C.R.A. EXPLORATION PROPRIETARY LIMITED

Ref. No. N.T. 55

SUBJECT: NAMOONA AREA, NORTHERN TERRITORY - SUMMARY AND CONCLUSIONS.

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Namoona Area, Northern Territory

Summary and Conclusions

av 86'

av. 40'

A number of costeans, 16 diamond drill holes (total footage 1,377) and 60 wagon drill holes (total footage 2,352) in the 2½-mile length of lead showings at Namoona did not prove payable quantities of lead ore.

Geochemical sampling in the vicinity of Coirwong Creek, 2 miles northwest of the Namoona prospect, indicated 2 anomalies where high grade lead mineralisation could occur beneath the soil cover. No work has been done on this area apart from two costeans and some wagon drill holes (total footage 466) between the two anomalies.

The lead in the Namoona prospect has been shown to consist of narrow high grade seams of galena and cerussite in siltstones. There do not appear to be any areas of widespread low grade mineralisation.

Prorpecting and detailed mapping of ferruginous gossans of the Brock's Creek type in a 75 square mile area some distance northwest of Namoona did not reveal any base metal mineralisation.

A shaft sunk on the Minglo lead prospect 5 miles west of Namoona indicated an overall grade of not less than 12% lead in a 10 foot wide fault breccia. The mineral is anglesite after galena with some unaltered sulphide. The prospect may be regarded as a good gouger's proposition.

RECOMMENDATIONS

In view of the large amount of drilling and costeaning carried out on the Namoona Prospect and the sporadic nature of the mineralisation, further work in this prospect cannot be recommended.

The geochemical anomalies northwest of Namoona, since they are virtually untested, must be regarded as lead prospects worthy of further investigation. Check geochemical sampling and extraction of lead by an improved technique has confirmed the position and size of the most northwesterly anomaly.

The existing geochemical grid could easily be extended to cover a wider area. Complete testing would involve costeaning, wagon drilling and diamond drilling as was done at the Namoona prospect. However, some valuable knowledge could probably be gained from hand dug pits (these would have to be at least 6 feet deep since a pit sunk on Anomaly A did not strike rock at this depth).

INTRODUCTION

The Namoona lead prospect was discovered by Enterprise Exploration Company prospectors in September 1954. It consists of a few small showings of galena and cerussite in poorly outcropping grey siltstone.

Geological mapping was commenced by B. P. Thomson (1) and bulldozer costeaning and sampling were carried out simultaneously, supervised by H. Brennan. The prospect was eventually drilled by wagon drill and diamond drill.

An Authority to Prospect (A.P. No. 448) of about 525 square miles was obtained over the surrounding country and in the course of prospecting another lead showing was discovered at Minglo, 5 miles southwest of Namoona.

The geological mapping was carried out by B. P. Thomson, W. N. Thomas and G. Sleis. Prospecting was done by H. Brennan, D. Guidicatti, A. H. Connell and some native boys. H. V. Wilkins supervised drilling and carried out some sampling.

A geochemical survey of an area, about 5 miles long by 2 miles wide, was conducted northwest of the Namoona prospect by a Bureau of Mineral Resources team under A. H. Debnam.

To enable further testing of geochemical anomalies a small area of 10 square miles (A.P. No. 658) was obtained for 6 months in 1958. Some check sampling was carried out, but the existing grid was not extended.

LOCATION AND ACCESS

The Namoona area is situated about 40 miles northwest of Pine Creek. (Pine Creek is 157 miles southeast of Darwin, on the Stuart Highway and North Australian Railway). It can be reached by road from Pine Creek via Goodparla Station or from Grove Hill (on the railway 40 miles northwest of Pine Creek) via Mt. Masson.

The road through Goodparla is the better track, in regular use by the United Uranium N. L. as access to the El Sharana Mine. The 20 miles (approx.) from Goodparla to Namoona is negotiable only in dry weather. During the wet season the entire road is liable to be cut off by the Mary River 25 miles from Pine Creek.

The road through Grove Hill is negotiable only in the dry season and is negotiable only by 4-wheel drive vehicle beyond the Mary River Crossing.

GEOLOGY AND MINERALISATION

The rocks in which the mineralisation occurs are siltstones and greywackes of the Masson Formation of the Lower Proterozoic. This formation has been mapped by the B. M. R. as stratigraphically lower than the Golden Dyke Formation, which is the host of the Rum Jungle mineralisation.

The regional trend of the area is northwest and the lead mineralisation, as well as the ferruginous gossans, conforms to this trend.

The extensively outcropping Cullen Granite occurs 3 miles southwest of the Namoona prospect.

Lead mineralisation occurs variously as galena, anglesite and cerussite and can be regarded as primarily lead. There is a little sphalerite and pyrite and the ferruginous Brock's Creek type gossans seen in the northwestern part of the area are probably due to pyrite.

NAMOONA PROSPECT

The Namoona Prospect is impressive by virtue of its length (about 2½ miles) and the great number of lead showings at or near the surface.

The richest mineralisation occurs near the southern end where a 9-foot width (with visible galena) encountered in 100 N costean assays 10% lead. All of the wagon and diamond drilling was concentrated in this part of the prospect, but no significant width of lead mineralisation was encountered on any of the holes. (See plans Nos. X27/460, 461, 462, 463, 464, 465, 467, 468, 470, 471, 473, 474).

Costeaning was carried out at right angles to a main baseline running in a northwesterly direction for 6,200 feet. Another short baseline running in the same direction commenced about 1,700 feet southwest of the southern end of the main baseline. It is 1,000 feet long and has three costeans along it.

In all about 40 costeans were cut, all by bulldozer. The surface showings can therefore be said to have been thoroughly tested.

Assays of all the mineralisation sampled are not available, but the major proportion of the values is shown in the costean and drill plans.

MINGLO PROSPECT

The Minglo Prospect is an interesting galena-anglesite occurrence about 5 miles southwest of Namoona. It has been described by W. N. Thomas (3), who recommended developmental opencutting to enable thorough appraisal of the ore potential.

The ore occurs in a fault breccia, which is about 10 feet wide in the shaft. The shaft was sunk to 27 feet and short cross-cuts into both walls have exposed a 16 foot width of mineralisation (reactions obtained with K 1 test).

The average grade of material excavated from the shaft has been estimated at 25% lead. Since the shaft tested only half the true width of the breccia, the overall grade would therefore be not less than 12%.

Plan No. N. T. 3 shows the surface geology and cross-section of the prospect.

Some radioactivity was located in the vicinity of the lead showing, the most radioactive spots being 140 feet and 150 feet respectively south of the shaft. A sample from one of these assayed approximately 3 lbs./ton U_3O_8.

GEOCHEMICAL ANOMALIES

The geochemical work carried out by A. H. Debnam (B. M. R.) in 1955 indicated two anomalies, on either side of Coirwong Creek. These anomalies, occupying rectangular areas 1,000 feet by 3,200 feet and 1,000 feet by 2,000 feet respectively, were designated A and B by Debnam. (See Plan No. N. T. 58).

Anomaly A occurs where soil cover is deep and the terrain very flat. Debnam considers that there would be a minimum of soil migration and that the mineralisation should occur directly beneath the anomaly.

There is some outcropping lead mineralisation (cerussite) on anomaly B and Debnam has expressed the view that the fourth order anomaly extending to the northwest and southeast may be a surface expression of sililar mineralisation.

G. W. Patterson.

Darwin
February, 1959.

REFERENCES

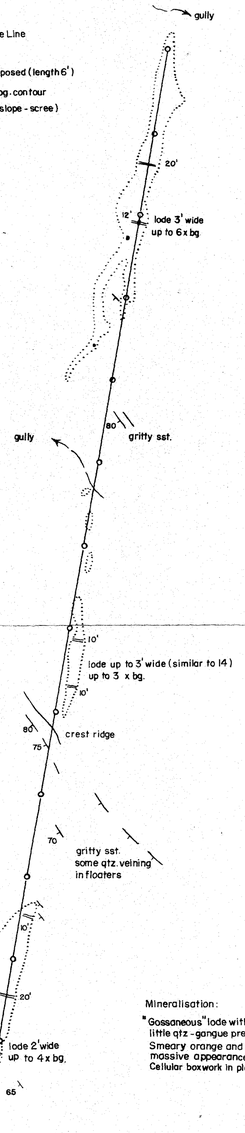
(1) Thomson B. P. (1955) "Notes on Namoona N. T." unpublished A. M. & S. report.

(2) Debnam A. H. (1955) "Preliminary Report on Geochemical Prospecting for Lead at Namoona, N. T." B. M. R. records.

(3) Thomas W. N. (1956) "Report on the Minglo Lead Prospect, Namoona Area, A. P. 448" Unpublished A. M. & S. Report.

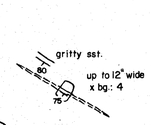
(2.) Scale 1" = 100'

Legend
- Pegs on Base Line
- Pothole
- Costean
- 6' " proposed (length 6')
- Approx. 2 x bg. contour (mainly over slope - scree)



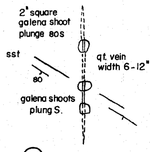
Mineralisation:
"Gossaneous" lode with very little qtz - gangue present. Smeary orange and brown limonite, massive appearance. Negative KI tests. Cellular boxwork in places.

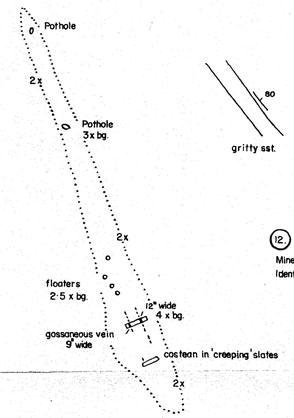
(6.) Scale 1" = 20 feet



Mineralisation: Similar to 2. but positive KI test

(7.) Scale 1" = 20 feet

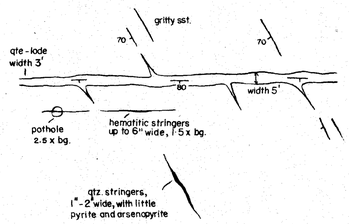


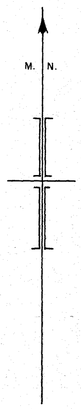


(12.) Scale 1" = 40 feet

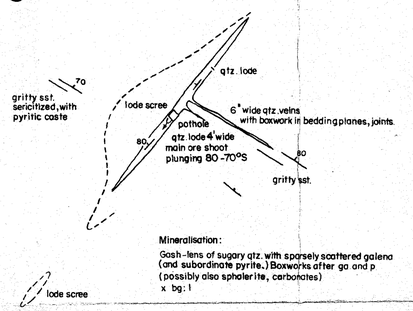
Mineralisation: Identical with 2.

(17.) Scale 1" = 40 feet





(23.) Scale 1" = 40 feet

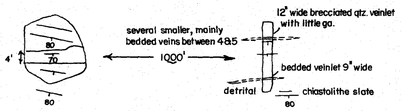


Mineralisation:
Gash - lens of sugary qtz. with sparsely scattered galena (and subordinate pyrite.) Boxworks after ga. and p (possibly also sphalerite, carbonates)
x bg: 1

(4.) Scale 1" = 20'

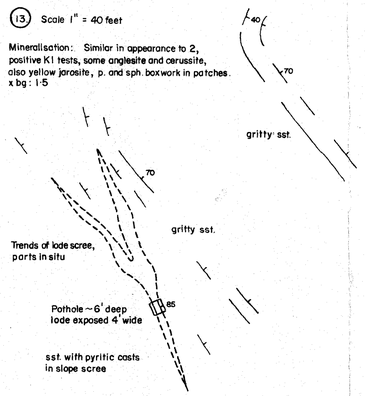
Sugary qtz. lode with little galena approx. length traceable in slope detritus - 100' in carbonaceous chiastolithe slate.

(5.) Scale 1" = 20'



(13.) Scale 1" = 40 feet

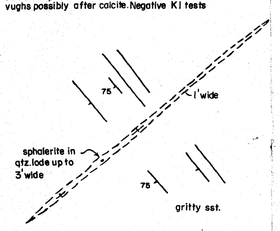
Mineralisation: Similar in appearance to 2, positive KI tests, some anglesite and cerussite, also yellow jarosite, p. and sph. boxwork in patches.
x bg: 1·5



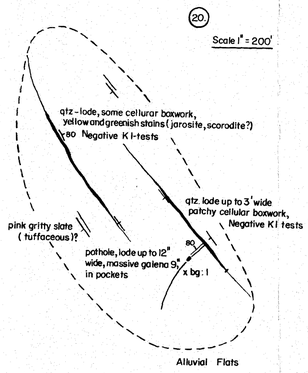
(14.) Scale 1" = 60'

Mineralisation: Vughy qtz. lode, relict sphalerite on surface. Some compact cellular boxwork. Some rhombohedral vughs possibly after calcite. Negative KI tests

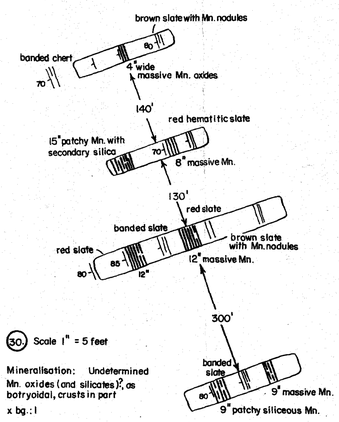
x bg: 1



(20.) Scale 1" = 200'



(30.) Scale 1" = 5 feet



Mineralisation: Undetermined Mn. oxides (and silicates)?, as botryoidal, crusts in part
x bg.: 1

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NAMOONA AREA, N.T.
A - P 448

SKETCH PLANS SHOWING MINERAL OCCURRENCES (REF. PLAN N.T. 10)

Scales	Date	Plan No.
As shown	Dec. 1956	N.T. No. 9.

LOWER CRETACEOUS	Mullaman Group	Klm	Mainly sandstone
UPPER PROTEROZOIC	Mt. Douglas Formation	Pu	Quartz conglomerate and sandstone
	Golden Dyke Formation	Pgd / Fe Mn	Siliceous siltstone and chert. Hematitic breccia and banded iron formation
LOWER PROTEROZOIC	Masson Formation	Plm	Conglomerate, quartz greywacke, sandstone and siltstone
	South Alligator Group		Algal reef dolerite, banded iron formation, chert, quartz greywacke
ARCHEAN			Greenstone agglomerate

IGNEOUS ROCKS

- Granite
- Epidiorite

SYMBOLS

- Fault
- Anticlinal fold (axis)
- Shear zone
- Quartz filled fracture
- Track

MINERALIZATION:-

- 23 Prospect Nos. refer to N.T. 9. or to Report on N.T. 10. Not to scale, showing approx. strike only.
- Positive Kl-test and/or relicts of galena (ga) in outcrop
- Cellular boxwork, sponge etc. after leached sulphides
- 3x ditto, times background count shown

FERRUGINOUS OUTCROPS

- Banded Iron Formation, "iron blows" less than 100' long included
- 38 "Iron blows" more than 100' long, typus localities only numbered
- Mn Oxides of manganese in outcrops

- Portion of A.P. 448 held solely by C.Z.P.
- Portion of A.P. 448 held jointly by C.Z.P. - M.I.M.

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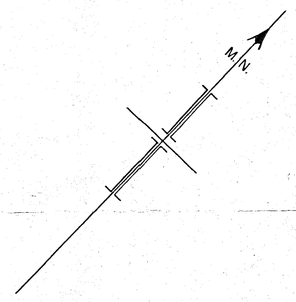
NAMOONA AREA, N.T.
A to P. 448
GEOLOGICAL PLAN

Based on unpublished B.M.R. 1" = 1 Mile field mapping sheets

Scale	Date	Plan No.
1" = 1 Mile	Dec. 1956	N.T. 10



5600N

5500N

5500N.E.A

5400N

5200N

MISSING
20166 - 20171
10-15
5000N
0.3%

5000N

4800N

Base Line

4600N
85
Mn.
80 60 60 Gn. 80 85
4600N
20115 - 20120
0.6%

4400N

4200N
85 85
80 70 60 40 30
Fe.
4200N.A.
20157 - 20159
MISSING
0.3%
20160 - 20165
MISSING
0.2%
30
60
70 50
20
4200N.B.
20146 - 20156
MISSING

Enterprise Exploration Co. Pty. Ltd.

NAMOONA, N.T.

SHOWING COSTEANS AND DRILL HOLES

(NORTHERN SHEET)

Scale		Plan No.
1" = 100'	March. 1955	X27/470

4000N

4000N. A.

4000N.B.

3800N

3800N.

3600E.B

3600N

3600N. E-A

3400E.B.

3400N

3400N. W-A

3400N. W-B

3400N. E-A

3200N

3200N. W-B

3200N. W-A

3200N. E-A

3000N

3000N. W-A

3000N. W-B

3000N. E-A

3000N. E-C

3000N. E-B

W-C

2800N

2600N

2400N

BASE LINE

2200N

2000N

1800N

1600N

1400N

1200N

1000N

1000N. B.

1000N. A

800N.E.

800N W.

800N

600N

600N-W

400N

400N-W

200N

100N

200S

400S

600S

M.N.

Australian Mining and Smelting Co. Ltd.

PLAN

NAMOONA PROSPECT, N.T.

SHOWING COSTEANS AND DRILL HOLES.

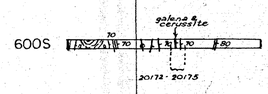
(SOUTHERN SHEET)

Scale		
1" = 100'	B.P. Thomson. Jan. 1955	Plan No. X27/460

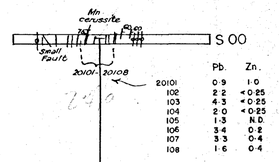
- 21/40 = Waggon Drill Hole No/depth feet
- Galena and lead carbonate
- Claystone with positive K.I. reaction
- 1000x — Geochemical anomaly, times background value
- Lead showing - outcrop or Pb in rubble

Original Base Line

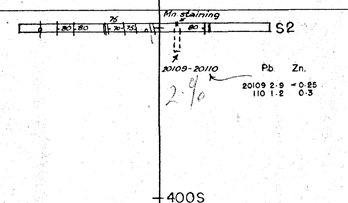
600S



600S

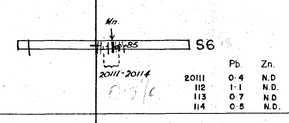


	Pb.	Zn.
20101	0·9	1·0
102	2·2	< 0·25
103	4·3	< 0·25
104	2·0	< 0·25
105	1·3	N.D.
106	3·4	0·2
107	3·3	0·4
108	1·6	0·4



	Pb	Zn.
20109	2·9	< 0·25
110	1·2	0·3

400S



	Pb	Zn.
20111	0·4	N.D.
112	1·1	N.D.
113	0·7	N.D.
114	0·5	N.D.

800S

1000S

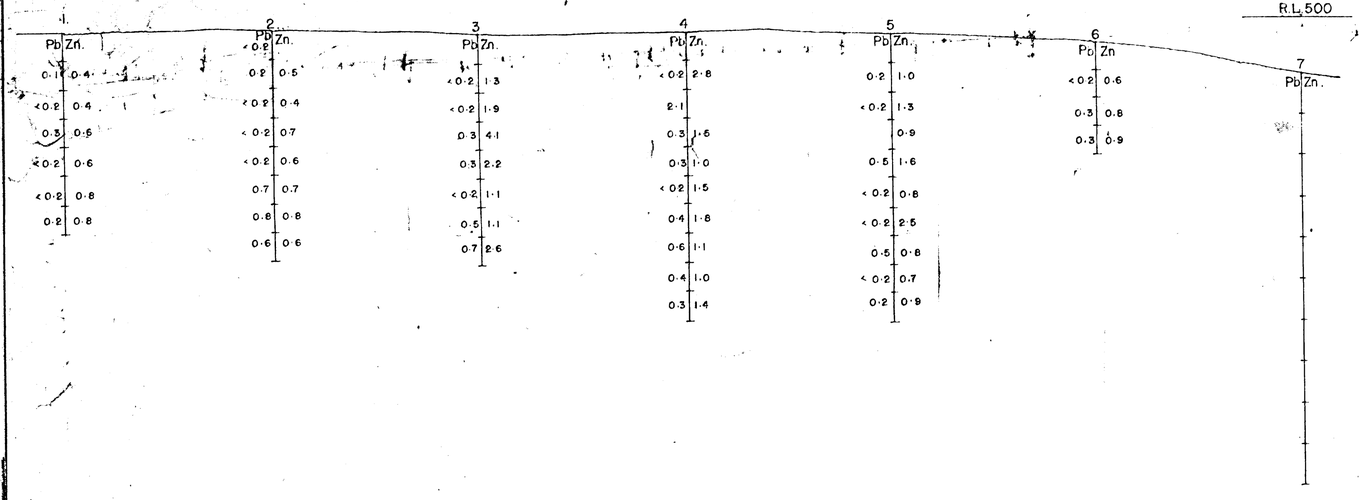
Enterprise Exploration Co. Pty. Ltd.

NAMOONA, N.T.

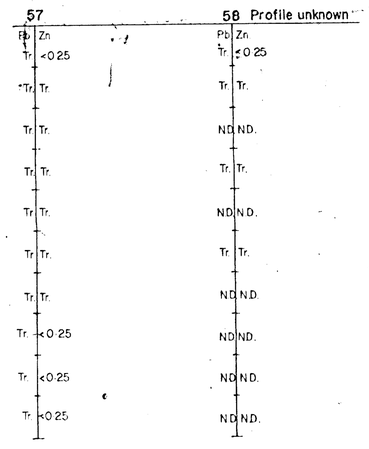
SHOWING COSTEANS & DRILL HOLES
(SOUTH WESTERN SHEET)

Scale		Plan No.
1" = 100'	March 1955	X27/471

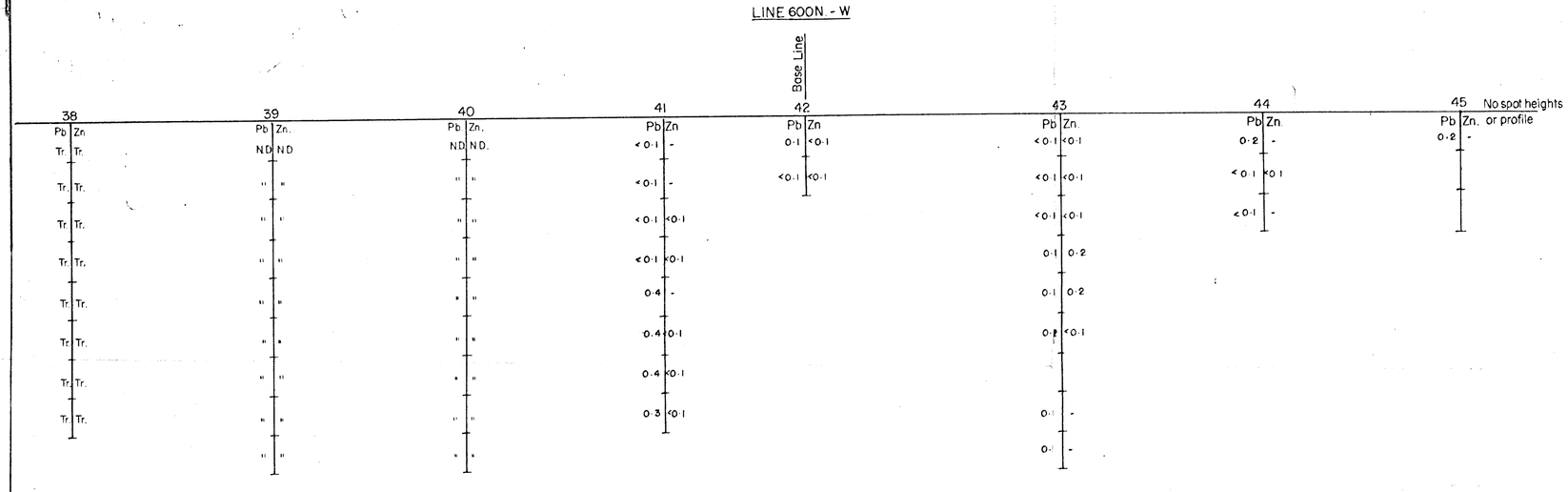
SECTION ALONG BASE LINE



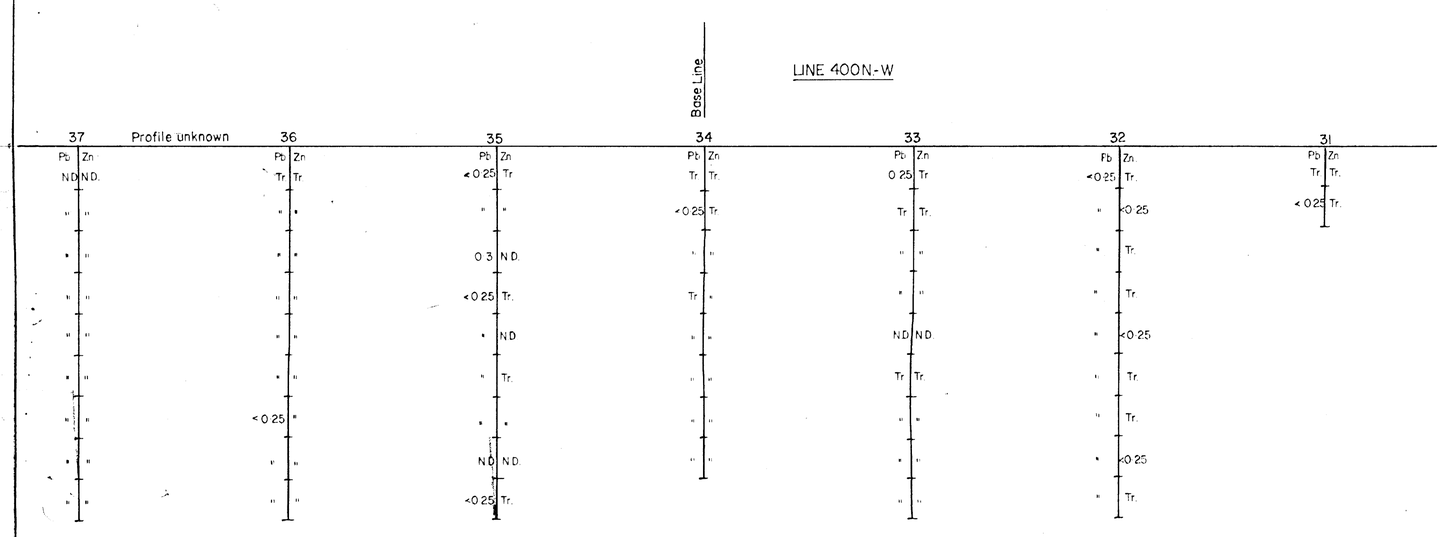
LINE 600 S



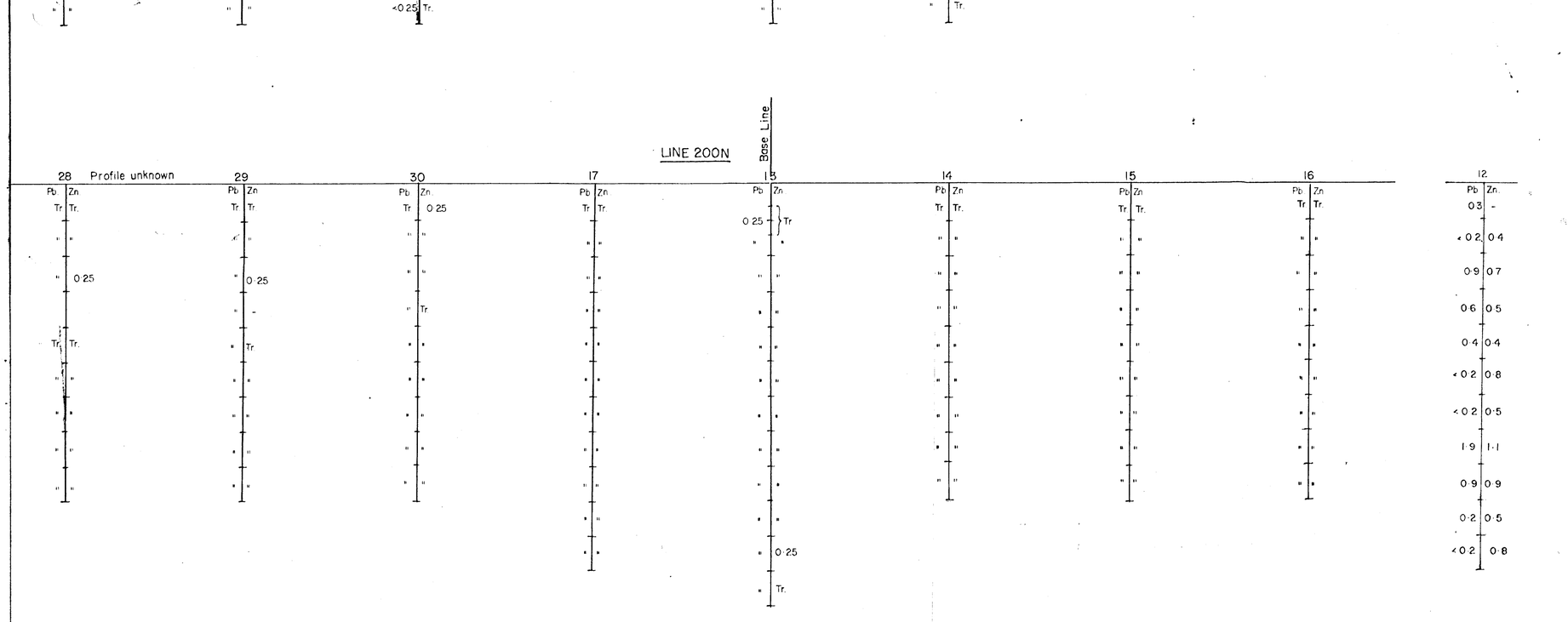
LINE 600N - W



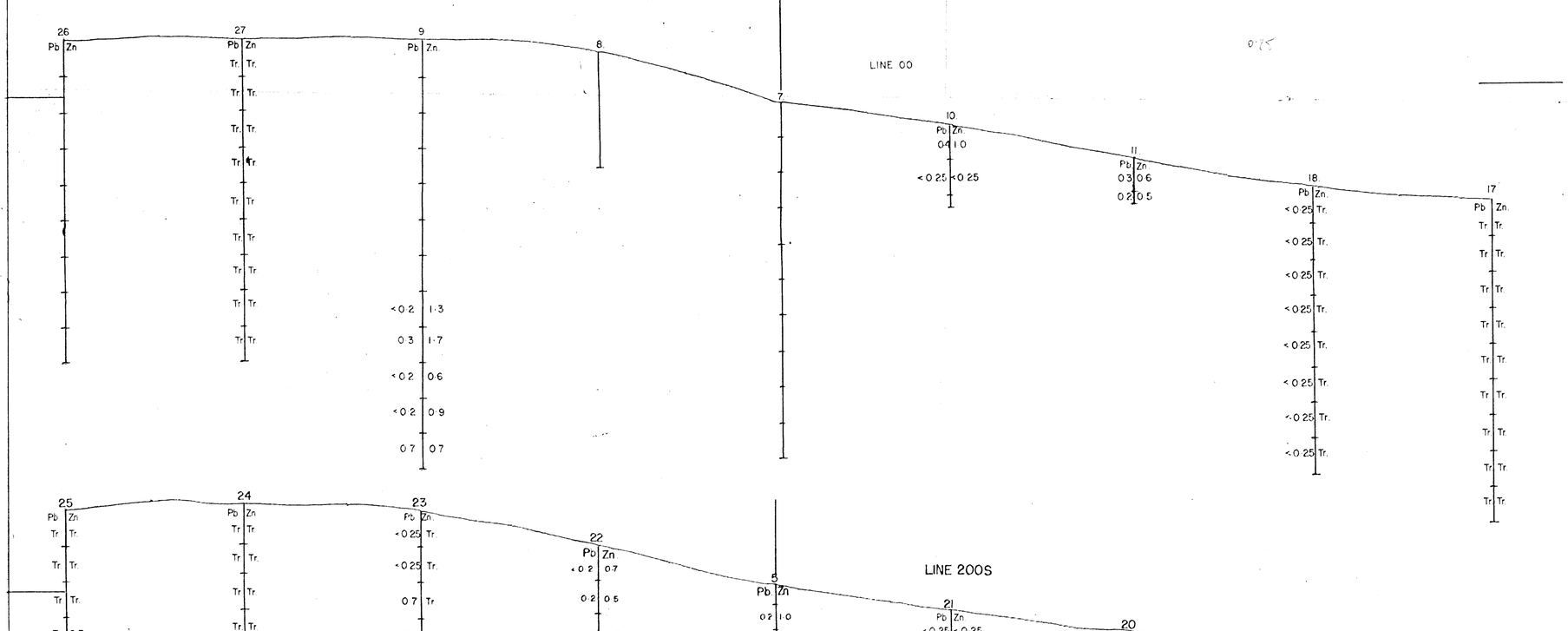
LINE 400N - W



LINE 200N



LINE 00



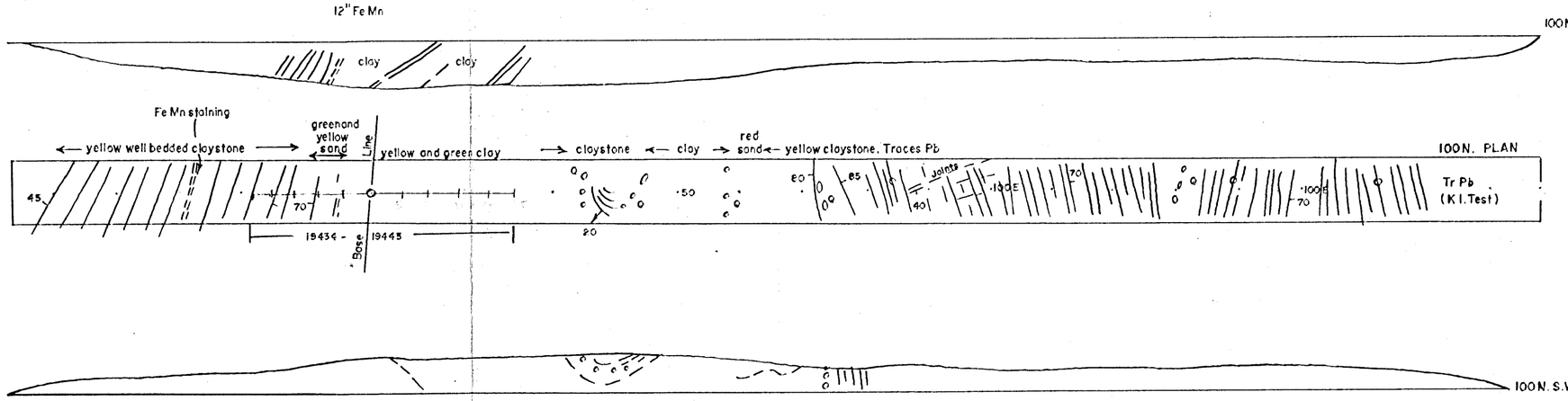
LINE 200S

LINE 400S

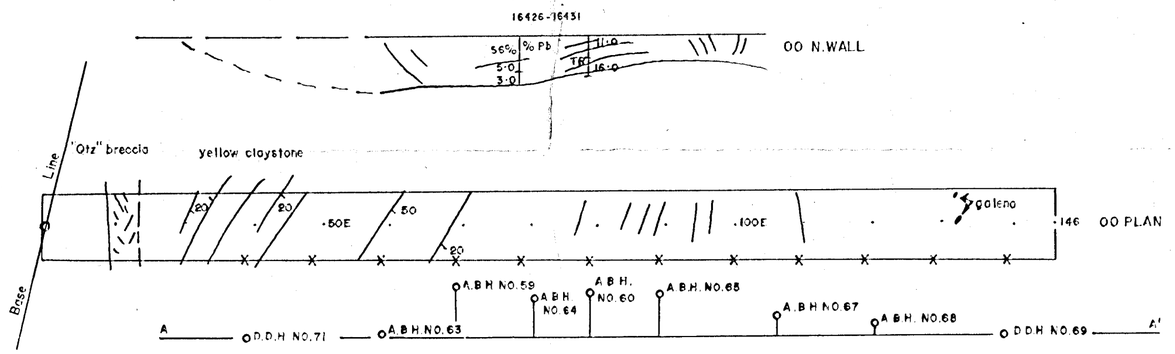
Enterprise Exploration Co. Pty. Ltd

WAGGON DRILL HOLE ASSAYS
NAMOONA PROSPECT, N.T.

Scale Hor. 1" = 40' Vert. 1" = 10'	Feb. 1958	Plan No. X27/467

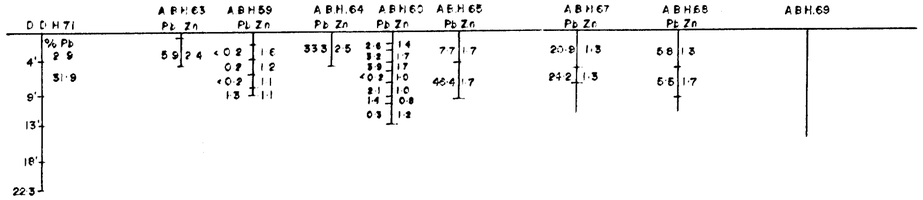


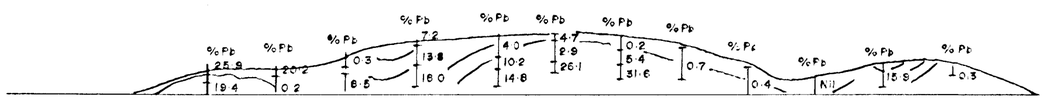
SAMPLE NO.	% Pb	% Zn	
19434	0·6	<0·25	0-5'E
19435	4·0	"	5-9'
19436	7·9	"	9-14'
19437	5·1	0·5	14-19'
19438	2·1	<0·25	19-23'
19439	8·7	"	0-4'W
19440	12·6	"	4-8'
19441	10·4	"	8-11'
19442	1·4		11-15'
19443	1·0		15-19'



A.B.H = Air Blast Hole (Longyear)
D.D.H = Diamond Drill Hole

Drill Profile (Projected to Line A-A')

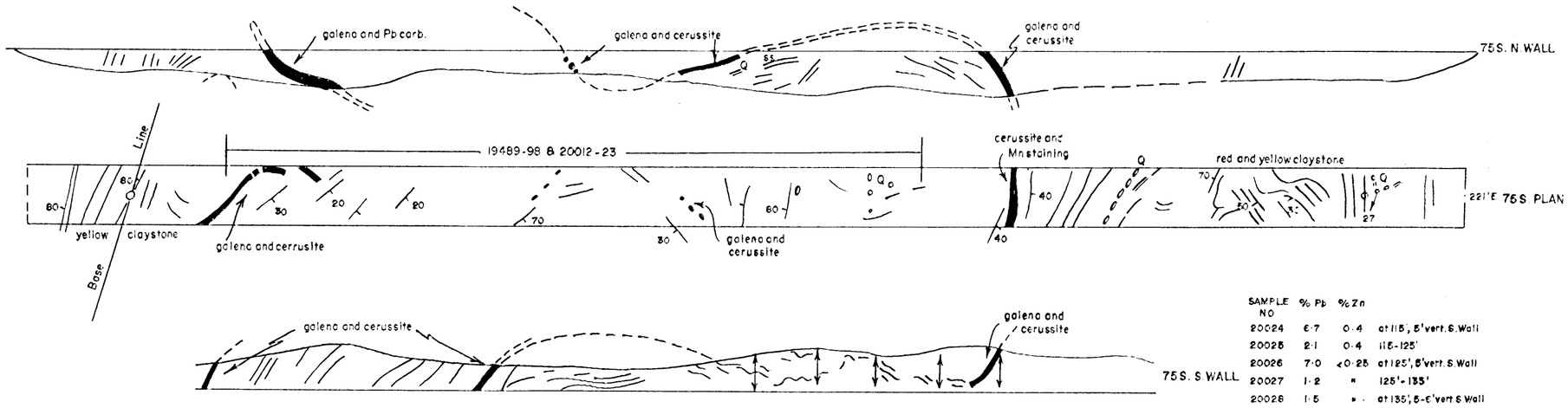




SAMPLE NOS. 16401 - 16425
CHANNEL SAMPLES SHOWING Pb VALUES

75 S

SAMPLE NO.	FOOTAGE	% Pb	% Zn
19489	19-24E	28·1	0·5
19490	24-29	1·2	0·6
19491	29-34	1·8	4·0
19492	34-39	0·2	1·4
19493	39-44	0·4	0·4
19494	44-49	0·9	0·8
20012	49-54	0·9	0·5
20013	54-59	0·6	<0·25
20014	59-64	0·6	0·4
20015	64-69	3·3	<0·25
20016	69-74	1·0	"
20017	74-78	1·4	"
20018	79-84	0·9	0·4
20019	84-89	1·0	1·3
20020	89-94	6·5	<0·25
20021	94-99	8·2	"
20022	99-105	2·0	0·5
20023	105-115	2·3	<0·25
19495	100-105	2·6	0·6
19496	105-110	1·0	<0·25
19497	110-120	2·8	"
19498	120-130	1·8	"



SAMPLE NO	% Pb	% Zn	
20024	6·7	0·4	at 115', 5' vert. S. Wall
20025	2·1	0·4	115-125'
20026	7·0	<0·25	at 125', 5' vert. S. Wall
20027	1·2	"	125'-135'
20028	1·5	"	at 135', 5-6' vert S Wall
20029	1·1	"	135-145'
20030	1·0	"	at 145', 3' vert. S Wall
20031	10·2	"	3-6' " "
20032	9·5	0·4	145'-150'
20033	0·5	0·25	150'-155'
20034	33·3		at 105', 0·3' vert. S Wall
20035	4·1	0·4	" 3-6' " "

Enterprise Exploration Co. Pty. Ltd.

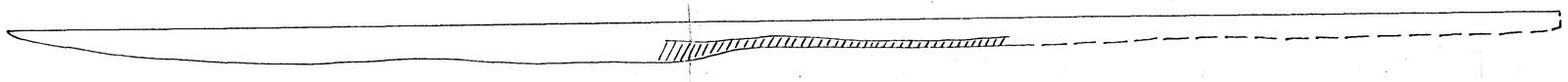
NAMOONA PROSPECT, N.T.

COSTEAN MAPPING AND SAMPLING DETAIL

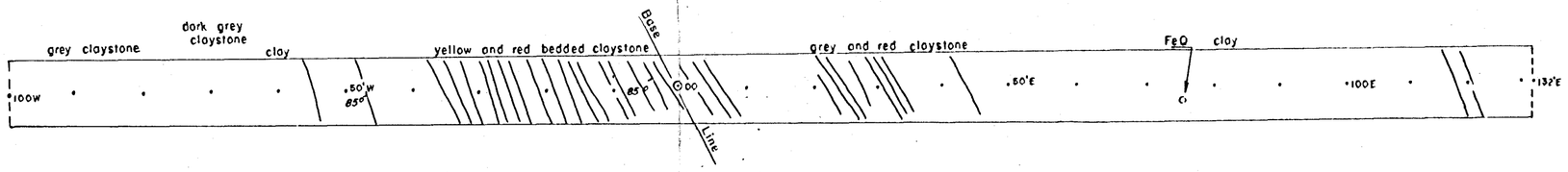
(SHEET I.)

Scale	B. P. Thomson	Plan No.
1" = 16'	Jan. 1955	X 27/461

2600N. N.Wall

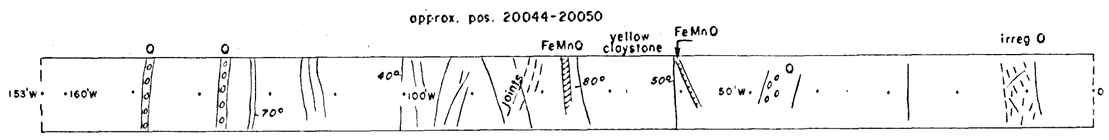


2600N.



600N. N.Wall

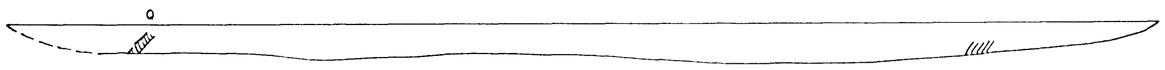
600N-W



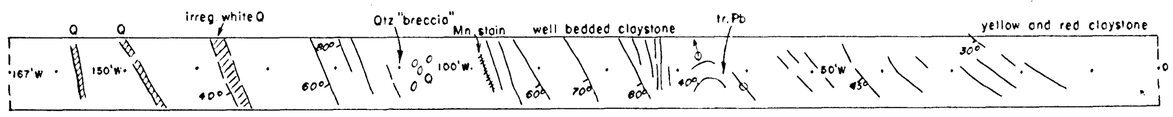
ASSAY VALUES 600N-W

SAMPLE N°	% Pb	% Zn
20044	0·4	ND
20045	0·7	ND
20046	0·4	ND
20047	0·8	ND
20048	0·7	ND
20049	0·8	ND
20050	0·3	ND

400N. N.Wall



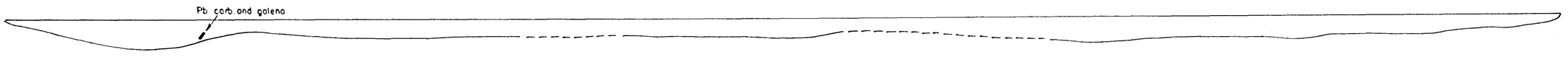
400 N-W



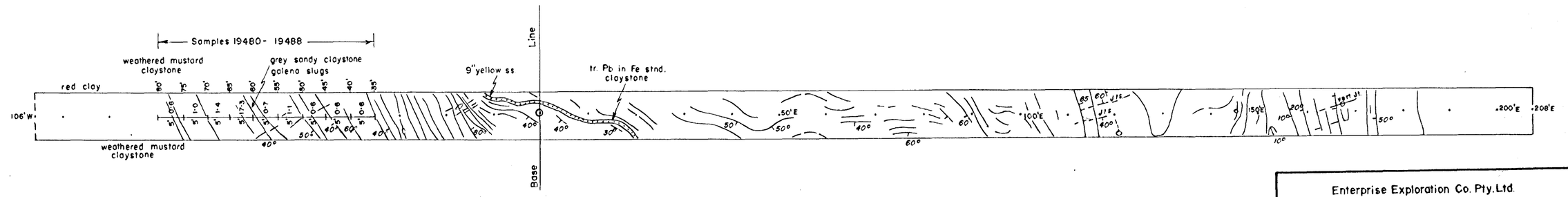
ASSAY VALUES 400N-W

SAMPLE N°	% Pb	% Zn
20036	0·3	ND
20037	0·3	ND
20038	0·4	ND
20039	0·5	ND
20040	0·2	ND
20041	0·25	ND
20042	0·7	ND

200N. N.Wall



200N



ASSAY VALUES 200 N

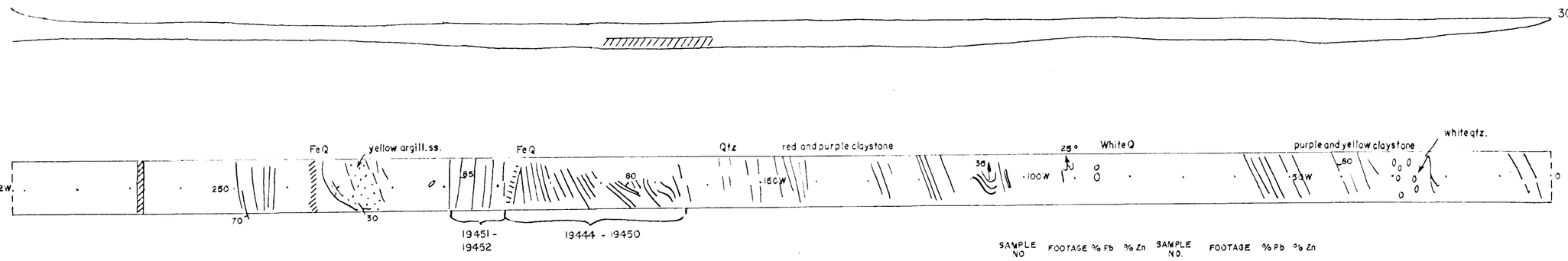
SAMPLE N°	% Pb	% Zn	FOOTAGE
19480	0·6	ND	W 35'-40'
19481	0·6	ND	40-45
19482	0·6	ND	45-50
19483	1·1	ND	50-55
19484	0·7	ND	55-60
19485	17·3	< 0·25	60-65
19486	1·4	< 0·25	65-70
19487	1·0	< 0·25	70-75
19488	0·6	< 0·25	75-80

Enterprise Exploration Co. Pty. Ltd.

NAMOONA PROSPECT, N.T.

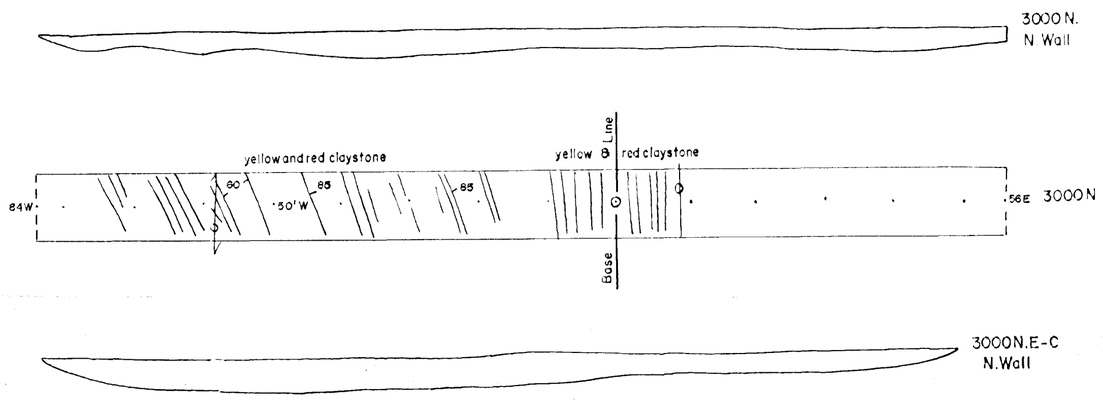
COSTEAN MAPPING & SAMPLING DETAIL (SHEET 2)

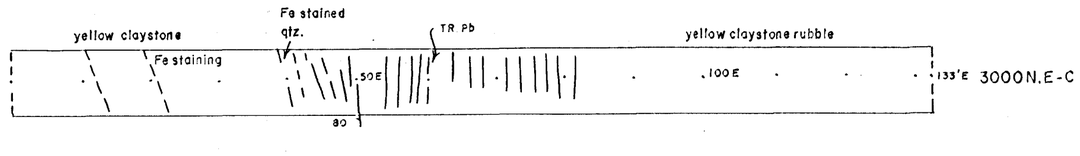
Scale 1" = 16'	B.P. Thomson Jan. 1955	Plan No. X 27/464

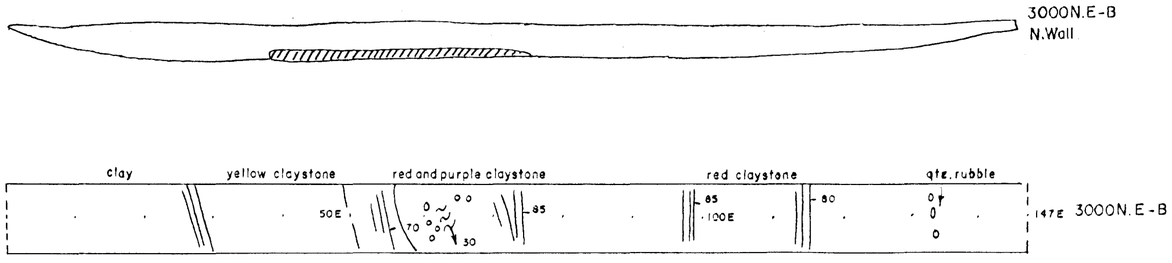


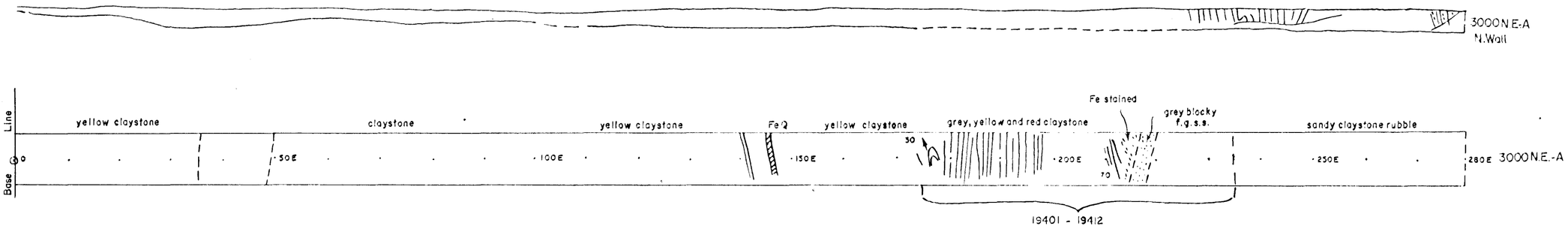
SAMPLE NO	FOOTAGE	% Pb	% Zn
19451	193-204W	0·8	<0·25
19452	204-209	0·6	"

SAMPLE NO.	FOOTAGE	% Pb	% Zn
19444	164-169W	<0·25	<0·25
19445	169-174	1·0	"
19446	174-179	0·7	"
19447	179-184	0·8	0·3
19448	184-189	1·0	N.D.
19449	189-194	0·9	<0·25
19450	194-199	8·1	"









SAMPLE NO.	FOOTAGE	% Pb	% Zn
19401	175 - 180	–	–
19402	180 - 185	5·0	N.D.
19403	185 - 190	0·8	"
19404	190 - 195	0·5	"
19405	195 - 200	0·5	"
19406	200 - 205	0·5	"
19407	205 - 210	0·8	"
19408	210 - 215	1·6	"
19409	215 - 220	1·2	"
19410	220 - 225	0·5	"
19411	225 - 230	5·1	<0·25
19412	230 - 235	1·4	N.D.

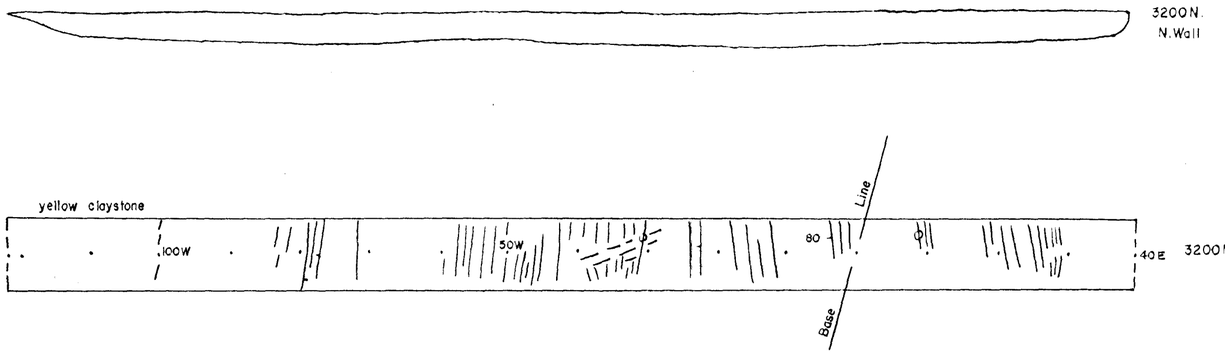
Enterprise Exploration Co. Pty. Ltd.

NAMOONA PROSPECT, N.T.

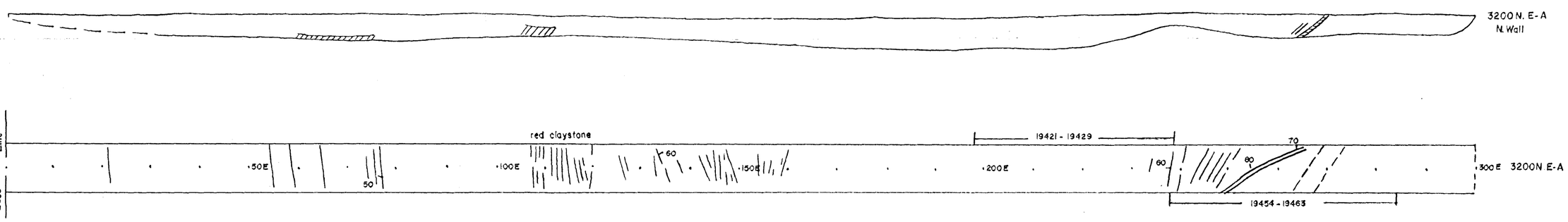
COSTEAN MAPPING AND SAMPLING DETAIL

(SHEET 3)

Scale	B. P. Thomson	Plan No.
1" = 16'	Jan. 1955	X 27/462

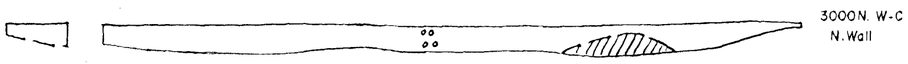


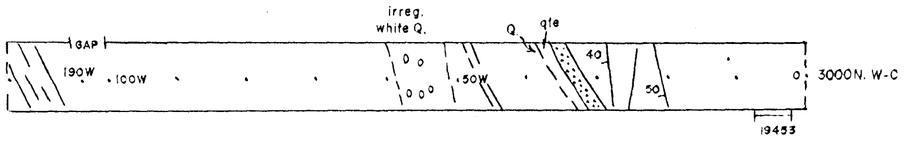
SAMPLE NO.	% Pb	% Zn
19417	<0.25	N.D.
19418	0.3	"
19419	<0.25	"
19420	0.4	"



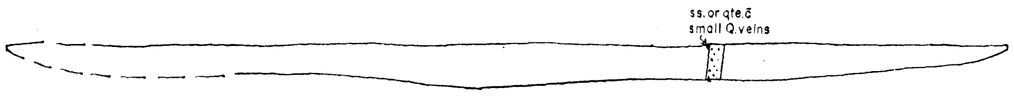
SAMPLE NO.	% Pb	% Zn
19421	0.5	<0.25
19422	0.7	0.3
19423	0.8	<0.25
19424	0.9	0.5
19425	1.7	<0.25
19426	1.1	0.8
19427	3.9	0.6
19428	1.0	<0.25
19429	10.7	<0.25

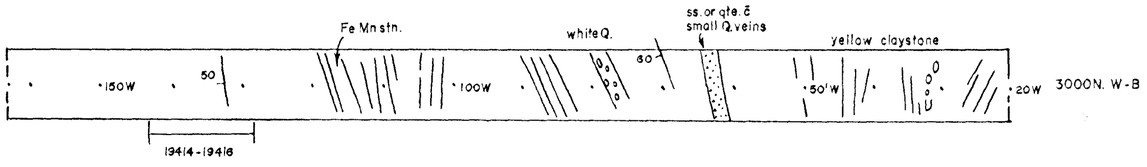
SAMPLE NO.	% Pb	% Zn
19454	0.6	N.D.
19455	0.5	N.D.
19456	<0.25	N.D.
19457	"	"
19458	0.6	"
19459	0.4	"
19460	5.3	0.2
19461	3.0	0.3
19462	2.7	0.3
19463	0.6	<0.25





SAMPLE NO.	% Pb	% Zn
19453	1.5	0.8





SAMPLE NO.	% Pb	% Zn
19414	<0.25	<0.25
19415	N.D.	<0.25
19416	2.3	1.0

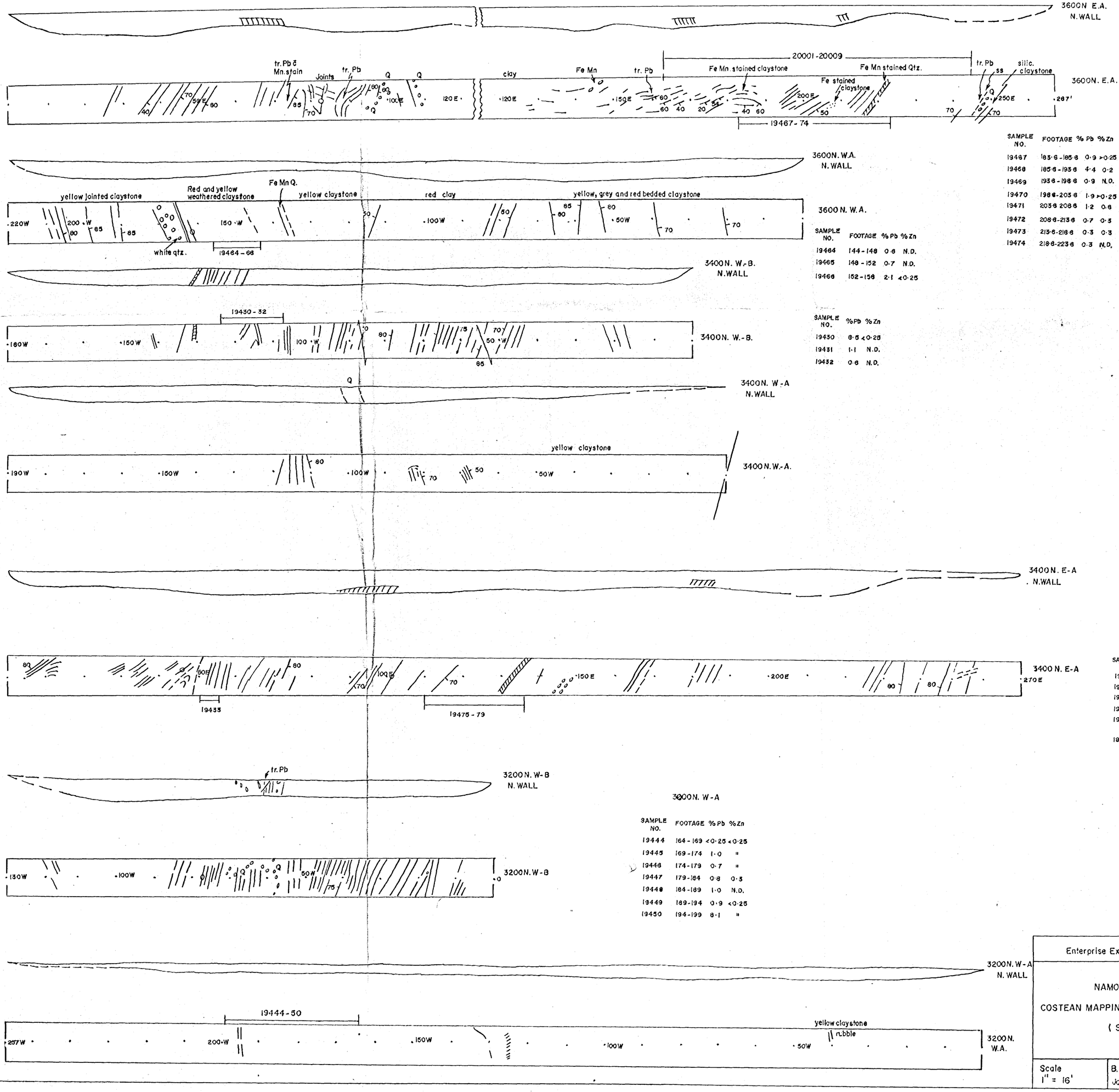
Enterprise Exploration Co. Pty. Ltd.

NAMOONA PROSPECT, N.T.

COSTEAN MAPPING AND SAMPLING DETAIL

(SHEET 4)

Scale	B. P. Thomson	Plan No.
1" = 16'	Jan. 1955	X27/463



SAMPLE NO.	FOOTAGE	% Pb	% Zn
19464	144 - 148	0.6	N.D.
19465	148 - 152	0.7	N.D.
19466	152 - 156	2.1	<0.25

SAMPLE NO.	FOOTAGE	% Pb	% Zn
19467	183.6 - 185.6	0.9	>0.25
19468	185.6 - 193.6	4.4	0.2
19469	193.6 - 198.6	0.9	N.D.
19470	198.6 - 203.6	1.9	>0.25
19471	203.6 208.6	1.2	0.8
19472	208.6 - 213.6	0.7	0.3
19473	213.6 - 218.6	0.3	0.3
19474	218.6 - 223.6	0.3	N.D.

SAMPLE NO.	% Pb	% Zn
20001	3.7	0.6
20002	1.1	0.4
20003	2.7	0.3
20004	3.6	Tr.
20005	4.6	Tr.
20006	2.2	Tr.
20007	1.2	Tr.
20008	1.2	0.5
20009	8.0	0.4

SAMPLE NO.	% Pb	% Zn
19430	8.6	<0.25
19431	1.1	N.D.
19432	0.6	N.D.

SAMPLE NO.	% Pb	% Zn
19475	0.3	N.D.
19476	0.7	N.D.
19477	0.3	N.D.
19478	0.5	<0.25
19479	1.0	"
19433	<0.25	N.D.

3200N. W-A

SAMPLE NO.	FOOTAGE	% Pb	% Zn
19444	164 - 169	<0.25	<0.25
19445	169 - 174	1.0	"
19446	174 - 179	0.7	"
19447	179 - 184	0.8	0.3
19448	184 - 189	1.0	N.D.
19449	189 - 194	0.9	<0.25
19450	194 - 199	8.1	"

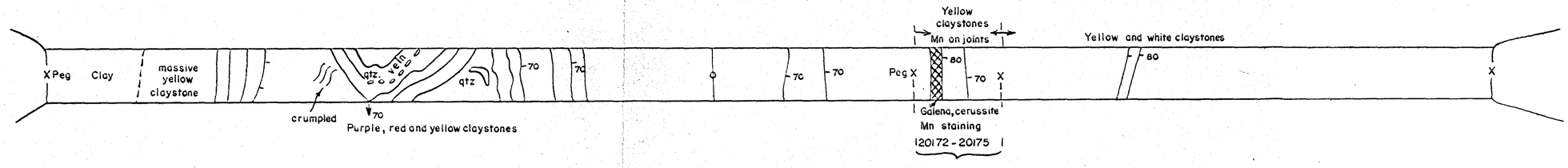
Enterprise Exploration Company Pty. Ltd.

NAMOONA PROSPECT, N.T.

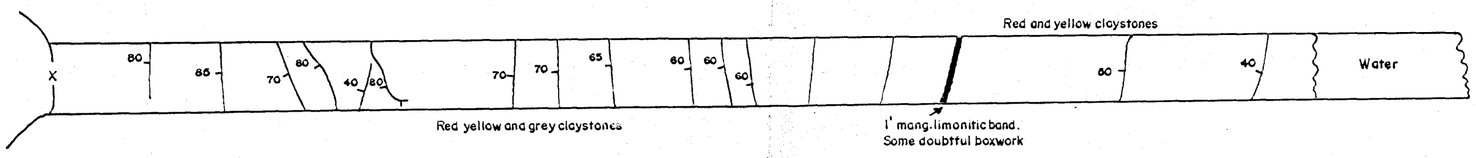
COSTEAN MAPPING AND SAMPLING DETAIL

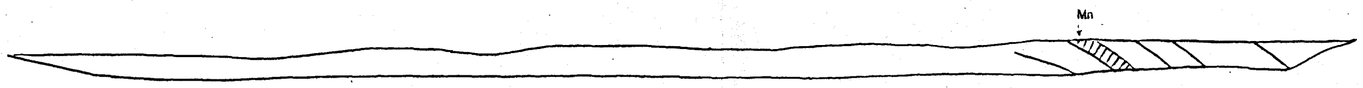
(SHEET 5)

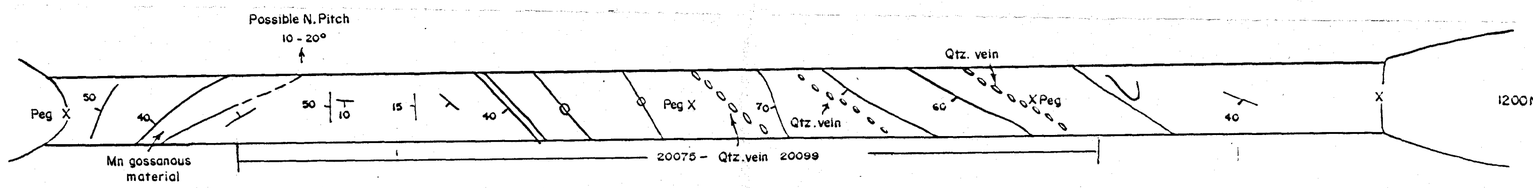
Scale	B. P. Thomson	Plan No.
1" = 16'	Jan. 1955	X 27/465



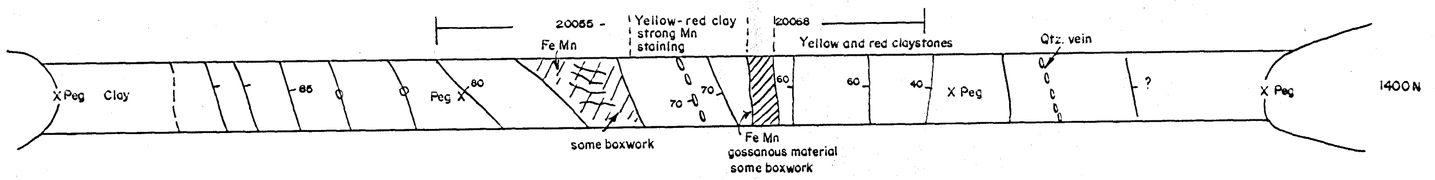
SAMPLE NO.	LENGTH	% Pb	%Zn
20172	91' - 96'	3·8	TR.
20173	96'- 102'	TR.	N.D.
20174	102'- 104'	12·3	TR.
20175	104' - 107'	26·0	N.D.



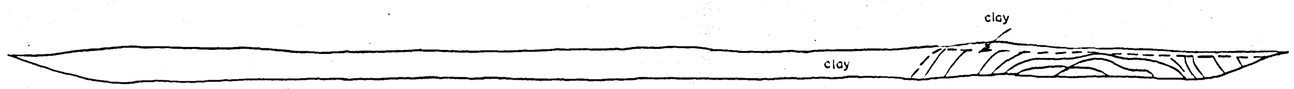


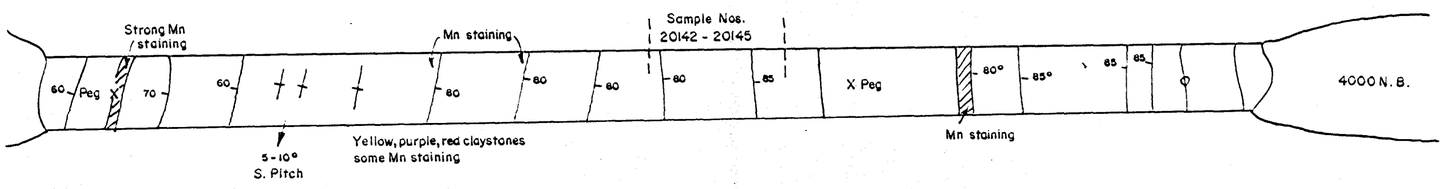


SAMPLE NO.	FOOTAGE	% Pb	% Zn
20075	47 - 52	0·3	<0·25
20076	52 - 57	0·4	"
20077	57 - 62	0·3	"
20078	62 - 67	0·4	"
20079	67 - 72	0·2	"
20080	72 - 77	0·3	"
20081	77 - 82	0·2	"
20082	82 - 87	0·3	"
20083	87 - 92	0·4	"
20084	92 - 97	0·3	"
20085	97 - 102	0·5	"
20086	102 - 107	0·3	"
20087	107 - 112	0·5	"
20088	112 - 117	0·5	<0·25
20089	117 - 122	2·2	"
20090	122 - 127	3·6	1·0
20091	127 - 132	0·9	<0·25
20092	132 - 137	0·8	0·4
20093	137 - 142	0·5	<0·25
20094	142 - 147	0·4	"
20095	147 - 152	0·3	0·25
20096	152 - 157	0·3	<0·25
20097	157 - 162	0·4	"
20098	162 - 167	0·3	0·3
20099	167 - 172	0·3	<0·25

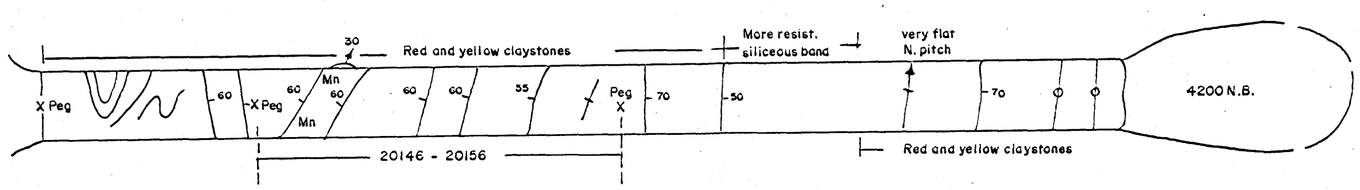


SAMPLE NO.	FOOTAGE	% Pb	%Zn
20055	90 - 95	0·4	N.D.
20056	95 - 100	0·3	"
20057	100 - 105	<0·25	"
20058	105 - 110	"	"
20059	110 - 115	0·5	"
20060	115 - 120	23·7	<0·25
20061	120 - 125	0·5	N.D.
20062	125 - 130	0·3	<0·25
20063	130 - 135	<0·25	N.D.
20064	135 - 140	2·4	0·4
20065	140 - 145	1·3	<0·25
20066	145 - 150	<0·25	N.D.
20067	150 - 155	"	<0·25
20068	155 - 161	"	"





SAMPLE NO.	FOOTAGE	% Pb	%Zn
20142	78 - 83	< 0·25	< 0·25
20143	83 - 88	"	"
20144	88 - 93	"	"
20145	93 - 98	"	0·25



SAMPLE NO.	FOOTAGE	% Pb	%Zn
20146	31 - 36	0·5	N.D.
20147	36 - 41	<0·25	"
20148	41 - 46	"	"
20149	46 - 51	"	"
20150	51 - 56	"	<0·25
20151	56 - 61	"	"
20152	61 - 66	0·5	0·5
20153	66 - 71	<0·25	<0·25
20154	71 - 76	"	"
20155	76 - 81	0·3	"
20156	81 - 86	<0·25	"

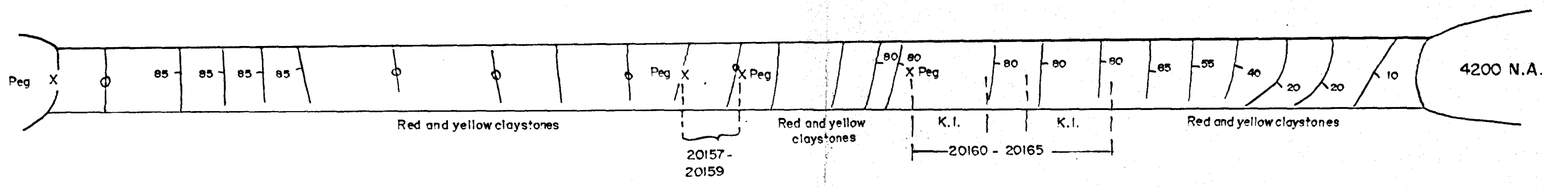
C.R.A. Exploration Pty. Limited

NAMOONA PROSPECT, N.T.

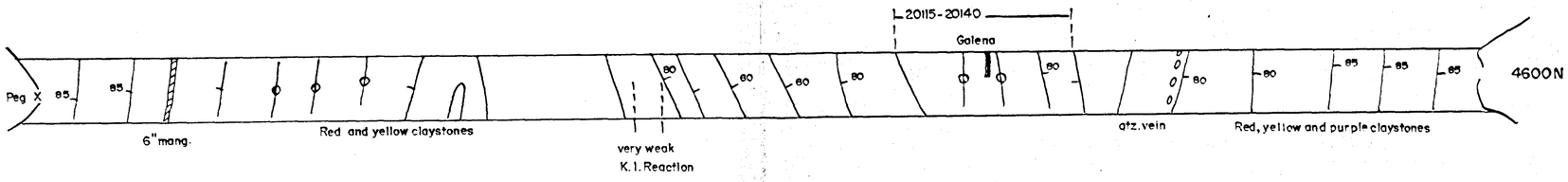
COSTEAN MAPPING AND SAMPLING DETAIL

(SHEET 6.)

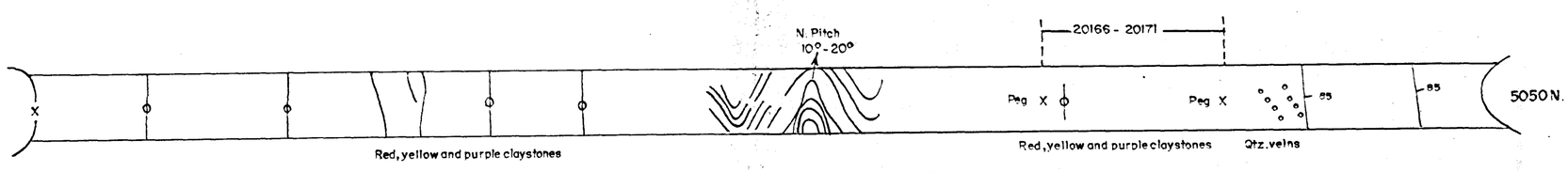
Scale		Plan No.
1" = 16'	P.R. Miller March 1955	X 27/473



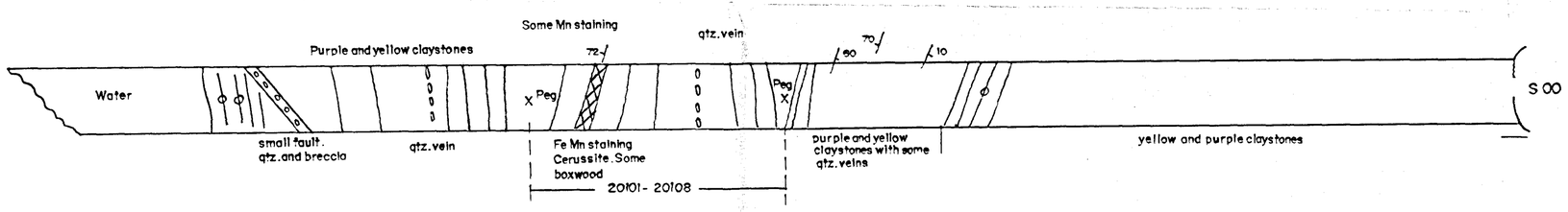
SAMPLE NO.	FOOTAGE	% Pb	% Zn
20157	90 - 95	0.9	N.D
20158	95 - 100	< 0.25	N.D.
20159	100 - 105	< 0.25	N.D.
20160	125 - 130	< 0.25	N.D.
20161	130 - 135	< 0.25	"
20162	135 - 140	"	"
20163	140 - 145	"	"
20164	145 - 150	"	"
20165	150 - 155	"	"



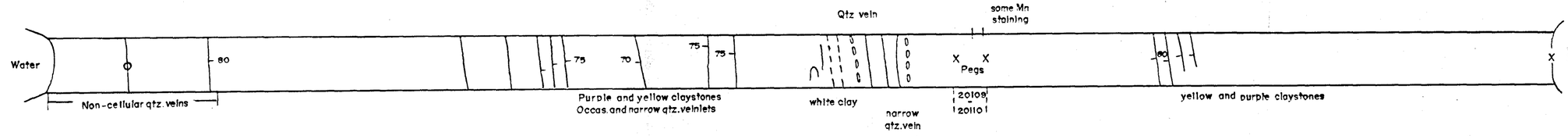
SAMPLE NO.	FOOTAGE	% Pb	% Zn	SAMPLE NO.	FOOTAGE	% Pb	% Zn	SAMPLE NO.	FOOTAGE	% Pb	% Zn.
20115	60 - 65	0.3	< 0.25	20123	100 - 105	0.2	N.D.	20132	145 - 150	0.5	N.D.
20116	65 - 70	0.2	"	20124	105 - 110	0.2	N.D.	20133	150 - 155	0.2	N.D.
20117	70 - 75	0.3	"	20125	110 - 115	0.2	< 0.25	20134	155 - 160	0.2	N.D.
20118	75 - 80	0.3	N.D.	20126	115 - 120	0.3	N.D.	20135	160 - 165	0.2	N.D.
20119	80 - 85	2.7	< 0.25	20127	120 - 125	0.4	N.D.	20136	165 - 170	0.3	< 0.25
20120	85 - 90	0.4	N.D.	20128	125 - 130	0.3	< 0.25	20137	170 - 175	0.2	< 0.25
20121	90 - 95	0.7	N.D.	20129	130 - 135	0.5	"	20138	175 - 180	0.3	N.D.
20122	95 - 100	0.8	< 0.25	20130	135 - 140	4.5	N.D.	20139	180 - 185	0.2	N.D.
				20131	140 - 145	0.5	N.D.	20140	185 - 191	0.2	N.D.



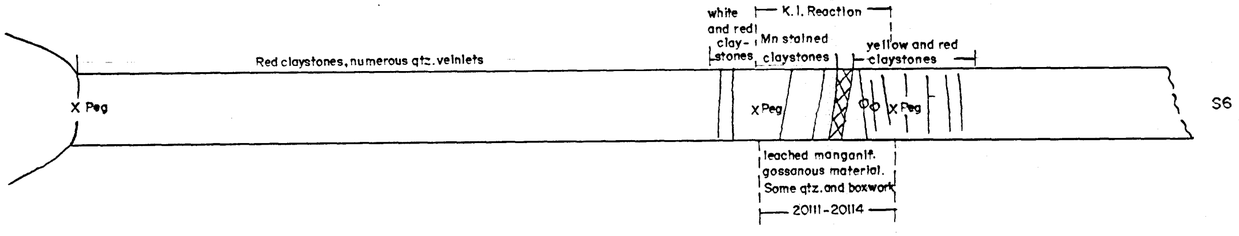
SAMPLE NO.	FOOTAGE	% Pb	% Zn
20166	156 - 161	0.25	N.D.
20167	161 - 166	0.7	"
20168	166 - 171	0.25	"
20169	171 - 176	"	"
20170	176 - 181	"	"
20171	181 - 186	0.4	



SAMPLE NO.	FOOTAGE	% Pb	% Zn
20101	15 - 20 E	0.9	1.0
20102	10 - 15 E	2.2	< 0.25
20103	5 - 10 E	4.3	"
20104	0 - 5 E	2.0	"
20105	0 - 5 W	1.3	N.D.
20106	5 - 10 W	3.4	0.2
20107	10 - 15 W	3.3	0.4
20108	15 - 18 W	1.6	0.4



SAMPLE NO.	FOOTAGE	% Pb	% Zn
20109	18 - 22 E	2.9	< 0.25
20110	22 - 26 E	1.2	0.3



SAMPLE NO.	FOOTAGE	% Pb	% Zn
20111	33 - 38 E	0.4	N.D.
20112	28 - 33 E	1.1	N.D.
20113	23 - 28 E	0.7	N.D.
20114	18 - 23 E	0.5	N.D.

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NAMOONA PROSPECT, N.T.

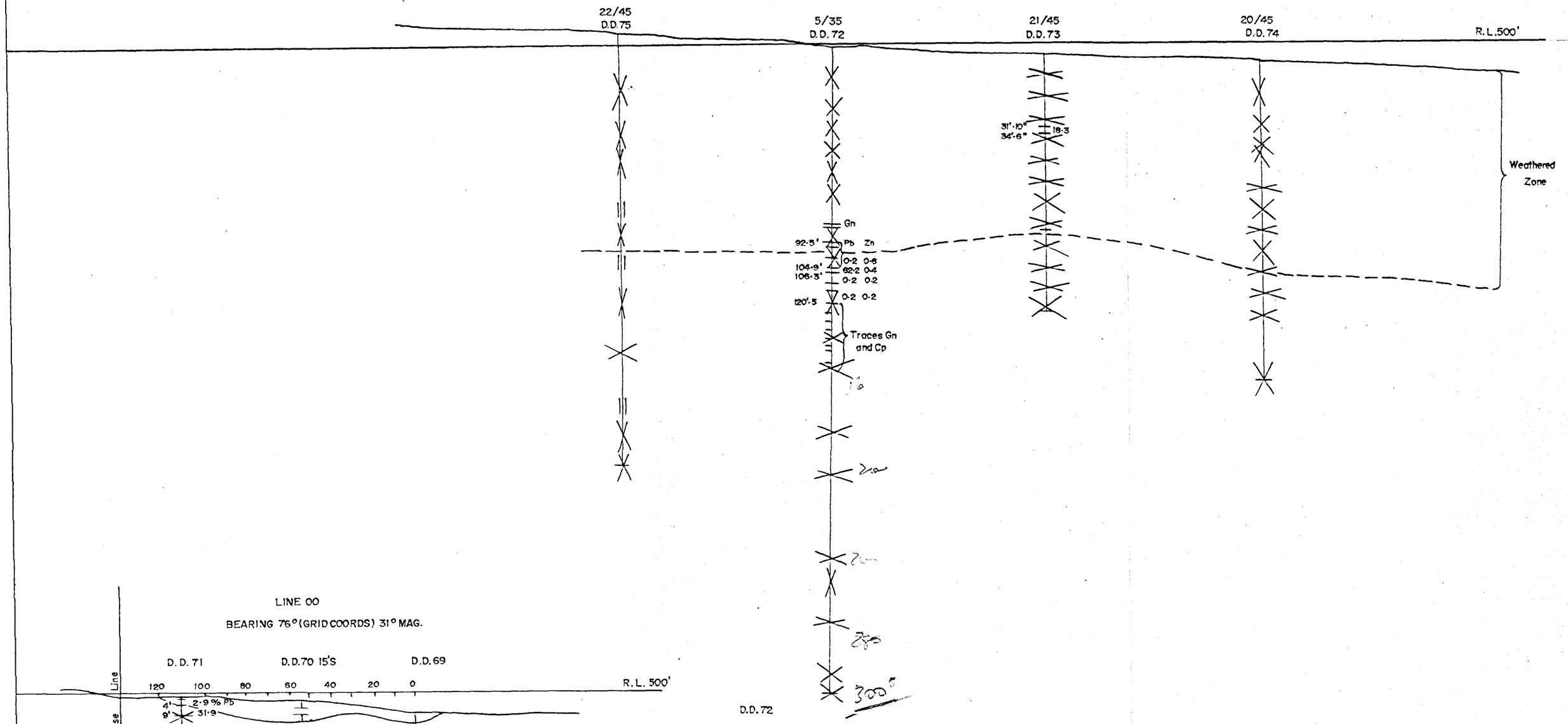
COSTEAN MAPPING & SAMPLING DETAIL

(SHEET 7.)

Scale	Date	Plan No.
1" = 16'	Mar. 1955	X 27/474

LINE 200 S

BEARING 90° (GRID COORDS.) OR 45° MAG.



LINE 00

BEARING 76° (GRID COORDS) 31° MAG.

D.D. 72

SAMPLE NO.	FOOTAGE	% Pb	% Zn
20176	99 - 104	2·2	0.6
20177	122 - 125	0·3	0·9
20178	125 - 129	< 0·25	< 0·25
20179	129 - 133	"	"
20180	133 - 137	0·5	1·5
20181	137 - 141	< 0·25	0·8
20182	141 - 143·3	0·3	3·0
20183	106 - 109·3	1·4	0·5
20184	109·3 - 113	0·4	0·4
20185	113 - 116·6	< 0·25	< 0·25
20186	116·6 - 119·6	"	"
20187	143·6 - 149·6	0·4	2·6

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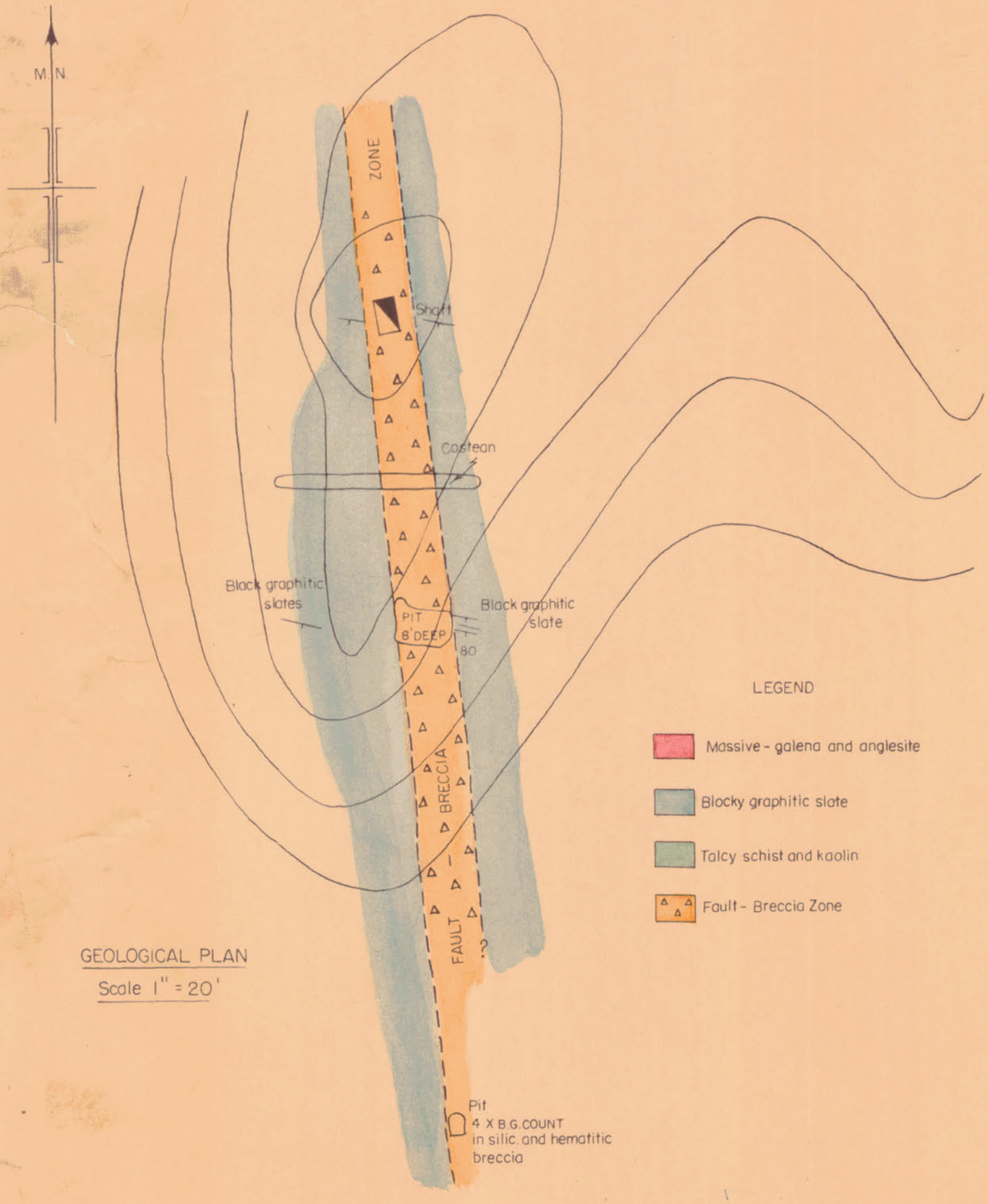
CROSS SECTIONS

NAMOONA PROSPECT, N.T.

Scale	P. R. Miller	Plan No.
1" = 40'	Feb. 1955	X 27/468

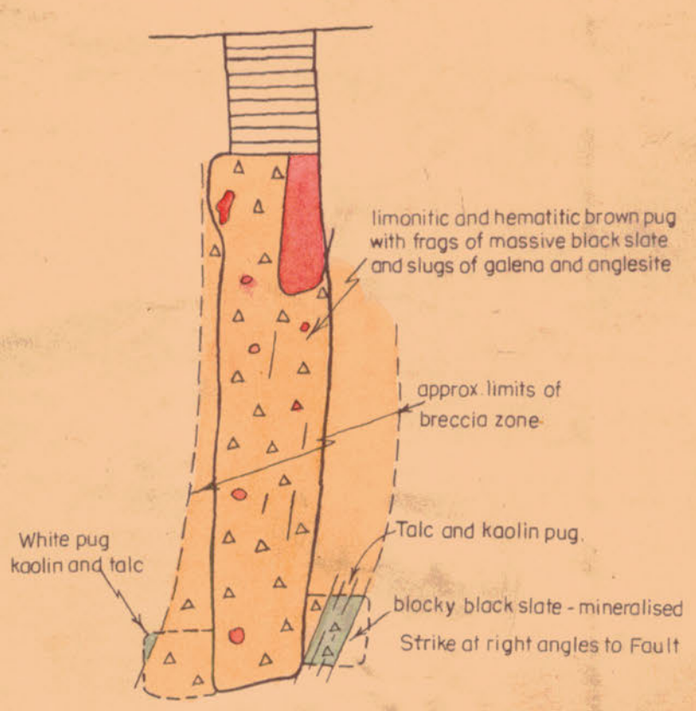


GEOLOGICAL PLAN

Scale 1" = 20'

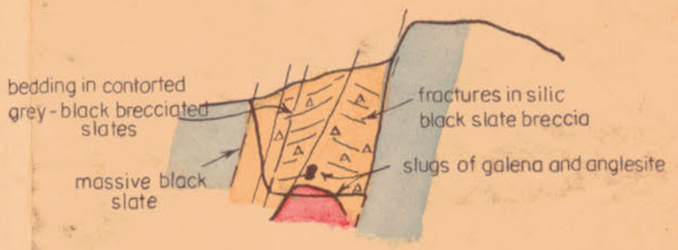
LEGEND

- Massive - galena and anglesite
- Blocky graphitic slate
- Talcy schist and kaolin
- Fault - Breccia Zone



CROSS SECTION SOUTH WALL OF SHAFT - LOOKING SOUTH

0 5 FEET



CROSS SECTION SOUTH WALL OF PIT- LOOKING SOUTH

0 5 FEET

Enterprise Exploration Co. Pty. Ltd.

MINGLO PROSPECT
—A.-P. 448.—
GEOLOGICAL PLAN & SECTIONS.

Scale	Date	Plan No.
As shown	May. 1959	N.T. 3.

NORTH

10200'
328°

GRID

Anomaly B

Anomaly A

Area covered by check sampling 1964

NORTH

9800'
302°

GRID

Prospecting Authority 8 sq. miles

Approx. location of M.L.'s

5 4 3 2 1

6 7 Costeaned Section 8 9 10

3500'
318°

1400'
290°

1000'
305°

1200'
315°

765'
307°

1954 Traverse

1954 Grid.

SOUTH

5000'
298°

GRID

0 2000' 4000' 6000'

FEET

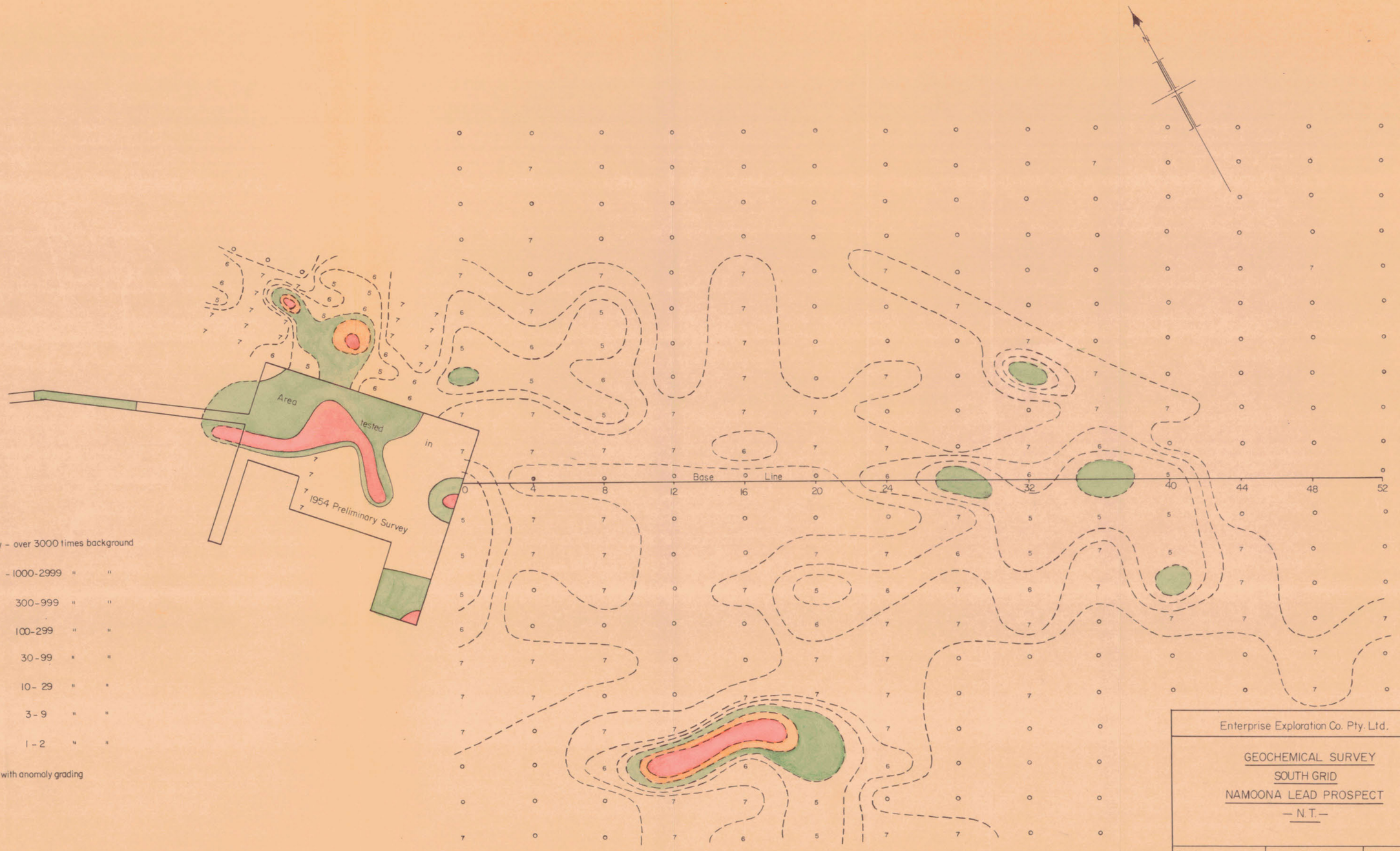
C.R.A. Exploration Pty. Limited.

NAMOONA LEAD PROSPECT

PLAN SHOWING AREAS COVERED BY GEOCHEMICAL PROSPECTING SURVEY- 1955 WITH ADDITIONAL SAMPLING - 1964

Scale	Original Plan by	Plan No.
1" = 2000'	A.H. Debnam May 1959	N.T. 126

Anomaly "B"
Anomaly "A"
Base Line
Waterhole
Billabong
mud flats
quartz blow
Costean
East Colrwong Ck
1st. Order Anomaly - over 3000 times background
2nd. " " 1000 - 2999 " "
3rd. " " 300 - 999 " "
4th. " " 100 - 299 " "
5th. " " 30 - 99 " "
6th. " " 10 - 29 " "
7th. " " 3 - 9 " "
No anomaly 1 - 2 " "
Sampling points with anomaly grading
Ridge
Track
Section resampled with closer grid
Additional sampling by G.W.P. 1964
Figures on traverses 60-128 denote Total Pb in p.p.m.
Enterprise Exploration Co. Pty. Ltd.
GEOCHEMICAL SURVEY
NORTH GRID
NAMOONA LEAD PROSPECT
— N. T. —
Scale
1" = 400'
A. H. D.
12/9/55
Plan No.
N.T. No. 58 129



Enterprise Exploration Co. Pty. Ltd.

GEOCHEMICAL SURVEY
SOUTH GRID
NAMOONA LEAD PROSPECT
— N.T. —

Scale	Date	Plan No.
1" = 400'	12/9/55 A.H.D.	N.T. No. 61

Approx A.-P. Boundary No. 448

Mary River

veins manganese oxides
6" - 12" wide over
300' length

sulphide boxworks
along fractures in
ferruginous slate

N

Brocks Creek type ferruginous gossan

Structural Trend Lines

Enterprise Exploration Company Pty. Ltd.

NAMOONA, N.T.
A-P 448
Sketch Plan Showing
OUTCROPS OF FERRUG. 'GOSSANS'

Scale	Date	Plan No.
1" = 4200' approx.	July 1959	N.T. No. 7