

SURRENDER REPORT

EXPLORATION LICENCE No. 4968

ALEXANDRIA STATION

NORTHERN TERRITORY

by

L.G.NIXON

L.G.B.NIXON & ASSOCIATES

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*OPEN FILE
This report only.
Remains of area
under mineral
claim p*

ATTACHMENTS

<u>PLAN No.</u>	<u>TITLE</u>	<u>SCALE</u>
FIG 1	PLACE FIX PLAN SAMPLE AND DRILL SITES EL 4968 ALEXANDRIA STATION NORTHERN TERRITORY	1:250000
FIG 3	AUGER DRILLING PATTERN EIGHTEEN MILE WATER HOLE PLAYFORD RIVER EL 4968 N.T.	1:2500

Summary.

Exploration of the area covered by EL 4968 included ground reconnaissance using a four wheel drive Toyoya Land Cruiser, helicopter traverses along the waterways in the tenement area and walking into areas that the vehicle could not reach.

The reconnaissance revealed that gypsum is widespread in the area occurring as lumps scattered in the black soils over a wide area. Only two areas warranted test drilling, one such area is the gypsum outcrop at the Eighteen Mile Water Hole. This work is described later in this report.

Exploration.

The helicopter traverses enabled the whole of the exploration licence to be explored in a matter of days. This phase resulted in the location of gypsum concentrations along the southern bank of the Playford River in the vicinity of the Eighteen Mile Waterhole. The ground reconnaissance on foot and by four wheel drive vehicle failed to locate gypsum occurrences additional to those found during earlier exploration.

Sampling.

Several surface samples were collected along the Playford River bed and bank. The analyses of samples Alexandria, Playford 1 and 3 are tabulated elsewhere in this report.

Only three drill holes were sampled and analysed from the testing at the Eighteen Mile Water Hole. These analyses are tabulated elsewhere in this report. Samples from the remainder of the holes did not warrant the expense of analysing.

Drilling.

Gypsum and gypseous clay are exposed in the southern bank of the Eighteen Mile Water Hole, over a length of approximately 800 metres, with an average thickness of 2 metres.

Eight auger holes were drilled into the flat plain on the southern side of the exposed gypsum into the projected extension of the gypsum. See FIG 3 attached. Only hole 18/3 intersected a useful thickness of gypsum and only one other hole (18/5), intersected gypsum. All the other holes intersected gypseous clay and clayey gypsum of uneconomic grade. For details of the material penetrated see the geological in Appendix I attached.

Analyses.

The analyses of the surface and drill hole samples taken from the localities were not of economic grade and were not investigated further. Details of the analyses carried out are tabulated in Appendix II attached.

Conclusions.

Gypsum is widespread in the region. Concentrations of economic grade and size are rare. Only one significant deposit has been discovered and this is now covered by mining tenements.

Recommendation.

Hold the areas covered by the mineral claims.



L.G.Nixon. 10/09/1990

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APPENDIX I

DRILL LOGS

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APPENDIX

AUGER DRILL HOLE LOGS.

EIGHTEEN MILE WATER HOLE. PLAYFORD RIVER. N.T.

Drilling Contractor:- V & R Carusi Pty. Ltd.

Driller:- Peter Ground.

Drill:- "PROLINE" 4 Tonne Class 2 Slewing Crane with
Pendulum Borer.

Drill:- Programme commenced 21/8/'87

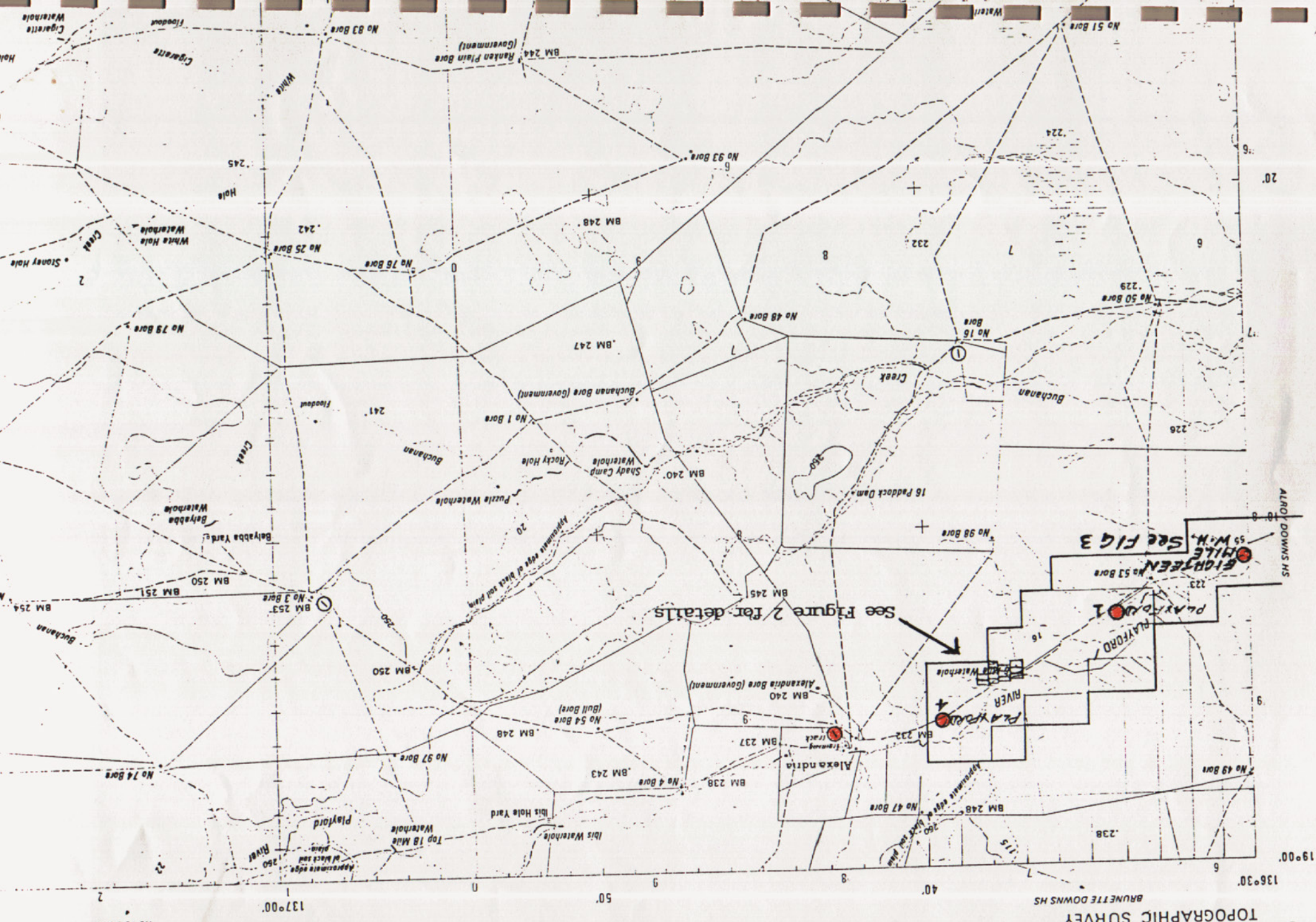
Drill:- programme completed 21/8/'87

Hole Number	Depth Metres	Geological Log
18/1	0.00-0.10	Brown loam with jasper and chert gravel.
	0.10-2.00	Brown gypseous clay. End hole.
18/2	0.00-2.20	Brown loam grading down to brown gypseous clay then into mottled brown and white clay. End hole.
18/3	0.00-1.00	Brown loam and clay with abundant gypsum crystals.
	1.00-2.00	Crystalline gypsum.
	2.00-2.20	Grey-green clay. End hole.
18/4	0.00-2.00	Brown loam and clay with abundant gypsum crystals scattered through the clay. End hole.
18/5	0.00-1.65	Brown plastic clay.
	1.65-2.00	Crystalline gypsum.
	2.00-2.20	Palegrey-brown clay. End hole.
18/6	0.00-2.00	Brown loam grading downwards to a mottled brown and white clay. No gypsu. End hole.
18/7	0.00-1.00	Alluvium and brown clay.
	1.00-1.75	Gypsum grading downwards into a mixture of pale green clay and gypsum. End hole.
18/8	0.00-1.00	Alluvium & brown clay. No gypsum. End hole.

FIGURE 1

1" of longitude = 29 metres

No 13 BORE



See Figure 2 for details

SIXTEEN MILE W.M. SEE FIG 3

PLAYFORD 1

PLAYFORD 2

PLAYFORD 3

ALROD DOWNS NS

136°30'

19°00'

BRUNETTE DOWNS NS

No 13 BORE

1" of longitude = 29 metres

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APPENDIX I I
ANALYTICAL DATA

ADELAIDE BRIGHTON CEMENT LTD.

BIRKENHEAD LABORATORY

Smple No.	SO3	GYPSUM
Alexandria	44.80	96.54
Playford 1	0.9	1.94
Playford 4	36.60	78.73
Hole 18/3	28.00	60.23
Hole 18/5	25.00	51.62
Hole 18/7	29.00	62.38

MEGASCOPIC DESCRIPTION

Alexandria.

Pale pink, brown and off white, pearly lustre, clear to translucent, laminated and twinned, coarsely crystalline gypsum rock. Impurities include silica sand, clay and organic matter.

Playford 1.

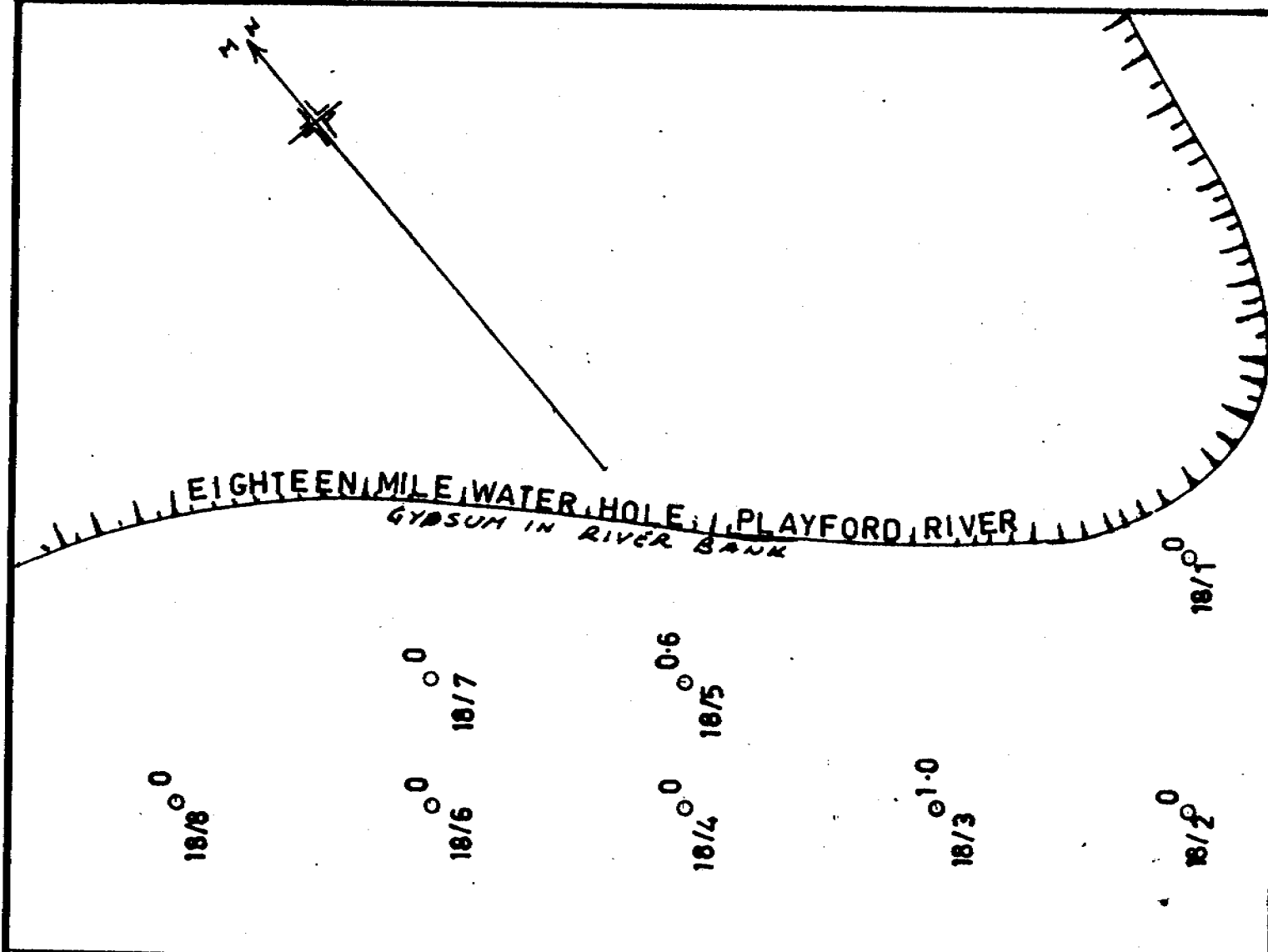
Pale grey to off white earthy clay. Material reacts vigorously with HCl. Gypsum content very low.

Playford 4.

White coarsely crystalline gypsum rock. Lustre pearly, crystals clear to translucent. Carbonate matrix which reacts vigorously with HCl. Major impurities are clay, earthy limestone and organic matter.

For material in drill holes refer to drill logs.

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18/1	Auger drill hole showing gypsum intersections in metres
18/2	Creek bank

NORTHERN CEMENT PTY. LTD.	
AUGER DRILLING PATTERN	
EIGHTEEN MILE WATER HOLE	
PLAYFORD RIVER	
E.L. 4968	
N.T.	
FIG 3	
Drn. L.G.N	
Ckd.	
Rev.	
Scale 1:2500	
Dt. 7/11/1987	L.G.B. NIXON & ASSOCIATES.