

R E F E R E N C E S.

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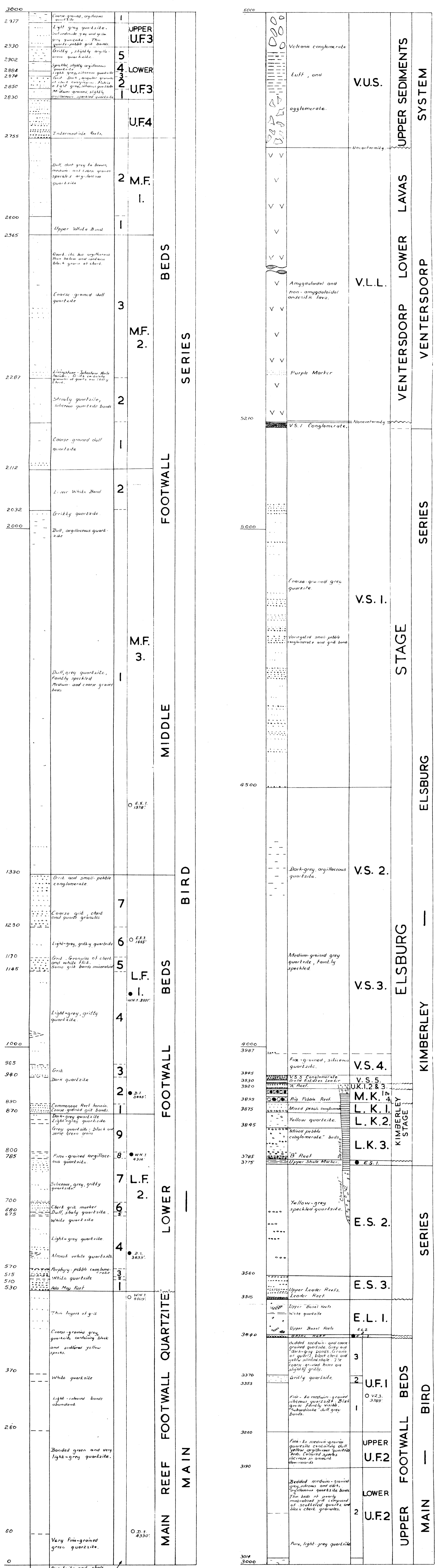
A.

GENERALISED GEOLOGICAL COLUMN

OF

VIRGINIA AND MERRIESPRUIT MINES

ORANGE FREE STATE.



SCALE - 1:1000 FT.

LIST SUBDIVISION OF FOOTWALL BEDS FOR COMPARISON WITH TABLE IX.

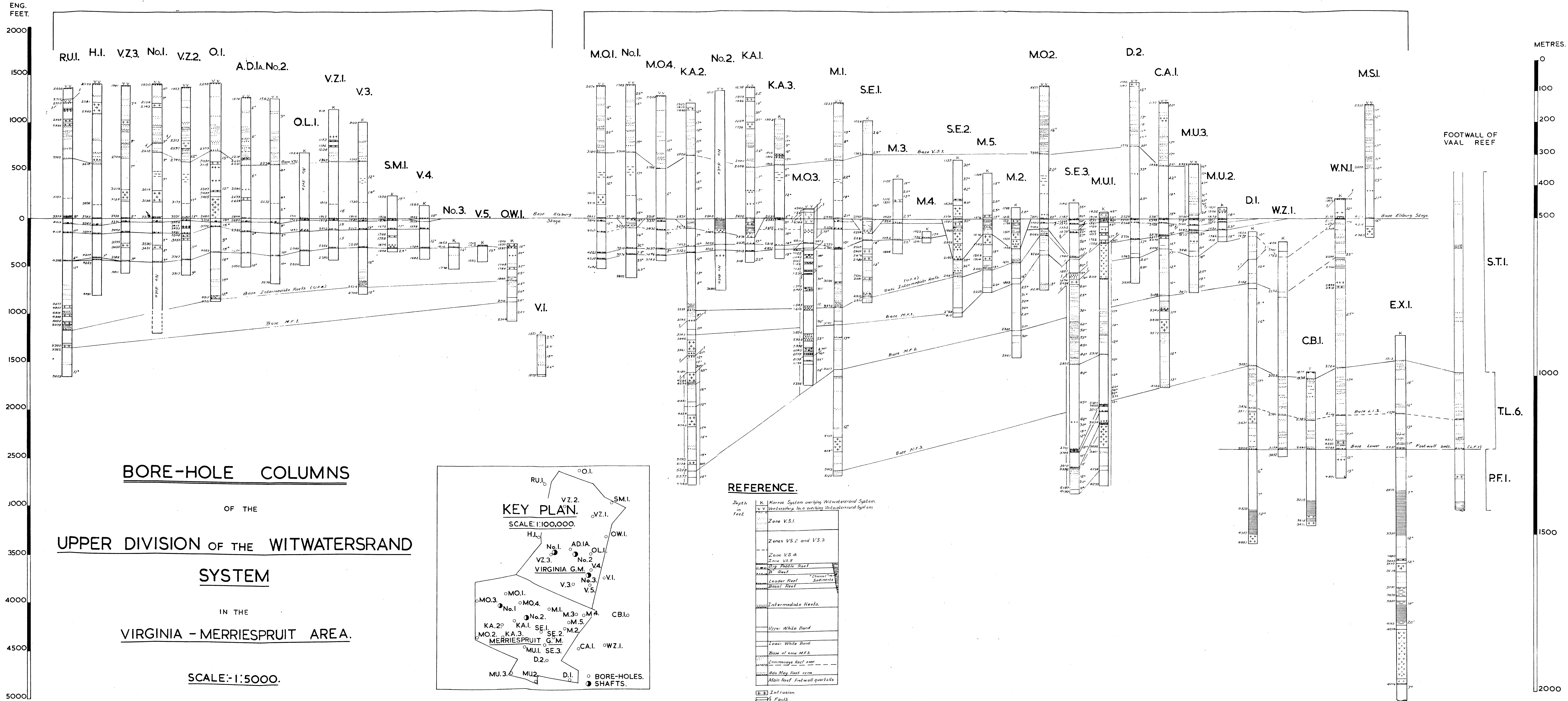
- Chloritoid-bearing sedimentary rock
 - Thin section locality - no chloritoid. (Footwall beds only)
- (Name of bed hole and depth given)

B.

VIRGINIA GOLD MINE AND SURROUNDINGS.

MERRIESPRUIT GOLD MINE AND SURROUNDINGS.

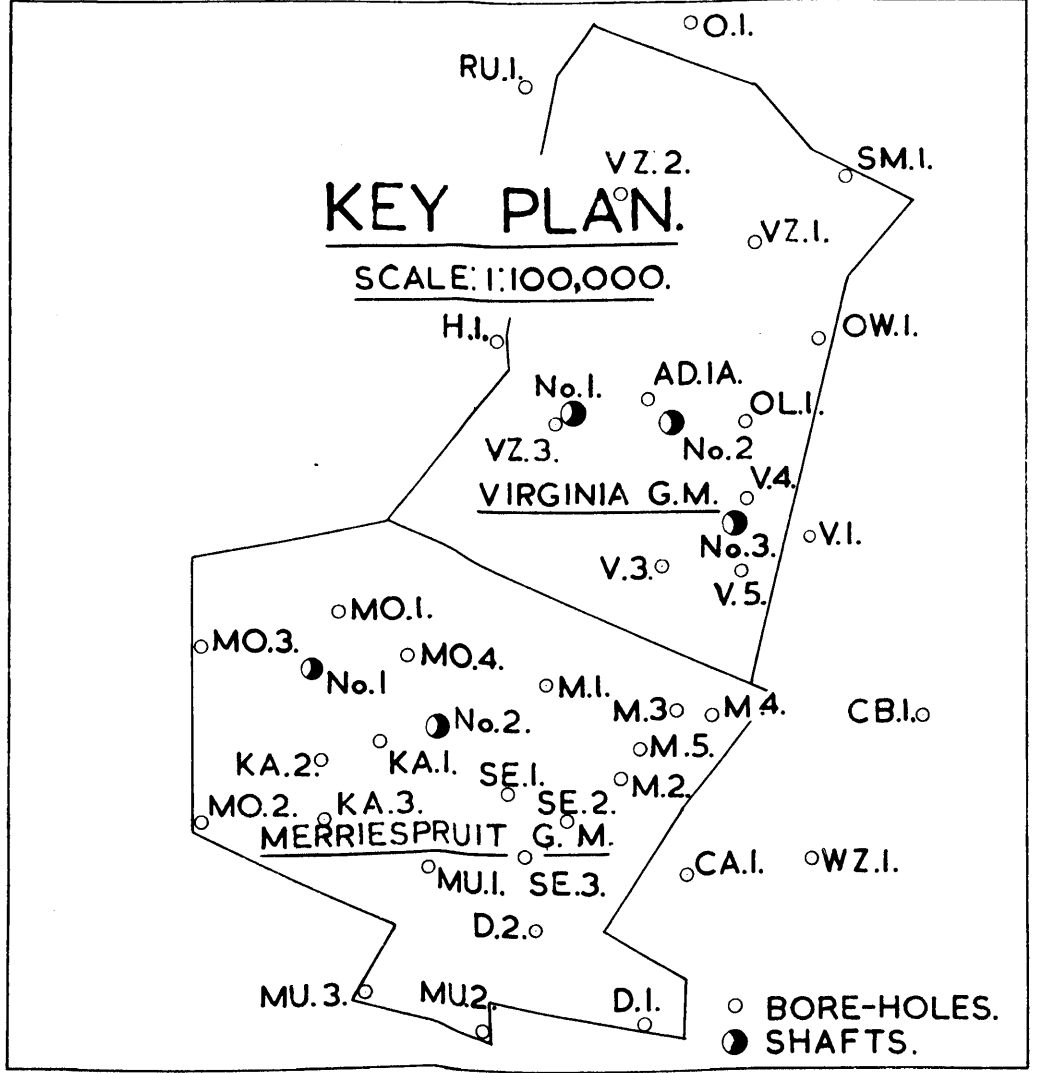
KLERKSDORP.



BORE-HOLE COLUMNS

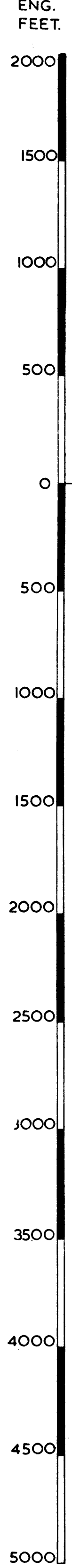
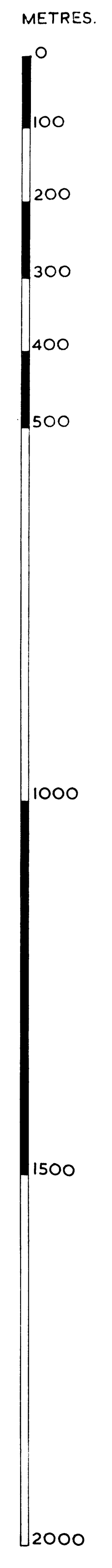
OF THE
UPPER DIVISION OF THE WITWATERSRAND SYSTEM
IN THE
VIRGINIA - MERRIESPRUIT AREA.

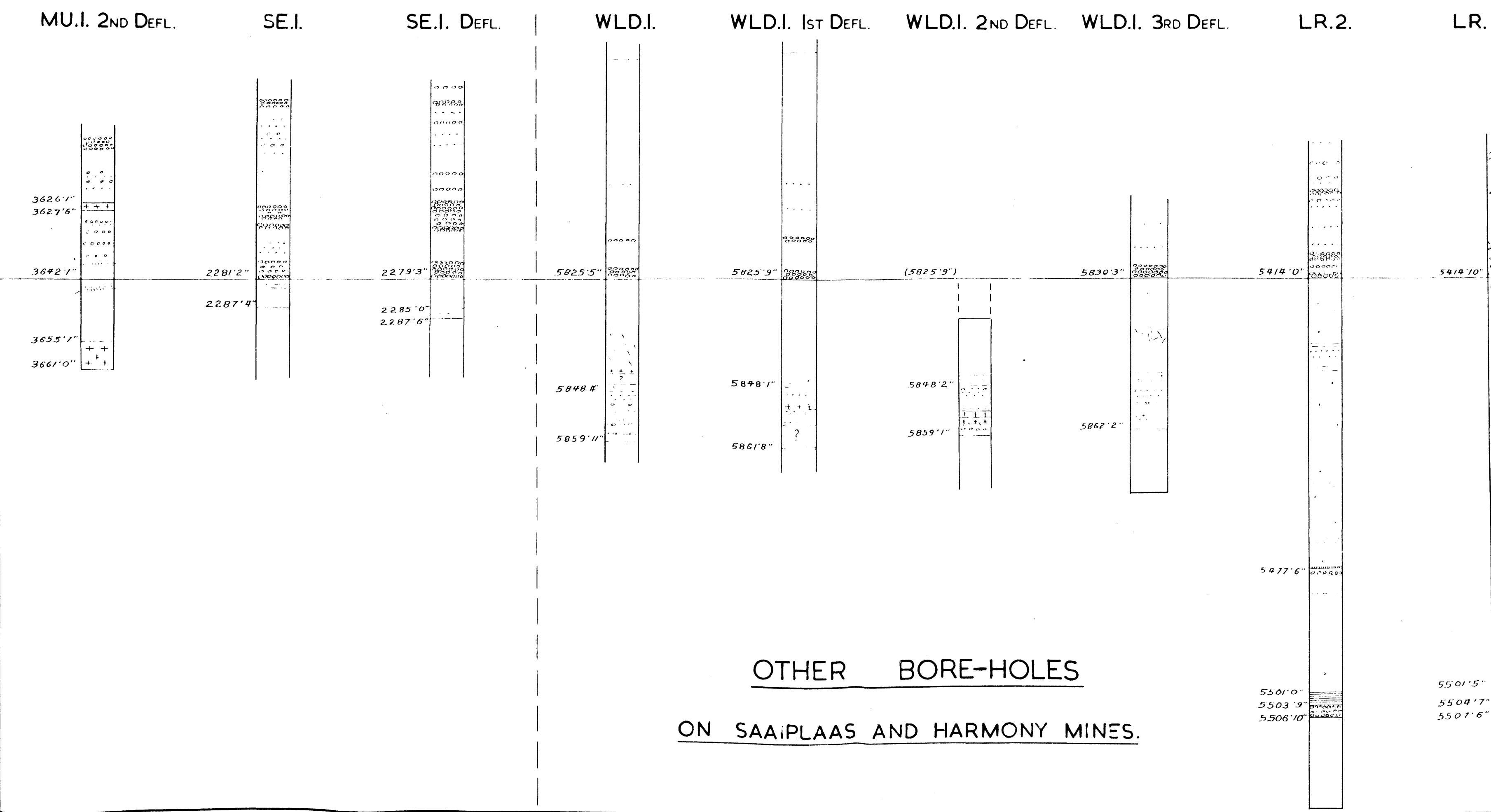
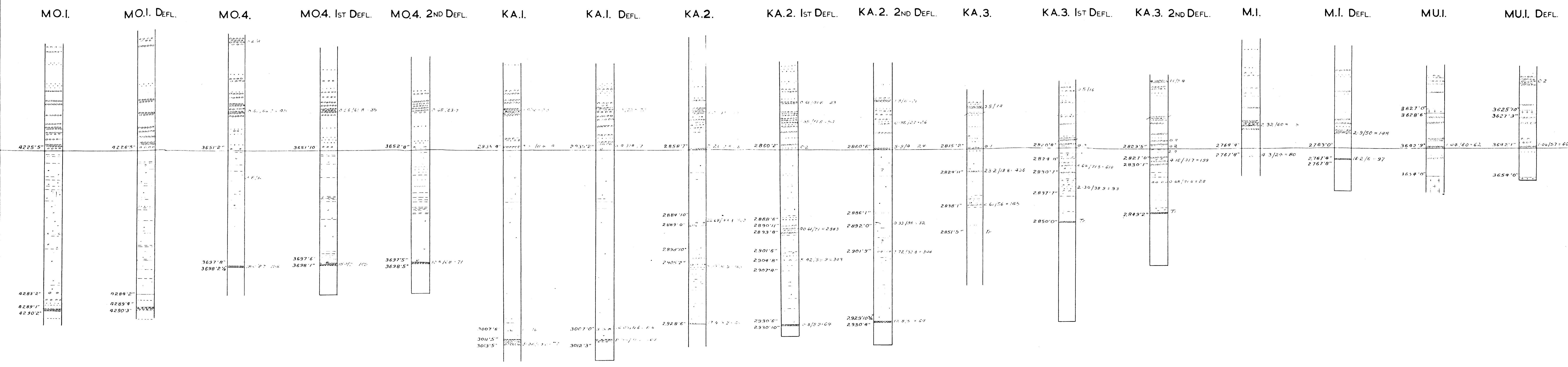
SCALE:- 1:5000.



REFERENCE.

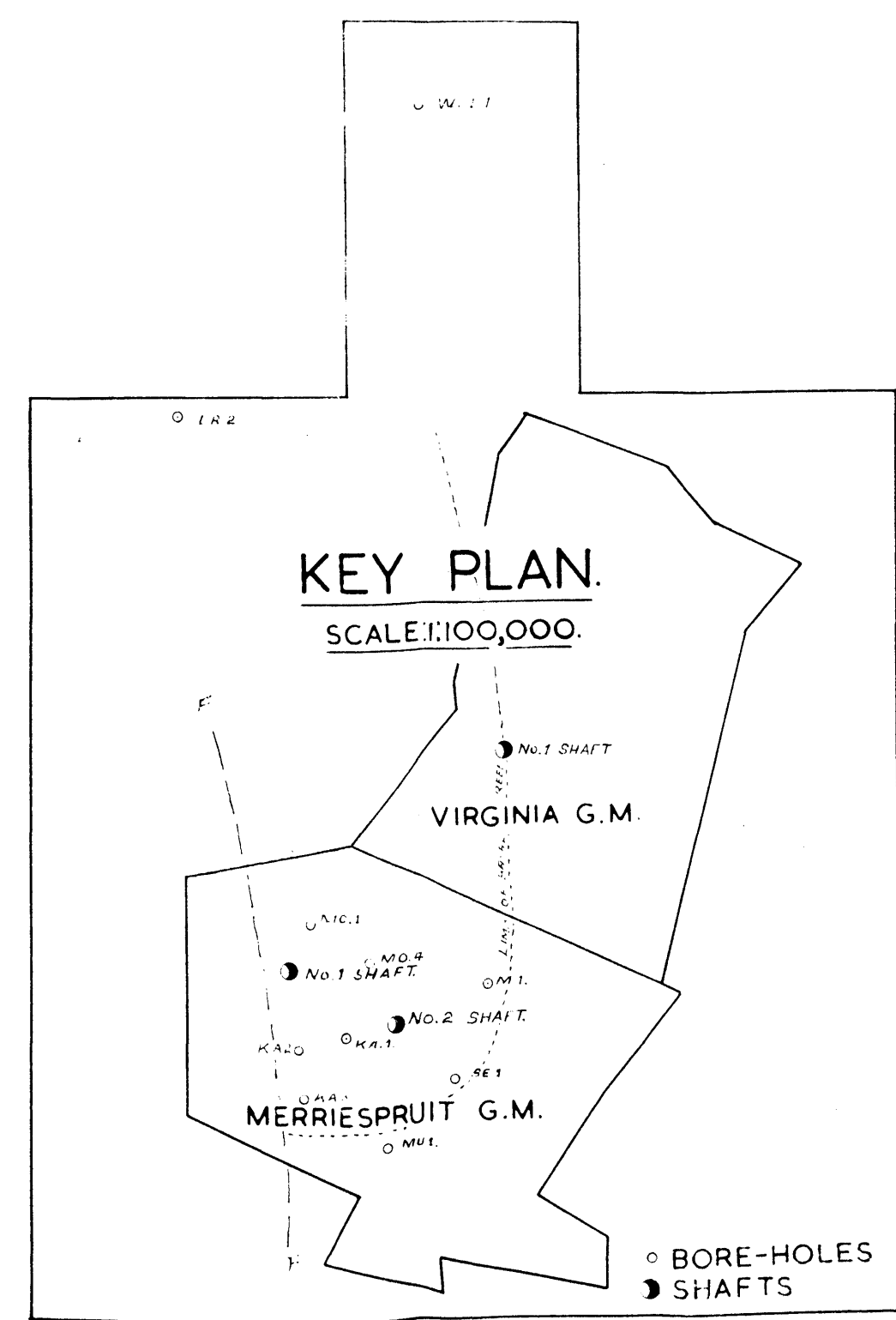
Depth in feet	K	Karoo System overlying Witwatersrand System.
	V	Witwatersrand lava overlying Witwatersrand System.
	Zone V.S.1	
	Zones V.S.2 and V.S.3	
	Zone V.S.4	
	Zone V.S.5	
	Big Public Reef	
	B Reef	
	Leader Reef	
	Basal Reef	
	Intermediate Reefs.	
	Upper White Band	
	Lower White Band	
	Base of zone M.F.3	
	Commonage Reef zone	
	Red May Reef zone	
	Main Reef	
	Footwall quartzite	
	Intrusion	
	Fault	
	12° Apparent dip measured on core.	





REFERENCE.

ZONE	Description
E.S.3	Upper Leader Reef
	Leader Reef
E.L.1	Thin brown, waxy quartzite
	Siliceous quartzite (lenticular)
E.L.2	Upper Basal Reef (lenticular)
E.L.3	Basal Reef
U.F.1	Upper Foot wall quartzite



MERRIESPRUIT (O.F.S.) G.M. Co., LTD.

BOREHOLE COLUMNS
SHOWING SPATIAL DISTRIBUTION AND DEVELOPMENT OF
UPPER BIRD REEFS
[ZONES E.S.3 (LEADER REEF) E.L.1 & BASAL REEF.]
COMPARED WITH THEIR
GOLD CONTENT.
SCALE = 1:200.

GEOLOGY:
DRAWN:
DATE:
REFERENCE:

OTHER BORE-HOLES
ON SAAIPLAAS AND HARMONY MINES.

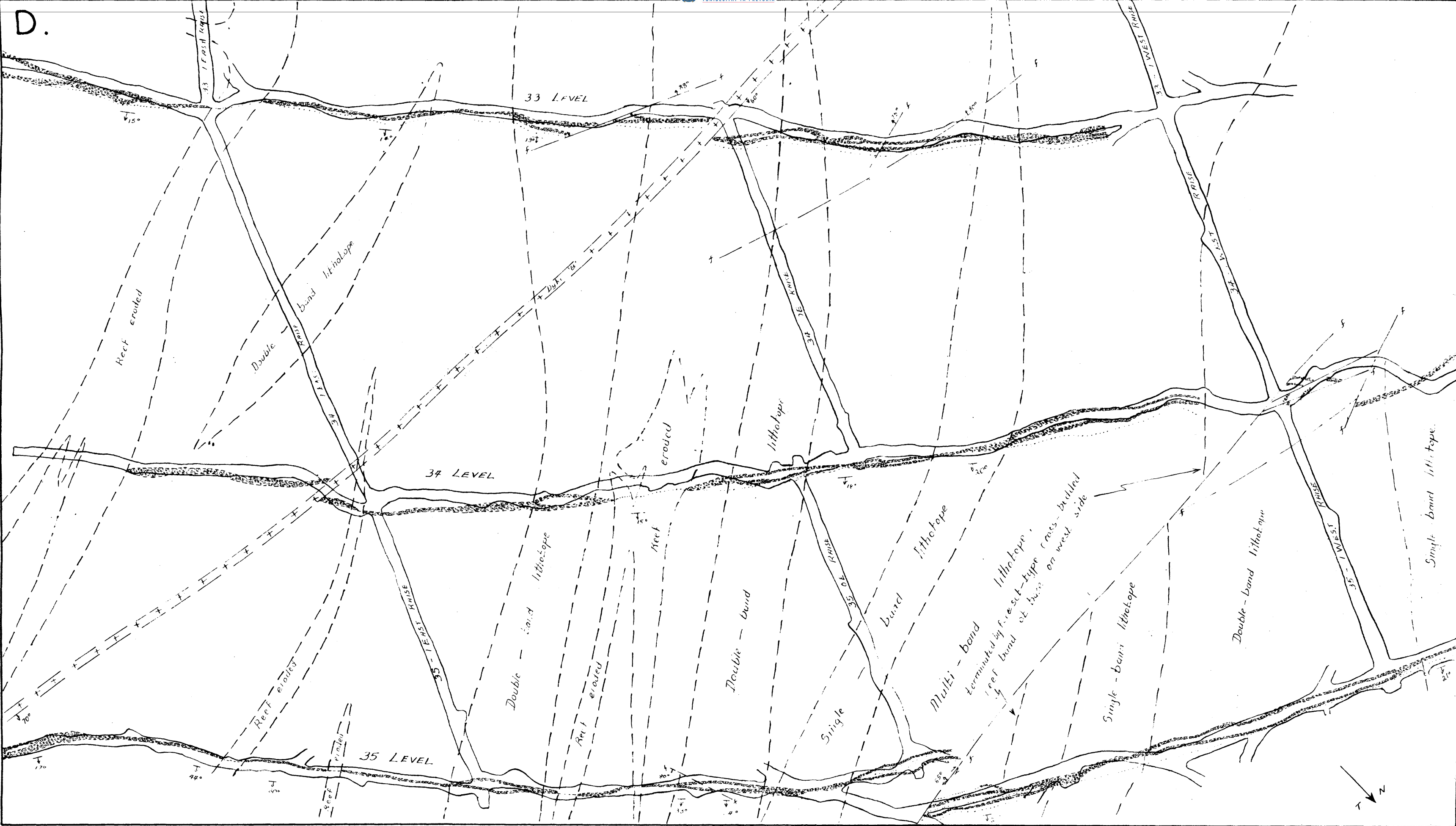
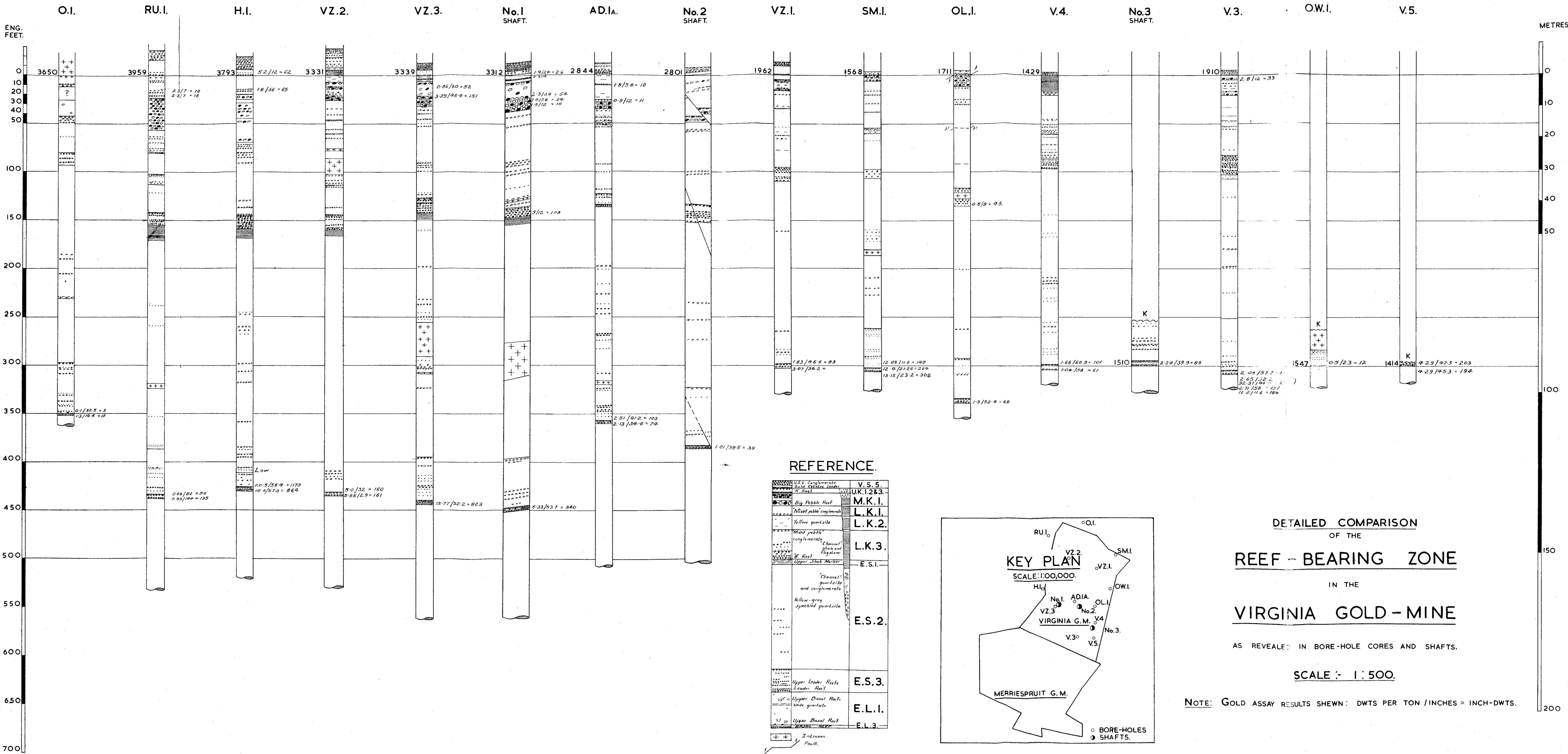


PLATE D. LITHOTOPE MAP OF BASAL REEF ON PORTION OF MERRIESPRUIT MINE.

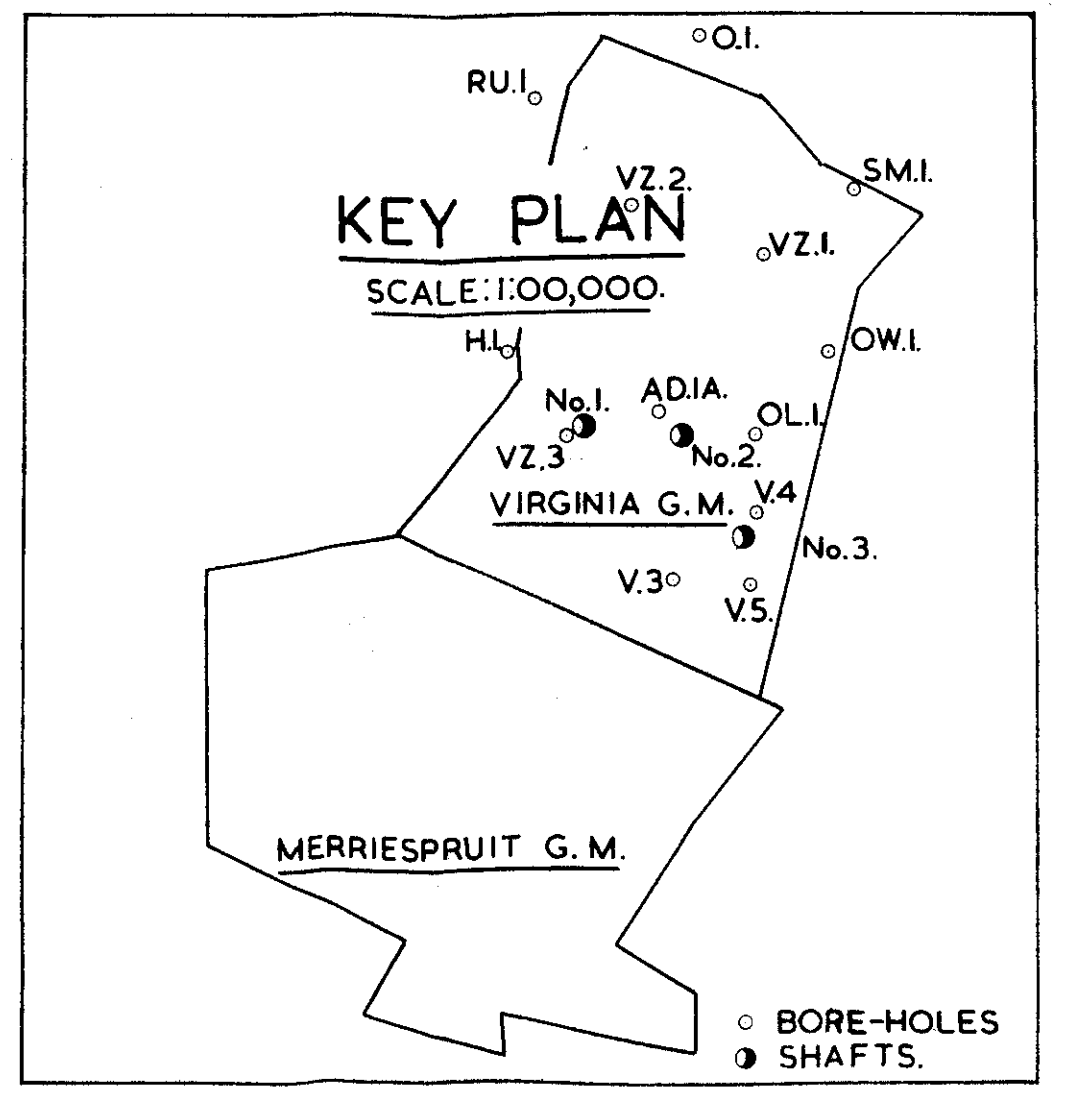


E.



REFERENCE.

V.S. Conglomerate	V.S.5
Sandstone	UK.1,2&3
Big Pebble Reef	M.K.I.
Mixed pebble conglomerate	L.K.I.
Yellow quartzite	L.K.2.
Mixed pebble conglomerate	L.K.3.
Channel shale and flagstone	E.S.I.
Upper Shale Marker	E.S.2.
Channel quartzite and conglomerate	E.S.3.
Yellow-grey speckled quartzite	E.L.I.
Upper Leader Rocks	E.L.3.
Leader Reef	
Upper Basal Reef	
White quartzite	
Upper Basal Reef	
Lower Reef	
Inclusion	
Fault	



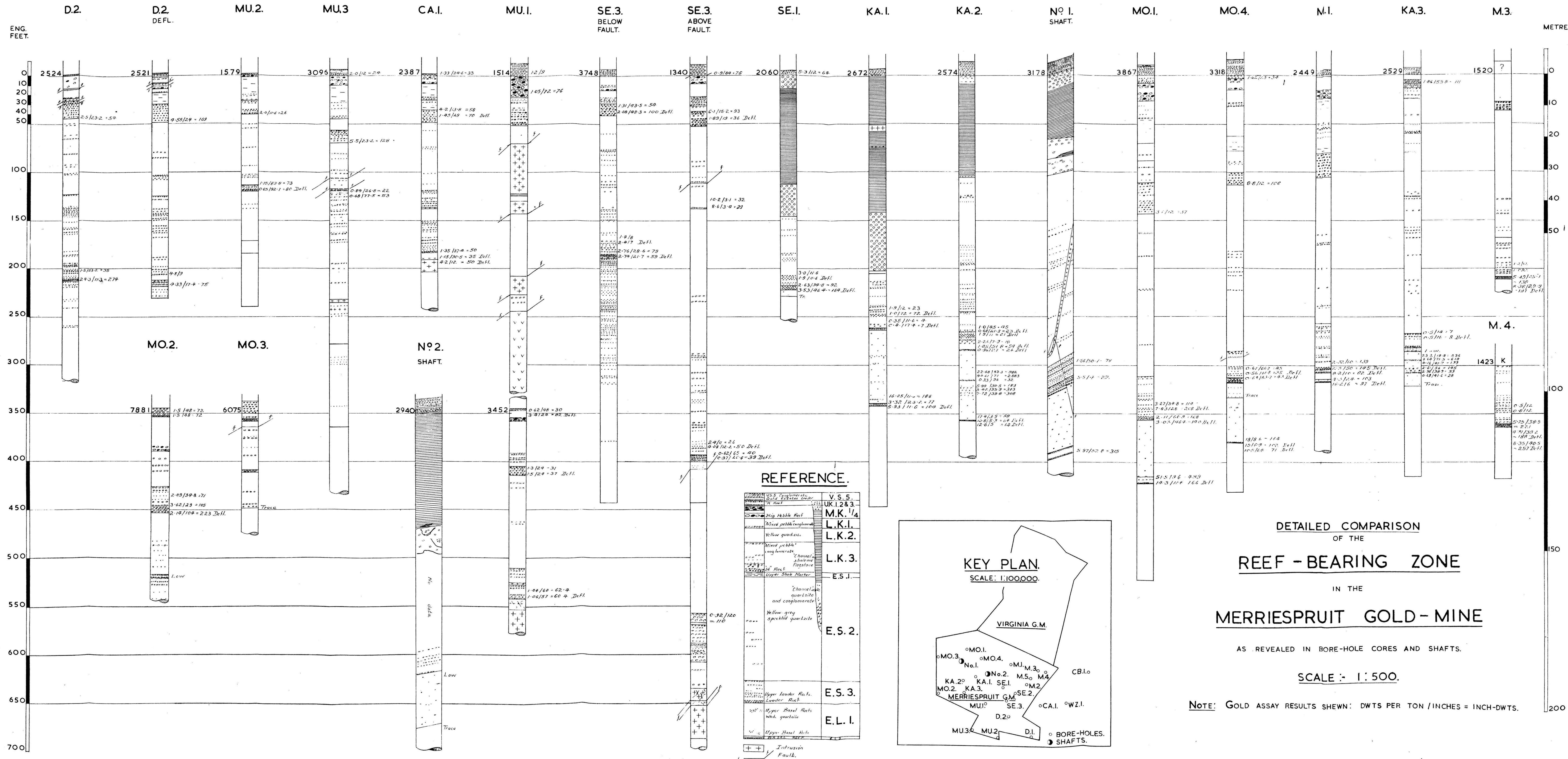
DETAILED COMPARISON
OF THE
REEF-BEARING ZONE
IN THE
VIRGINIA GOLD-MINE

AS REVEALED IN BORE-HOLE CORES AND SHAFTS.

SCALE: 1:500.

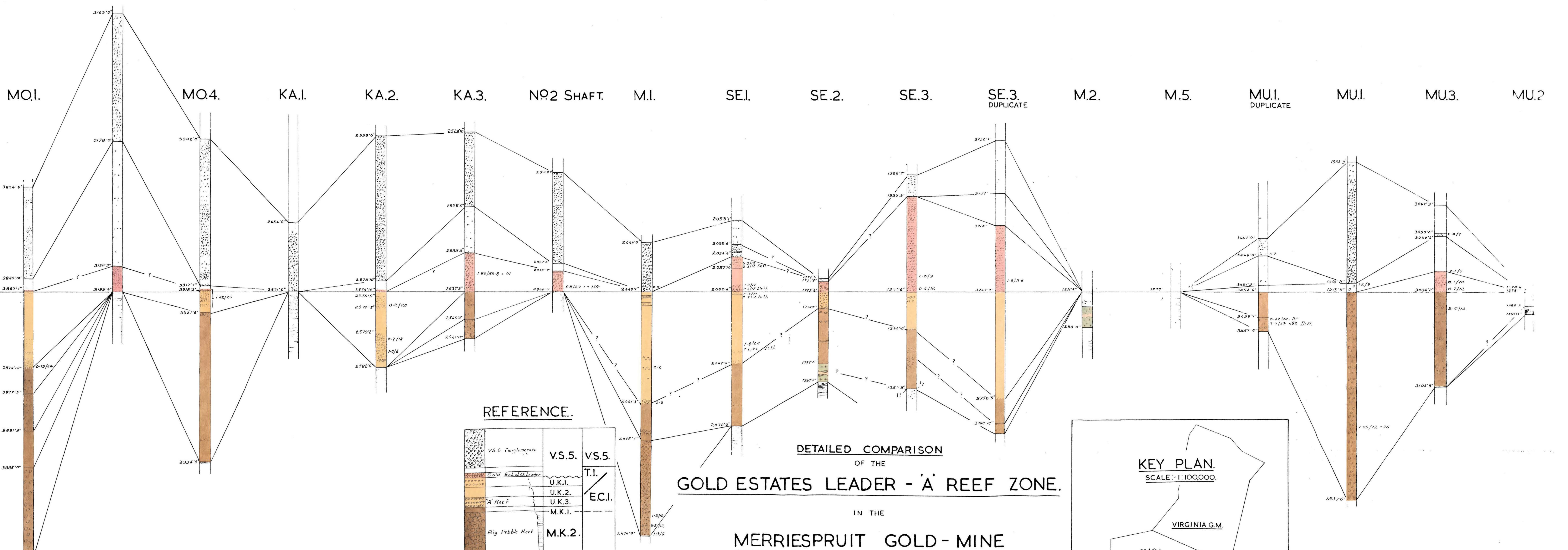
NOTE: GOLD ASSAY RESULTS SHOWN: DWTS PER TON / INCHES = INCH-DWTS.

F.



G.

NO.1 SHAFT.



DATUM: DISCONFORMITY AT BASE OF ELSBURG STAGE.

REFERENCE.

VS.5 Conglomerate	VS.5.	VS.5.
Gold Estakes Leader	U.K.1.	T.I.
'A' Reef	U.K.2.	EC.1.
	U.K.3.	
	M.K.1.	
Big Pebble Reef	M.K.2.	
'Channel' Shale and Flagstones	M.K.3.	EC.2.
Big Pebble Reef	M.K.4.	

++ Intrusion

DETAILED COMPARISON
OF THE
GOLD ESTATES LEADER - 'A' REEF ZONE.

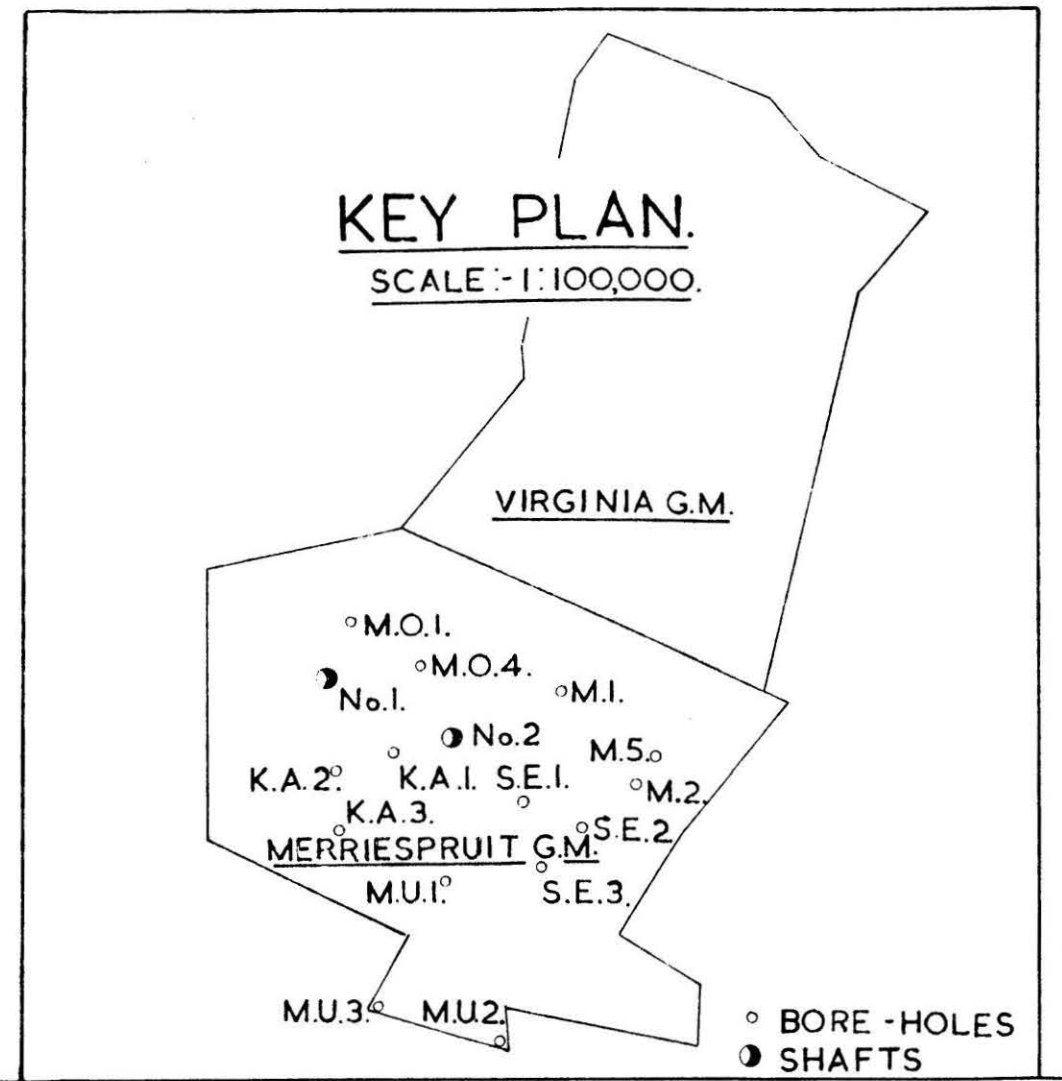
IN THE
MERRIESPRUIT GOLD - MINE

AS REVEALED IN BORE-HOLE CORES AND SHAFTS.

SCALE:- 1:50.

NOTE:- GOLD ASSAY RESULTS SHEWN: DWTS PER TON / INCHES = INCH-DWTS.

KEY PLAN.
SCALE:- 1:100,000.



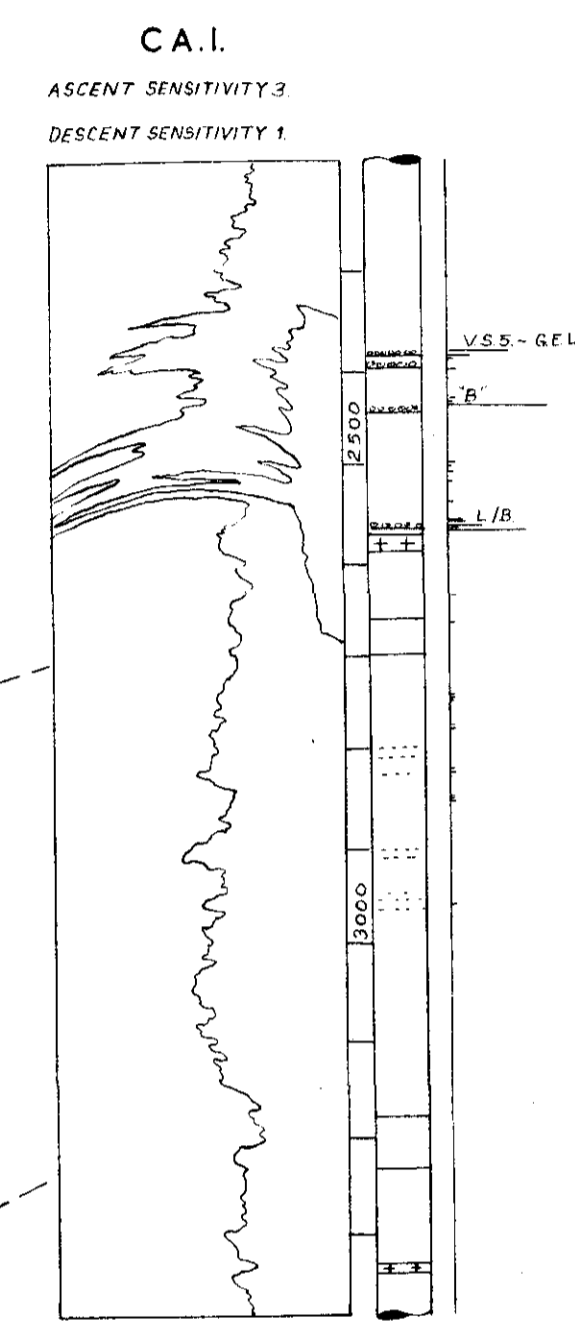
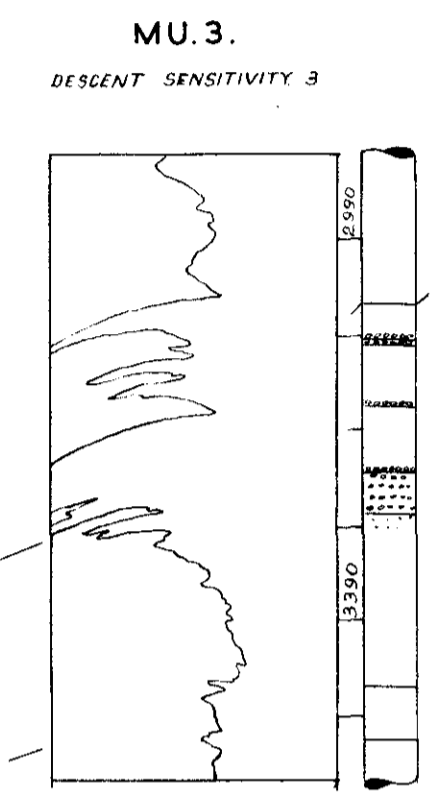
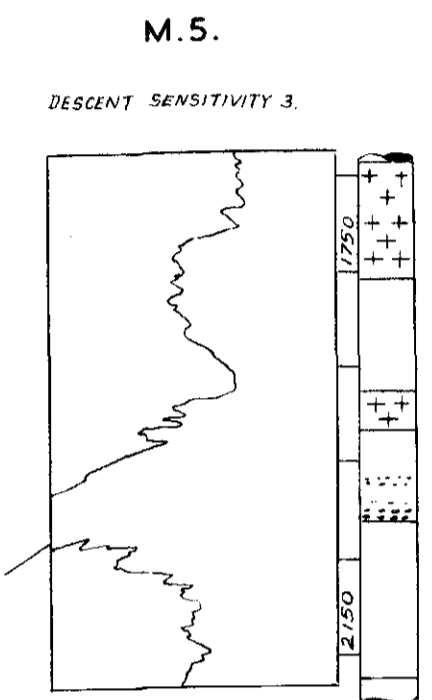
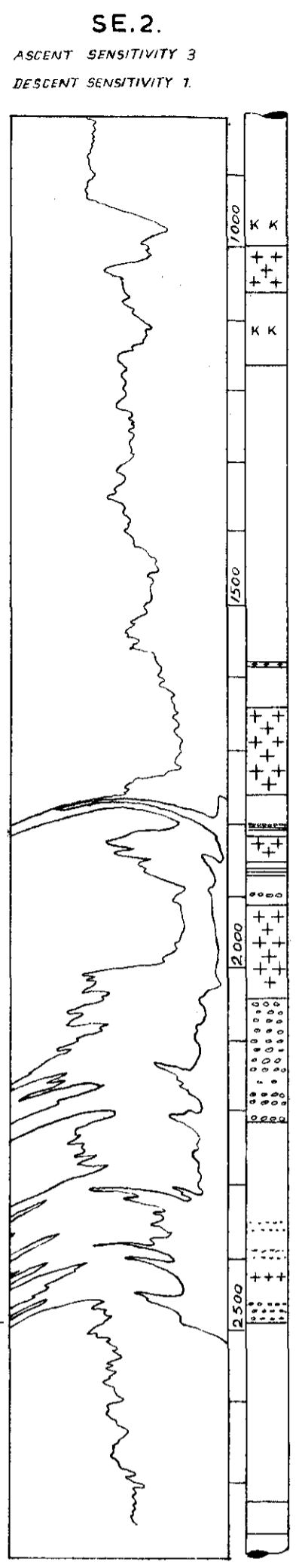
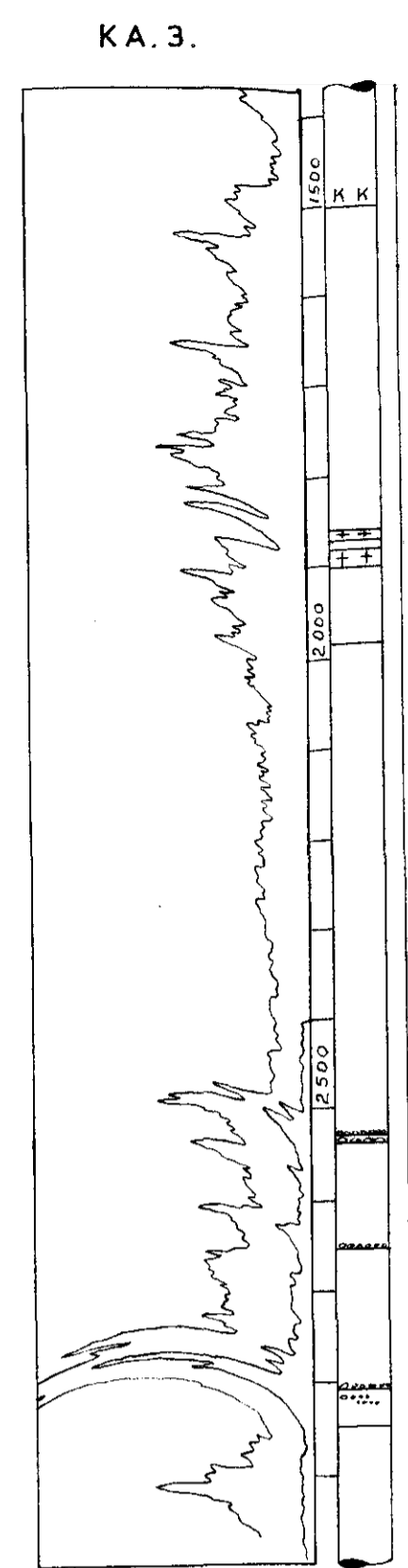
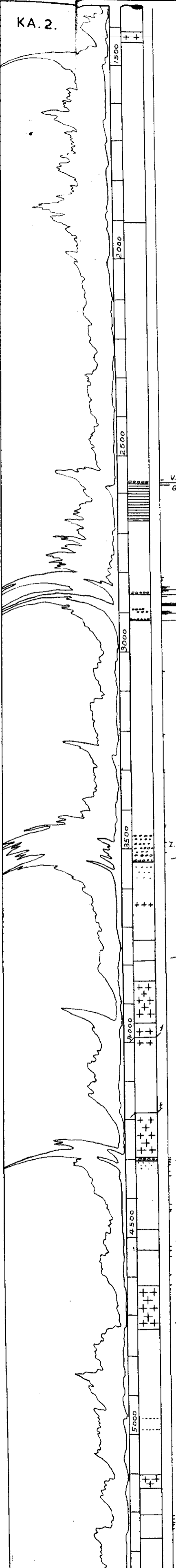
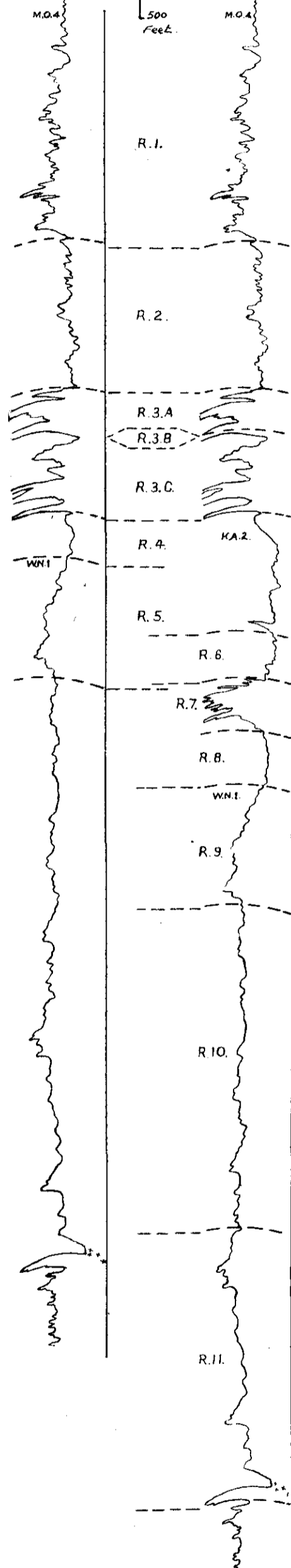
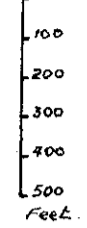
20 July 1955.

COMPOSITE LOGS

DR. SIMPSON.
(1952)
(PLATE XXII)
FIG. 6.)

REVISED.

SCALE

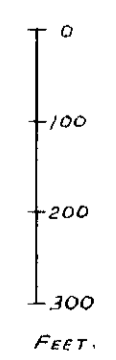


RADIOMETRIC LOGS AND GOLD CONCENTRATIONS.

COMPARED WITH DESCRIPTIVE COLUMNS OF SELECTED BORE-HOLES

IN THE
MERRIESPRUIT MINE.

VERTICAL SCALE.

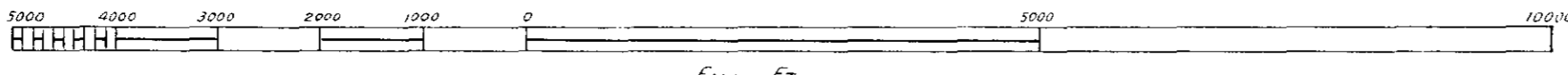


R1, R2, etc.: Radiometric Subdivisions.

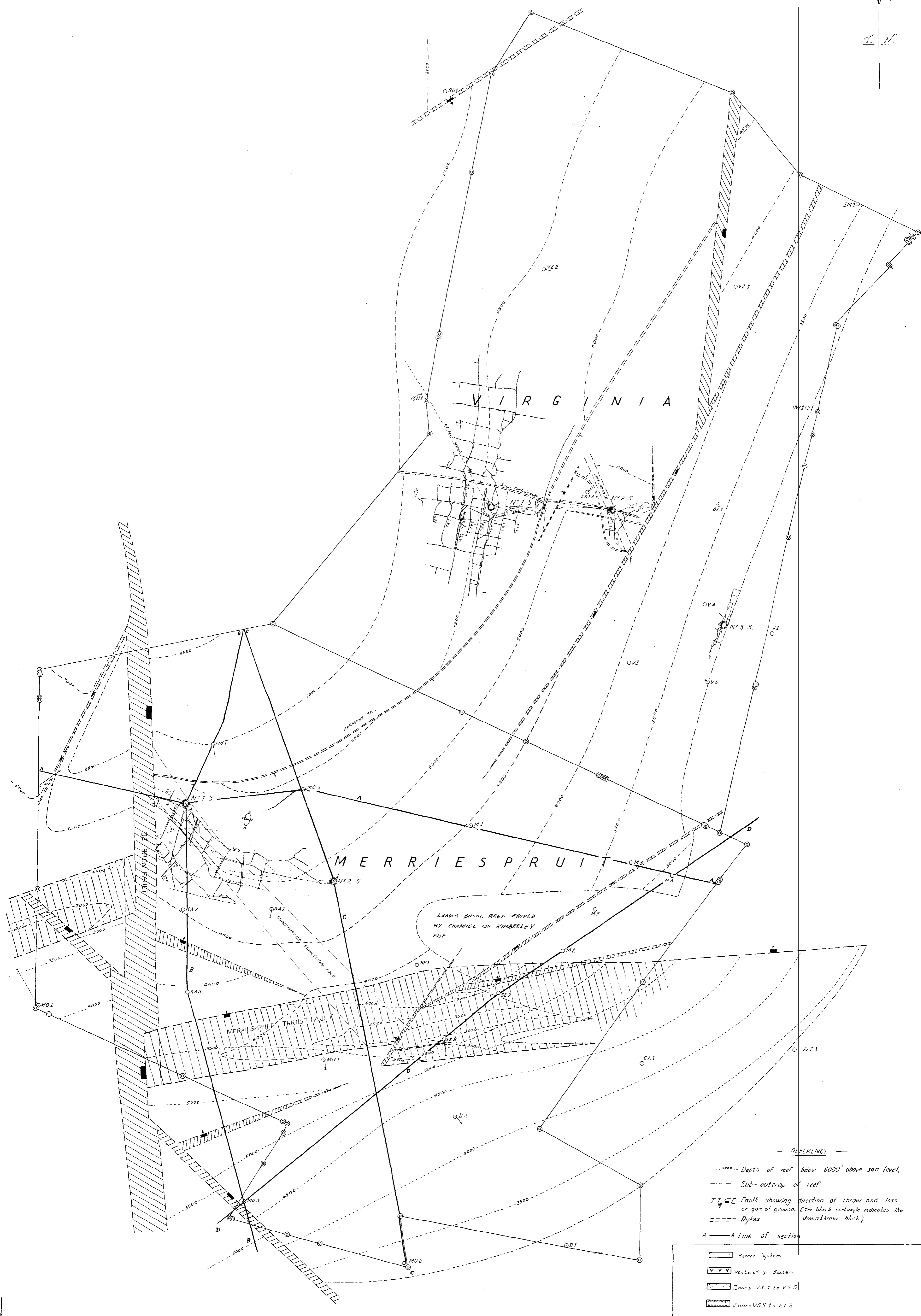
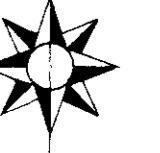
ABBREVIATIONS.

V.S.S.	V.S.S. Conglomerate
G.E.L.	Gold Estoloz Leader.
B' Reef	B' Reef.
L.R.	Leader Reef.
U.B.R.	Upper Basal Reefs.
B.R.	Basal Reef.
L/B.	Leader-Basal Reef.
I.R.	Intermediate Reefs.

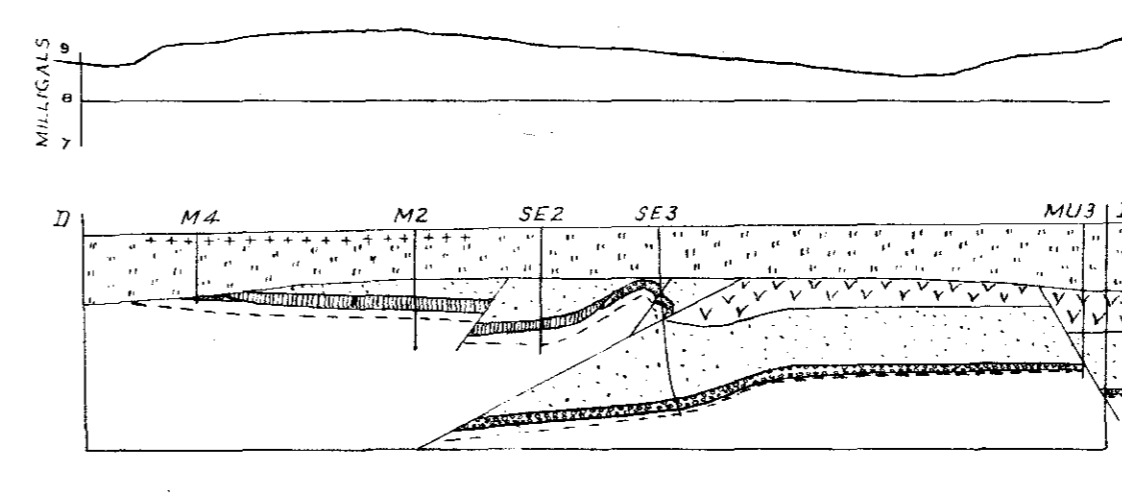
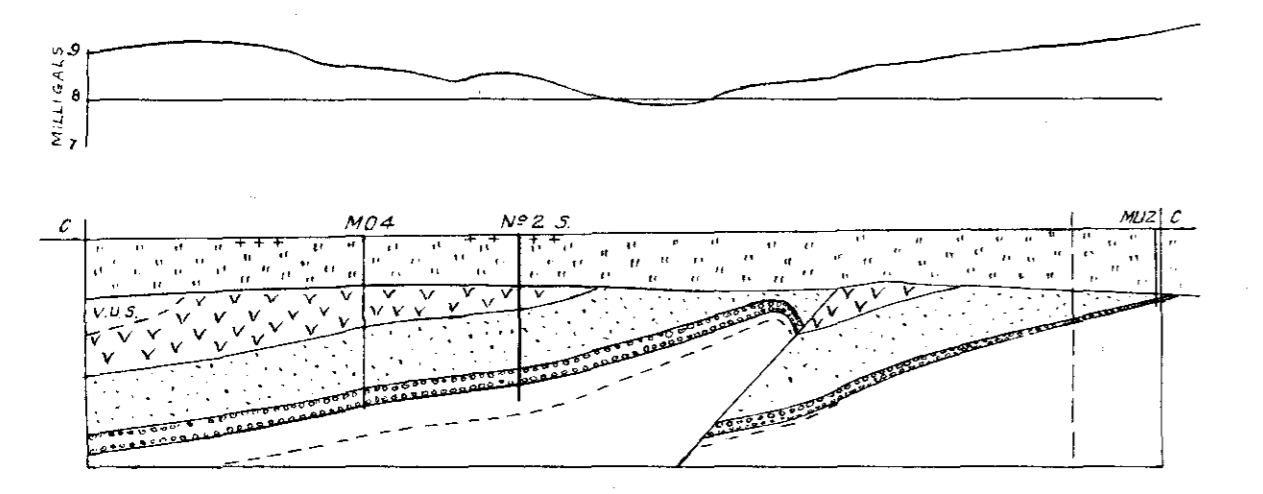
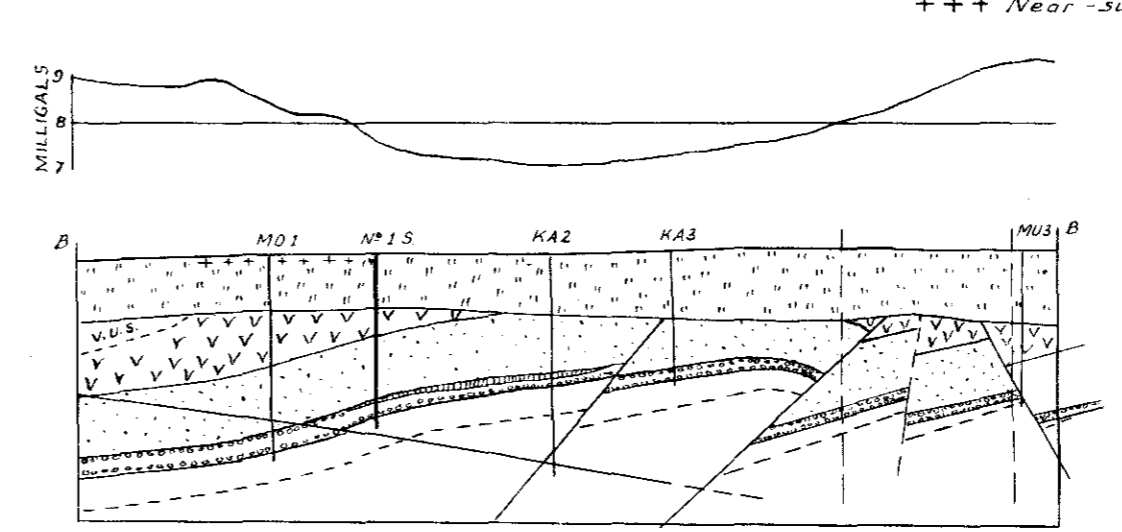
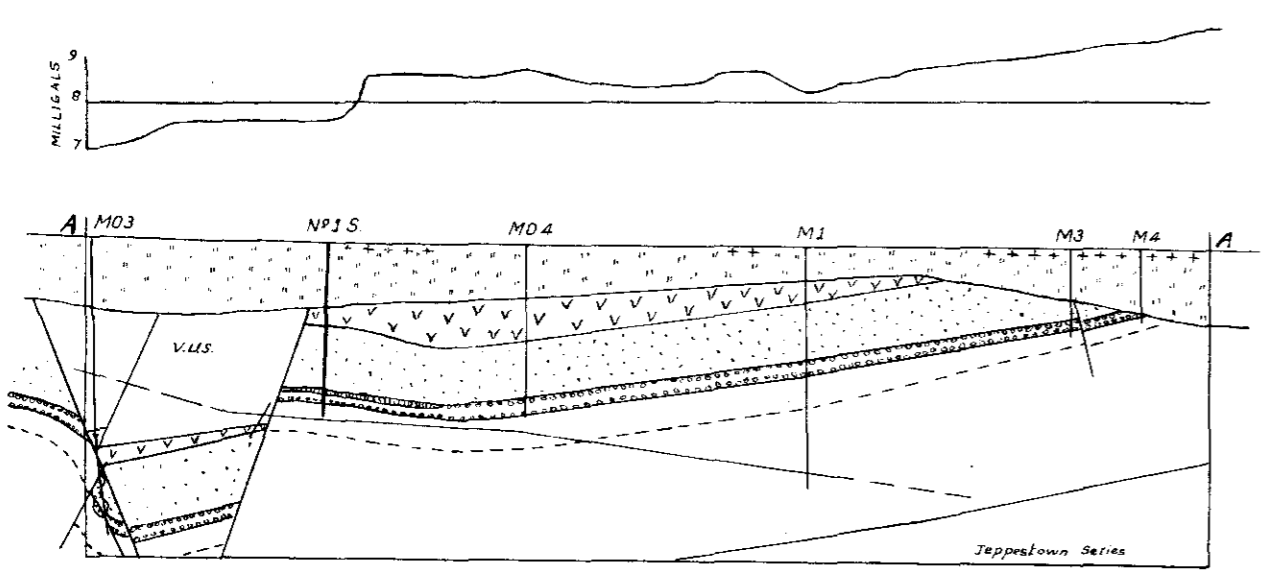
VIRGINIA AND MERRIESPRUIT MINES.



SCALE: 1:20,000.



- REFERENCE
- Depth of reef below 6000' above sea level.
 - - - Sub-outcrop of reef
 - Fault showing direction of throw and loss or gain of ground. (The black rectangle indicates the downthrow block.)
 - Dykes
 - A --- A Line of section
 - [Symbol] Harrow System
 - [Symbol] Ventersdorp System
 - [Symbol] Zones V.S. 1 to V.S. 5
 - [Symbol] Zones V.S. 5 to E.L. 3.
 - [Symbol] Footwall beds
 - [Symbol] Channel deposits
 - Base Intermediate Reefs
 - +++ Near-surface dolerite sheets

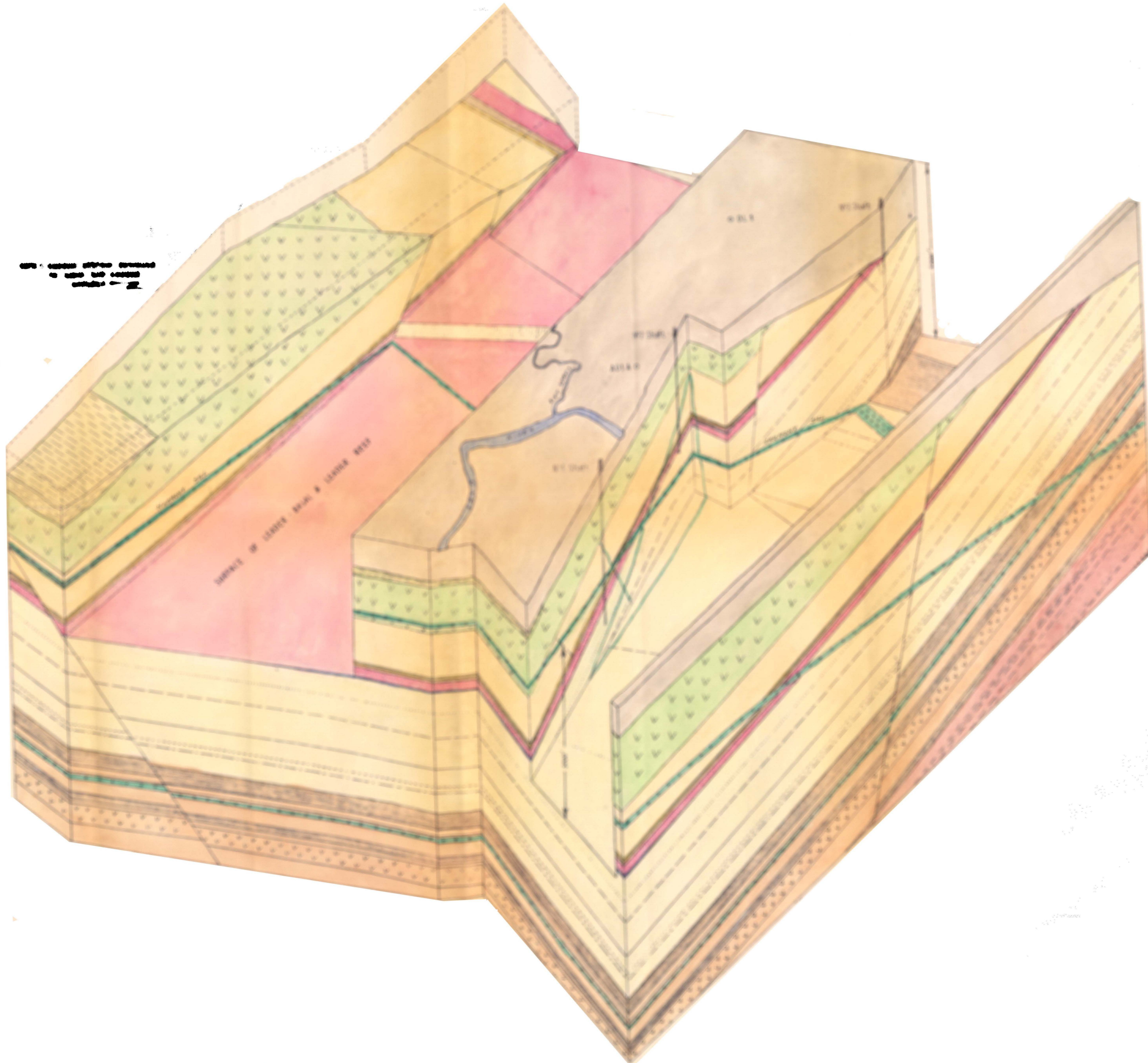


SCALE: 1:50,000.

J



**BLOCK DIAGRAM SHEWING
GEOLOGY & STRUCTURE
VIRGINIA O.F.S. & M. CO., LTD.
SCALE 1:20000**



NOTE: SANDSTONE STRATA CONTAINED
IN THIS BLOCK DIAGRAM
WAS CALCULATED BY THE
AUTHOR.

LEGEND

