SPRINGMOUNT OPERATING COMPANY LTD.
1986 EXPLORATION PROJECT

## Report On The Thunderbird East Exploration Trench

### A. General

The Thunderbird M.C. which borders the "Greta" Claim on which a high grade Silver Lode was mined in the early fifties and which is also located on Strike (N.E.) of the Bellekeno Vein System, was selected for examination due to its favourable location mentioned above.

An East-West oriented Cross-Trench waa started approximately 400 feet to the West of a known Vein which was successfully mined in earlier years.

The Trench is located on the South Slope of Keno Hill; an area which was never extensively prospected due to the existence of (1) heavy overburden which ranges from 10 ft. to 40 ft., (2) the presence of a 10 ft. to 20 ft. thick band of Schist which underlies a top layer of thin bedded Quartzites and minor Schist Bands, which ranges in thickness from 20 ft. to 50 ft.

It is believed, that it is this thick Band of Schist which prevented the mineralization of the Vein Faults to reach the surface, making it extremely difficult to assess or even to recognize a Vein Fault after removal of the overburden.

Mineralization reached the surface only at places where this Schist Band is comparatively thin (3 ft. to 5 ft.).

### B. Veins

The Vein Faults on the South Slope of Keno Hill are mainly of the transverse variety, i.e. striking from just West of North to 40 degrees Northeast, the predominant Dip being Southeast. Some known veins on Keno Hill have a "Reverse Dip" - i.e. Northwest.

The Vein Faults are offset by "Post-Mineralization Cross Faults" as well as numerous flat dipping Bedding Plane Faults. the ore deposits in the Vein Faults are localized structurally in the following sites:

(1) at the junction of Vein Faults,
(2) at the junction of a Vein Fault and subsidiary fractures (splits).
(3) in massive Quartzites and Greenstones.

C. Trenching

No. 1 Cross Trench

This Trench was started on June 1st 1986 at Elevation 3970 and as mentioned before, ca. 400 ft. West of a know "Reverse Dip Vein Fault". It was aimed at intersecting the most Easterly Vein Faults of the Bellekeno System which are also dipping to the Northwest (Reverse Dip). Once the Mount Keno and the Bellekeno Systems have been co-related, the location of Vein Faults on Keno Hill can then be determined with a greater degree of certainty.

Once the 25 ft. layer of overburden was removed, the predominant rock formation encountered was thin bedded Quartzites with interbedded layers of Schist and Phyllites.

At Elevation 3930 a narrow "Sheeted Zone" could be clearly identified and at Elevation 3920, Siderite began to appear in the Vein. At Elevation 3917 the Vein started to contain minor amounts of Galena.

No. 2 Trench

At this point the Cross-Trench was widened and No. 2 Trench was started in order to further investigate this Vein. The Vein widened to 2 feet but did not contain Galena in economic quantities. The Strike of the Vein is 7 degrees Northeast and dipping 70 degrees Northwest (Reverse Dip). A major Bedding Plain Fault which was identified as such, at Elevation 3900, offset the South Extension of the Vein i.e. it disappeared into the West Wall of No. 2 Trench.

No. 3 Trench

At Elevation 3883, No. 2 Trench was abandoned and No. 3 Cross Trench was started approximately 230 ft. South of where the Vein was first intersected in No. 1 Cross Trench and at Elevation 3890. It was the purpose of this Trench to determine the exact distance that the Vein was offset to the East by the Bedding Plain Fault.

At Elevation 3850 the Vein was intersected and identified as such, the Easterly Offset being 10 ft.

In the course of the above excavations, the following quantities of materials were removed from the Trenches:

| | | |
|---|---|---|
| Overburden - | 17,998 | $m^3$ |
| Bedrock - | 7,221 | $m^3$ |
| TOTAL Material Excavated - | 25,219 | $m^3$ |

Equipment used:

1 - D 8 - K Caterpillar with ripper

1 - Gardener Denver Air-Track

1 - Gardener Denver 350 Compressor

1 - Caterpillar Loader

Approximately 60% of the Bedrock had to be broken by drilling and blasting prior to removal from the Trenches. A total of 300 - 6 ft. holes were drilled and blasted.

D. Engineering and Supervision

The existing Survey and Geological Grid was extended to cover the Sites of the Trenches, with a precision of 1 : 10,000, the Trenches were Logged and Surveyed and a Plan covering the Trench Areas was drawn up.

E. Expenditures

All equipment used at the Project is wholly owned by Springmount Operating Company Ltd. and all work was carried out by Company Employees. The Company is a Duly Registered Yukon Company and all Employees are Yukon Residents.

The Company has no "Outside" suppliers, i.e. all purchases are either made in Mayo, or in Whitehorse.

The Expenses incurred for this Project are as follows:

| | |
|---|---|
| D 8- K Caterpillar: 430 hrs. @ $130/hr. = | $55,900 |
| Loader: 60 hrs. @ $60/hr. = | 3,600 |
| Drilling & Blasting: 1,800 L.F. @ $3.50/ft. | 6,300 |
| Survey Crew: 4 days @ $400/day | 1,600 |
| Engineering: 5 days @ $400/day | 2,000 |
| Supervision: 20 days @ $250/day | 5,000 |
| 10% Overhead | 7,400 |
| TOTAL | $81,800 |

Total Volume Excavated = 25,219 $m^3$

Cost per $M^3$ = $3.24

Start of Project - June 1st 1986

Completion of Project - July 16th 1986

Number of Manhours = 930.

F. Conclusion and Recommendations

The Trenching resulted in the discovery of a well mineralized Reverse Dip Vein Fault which could make Ore, once massive Quartzite or Greenstone is reached beneath the Schist Band. Since the Trenches cannot be deepened due to the high walls and limited width at the bottom of the Trench, it is recommended that Springmount investigate this Vein further by Large Diameter Diamond Drilling (Phase 2).

The Drill Holes should be located in the Hanging Wall of the Vein and 3 Fans @ 3 Holes each should be drilled at the following sections (see Dwg. Ex -2)

1 - Fan @ 3 Holes at 1950 N. Section

1 - Fan @ 3 Holes at 1800 N. Section

1 - Fan @ 3 Holes at 1600 N. Section.

If the Diamond Drill results are sufficiently encouraging, an Exploratory Adit should be Faced Up at Elevation 3885 on 1800 N. Section at 1025 ERL (Phase 3) (See Dwg. Ex - 2).

This Adit if driven initially approximately 200 ft. on Strike to 2000 N. Section, would give sufficient information as to enable the Company to evaluate the Economics of the Vein.

If the results of DDH 4, 5 and 6 indicate the necessity of further examination, then a second Adit should be faced up at Elevation 3820 at 1585 N. Section and 1065 ERL.

This Adit should then be driven 350 ft. to 1930 N. Section (see Section A - A Diag. Ex-2).

Cost Estimate For Phase 2 and 3

| | | |
|---|---|---|
| Diamond Drilling : 1939 L.F. @ $22 = | | $42,658 |
| Casing: 284 L.F. @ $30 = | | 8,520 |
| Sub-Total Phase 2 = | | $51,178 |
| Facing Up Upper Adit: 200 $m^3$ @ $3.24 = | | $ 648 |
| Upper Adit: 205 L.F. @ $350 = | | 71,750 |
| Sub-Total Upper Adit = | | $72,398 |
| Facing Up Lower Adit: 5,900 $m^3$ @ $3.24 = | | $19,116 |
| Lower Adit: 350 L.F. @ $350. = | | 122,500 |
| Sub-Total Lower Adit = | | $141,616 |
| TOTAL COST Phase 2 and 3 = | $265,192 | |

August 12th 1986

F. A. Widmann, P. Eng.

ADDENDUM TO REPORT

Re: Designation # EIP 86-008

Four Samples of the Vein were taken on the North Face of No. 2 Trench

No. 1 Sample

This Sample was taken at elev. 3930 and consisted of mainly Siderite and Vein Gauge. Width of Vein: 2 ft. Wt. of Sample: 3 lbs.

No. 2 Sample

This Sample was taken at elev. 3925 and consisted of Siderite and Vein Gauge. Width of Vein: 2 ft. Wt. of Sample: 4 lbs.

No. 3 Sample

This Sample was taken at elev. 3915 and consisted of Siderite. Width of Vein: 2.5 ft. Wt. of Sample: 3 lbs.

No. 4 Sample

This Sample was taken at elev. 3910. It consisted of Galena which was found in a small pocket within the Siderite. This Sample does not represent the Vein, since only Galena was taken. To wt. of Sample: 5 lbs.

Assay Results

| Sample No. | AG. (oz./ton) | Pb% | Zn% |
|---|---|---|---|
| 1 | 19.68 | 2.54 | 0.74 |
| 2 | 22.58 | 4.05 | 0.77 |
| 3 | 26.20 | 2.40 | 0.84 |
| 4 | 378.20 | 57.20 | 0.12 |

The above Samples were Assayed by United Keno Hill Mines Ltd.

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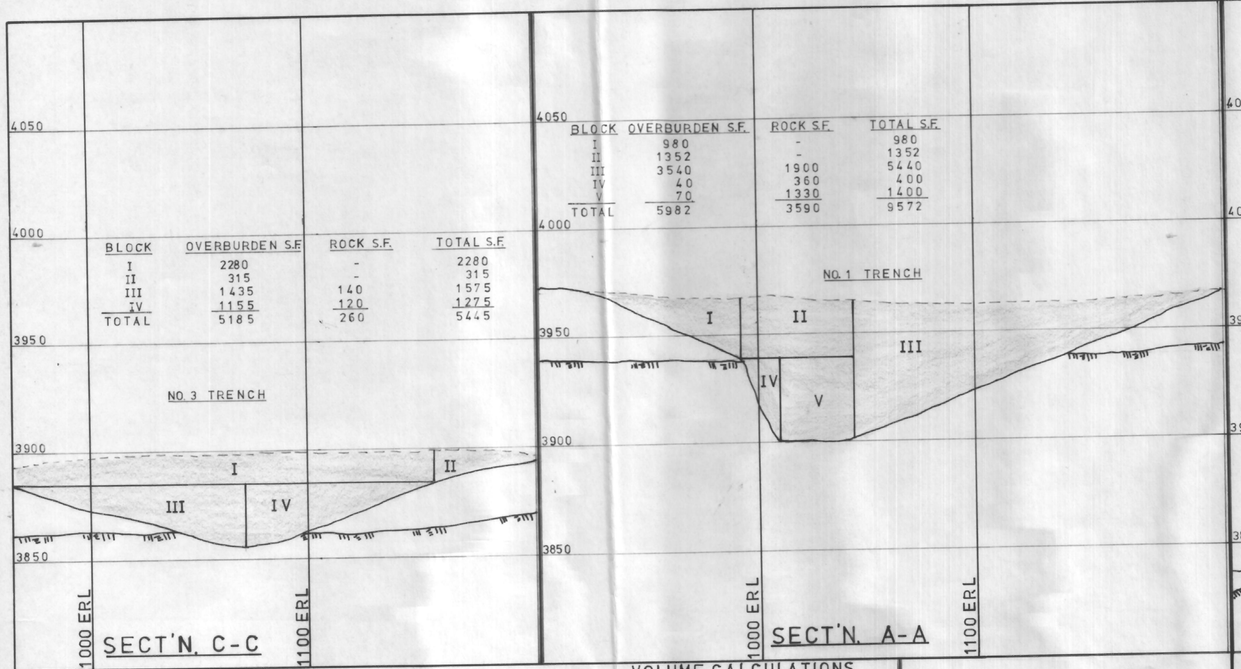
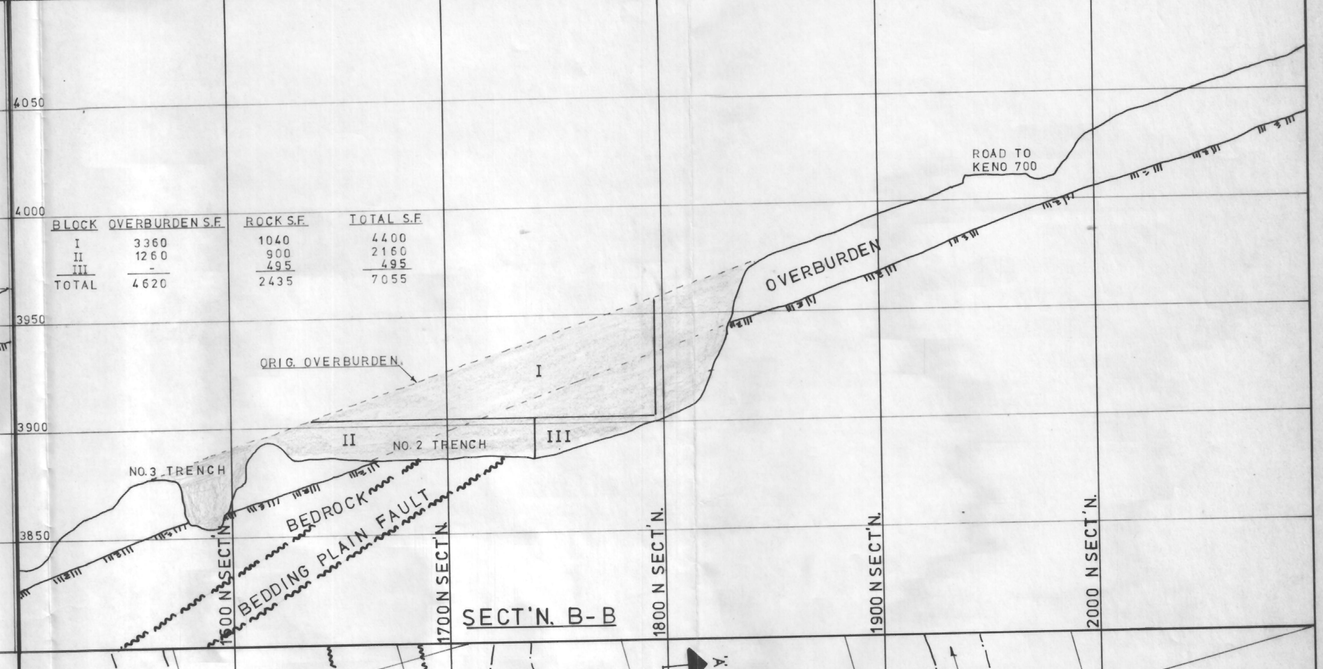








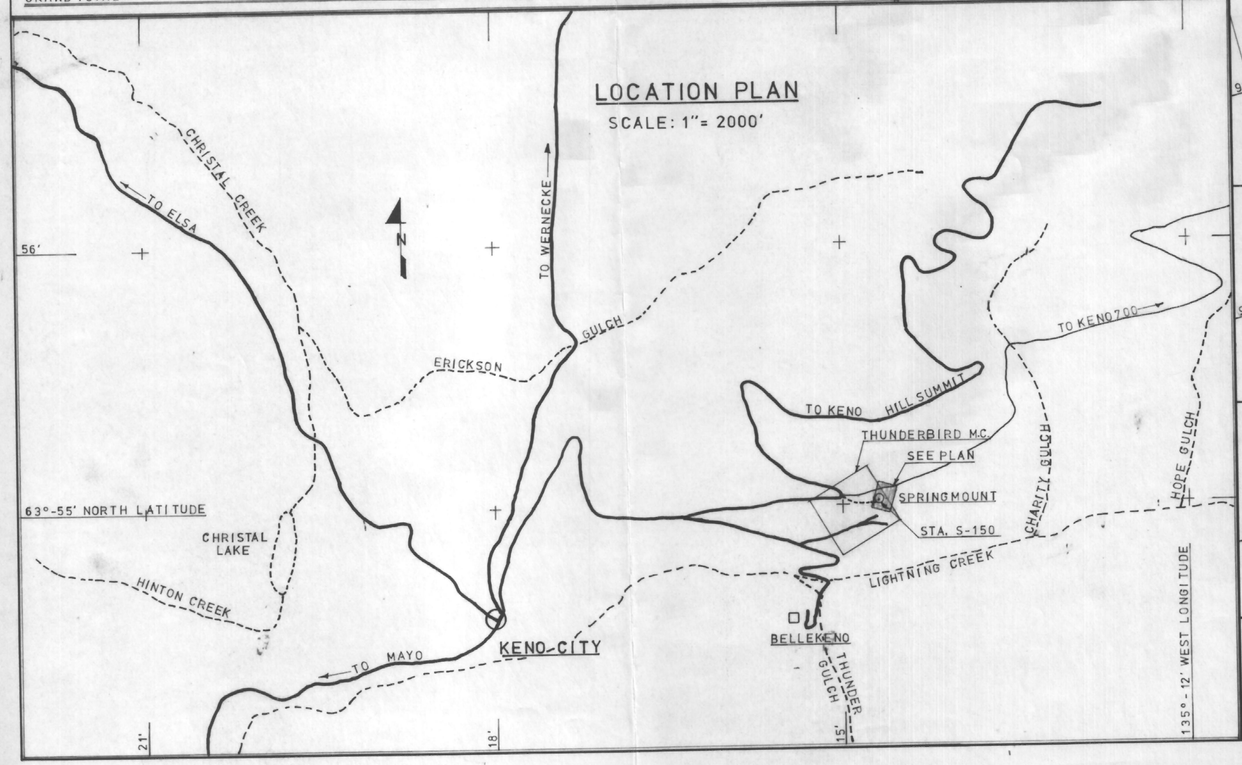

## VOLUME CALCULATIONS

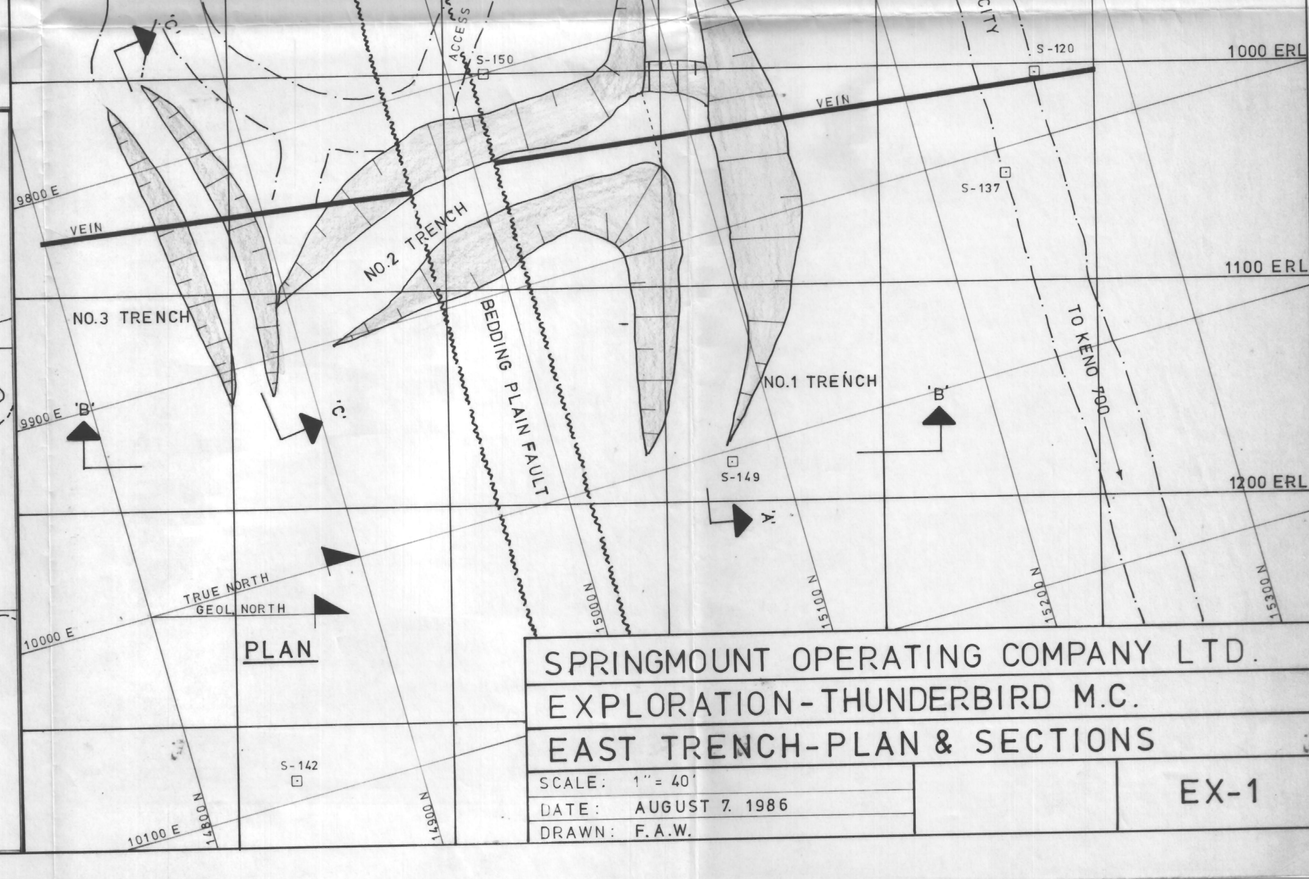
| TRENCH NO. | BLOCK | OVERB. S.F. | ROCK S.F. | WIDTH FT. | OVERB. CU.FT. | ROCK CU.FT. | OVERB. CU.YDS. | ROCK CU.YDS. | TOTAL CU.YDS. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | I | 980 | - | 42 | 41160 | - | 1524 | - | 1524 |
| 1 | II | 1352 | - | 47 | 63544 | - | 2353 | - | 2353 |
| 1 | III | 3540 | 1900 | 50 | 177000 | 95000 | 6555 | 3518 | 10073 |
| 1 | IV | 40 | 360 | 31 | 1240 | 11160 | 46 | 413 | 459 |
| 1 | V | 70 | 1330 | 33 | 2310 | 43890 | 85 | 1626 | 1711 |
| SUB TOTAL | | | | | 285254 | 150050 | 10563 | 5557 | 16120 |
| 2 | I | 3360 | 1040 | 50 | 168000 | 52000 | 6222 | 1926 | 8148 |
| 2 | II | 1260 | 900 | 35 | 44100 | 31500 | 1633 | 1167 | 2800 |
| 2 | III | - | 495 | 30 | - | 14850 | - | 550 | 550 |
| SUB TOTAL | | | | | 212100 | 98350 | 7855 | 3643 | 11498 |
| 3 | I | 2280 | - | 28 | 63840 | - | 2364 | - | 2364 |
| 3 | II | 315 | - | 27 | 8505 | - | 315 | - | 315 |
| 3 | III | 1435 | 140 | 25 | 35875 | 3500 | 1329 | 130 | 1459 |
| 3 | IV | 1155 | 120 | 26 | 30030 | 3120 | 1112 | 115 | 1227 |
| SUB TOTAL | | | | | 138250 | 6620 | 5120 | 245 | 5365 |
| GRAND TOTAL | | | | | 635,604 | 255020 | 23538 | 9445 | 32983 |

## METRIC CONVERSION

$1\ m^3 = 35.3144\ CU.FT.$

OVERBURDEN: 635,604 CU.FT. = $17,998\ m^3$
ROCK EXCAV: 255,020 CU.FT. = $7,221\ m^3$
TOTAL EXCAV. 890,624 CU.FT. = $25,219\ m^3$



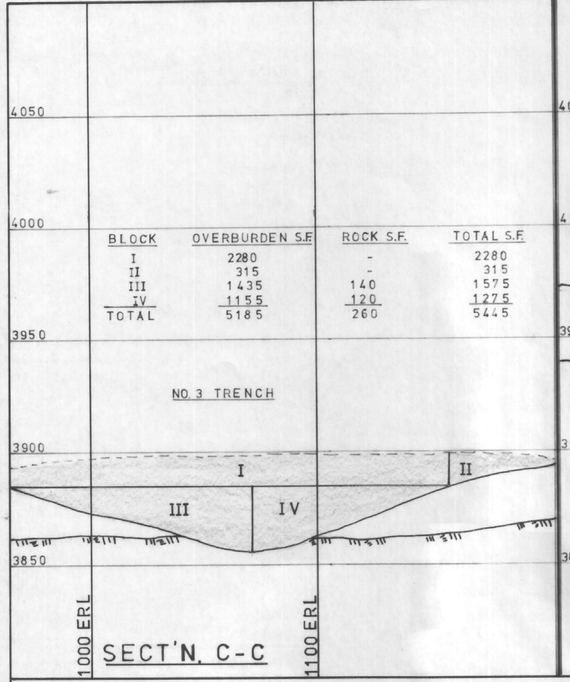

# SPRINGMOUNT OPERATING COMPANY LTD.

## EXPLORATION - THUNDERBIRD M.C.

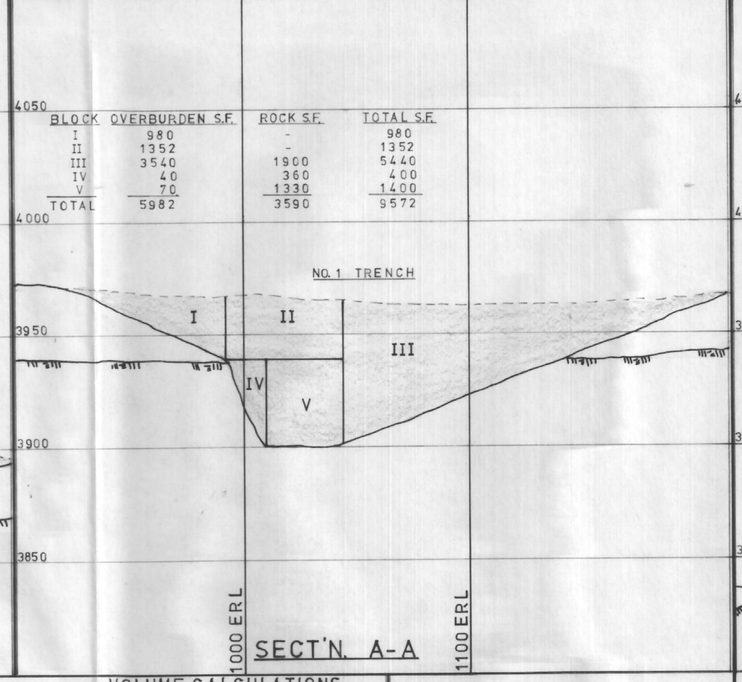
## EAST TRENCH - PLAN & SECTIONS

SCALE: 1" = 40'
DATE: AUGUST 7, 1986
DRAWN: F.A.W.

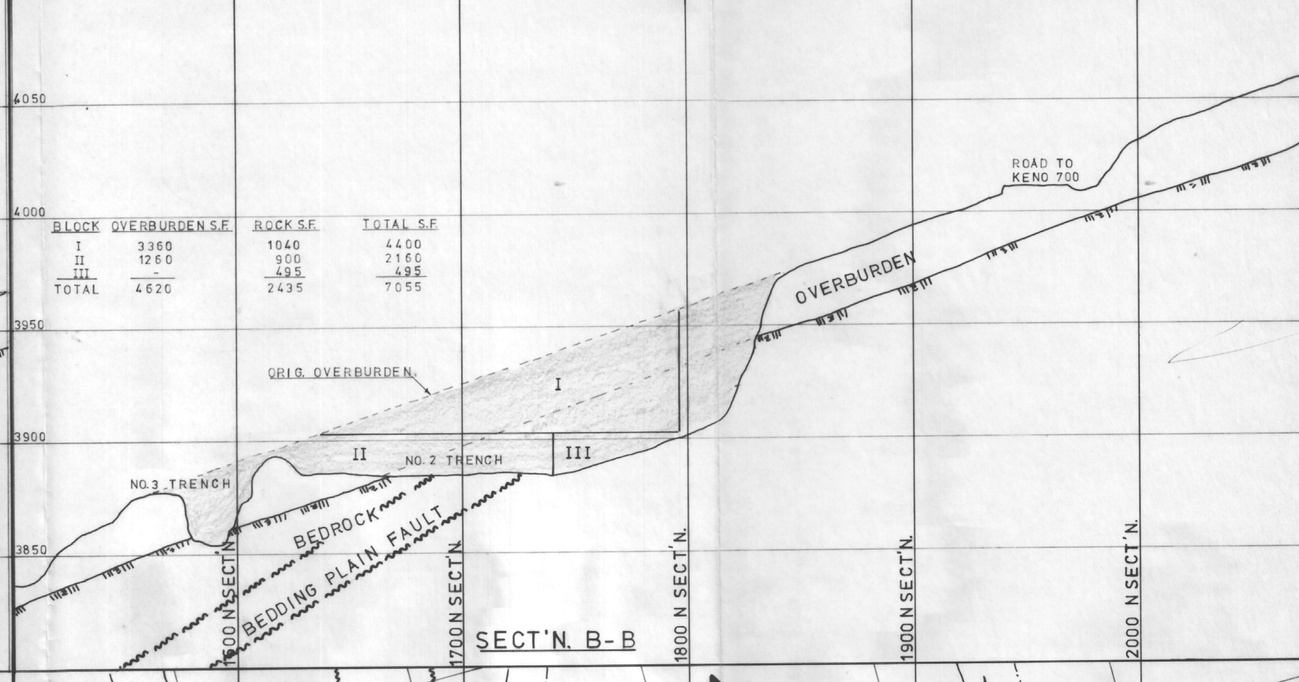
EX-1




| BLOCK | OVERBURDEN S.F. | ROCK S.F. | TOTAL S.F. |
|---|---|---|---|
| I | 2280 | - | 2280 |
| II | 315 | - | 315 |
| III | 1435 | 140 | 1575 |
| IV | 1155 | 120 | 1275 |
| TOTAL | 5185 | 260 | 5445 |




| BLOCK | OVERBURDEN S.F. | ROCK S.F. | TOTAL S.F. |
|---|---|---|---|
| I | 980 | - | 980 |
| II | 1352 | - | 1352 |
| III | 3540 | 1900 | 5440 |
| IV | 40 | 360 | 400 |
| V | 70 | 1330 | 1400 |
| TOTAL | 5982 | 3590 | 9572 |




| BLOCK | OVERBURDEN S.F. | ROCK S.F. | TOTAL S.F. |
|---|---|---|---|
| I | 3360 | 1040 | 4400 |
| II | 1260 | 900 | 2160 |
| III | - | 495 | 495 |
| TOTAL | 4620 | 2435 | 7055 |

## VOLUME CALCULATIONS

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| 1 | V | 70 | 1330 | 33 | 2310 | 43890 | 85 | 1626 | 1711 |
| SUB TOTAL | | | | | 285254 | 150050 | 10563 | 5557 | 16120 |
| 2 | I | 3360 | 1040 | 50 | 168000 | 52000 | 6222 | 1926 | 8148 |
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| SUB TOTAL | | | | | 212100 | 98350 | 7855 | 3643 | 11498 |
| 3 | I | 2280 | - | 28 | 63840 | - | 2364 | - | 2364 |
| 3 | II | 315 | - | 27 | 8505 | - | 315 | - | 315 |
| 3 | III | 1435 | 140 | 25 | 35875 | 3500 | 1329 | 130 | 1459 |
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| SUB TOTAL | | | | | 138250 | 6620 | 5120 | 245 | 5365 |
| GRAND TOTAL | | | | | 635604 | 255020 | 23538 | 9445 | 32983 |

## METRIC CONVERSION

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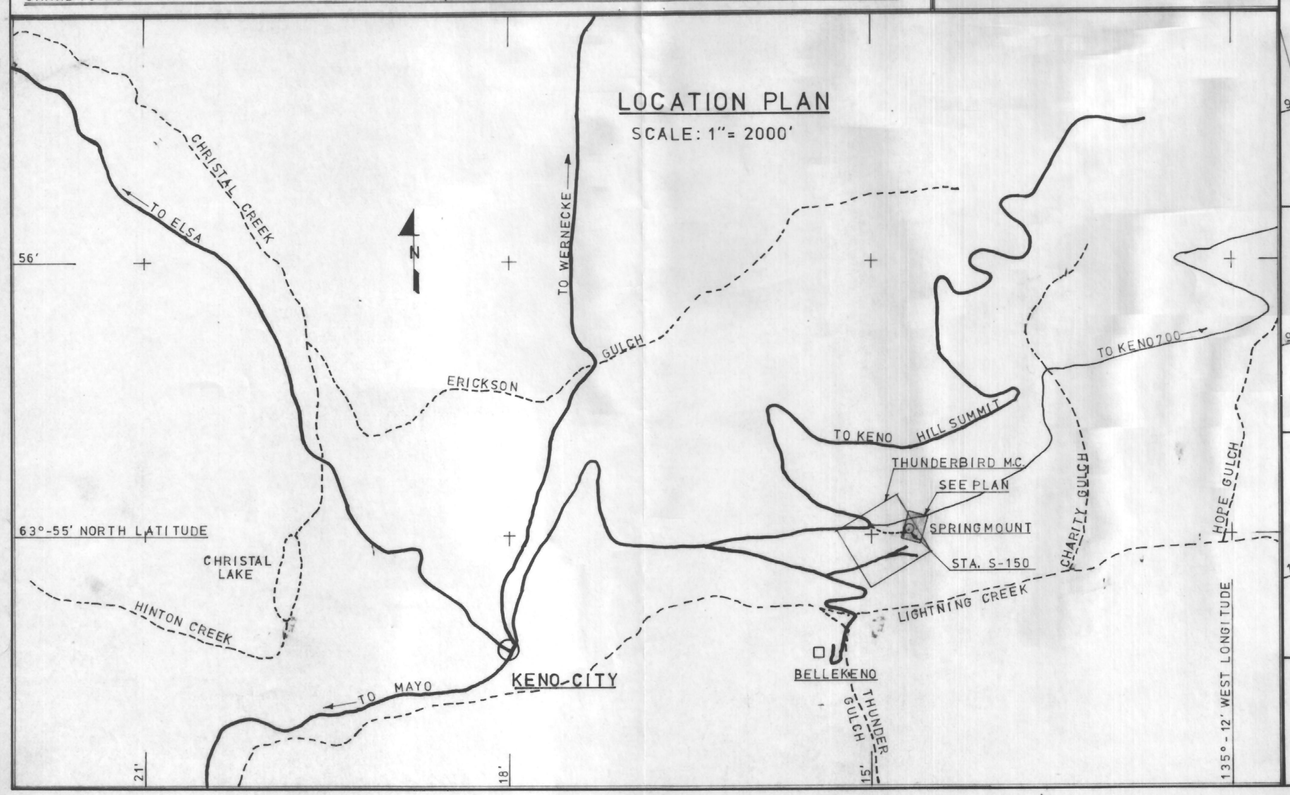
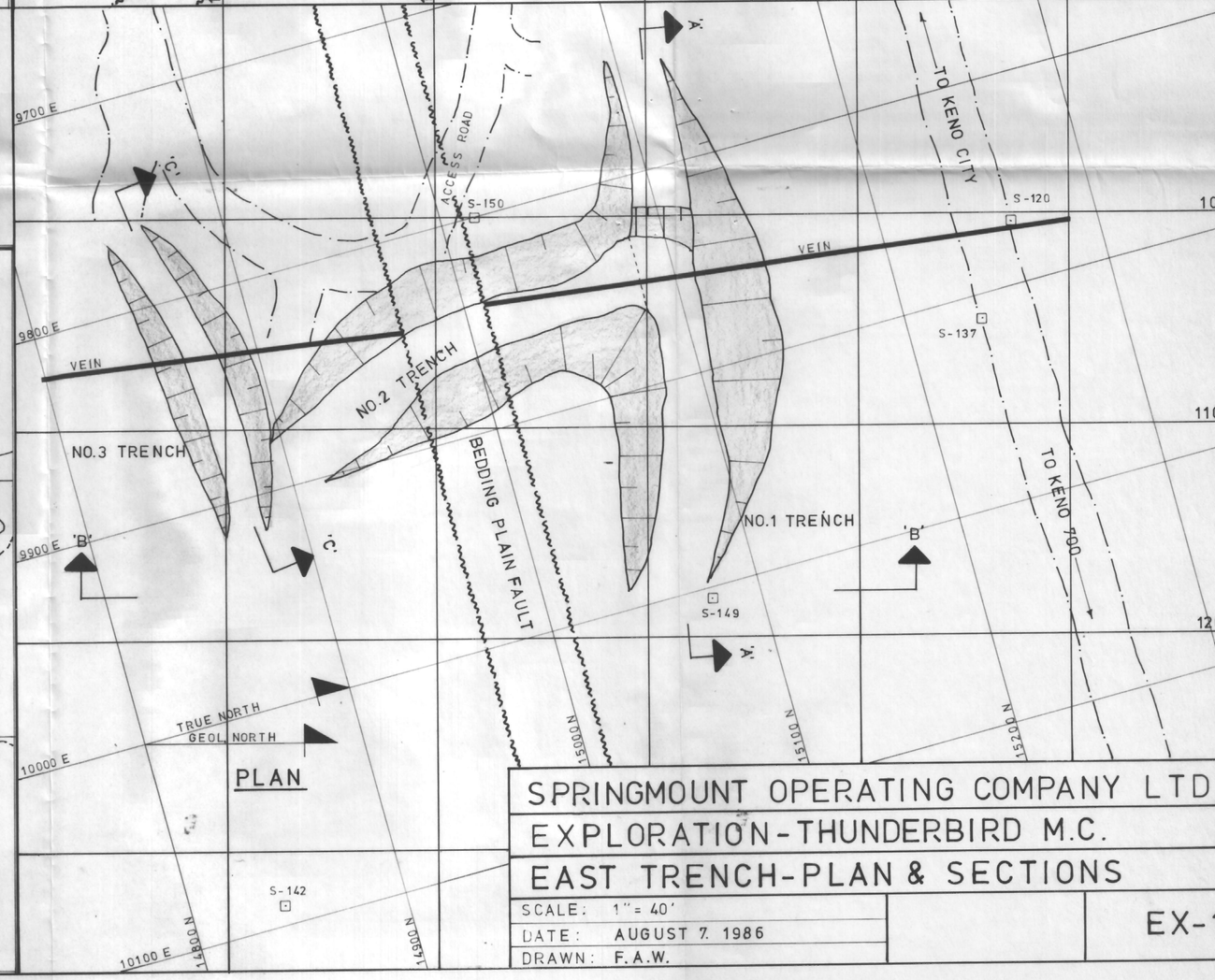


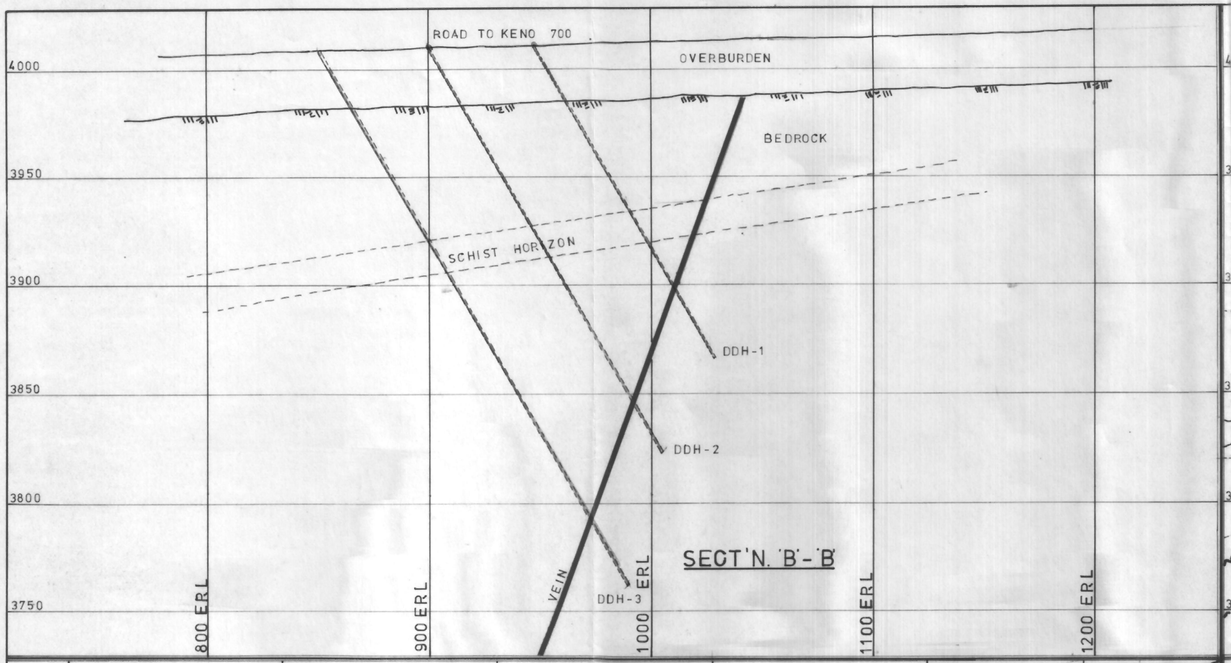

SPRINGMOUNT OPERATING COMPANY LTD.

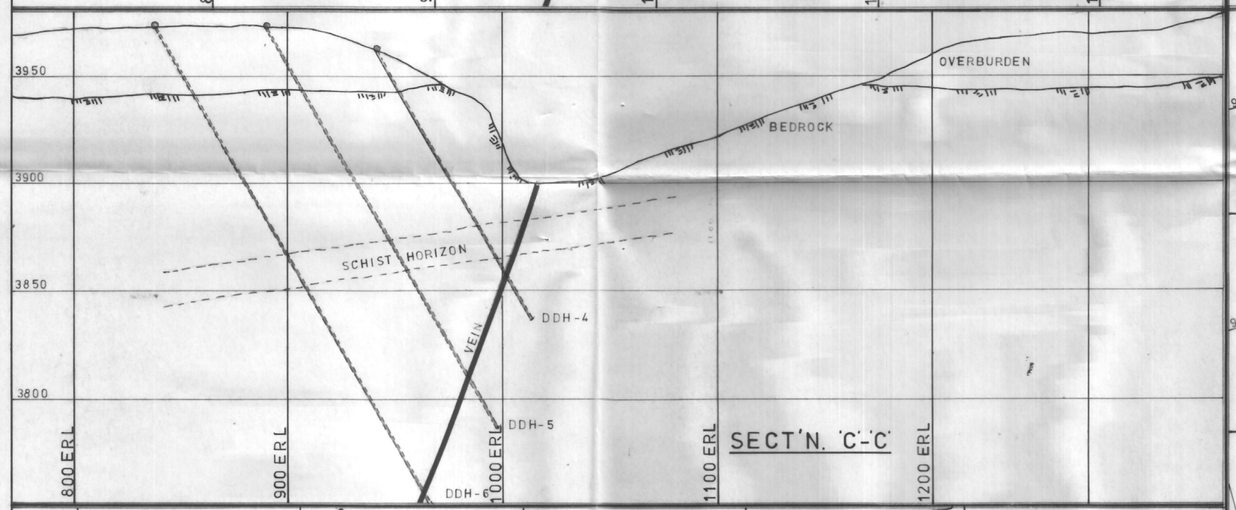
EXPLORATION - THUNDERBIRD M.C.

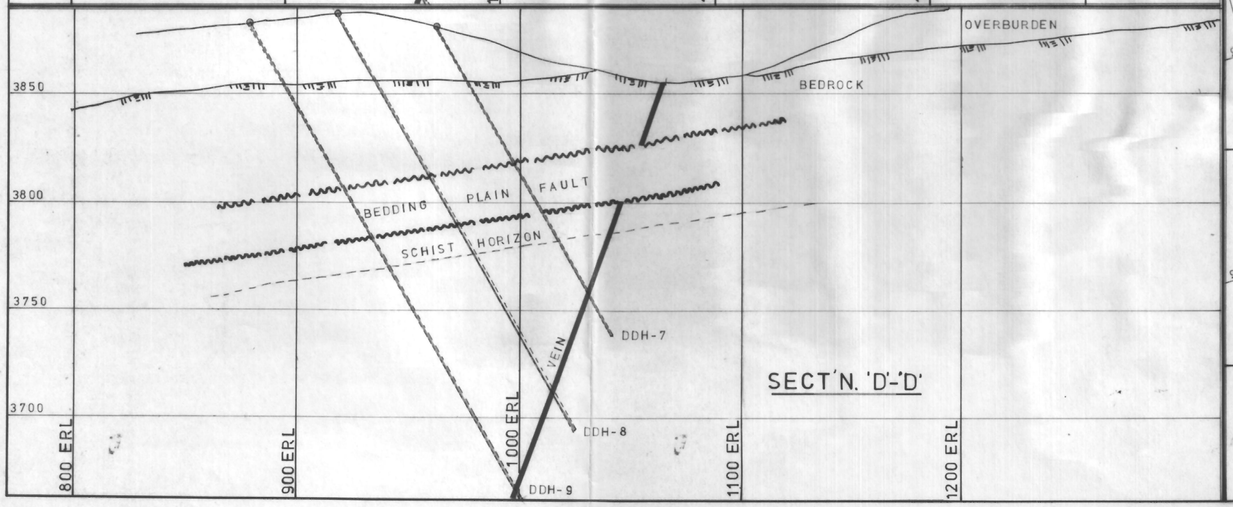
EAST TRENCH - PLAN & SECTIONS

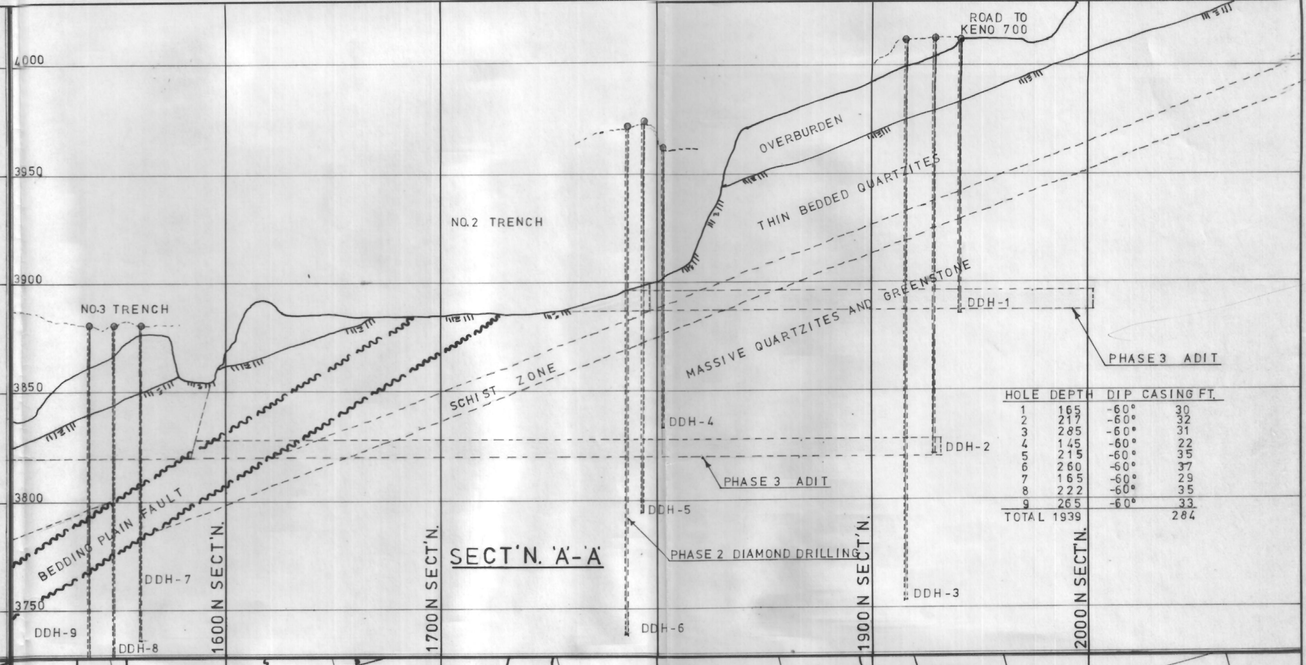
SCALE: 1"= 40'
DATE: AUGUST 7. 1986
DRAWN: F.A.W.

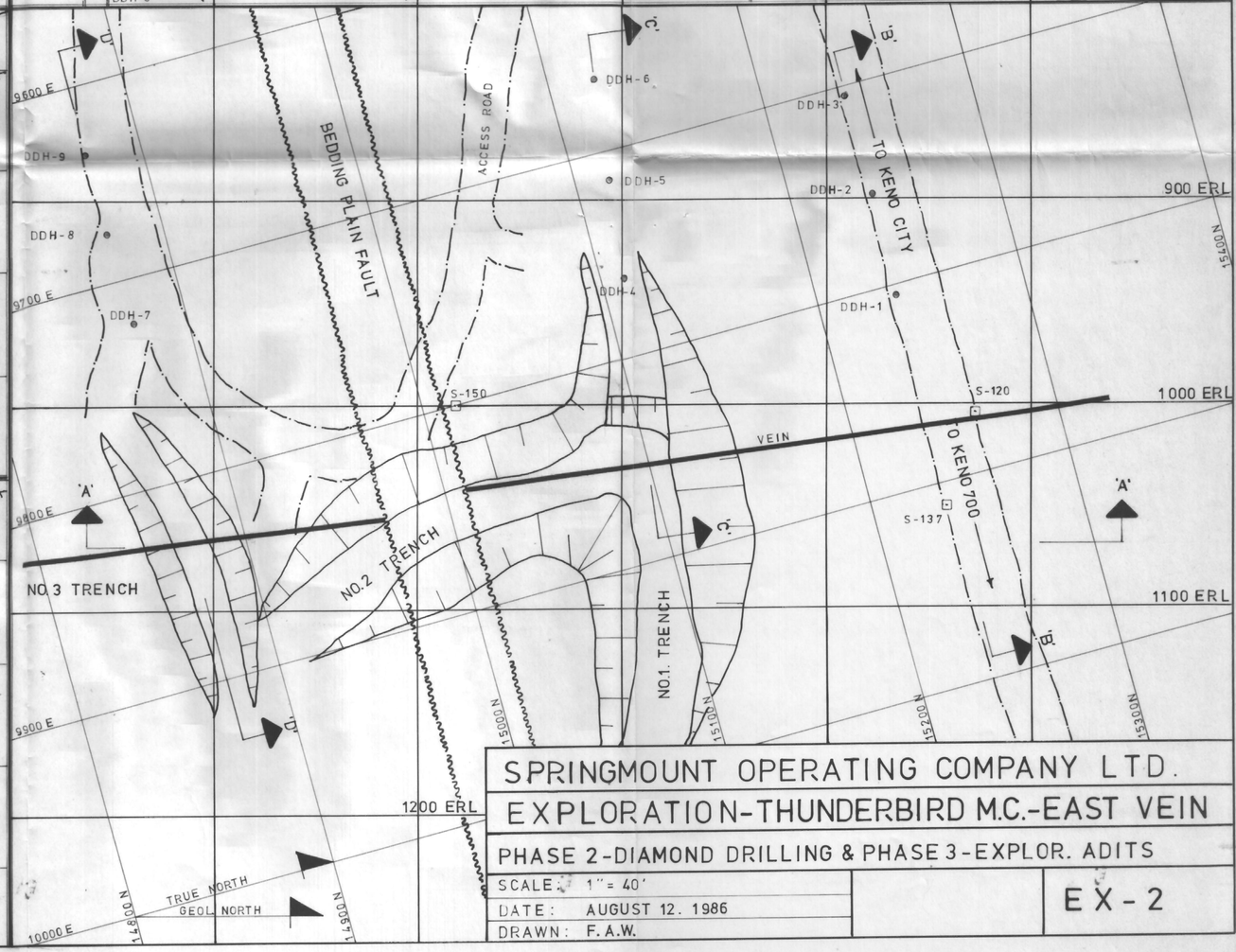
EX-1




SPRINGMOUNT OPERATING COMPANY LTD.

EXPLORATION-THUNDERBIRD M.C.-EAST VEIN

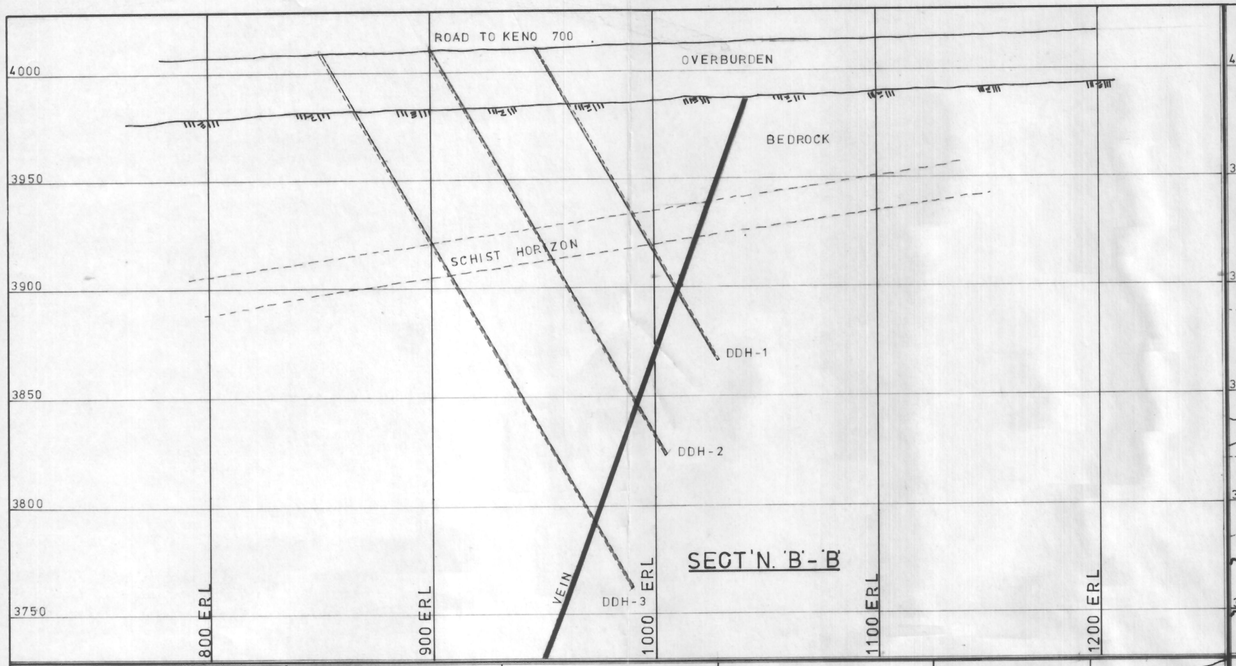
PHASE 2-DIAMOND DRILLING & PHASE 3-EXPLOR. ADITS

SCALE: 1" = 40'

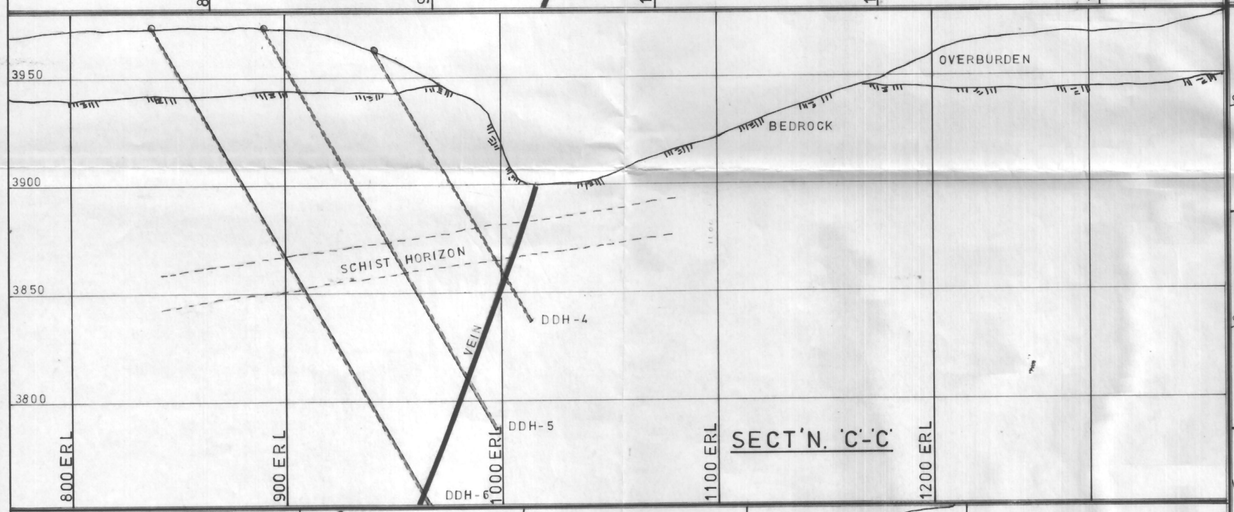
DATE: AUGUST 12. 1986

DRAWN: F.A.W.

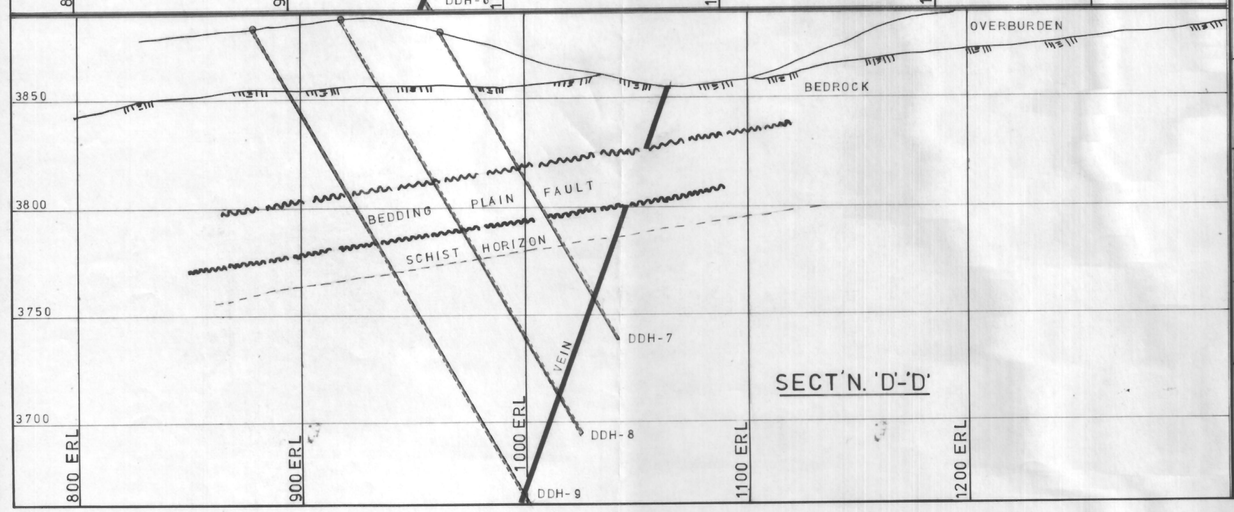
EX-2



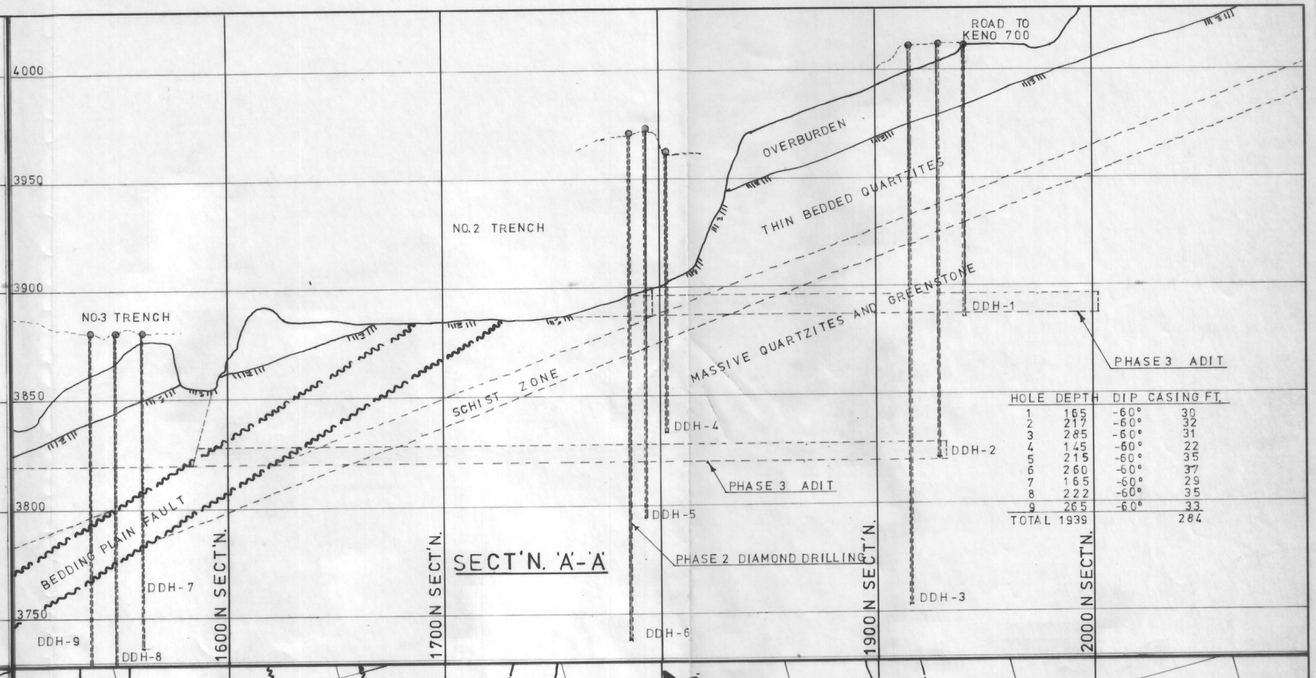

SECT'N. 'B'-'B'




SECT'N. 'C'-'C'

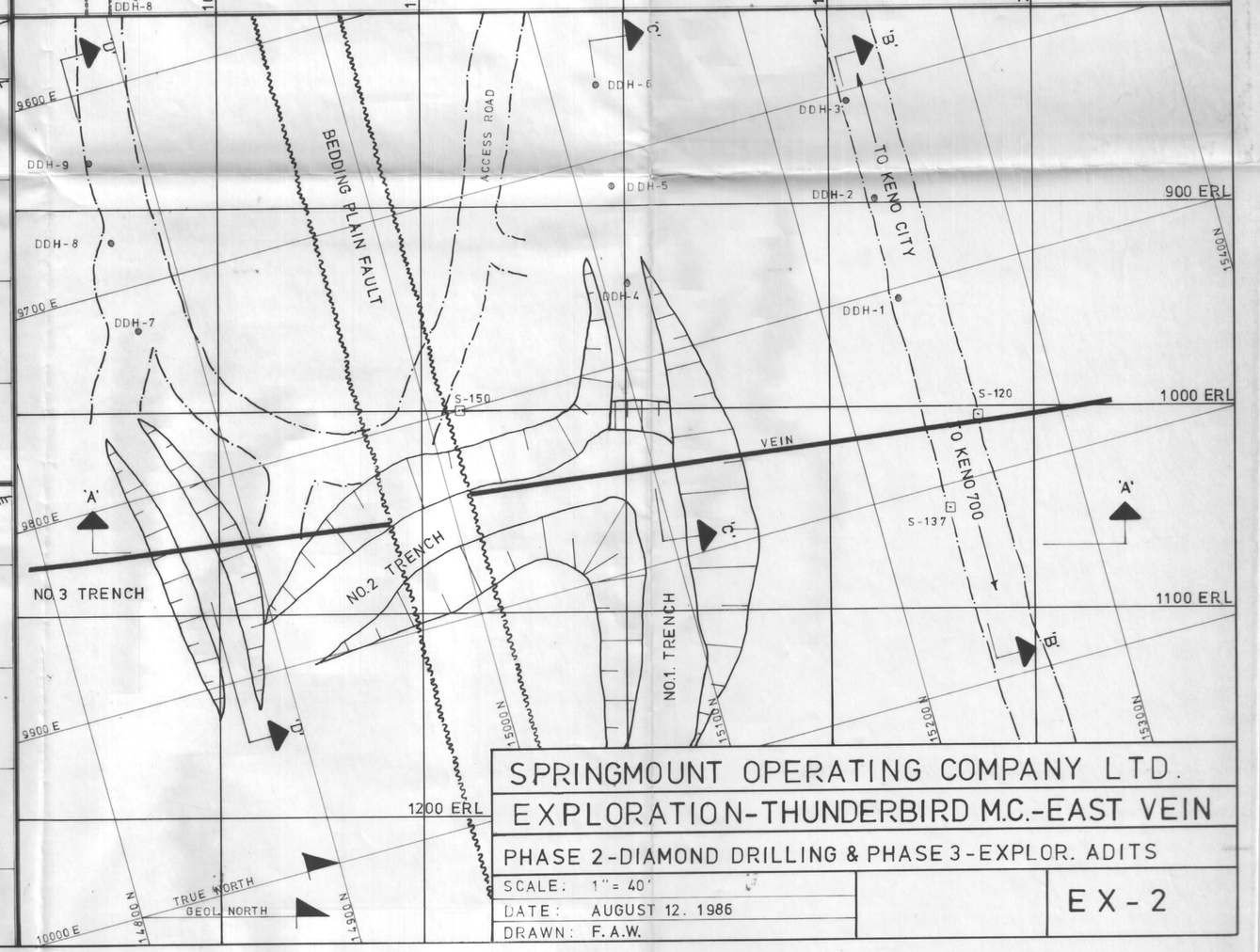



SECT'N. 'D'-'D'




| HOLE | DEPTH | DIP | CASING FT. |
|---|---|---|---|
| 1 | 165 | -60° | 30 |
| 2 | 217 | -60° | 32 |
| 3 | 285 | -60° | 31 |
| 4 | 145 | -60° | 22 |
| 5 | 215 | -60° | 35 |
| 6 | 260 | -60° | 37 |
| 7 | 165 | -60° | 28 |
| 8 | 222 | -60° | 35 |
| 9 | 265 | -60° | 33 |
| TOTAL | 1939 | | 284 |

SECT'N. 'A'-'A'




SPRINGMOUNT OPERATING COMPANY LTD.

EXPLORATION-THUNDERBIRD M.C.-EAST VEIN

PHASE 2-DIAMOND DRILLING & PHASE 3-EXPLOR. ADITS

SCALE: 1" = 40'

DATE: AUGUST 12. 1986

DRAWN: F.A.W.

EX-2