RB 39/100

GEOLOGICAL SURVEY OF SOUTH AUSTRALIA.

THE MYPONGA URANIUM PROJECT.

(Wild Dog Prospect).

REPORT ON COMPLETION OF EXPLORATION

(NO. W.D.11)

- BY -

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CHIEF GEOLOGIST.

SEE ALSO RB 0036 *
RB 0041
RB 0275

(* DOH 7, 10. REPORTS)

C O N T E N T S.

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SUMMARY:

Exploration of the uranium discovery at Myponga has been completed. Diamond and wagon drilling, and underground exploration have shown that the mineralisation is too limited to warrant further development.

I. INTRODUCTION:

The discovery of uranium mineralisation near Myponga was made in October, 1953 by a prospector W. F. Wenham who brought radioactive specimen material to the Mines Department for examination. An immediate inspection was made by officers of the Geological Survey and some sampling carried out. The discovery was made by geiger counter in an area in which rock outcrop is not good, the lode material being completely obscured by sand and soil. Within a few inches of the surface extremely radioactive secondary minerals were revealed and preliminary grab samples assayed up to 20% U_3O_8. A few days later, the same prospector made a further discovery about a quarter mile to the north, in this instance two radioactive nuggets were found in the subsoil which on examination proved to be massive pitchblende enveloped by secondary alteration products. These two discoveries which became subsequently the sites of No.1 and No.2 lodes of the Myponga project, are the first of significance to be made in the Adelaide Hills other than the davidite occurrences near Houghton. As an immediate consequence a wide prospecting campaign was undertaken in the Myponga area spreading south to Yankalilla, and north to Mt. Compass, using both air-borne and manual methods. Public interest was also aroused by the awarding of a £5,000 discovery reward and many private prospectors combed the area. No further discoveries have been made.

Following the initial inspections, recommendations were made for testing and a programme of open cutting drilling and shaft sinking was commenced. A Departmental

camp was established on the site and approximately two miles of access track construction undertaken. The project was brought to a close in May 1955.

The Geological Survey was given the responsibility of directing the exploration sampling and development of the prospect and for the final appraisal, the mining operation were carried out by the Mining Branch and drilling by the Boring Branch. A final report on the mining operation and a cost statement will be presented by the State Mining Engineer. The present report aims to summarise the various progress reports submitted during the life of the project and to present a final evaluation.

II. THE FOLLOWING ILLUSTRATIONS ACCOMPANY THIS REPORT —

1. Regional geological plan scale 1"=10 chains -- (Plan No.55-169)
2. Geological and radiometric surface plan scale 1"=40' (Plan No. U.S.254)
3. No. 1 Lode, Plans and Sections (Plan No.55-93)
4. Cross Section of No.1 Shaft No. 2 Lode (Plan No. U.S.288).

III. PREVIOUS REPORTS:

Reports and memoranda previously submitted by the Geological Survey are as follow:

REPORT NO.	DATE.	AUTHOR.	TITLE.
W.D.1	26/10/53	L. W. Parkin	Uranium Prospect, Hd. Myponga.
2	3/11/53	L. W. Parkin	Wild Dog Prospect, Hd. Myponga.
3	15/12/53	L. W. Parkin	Wild Dog Prospect, Hd. Myponga.
4	15/ 1/54	B.P. Webb & F.E. Hughes	Wild Dog Prospect, Progress Report.
5	12/ 3/54	F.E. Hughes	Wild Dog Prospect, Progress Report.
6	12/ 3/54	L. W. Parkin	Wild Dog Prospect, Progress Report.
7	Not issued		
8	31/ 3/54	M. L. Reyner	Wild Dog Prospect, Progress Report.
9	24/ 6/54	F. E. Hughes	Wild Dog Prospect, Progress Report.
10	21/ 2/55	L. W. Parkin	Myponga Uranium Project.

In addition reports on petrological and mineralogical aspects have been submitted by A. W. G. Whittle.

IV. LOCATION:

The prospect is located on Section 75 Hd. Myponga in uncleared scrub country some 3 miles southwest of Myponga township, which is 38 miles south of Adelaide. Access is by sealed road for 2 miles southwest of Myponga, thence by gravel road south for 2 miles and by farm track easterly for 1 mile.

V. GEOLOGY:

The country rock comprises Archaean metasediments, intruded and altered in places by later pegmatites, but frequently showing relict bedding foliation, the mapping of which has provided a basis for an understanding of the geological structure (see geological plan US 254). Four gneissic rock types are recognisable and have been mapped, subsequent petrological examination providing descriptions of these as follow: albite-diopside gneiss, biotite perthite gneiss, orthoclase gneiss, sillimanite-garnet gneiss.

On a regional scale, the prospect lies in a zone in which the Archaean formations are deformed in a simple monoclinal fold outlined by the competent diopside granulite. In detail however the less competent members are highly crumpled and considerable crushing and shearing has also taken place (See Regional Map 55-169).

Mapping of bedding foliation in the vicinity of the prospect outlines a north-west pitching anticlinal fold structure complicated by several minor cremulations with sympathetic pitch which is confirmed by the general distribution of the rock types. The pitch varies between 15° and 50° and averages 40°. Regional mapping indicates that the albite-diopside-granulite does not participate in the folding and that a structural discontinuity exists which cuts off the west limb of the anticline against this rock type to the west.

VI. URANIUM MINERALISATION:

The original discovery, now No.1 lode, is situated at the crest of a spur which runs in a general west-north-

west direction. Here secondary uranium minerals are distributed along foliation planes and joint surfaces in the county rock which is a perthite gneiss. Exposure of the surface zone by trenching and open cutting revealed a northerly pitching minor fold in the gneiss with the uranium minerals impregnating the foliation at the crest of the fold which measured some 12 feet from limb to limb and 6 feet in vertical dimension. The uranium minerals identified here comprise uranophane, gummite and meta-autunite. Subsequently pitchblende was also identified. Five hundred feet further to the north in the No. 2 lode, secondary uranium minerals also predominate but here follow a linear shear structure associated with clay gouge and mylonite and highly crushed biotite. Massive pitchblende was identified in near surface residual boulders and its occurrence has also been noted in association with secondary minerals in the prospecting shafts. There is no associated sulphide mineralisation in either Lode.

VII. DRILLING:

(1) Diamond drilling operations were carried out on both lodes, 22 holes being completed totalling 2308 feet.

Wagon drilling was also successfully applied, 112 holes being completed. Wagon drilling totalled 7401 feet. All drill holes have been radiometrically logged. The location of all holes is shown on the accompanying plan, (US 254) and detailed diamond drill logs are appended. Details of wagon drilling are also shown on an appended table.

VIII. UNDERGROUND DEVELOPMENT:

As soon as sufficient information became available from drilling, shaft sinking was commenced on No.2 Lode, two shafts being sunk to shallow depths. On No.1 Lode following excavation of the near surface ore, an inclined shaft was sunk following the apparent pitch of the structure.

This was continued to an inclined depth of 126 feet, at 55 feet from the portal a drive east was taken for 22 feet. At 126 feet shaft sinking was discontinued and a programme of horizontal and vertical exploration carried out as shown on plan 55-93.

IX. THE ORE SHOOTS:

No. 1 Lode.

The open cut which was first excavated revealed what appeared to be a very simple structural control of the ore shoot which lay on the crest of a minor northerly pitching fold. Sampling showed the average thickness of the mineralised zone to be 42" with a grade of 32 lb. U_3O_8/ long ton (1.33%). From the portal of the shaft for a distance of 80' down the incline, the mineralisation follows the structure noted in the surface excavation on the east limb, the mineralisation thins out as it converges on a series of vertical fracture planes. The west limb mineralisation is weak near the surface and dies out completely a few feet from the portal. In the 55 foot level drive there is a well defined hanging and footwall but the ore has migrated into the east limb from the fold crest. Here the footwall is marked by a 1" seam of clay gouge which probably represents a type of bedding plane slip. At the eastern end of this drive, the ore shoot is terminated as it approaches an ill defined zone of faulting in which pegmatite and quartz has been emplaced. Below the 55' level, the ore thins out and though the structure continues, grade falls off rapidly. Thereafter only small lenses a few feet in length were encountered in shaft sinking. At 85 feet from the portal a semi-vertical zone of shearing enters the shaft from the east side. The lode channel is disrupted and almost all structure is obscured by a series of joints, minor shears and intruded pegmatite stringers. It is reasonable to postulate that this zone is a continuation of the one found in the east end of the 55 foot level.

Although there was no ore showing in the disturbed area, it was decided to continue the shaft on the same inclination as this would expose mineralisation intersected in wagon-drill hole No. 9.

Instead of being a continuation of the 'bedded' structure, mineralisation found in this drill hole proved to be a 6" wide near vertical lens of ore along a joint or minor fault plane. Further development showed similar ore occurrences with the most continuous mineralisation along the central main shear. The greatest development of ore occurs where there is a migration from this central shear along intersecting joint planes. The face at 120 feet as shown on the accompanying sections is an example of this type of occurrence.

In view of the continued near vertical ore control shaft sinking was discontinued and horizontal development undertaken along the main shear zone, followed by crosscutting and winzing, This development being based on the fact that the projection of the ore-body as defined by surface drilling was striking slightly to the east of the shaft and to continue the shaft would mean either a deviation or else sinking in barren ground.

As exposed in the drive, mineralisation extends for approximately 15 feet in the shear and for various widths on either side depending on the frequency of joint planes which apparently act as channels for the migration of mineralisation. At 10 feet in the drive the concentration of these minor joint planes is sufficient to allow the block on the east side to be taken as ore. This block was removed as shown on the plan of lode development.

In the small western crosscut approximately 20 feet ahead of the face of the shaft, there is no structure of significance except for minor jointing and the west dipping gneissocity. Underground drilling as shown on the accompanying plans was carried out from this crosscut.

The most prominent shear continues in the main drive for a further 20 feet past the above crosscut but is unmineralised and gradually becomes weaker until it completely dies out. At approximately 50 feet from the bottom of the shaft there is a marked increase in the amount of pegmatisation both in form of defined pegmatite veins and also as felspar clots in the gneiss. These veins and the enclosing structures swing to the west. Minor faulting or jointing is encountered in the end of the main drive near the collar of the winze.

Mineralisation exposed in the winze is similar to that found in the lower portion of the shaft. Mineralisation extends on either side of a central shear zone which is occupied by approximately 1 foot of biotite crush. It is apparently in the same favourable horizon as is defined in the development near the portal of the shaft. The grade of the mineralisation decreases away from the crush. Three samples taken on the north wall of the winze gave the following assays:—

(a) 2 ft. west of the shear. Chemical assay 11.4 lbs. U_3O_8/long ton.

(b) 6 inches east of the shear. Chemical assay 23.1 lbs. U_3O_8/long ton.

(c) 5 feet east of the shear. Chemical assay 5.8 lbs. U_3O_8/long ton.

Although the shear is apparently a controlling factor in ore deposition it is not strongly mineralised itself and a sample cut from the centre of the shear assayed only 2.5 lbs. U_3O_8/long ton.

To summarise the ore occurrence in No. 1 Lode: from the winze to the portal of the inclined shaft, the ore first occurs as an almost continuous 'pod' along, but not necessarily in a shear, and then near the portal concentrates in the crest of a small anticline as a larger ore body. The mineralisation at the portal is clearly confined to one horizon in the gneiss.

2. NO. 2 LODE:

Here the distribution of secondary minerals follows a linear pattern along a north-west trending shear zone over a length exceeding 100 feet. Seven trenches have been excavated across this zone, 4 dimaond drill holes and 12 wagon drill holes completed.

A prospecting shaft has been sunk in the richest ore lens which has a surface length of 50 feet and width of 2-3 feet. In the shaft, the lode was ill-defined near the surface but from 4-5 feet depth a well defined hanging wall dips 40' West and was followed for 19 feet (see Cross Section). US 288 To this depth the lode lenses out from a maximum of 2 feet in width and samples taken across it assay 1.2% U_3O_8. Below 19 feet only a weak unmineralised shear continues. Drilling in the section of this shaft showed no mineralisation below it (see fig.4.) US 288 The shaft was extended to depth of 27 feet and discontinued. The south wall of the shaft is occupied for the first 12 feet by a dyke of coarse grained microcline pegmatite which transects the lode striking east-west and dipping steeply to the south. It is apparently unrelated to the other pegmatites on the field both in composition of the felspars and in field relationships since it transgresses both bedding and lode formation, in contrast to the general sill-like form of most of the pegmatites recorded in the area.

A second prospecting shaft 60 feet north of the first shaft followed a shear zone dipping westerly at 50°. The shear carries spotty uranium-bearing material which is present both as fragments in the gouge and as small lenses. The shaft was extended to a depth of 37'6" and discontinued.

None of the diamond or wagon holes proved extensions to the mineralisation, the only significant lens of which is immediately adjacent to the north wall of the first prospecting shaft, where a little high grade lode remains.

X PRODUCTION:

NO. 1 LODE: Ore removed during development and stoping totals 321.86/long tons at an average grade of 8.25 lbs. U_3O_8/long ton (0.37%).

NO. 2 LODE: The only ore taken was that encountered in the sinking of the two shafts comprising 18.55 long tons at an average grade of 4.9 lbs. U_3O_8/ton (0.22%).

TOTAL PRODUCTION: 340.41 tons assaying 8.08 lbs. U_3O_8 per long ton or 2748 lbs. of uranium oxide.

XI EVALUATION:

The mineralisation at Myponga is the first of its type to be discovered in South Australia, consequently it is a matter of great interest to obtain an understanding of the geological factors responsible for the occurrence. Mapping on both regional and local scales has been carried out, and a great deal of three dimensional data plotted as the result of drilling and underground development. However, although the locus of mineralisation is now known, the erratic distribution of the ore lenses cannot be forecast. The largest and richest lens is that which reaches the surface at No. 1 Lode and which has now been removed by stoping, elsewhere in this Lode channel, the lenses are small — containing up to ten tons in each one but separated by many feet of unmineralised channel. It is probable that many lenses of this type could be discovered by underground development along the lode channel but although individually they may assay up to 1% U_3O_8, their erratic distribution and small dimensions do not encourage further expenditure. The situation is even less promising in the No.2 lode channel where the ore lenses are even smaller and sparser. A few tons of ore with grade of about 0.5% could perhaps be gouged from this lode but there is no suggestion of extensive mineralisation.

It is concluded that although there is no doubt that small additional tonnages of ore could be located these would not warrant recovery.

It is accordingly recommended —

(1) that exploration be discontinued,

(2) that the Government reservation be withdrawn and,

(3) that the security files dealing with the project be declassified and a summary report released for publication.

L. W. Parkin

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L. W. PARKIN.

CHIEF GEOLOGIST.

LWP/JEA

16/6/55.

----A P P E N D I X I-----

MYPONGA URANIUM PROSPECT.

DIAMOND DRILL LOGS.

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DIAMOND DRILL LOG

PROJECT:	Myponga No.2 Lode		Plan Reference:	U.S.-254
BORE NO.	1.		DRILLER:	Rixon.
CO-ORDS:	10700N	10275E.	DATE DRILLING FINISHED.	25/3/54.
BEARING:	070°	Depressed 45°		
DATE DRILLING COMMENCED:	10/3/54.			

6527-212

LOG

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	31	0	Highly pegmatised (coarse pink felspars), coarsely banded, biotite-felspar-gneiss.
31	0	66	0	Coarsely banded, dark coloured, felspar-biotite-gneiss with some pegmatite. (Banding 20° at 58', 20° at 37').
66	0	69	9	Coarse, pink-felspar pegmatite.
69	9	77	0	Medium-grained, banded felspar-biotite-gneiss.
77	0	87	9	Highly biotitic, felspar-biotite-gneiss grading to pink-felspar biotite towards end of hole.

26.7'

----END OF HOLE----

DIAMOND DRILL LOG

PROJECT: Myponga. No.2 Lode Area. PLAN REFERENCE: U.S.-254

BORE NO.: 2 DRILLER: Noble.

CO-ORDS: 10757N 10193 E DATE DRILLING FINISHED:

BEARING: 080° Depressed 45° 12/4/54.

DATE DRILLING COMMENCED: 5/4/54. 6527-213

LOG

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	27	3	Pegmatite.
27	3	32	9	Highly pegmatised gneiss.
32	9	44	0	Coarse bronze biotite-schist becoming gneissic.
44	0	51	0	Fine-grained felspar-biotite-gneiss. (Pegmatite band at 48')
51	0	53	0	Coarse bronze biotite-schist.
53	0	75	6	Medium-grained felspar-biotite gneiss.
75	6	77	6	Pegmatite.
77	6	81	0	Pegmatised gneiss (some blue quartz).
81	0	85	0	Medium-grained felspar-biotite-gneiss (poorly banded).
85	0	87	6	Pegmatised gneiss.
87	6	104	0	Medium-grained felspar-biotite-gneiss with some pegmatite bands at 91'-92', 93'-6", 98'-7"—101'.
104	0	109	6	Fine-grained biotite-felspar-gneiss.
109	0	115	6	Medium-grained biotite-felspar-gneiss.

35·20

-----END OF HOLE-----

DIAMOND DRILL LOG

PROJECT:	MYPONGA NO.2 Lode	PLAN REFERENCE:	U.S.-254
BORE NO.	3	DRILLER:	Noble
CO-ORDS:	10770N 10237E	DATE DRILLING COMPLETED:	1/4/54.
BEARING:	078° Depressed 45°		
DATE DRILLING COMMENCED:	26/3/54.	6527-21K	

LOG

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	2	0	Wholly weathered bronze biotite schist.
2	0	5	3	Coarse bronze biotite schist.
5	3	24	9	Highly biotitic felspar-gneiss. Well banded (70°).
24	9	36	0	Highly pegmatised. 1'-6" Core recovery.
36	0	39	9	Highly pegmatitic gneiss. 1'-6" core recovery.
39	9	41	3	Biotite-felspar-gneiss.
41	3	50	0	Pegmatised biotite-felspar-gneiss. Poorly banded.
50	0	54	6	Pink-felspar pegmatite.
54	6	61	0	Pegmatised felspar-biotite-gneiss.
61	0	80	0	Fine grained felspar-biotite-gneiss. Some banding at 70°.

24.38

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DIAMOND DRILL LOG.

PROJECT:	MYPONGA No.2 Lode	PLAN REFERENCE:	U.S.-254
BORE NO:	4	DRILLER:	Noble
CO-ORDS:	10735N 10254E	DATE DRILLING COMPLETED:	23/4/54.
BEARING:	070° Depressed 45°		
DATE DRILLING COMMENCED:	20/4/54.		6527-215

LOG.

DEPTH From Ft.	From Ins.	To Ft.	To Ins.	
0	0	16	0	Dark grey, highly biotitic felspar-gneiss.
16	0	29	0	Negligible core-some pegmatitic fragments recovered—blue quartz.
29	0	31	6	Pegmatised biotite-felspar-gneiss.
31	6	40	0	Banded felspar-biotite-gneiss. Some pegmatitic banding at 80°.
40	0	48	0	Pegmatised felspar-biotite-gneiss.
48	0	49	0	Pegmatite.
49	0	54	0	Fine-grained felspar-biotite-gneiss. Pegmatite at 51'-52'.
54	0	58	0	Banded pegmatised felspar-biotite-gneiss. Blue quartz at 58'.
58	0	75	0	Fine grained felspar-biotite-gneiss. Some banding (80° at 67', 20° at 74', 70° at 76').
75	0	84	0	Banded felspar-biotite-gneiss (70°) becoming pegmatised at 84'.

25-60

---END OF HOLE---

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DIAMOND DRILL LOG.

PROJECT: MYPONGA No.2 Lode

PLAN REFERENCE: U.S.-254

BORE NO. 5

DRILLER: Noble & Foster

CO-ORDS: 10800N 10237E

DATE DRILLING FINISHED: 18/5/54.

BEARING: - Depression 45°

6527-216

DATE DRILLING COMMENCED: 28/4/54.

LOG.

DEPTH. From Ft.	Ins.	To. Ft.	Ins.	
0	0	6	0	Weathered biotite gneiss.
6	0	21	6	Dark coarse highly biotitic gneiss.
21	6	32	0	Medium-grained felspar-biotite-gneiss. (some banding) with pink felspar content increasing towards 32'.
32	0	45	1	Somewhat pegmatised felspar-biotite-gneiss.
45	1	81	0	Grey fine-grained felspar-biotite-gneiss with some pegmatite zones.

24.69

---END OF HOLE---

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DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 2 LODE — DM

Bore No. 6 — Bore Serial No. DD

Hundred Myponga — Section 75 — Plan Reference US - 254

Co-ordinates 10230 E 10830 N — R.L. of Collar

Bearing N 65° E — Depressed 45° — Driller

Date Drilling commenced — Date Drilling completed 16/8/54

6527 - 217

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	12	0			Note: From 0'-12' only 1'3" recovered consisting 0'5" Coarse-grained quartz felspar pegmatite 0'10" Medium-grained siliceous felspar-biotite-gneiss, poorly banded.
12	0	20	0			As above, recovery 6'0", banding weak at 40° to axis.
20	0	34	1			As above.
34	1	34	4			As above with only small amounts of biotite and yellow secondary uranium mineralisation in joints.
34	4	35	6			Biotite felspar gneiss with some large biotite clots and secondary uranium minerals.
35	6	39	10			Quartz felspar pegmatite with secondary uranium minerals in fractures.
39	10	41	6			Felspar biotite gneiss, poorly banded.
41	6	50	2			Coarse grained felspar biotite gneiss with large pink felspar crystals and secondary uranium minerals. At 44'6 a ½" zone (core fractured) of highly radio-active Brannerite Pet. Rep. 59/54.
50	2	59	6			Quartz felspar gneiss with small amounts biotite.
59	6	60	6			Quartz felspar pegmatite.
60	6	91	4			Quartz felspar gneiss, poorly banded, sparse biotite, hornblende etc.

27.84

Bore logged by R. Rowley

Date 23/8/48

50 4850—6.53 3341.

DEPARTMENT OF MINES, ADELAIDE.

DIAMOND DRILL LOG.

6527-218

PROJECT: Wild Dog Mine Myponga S.R. 11/2/64.

BORE NO. 7 BORE SERIAL NO. DD

HUNDRED Myponga SECTION 75 PLAN REFERENCE US-287 US-254

CO-ORDINATES 10600N 10815E R.L. OF COLLAR 1003,4

BEARING DEPRESSED Vertical DRILLER: W. Noble

DATE DRILLING COMMENCED: 23.2.54. DATE DRILLING COMPLETED 26.2.54.

L O G

DEPTH From Ft.	In.	To Ft.	In.	Core Recovered Ft.	In.	Note "Dip" readings refer to the angle between Foliation and axis of drill core.
0'	-	2	-	2	0	0' - 2'0 soil and weathered rock
2	0	3	7	1	3	2' -12'0 fine grained felspar biotite gneiss,
3	7	5	9	1	8	developing more biotite
5	9	7	9	1	10	from 10'-12'
7	9	8	5	-	5	dip 40° at 4'0
8	5	10	5	1	7	60° at 5'9
10	5	12	-	1	3	40° at 7'6
12	-	14	6	2	-	60° at10'0
14	6	16	8	1	8	45° at11'
16	8	20	5	1	6	12'0-14'6 biotite felspar gneiss, mineralised.
20	5	25	-	3	1	along joints and cracks from 13'0-14'6
25	-	26	9	1	-	with secondary uranium minerals, dip 50°
26	9	29	-	1	6	14'6-15'8 Strong lode, biotite felspar gneiss with
29	-	30	-	1	-	strong impregnation of
30	-	31	6	1	3	secondary uranium minerals
31	6	35	2	3	8	15'8-16'0 biotite felspar gneiss, weakly mineralised.
35	2	38	2	3	-	16'0-60'0 "Spotted" gneiss, of soft
38	2	42	-	2	-	decomposed grey-green
42	-	45	-	1	5	felspar with little biotite and weak banding very
45	-	50	-	5	-	weakly mineralised to 40 f
50	-	52	6	1	3	dip flat at 54°
52	6	54	8	2	-	pegmatite 44'-44'6, 57'8-60'
54	8	57	8	3	-	60'0-70'1 Weakly banded medium-
57	8	60	2	-	7	(End of bore) grained biotite felspar
60	2	65	-	4	3	gneiss.
65	-	66	10	1	2	pegmatite 68'6-69'9
66	10	70	1	3	-	

21.36

BORE LOGGED BY F. E. Hughes. DATE 26.2.54.

DIAMOND DRILL LOG

PROJECT: MYPONGA N-W No.1 Lode. PLAN REFERENCE: US-254

BORE NO: 8 DRILLER: Malmon.

CO-ORDS: 10801N 10678E DATE DRILLING FINISHED 16/6/54.

BEARING: 146° Depression 60°

6527 - 219

DATE DRILLING COMMENCED; 27/5/54.

Log.

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	1	0	White felspar-quartz-pegmatite.
1	0	16	0	Dark coloured, banded, medium-grained felspar-biotite-gneiss.
16	0	27	0	Highly pegmatised pink felspar-biotite-gneiss grading to pegmatite towards 27'. Some blue quartz.
27	0	50	0	Medium-grained, well banded, dark, felspar-biotite-gneiss. Banding 75°-90°.
50	0	61	10	Somewhat pegmatised coarse-grained felspar-biotite-gneiss grading to pegmatite bands.
61	10	76	0	Weakly-banded, fine-grained grey felspar-biotite-gneiss.
76	0	93	0	Coarse bronze biotitic gneiss with less biotite towards 93'. (Possible "footwall" type).
93	0	133	3	Biotite gneiss becoming more felspathic.

40.6'

-END OF HOLE-

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DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE

DM

Bore No. 9

Bore Serial No. DD

Hundred Section

Plan Reference US-254

Co-ordinates 10800 N 10678 E

R.L. of Collar

Bearing Depressed 90°

Driller

Date Drilling commenced

Date Drilling completed

6527-220

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	18	5			Banded felspar biotite gneiss, banding 60° to axis, some vertical cleavage.
18	5	63	10			Coarse-grained quartz felspar pegmatite with occasional biotite clots.
63	10	91	0			Poorly banded, felspar biotite gneiss with thin pegmatite bands at 73'6", general banding 40° to core axis.

27.74

Bore logged by

Date

50 4850—6.53 3341

DEPARTMENT OF MINES,
ADELAIDE.

DIAMOND DRILL LOG.

PROJECT: Wild Dog Mine, Myponga. SR 11/2/64

BORE NO.: 10 BORE SERIAL NO.DD

HUNDRED Myponga SECTION 75 PLAN REFERENCE: US-287 US-254

CO-ORDINATES 10580N 10795E R.L. OF COLLAR: 1004.1

BEARING: 090 DEPRESSED: 45° DRILLER: W. Noble

DATE DRILLING COMMENCED 12.2.54. DATE DRILLING COMPLETED : 22.2.54.

6527-22/

- L O G -

DEPTH From Ft.	In.	To Ft.	In.	Core Recovered T.	In.		Note "Dip" readings refer to the angle between bedding foliation and axis of drill core.
0'	-	1	0	1	0	0'-1'0	soil and weathered gneiss
1'	0	2	3		9	1'0-9'6	banded felspar-biotite gneiss
2'	3	3	6	1	1		dip 45°
3	6	5	9	1	4	9'6-14'9	soft biotite felspar gneiss,
5	9	7	9	1	11		weakly banded.
7	9	9	6	1	-	14'9-47'	soft felspar biotite gneiss,
9	6	12	2	1	6	(approx.)	"Spotty" appearance due to
12	2	14	9	1	7		pale grey-green decomposed
14	9	20	-	2	2		felspar, weak structure.
20	0	22	4	1	9		dip 50° at 19'.
22	4	24	6	1	-		28'6-40' weakly mineralised
24	6	26	8	2	2		with disseminated
26	8	28	-	-	4		secondary uranium minerals and
28	-	31	9	1	6		limonite, dip steepening
31	9	34	10	2	8		to 80° at 34'-40'.
34	10	37	3	2	2	47'-66'2	felspar biotite gneiss struc-
37	3	40	6	-	10		ture still weak but becoming
40	6	44	10	1	9		more clearly banded, well
44	10	45	2	-	4		defined after 60'
45	2	47	2	-	7		dip at 45° at 55'6
47	2	48	2	-	11		60° at 63'
48	2	51	4	3	-		dense fine grained quartz-
51	4	55	8	3	11		felspar- biotite gneiss
55	8	58	9	2	2		63'3-64'3
58	9	60	-	1	3	66'2-72'6	dense fine grained siliceous
60	-	62	3	2	3		felspar gneiss, low in bio-
62	3	65	3	2	6		tite, with little epidote in
65	3	68	-	2	9		joint planes and along bedding
68	-	69	7	1	2		71'-72'
69	7	72	6	2	11		dip 55° at first and becoming
72	6	75	3	2	5		shallow
75	3	80	5	1	2	72'6-86'8	pegmatised felspar biotite
80	5	83	-	-	8	(end of bore)	gneiss
83	-	83	8	-	7		dip 10°-30° at first, and
83	8	85	-	1	1		becoming steeper.
85	-	86	8	1	2		

26.42

BORE LOGGED BY F. E. HUGHES DATE 22.2.54.

PROJECT: MYPONGA. NO.1 LODE PLAN REFERENCE: US-254

BORE NO. 11 DRILLER: W. Noble

CO-ORDS: 10630N 10820E DATE DRILLING FINISHED: 3/3/54.

BEARING: - DEPRESSION 90°

6527-222

DATE DRILLING COMMENCED: 1/3/54.

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	2	0	Highly weathered gneiss.
2	0	3	6	Even-grained felspar-biotite-gneiss.
3	6	7	0	Mainly pegmatite with some gneissic remnants.
9	0	12	6	White felspar-quartz-pegmatite.
12	6	18	5	Above with some biotite.
18	5	39	0	Fine-grained felspar-biotite-gneiss, some banding at 36'. (5°).
39	0	47	3	White-felspar pegmatite with some biotite.
47	3	51	0	Fine-grained felspar-biotite-gneiss with some banding at 48' (45°)
51	0	53	0	White-felspar pegmatite.
53	0	56	8	Fine-grained banded gneiss partly felspathised; Banding 45° at 53', 0° at 56'.

17.27

- E N D O F H O L E.-

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DIAMOND DRILL LOG.

PROJECT: MYPONGA No.1 Lode. PLAN REFERENCE: US-254

BORE NO. 12 DRILLER: W. Noble.

CO-ORDS: 10600N 10845E DATE DRILLING FINISHED: 8/3/54.

BEARING: 270° DEPRESSION: 45°

DATE DRILLING COMMENCED; 4/3/54. 6527-223

Log

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	1	6	Highly weathered gneiss.
1	6	43	0	"Spotted" felspar-biotitic gneiss. "Footwall" rock. Blue quartz pegmatite at 11'. Flakes greenish-yellow secondary uranium mineral. (39' to 40'-6"). Core split for assay 25'-3" to 43'.

13.11

---END OF HOLE---

DIAMOND DRILL LOG

PROJECT: Myponga. No.1 Lode. PLAN REFERENCE: US-254

BORE NO. 13. DRILLER: W. Noble.

CO-ORDS: Depression 90° DATE DRILLING FINISHED: 10/3/54.

DATE DRILLING COMMENCED: 8/3/54.

6527-224

LOG.

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	1	0	Weathered gneiss.
1	0	15	8	Grey fine-grained banded felspar-biotite-gneiss becoming more biotitic towards 15'-8".
15	8	30	0	Dark, medium-grained banded felspar-biotite-gneiss. Secondary greenish-yellow uranium mineralization at 18'-4" to 19'.
30	0	37	0	Chloritic (?) spotted biotitic felspar gneiss. "Footwall" rock.
37	0	49	0	Medium-grained, white-felspar, biotite-gneiss.
49	0	51	6	Fine-grained, white-felspar, biotite gneiss.

(Core split from 15'-8" to the end of the hole).

15-70

---oOo---

DIAMOND DRILL LOG.

PROJECT: MYPONGA. NO.1 Lode. PLAN REFERENCE: U.S.-254

BORE: 14 DRILLER: W. Noble.

CO-ORDS: 10645N 10813E DATE DRILLING FINISHED 10/3/54

BEARING: - Depression 90°

DATE DRILLING COMMENCED: 8/3/54. 6527-225

Log.

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	1	0	Weathered gneiss.
1	0	8	0	Fine-grained felspar-biotite-gneiss with some banding.
8	0	14	0	Fine-grained, banded, felspar-biotite-gneiss.
14	0	20	0	Coarse-grained, banded, felspar-biotite-gneiss.
20	0	28	0	Fine-grained, " " biotite-gneiss.
28	0	35	6	Pink-felspar pegmatite.
35	6	51	6	Highly pegmatised felspar-biotite-gneiss grading to pegmatite in bands.

15.70

----END OF HOLE---

Diamond Drill Log

PROJECT: MYPONGA. West of No.1 Lode. PLAN REFERENCE: US-254

BORE: NO.15. DRILLER: W. Noble.

CO-ORDS: 10580N 10695E DATE DRILLING FINISHED: 24/3/54.

BEARING: — Depression 90°

DATE DRILLING COMMENCED: 15/3/54.

6527-226

Log.

DEPTH From Ft.	Ins.	To Ft.	Ins.	
0	0	1	8	Weathered gneiss.
1	8	7	0	Dark, fine-grained felspar-biotit gneiss.
7	0	26	0	Dark, fine-grained, pegmatised felspar-biotite-gneiss.
26	0	46	0	Medium-grained, pinkish, banded felspar-biotite-gneiss (Banding 0°-15°)
46	0	62	0	Dark, highly-biotitic gneiss. Coarse bronze biotite at 49'.
62	0	70	0	Medium-grained pink felspar-biotite-gneiss.
70	0	86	0	Biotitic gneiss-some thin pegmatite bands.
86	0	97	0	Pegmatised biotite-felspar-gneiss grading to pegmatite at 94'-97'.

29.57

--- END of HOLE ---

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE — DM

Bore No. 16 — Bore Serial No. DD

Hundred Myponga Section 75 — Plan Reference US 254

Co-ordinates 11,000 E 10600 N — R.L. of Collar

Bearing 270° Depressed 45° — Driller

Date Drilling commenced — Date Drilling completed 2-2-54

6527-227

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	73	0			Poor core recovery. Mostly coarse grained felspar biotite gneiss, well banded, dip of gneissosity variable - at 30' is 45° to axis, 41' 10°, 67' 30°, 70'6" 45°.
73	0	73	2			Coarse grained quartz felspar pegmatite.
73	2	77	0			Well banded biotite felspar gneiss - gneissosity 45°.
77	0	78	2			Coarse grained quartz felspar pegmatite.
78	2	87	10			Poorly banded felspar biotite gneiss.
87	10	91	6			Well banded felspar biotite gneiss.
91	6	92	4			Plagioclase quartz pegmatite with small vughs.
92	4	100	0			Above, interbanded with well banded gneiss.
100	0	105	0			Well banded felspar biotite gneiss - 30°.
105	0	106	0			Quartz plagioclase pegmatite
106	0	131	0			Highly pegmatized gneiss grading in places to quartz felspar pegmatite.
131	0	150	0			Quartz felspar rock - showing occasional banding and few ferro-magnesian minerals.
150	0	165	3			Poorly banded quartz felspar gneiss, highly pegmatized.
165	3	167	0			Extremely fine grained poorly banded gneiss.
167	0	180	0			Poorly banded gneiss showing occasional large clots biotite.
180	0	191	1			Dark, poorly banded siliceous rock - appears to be a metamorphosed quartzite.
191	1	199	4			Well banded, medium grained quartz felspar gneiss
199	4	226	6			Fine grained poorly banded siliceous rock - perhaps a meta-quartzite.
226	6	261	0			Coarse grained poorly banded gneiss - plentiful dark minerals. Very similar to "foot wall rock" of No. 1 lode.
261	0	263	6			Coarse grained quartz felspar pegmatite.
263	6	316	6			Medium grained poorly banded gneiss similar to "foot wall rock" type.

96.47

Bore logged by R. Rowley

Date

50 ks50—6.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE — DM

Bore No. 17 — Bore Serial No. DD

Hundred Myponga Section — Plan Reference US-254

Co-ordinates 11032 N 10527 E — R.L. of Collar

Bearing 146° Depressed 45° — Driller Jensen

Date Drilling commenced — Date Drilling completed 11.8.54

LOG

6527 - 228

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	40	0	8	10	Recovery poor, consisting of: 3'6" Broken core - mainly pegmatized gneiss with large crystals of pink felspar 5'4" Micaceous schist grading to gneiss and in part pegmatized.
40	0	84	6			Pegmatized gneiss with high angle jointing (5° to axis) and talc? along joints. Poorly banded approx. 40° to axis.
84	6	127	4			Poorly banded medium to fine grained felspar biotite rock ("Footwall type" of No. 1 lode?) core fractured 97-102' with yellow non-radioactive secondary minerals in the fracture.
127	4	131	0			Coarse grained felspar pegmatite - large crystals of pink felspar.
131	0	166	8			Medium to coarse grained spotted felspar biotite rock. ("Footwall" type?) Coarse blue quartz at 155'.
166	8	167	2			Greyish blue crypto-crystalline quartz vein.
167	2	187	0			Medium to coarse grained spotted felspar biotite rock
187	0	187	6			Broken core and some clay.
187	6	190	3			Medium to coarse grained spotted felspar biotite rock, in part pegmatized.
190	3	190	7			Coarse grained felspar biotite pegmatite with pink felspar.
190	7	200	3			Pegmatized felspar biotite spotted rock.

61.04

29.5 - 31.1.

Bore logged by R. Rowley

Date 9/9/54.

50 ks50—6.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE

Bore No. 18

Hundred ..... Section .....

Co-ordinates 10765 N 10701 E

Bearing 148° Depressed 65°

Date Drilling commenced .....

DM .....

Bore Serial No. DD .....

Plan Reference US-254

R.L. of Collar .....

Driller K. Sedlaceck

Date Drilling completed 10.9.54

6127-229

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	10	2			Weathered felspar biotite gneiss, highly pegmatized. Blue quartz pegmatite in lower 6" of core.
10	2	11	6			Highly pegmatized gneiss, irregular banding
11	6	12	2			Pegmatite with blue quartz
12	2	15	6			Highly pegmatized gneiss - in general perpendicular to core axis. Grades to pegmatite in the lower 12".
15	6	32	4			Highly pegmatized gneiss, irregular banding approximately 90° to axis.
32	4	33	0			Clay pugand highly altered gneiss - minor fracture (small core loss)
33	0	37	6			Fine grained felspar biotite gneiss — poorly banded.
37	6	44	0			Highly pegmatized gneiss - irregular banding
44	0	44	6			Coarse blue quartz pegmatite.
44	6	58	0			Highly pegmatized gneiss - thin band of pegmatite at 47'6", limonite stained joint at 49'9. Banding 80° to axis.
58	0	74	3			Fine grained gneiss - silicified appearance. Banding perpendicular to axis - occasional joint parallel to axis.
74	3	90	0			Coarse grained spotted gneiss ("Foot-wall rock") At 90' small pug seam - minor fracture.
90	0	122	4			As from 74'3".
122	4	123	3			Pegmatized spotted gneiss.
123	3	135	0			Coarse-grained spotted gneiss ("Foot wall rock")
135	0	136	9			Blue quartz pegmatite
136	9	150	0			Coarse grained spotted gneiss ("Footwall rock")
						45.72 END OF HOLE

Bore logged by R. Rowley

Date 22/10/54.

50 4s50—6.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE

DM

Bore No. 19

Bore Serial No. DD

Hundred Section

Plan Reference US - 254

Co-ordinates 10838 N 10830 E

R.L. of Collar

Bearing 240° Depressed 20°

Driller

Date Drilling commenced

Date Drilling completed 7.12.54

6527 - 230

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	28	0			Fine- medium grained biotite felspar gneiss. Banding variable at 13'6", 65°: 18'0" irregular parallel, 26'0", 60°.
28	0	48	10			Coarse grained pegmatite with blue quartz and biotite flakes
48	10	54	0			Fine - medium grained biotite felspar gneiss, banding at 45°.
54	0	77	9			As above, becoming heavily felspathized, banding at 45°. Core shattered at 70'.
77	9	103	0			Medium to fine grained gneiss heavily pegmatized banding 90° at 85', 35° at 100'.
103	0	105	0			As above with a granitic texture.
105	0	110	0			Biotite felspar gneiss, banding 70°.
110	0	110	3			Blue quartz felspar pegmatite.
110	3	123	9			Biotite felspar gneiss with large clots of felspar.
123	9	132	0			Fine grained gneiss, banding at 45° and no felspar clots.
132	0	133	0			Quartz - felspar pegmatite
133	0	150	0			Fine grained gneiss with banding at 70°.
150	0	153	6			'Spotted' gneiss - felspar, quartz, biotite.
153	6	156	9			Fine grained gneiss, poorly banded at approx. 70° to axis.
156	9	164	9			Fine grained gneiss, no banding, occasional greenish spots of ferro-magnesian mineral up to $\frac{1}{8}$" diameter.
164	9	172	8			Fine grained gneiss, poorly banded.
172	8	183	10			Minor zone of jointing parallel to core with a development of biotite on the joints.
183	10	216	0			Biotite felspar rock, no banding, occasional large clots of felspar.

3000' 91.44

Bore logged by R. Rowley

Date 22/2/55.

50 4850—0.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO1 1 LODE DM

Bore No. 19 Bore Serial No. DD

Hundred Section Plan Reference US - 254

Co-ordinates 10838 N 10830 E R.L. of Collar

Bearing 240° Depressed 20° Driller

Date Drilling commenced Date Drilling completed

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
216	0	220	9			Gneiss with a dioritic texture - biotite and felspar in even-grained crystalline rock.
220	9	226	8			Biotite felspar pegmatite.
226	8	249	3			Spotted biotite felspar rock
249	3	255	0			As above with yellow-green staining suggestive of epidote weathering.
255	0	287	5			Biotite felspar "spotted" rock
287	5	295	0			Coarse grained felspathised gneiss.
295	0	300	0			Banded gneiss 30° to axis

Bore logged by R. Rowley

Date 22/2/55

50 ks50—6.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE

DM

Bore No. 20

Bore Serial No. DD

Hundred Section

Plan Reference US-254

Co-ordinates Underground

R.L. of Collar

Bearing 235 Depressed 45°

Driller

Date Drilling commenced

Date Drilling completed

6527-23

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	1	1			Biotite felspar gneiss with banding parallel to axis.
1	1	5	0			"Spotted" biotite felspar gneiss with very coarse biotite.
5	0	6	4			Coarse biotite felspar "spotted" gneiss. No banding.
6	4	9	9			"Spotted" type gneiss, no banding.
9	9	14	0			As above with a small shear at 10'6".
14	0	18	8			As above with commencement of sheared zone at 15'10".
18	8	24	9			Sheared zone in spotted gneiss. Core becomes more solid at 19'6".
24	9	27	8			"Spotted" gneiss but becoming finer grained.
27	8	31	3			"Spotted" gneiss with suggestion of 45° banding.
31	3	33	7			Coarser grained felspar biotite gneiss, no banding.
33	7	36	5			Coarse grained felspar pegmatite with blue quartz.
36	5	40	0			"Spotted" felspar biotite gneiss.

12.19

Bore logged by R. Rowley

Date 20/1/55.

50 ks50—6.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE

Bore No. 21

Hundred ..... Section .....

Co-ordinates Underground

Bearing 235 Depressed 65°

Date Drilling commenced .....

DM .....

Bore Serial No. DD .....

Plan Reference US - 254

R.L. of Collar .....

Driller .....

Date Drilling completed .....

6527 - 232'

LOG

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	16	0			Poor recovery (approx. 2 ft.) of quartz felspar gneiss almost granitic in texture.
16	0	18	3			Quartz, felspar, bronze biotite spotted gneiss.
18	3	18	6			Quartz felspar pegmatite
18	6	29	3			Quartz felspar bronze biotite spotted gneiss.
29	3	29	6			Quartz felspar pegmatite.
29	6	40	0			Quartz, felspar, bronze biotite gneiss.

12-19

Bore logged by R. Rowley

Date 22/2/55.

50 ks50—6.53 3341

DEPARTMENT OF MINES, ADELAIDE

DIAMOND DRILL LOG

Project MYPONGA NO. 1 LODE

DM

Bore No. 22

Bore Serial No. DD

Hundred Section

Plan Reference US - 254

Co-ordinates underground

R.L. of Collar

Bearing 235° Depressed 0°

Driller

Date Drilling commenced

Date Drilling completed

LOG

6527-233

Depth From Ft.	Depth From In.	Depth To Ft.	Depth To In.	Core Recovered Ft.	Core Recovered In.	
0	0	6	9			Fine grained well banded felspar biotite gneiss.
6	9	23	6			As above, becoming denser and with less biotite, pegmatized in part.
23	6	40	3			Quartz, felspar, bronze biotite gneiss ("spotted") with granitic texture and occasional granitic phases.

12.27

Bore logged by R. Rowley

Date 22/2/55.

50 ks50—6.53 3341

APPENDIX II.

MYPONGA URANIUM PROSPECT.

WAGON DRILL DETAILS.

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APPENDIX II.

MYPONGA URANIUM PROSPECT.

WAGON DRILL HOLE DETAILS.

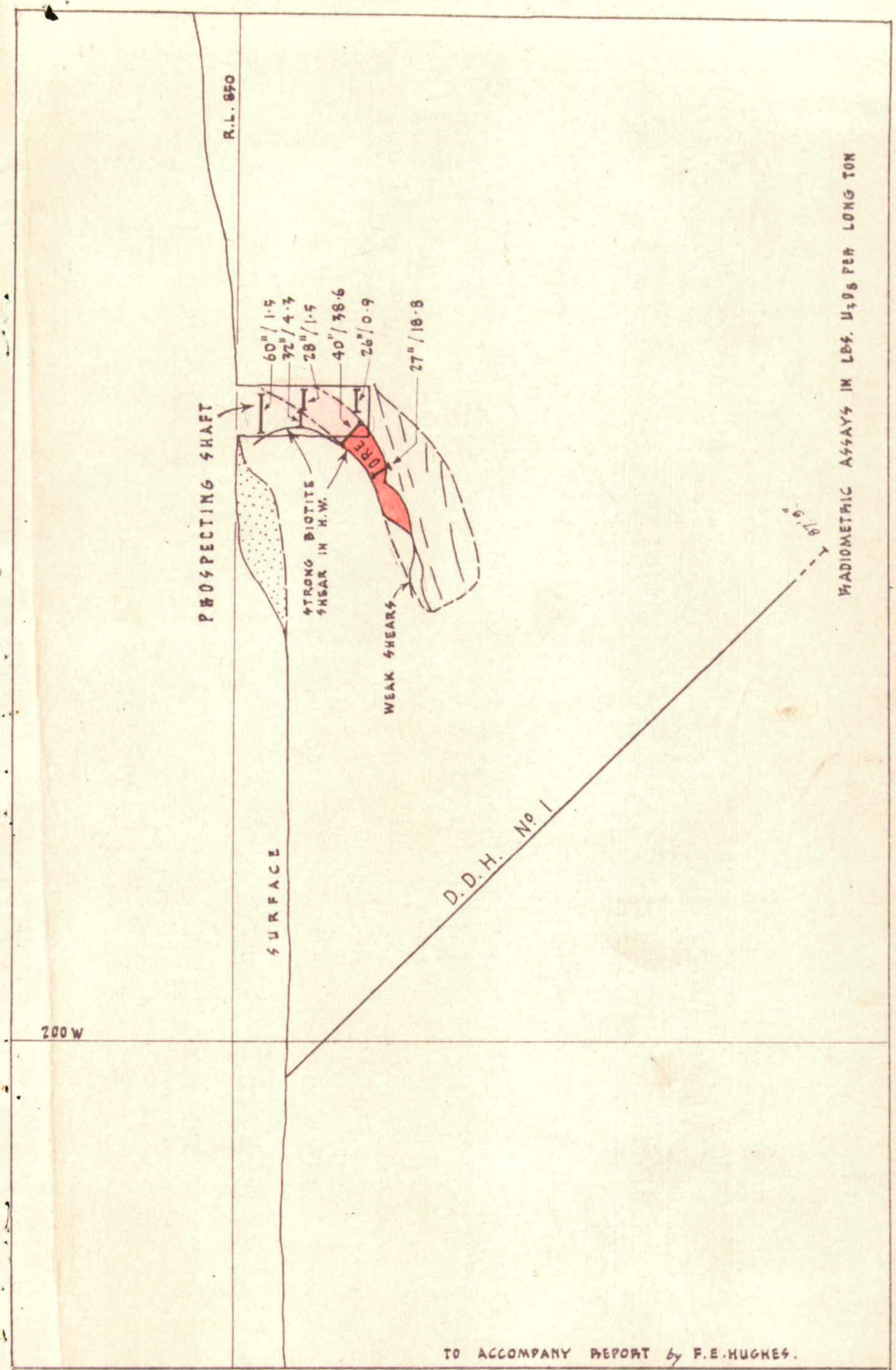
Hole No.	Co-ordinates	Dust Footage From	To	Radiometric Dust Assay (lbs./ton)	Final Depth	Remarks.
1	10615N 10827E	0	12	0.15		
		12	16	1.6		
		16	30	0.1	30'	
2	10615N 10822E	0	16	0.1		
		16	18	0.7		
		18	30	0.15	30	
3	10615N 10812E	0	18	0.1		
		18	20	17.5		
		20	22	2.9		
		22	24	0.3		
		24	32	0.9		
		32	40	0.15		
		40	45	0.7	45	
4	10615N 10807E	0	22	0.15		
		22	24	6.8		
		24	26	17.0		
		26	28	9.0		
		28	36	0.3	36	
5	10615N 10800E	0	32	0.15		
		32	34	1.3		
		34	36	23.5		
		36	38	4.3		
		38	42	0.65		
		42	46	0.2	46	
6	10615N 10784E	0	53'8"	0.1	53'8"	No significant assays.
7	10615N 10767E	0	71'7"		71'7"	No significant assays.
8	10640N 10800E	0	50		50	No significant assays.
9	10640N 10784E	0	47	0.07		
		47	55	3.85		
		55	61	0.6		
		61	65	0.2	65	
10	10660 10789E	0	69		69	No significant assays.
11	10655N 10770E	0	60	0.06		
		60	68	0.55		
		68	71'9"	0.3	71'9"	
12	10660N 10754E	0	83		83	No significant assays.
13	10660N 10734E	0	86		86	No significant assays.
14	10685N 10757E	0	69			
		69	75	2.0		
		75	79	0.6	90	
15	10708N 10744E	66	70	1.6		
		70	72	7.4		
		72	74	2.4		38m.
		74	82	0.25	82	

HOLE NO.	Co-Ordinates		Dust Footage From	To	Radiometric Dust Assay (lbs/ton)	Final Depth	Remarks.
16	10706N	10731E	0	89'6"		89'6"	No significant assays.
17	10731N	10723E	75	77	16.0		
			77	82	0.1	82	
18	10640N	10769E	0	62		62	No significant assays.
19	10615N	10836E	0	12			
			12	16	1.3		
			16	35	0.1	35	
20	10615N	10847E	0	53		53	No significant assays.
21	10615N	10841E	0	30		30	No significant assays.
22	10615N	10867E	0	72		72	No samples taken.
23	10615N	10887E	0	83		83	No significant assays.
24	10630N	10832E	0	27		27	No significant assays.
25	10631N	10841E	0	36		36	No significant assays.
26	10633N	10849E	0	36		36	No significant assays.
27	10647N	10839E	0	50		50	No significant assays.
28	10644N	10831E	0	36		36	No significant assays.
29	10615N	10752E	0	125'6"		125'6"	No significant assays.
30	10615N	10722E	0	74		74	No samples taken.
31	10615N	10707E	0	80		80	No significant assays.
32	10617N	10691E	0	72		72	No significant assays.
33	10617N	10699E	0	90		90	No significant assays.
34	10615N	10737E	0	90		90	No samples taken. Radiometric log 50'-54'=3 lbs/ton
35	10660N	10813E	0	54		54	No samples taken.
36	10615N	10742E	0	48			
			48	56	1.55		
			56	72		72	
37	10615N	10732E	0	71		71	No significant assays.
38	10640N	10728E	0	56			
			56	64	0.3		
			64	108		108	
39	10648N	10735E	0	90		90	No significant assays.
40	10660N	10709E	0	78		78	No samples taken.
41	10655N	10700E	0	72		72	No significant assays.
42	10650N	10693E	0	92		92	No samples taken.
43	10645N	10684E	0	71		71	" " "
44	10657N	10646E	0	108		108	No samples taken Radiometric log 90'-92'=1.5 lbs/ton.

Hole No.	Co-ordinates		Dust Footage From	To	Radiometric Dust Assay (lbs/ton)	Final Depth	Remarks.
45	10669N	10657E	0	92	-	92	No samples taken.
46	10679N	10668E	0	82'6"		82'6"	No significant assays.
47	10683N	10682E	0	90		90	No samples taken.
48	10692N	10691E	0	90		90	No significant assays.
49	10700N	10700E	0	31		31	No significant assays.
50	10701N	10702E	0	72		72	No significant assays.
51	10716N	10752E	0	89		89	No samples taken.
52	10712N	10770E	0	93		93	No samples taken.
53	10828N	10661E	0	90		90	No samples taken. Radiometric log 36'-41'=4.5 lbs/ton
54	10834N	10669E	0	90		90	No samples taken.
55	10840N	10677E	0	88		88	No samples taken. Radiometric log Anomaly 40'-46'. Max^{m}=1.65 lbs/ton.
56	10847N	10684E	0	80		80	No significant assays.
57	10852N	10692E	0	81		81	No significant assays. Radiometric log. Anomaly 60'-64'. Max^{m} 2.1lbs/ton.
58	10826N	10652E	0	68			Rad. log. Anomalies 42'-48'. 1.8 lbs/ton
			68	72	0.5	72	66'-70'. 1.4 lbs/to
59	10823N	10642E	0	46		46	No samples taken.
60	10820N	10633E	0	64		64	No samples taken.
61	10815N	10624E	0	64		64	No samples taken. Radiometric Log. Slight anomaly 25'-28'.
62	10810N	10614E	0	90		90	No samples taken.
63	10805N	10605E	0	80		80	" "
64	10800N	10600E	0	43		43	" "
65	10827N	10656E	0	67		67	No samples taken. Radiometric Log Anomaly. Max^{m} = 4 lbs/ton at 50'.
66	10831N	10665E	0	60		60	
67	10717N	10720E	0	68			
			68	72	0.1		
			72	80	5.4	80	
68	10717N	10734E	70	72	3.0	72	
69	10718N	10739E	68	72	18.1		
			72	80		80	

Hole No.	Co-ordinates		Dust Footage From	To	Radiometric Dust Assay (lbs/ton)	Final Depth	Remarks.
70	10716N	10743E	66	72	3.3		
			72	80		80	
71	10716N	10748E	0	66			
			66	72	0.2	72	
72	10696 N	10765 E	0	62		62	No samples taken.
73	10694 N	10760 E	68	72	0.2	72	
74	10691 N	10755 E	90	101	0.5	101	
75	10688 N	10751 E	0	72			
			72	76	2.4		
			76	80	0.9		
			80	90		90	
76	10685 N	10745 E	0	72		72	No samples taken.
77	10580 N	10773 E	0	72		72	No significant samples.
78	10580N	10743 E	0	74'6"		74'6"	" "
79	10579 N	10764 E	0	72		72	No samples taken
80	10580 N	10752 E	0	90		90	" " "
81	10580 N	10743 E	0	108		108	" " "
82	10600 N	10736 E	0	108		108	" " "
83	10600 N	10742 E	0	108		108	" " "
84	10600 N	10747 E	0	108		108	" " "
85	10600 N	10752 E	0	108		108	" " "
86	10600 N	10756 E	0	108		108	" " "
87	10792 N	10594 E	0	108		108	No samples taken. Radiometric log. Weak anomalies 5'-15' and 80'.
88	10785N	10589E	0	64		64	" "
89	10777 N	10584 E	0	73		73	" "
90	10766N	10578E	0	12'6"		12'6"	" "
91	10757N	10574E	0	50		50	" "
92	10738 N	10566E	0	46		46	" "
93	10717 N	10558E	0	18		18	" "
94	10428 N	10712 E	0	43		43	" "
95	10431 N	10705 E	0	18			
			18	34	0.7		
			34	44		44	
96	10434 N	10700 E	24	28	0.3	44	
97	10436 N	10695 E	0	7	0.5		
			22	26	0.6		
			28	32	0.5	36	

Hole No.	Co-ordinates		Dust Footage From	To	Radiometric Dust Assay (lbs/ton)	Final Depth	Remarks
98	10438 N	10620 E	0	9			
			9	15	1.35		
			18	25			
			25	36	0.45		
			36	49	0.15	49	
99	10441 N	10686 E	0	93		93	No samples taken.
100	10706N	10302E	0	18	1.1		
			18	28	0.4	43	
101	10713N	10293E	0	35		35	No samples taken.
102	10700N	10273E	0	70		70	No samples taken. Radiometric Log. Weak Anomaly 30'-36'.
103	10694N	10255E	0	64		64	No samples taken. Radiometric log. Weak anomaly 14'-16'.
104	10762N	10336E	0	35		35	No samples taken. Radiometric log. Weak anomaly 16'-18'.
105	10756N	10327E	0	35		35	No samples taken.
106	10750N	10318E	0	27		27	" "
107	10747N	10314E	30	32	0.2	32	Radiometric log. Anomaly 0-10' with max^{m} 1.2 lbs/ton.
108	10744N	10311E	6	10	1.0		
			10	18	0.2	28	Radiometric log. Anomaly 0-10'. Max^{m} 5.2 lbs/ton. Average 2 lbs/ton
109	10741N	10307E	4	10	0.55		
			10	12	2.9		
			12	14	0.8		
			14	18	0.25	35	
110	10736N	10300E	8	12	0.6	35	
111	10727N	10292E	0	25		25	No significant assays.
112			0	17		17	No samples taken.



TO ACCOMPANY REPORT by F.E.HUGHES.

S.A. DEPARTMENT OF MINES

Approved	Passed	Drn.	WILD DOG MINE MYPONGA No 2 LODE SECTION 51DON LOOKING NORTH	D.M.	Scale 10 Ft. to 1 inch
		Tcd.		Rec.	US·288
		Ckd.			
Director		Exd.			Date 10·3·54

10000 E
10100 E
10200 E
10300 E
10400 E
10500 E
10600 E
10700 E
10800 E
10900 E
11000 E
11100 E
11200 E

11000 N
10900 N
10800 N
10700 N
10600 N
10500 N
10400 N
10300 N
10200 N
10100 N
10000 N

LODE No 2
LODE No 1
Road from Lode No 2 to Lode No 1
Covered with Soil
Soil Cover

T.V.

- LEGEND -

Albite - Diopside Gneiss
Biotite - Perthite Gneiss
Orthoclase Gneiss
Sillimanite Garnet Gneiss
Pegmatite
Outcrop areas
Sub-outcrop areas
Scattered Angular Boulders

Radiation Contours (c.p.s. Nalrass Scintillometer Survey)
Strike & Dip of Gneissosity
Trench
Surface Contours (10ft interval) (Arbitary datum 11500N 10800E = 1000')
Wagon Drill Holes
Diamond Drill Holes

S. A. DEPT. OF MINES

WILD DOG PROSPEC

GEOLOGICAL & RADIOMETRIC

(SEC 75 HD MYPONGA)

SCALE : 40 FEET TO 1 INCH

WS-

LODE N° 1

Quartz

Quartz

Covered with Soil Cover

E 00501 E 00601 E 00701 E 00801 E 00901 E 01001 E 01101

DD17 60°

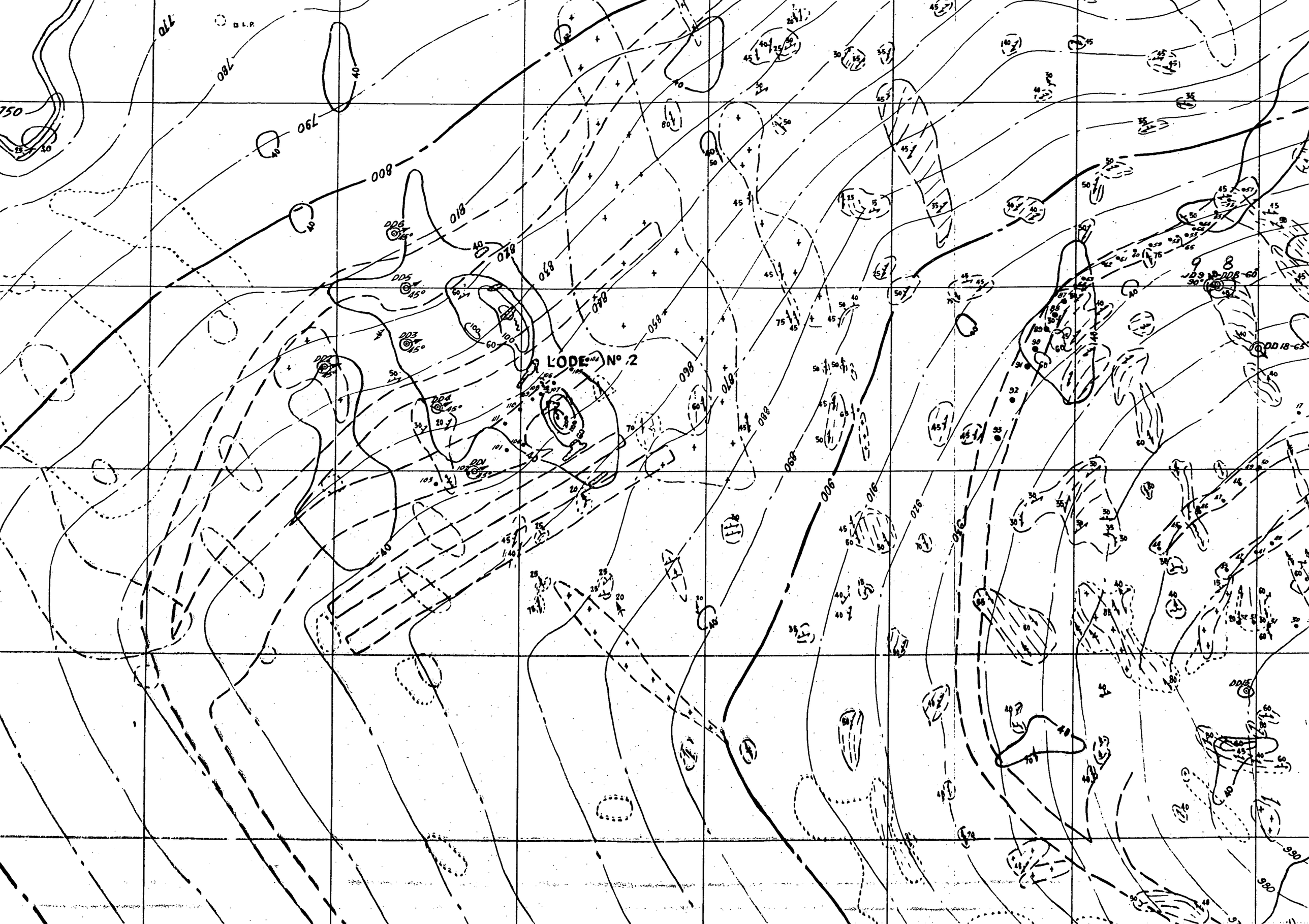
DD9 26°

DD18-65°

DD8-65

DD12 DD11 DD10 DD7 DD2 DD16

880 890 900 910 920 930 940 950 960


L'ODE N° 2
DD6
DD5
DD3
DD2
DD4
DD1
DD9
DD8
DD18-65
DD15
780
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870
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