quartz felspar gneiss, and lateritic sandstones. 55 - 124 Buff clayey fine sand and silt with abundant mica and pockets of white gritty clay.	Bore No. A Folder No. 2/- Hd. Mamblin. Abandoned. Vide Plan 62-433
2	23	129'	41' 116-118	33' 25'	Seepage Small	AT84100-1100	LW492/61 LW552/61		0 - 1 Light brown sandy soil. 1 - 5 White gritty kaolin. 5 - 41 White and cream kaolin with abundant angular quartz grit. 41 - 51 White kaolin with abundant angular quartz grit and gravel. 51 - 61 Buff clayey fine silt. 61 - 90 Pale grey gritty kaolin with mica. 90 - 102 Light green clay with abundant sub-angular quartz grit. 102 - 107 Light brown and yellow clayey fine sand and silt with abundant mica and sub-angular quartz grit. 107 - 118 Light green clayey fine sand with abundant dark green mica and grit. 118 - 125 Light grey fine grained quartz. 125 - 129 Green fine grained partly decomposed schist.	Bore No. A Folder No. 3/- Hd. Mamblin. Abandoned. Vide plan 62-433
3	19	85'	18'	11'	360	AT84100-	LW495/61		0 - 9 Brown fine sand. 9 - 3 Light brown fine sand with nodules of limestone. 3 - 6 Buff fine grained dense sandy limestone. 6 - 18 Light brown sandy clay with fragments of dense sandy limestone. 18 - 19'6" Buff fine-coarse sand with sub-angular quartz grit. 19'6"-21' Light grey gritty clay. 21' - 69 Dark greyish-brown lignitic fine sand with quartz grit and fragments of lignite. 69 - 83 Light grey gritty clay with mica.	Bore No. A. Folder No. 3/- Hd. Vannaman Abandoned. Vide Plan 62-433

Table No. 7

SUMMARY OF BORE RECORDS

Ground Water Survey

XENOPOL

XOXURY Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	net cut 24"	Static level		Parts per million	Analysis No.			
4	Rd. Res. A61	3'	14'	7'	2,000 2,100	ATS1100 DT2940	LW558/61 131/2009		Plan 2, Strip 2 0 - 5 Grey clayey fine sand and silt. 5 - 14 Light grey clayey fine sand and grit. 14 - 22 Light brown fine sand and abundant sub-angular grit. 22 - 30 Brown medium-coarse grained sand and grit. 30 - 41 Dark grey lignitic fine-coarse sand and grit. 41 - 49 Cream gritty kaolin with mica.	Bore No. B Folder No. 4/- Hd. Wannamana Vide Plan 62-433
		5'	2'	30' 29' 30' " " 24' "	1200+ " " " " "	ATS2950 " 2950 " 2865 " 2750 " 2950 " 2835 BT3260	LW124/61 LW125/61 LW126/61 LW127/61 LW128/61 LW129/61		0 - 5 Brown slightly clayey fine sand. 5 - 28 Brown clayey fine sand with nodules of lime, and rounded quartz grit. 28 - 38 Brown clayey fine sand with abundant sub-angular quartz grit. 38 - 40 Grey sub-angular quartz grit and gravel with dark brown fine sand. 40 - 43 Grey sub-angular quartz grit and gravel with minor quantities of sand. 43 - 44 Light grey clayey fine sand and silt with abundant quartz grit. 44 - 46 Light brown fine-coarse sub-angular quartz grit.	Bore No. A Folder No. 1/- Hd. Wannamana. Vide Plan 62-433
7	Rd. Res. A33/30	45'	23'	22'	400	ATS1100+	LW557/61		0 - 2 Light brown clayey fine sand and nodular sandy limestone. 2 - 5 Light brown clayey fine sand with angular quartz grit. 5 - 10 Grey sandy clay with pockets of brown fine sand. 10 - 20 Light grey clayey fine sand with sub-angular grit. 20 - 35 Yellow-brown fine-coarse sand and grit. 35 - 45 Buff fine-coarse sand and sub-angular grit.	Bore No. A Folder No. 1/- Hd. Palabie. Abandoned. Vide Plan 62-433
		30'							0 - 6" Reddish-brown sandy and clayey loam. 6" - 1' Travertine nodules with some reddish-brown sandy loam. 1 - 2 Hard pale buff pisolitic travertine with some earthy lime and some light brown limy clay. 2 - 3 Hard pale buff pisolitic travertine. 3 - 5 Pale buff friable sandy marl with very abundant lumps and nodules of hard travertine. 5 - 6 As above but becoming darker in colour with less travertine. Nodules and some pockets of pale reddish-brown sandy clay.	Bore No. T/A Folder No. 1/- Hd. Pygery.

SUMMARY OF BORE RECORDS

Ground Water Survey

Dudum

Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
7 (Contd.)	Vadima River Reb.								Plan 2, Strip 2 6' - 8' Moist soft to firm light reddish-brown to midreddish-brown very sandy clayey becoming more sandy with depth. Some specks of black staining. 8' - 16' Firm moist red-brown and pale grey-brown mottled very sandy clay. 16' - 18' As above but more sandy. 18' - 21' Red-brown and red mottled clayey sand to sandy clay, with occasional light red-brown and light grey-brown mottling. 21' - 27' Red-brown and light red-brown vaguely mottled clayey sand to sandy clay with some pockets of grey and light grey mottling. Stiff compact. Some pockets of fatty clay from 26-27'. 27' - 30' Pale red-brown sand with pockets of red-brown and grey-brown mottled clayey sand and pockets of red-brown and grey-brown mottled slightly sandy clay. Stiff compact.	Bore No. T/A Folder No. 1/- Hd. Pygery.
8	" "								0' - 6" Reddish-brown slightly clayey loam. 6" - 1' Pisolitic travertine nodules with some brown sandy clay. 1' - 3' Hard pisolitic travertine boulders, with some earthy marl. 3' - 10'6" Sealed tube samples. 10'6" - 12'6" Red-brown very sandy clay to clayey sand. Firm to stiff. Compact. Earthy texture. 12'6" - 14' Sealed tube sample. 14' - 14'6" Reamed. 14'6" - 15' Sealed tube sample. 15' - 19' Red-brown and grey-brown mottled very sandy clay to clayey sand. Stiff, compact. 19' - 20'6" Red-brown and light red-brown vaguely mottled clayey sand. Occasional grey-brown mottling. Stiff compact. 20'6" - 22' As above with specks of white earthy lime. 22' - 25' Sealed tube samples. 25' - 26' Red-brown, light red-brown, grey and grey-brown mottled clayey sand. Stiff, compact.	Bore No. T/B Folder No. 2/- Hd. Pygery.
9	Vadima River Lot.	125'	24'	80'	small	1784400	1770/60		0' - 5' Light brown clayey fine sand with limestone nodules. 5' - 4'6" Light brown dense nodular travertine. 4'6" - 6' Light brown sandy clay with limestone nodules. 6' - 43' Light brown clayey fine sand with quartz grit and limestone fragments. 43' - 49' Red-brown sandy clay with quartz grit. 49' - 59' Light brown clayey fine sand with abundant quartz grit.	Bore No. T/C Folder No. 3/- Hd. Pygery Railway Yards.

SUMMARY OF BORE RECORDS

Ground Water Survey

Middagudi

Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
9 (Contd.)	Udimala Town Lot	125'	84'	80'	small	ATS1100	LW78/60		Plan 2, Strip 2	
									59 - 61	Brown clayey fine-coarse sand with quartz grit.
									61 - 68	Red-brown clayey fine sand with abundant sub-angular quartz grit.
									68 - 69	Grey-subangular quartz grit and gravel with fine light brown sand.
									69 - 71	Light brown fine sand with abundant sub-angular quartz grit.
									71 - 75	Buff clayey fine sand with abundant quartz grit.
									75 - 94	Brown fine sand with abundant quartz grit, with some gravel and pockets of white clay.
									94 - 125	Light brown and grey clay with angular quartz grit.
10	" " "	90'	84'	80'	small	ATS1100	LW79/60		0 - 9"	Light brown clayey fine sand with nodules of limestone.
									9" - 5'	Light brown dense sandy nodular travertine.
									5 - 16	Light brown clayey fine sand and silt with limestone nodules and quartz grit.
									16 - 32	Red-brown clayey fine sand with limestone nodules.
									32 - 37	Red and grey clayey fine sand with sub-angular quartz grit.
									37 - 60	Red-brown clayey fine sand with abundant sub-angular quartz grit.
									60 - 65	Brown clayey fine sand with pockets of grey sandy clay.
									65 - 77	Brown clayey fine sand with abundant sub-angular quartz grit.
									77 - 84	Light brown clayey fine sand with sub-angular quartz grit and limestone nodules.
									84 - 88	Grey sub-angular quartz grit and brown fine sand.
									88 - 90	Light grey gritty clay.
11	" " "	90'	84'	80'	small	ATS1100	LW80/60		0 - 1	Red-brown slightly clayey sandy soil with nodules of limestone.
									1 - 4	Brown sandy clay with abundant limestone nodules and fragments.
									4 - 7	Bluff clayey fine sand with limestone nodules and pockets of red-brown sand.
									7 - 53	Brown clayey fine sand with quartz grit and pockets of lime.
									53 - 65	Brown clayey fine sand and silt with sub-angular quartz grit.
									65 - 83	Red clayey fine sand with abundant sub-angular quartz grit.
									83 - 87	Grey sub-angular quartz grit and brown fine sand.
									87 - 40	Light grey gritty clay.
										Bore No. T/E Folder No. 5/- Hd. Pygery Railway Yard.

Table No. 10

SUMMARY OF BORE RECORDS

Ground Water Survey

BUREAU

COUNTRY Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 2	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
12	Town Lot 11	216'	110'	75' 90'	Seepage	AT84100	LM484/6		0 - 1 Brown fine sand with nodules of lime-stone. 1 - 7 Brown clayey fine sand and boulders of dense nodular limestone. 7 - 37 Red-brown clayey fine-coarse sand and grit. 37 - 45 Pink clayey coarse sand and grit with ironstone gravel. 45 - 63 Light brown clayey fine-coarse sand and grit. 63 - 71 Yellow-brown clayey fine sand with abundant sub-angular-grit. 71 - 86 Light grey gritty clay. 86 - 101 Cream gritty clay. 101 - 117 Cream clayey fine sand and silt with grit. 117 - 123 Grey silty clay with grit and mica. FURTHER WORK 125 - 155 Light yellow-brown fine to coarse sandy (well rounded) clay - slightly micaceous. 155 - 180 Grey and greenish-grey fine to coarse sandy clay - slightly micaceous - bedrock derivative. 180 - 190 Grey and light yellow-brown fine to coarse sandy clay. 190 - 200 As above but becoming micaceous and feldspathic. 200 - 205 Mainly yellow-brown angular quartz and grit - some feldspar and iron-staining. 205 - 216 Fine to coarse very angular quartz sand with some feldspar.	Bore No. T/F Folder No. 7/- and 7A/- Hd. Pygery.
13	Adalco 63012	155'	62-65'	70'	60	AT84745	LM423/6		0 - 1'10" Light brown sandy soil with nodules of lime. 1'10 - 3' Brown slightly clayey fine sand with dense light brown nodular travertine. 3 - 15 Light brown clayey fine sand and silt with limestone nodules. 15 - 26'6" Brown fine-coarse sand and grit, with lateritic sandstone gravel. 26'6 - 51 Light brown fine sand with abundant sub-angular quartz, grit.	Bore No. A. Folder No. 6/- Hd. Pygery. Abandoned. Vide Plan 62-433.

Table No. 40A

SUMMARY OF BORE RECORDS

Ground Water Survey

Blackrock

~~SECRET~~ Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 2	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
13 (contd.)	Rd. Reg. Adj. 12	155'	62-145'	70'	80	ATS1745	LW123/61		51' - 54' Cream slightly clayey fine sand with abundant sub-angular quartz grit and pockets of white clay.	
									54 - 62 Light brown clayey fine sand with quartz grit and nodules of kaolin.	Bore No. A. Folder No. 6/- Hd. Pygery. Abandoned. Vide Plan 62-433
									62 - 96' 6" Buff grit clay.	
									96' 6" - 145 Light grey gritty fine sand and silt with pockets of kaolin.	
									145 - 155 Light grey coarse sand and grit with fragments of weathered granite felspar.	
14	Red. Rd. Adj. 20	98'	24-43'	24'	1000+	ATS1100	LW81/60		8" - 1' Light brown sandy soil.	Bore No. A. Folder No. 2/- Hd. Yaninee. Vide Plan 62-433
			94'	75'	50	" 1100	LW82/60		1 - 5 Light brown dense nodular sandy limestone.	
			24-43	26'	1600	" 1100	LW83/60		5 - 17 Buff clayey fine sand with limestone nodules.	
			"	32'	"	" 1100	LW84/60		17 - 27 Buff clayey fine sand and silt with pockets of grey clay.	
			"	40'	1400	" 1100	LW85/60		27 - 36 Greyish-pink clay with lime nodules and quartz grit.	
			24'	22'	1200	DT 2460	131/2008		36 - 43 Light brown and grey clayey coarse sand with pockets of yellow clay.	
									43 - 50 Grey gritty clay.	
									50 - 52 Light brown medium grained clayey sand and grit.	
									52 - 62 Dark brown clayey fine sand with abundant sub-angular quartz.	
									62 - 76 Buff silty clay with sub-angular grit and mica and silt.	
									(continued over page).	

SUMMARY OF BORE RECORDS

Ground Water Survey

Bhadrachalam

Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 2	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million			
14 (contd.)	Rd. Roc. 133.2C	98'							76 - 95' Greyish-brown clayey fine sand and silt with quartz grit.	Bore No. A Folder No. 2/- Hd. Yaninee Vide Plan 62/433.
									95 - 98 Grey clayey quartz grit with felspar and weathered granite.	
15	20	20'	9'	3'	small	AT81100	LW556/6		DRILLER'S LOG - No sludges available.	Bore No. B. Hd. yaninnsee. Folder No. 5/- Abandoned.
									0 - 9 Brown clay.	
									9 - 20 Blue clay.	
16	20	60'	35'	34'	Est. 300	AT81100	LW554/6		0 - 5 Brown clay. } 5 - 15 Clay. } Driller's log: 15 - 25 Red clay (dry) } No sludges.	Bore No. C Folder No. 4/- Hd. Yaninee, Abandoned. Vide Plan 62-433.
									25 - 40 Light grey sandy clay.	
									40 - 55 Clay. } 55 - 60 White clay } Driller's log: No sludges.	
17	36	44'	38'	38'	Small	AT81100	LW556/6		0 - 15 Brown soil and light brown sandy nodular limestone.	Bore No. A Folder No. 3/- Hd. Yaninee. Abandoned. Vide Plan 62-433
									15 - 20 Buff clayey fine sand with nodules of limestone.	
									20 - 22 Pink clayey fine sand and silt.	
									22 - 30 Light brown clayey fine sand and sub-angular grit.	
									30 - 38 Greenish-grey sandy clay with sub-angular grit.	
									38 - 40 Light grey clayey fine sand and silt, with grit.	
									40 - 44 Light greenish pink weathered quartz felspar gneiss.	

Table No. 12

S.A. DEPARTMENT OF MINES Bores located along Eyre
Highway from Toopoopora to Capietha.
SUMMARY OF BORE RECORDS

Ground Water Survey

Plan No. 2.

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through Plan 2. Strip 3	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
1	29	40'			Dry				Travertine. Sand. Stopped in fairly hard sandstone.	Bore No. A Hd. Yaninee Plan 61/4.
2	Rd. Ros Adj. 4	208'		120'	Seepage only	ATS2835	LM422/64		0 - 1 Red-brown fine sand with limestone nodes. 1 - 3 Buff dense sandy travertine. 3 - 11 Light brown clayey fine sand with limestone nodules. 11 - 25 Yellow-brown clayey fine sand with sub-angular quartz grit. 25 - 45 Red-brown clayey fine sand with quartz grit. 45 - 82 Light brown medium grained clayey sand and dense fine grained interitic sandstone. 82 - 90 Green fine sand and silt. 90 - 103 White fine sand. 103 - 106 Grey gritty clay. 106 - 108 Yellow-brown and grey sandy clay with abundant quartz grit. 108 - 111 Buff clayey fine sand and sub-angular quartz grit. 111 - 114 Buff clayey fine sand with quartz grit and pockets of kaolin. 114 - 208 Cream gritty kaolin with mica.	Bore No. A Folder No. 3/- Hd. Minnipa Abandoned. Vide Plan 62-433.
3	9	60'			now dry	fresh		439	49' Travertine. Sand. Granite.	Bore No. A Hd. Minnipa.
4	Minnipa Rly. way. yards	21'							0' - 1' Grey-brown slightly clayey sandy loam slightly calcareous. Moist, soft. 1' - 2'6" Brown slightly clayey medium grained sand; calcareous, soft, friable. 2'6" - 3' Light brown sandy marl with occasional small travertine nodules. Soft, damp. 3' - 5' Pale reddish-brown sandy marl with abundant hard travertine nodules increasing with depth. Moist, firm, friable. 5' - 5'6" Pale reddish-brown sandy marl with abundant hard travertine nodules. Moist, friable. 5'6" - 6' Hard nodular travertine layers with interstitial pale reddish-brown sandy marl. 6' - 8' Very pale reddish-brown sandy marl with moderate to occasional traver- tine nodules. Very moist, soft friable. 8' - 9'6" As above, but soft and very wet. 9'6" - 10 Red-brown very clayey sand to sandy clay with patches of earthy lime. Soft, very moist.	Bore No. A Folder No. 1/- Hd. Minnipa

SUMMARY OF BORE RECORDS

Ground Water Survey

Hudson

Chazy Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 3	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
4	Minnipa Railway yard	21'							10' - 12' Red-brown sandy clay to clayey sand. Occasional small pockets earthy limo. Soft and moist with very few patches.	Bore No. A Folder No. 1/- Hd. Minnipa.
									12' - 17' 6" Red-brown clayey sand to sandy clay with occasional light grey mottling. Becoming more reddish in colour with depth. Firm, damp to moist.	
									17' 6" - 18' Red-brown and yellow-brown mottled clayey sand with irregularly abundant quartz grains (grit size). Moist, friable.	
									18' - 18' 9" Red-brown clayey sand with yellow-brown mottling and pockets of iron-staining. Moderately abundant small quartz grains (grit size). Moist, soft, friable.	
									18' 9" - 19' As above with very abundant patches of ironstaining.	
									19' - 19' 9" Yellow-brown, red-brown, maroon and white spotted clayey medium grained to coarse grained sand. Moderately abundant quartz grit particles. The maroon pockets are probably haematitic.	
									19' 9" - 20' As for 19' - 19' 9" but white colour predominating.	
									20' - 20' 3" White clayey medium grained to coarse grained sand with some maroon and red-brown mottling. Heavily iron-stained with moderately abundant small quartz particles. Moist, friable.	
									20' 3" - 20' 9" Decomposed granite. Soft, moist, friable with some ironstone nodules.	
									20' 9" - 21' As above but very hard with fragments of hard fine to medium grained granite, and some hard siliceous ironstone.	
	" " "	18' 6"							0' - 1' Grey-brown slightly calcareous slightly clayey sand. Moist, soft, friable.	Bore No. B. Folder No. 2/- Hd. Minnipa. Abandoned.
									1' - 2' As above with small pockets lime.	
									2' - 3' Light grey-brown calcareous sand with very small lime nodules. Moist, soft, friable.	
									3' - 4' Light brown to pale reddish-brown sandy marl with moderately abundant small travertine nodules.	
									4' - 7' As above with hard thin travertine layers.	
									7' - 17' 6" Sealed tube samples.	
									17' 6" - 18' 6" Sealed tube sample attempted but material became too hard, causing tube to become detached and hole was abandoned.	

Table No. 14

S.A. DEPARTMENT OF MINES

DM-C3

SUMMARY OF BORE RECORDS

Ground Water Survey

Borehole

Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 3	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
6	Rd. Res. Adj. 9	92'							0 - 30 Light brown clayey fine sand with lime-stone nodules and quartz grit. 30 - 43 Yellow-brown clayey fine sand with abundant sub-angular quartz grit and lateritic gravel. 43 - 67 Pink medium grained friable sandstone - gritty in parts. 67 - 70 Red-brown fine-coarse sand and grit with pockets of white gritty kaolin. 70 - 74 Pink clayey fine-coarse sand and grit with some white gritty kaolin. 74 - 92 Cream gritty kaolin.	Bore No. A. Folder No. 3/- Hd. Carina. Abandoned. Vide Plan 62-434
7	Rd. Res. Adj. 4	140'	127'	127'	200	AT841C3	LM555/6		0 - 7 Cream dense nodular limestones. 7 - 20 Light brown friable fine grained sandstone with limestone nodules and lateritic gravel. 20 - 43 Red-brown lateritic sandstone with limestone and grit. 43 - 67 Cream fine-medium grained friable sandstone, gritty in parts. 67 - 70 Cream clayey fine sand with pockets of white gritty kaolin. 70 - 127 White gritty kaolin. 127 - 140 White clay with abundant angular quartz grit.	Bore No. B. Folder No. 2/- Hd. Carina. Abandoned. Vide Plan 62-434
8	Res. Adj. 30	140'							0 - 1 Red-brown sandy soil with boulders of buff dense nodular limestone. 1 - 8 Buff sandy limestone. 8 - 15 Buff medium grained sand with limestone nodules. 15 - 26 Light brown fine-medium grained sand with fragments of brown and white gritty clay. 26 - 31 Yellow-brown slightly clayey fine-medium grained sand. 31 - 38 Light brown and yellow slightly clayey fine sand. 38 - 51 Red-brown fine-medium grained sand. 51 - 60 White fine-coarse sand and grit. 60 - 70 Cream medium-coarse grained sand with nodules of white clay. 70 - 140 White gritty clay.	Bore No. A. Folder No. 10/- Hd. Carina. Abandoned. Vide Plan 62-434

Table No. 15

SUMMARY OF BORE RECORDS

Ground Water Survey

Hobart

Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 3	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
9	Rd. Res. Adj. 8	115'					Dry		0 - 10 Brown sandy soil and buff sandy lime-stone. 10 - 22 Cream medium grained sandstone. 22 - 29 Red-brown medium grained friable sandstone. 29 - 46 Cream medium grained friable sandstone. 46 - 61 Red slightly clayey fine grained friable sandstone. 61 - 79 Light brown fine sand with sub-angular quartz grit. 79 - 90 Light brown fine-coarse sand and grit with pockets of white gritty clay. 90 - 115 White gritty clay with mica.	Bore No. A. Folder No. 5/- Hd. Moorkitaby Abandoned. Vide Plan 62-434
10	Rd. Res. Adj. 7	80'					Dry		0 - 25 Buff dense sandy nodular limestone. 25 - 33 Light brown medium grained friable sandstone. 33 - 43 Red-brown fine-medium grained sand and sub-angular grit. 43 - 50 Buff medium grained sandstone. 50 - 70 Cream clayey fine sand and grit. 70 - 80 White gritty clay with mica.	Bore No. A. Folder No. 6/- Hd. Moorkitaby. Abandoned. Vide Plan 62-434.
11	19	180-200 now 60'		200'C			Salt	314	Thick travertine. Red-yellow and white soft sandstone. Sand. Clay.	Bore No. B. Folder No. 1/2 Hd. Karkultaby
12	59	32'							0' - 1' Brown silty sandy lime with abundant travertine rubble. Friable. 1' - 2'4" Hard pale buff coloured nodular travertine. 2'4" - 3' Off-white calcareous sand, with abundant travertine rubble and cemented sandy lumps. 3 - 5 Very pale brown sandy calcareous silt, with moderate small cemented lumps of same. Moderate small limestone rubble, increasing with depth. 5 - 6'2" Semi-consolidated silty sandy limestone with moderately abundant fragments of hard travertine limestone. 6'2" - 7'6" Hard sandy travertine. 7'6" - 8'3" As above but only cemented in parts. Damp. 8'3" - 9'4" Cream silty sandy marl with semi-cemented lumps and occasional travertine nodules. Very slightly damp, friable.	Bore No. A. Folder No. 2/- Hd. Karkultaby. Pocchera Railway Yards.

SUMMARY OF BORE RECORDS

Ground Water Survey

HIGHTER

COCH Plan No. 2

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Plan 2, Strip 3.	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
12 (Contd.)	59	32'							9' -10'8" As above but slightly reddish in colour, and becoming more compact with depth. 10'8"-11'8" Compact sandy travertine fragments, with loose dry friable interstitial material. 11'8"-14' Pale buff silty and finely sandy marl, semi-consolidated in parts. Friable to compact, dry. 14' -16' Hard sandy travertine layer. 16' -16'6" Compact semi-consolidated pale buff silty and finely sandy marl. Dry. 16'6"-17' Cream silty and finely sandy moderately consolidated marl, slightly crystalline in parts. Frequent very hard, thin layers of travertine. Dry. 17' -19' Off-white semi-consolidated finely sandy calcareous silt. Dry. 19' -19'6" Off-white calcareous silty fine sand, with abundant consolidated lumps of same. Dry. 19'6"-20' As above but more silty with only moderate consolidated lumps. Dry. 20' -21' Off-white sandy calcareous silt with semi-consolidated fragments of pale brown limestone. 21' -23' White calcareous finely sandy silt, semi-compacted in parts. Dry, friable to loose. 23' -27' White silty calcareous fine sand with hard lumps of a very pale buff colour, (probably cemented lumps of the same). Dry. 27' -31' Off-white friable silt calcareous very fine sand, with semi-compacted portions. Dry. 31' -32' Loose dry silty calcareous very fine sand, with occasional semi-compacted portions.	Bore No. A Folder No. 2/- Hd. Karcultaby. Poochera Railway Station.
43	35	148'		145'		calc			0' -148' Alluvium Sto sand grit clay, white. Red and yellow rock. (ferrug. cement).	Bore No. A. Folder No. 1/5 Hd. Gungana. Mt. Jane Nth. Well

Table No. 1

S.A. DEPARTMENT OF MINES

DM-C8

SUMMARY OF BORE RECORDS

Ground Water Survey

BUREAU

COUNTRY Plan No. 3

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	8	50'						272	<u>PLAN 3 STRIP 1</u> Travertine. Sandstone. Sand.	Bore No. A Hd. Cungena Pemmury Well
2	77	150'				5oz.		323	0 - 150 Alluvium, ste. (red and yellow). Sand. Grit (ferrug.) Fine gr. thin white laminated shales whitish sand.	Bore No. A Folder 1/2 Hd. Cungena
3	17	190'			1000pd.	very salt dry		313	0 - 190 Alluvium, ste. sand, grit, clay granite.	Bore No. A Folder No. 1/6 Pollilia Bore Hd. Walpuppie
4	17	176'		164'	1000pd 1500	fresh			Trav. limestone, stone, sand, granite.	Well, A. Folder No. 1/5 Yantanaby Well
5	17	102'				dry			Trav. limestone, stone, sand decomposed granite-grey.	Well No. B Folder No. 1/2
6	57	34'							0' - 1' Brown fine grained to medium grained calcareous sand. Moist friable to loose.	Bore No. B Folder 3/- Wirrulla R/vay Yards Bore 2 Hd. Walpuppie
									1 - 2' Light grey-brown fine calcareous sand with frequent hard cemented lumps, tending towards a sandy travertine in some lumps. Damp.	
									2 - 5' As above but dry and loose.	
									5 - 8 Sealed tube samples.	
									8 - 9 Light grey-brown fine calcareous sand with pockets of earthy lime and moderately hard lime nodules. Dry loose.	
									9 - 13'6" Sealed tube samples.	
									13'6" - 19'6" Light red-brown very sandy marl. Semi-compact with moderately hard travertine nodules.	
									19'6" - 30 Sealed tube samples.	
									30 - 34 Brownish-yellow slightly clayey sand with occasional patches of grey mottling. Very compact.	
7	57	30'							0 - 1 Fine brown calcareous sand, very slightly clayey. Moist friable to loose.	Bore No. A Folder No. 2/- Railway Yards. Wirrulla Bore 1 Hd. Walpuppie
									1 - 2 Light brown calcareous sand with large hard fragments of sandy travertine. Moist.	
									2 - 3 Very pale brown calcareous sand with small travertine nodules. Moist friable to loose.	

SUMMARY OF BORE RECORDS

Ground Water Survey

ETNA, ARIZ.

Recovery Plan No. 3

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
7	57	30'							3' - 4' As above, but with very abundant hard sandy travertine fragments. Damp. 4 - 7 Fine to medium grained light-grey calcareous sand with hard cemented lumps. Loose, dry to lightly damp. 7 - 9 Pale grey-brown and white mottled very sandy marl with moderately abundant harder cemented lumps. Friable. 9 - 10 Pale grey-brown calcareous sand with pockets white earthy lime. Friable but compact in parts. 10 - 12 Pale-grey brown fine grained calcareous sand. Loose. 12 - 13 Pale grey and off-white very sandy marl with frequent hard nodules of travertine. Soft friable damp. 13 - 14 Pale buff sandy marl with occasional small travertine nodules. Soft friable damp. 14 - 15 Pale red-brown friable sandy marl with very abundant travertine nodules, grading to a pale red-brown compact nodular travertine. 15 - 16 Pale red-brown sandy marl with abundant small to medium travertine nodules. 16 - 17 Pale grey-brown fine to medium grained calcareous sand with pockets of light red-brown sandy marl, and moderately abundant travertine nodules. Friable to compact. 17 - 19 Light red-brown sandy marl with moderately abundant travertine nodules. Semi-compact. 19 - 21 Pale reddish-brown compact friable marl with very abundant travertine nodules and pockets of reddish-brown clayey sand. 21 - 22 As above with large travertine fragments and increasing amounts of sandy clay. Compact. 22 - 23 As above but with less travertine fragments. 23 - 25 Light red-brown clayey sand with pockets of cream sandy marl. Friable to compact with an earthy texture.	Bore No. A Folder No. 2/- Railway Yards Wirrulla Bore 1 Hd. Walpuppie

Table No. 3

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

BUREAU

Plan No. 3

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through <u>Strip 1 Contd.</u>	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
7	57	30'							23 - 26 Reddish-brown and yellow-brown mottled clayey sand with occasional pockets of earthy lime. Firm, slightly friable to compact with an earthy texture.	Bore No. A Hd. Walpuppie
8	7	175'			small	salt			26 - 28 As above but no lime. 28 - 30 Stiff brownish yellow clayey sand with some grey mottling. Earthy texture. Dump shows, travertine, sandstone, sand, grits, clays.	Well No. A Folder NO. 1/1 Blair's Well Hd. Walpuppie
9	10E	102'		51'	30-40pd	6 1/2 oz.			Travertine stone, clay and gabbro-amphibolite.	Well No. A Folder No. 1/3 Hd. Perlubie
10	38	63'		63'		2 oz.			Travertine, stone, sand a little clay.	Bore No. a Folder No. 1/3 Hd. Perlubie. Pimba Acla West, Well.
11	W.Con. Res. 50	112' silted to 92'		88'	good	2 1/2 - 3ozs.			Travertine, stone, sand, clay a good deal mixed with L quartz and quartz pebbles (may be gr. from bottom).	Well No. A Folder No. 1/4 Narcultie Well
12	WCR 50	131'6"	93'	79'		Salt			0' - 6" Loam. 6" - 6'6" Hard flinty limestone. 6'6" - 12' Yellow sandstone. 12' - 18' Red clay. 18' - 19' Hard ironstone boulders. 19' - 33' Quartzite. 33' - 36' Red sand, rock. 36' - 40' Red sand and boulders. 40' - 44' Brown rock with boulders. 44' - 45'6" Quartzite. 45'6" - 47' Red sandy rock. 47' - 113' Clay. 113' - 122' Granite boulders. 122' - 131'6" Granite.	Bore No. B Folder No. 1/3 Narcultie Bore
1	WCRadj 24	119'				fresh, took salt.			<u>Strip 2 (No Bores)</u> <u>Plan 3, Strip 3</u> No log.	Well. Folder No. 1/1. Merchiny Well Hd. Wandana
2	Ceduna 129	T/S 28	24'	24'	300	brackish			0 - 12' Pinkish brown slightly clayey limestone numerous fragments of travertine limestone.	Bore T/A Folder 5/- Hd. Bonython

Table No. 4

SUMMARY OF BORE RECORDS

Ground Water Survey

~~Handwritten~~Plan No. 3

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
2	Gaduna 129	1/8 28'	24'	24'	300	brackish			12 - 20 Pinkish white very calcareous clay grading to reddish brown very fine sand.	Bore T/A Folder 5/- Hd. Bonython.
3	25	52' 6"	46'	46'	200	ATS694			20 - 28 Very light grey to brownish hard siltstone to shale. 10 Surface Earth. 10 Plum Pudding Limestone. Clay - sand and clay. Coarse red sand and water.	Bore A. Folder 1/8 Hd. Moule
4	40	72'	70'	65'	50	ATS2520	39/941		0 - 1/2' Dark brown loam soil. 1/2' - 10 Hard white nodular travertine limestone. 10 - 15 Calcareous sand and clay-aeolianite. 15 - 23 Brown calcareous clay containing considerable fine quartz sand. 23 - 34 Fine red-brown ochreous siliceous sand and some clay slightly calcareous. 34 - 66 Fine yellow ochreous siliceous sand and some grit. 66 - 70 Fine red-brown siliceous sand (ochreous) with some grit. 70 - 72 Medium coarse siliceous sand and grit, red-brown colouration due to ochre.	Bore No. A Folder No. 4/- Hd. Moule.
5	Blk. 7A	86'	86'	70'		769.12	19/5684		Limestone and clay. Granite 2 to 3 feet from water. Limestone, clay granite at 84 feet.	Bore A Folder 1/3 Hd. Moule
6	82	98'	95'	82'	30'	ATS1740	37/422		0 - 1 1/2 Brown soil and limestone rubble. 1 1/2 - 8 Hard white travertine limestone. 8 - 24 Cream calcareous sand and clay aeolianite. 24 - 31 Fine red-brown ochreous siliceous sand, some grit. 31 - 51 Fine - medium yellow ochreous quartz sand and considerable amount of quartz grit. 51 - 67 Brick red medium siliceous sand with an ochreous cement. 67 - 98 White kaolin clay and quartz grit decomposed bedrock.	Bore No. B Folder No. 3/- Hd. Moule.

Table No. 5**SUMMARY OF BORE RECORDS**

Ground Water Survey

~~RETRACT~~~~RETRACT~~ Plan No. 3

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
7	82	108'	106'	94'	50'	AT81740	37/418		<u>Strip No. 3 (Contd.)</u> 0 - 3 Dark brown surface soil and loam with modules of travertine limestone. 3 - 13 Hard travertine limestone, pinkish brown. 13 - 41 Very fine yellow brown ochreous sand- stone, some grit. 41 - 70 Very fine pinkish-yellow ochreous sandstone, some grit. 70 - 79 Brick red fine ochreous sand, with some grit and clay. 79 - 92 White and pink kaolin clay bearing quartz. 92 - 108 Cream coloured kaolin clay and quartz grit, decomposed gneiss.	Bore No. A Folder No. 2/- Hd. Moulo

Table No. 1

Bores located along Eyre Highway from
S.A. DEPARTMENT OF MINES Wialabunna to Mundroo Station. ~~Wialabunna~~

DM-CS

SUMMARY OF BORE RECORDS

Ground Water Survey

Plan 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	1		50'						- Plan 4 Strip 1 At about 50' to dense aplitic granite, trace of water in bottom, never equipped.	Chatana Trial Hole B. Folder 1/1A Hd. Catt
2	1	68'				salt			No details.	Bore No. E Hd. Catt.
3	17	54'				6 ozs.			No details.	Bore No. A Hd. Catt.
4	1	38'		35½'	65	440 589			No details.	Bore No. F Hd. Catt. Plan 147-1/1.
5	17	30'							Sand caving in.	Bore No. C Hd. Catt.
6	17	102'	72'	65'	30	ATS2400	100/1323		0 - 2 Limestone soil. 2 - 10 Light greenish brown sandy limestone. 10 - 20 Light yellow-brown marl and limestone. 20 - 35 Light yellow-brown limestone and weathered granite fragments. 35 - 102 Light grey weathered granite.	Bore No. B Folder 9/- Hd. Catt.
7	50	270'	58'		Seepage	ATS1100	LW114/62		0 - 10 Light brown sandy limestone. 10 - 20 Buff fine grained dense nodular lime- stone. 20 - 22 Red-brown and grey clayey fine sand with limestone nodules. 22 - 35 Buff fine ground dense nodular lime- stone. 35 - 55 Cream fine sand with grit and nodules of white clay. 55 - 155 Cream clay with mica and abundant quartz grit. 155 - 215 Samples missing. 215 - 240 Grey weathered medium grained granitic gneiss. 240 - 250 Grey soft weathered fine grained mica schist. 250 - 270 Grey fine grained granitic gneiss.	Bore No. A Folder 19/- Hd. Catt.
8	27	28½'				Dry			0 - 8" Brown loam soil and limestone rubble. 8" - 2'6" Cream coloured calcareous clay and limestone rubble. 2'6" - 14' Hard nodular travertine limestone. 14 - 28' Pale yellow brown fine siliceous sand, occasional grit and gypsum crystals. 28' - 28'6" Hard grey granite bedrock (resembles black hill granite).	Bore No. A Folder 7/- Hd. Catt

SUMMARY OF BORE RECORDS

Ground Water Survey

1971/72

Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level	Gallons per hour	Parts per million	Analysis No.			
Strip 1 (Contd.)										
9	32	150'	145'	135'	60	AT81200 Salt	108/327		0 - 18 Brown rubbly limestone. 18 - 35 Light brown rubbly marl. 35 - 150 Decomposed granite, very micaceous and poor in quartzite.	Bore No. A Folder 18/- Hd. Catt.
10	21	115'	110'	100'	40	108/1330	1072.5		0 - 12 Pale brown fine carbonaceous sand and sandy limestones. 12 - 35 Brown sandy clay with limestone gravel. 35 - 52 Pink sandy clay with gravel and carbonaceous fragments 52 - 65 Red-brown clayey sand with quartz and limestone gravel. 65 - 78 Mottled red brown-grey sandy clay. 78 - 90 Pale brown sandy clay with rounded quartz gravel and particles of weathered gneiss. 90 - 110 White gritty clay with abundant muscovite. 110 - 114 Pale brown sandy clay with abundant mica, quartz and particles of decomposed gneiss. 114 - 115 Brownish grey coarse quartz gravel with feldspar and mica and some weathered gneiss.	Bore A Folder 17/- Hd. Catt
11	22	65'							Lime rubble Limestone. Red clay. Yellow sand. Clay Yellow sand. Red sand. 65' Yellow sand. Decomposed granite with mica.	Bore No. B Folder 1/4 Hd. Bagster.
12	22	145'		130'	20 p.d.	814.79	20/5844		Micaceous granite. Gneiss from 40'.	Well No. A.
13	6	150'	50' 70' 35' 75'	50' 49' 35' 75'	Very small 15 50 50	AT83440 AT82660 Brackish AT81200	28/8167 28/8168 108/1495		0 - 11 Travertine and pink clay. 11 - 16 1/2 Red sandy clay. 16 1/2 - 27 Yellow sand and clay. 27 - 133 Soft grey micaceous schist- of red gneiss. 133 - 134 1/2 Hard yellow micaceous gneiss. 134 1/2 - 150 Grey gneiss (quartz, feldspar, biotite).	Bore No. B Folder 2/- Hd. Bagster Bore No. B
14	6	58'							0 - 3 Brown sandy soil with some calcareous nodules. 3 - 20 Brown clay limestone gravel. 20 - 40 Red sandy clay with calcareous nodules.	Bore No. A Folders 10/- 1/2 Hd. Bagster

SUMMARY OF BORE RECORDS

Ground Water Survey

HAYSHOCK

CHERRY

Plan No. 14

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through (Strip 1) - Contd.	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
14	6	58'							40 - 45 Brown fine sand with some clay and abundant muscovite.	Bore No. A
15	6	125'	125'	120'	10	Salt ATS1300	108/1331		45 - 65 Greyish brown highly weathered gneiss. 0 - 3 Brown sandy soil. 3 - 20 Pale brown clayey limestone rubble. 20 - 40 Red brown clayey sand with some mica. 40 - 62 Pale brown clayey sand with calcareous nodules. 62 - 85 Pale brown clayey sand and grit with calcareous fragments. 85 - 100 Grey-white gritty clay with abundant mica. 100 - 110 No sample. Driller reports white clay with mica. 110 - 125 No sample. Driller reports white clay with mica.	Bore No. "C" Folder 12/- Hd. Bagster
16	32	56'	50'	50'	20	Brackish ATS1200	108/1492		0 - 3 Soil. 3 - 20 Pinkish buff marly limestone. 20 - 28 Red-brown rubbly sandy marl. 28 - 34 Pinkish buff very micaceous quartz deficient decomp. granitic rock. 34 - 56 Offwhite ditto.	Bore No. A Folder Nos. 1/3, 15/-
17	5H	90				salt			No details.	Well A
18	5H	90				salt			No details.	Well B
19	4N	85		67'	50	519.38	20/5846		No details.	Well A
20	4N	113	97		15-20	1 1/2 ozs.			Water in 8ft. of decomposed mica schist quartz pebbles. 97 - 100 Mica schist. 105 Calc. gravel - mica schist (Decomposed).	Bore C
21	5H	72'				salt			0 - 3 Sandy soil. 3 - 15 Brown rubbly limestone. 15 - 20 Cream, brown and green rubble marl. 20 - 34 Light red brown very sandy marl. 34 - 58 Red marly sand. 58 - 72 Cream very micaceous silty - ? schist	Bore A Folder 11/- Hd. Bagster derivative.
22	8	95	93 95	83 1/2 83	100 200	855.35 1057.1	51/2471 103/2471		0 - 1 Brown soil 1 - 2 1/2 Brown calcareous clay. 2 1/2 - 10 1/2 Hard nodular travertine limestone. 10 1/2 - 17 Grey sandy clay. 17 - 34 Brown sandy clay. 34 - 37 Pale yellow fine siliceous sand. 37 - 43 Pale yellow fine siliceous sand. 43 - 45 Brick red fine siliceous sand. 45 - 51 Fine yellow-brown siliceous sand.	Bore A Folder 11/-

Table No. 4

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

~~XXXXXX~~~~XXXXXX~~ Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through <u>Strip 1 (Contd.)</u>	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
22	8								51 - 57 White sand and grit. 57 - 85 Fine golden-yellow micaceous sand. 85 - 92 Pale yellow micaceous sand. 92 - 94 Pale yellow micaceous sand and quartz grit. (Water).	Bore A Folder 11/-
23	9	40'			Dry				Struck granite.	Well B. Hd. Burgoyne
24	9	76'	73'	73'		1006.09	48/1329		0 - 2 Brown soil. 2 - 4 Pale brown calcareous clay. 4 - 6 Cream coloured calcareous clay and limestone rubble. 6 - 11 Nodular travertine limestone. 11 - 16 Brown calcareous clay and limestone rubble. 16 - 24 Fine mottled grey and yellow clayey sand (siliceous). 24 - 50 Yellow-brown clay (samples lost). 50 - 54 Pale yellow and fine siliceous sand and some clay. 54 - 60 Mottled white and yellow fine siliceous sand with some clay. 60 - 72 Yellow siliceous sand and considerable muscovite. 72 - 76 Coarse quartz sand.	Bore A Folder 7/- Hd. Burgoyne
25	8	90'	85'	85'	20	salt 2100	107/1087		0 - 6 Creamy white travertine limestone. 6 - 15 Grey-brown travertine limestone and some marl. 15 - 30 Brick red silt and very fine sand. 30 - 35 Brick red silt and very fine sand with ferruginous grit and gravel. 35 - 45 Light brown silty and very fine sand. 45 - 60 Dark brown silty fine sand with grit and gravel some of which amphybolitic. 60 - 75 Pale pink micaceous clay. 75 - 90 Whitish and blue mica and some clay.	Bore C. Folder 18/- Hd. Burgoyne
26	7	64'	44' 64'	45'	150'	48/1326 AT81580	(anal. no.)		0 - 1/2" Brown soil. 1/2 - 7' Nodular travertine limestone. 7 - 15 Calcareous clay and limestone rubble. 15 - 36 Brick red ochreous sandy clay. 36 - 40 Fine white siliceous sand - red mottlings. 40 - 51 Very fine white siliceous sand and sandstone. 51 - 64 Brick red ochreous fine siliceous sand.	Bore A Folder 14/- Hd. Burgoyne
27	24	42'	40	26 27	500 500?	271.8 AT8420	107/1089 LW221/62		0 - 10 Cream travertine limestone. 10 - 20 Creamy travertine limestone with some marl. 20 - 38 Pale pink marly fine sand with some calcareous grit and gravel. 39 - 42 Yellowish cream slightly silty fine to coarse sand.	Bore B Folder 20/- Hd. Burgoyne.

Table No. BA

SUMMARY OF BORE RECORDS

Ground Water Survey

ROBINSONCounty Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
									<u>Strip 1 (Contd.)</u>	
28	24	31	28	25	200	35.8 42	107/1093 Dept. Agric. LW220/62		0 - 5 Pale pink travertine limestone. 5 - 18 Pale brown cream travertine limestone. 18 - 25 Pale brown cream travertine lime- stone with some marl. 25 - 31 Brown marl with travertine limestone rubble.	Bore A Folders 15/- & 2/7. Hd. Burgoyne
29	Town Lot 26	90	60	60	10	1677.3 Salt	107/1095		No details.	Bore TA Folder No. 23/- Hd. Burgoyne
30	12	29		19	50-100	320.91 374.1	20/5806 ?		No details.	Station Horse Well Co. Hd. Burgoyne Plan L47-1/1
31	12	7		6½	100-150	156.89	20/5801		No details.	Bore No. A Hd. Burgoyne Minyaoola Well Plan L47-1/1
32	12	11'6"			300	¾ oz.			No details.	Bore No. E Folder 32/4 Hd. Burgoyne Racecourse.
33	24	35		28	40	111.63	20/5837		No details.	Well No. A Hd. Burgoyne Plan L47-1/1
34	84	12		11 11'3"		102. 1½ ozs.			No details.	Bore No. D Hd. Burgoyne Folder 32/5 Racecourse

Table No. 5

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

REMARKS

Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million	Analysis No.		
1	33	78			Dry				<u>STRIP 2</u> Sunk in Amphibolite Schist.	Well No. A Hd. Cohen
2	7	46		38	50	123.63	20/5838		Over whitish clay (or Marl).	Bore No. C B. Shipard Hd. Cohen
3	7	38			100	452.51	20/5839		No details.	Well No. A B. Shipard Hd. Cohen
4	6	40	40	37	500	AT84050	125/216		5ft. clay 6" rock 20" Hard rubble 9" Rock	Bore No. D Hd. Cohen Folder No. 1/9 M.G. Oats, Penong.
5	23	128	128		V. small	AT84740	49/1719		0 - 2 Calcareous sandy topsoil. 2 - 4 Pinkish sandy limestone. 4 - 11 $\frac{1}{2}$ Travertine. 11 $\frac{1}{2}$ - 86 Pinkish sandy limestone. 86 - 104 Pinkish medium grained very calcareous sand. 104 - 108 Ditto. Slightly coarser. 108 - 128 Red coarse slightly calcareous sand.	Bore No. A Folder No. 5/- Hd. Cohen G.J. Edwards
6	6	25		24' 6"		774.90	20/5851		No details.	Well No. A. Hd. Cohen R. Dunn
7	12A	17		15' 3" 15' 6"	175 150	318.18	20/5846		No details.	Well No. A Hd. Giles G. Lav
8	12A	36		32		salt			No details.	Bore No. B Hd. Giles G. Lav
9	22B	40?		38? 30	50	622.80 1 $\frac{1}{2}$ ozs.	20/5849		No details.	Well No. A Folder No. 1/8 Hd. Giles R. Dunn
10	8A	30		25?	100	308.45	20/5853		No details.	Bore No. A Hd. Giles C. Brook
11	7	77	74	74	80	1770	103/2467		0 - 20 Pink sandy marl and limestone. 20 - 35 Pink sandy marl - some large quartz grains. 35 - 52 Pink very sandy marl. 52 - 77 Pink sandy marl.	Bore No. A Folder No. 4/- Hd. Giles G.J. & J.L. Edwards Cedunn. Non-productive
12	15	16				Salt			No details.	Bore No. A Hd. Giles
13	8	27		23	100	78.58	20/5854		No details.	Bore No. A Hd. Giles G. Lav

SUMMARY OF BORE RECORDS

Ground Water Survey

KASIMPUR

CUMMER Plan 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Strip 2 (Contd.)	Remarks
		Total	Water cut	Static level		Parts per million	Analysts No.			
27	13	36		30		1 1/2 oz.			Limestone and calc ste	Old Well A Folder No. 1/8 Hd. Magarey Dunn (not used)
28	12	36	36	25' 6" 26	50	33.90 ATS 36	49/1709 52/2590		0 - 5 Brown calcareous soil 5 - 14 Pink calcareous clay 14 - 17 Brown gritty clay 17 - 19 Travertine limestone 19 - 30 Pinkish soft clayey limestone - aeolianite 30 - 36 Brown clay with limestone nodules	Bore No. C Folder No. 3/- Hd. Magarey I. A. Gray
29	12	72	72	70		948.06	49/1710		0 - 1 Brown soil 1 - 16 Travertine limestone 16 - 36 Pink pale brown calcareous sand - aeolianite. 36 - 51 Cream coloured calcareous sand - aeolianite 51 - 66 Yellow-orange fine sand and grit - slightly calcareous 66 - 72 White clay with ironstone nodules	Bore No. B Folder No. 4/- Hd. Magarey I. A. Gray
30	13	125	70 120	70 50	100 10	450 1701.9	108/1333 108/1332		0 - 3 Soil 3 - 20 Light brown sandy limestone 20 - 32 Yellow brown very sandy marl 32 - 50 Yellow pink slightly gritty marl 50 - 68 White, pink and light brown silty clay 68 - 125 White and pink micaceous kaolinitic gritty clay - (? bedrock derivative).	Bore No. E Folder No. 9/- Hd. Magarey L. J. Dunn Abandoned
31	12	57	57	55	128.81		49/1711		0 - 3 Light brown soil 3 - 18 Travertine limestone 18 - 33 Pale brown fine calcareous sand - some siliceous aeolianite 33 - 38 Orange coloured fine calcareous sand - some siliceous aeolianite 38 - 42 Hard sandy limestone - fine grained. 42 - 56 Light brown calcareous sand - porellan- ite pebbles aeolianite 56 - 57 Fine yellow siliceous sand.	Bore No. D Folder No. 5/- Hd. Magarey I.A. Gray
32	9	65	55	54	50	Brackish 1041.3	108/1329		0 - 4 Brown soil 4 - 17 Buff limestone and marl 17 - 32 Light brown to cream nodular rubbly limestone. 32 - 51 Yellow calcareous gritty sandstone 51 - 58 Light brown clay and grit 58 - 65 Red to maroon micaceous gritty clay -? granitic derivative.	Bore No. G Folder No. 10/- Hd. Magarey G. Mahar
33	9	62			V.Small	3/8 oz.			62 Clay and cream sand to 62'	Well No. B Folder No. 1/2 Hd. Magarey Maher's Well
34	9	73			400 day	ATS 760	92/1009		This sample was taken 3' below bottom of 70' fresh water well, which makes about 400 g.p.d. Fresh water in white pipe clay, quartz and quartz sand.	Bore No. H Folder No. 2/10 Hd. Magarey B. Mahar
35	9	71		64	fair	1/2 oz.	Plan 60/118		Limestone on Mica and hornblende schist and qte with granite veins.	Pennalumba Well C Folder No. 1/5 Hd. Magarey

Table No. 8

S.A. DEPARTMENT OF MINES

DM-08

SUMMARY OF BORE RECORDS

Ground Water Survey

HYDERABADCounty Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Strip 2 (Contd.)	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
36	9	72½		67	fair small	2 oz. AT9830	121/959		Limestone and granite. Travertine limestone alluvial sand and clay, amphibolite and granite.	West Well D Folder No. 1/5 Hd. Magarey Pennalumba Well
37	9	75	69	64 50	60 150	247.01 brackish	49/1712		0 - 4 Brown soil. 4 - 17 Nodular travertine limestone 17 - 32 Fine calcareous sand - aeolianite 32 - 42 Brown siliceous sand - some clay and grit. 42 - 59 Very fine brown siliceous sand 59 - 69 Quartz gravel and white clay (near bedrock) ? 69 - 75 Quartz and sand.	Bore No. F Folder No. 6/- & 6A/- Magarey G.P. & B. MAHAR
38	7A	45				Salt			No details	Well No. A Folder No. 1/2 Hd. Nash J. Murray

S.A. DEPARTMENT OF MINES

Table No. 9

SUMMARY OF BORE RECORDS

Ground Water Survey

~~REDACTED~~~~XXXXXX~~ Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
									<u>STRIP 3</u>	
1	18A	51'	49'			160zs.			0 - 15' Red clay. 30 Limestone. 50 Various clays. At 51 Sand, grey green.	Bore B. Folder 1/4 Hd. Caldwell
2	32	16'6"	15'6"			4 ozs.			No details.	Bore No. A Folder 1/5 Hd. Caldwell
3	20B	64'	46'	44'	500	6 ozs.			20' Limestone. 24 Clay with gravel. 24 Granite.	Bore ? B Folder 1/3 Hd. Sturdee
4	18	20'		50'		ATS1625	92/1080		Travertine, fossiliferous calc. sandstone. Hornblende gneiss.	Well (S. enr.) "B" Folder 2/3 Hd. Sturdee Well in hollow.
5	21	89'	65'	65'	10				0 - 15 Pinkish travertine. 15 - 25 Greenish to pale buff soft limestone. 25 - 40 Yellow fine sand. 40 - 58 Yellow fine sand some coarse fragments. 58 - 67 Red-brown sandy marl. 67 - 89 Buff sandy marl.	Bore No. A Folder 12/- Hd. Sturdee
6	17	68'		54' 62' 60'	large 6,000	1/8 oz. 335.91 ATS237	52/2595 92/1079		Nodular limestone. Limestone sand. Red calcareous sand.	Bore No. A Pintumba Well Folder 2/2 Hd. Sturdee
7	24	67'6"		60'6"		281.23 ATS238	42/1873 92/1078		0 - 66 Yellow fossiliferous calcarenite. Alluvium. Marine limestone. Yellow sand and slate.	Well A. Taromba Well Folder 2/5 Hd. Sturdee.
8	16	75'	54' 70'	54'	120	fresh			No details.	Old Well C Folder 4/1 & 4/2 Hd. Sturdee
9	16	56'6"			100	3 ozs.			No details.	Folder 4/6 Bore No. A Hd. Sturdee
10	16	48'6"				2 1/2 ozs.			No details.	Bore No. B Folder 4/7 Hd. Sturdee
11	3	85-90'		74' 63' 65-70'	Moderate good "	1 oz. ATS203 " 199	52/2587 92/1077		0 - 3' Travertine. 3 - 20' Travertine sandstone. 20 - W.L. Timbered Gneissic granite on dump.	Well A. Hd. Moller Folder 1/1 Koorngibbie Govt. Well.

Table No. 10

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

~~Handwritten~~~~County~~ Plan No. 1

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Strip 3 (Continued)	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
12	3	58' 6"	56'	± 50'	100 gph	1 1/2 oz. 176.7	142/189		Limestone.	Bore No. Folder No. 2/10 Hd. Miller.
13	3	56-58'		54'		ATS104	52/2594		No details.	Well D. Folder 1/10 Hd. Miller.
14	3			55'	3000 g.	1/8 oz.			No details.	Well B Fox's Well Hd. Miller Folder 1/4
15	4	61'		58'		240-50	52/2593		0 - 18 Travertine and travertinised sandstone. 18 - 50 White calc. rubblely clay. 50 - 61 Yellow (horizontal) fossiliferous sandstone.	North Well No. A Folder 2/2 Hd. Miller
16	4	63		60		1/4 oz.			No details.	Well D Folder 1/5 Hd. Miller
17	4	60		54		ATS200	52/2592		No details.	South Well C Folder 2/1 Hd. Miller
18	3	83		81		ATS339	52/2586		Travertine and fossiliferous sandstone on dump.	Well C. Folder 1/9 Hd. Miller
19	5A	115	113'		small	926.56	54/278		0 - 45 Travertine. 45 - 58 Calcareous sandstone (aeolianite). 58 - 68 Hard yellow aeolianite. 68 - 77 Yellow clayey aeolianite. 77 - 85 Hard calcareous sandstone. 85 - 98 Yellow aeolianite. 98 - 101 Yellow calcareous coarse sand. 101 - 111 Dark yellow calcareous sandy clay. 111 - 115 Dark yellow quartz sand.	Bore A Folder 4/- Hd. Miller
20	16	85'				ATS694 p.p.m.	151/484		No details.	Stotts Well E Folder 9/1 Hd. Miller
21	16	72		70	good fair	424.58 1 oz.	52/2594		Travertine, sandstone, and fine sand on dump.	Well A Folders 2/3 & 1/2
				54	-	ATS 172	92/1089		Yellow fossiliferous calcarenite.	Hd. Miller
				59	good w/m	6457ATS p.p.m.	151/47		0 - 70 Limestone on white green and yellow sand and clayey grit.	

Table No. _____

S.A. DEPARTMENT OF MINES

SUMMARY OF BORE RECORDS

Ground Water Survey

~~HARTECH~~

County Plan No. 4

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Strip 2 (Contd.)	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
14	11	30			none	bitter			No detgils.	Manandilla Well No. B Folder No. 1/6 Hd. Giles
15	10A	35		30	150-200	186.91	20/5809		No details.	Garden Well A Hd. Giles G. Law
16	10A	27		20	150-200	505.50	20/5795		No details.	Well No. B Folder No. 1/5 Hd. Giles G. Law
17	9	47			small	stock- salt			No details.	Well A Folder No. 1/4 Hd. Giles
18	8	45	38	32	30	86.9	108/1328	0 - 20 20 - 40 40 - 45	Pale brown sandy clay with limestone gravel. Pale brown marly limestone with lime- stone gravel. Pale brown dense sandy clay with lime- stone nodules.	Bore No. A Folder No. 8/- Hd. Magarey J.H. Murray & Sons
19	16		19	19	400	$\frac{1}{2}$ oz.			Hard limestone to 19'. Soft limestone - little pipe clay in bands rock bottom.	Bore No. B Folder No. 7/5 Hd. Magarey J. Miller
20	16		19	19	600			0 - 19	Hard limestone Soft limestone Little pipe clay in bands Rock bottom	Bore No. C Folder No. 7/5 Hd. Magarey J. Miller
21	16		19	19	1500			0 - 19	Hard limestone Soft limestone Little pipe clay - in bands Rock bottom	Bore No. D Folder No. 7/5 Hd. Magarey J. Miller
22	16		20	20	400			0 - 19	Hard limestone Soft limestone Little pipe clay - in bands Rock bottom	Bore E Folder No. 7/5 Hd. Magarey J. Miller
23	W. Res	43		15	175	426.78	20/5826		No details	Bookabie Govt. Well T/A Hd. Magarey F. Gray
24	62	22	20	18	400	116.8	108/1325	0 - 3 3 - 17 17 - 22	Brown sandy soil Buff rubbly limestone Pinkish-white limestone	Bore No. B Folder No. 12/- Hd. Magarey F. Gray
25	62	19	17	15	200	ATS625	108/1326	0 - 3 3 - 19	Sandy soil Light buff limestone	Bore No. A Folder No. 11/- Hd. Magarey F. Gray
26	13	36	27 35	27	100 250	fresh		0 - 16 16 - 27 27 - 35 35 - 36	Limestone Not stated Sand-pipe clay Gravel	Bore No. D Folder No. 7/4 Hd. Magarey J. Dunn

Table No. 1

Bores located along Eyre Highway from
S.A. DEPARTMENT OF MINES from NUNDROO to WHITE WELL ~~Hundred~~

DM-C8

SUMMARY OF BORE RECORDS

Ground Water Survey

Plan No. 5

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through Plan 5, Strip 1	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	16	100'6"	95			1 1/2 ozs.			No details.	Bore D Folder 2/9 Hd. Miller
2	16	125	105	100 w/m	ATS2700 ATS15000 ppm	103/2455 151/54			53 - 105 Brown clay. 105 - 115 Fine white sand. 115 - 125 Coarse yellow sand. 0 - 30 Limestone on green and white clay and sand.	John's Bore C Folder No. 7/- & 1/3 H.R. Alchurch & E. H. Johns Hundred Miller
3	21	147	142	133	400	ATS1020	94/1507		0 - Old well limestone (SKETCH) pipe clay stone sandy clay - 147 Water	Bore C Folder No. 2/5 Hundred Miller E. H. Johns & Sons.
4	21	142	138	138	100	ATS2350	103/2456		0 - 30 Well 30 - 55 Grey clay sand 55 - 78 White clay sand 78 - 90 Grey sandy clay 90 - 105 Grey sandy clay 105 - 135 Soft brown sandstone 135 - 142 Grey sand	Bore A Folder No. 8/- Hundred Miller H.R. Alchurch
5	21	26	16	16	80-100	ATS 44	95/2015		No details.	Bore B Folder No. 2/8 & 2/6 Urabi Pastoral Co. Hd. Miller
6	21	100	93		large	12-oz.			0 - 27 Limestone 27 - 100 Dark brown clay Yellow clay beneath	Big Paddock Bore D Folder No. 2/7 Hd. Miller Urabi Pastoral Co.
7	24	108				Dry			0 - 108 Fossil III limestone.	Bore B Folder No. 1/7 Hd. Miller
8	6	100 (about 90')			Good	Stock	Folder		L.S. Conglom (near Cryst fossil L.S. (Older Sand or sandstone).	Cadambly Well A Folder 1/1 Hd. Lucy
9	5					Dry			Dense cryst L.S. and soft white L.S. on greenish and yellow argillaceous sand or slate (older III)	Kidnippy Well A Hd. Lucy Folder No. 1/4
40	Adj. Sep. 4	113	108	103	80	456.8	103/2451		0 - 25 Limestone 25 - 34 Yellow clay 34 - 46 White limestone 46 - 60 Limestone rubble 60 - 85 Limestone 85 - 96 Grey clay 96 - 110 Buff clay 110 - 113 Limestone	Bore No. B Folder No. 2/- Hd. Lucy Aborigines Dept. Yalata Mission

Table No. 2

SUMMARY OF BORE RECORDS

Ground Water Survey

~~FRANK~~~~COHEN~~ Plan No. 5

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through (strip) -- 1 Contd.	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
11	4B	112	110	104	app.100	ATS407	101/1799		No details.	Bore No. C Folder No. 1/7 Hd. Lucy Yalata Lutheran Mission
12	B	684		200		758.56	15/4254		No details.	White-Well A Hd. Lucy Colona Station
13	Adj. Sec. 5	113'6"		108 96 110 110	5000 day good 500 day	1 1/2 oz. 626.17 684.66 ATS336 " 540	15/4246 42/1872 92/1076 101/1798		Null Travertine-limestone and W/Bluff limestone	Colona Well A Folder No. 1/3 Hd. Lucy Yalata Lutheran Mission
14	13	145		160 134 134	500 day good 500 day	3/16 oz. ATS165 " 161 " 156	78/1363 92/1084 103/2127		Crystalline sand limestone on polyzoal limestone Fossiliferous limestone. 0 - 141' Calc. ste. and polyzoal Limestone.	Chinalumba Well A Folder No. 1/2 Hd. Lucy Yalata Mission
15	21	112'9"		102'2"		1 1/2 oz. ATS765	92/1085		Travertine Null-Col., W/Bluff 1st. Crystalline fossiliferous and softer chalky Limestone, on clay and rubble (older III).	Waltabie Well A Folder No. 1/5 Hd. Lucy
16	15	108							Recent fixed sand ridges and travertine overlying Nullabor Limestone.	Well A Hd. Lucy
17	10	178							Rec. Fixed sand ridges and travertine overlying Nullabor limestone.	Bore No. A Hd. Bice
1	Blk. 849	204		200'6" 100	200	ATS 460 460	92/1086 Plan 56/91		STRIP 2. 0 -- Travertine, Nullabor limestone Wilson's Bluff limestone Hard crystalline limestone and softer coralline and shell limestone on coarse sand grit, clay and green - 215' argillaceous sand. (Older III). Recent fixed sand ridges and travertine over- lying Nullabor limestone.	Tallowan Well 3 Folder No. 1/3 Co. Hopetoun Out of Hundreds Yalata Lutheran Mission Wearing Well 1 Co. Hopetoun out of hds.
2	PL1637 Blk 819	155								
1	PL1637 Blk 818	68+			1200	650	Plan 56-91		STRIP 3. Nullabor Plain travertinized. Nullabor limestone outcropping of surface.	Jubilee White Well Bore 5 Grid C.6 Jubilee White Well Bore.

Table No. 1

SUMMARY OF BORE RECORDS

Ground Water Survey

Plan No. 6

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through Plan 6, Strip 1	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	PL1933 Blk. 882	777'	192 749 "	126	1500 52,000 "	911.00 663.8 3 ozs. 549.11 810 1.51 ozs. 675 AT88570	1/2A 1/2A 15/4252 87/1749 92/1091 151/206	0' - 1'6" 1'6" - 120 120 - 190 190 - 210 210 - 403 403 - 414 414 - 749 749 - 753 753 - 768 768 - 772 772 - 777	Red loam. Grey crystalline limestone with marine fossils. Polyzoal limestone. Soft white polyzoal limestone. White chalk with bands of flint or marine fossils. Yellow chalk with lumps of black clay and marine fossils. Black clay. Black sand, good water. Black clay. Quartz, gravel and clay. Gravel.	Robert's well & Bore No. 5 Folder No. 1/5-A Grid 3. 6 Nullabor Station
2	PL1933 Blk. 882	787	260 743 750 760 775 785	216 240 200 180 170 157		2 3/4 ozs. ? 1 3/4 ozs	 Hydrometer	0 - 147 147 - 210 210 - 218 218 - 258 258 - 260 260 - 292 292 - 318 318 - 374 374 - 424 424 - 428 428 - 440 440 - 444 444 - 479 479 - 484 484 - 513 513 - 515 515 - 553 553 - 554 554 - 620 620 - 624 624 - 699 699 - 735 735 - 738 738 - 743 743 - 750 750 - 753 753 - 760 760 - 775 775 - 785 787	Through limestone. Shaft. All boulders & solid white rock. Hard brown rock. White and yellow soft rock. Quartz pebbles, got salt water 2 3/4 ozs. Pipe clay bands & rock. Sandy pipe clay. Pipe clay, soft white rock, quartz pebbles. Yellow and brown clay, sticky clay. Hard quartz rock. Green sandy shale with blue seams. Quartz rock. Sandy shale. Very hard grey sandstone with quartz. Sticky blue clay. Black rock. Blue clay. Grey rock. Blue clay. Hard black rock. Blue clay. " " Quartz rock. Blue clay, struck water, rises to 240 feet. Sandy gravel, water rises 200 feet. Hard quartz pebbly rock. Sandstone rock and more water, rises 180'. Coarse gravel and sand, after pump- ing water rose to 170' from surface. Depth of bore, water rises to 157' from surface. No record of qual- ity of water given. Coarse gravel and sand, after pumping water rose to 170 feet from surface. Drill down to 787ft. The water bed is composed of granitic sand and pebbles.	Marrawidginnee bore & Well 6 Grid B.6 Folder No. 1/5 - A 1/6 - A Nullabor Station

Table No. 2

SUMMARY OF BORE RECORDS

Ground Water Survey

REMARKS:

~~SECRET~~ Plan 6

BORE	SECTION	DEPTH in feet below surface			SUPPLY	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Gallons per hour	Parts per million			
3	PL2081 Blk. 884	794	198	198		1409.45	2/383		<u>Strip 1. (Contd.)</u> Surface to bottom of shaft 190'. 190 - 235 Soft white limestone with hard white chert boulders every few feet. Last three feet slightly yellowish. 198 Struck water. Did not rise. 220 Gas bubbles in water. 225 Whiting. 235 - 241 Hard white polyzoal limestone. 241 - 244 Soft " 244 - 244'6" Very hard grey chert and limestone rock. Turns brown on exposure to air. 244'6" - 248 Creamy polyzoal limestone. 248 - 270 White limestone, fairly hard. 270 - 280 White polyzoal limestone. Struck water. Rose to 190'. 280 - 463 White limestone, alternating hard and soft. Polyzoal at 330'. Whiting 400'. 463 - 464 Yellowish limestone. 464 - 467 Pea green clay. Turns brown on drying. Highly calcareous. Glauconite? 467 - 473 Dark brown clay. Sandy carbonaceous. 473 - 484 Greenish clay. 484 - 627 Black shale with trace of oil. Lignitic clay. Started to burn after drying. 627 - 784 Blue shale, very sticky. 784 - 787 Blue clay with coarse gravel. Struck water, rose to 190'. 787 - 790 Fine gravel. Coarse limestone. S10. Sand. 790 - 794 Very Coarse gravel. Coarse quartz sand. Bottom of bore. Water rose to 139' (and, on pumping with saw pump,) to 131' from surface.	Muddaugana Bore No. 7 Folder No. 1/10 Grid B.6 Nullabor Stn.
1	PS 10 ^C Adj. PL1974 Water Res. 284	1500	182 240 900	267	large good		4 oz. 5 oz.		<u>STRIP 2</u> 0 - 38 Surface soil, travertine nodules and clay. 38 - 82 Hard crystalline limestone. 82 - 85 Soft limestone. 85 - 100 Crystalline limestone. 100 - 528 White polyzoal limestone with flints. 528 - 538 Clay and ironstone. 538 - 833 Black clay. 833 - 900 Blue shale. 900 - 915 Sandy shale. 915 - 940 White pipe clay and gravel. 940 - 960 Carbonaceous shale. 960 - 1074 Pipe clay, gravel and iron pyrites. 1074 - 1100 Shale. 1100 - 1132 Quartz-gravel, pyrites and lignite. 1132 - 1387 Blue shale. 1387 - 1500 Igneous rock.	Yanganabie Bore No. 2 Folder No. 1/9 Grid B. 6 Nullabor Plains

Table No. 3

SUMMARY OF BORE RECORDS

Ground Water Survey

YORRIBALL

County Plan 6 (Contd.)

BORE	SECTION	DEPTH in feet below surface			SUPPLY Gallons per hour	SALINITY		HEIGHT above sea level	Strata passed through	Remarks
		Total	Water cut	Static level		Parts per million	Analysis No.			
1	P.S.10 ^B FL2067 W.Res. 39 Blk.297 ^B	1277		975 1004 975	400 1200	3½ oz. 3½ oz. salt 1506.18	6/4751-1		<u>STRIP 3</u> 0 - 13 Surface loam. (Light red soil with nodular limestones). 13 - 45 Crystalline limestone. 45 - 54 Plum pudding stone. 54 - 59 Crystalline limestone. 59 - 82 Tough limestone. 82 - 131 Yellow limestone. 131 - 148 White gritty limestone. 148 - 171 Hard white limestone. 171 - 187 Chalk and limestone. 187 - 545 Chalk, sandstone and flint. 545 - 570 Yellow rock and clay. 570 - 578 Sandy clay and gravel. 578 - 599 Drift sand. 599 - 600 Yellow clay. 600 - 970 Blue clay. 970 - 975 Brown clay. 975 - 988 Coarse grey sand. 988 - 989 White clay. 989 - 995 Sand and quartz gravel. 995 - 998 Light grey clay. 998 - 1003½ Sand and quartz gravel. 1003½ - 1004 White clay. 1004 - 1010 Sand and quartz gravel. 1010 - 1011 White clay. 1011 - 1015 Light blue tough clay. 1015 - 1018 Light grey sandy clay. 1018 - 1020 Dark brown stiff clay. 1020 - 1022 Light grey sandy clay. 1022 - 1037 Coarse sand. 1037 - 1039 Light blue stiff clay. 1039 - 1042 Black sandy clay. 1042 - 1062 Sand and quartz gravel. 1062 - 1062½ White clay. 1062½ - 1066 Sand. 1066 - 1108 Light green clay. 1108 - 1120 Brown clay. 1120 - 1141 Hard blue rock. 1141 - 1144 Red gritty rock. 1144 - 1154 Decomposed brown rock. 1154 - 1195 Blue rock. 1195 - 1196 Green rock. 1196 - 1253 Blue rock. 1253 - 1277 Granite.	Guinewarra Bore 5 Folder No. 1/4-A Abandoned Grid A.6 Nullabor Plains Bore No. 4
2	FL2067 ^B Blk.297	214	266	266		493/80 372.19 AT8866	21/6203 21/6204 LW87/62		No details.	Bore No. 4 Folder No. 1/4 & 1/5 Grid A.6 C.R. Gurney, Koon- sida Station.
3	FL2067 W.Res. 40 Blk.298 ^A	1084	665 740	270 290 420 490 420	400 420 500 gpd 700	3½ oz. " 1½ oz. 1½-1½ ozs. 36.68	15/4245		0 - 70 Grey crystallised limestone. 70 - 148 Coralline rock. 148 - 326 White ployzoal limestone. Flint at 170" 314 Bottom of shaft. 326 - 391 Chalk (white). 391 - 416 White limestone. 6" white sandstone. 416 - 463 Chalk and flint. 463 - 475 White sandstone. 475 - 532 White sandstone.	Bore No. 3 Folder No. 1/2 & 1/3, A, B. Nullabor Plains

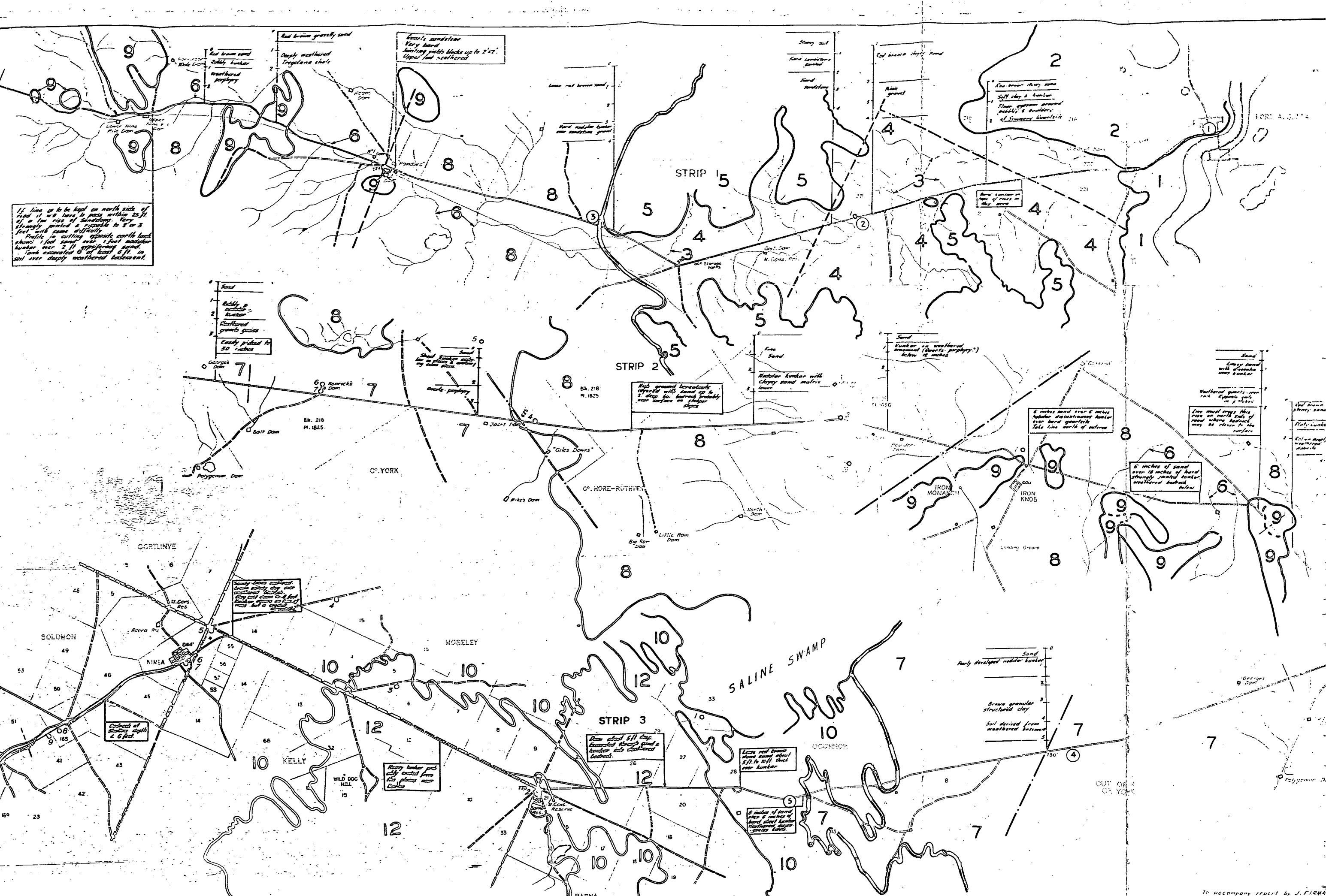
SUMMARY OF BORE RECORDS

Ground Water Survey

HYDRAZINE

~~CONFIDENTIAL~~ PLAN 6

[illegible]



If line is to be kept on north side of road it will have to pass within 25 ft. of a low ridge of sandstone. Very strongly jointed & fissured to 8 or 5 feet with some difficulty. Profile in cutting opposite north bank shows 1 foot sand over 1 foot nodular kunkar over 2 ft. of silty clay. Tank excavated to at least 6 ft. in soil over deeply weathered basement.

1 Sand
2 Silty clay
3 Weathered granite gneiss
4 Sandy siltstone to 30 inches

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High ground hereabouts covered with sand up to 1/2 deep to horizon probably near surface on steeper slopes.

6 inches sand over 6 inches nodular discontinuous kunkar over hard quartzite. Take line north of outcrop.

6 inches of sand over 18 inches of hard strongly jointed kunkar weathered bedrock below.

Section of strata depth 6 ft.

Heavy kunkar and silty clay from this place.

Rem about 5 ft. deep. Discontinuous kunkar over weathered bedrock.

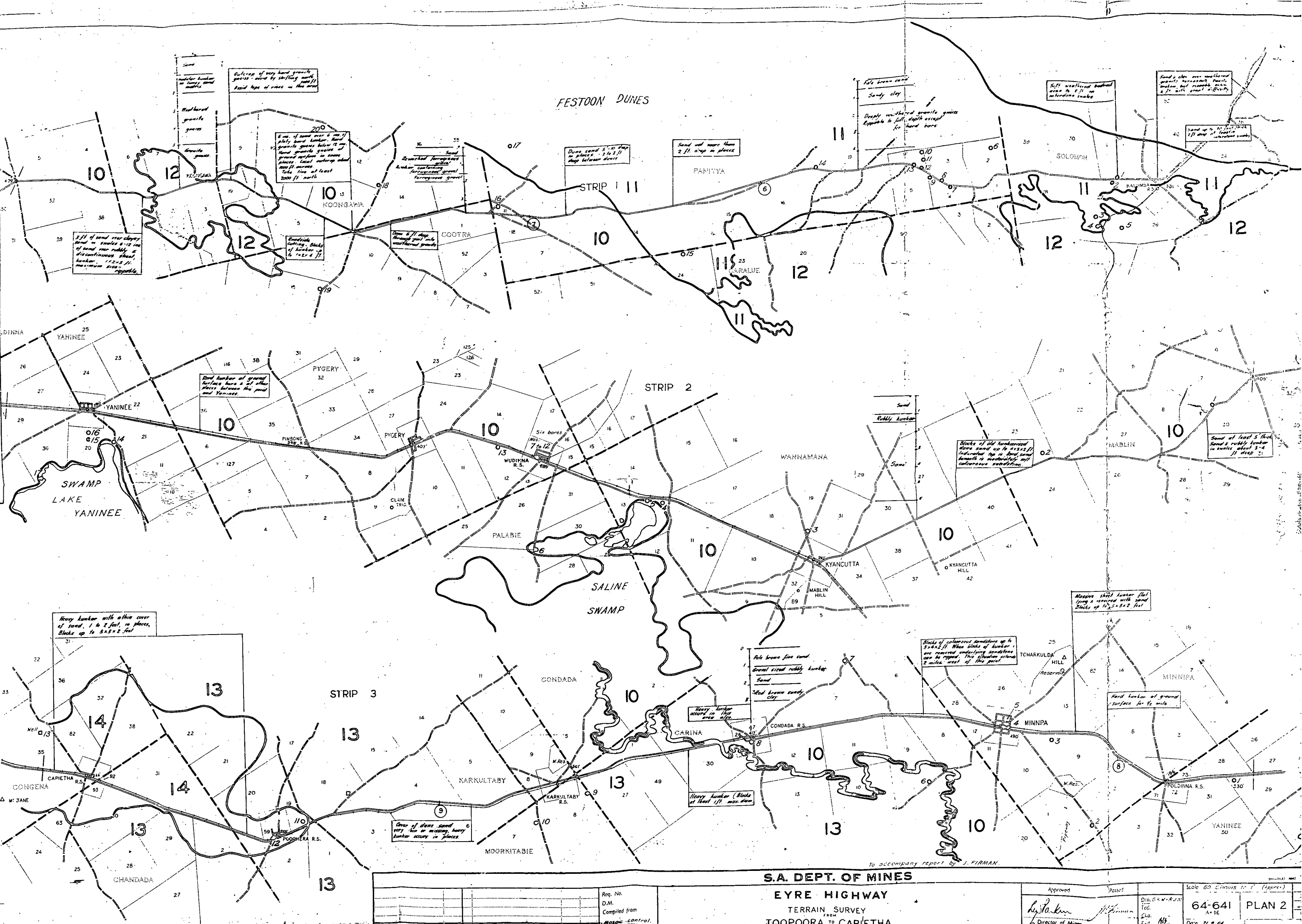
Less red brown than sand about 5 ft. to 10 ft. thick over kunkar.

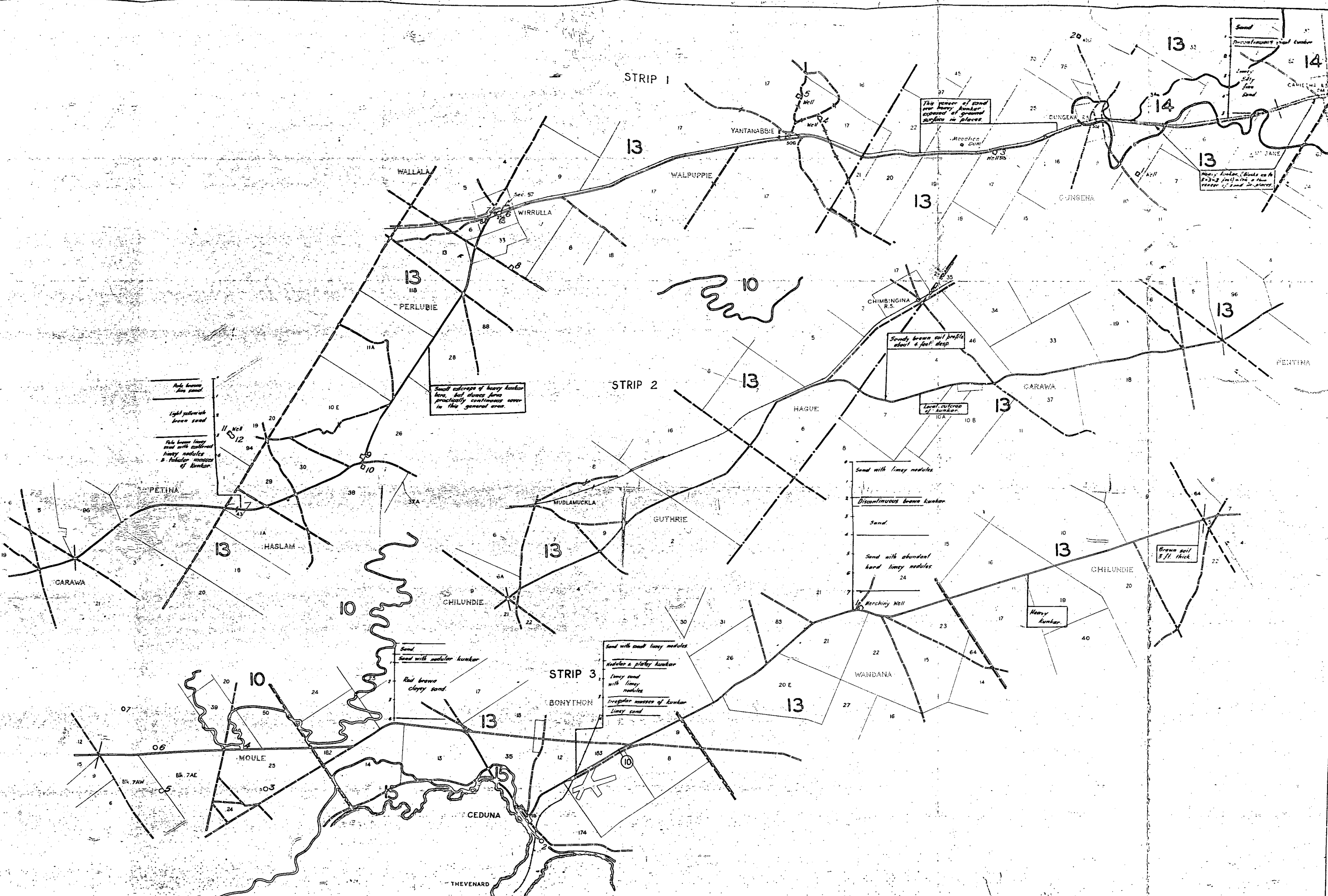
6 inches of sand over 6 inches of hard silty clay. Discontinuous kunkar over weathered bedrock.

1 Sand
2 Partly developed nodular kunkar
3 Brown granular structure clay
4 Soil derived from weathered basement

To accompany report by J. F. R. M.

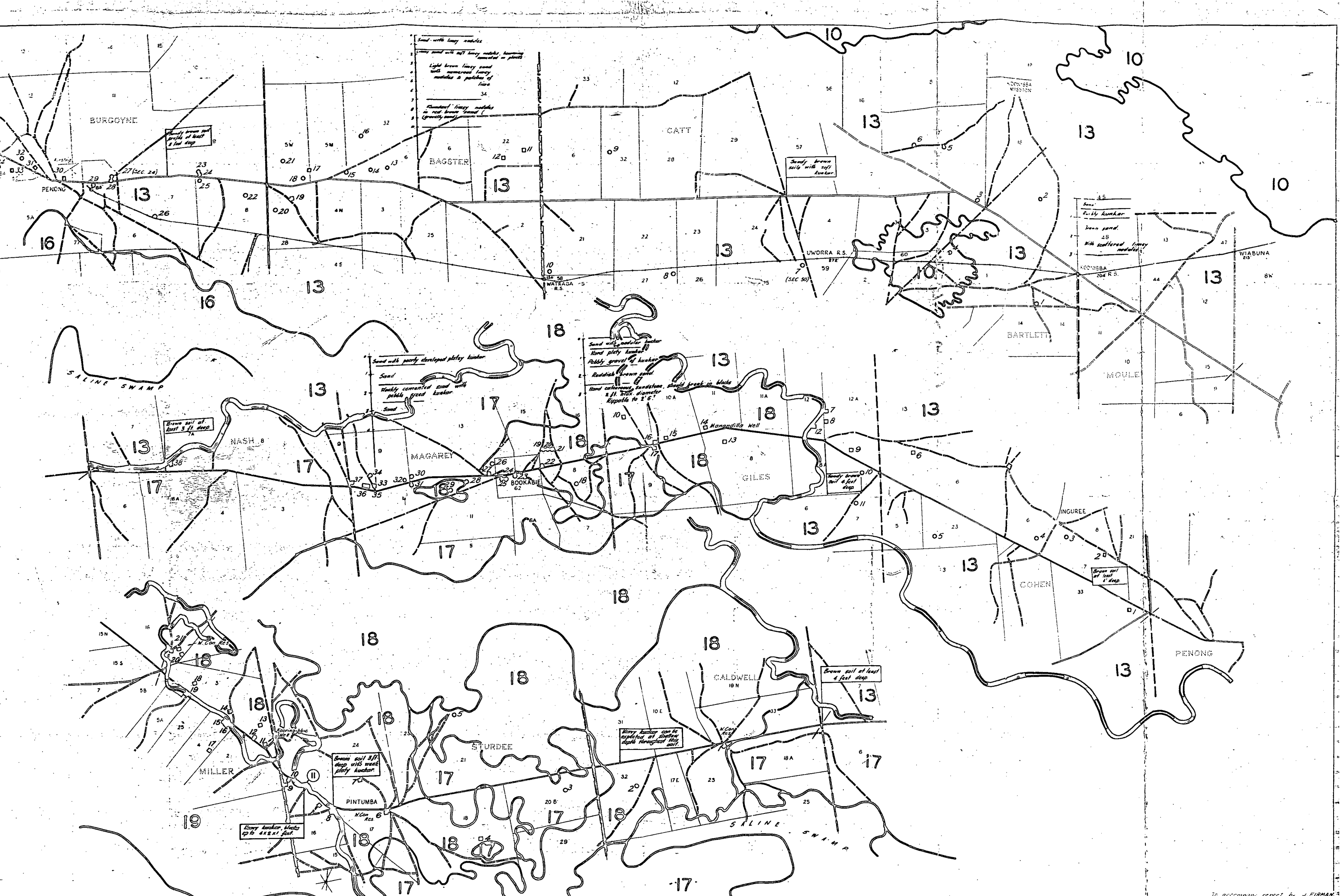
S.A. DEPT. OF MINES				Eyre Highway TERRAIN SURVEY FROM PORT AUGUSTA TO TOPOORA		Scale 60 Chains to 1" (Approx.)	
Req. No. D.M.A. Compiled from Airphoto Control.				Approved: J. F. R. M. Director of Mines		64-640 PLAN I	
Associated Sheets: No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.				Date: 21. 2. 64		13th. 21. 2. 64	





S.A. DEPT. OF MINES									
EYRE HIGHWAY									
TERRAIN SURVEY									
CAPIETHA TO WIABUNA									
Associated Drawing		No.	No.	Amendment	Exd.	Date	Req. No.		
							D.M.		
							Compiled from		
							Mosaic Control.		
							Approved		
							Passed		
							Scale 80 Chains to 1" (Approx.)		
							64-642 PLAN 3		
							Date 21. 9. 64		

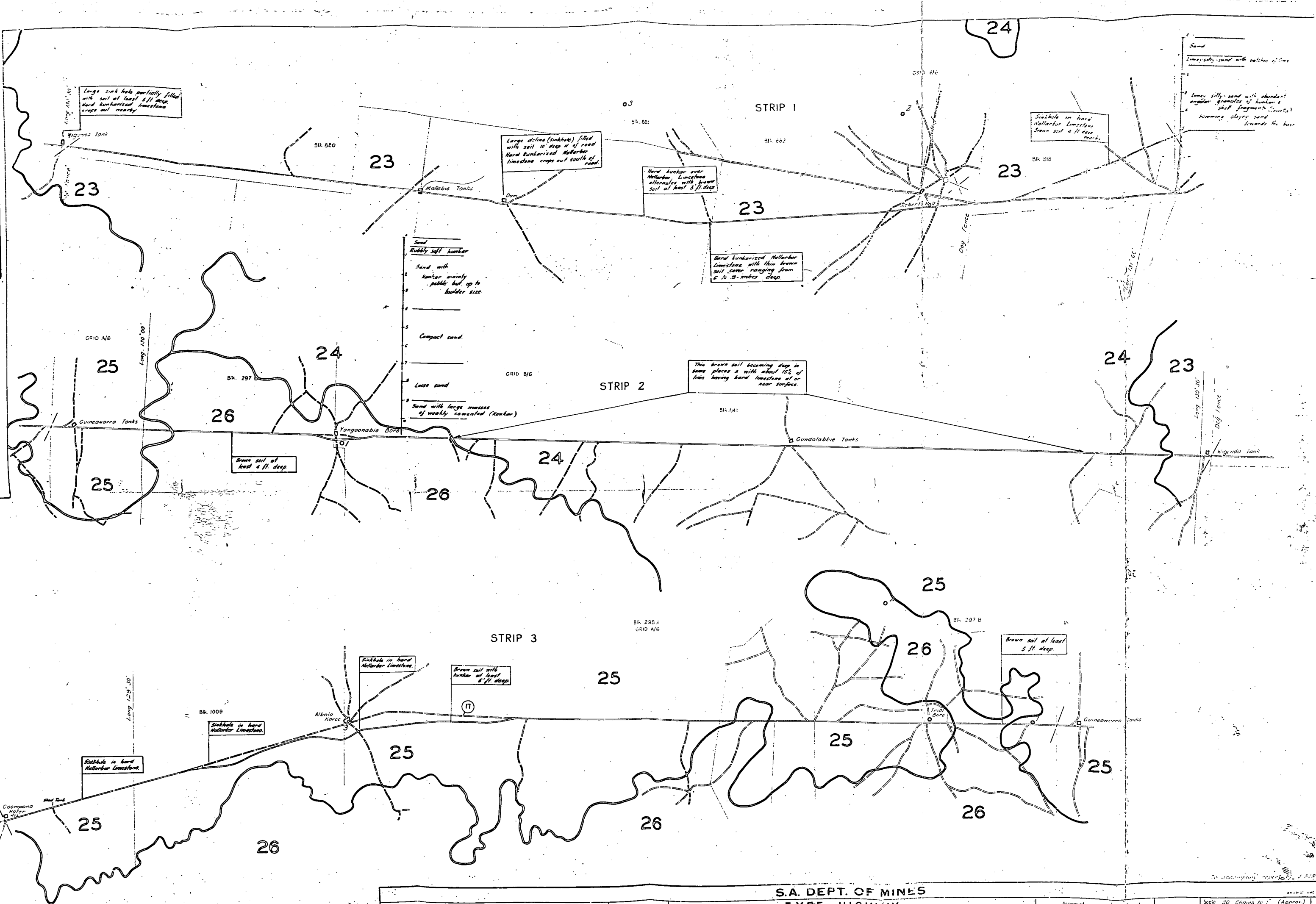
To accompany report by J. FIRMAN.

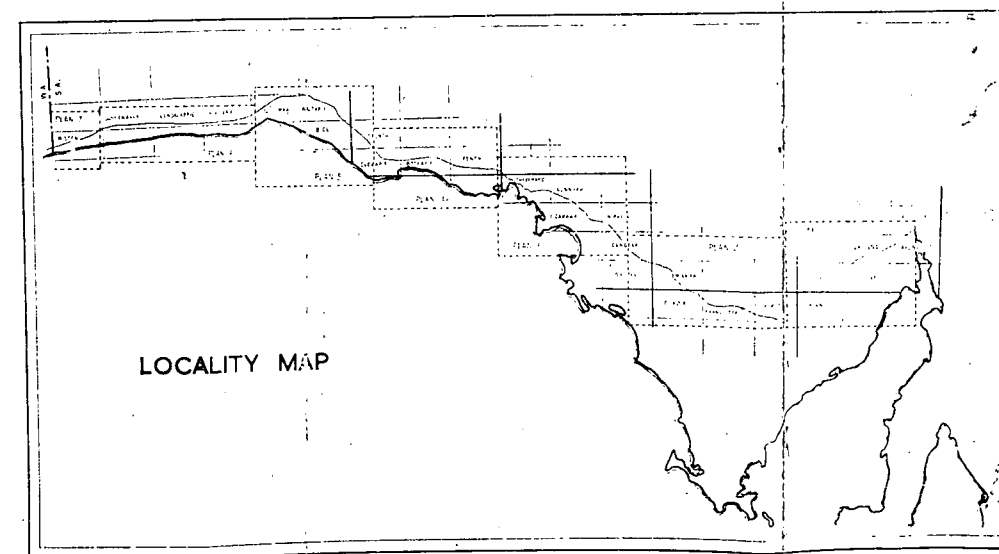
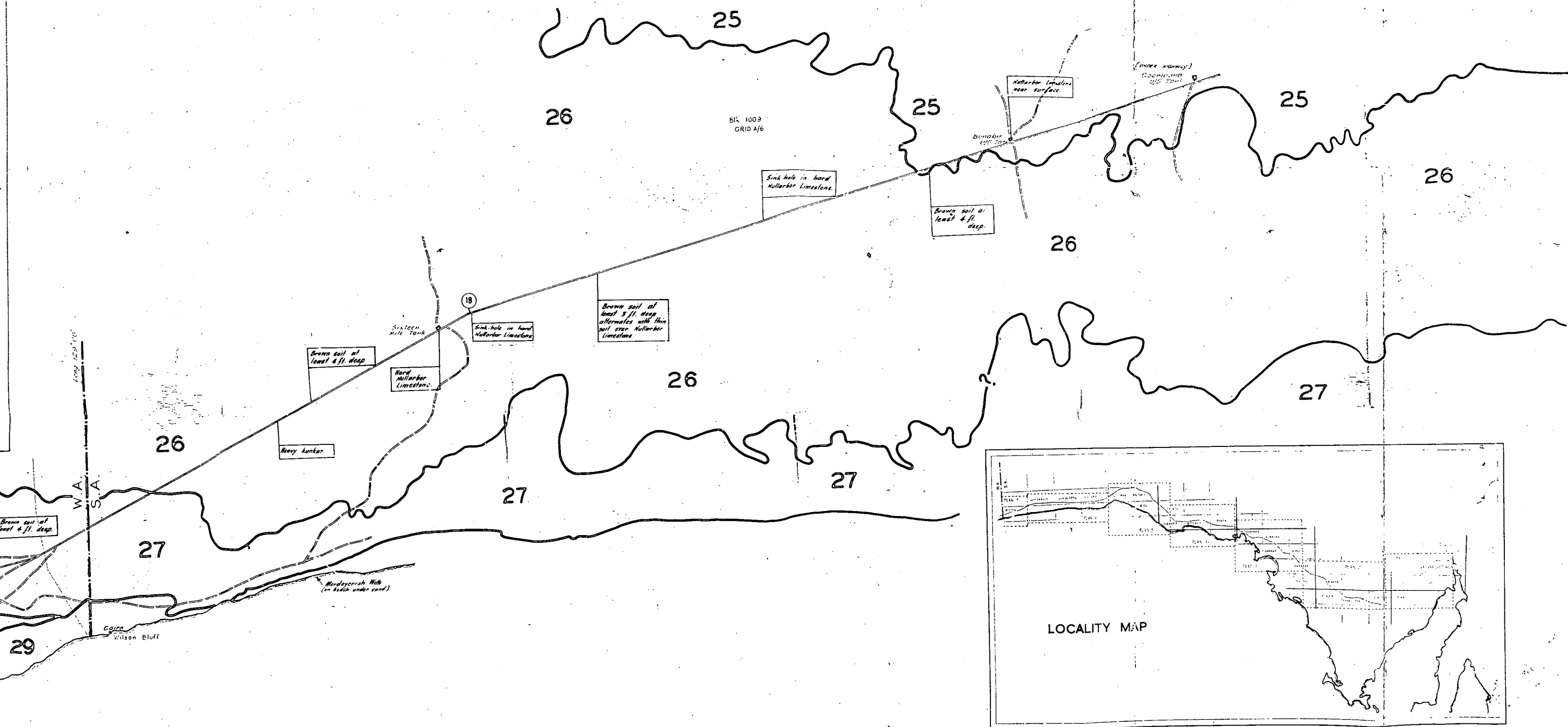


To accompany report by J. FIRMEN

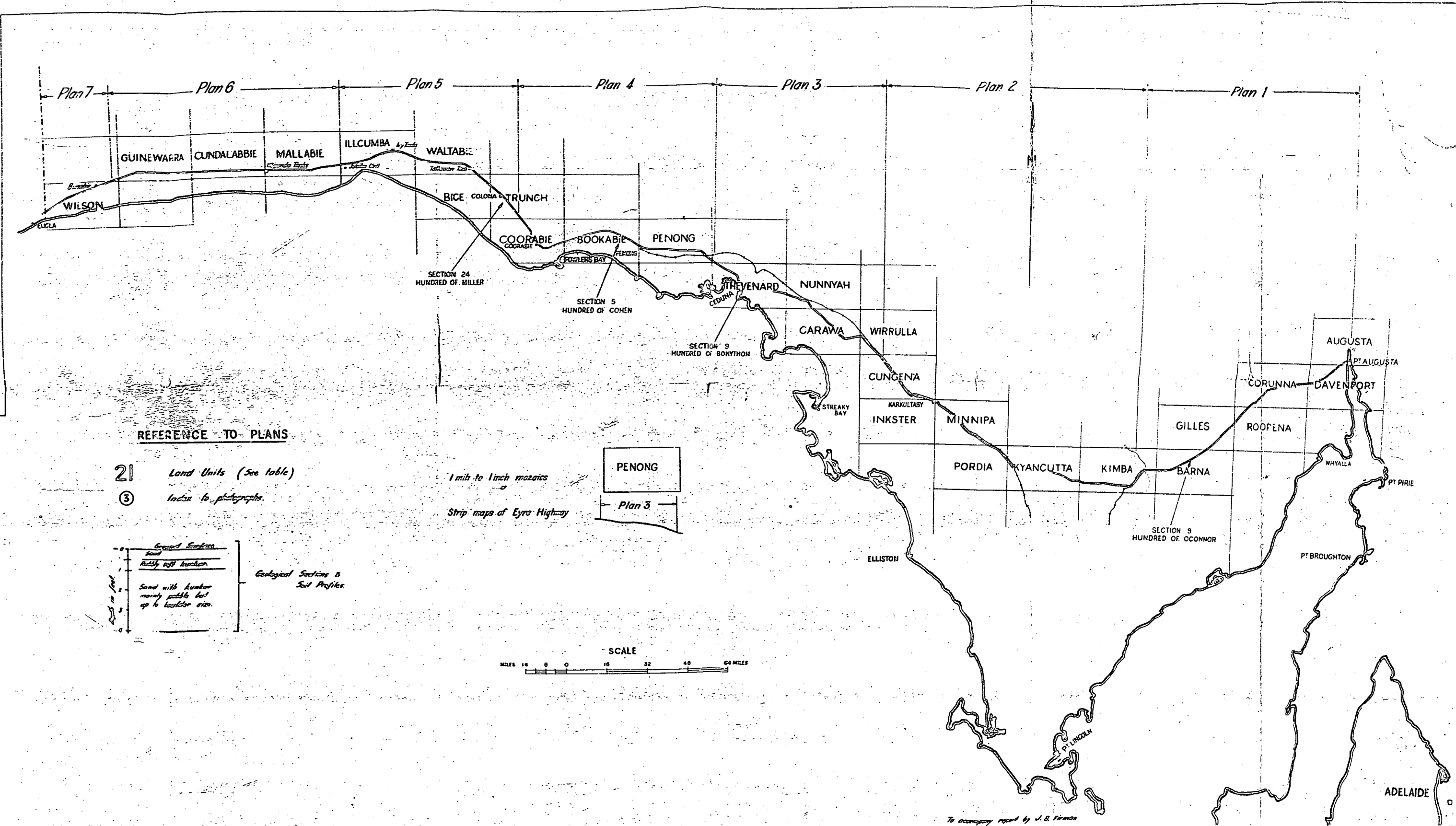
S.A. DEPT. OF MINES			
EYRE HIGHWAY			
TERRAIN SURVEY			
WIABUNA TO NUNDROO STN.			
Req. No.	D.M.	Compiled from	Mosaic Control
Associated Drawing	No.	No.	Amendment
Ext.	Date		

Approved	Passed	Scale 80 Chains to 1" (Approx)
<i>L. J. Barker</i>	<i>B. J. Barker</i>	64-643 PLAN 4
Director of Mines		Date 21. 9. 64





S.A. DEPT. OF MINES				EYRE HIGHWAY		TERRAIN SURVEY		COOMPANA TO W.A. BORDER	
Associated Drawing No. 1				Req. No. D.M.		Compiled from Mosaic Control.		Approved: <i>L. J. Parker</i> Director of Mines	
No. 1				No. 1		Amendment		Scale 80 Chains to 1" (Approx.)	
Exd. 1				Date				64-646 PLAN 7	
								Date 21.9.64	



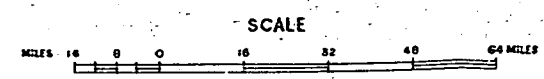
REFERENCE TO PLANS

21 Land Units (See table)

③ Index to photographs

Geological Sections & Soil Profiles

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S.A. DEPT. OF MINES									
EYRE HIGHWAY									
TERRAIN SURVEY									
LOCALITY AND INDEX PLAN									
Plans 1 to 7	64-756	64-756	Req. No.	D.M.	Compiled from	Approved	Passed	Scale 16 miles to 1 inch	64-756
Associated Drawing	1 No.	At.	Assessment	Ext.	Date	Director of Mines		Date 14-9-64	A+DE