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10/86

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,164

WAYSIDE, NEW DISCOVERY

Southwestern B.C. (92J/15W)

Geological, Geochemical and

Drilling Assessment Report of Work

Performed to July 28/1985

GEOLOGICAL, GEOCHEMICAL AND
REPORT ON DRILLING ON THE
WAYSIDE CLAIMS

Lillooet Mining Division

N.T.S. Map - 92J/15W, Zone 10

Centered at Approximately - U.T.M. 5 635 500 N
512 000 E
765 m elevation

50° 53' - Latitude

122° 50' - Longitude

Owned By - Amazon Petroleum Corp. and
Carpenter Lake Res.

Operated By - Amazon Petroleum Corp.

Consultant - R.J. Morris
MORRIS GEOLOGICAL CO. LTD.

Author - R. J. Morris

Date - August 16, 1985

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- 2 - Drill Hole Core Descriptions
- 3 - Detailed Trench Drawings

SUMMARY -

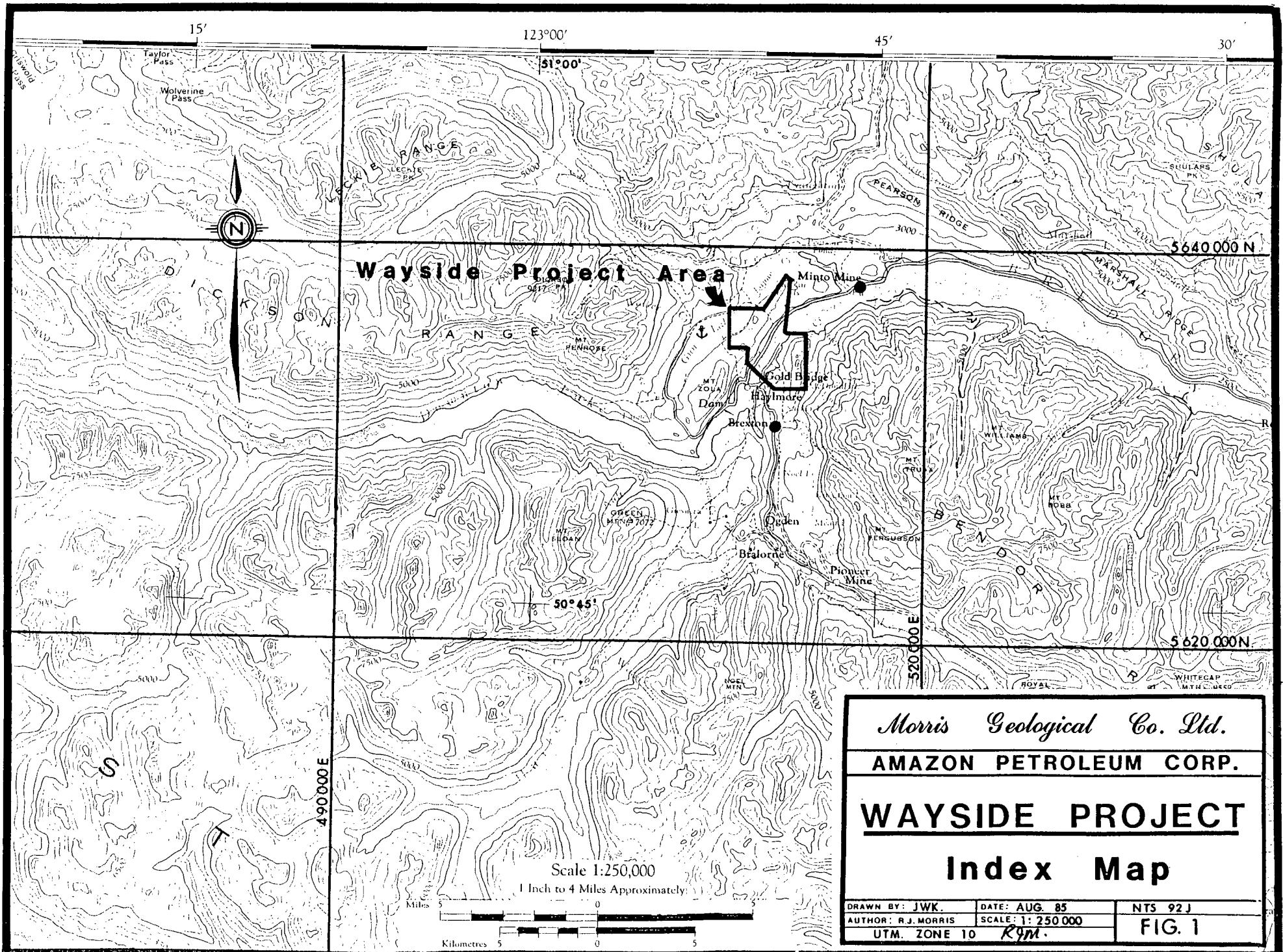
The discovery zone massive sulfide was located in the mid 70's during construction of the Lillooet - Gold Bridge highway. Since discovery 14 holes have been drilled to delineate 150,000 tonnes of copper-zinc mineralization with a minor precious metal content. The deposit is open to depth and along strike.

Work in 1985 was directed towards increasing the potential reserves of the main zone by testing its extension towards surface and to the north and south. A major EM conductor located in 1984 was also tested with diamond drilling as well as an I.P. anomaly delineated in 1981.

The Wayside property is within the Coast Plutonic Complex and comprises the Bridge River Group and the Bralorne Intrusives. The Bridge River Group is made up of volcanic and sedimentary rocks which strike north-south and dip steeply to the east. The Bralorne Intrusives are dominantly diorite which were probably emplaced as sills and may be the intrusive equivalent to the Bridge River Volcanics.

The property hosts at least two major strike - slip faults which strike east - west and appear to truncate the main ore horizon on the north and south. Combining geological mapping, geochemistry, I.P. and to an extent EM, the north and south extensions of the main ore zone appear to be displaced to the west, relatively.

It is recommended that diamond drilling be undertaken to test the present interpretation which leaves the down - dip extension and north and south ends of the deposit open.



INTRODUCTION -

Location and Access:

The Wayside property is located 3.2 kilometers north of the town of Gold Bridge, adjacent to and covering the southwestern end of Carpenter Lake.

Access is via an all weather road westward from Lillooet approximately 112 kilometers. The highway goes through the claims and several good exploration and forestry roads allow access to various portions of the property.

Previous Work

- WAYSIDE MINE
 - produced 1914 - 37
 - 43,094 tons
 - 5,341 oz. gold
 - 842 oz. silver

- active during 1946 - 53
- no production figures

- 1934 - G.S.C. map 430A, "Gun Lake area"

- 1974 - Charles A.R. Lammle
 - preliminary report + map
 - 110 soil samples along highway analysed for gold.

NOTE because of thick glacial debris soil sampling should be site specific.

- ground magnetometer survey along highway.

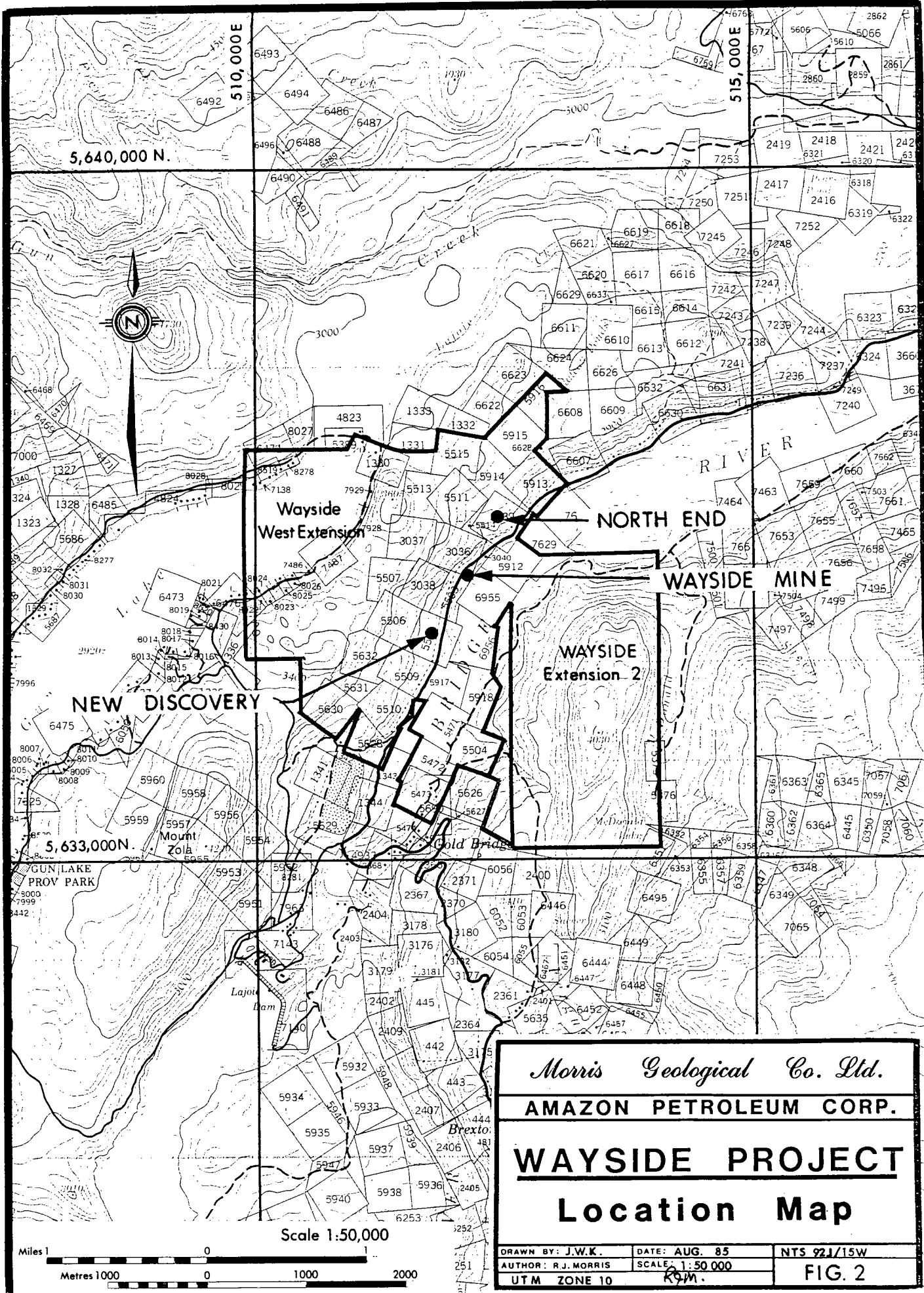
NOTE magnetometer results seem to map the diorite and Bridge River Group very well.

- two sites noted for oxidized porphyritic rock, "New Discovery" and above D.D.H. 84.07.

NOTE a boulder of massive pyrite in chert was located at

the second site (sample 59R).

- 1980, 1982 - J.P. Elwell - three reports covering diamond drilling + assays.
 - 8 holes in the "New Discovery"
 - total = 1995.8m (6548 ft.)
 - 1981 - Geotronics - I.P. & S.P. survey
 - anomaly A correlates very well with the new discovery.
- NOTE the new discovery is non-economical, massive pyrite;
- a) surface sampling
 - b) holes 84 - 10, 11
 - c) holes 80 - **S3, S2**
- the north end of anomaly A is probably faulted (left lateral) to the 84-04 area.
- NOTE anomaly A over 84-04 correlates with a conductor of Glen Whites.
- the south end of anomaly A is probably faulted (right lateral) to become anomaly B.
- NOTE if anomaly A, over hole 84-04 and anomaly B are fault extensions of the main anomaly A, possibly they are merely massive pyrite also.
- 1983 - R.H. Seraphim - Geochemistry for Gold over the Wayside diorite and onto Bridge River Group west of the diorite.
 - 1984 - A. Halim Arik - Report on drilling, 1984
 - four holes on the New Discovery
 - total = 825.4m (2703 ft.)
 - 1984 - Geotronics - EM and geochemistry.
 - North end and east of Wayside diorite.
 - good correlation of geochem and EM.
 - 1984 - Glen White - Geophysical report for downhole and pulse EM.



SUMMARY OF 1985 EXPLORATION

- Geological mapping
 - North end, H. Arik east of base line
 - R.J. Morris west of base line
- South end, R.J. Morris
 - all roads
 - White's grid
- Chain and compass survey
 - 11 176m (36,666.7 ft = 6.9 mi.)
 - mostly roads
- Trenching - 453m (1,486.2 ft.)
- New road - 798m (2,618.1 ft.)
- Old trenching and adit
 - three old trenches were located.
 - one old adit was found
- Geochem - 324 soil and rock samples
- New sections, White's grid
- New detail on New Discovery
- Diamond drilling - 4 holes completed, number 5 in progress; 587.7m
- The present report describes work and interpretations by the author after field work from May 21 to August 29, 1985

SUMMARY OF TRENCHES

TABLE 3

TRENCH NO.	LENGTH	WIDTH	DEPTH	ACCESS	TO TEST FOR	SAMPLES	RECLAIMED
41	24.5	1.0	2.5	Edge of existing road	Au	3 soils	✓
A34	20	0.5	0.5	along skidder trail	Au	1 soil	✓
A34E	22	0.5	0.5	" " " "	Au	1 " "	✓
34	21	0.5	0.5	" " " "	Au	N/S	✓
11	41	1.0	1.0	new trail, length = 220m	Au	5 soils	
6N500W	14	1.0	4.5	along skidder trail	MS	2 " "	✓
103	55	1.0	-	along road	MS	15 rock chips	✓
6N300W	4	1.0	-	new trail, length = 92m	MS	1 soil	✓
99	84	1.0	2.0	re-opened old trench	Au	4 soil, 3 rock	✓
147	20	1.0	4.0	along new trail to trench 11	Au	4 soils	✓
81	20	1.0	1.5	along old road	Au	3 soils; 3 rock	
118	15	2.0	1.5	ditch of highway	MS	3 soils; 12 rock	
165	33	1.0	3.0	new trail, length = 345m	MS	2 soils	✓
158	14	1.0	1.0	new trail, length = 41m	MS	3 soils	✓
118A	22	1.0	0.5	along old road	MS	17 rock	
117	6	1.0	1.5	along old road	MS	5 rock, 3 soil	✓
61	10	1.0	5.0	re-opened old trench	MS	1 soil	
59	7.5	1.0	2.5	" " " "	MS	2 " "	
900S	-	-	-	new trail, length = 100m	Au	N/S	✓
600S320E	15	1.5	3.0	along old trail	Au	1 soil, 1 rock	✓
PLA	5	3.0	3.0	re-opened old adit along old trail	Au	3 rock	✓

Total trenches = 453m
 New road = 798m (for trenching) } 1575.5m
 New road = 777.5m (for drilling) }

GEOLOGY -

Overview :

The Gold Bridge - Bralorne area is part of the Coast Geanticline tectonic element of the Canadian Cordillera. The area was subjected to a varied eugeosynclinal depositional regime including extensive and repeated volcanism in island arc environments and rapid changes in the distribution, thickness and character of the sediments, reflecting repeated deformation and uplift from late Devonian until the late Cenozoic.

The upper Paleozoic eugeosynclinal rocks were deposited in two relatively mobile volcanic arcs. The Coast Mountain arc is characterized by mixed volcanics: andesite, basalt, and rhyolite with abundant pyroclastics; clastics, partly terrigenous and partly volcanogenic.

The early Mesozoic witnessed extrusion of abundant andesitic and basaltic volcanics, in part from centres along island arcs, and, in part as submarine flows in adjacent troughs and basins. The basins also received thick accumulations of volcanogenic and terrigenous sediments from the arcs. Tectonic relief is recognized on the basis of gross changes in facies of volcanics and sediments.

The Tygaughton Trough successor basin was established following the mid-Jurassic tectonism. The trough received considerable granite debris from the east in late Jurassic and Early Cretaceous time. In early Late Cretaceous time much of the Cordilleran region was land - mainly mountains, though deposition continued in Tygaughton Trough.

The Coast Plutonic Complex is dominated by the Pacific Orogen. The structures are mainly steeply dipping reflecting the nearly vertical upward movement of blocks and plutonic material.

Detailed Geology :

Two formations are exposed on the Wayside Property, the older Bridge River Group which comprises sediments (argillite, sandstone and chert) and greenstones, (andesite to gabbro), and the Bralorne Intrusives which are dominantly diorite.

The Bridge River Group is comprised of sediments and volcanics which strike north-south and are nearly vertical. Several tops determinations on the north end of the property indicate that younger strata is to the east. The depositional environment is submarine and generally low energy as indicated by up to 400m of chert and argillite at the north end of the property. Contradictory to this quiet environment are several locations of sandstone, conglomerate, agglomerates and pyroclastics. These occurrences indicate several periods of uplift and rapid deposition into paleo-basins.

The Bralorne Intrusives were probably emplaced as sills during eugeosynclinal basin development. The diorite is generally conformable, as indicated by numerous north-south contacts though drilling shows some cross cutting contacts. There does not appear to be much contact metamorphism though gradational lithology changes are evident where the diorite is in contact with greenstones. This gradation may indicate a near surface magma with the greenstones being volcanic equivalents.

Later stage structures include two east-west strike slip faults with up to 150m displacement. These faults are not reported on previous geological maps nor is the east-west slip component. As well as mapping, evidence to support this interpretation includes three silicic dikes, up to 6m thick, which strike east-west and could be interpreted as infilling zones of weakness, and an I.P. survey which shows identical displacement of a major anomaly.

A geological model for the accumulation of sediments and volcanics with the massive sulfide occurrence is proposed with sketches to aid interpretation.

During deposition of the Bridge River Group the sea floor level was very unstable with several high and low areas. The rapid transition from thick greenstone sequences to sediments indicates synvolcanic faulting. The fault zones acted as vents and supplied the volcanic flows which filled depressions and spilled out over lower areas. Continued movement along these fault zones would allow hydrothermal solutions and sulfide ore migration as well as later zones of weakness for faulting and shearing.

Hodgson and Lydon (1977) have presented two hydro-thermal systems which could be applicable to the Wayside property. The first, Fig.29, shows development adjacent to a fault with volcanic flow, ore accumulation, the heat source would be the intruding Bralorne sills. Figure 30 shows several ore accumulation sites with sill emplacement. This model shows a favourable horizon for ore but also the exploration difficulties.

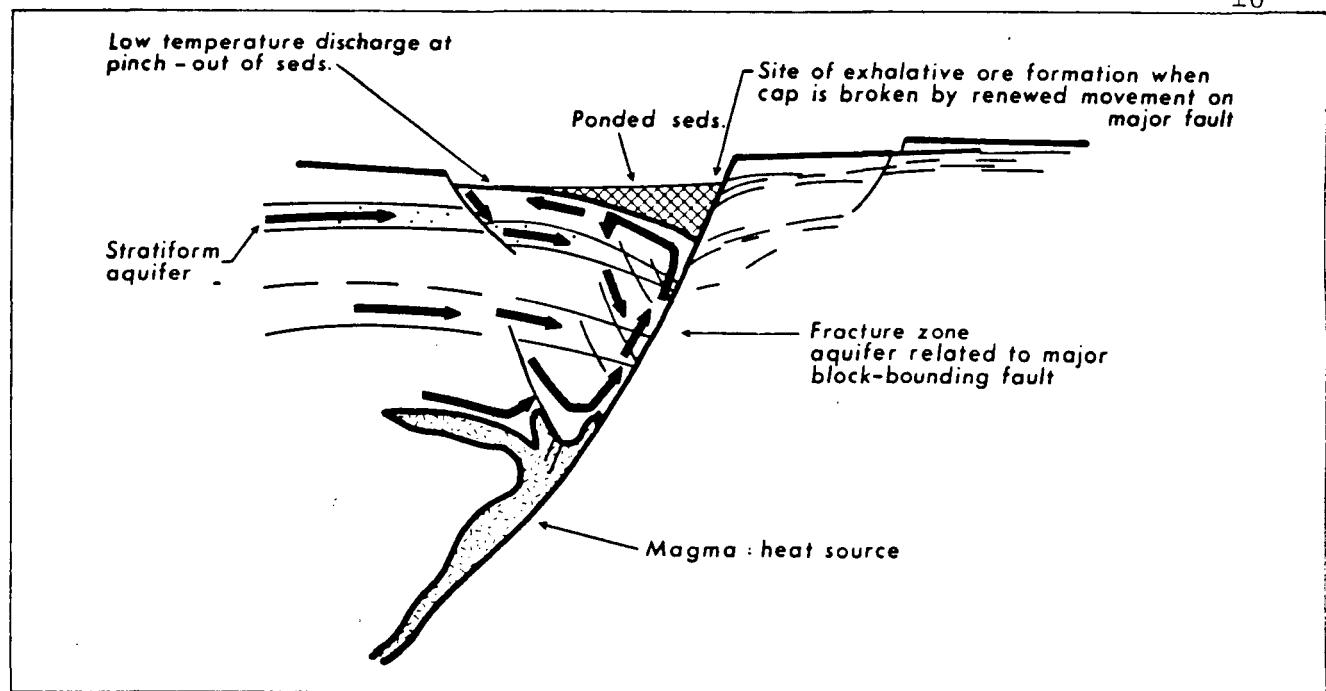


FIGURE 29—Diagrammatic representation of a hydrothermal system developed in a fractured zone adjacent to the boundary fault of a tilted fault block.

(both from: Hodgson & Lydon, 1977)
R.G.M.

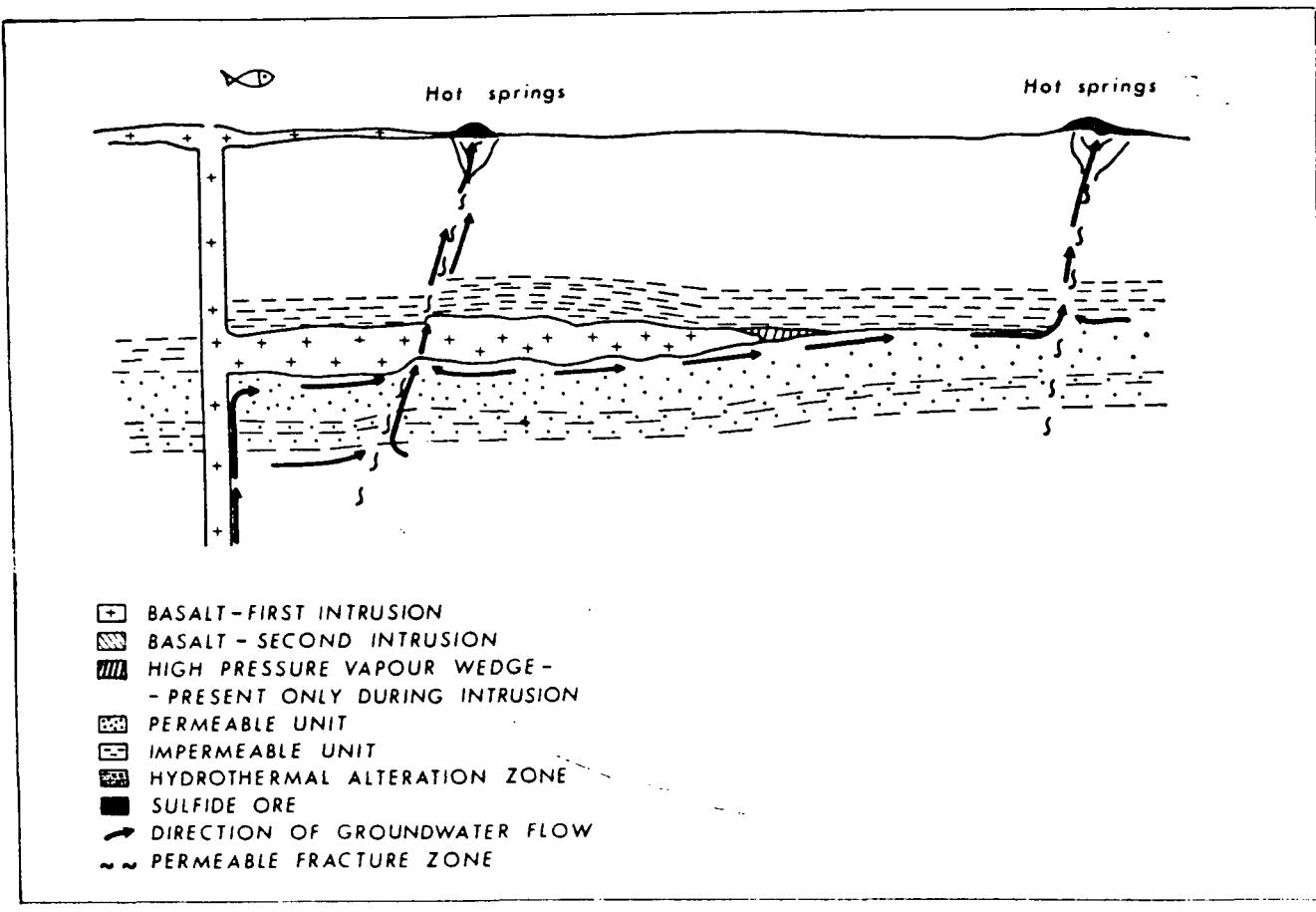


FIGURE 30—Possible hydrothermal systems associated with sills: (a) sill emplaced beneath an impermeable layer below which the vapour wedge necessary for sill initiation and lateral expansion may form (c.f. Fig. 4), and which prevents the upward escape of groundwater heated by the sill, except where the layer is transected by permeable zones

DEPOSIT MODELLING -

The "New Discovery" is an example of a volcanogenic massive sulfide deposit. Since 1979 fourteen diamond drill holes have been completed to test a mineralized horizon approximately 140m long by 75m deep at a depth of 175 - 250m below surface. The mineralized horizon appears to be conformable with the volcanic strata. The best results include a 6.4m interval grading 1.76% Cu and 2.45% Zn (hole 79 - S6, 193.5 - 199.9m) 3.1m of 1.17% Cu and 3.03% Zn (hole 80 - S1, 206.3 - 209.4m) and 6.8m of 0.86% Cu and 2.03% Zn (hole 84 - 03, 203.5 - 210.3m).

Work in 1985 has been directed towards increasing the size of the occurrence using a volcanogenic massive sulfide deposit model. The following is a summary of characteristic features of the type deposit and observations from the New Discovery area.

<u>TYPE</u>	<u>DEPOSIT FEATURES</u>	<u>NEW DISCOVERY</u>
tectonic setting		- island arc, eugeosynclinal volcanic - sedimentary succession
age of host		- Triassic-Jurassic Bridge River Group
general form		- Stratabound, strata form lenses
deposit classification		- Cu - Zn type; minor lead; mafic footwall; Zn/Zn+Pb ratio 0.95.
host		- volcanic; adesitic to grabbroic (mafic greenstone), vesicular
submarine		- volcanics; pillows, vesicular - cherts - sediments; mostly argillites, some greywacke, siltstone
hanging wall		- sharp cut off of Cu - Zn mineralization, up to 20m above the ore is a massive

pyrite horizon up to 100m thick.

- footwall - mafic volcanics; several zones of copper mineralization; pyrrhotite more common.
- ore - sections of massive sulfide; strata form thickness is much less than width of length; Cu/Cu+Zn ratio is about 0.3 which approaches the typical 0.14 of massive ore
- mineralogy - dominantly pyrite, some chalcopyrite and sphalerite; very minor galena; some pyrrhotite
- precious metals - the highest values reported are from 84-03, 0.045 oz/ton Au and 1.7 oz/ton Ag.
- gangue minerals - quartz, chlorite, sericite.
- alteration - some chlorite alteration; pervasive sericite
- structural controls - preliminary mapping indicates rapid lithology changes, from thick volcanic sections to chert - argillite sections.
- possibly synvolcanic faulting causing agglomerates and pyroclastics.
- possibly thick volcanic sequences represent negative paleotopography while sediments represent paleo-highs and discharge areas.

GENERAL FEATURES

- no oxide minerals (ex; magnetite, hematite) are obvious which may indicate shelf-basin paleotopography..
- barren sulfide horizons may be stratigraphic as well as genetic equivalents to ore horizons therefore geochemical studies may aid in deposit location.
- the deposit may be comprised of several individual ore lenses..
- no stringer ore zone has been identified; the 'footwall area' of hole 85 - 02 appear copper rich and may represent a stringer zone.
- a heat source was near by as indicated by the Bralorne intrusives and various dikes in the immediate area.

GEOCHEMISTRY -Sampling Procedure:

A total of 243 soil samples were collected, mostly from road cuts and trenches. The samples represent the B soil horizon where possible or the deepest soil from trenches. Road cuts provide ideal sample sites as the A soil horizon, the volcanic ash layer and the B soil horizon can be easily identified.

The sample numbering system used the road survey (chain and compass) control station numbers as a prefix and a distance from the station. The survey control stations are on all maps to aid in location of features.

A total of 76 rock samples were collected representing either channel samples or grab samples. The sample numbers correspond to survey control stations to aid in location.

LABORATORY TECHNIQUES:

Acme Analytical Lab. Ltd., of Vancouver did all of the geochem and assay work. The I.C.P. analysis report sheets include the sample preparation techniques. Appendix 1 includes the Laboratory Methodology for 1985.

Discussion of Results:

The property was divided into two projects, gold only, and massive sulfide. The gold only data is from the main Wayside diorite body and the north end, while the massive sulfide exploration was confined to volcanics and sediments between the Wayside diorite body and the southwest diorite body.

To aid in gold exploration, soil and rock samples were analysed

for 30 elements. Silver, arsenic and antimony appeared to be usefull indicator elements while cobalt, iron and vanadium showed false anomalies and occasionally failed to identify true anomalies. Figures 12, 13 and 14 show the distribution of values from soil sampling and the threshold value. Follow-up work included trenching and rock sampling where possible.

Table 1 summarizes the results of soil sampling for gold exploration with the anomalous results highlighted. Table 2 shows the results of rock sampling.

<u>Anomalous Sample</u>	<u>Description</u>	<u>Explanation</u>
74+00	Wayside Shear near	on known shear zone
+20	150 Adit	no follow-up completed
78+160	Wayside Shear near	follow-up included
+130	"C" Adit	channel sampling
+200		over 4m, see Table 3 and Figure 15.
PLA-3L	Power Line Adit,	follow-up included
4L	east contact of Wayside three rock samples, diorite	Table 2, PLA-5R, 6R, 7R.

FOLLOW-UP

PLA-5R = chips from north wall of open cut, over +2m

PLA-6R = chips from quartz lens, 20 cm thick

PLA-7R = chips from gouge zone, argillite with quartz veinlets

41 N	Trench 41, Figure 18 sample of soil debris over 5.5m	porphyry dike in black argillite
11 W1	Trench 11, Figure 16 W2 N	shear zone exposed by trenching. Grab sample 11 typifies the rock type.

NOTE - sample 11 W1 has 0.058 oz/ton over 1.5m of soil debris above bedrock.

31+240	East contact of Wayside	Shear zone up to 5m
+260	diorite.	of exposure (true thickness approx. 3m)

FOLLOW-UP

31+256R	Calcite vein 70cm
260R	random chips over 5m of shear

Exploration for massive sulfide dominated the field program. Figures 9, 10 and 11 show the distribution of values from soil sampling and the threshold value. Follow-up work included mapping, trenching and diamond drilling. Tables 4 and 5 show the results of soil and rock sampling with the anomalous results highlighted.

Anomalous Sample	Description	Explanation
------------------	-------------	-------------

*NF means no follow-up in 1985

103+5	soil samples over pyroclastic
10	with quartz and pyrite veins
15	
70	

FOLLOW-UP Trench 103, Figure 25
no economic mineralization located.

6N 490W Trench 6N 500W, Figure 26, still in overburden above big EM conductor.

98+10 NF along west contact scarp of Wayside diorite.

99+40 NF 40m from station 99 towards station 100, scree dominated sample.

100+20 NF

<u>Anomalous Sample</u>	<u>Description</u>	<u>Explanation contd</u>
102+25	Trench 103, Figure 25	
30	over rusty gouge	
117+2L	Trench 117, Figure 22	
3L	no economic mineralization located.	
59+00		
59+2L	Trench 59, soil sample over 3m, no bedrock exposed.	
158+30L	Trench 158, Figure 27, no bedrock exposed.	
35L		
HND+1L	Trench 118, Figure 23, along highway massive sulfide exposure.	
117+120	NF	Along road from 84-03 towards 84-04.
140		Interpreted surface projection of ore horizon.
180		
200		
220		
240		
260		
340		
420		
129+80	NF	Possible north extension of ore bearing strata.
100		
120		
140		
180		
200		
138+150	NF	Possible north extension of ore bearing strata.
142+15	NF	" " " "

Anomalous Sample	Description	Explanation contd
31+20	In black argillite	
40		
60		
120		
<u>FOLLOW-UP</u>	Black argillite debris from road cut.	
31+100R		
32+20	NF Black argillite	
61+20	NF Possible north extension of ore bearing strata.	
40		
60+40	NF Possible north extension of ore bearing strata.	

Rock sample 59R is from a piece of float located below station 59. The rock was massive pyrite in grey-black chert. It is suspected that the boulder may represent the north extension of the massive sulfide horizon. The sample is anomalous in its molybdenum content.

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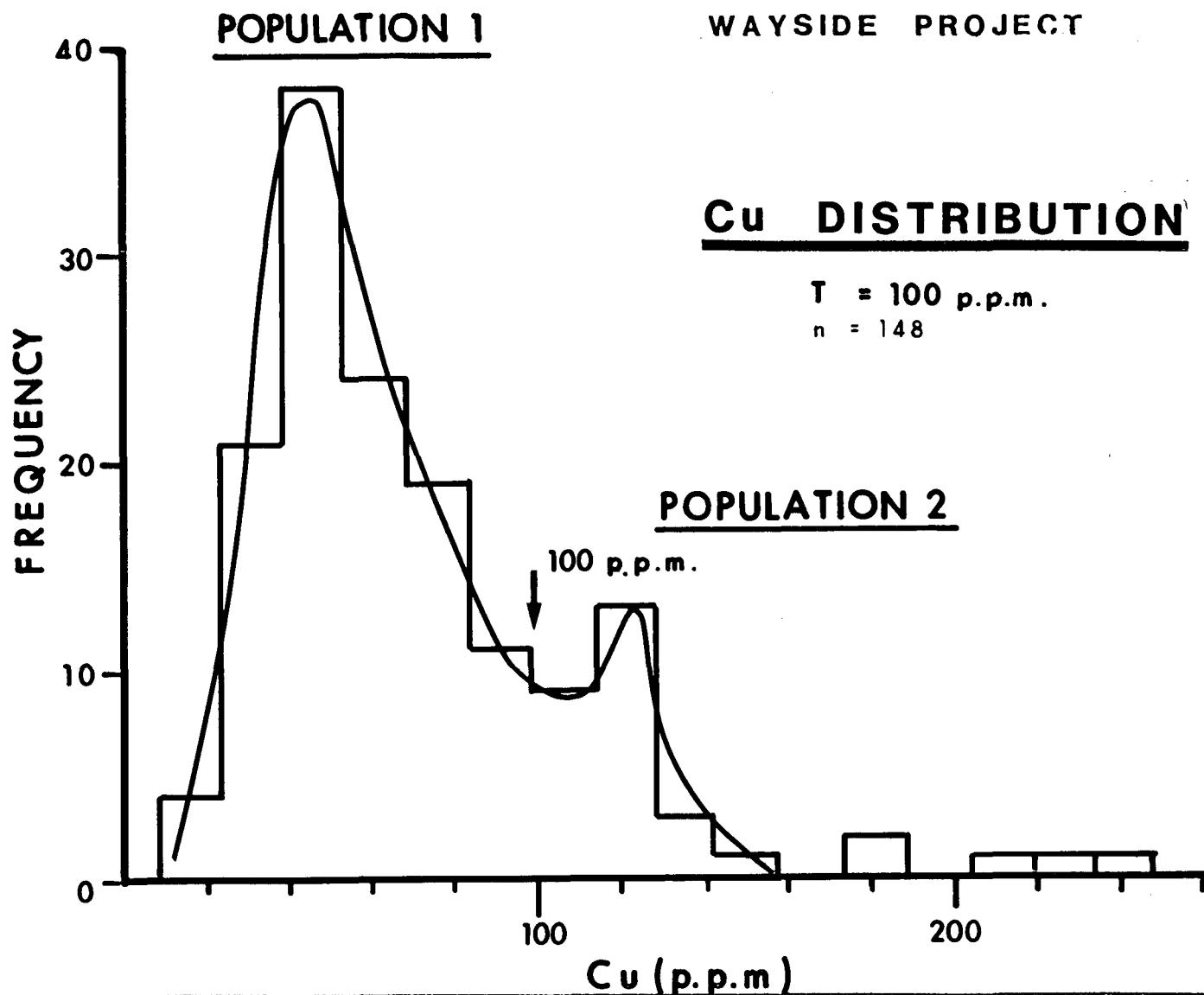


FIG. 9

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WAYSIDE PROJECT

Pb DISTRIBUTION

T = 18 p.p.m.

n = 148

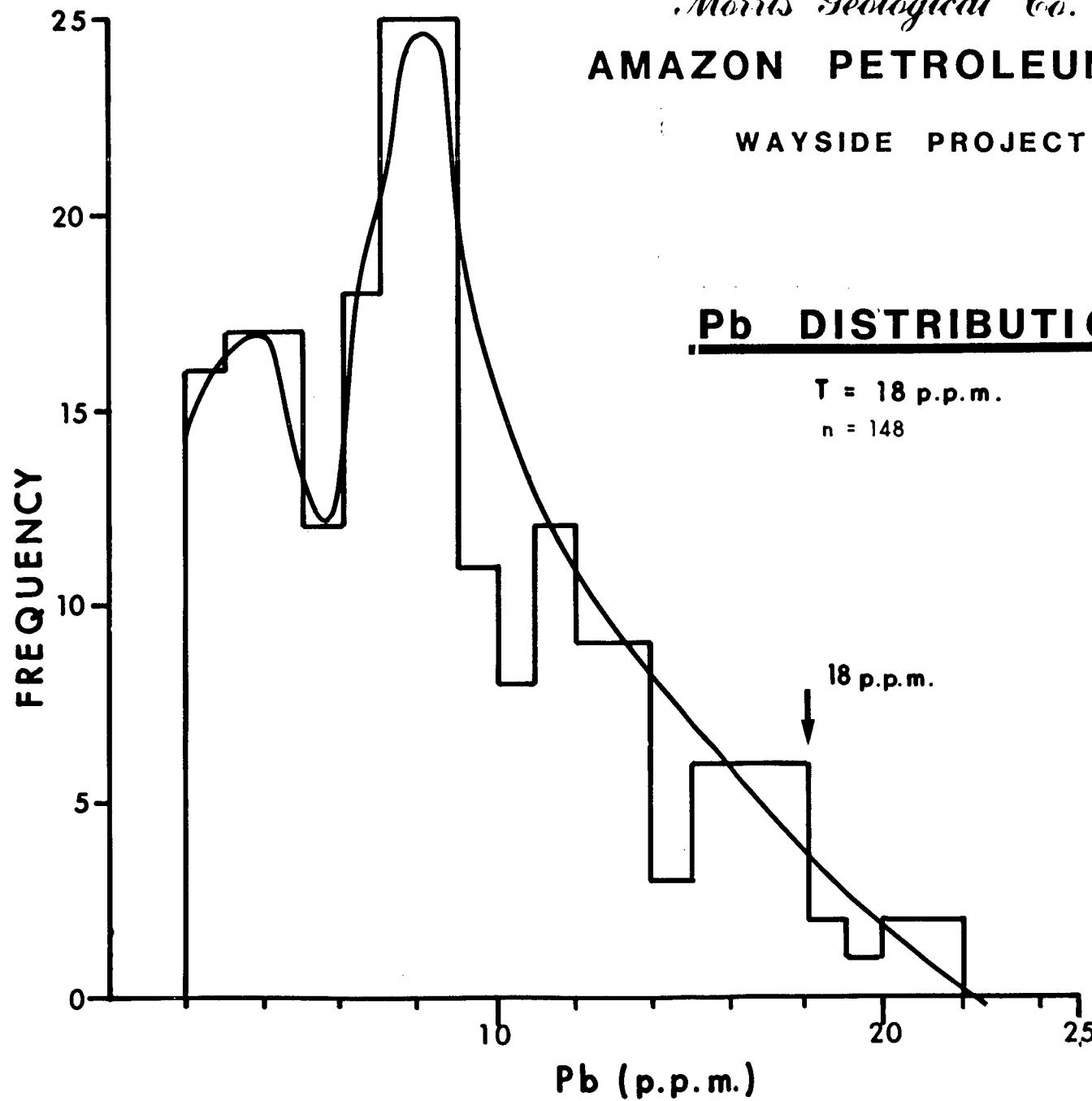


FIG. 10

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AMAZON PETROLEUM CORP.

WAYSIDE PROJECT

Zn DISTRIBUTION

$T = 250$ p.p.m.
 $n = 148$

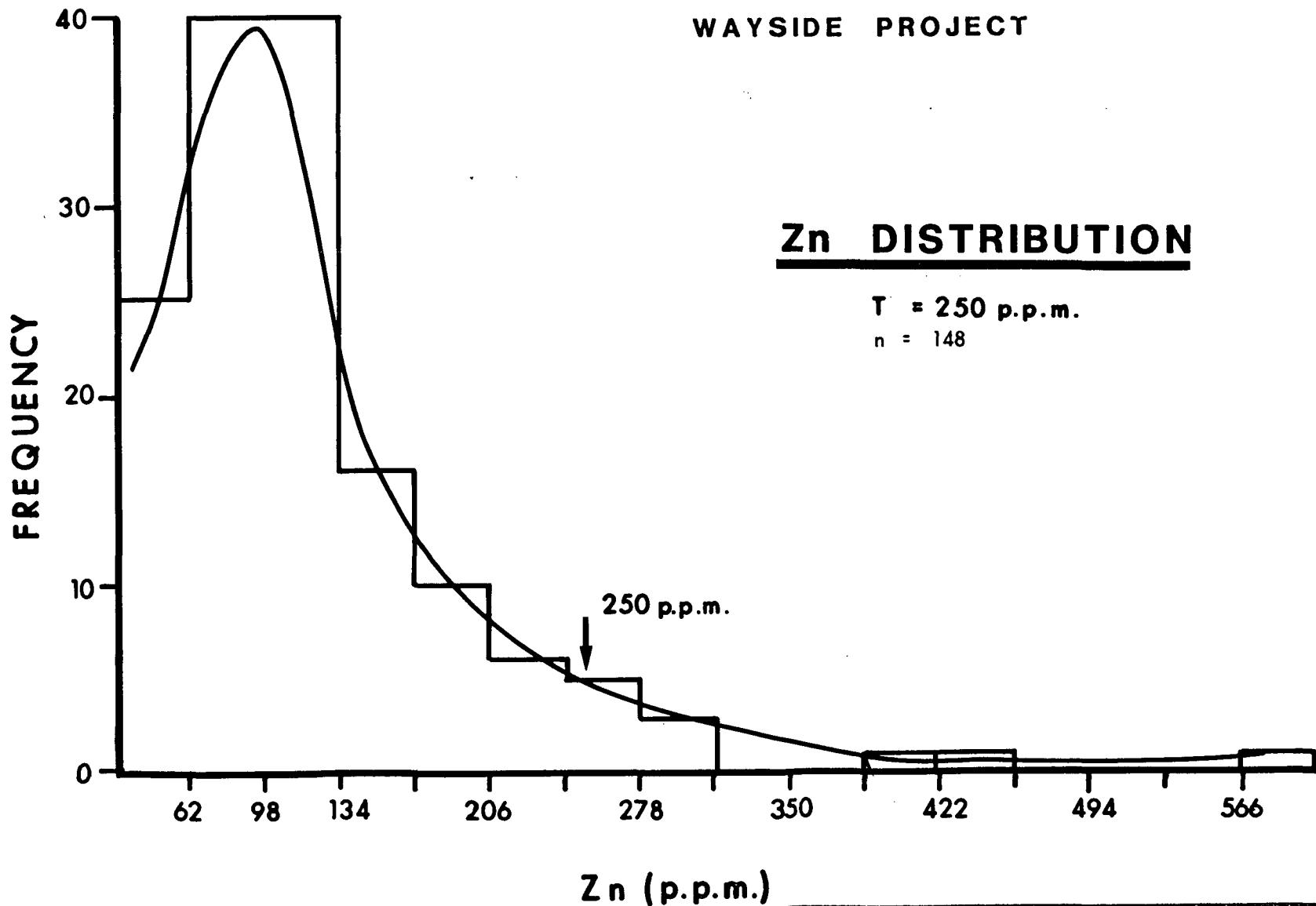


FIG. 11

RGM.

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AMAZON PETROLEUM CORP.

WAYSIDE PROJECT

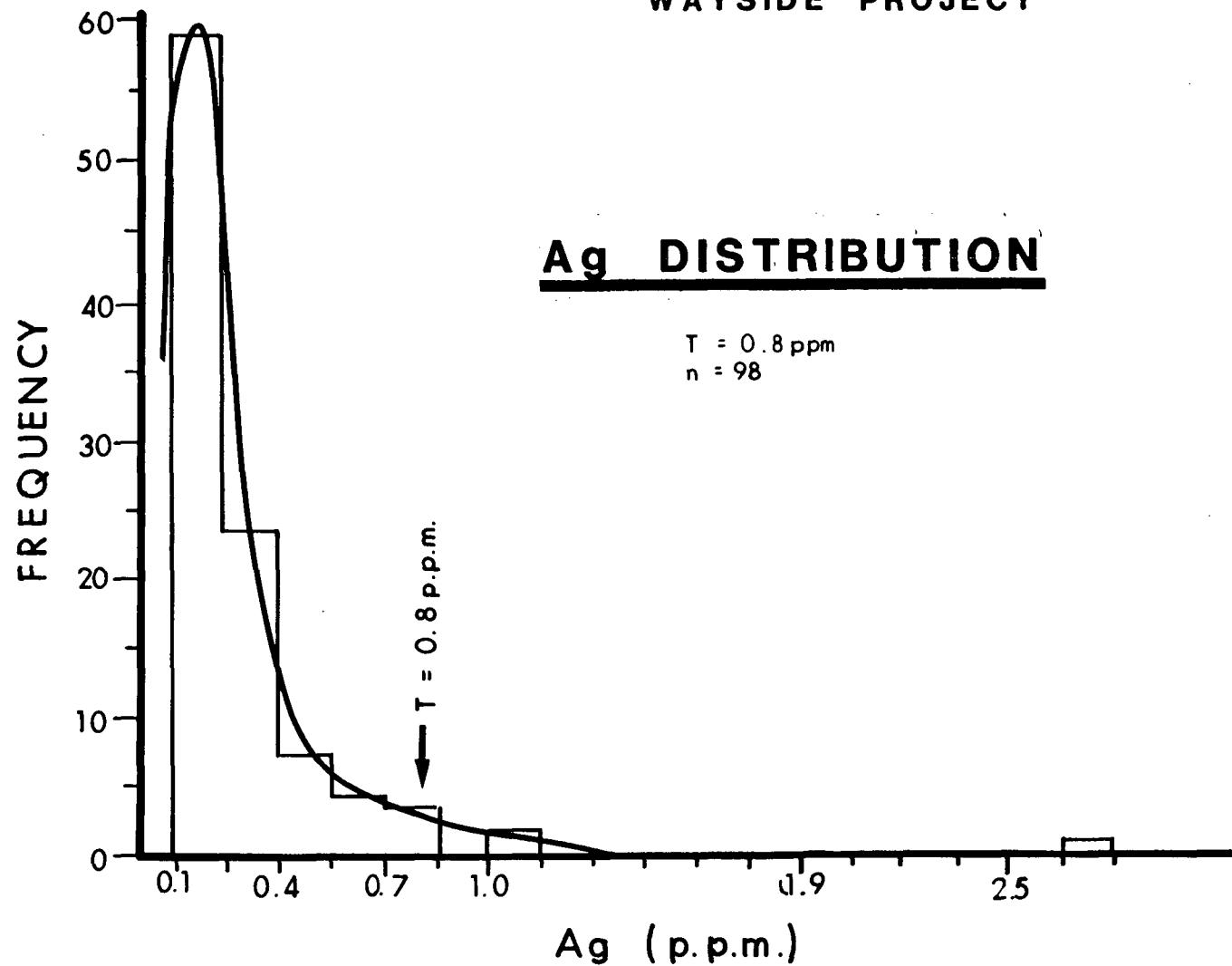


FIG. 12

RGM.

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WAYSIDE PROJECT

As DISTRIBUTION

$T = 100 \text{ p.p.m.}$
 $n = 97$

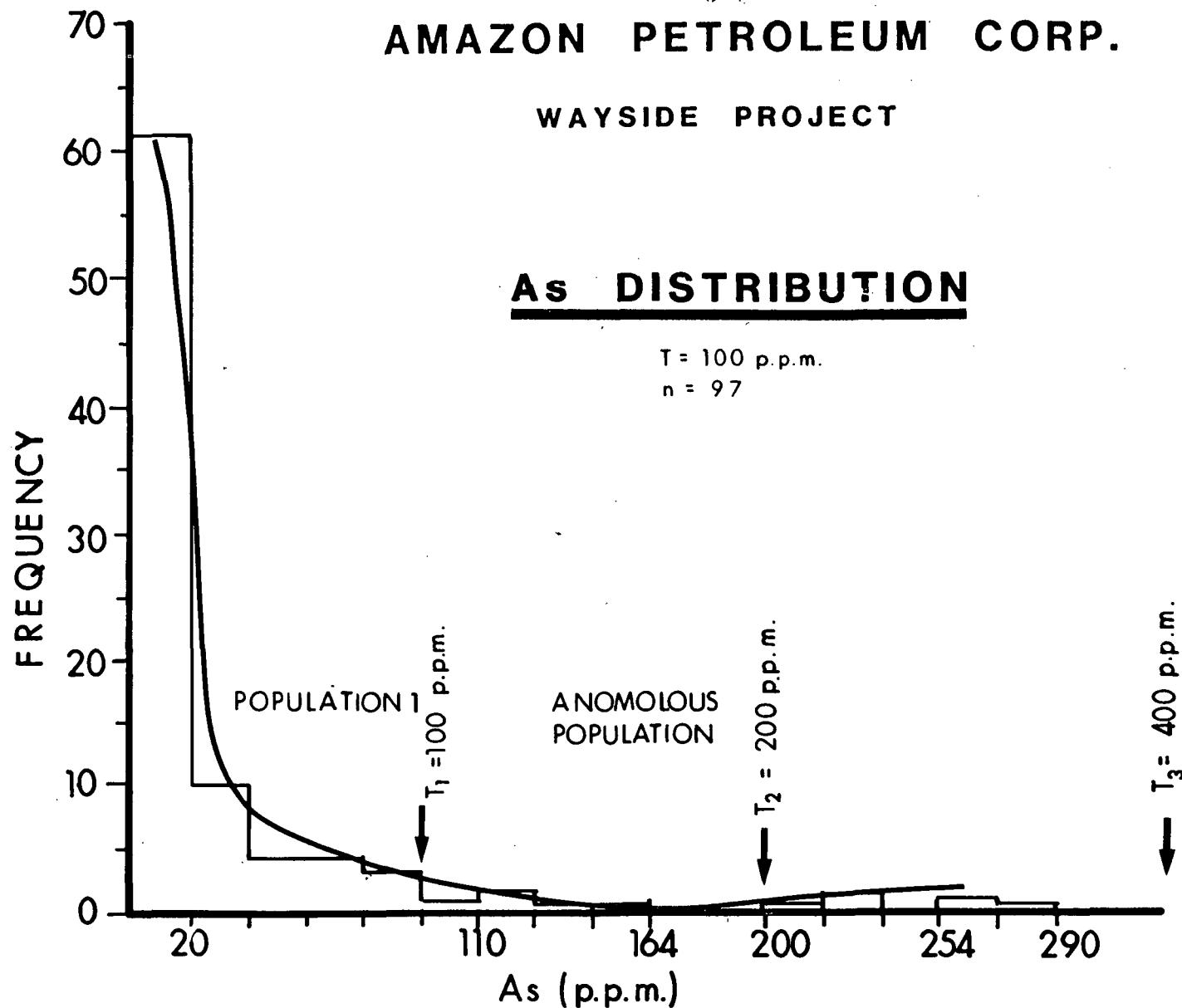


FIG. 13

RJM.

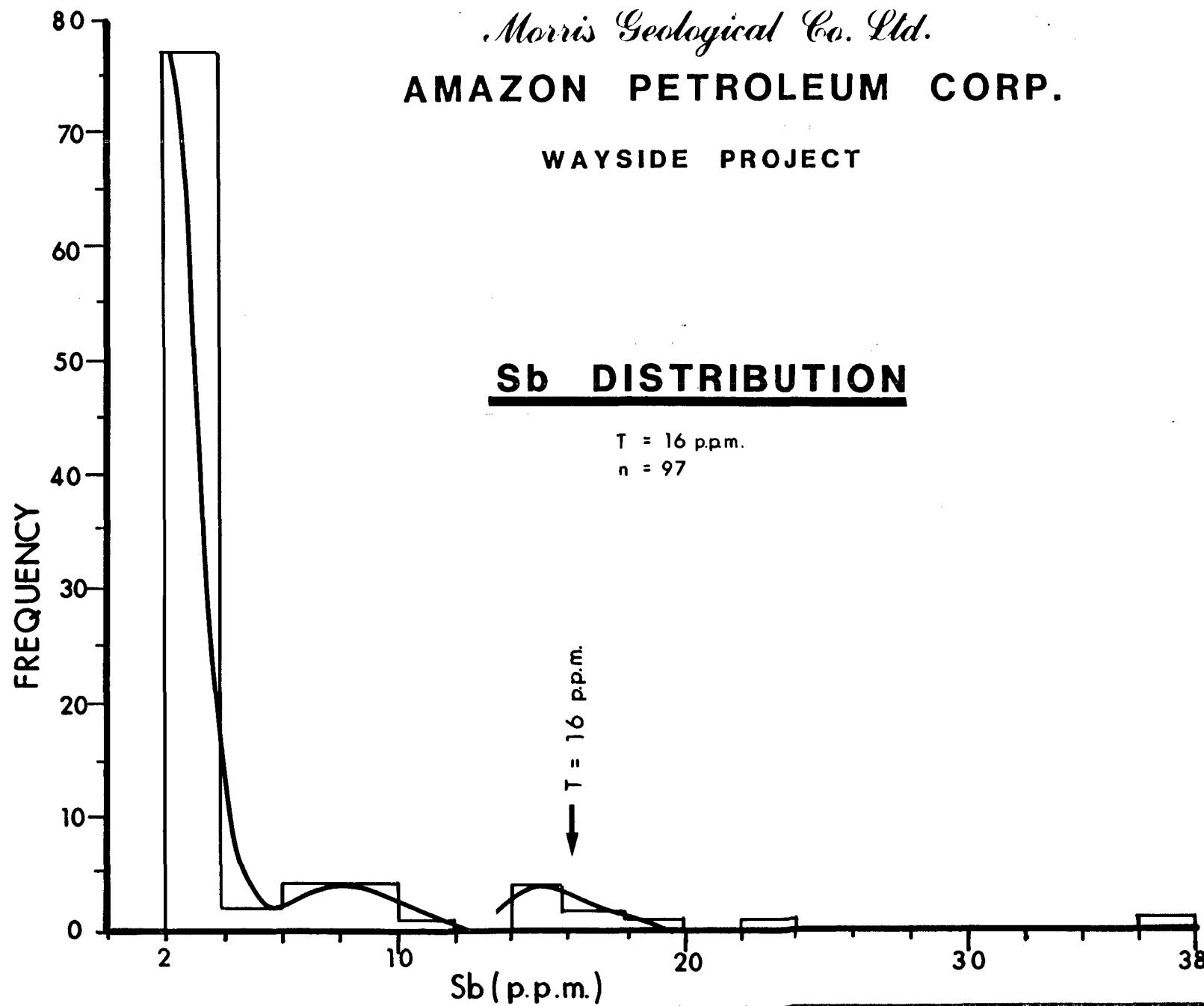


FIG. 14

RGM.

DIAMOND DRILLING -SUMMARY:

The 1985 diamond drilling program started July 8 and by July 28 four and a half holes had been completed for a total of 587.7m. Hole 85-05 was in progress when the author completed his field contract.

Drill holes 85-01 and 85-02 were drilled to test the upward extension of the ore horizon from 84-03. Hole 85-01 was collared on the same site as 84-03 and drilled towards 260° at -70° . The hole was to intercept the ore horizon approximately 150m up dip from hole 84-03. Drill hole 85-02 was collared on the same site as 84-10, 11 and drilled towards 260° at -70° . The hole was to intercept the ore horizon approximately 60m up dip from 84-03.

Drill holes 85-03 and 85-04 were drilled to test an IP anomaly noted in 1981. Hole 85-03 was collared at the north end of the anomaly and drilled towards 270° at -45° . Hole 85-04 was collared in the south end of the anomaly and drilled towards 270° at -45° . Drill hole 85-05 was drilled to test a major EM conductor noted in 1984. It was collared east of the conductor and drilled towards 270° at -45° .

DISCUSSION OF RESULTS:

Drill hole 85-01 was in volcanic rock as projected though no ore horizon was intercepted. The footwall diorite was 23m above where it was projected and it may have truncated the ore horizon. The footwall diorite dips $80 - 85^{\circ}$ east while the ore horizon dips 65° east, see Figure 8. Six drill core samples were taken, three quartz veins and three sulfide sections, the results are listed in Table 6.

<u>SAMPLE</u>	<u>DESCRIPTION</u>
2901	23.29m (0.13m), quartz vein with unknown silver mineral.
2902	33.25m (0.25m), quartz vein with silver mineral.
2903	33.38m (1.12m), breccia with abn. pyrite.
2904	81.08m (0.18m), pyrite band.
2905	91.20m (0.80m), disseminated pyrite.
2906	147.37m (0.08m), quartz vein.

Drill hole 85-02 was in volcanic rock as projected with abundant massive pyrite in the first 80m. Chalcopyrite first appeared at 77m while the first sign of sphalerite was at 135m. There was not an economic zone of massive sulfide intersected although a 3.9m section at 166m contained an appreciable amount of chalcopyrite, samples 2926 and 2927. This zone was very silicic and is precisely where the ore horizon projects from hole 84-03. The footwall diorite was not intercepted. Twentythree core samples were collected, the results are listed in Table 6.

<u>SAMPLE</u>	<u>DESCRIPTION</u>
2907	3.05m (0.18m) massive pyrite
2908	7.70m (0.44m) " " "
2909	8.84m (0.46m) " " "
2910	19.96m (0.55m) " " "
2911	20.88m (0.46m) " " "
2912	22.86m (0.76m) " " "
2913	23.62M (0.31m) " " "
2914	58.67m (1.10m) " " "
2915	59.77m (0.89m) " " "
2916	60.66m (1.21m) " " "
2917	64.90m (0.91m) " " "

<u>SAMPLE</u>	<u>DESCRIPTION</u>						
2918	66.90m (2.59m)	massive pyrite					
2919	76.20m (0.18m)	"	"	"			
2920	77.60m (2.78m)	"	"	"	, some chalcopyrite		
2921	83.67m (2.98m)	"	"	"	"	"	"
2922	86.65m (2.95m)	"	"	"	"	"	"
2923	98.63m (3.33m)	chert lenses with pyrite					
2924	113.08m (0.61m)	chalcopyrite in vesicular volcanics					
2925	135.79m (0.18m)	quartz vein, breccia					
2926	166.30m (1.70m)	abn. Pyrite, some chalcopyrite,					
2927	168.00m (2.19m)	"	"	"	"	" sphalerite	
2928	191.50m (2.30m)	massive pyrite, some chalcopyrite					
2929	206.70m (1.50m)	chert bands, abn. chalcopyrite					
2930	211.10m (1.10m)	silicious breccia with pyrite					

Holes 35-01 and 85-02 showed that there is no obvious up-dip extension of the ore horizon from 84-03, the down-dip extension is still open. Drill hole 85-03 was in sediments including chert, siltstone and sandstone. No mineralization of economic significance was noted, six core samples were collected, the results are listed in Table 6.

<u>SAMPLE</u>	<u>DESCRIPTION</u>	
2931	3.05m (0.15m)	black mudstone with quartz veins
2932	3.87m (0.31m)	white chert with black partings
2933	14.02m (0.92m)	chert with black partings
2934	25.80m (0.30m)	chert with black partings + chalcopyrite and pyrrhotite
2935	38.20m (0.30m)	greywacke
2936	42.76m (0.37m)	black, carbonaceous material

Drill hole 85-04 was in sediments very similar to 85-03. The hole was abandoned at 23.82m after the core barrel parted from the rods and could not be retrieved. Three core samples were

taken, the results are listed in Table 6.

<u>SAMPLE</u>	<u>DESCRIPTION</u>
2937	17.98m (0.31m) chert with chalcopyrite
2938	22.86m (0.15m) black siltstone with chlorite alteration.
2939	26.52m (0.30m) Black siltstone, very carbonaceous

Holes 85-03 and 85-04 tested an I.P. anomaly, no economic mineralization was located.

Drill hole 85-05 was to test a major EM conductor located in 1984. At 113m the rods were stuck and the hole was to be continued with BQ after reducing. Drilling was in progress July 28 when the author left the project. No core samples had been collected to 113m.

Drill cuttings were collected for hole 85-04 and 85-05, see Table 7. Drill hole 85-01 had no returns, hole 85-02 was in volcanics and massive sulfide and hole 85-03 was in blocky chert for the most part.

Drill core is stored in two buildings near the No. 5 adit of the old Wayside Mine.

TABLE 9

DRILL HOLE RESULTS

Hole	From	To (m)	Thickness (m)	%Cu	%Zn	Thickness weighted combined Cu & Zn	$\frac{\text{Cu}}{\text{Cu} + \text{Zn}}$	Intercept, see section
79-S6	168.6	171.0	2.4	0.24	0.59	0.83% : 2.4m	0.29	a
	188.4	191.4	3.0	0.12	0.69		0.15	b
	193.5	195.7	2.1	0.18	0.14		0.56	c
	195.7	197.5	2.2	2.56	1.48		0.63	d
	197.5	199.9	1.8	1.06	3.58	4.21% : 6.4m	0.23	e
	199.9	202.1	2.4	1.56	2.50		0.38	f
	202.1	203.6	2.2	0.29	0.48		0.38	g
			1.5	0.70	2.53		0.22	h
80-S1	206.3	209.4	3.1	1.17	3.03	3.13% : 5.8m	0.28	a
		212.1	2.7	0.99	0.93		0.52	b
80-S2	32.6	35.1	2.5	0.42	0.27	0.69% : 2.5m	0.69	a
80-S3	NO ORE							
80-S4	NO ORE							
80-S5	220.1	223.1	3.0	0.56	2.32	1.98% : 9.7m	0.19	e
		226.8	3.7	0.54	1.35		0.29	f
		229.8	3.0	0.84	0.34		0.71	g

Table 9 cont.

80-S5	203.3	205.4	2.1	1.30	0.53	1.30% : 5.2m	0.71	a
		208.5	3.1	0.59	0.36		0.62	b
80-S8	246.9	248.1	1.2	0.05	0.63	1.28% : 6.4m	0.07	a
		249.9	1.8	1.32	0.43		0.75	b
		251.8	1.9	0.69	0.04		0.95	c
		253.3	1.5	0.92	1.00		0.48	d
84-03	176.0	177.4	1.04	0.14	0.90	2.91% : 6.8m	0.38	a
	203.5	204.5	1.0	2.52	4.18		0.19	b
		206.3	1.8	0.31	1.32		0.23	c
		207.9	1.6	0.71	2.36		0.26	d
		209.4	1.5	0.52	1.45		0.39	e
		210.3	0.9	0.98	1.53		0.24	f
	211.2	212.8	1.6	0.56	1.73	2.73% : 1.9m	0.01	g
	213.2	213.5	0.3	0.17	4.85		0.14	h
	217.6	218.1	0.5	0.93	5.85		0.18	i
		218.8	0.7	0.22	0.98		0.04	j
	234.7	236.2	1.5	0.05	1.21			k
84-05	265.9	266.4	0.5	1.51	0.24		a	
	267.3	268.2	0.9	0.46	0.28		b	30

CONCLUSIONS -

The New Discovery occurrence typifies a volcanogenic massive sulfide deposit. Vesicular andesite - grabbo of the Triassic - Jurassic Bridge River Group is the host. To date 14 diamond drill holes indicate an ore horizon with a north-south strike length of 140m, and with an east dip (average of 65°) length of 75m. Potential reserves are estimated to be 150,000 tonnes (using a true thickness of 4.8m) with grades up to 1.76% Cu and 3.03% Zn and minor precious metal content.

Drilling in 1985 indicated that there is no near surface exposure of the ore horizon in the main zone (holes 85-01 and 85-02). The present interpretation shows that the down-dip extension is open and unexplored.

Drill holes 85-03 and 85-04 investigated IP anomalies which may be faulted southern extensions of the anomaly above the main zone. The holes encountered highly carbonaceous sediments which may have acted as the conductor.

Drill hole 85-05 was drilled into a major EM conductor which may have been caused by carbonaceous material and abundant water.

Geochemical studies conducted in 1985 attempted to identify the massive sulfide exposures and to locate additional target areas. Soil samples from the massive sulfide showing along the highway, at hole 85-02, are not anomalous in copper, lead or zinc though the iron content varies from 8.5 to 11.8%. Soil sampling stratigraphically below the massive pyrite showing yielded anomalous copper values (up to 2 times threshold). Anomalous zinc samples are erratic though there are four which correspond with anomalous copper areas and fit an interpreted north extension of the ore horizon. Lead shows a narrow range of values with no truly anomalous samples.

The gold only exploration was confined to the Wayside diorite and the north end of the property. On the Wayside diorite it was shown that geochemistry is an effective tool for locating anomalous areas. The main Wayside shear was identified twice as well as a smaller shear along the east contact and the Power Line adit.

On the north end of the property follow-up to 1984 sampling included detailed mapping and trenching. The anomalous geochemical samples seemed to be associated with a rhyolite dike and four trenches tested the contact zones, numbers 41, 34, 11 and 147. Trench 11 exposed a shear zone in black argillite with the highest gold value of 0.053 oz/ton (2 p.p.m) from a 1.5m sample of soil debris above bedrock.

RECOMMENDATIONS -

Several studies should be conducted to better understand the occurrence and to aid in further exploration.

- 1 - Detailed geological mapping to confirm the inferred structure and to better understand the lithological relationships.
Initially confined to the grid area (White's grid).
- 2 - A geochemical soil sampling program covering from line 4S to line 6N (White's grid) from the highway west. The sample spacing would be every 20m east-west on 100m intervals north-south.
- 3 - A ground magnetometer survey (over White's grid) would assist the geological mapping. Lammle (1974) shows that the diorite can be mapped successfully and there is a possibility that the volcanic and sedimentary sequences could respond individually.
- 4 - Deep diamond drilling should be undertaken to explore the down-dip extension of the ore horizon in the main zone. The main zone is between holes 80-53 and 80-54. Drill hole 79-S6 has the nearest to surface ore intercept at 170m deep while the deepest intercept is 255m in hole 84-D5. To explore down dip from hole 84-03 a hole should be collared along line O approximately 200m east of hole 85-03 and drilled towards 270° at -60° . The ore zone would be intercepted 100m down dip from hole 84-03 with 200 meters of drilling. The hole should be drilled 400m in total which would project it vertically below hole 84-03. If ore is intercepted holes can be fanned out along line O to test various depths..
- 5 - Deep diamond drilling should be conducted to explore the north and south extensions of the main zone. Drilling to date indicates a deep ore horizon in the main zone so drilling north and south should attempt to locate ore at the same elevation; assuming no vertical displacement on the two east-west faults.

To test the north extension a hole should be collared 50m east of the highway along line 150N and drilled towards 270° at -60°. This hole would test strata due north of the main zone if no fault exists. Another hole would be collared along the baseline at 150N to test the proposed faulted north extension.

To test the south extension a hole should be collared 50m east of the highway along line 150S and drilled towards 270° at -60°. This hole would test strata due south of the main zone if no fault exists. Another hole should be collared on the west side of the highway at 250S and drilled towards 270° at -60°. This hole would test the proposed faulted south extension.

This proposed drilling will effectively test all potential strata for an extension of the known deposit.

- 6 - The Wayside diorite has produced gold and has been explored extensively during the past decade. The limited mapping and soil sampling completed in 1985 indicates that there is potential for more shear zones and soil sampling could be used to locate them.

Typical shear zones are three to four meters wide and may carry up to 4830 p.p.b. gold (approx. 0.14 oz/ton), Fig. 15, Table 3.

- 7 - The north end of the property was explored briefly in 1985 and remains open to study. The moderately coincidental EM and arsenic anomalies should be tested further with deep trenching or drilling.

Trench 11, Fig. 16 exposed a shear zone with soil debris running up to 0.058 oz/ton gold (2 p.p.m.).

REFERENCES

- Arik, A.H., 1984, Assessment Report, Diamond Drill Program.
- B.C. Min. of Mines, 1927, Wayside Property: Annual Report p. C216.
- Cairnes, C.E., 1937, Geology and Mineral Deposits of Bridge River Mining Camp, B.C.: G.S.C. Mem. 213.
- Cairnes, C.E., 1938, Gun Lake Area: G.S.C. map 430A.
- Elwell, J.P., 1980, Report on the Exploration of the Wayside Property: Jan 21, 1980.
- Elwell, J.P., 1980, Report on the Exploration of the Wayside Property: Dec. 19, 1980.
- Elwell, J.P., 1982, Exploration Program for the Wayside Mine Property.
- Franklin, J.M., Lydon, J.W., and Sangster, D.F., 1981, Volcanic-Associated Massive Sulfide Deposits: Econ. Geol. 75th Ann. Vol., p. 485-627.
- Hodgson, C.J., and Lydon, J.W., 1977, Geological Setting of Volcanogenic Massive Sulphide Deposits and Active Geothermal Systems: Some Implications for Exploration: CIM Bulletin, Oct. 1977, p. 95-106.
- Hodgson, C. Jay, Chapman, R.S.G., and MacGeehan, P.J., 1982, Application of Exploration Criteria for Gold Deposits in the Superior Province of the Canadian Shield to Gold Exploration in the Cordillera: in Precious Metals in the Northern Cordillera, editor, A.A. Levinson; Assoc. of Exploration Geochemists.

Hutchinson, R.W., 1973, Volcanogenic Sulfide Deposits and Their Metallogenic Significance: Econ. Geol., vol. 68, no. 8, p. 1223-1246.

Lammle, C.A.R., 1974, Preliminary Geological Report, Wayside Mine Property.

Lydon, J.W., 1984, Volcanogenic Massive Sulphide Deposits. Part 1: A Descriptive Model: Geoscience Canada, vol. 11, p. 195-202.

Mark, D.G., 1981, Geophysical Report on a Induced Polarization and Self Potential Survey, Wayside Mine Property.

Mark, D.G., 1984, Geological, Geochemical and Geophysical Maps for the North Wayside Property.

Reinertson, L.C., 1978, Goldstream Massive Sulphide Deposit: Canadian Mining Journal, April 1978, p. 39-42.

Sangster, D.F., 1972, Precambrian Volcanogenic Massive Sulphide Deposits in Canada: A Review: G.S.C. Paper 72-22.

Seraphim, R.H., 1980, Western Mines - Myra, Lynx and Price Deposits: CIM Bulletin, Dec. 1980, p. 71-86.

Seraphim, R.H., 1983, Geochemical Map of Gold in Soils, Wayside Mine Project.

Western Miner, 1983, Noranda's Goldstream Mine a Welcome Winner: Western Miner, July 1983, p. 9-16.

Wheeler, J.O., and Gabrielse, H., 1972, The Cordilleran Structural Province: in Variations in Tectonic Styles in Canada: editors, R.A. Price and R.J.W. Douglas; G.A.C. Special Volume no. 11.

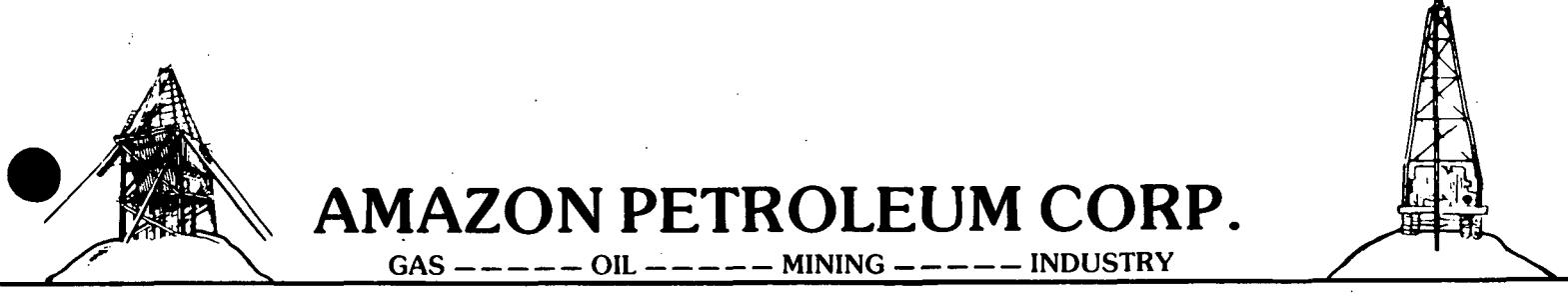
References continued:

White, G.E., 1984, Downhole Electromagnetic Logging and Time Domain electromagnetic Survey, Gold Bridge - Wayside Project.

STATEMENT OF QUALIFICATIONS -

- Robert James Morris - 1973 B.Sc. Geology, U.B.C.
- 1973-76 Coal Exploration, Kaiser Res. Ltd.
- 1976-77 M.Sc. Mineral Exploration, Queens
- 1977-80 Mineral Exploration, Kaiser
 Resources Ltd.
- 1980-Present Consultant Geologist

R. J. Morris 85.08.17



AMAZON PETROLEUM CORP.

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Executive Offices • #801 - 700 West Pender Street • Vancouver, B.C. V6C 1G8
Telephone (604) 681-1127 or 681-1128

STATEMENT TO CARPENTER LAKE RESOURCES LTD.
PERIOD: DECEMBER 1/84 to SEPTEMBER 30/85.

EXPENDITURES:

Advertising & promotion	\$4,200.00
Geological & Engineering	33,642.62
I.C.B.C.	759.00
Mapping	726.00
Field wages & supervision	10,500.00
News releases & printing	2,555.20
Engineers reports	737.56
Assays	3,698.40
Dicks Mechanical Contracting	5,353.25
Gold Bridge Hotel	4,099.52
Legal fees	1,500.00
M & B Drilling	63,770.57
Labour	4,142.00
Secretarial	1,000.00
J & H Trucking	217.00
B. C. Telephone	196.76
 Sub-Total	 \$137,097.88
Over-run from Nov. 30/84 Statement	 <u>10,745.76</u>
 TOTAL to Sept. 30/85	 <u>\$147,843.64.</u>

Outstanding invoices for October will
be submitted.

SIGNED:



D. Colenick
AMAZON PETROLEUM CORP.

ACCEPTED BY:



K. Deasom
CARPENTER LAKE RES.

SAMPLE#	No	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	D	Al	Na	K	Si	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
TRENCH 99	99+50L	1	86	10	91	.3	148	18	893	4.75	11	7	ND	4	28	1	2	2	64	.53	.08	22	128	1.35	227	.20	10	1.69	.02	.11	1
	99+60L	1	79	10	98	.1	139	18	953	4.58	11	5	ND	6	33	1	2	2	61	.58	.09	24	128	1.45	304	.18	14	1.65	.03	.12	1
	99+80L	1	63	8	70	.1	104	16	794	3.68	12	5	ND	2	33	1	2	2	67	.71	.12	10	88	1.58	186	.22	10	1.68	.04	.12	1
NO. 31 FOLLOW UP	99+90L	1	77	10	75	.2	138	19	744	4.52	11	5	ND	2	32	1	3	3	76	.59	.07	15	143	1.47	272	.24	7	2.44	.02	.11	1
	31+260L	1	166	16	77	.4	111	31	698	5.93	(274)	5	ND	1	45	1	6	2	76	1.75	.05	5	152	1.86	51	.03	9	2.62	.01	.08	3
TRENCH 81	81+15L	2	172	12	64	.2	153	32	994	4.06	49	5	ND	1	33	1	2	2	72	1.03	.09	7	160	2.68	100	.17	11	2.17	.02	.08	1
	81+20L	1	192	5	70	.3	105	20	845	4.15	68	5	ND	2	37	1	2	3	78	.99	.09	9	100	1.85	114	.20	10	2.14	.03	.10	1
	81+25L	1	196	10	67	.2	135	22	800	4.20	44	5	ND	2	36	1	2	2	77	.91	.08	10	118	1.97	100	.19	9	2.33	.03	.09	1
TRENCH 147	147+4	2	67	15	117	.2	62	13	931	4.38	18	5	ND	1	31	1	4	2	45	.39	.07	7	56	.82	96	.08	2	1.62	.02	.11	1
	147+7	1	56	13	89	.2	76	13	806	3.73	20	5	ND	1	28	1	3	2	48	.41	.07	7	69	.88	97	.10	2	1.50	.02	.11	1
	147+9	1	58	15	94	.1	86	14	697	3.94	15	5	ND	1	27	1	2	2	57	.41	.08	8	76	.99	97	.11	2	1.59	.03	.13	1
STA. 156	147+12	1	59	12	78	.2	88	13	961	4.14	35	5	ND	1	29	1	2	2	50	.45	.07	7	61	1.12	88	.07	2	1.56	.03	.09	1
	156+37L	1	73	9	67	.2	52	13	485	3.92	66	5	ND	1	25	1	2	2	59	.55	.06	3	71	.88	57	.07	11	1.55	.02	.07	1
	NEAR STA. 23	23+0+40	1	36	7	114	.1	72	11	359	2.86	2	5	ND	1	18	1	2	2	49	.41	.06	3	91	1.27	89	.09	15	1.98	.02	.08
NEAR STA. 31	23+0+60	1	43	6	93	.1	44	9	303	2.04	82	5	ND	1	19	1	2	2	40	.32	.04	4	46	.62	67	.06	11	1.38	.02	.07	1
	23+0+80	1	83	7	143	.3	75	20	777	4.54	78	5	ND	2	38	1	2	2	72	.52	.08	2	73	1.17	74	.08	16	2.02	.02	.10	1
	23+1+00	1	49	6	66	.2	75	12	298	2.86	15	5	ND	3	18	1	2	2	50	.34	.03	5	72	.99	73	.11	12	1.67	.02	.07	1
NEAR STA. 52	23+1+20	1	53	3	54	.1	65	10	249	2.84	7	5	ND	1	17	1	2	2	53	.36	.04	2	71	1.01	54	.10	12	1.54	.02	.06	1
	31+1+60	1	125	7	155	.3	124	31	714	5.53	21	5	ND	1	21	1	2	2	109	.59	.04	2	241	3.72	70	.06	18	4.15	.01	.05	1
	31+1+80	1	95	4	53	.1	114	20	443	3.84	3	5	ND	1	20	1	2	2	68	.67	.02	2	214	3.26	52	.09	17	3.38	.01	.03	1
NEAR STA. 52	31+2+00	1	119	10	109	.1	149	29	563	5.58	68	5	ND	1	29	1	3	2	79	.74	.04	5	237	2.95	63	.03	18	3.33	.01	.04	1
	31+2+20	1	99	6	66	.2	115	22	524	4.58	88	5	ND	1	25	1	2	2	72	.50	.04	2	131	2.00	103	.04	13	2.63	.01	.04	2
	31+2+40	1	69	8	69	.2	91	19	545	3.83	(45)	5	ND	2	20	1	2	2	69	.30	.06	4	150	1.59	78	.06	9	2.36	.02	.06	1
	31+2+60	1	110	7	66	.3	168	25	376	4.75	280	5	ND	2	19	1	2	2	60	.34	.04	2	179	1.54	41	.03	17	2.06	.01	.06	1
	52+0+00	1	41	4	50	.1	102	12	379	3.03	6	5	ND	2	16	1	2	2	58	.38	.03	3	90	1.08	74	.18	8	1.26	.02	.09	1

GOLD EXPLORATION
SOIL

TABLE 1

SAMPLE#	Mn ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mo ppm	Fe %	As ppm	U ppm	Au ppm	Tb ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P ppm	La ppm	Cr ppm	Mg ppm	Ba ppm	Ti ppm	S %	Al %	Na %	K %	N ppm	
TRENCH 11	11	1	22	6	42	.2	1224	59	775	5.13	77	5	ND	2	162	1	8	2	27	1.84	.01	2	1108	5.27	30	.01	10	.88	.01	.01	1
	A34E	1	15	4	35	.2	22	5	811	1.88	5	60	ND	1	212	1	2	2	18	24.66	.06	2	18	.82	43	.01	8	.33	.01	.04	2
TRENCH 34	34 E	1	35	2	53	.1	87	12	439	3.35	(153)	5	ND	3	25	1	2	5	56	.40	.09	8	78	.93	56	.09	11	1.07	.01	.02	1
TRENCH 99	99+9R	9	107	9	119	.1	248	24	1422	4.56	18	5	ND	4	151	1	2	5	80	.18	.05	9	143	.38	157	.03	15	.75	.01	.06	1
	99+23R	3	74	8	136	.3	905	59	1678	8.94	71	5	ND	2	45	1	2	4	117	1.78	.01	2	540	.51	96	.01	16	.73	.01	.02	1
	99+60R	3	80	11	74	.1	52	14	783	4.69	6	5	ND	3	31	1	2	6	71	.26	.12	9	35	.21	361	.01	17	.58	.05	.13	1
FOLLOW-UP	31+256R	1	20	4	16	.1	6	4	967	1.44	38	5	ND	1	706	1	2	2	25	25.84	.01	2	8	.51	22	.01	2	.64	.01	.02	1
STA. 31	31+260R	1	72	4	42	.2	38	14	911	3.80	855	5	ND	2	275	1	2	2	30	9.10	.02	3	52	2.03	17	.01	2	.88	.01	.05	1
TRENCH 81	81+31R	2	198	9	60	.1	57	28	1106	6.17	221	5	ND	1	22	1	2	2	121	.68	.02	4	75	5.04	25	.01	11	4.77	.01	.05	1
	81+32R	1	222	13	74	.1	44	37	1141	9.27	129	5	ND	1	14	1	2	2	311	.57	.03	2	34	2.73	38	.01	12	4.19	.03	.07	1
STA. 156	156+35R	1	442	3	44	.1	131	32	850	4.31	18	5	ND	1	11	1	2	2	74	.61	.02	2	103	5.28	13	.06	5	4.13	.03	.04	1
STA. 52	156+37R	1	65	11	38	.1	82	25	1040	4.28	48	5	ND	1	158	1	2	2	82	5.95	.01	2	197	2.69	23	.01	7	2.14	.03	.04	1
N. END TRENCH	5+320R	2	26	10	41	.1	15	4	420	1.39	2	5	ND	1	8	1	2	2	5	.05	.03	5	4	.08	197	.01	9	.21	.01	.06	1
POWER LINE ADIT	PLA-SR	5	61	20	139	.7	18	12	505	4.84	65	5	ND	1	39	1	10	2	14	1.18	.08	6	5	.15	86	.01	18	.59	.03	.11	1
	PLA-6R	1	18	9	15	.1	37	9	810	2.47	(170)	6	ND	4	321	1	2	2	12	8.07	.01	3	34	3.14	8	.01	30	.11	.02	.02	1
	PLA-7R	1	47	10	79	.1	65	24	353	5.70	(277)	5	ND	2	121	1	2	2	120	4.37	.05	7	59	2.51	19	.01	21	2.07	.03	.05	1

TABLE 2

GOLD
EXPLORATION
ROCKS

TABLE 3

AMAZON PETROLEUM FILE # 85-0961

PAGE 4

SAMPLE#	Ag PPM	As PPM	Sb PPM	Au* PPB
76+13R	.1	76	3	45
76+14R	.5	39	5	27
76+15R	.4	276	8	13
76+16R	.3	498	11	155
76+17R	2.1	1993	32	340
76+18R	.8	1329	14	4830
STD C/AU-0.5	6.9	39	15	500

- see Figure 15 for sample description

TABLE 5

MASSIVE SULFIDE
ROCKS

AMAZON PETROLEUM

SAMPLE#	AMAZON PETROLEUM																														
	No PPM	Cu PPM	Pb PPM	In PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	F %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	
HIGHWAY NEW DISCOVERY	HND-1R	1	60	7	126	.2	17	21	760	23.06	2	5	ND	2	7	1	2	126	.08	.06	2	77	1.32	30	.15	13	2.53	.01	.05	1	
	HND-2R	3	42	15	102	.1	16	13	844	14.55	10	5	ND	1	11	1	3	2	139	.11	.04	2	47	2.34	20	.20	2	2.57	.02	.07	1
	HND-3R	4	57	16	105	.4	11	14	419	19.70	11	5	ND	2	9	1	10	2	162	.03	.04	2	40	1.22	26	.15	6	1.92	.01	.11	1
	HND-4R	1	33	15	128	.1	14	18	1320	11.82	6	5	ND	1	5	1	2	2	156	.02	.02	2	37	3.43	28	.27	2	3.43	.01	.09	1
	HND-5R	1	38	14	27	.2	2	5	69	11.36	8	5	ND	1	4	2	5	2	79	.02	.02	3	12	.10	113	.12	10	.31	.01	.08	1
	HND-6R	4	39	12	41	.4	7	8	114	12.38	7	5	ND	1	8	1	3	2	96	.05	.03	2	15	.17	38	.24	7	.68	.01	.09	1
	HND-7R	2	16	6	30	.2	8	8	269	8.84	2	5	ND	1	7	1	2	2	94	.04	.02	2	20	.86	72	.24	13	1.02	.02	.17	1
	HND-8R	1	18	13	31	.1	8	9	254	13.98	8	5	ND	1	7	1	5	2	144	.02	.03	2	18	.65	64	.23	9	.81	.02	.19	1
	HND-9R	1	17	5	14	.1	4	5	56	7.93	5	5	ND	1	2	1	3	2	47	.03	.02	2	9	.07	25	.30	7	.24	.01	.08	1
	HND-10R	5	38	8	70	.2	9	7	591	7.33	9	5	ND	1	3	1	2	7	90	.02	.01	2	27	1.97	66	.28	14	1.96	.01	.11	1
HND-11R	2	19	10	67	.1	20	19	588	10.55	3	5	ND	1	5	1	2	3	102	.02	.02	2	32	2.01	9	.27	3	2.12	.01	.08	1	
	HND-12R	5	35	20	109	.2	12	12	785	15.46	36	5	ND	2	12	1	2	2	161	.03	.03	2	44	2.86	32	.18	2	2.89	.02	.09	1
59R	261	26	12	51	.1	53	30	192	4.75	81	5	ND	1	7	1	9	2	40	.07	.01	2	11	.37	17	.01	2	.34	.01	.04	1	
31+100R	7	63	12	160	.5	22	10	682	5.40	8	5	ND	1	23	2	2	2	50	.57	.12	8	21	.70	129	.06	7	2.26	.03	.11	1	

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCl-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR Mn.Fe.Ca.P.Cr.Mg.Ba.Ti.B.Al.Na.K.W.Si.Zr.Ce.Sn.Y.Nb AND Ta. Au DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE Au# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

TABLE 6DATE RECEIVED: JULY 19 1985 DATE REPORT MAILED: July 29/85 ASSAYER T. Saundry, DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

AMAZON PETROLEUM FILE # 85-1480

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca PPM	F %	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B PPM	Al PPM	Na PPM	K PPM	M PPB	Au# %	Cu %	Zn %
D.D.H. <i>85-01</i>																																	
2901	1	6	9	26	.4	78	11	525	2.19	510	8	ND	1	108	1	6	5	37	9.63	.01	2	125	1.97	3	.01	10	1.71	.01	.04	1	.95	—	—
2902	1	16	9	21	.4	6	5	1164	2.67	3080	7	ND	1	226	1	5	4	41	11.08	.01	2	3	1.82	4	.01	7	.92	.02	.03	1	.745	—	—
2903	1	113	9	77	.2	78	35	1284	9.11	134	5	ND	2	39	1	4	3	184	2.24	.04	2	102	4.11	3	.01	8	3.47	.03	.04	1	.13	—	..
2904	1	8	13	96	.2	18	45	1301	7.55	13	5	ND	1	31	1	3	2	215	1.03	.05	2	30	4.58	2	.27	9	3.46	.04	.01	1	.6	—	—
2905	1	71	9	76	.3	88	22	1334	5.79	6	5	ND	1	35	1	4	2	150	2.09	.03	2	145	5.00	3	.14	12	3.49	.08	.01	1	1	—	—
2906	1	13	2	6	.3	9	3	288	.78	7	5	ND	1	112	1	2	2	19	13.67	.01	2	27	.62	1	.01	5	.59	.04	.01	1	.8	—	—
D.D.H. <i>85-02</i>																																	
2907	2	30	22	117	.1	18	17	541	16.39	17	5	ND	2	2	1	2	3	53	.13	.01	7	14	1.44	9	.09	10	1.33	.01	.07	1	.6	.01	.01
2908	3	84	26	108	.4	4	5	221	15.02	22	5	ND	2	13	1	2	2	4	2.28	.01	15	1	.07	5	.01	9	.12	.01	.04	1	.14	.02	.02
2909	2	51	27	123	.2	7	8	162	15.72	10	5	ND	2	7	1	2	3	18	.52	.01	14	3	.45	8	.02	13	.48	.01	.07	1	.2	.01	.02
2910	6	34	26	152	.2	3	14	148	15.95	10	5	ND	2	9	1	2	2	3	.46	.01	16	1	.07	4	.01	10	.09	.01	.05	1	.12	.01	.02
2911	8	59	27	183	.7	8	14	202	14.88	18	5	ND	2	19	1	2	2	5	.81	.01	9	1	.13	3	.01	10	.14	.02	.06	1	.16	.01	.03
2912	5	23	21	197	.1	18	36	837	16.99	5	5	ND	2	14	1	2	4	83	.35	.01	10	20	2.41	11	.01	13	2.02	.03	.08	1	.3	.01	.02
2913	18	22	27	84	.4	7	38	342	14.99	10	5	ND	2	17	1	2	3	7	.47	.01	16	1	.28	8	.01	10	.17	.02	.07	1	.15	.01	.01
2914	4	167	14	199	.2	23	21	1065	15.11	2	5	ND	2	10	1	2	2	155	.33	.02	9	29	4.21	22	.20	19	3.83	.04	.07	1	.5	.02	.02
2915	11	68	27	129	.3	11	8	276	16.56	5	5	ND	2	8	1	2	3	65	.28	.01	15	11	1.58	8	.14	24	1.45	.04	.09	1	.4	.01	.01
2916	4	85	28	258	.2	25	22	656	17.85	15	5	ND	3	12	2	2	5	158	.28	.01	11	33	4.46	15	.19	31	4.00	.05	.07	1	.8	.01	.03
2917	11	39	25	262	.4	22	18	851	17.43	17	5	ND	3	11	2	4	3	204	.22	.01	2	41	6.06	18	.16	18	5.11	.04	.05	1	.9	.01	.02
STD C/AU-0.5	20	60	43	134	7.4	72	27	1158	3.95	40	15	6	38	50	18	16	21	63	.48	.16	41	62	.88	177	.07	41	1.73	.05	.12	11	480	—	—

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

TABLE 6

DATE RECEIVED: JULY 24 1985 DATE REPORT MAILED:

Aug 2/85

ASSAYER: T. Saundry DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

AMAZON PETROLEUM FILE # 85-1550A

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V %	Ca PPM	P %	La PPM	Cr PPM	Mg PPM	Ba PPM	Ti PPM	B %	Al %	Na PPM	K PPM	W %	Cu %	Zn %	OZ/T
D.D.H. <i>85-02</i>																																	
2918	10	45	42	362	.3	25	25	708	21.07	4	5	ND	2	14	1	3	2	153	.43	.01	25	31	4.33	8	.21	15	3.94	.06	.01	1	.01	.05	.001
2919	2	323	19	228	.1	19	23	648	19.41	6	5	ND	3	18	1	2	2	72	.75	.02	16	11	1.53	8	.01	20	1.91	.06	.05	1	.03	.03	.001
2920	7	335	13	281	.1	20	24	1560	15.49	2	5	ND	2	18	1	2	2	176	.30	.02	26	28	5.00	15	.04	15	4.64	.06	.02	1	.03	.04	.001
2921	7	262	12	133	.3	12	14	478	19.82	5	5	ND	3	15	1	2	3	48	.53	.01	5	7	1.28	4	.01	14	1.22	.04	.04	1	.03	.02	.001
2922	11	267	14	129	.2	21	20	291	17.35	4	5	ND	3	19	1	2	5	46	.40	.02	3	19	.90	5	.01	21	1.04	.07	.07	1	.03	.02	.001
2923	1	108	11	137	.1	10	38	1117	14.83	2	5	ND	2	8	1	2	2	197	.64	.04	23	15	4.17	10	.17	11	3.69	.04	.02	1	.01	.02	.001
2924	1	691	9	211	.4	24	33	2005	11.53	6	5	ND	1	63	1	3	2	200	.70	.02	18	36	4.27	26	.01	20	3.67	.03	.01	1	.08	.03	.001
2925	3	282	6	111	.4	11	15	2421	5.95	21	5	ND	4	331	1	5	2	57	10.35	.02	21	5	3.51	14	.01	21	.29	.05	.01	1	.03	.02	.001
2926	1	61	11	426	.1	7	28	1193	7.69	3	5	ND	2	17	1	2	2	176	.83	.03	11	2	3.13	5	.25	21	2.63	.02	.01	1	.01	.05	.001
2927	5	1181	11	915	.5	6	34	916	9.33	270	5	ND	2	18	5	2	2	143	.58	.03	9	2	2.38	3	.21	22	2.04	.02	.01	1	.12	.11	.003
2928	5	771	12	203	.4	60	28	1214	13.75	3	5	ND	2	11	1	2	2	214	.93	.04	25	86	3.24	10	.31	13	3.38	.04	.01	1	.07	.03	.001
2929	1	593	7	136	.1	24	24	1778	7.60	4	5	ND	2	19	1	2	2	198	.88	.04	14	42	4.14	2	.24	22	3.35	.04	.01	1	.06	.02	.001
2930	3	24	12	91	.1	16	33	942	11.09	9	5	ND	2	14	1	3	2	118	.52	.02	17	23	3.03	1	.14	20	2.37	.02	.01	1	.01	.01	.001
D.D.H. <i>85-03</i>																																	
2931	1	84	7	125	.1	27	15	1722	5.60	8	5	ND	1	43	1	2	2	76	.96	.07	9	28	1.01	44	.26	28	2.53	.01	.09	1	.01	.02	.001
2932	1	60	10	45	.1	14	7	521	2.06	10	5	ND	1	39	1	2	2	17	.69	.03	3	7	.53	33	.07	16	.64	.01	.10	1	.01	.01	.001
2933	7	93	16	70	.1	30	12	616	2.51	16	5	ND	2	26	1	2	2	18	.49	.05	7	11	.57	36	.01	22	.81	.01	.12	1	.01	.01	.001
2934	1	83	5	49	.1	18	5	476	1.61	7	5	ND	4	16	1	2	2	10	.44	.03	10	7	.42	18	.01	16	.66	.01	.13	1	.01	.01	.001
2935	1	41	8	71	.1	17	10	1330	3.55	8	5	ND	2	142	1	2	2	51	2.90	.05	11	30	1.16	19	.01	24	1.63	.03	.09	1	.01	.01	.001
2936	51	106	9	305	.7	92	12	370	2.46	39	5	ND	3	99	3	2	2	40	1.63	.04	12	8	.35	20	.01	24	.54	.01	.16	1	.01	.04	.001
D.D.H. <i>85-04</i>																																	
2937	1	305	9	54	.2	38	6	2989	1.19	6	5	ND	2	15	1	2	2	11	.47	.01	5	6	.38	35	.01	13	.20	.01	.04	1	.03	.01	.001
2938	1	73	5	122	.2	332	40	3379	5.92	2	5	ND	3	170	1	3	2	51	4.01	.02	21	462	4.91	60	.01	29	3.59	.01	.10	1	.01	.02	.001
2939	2	88	3	97	.4	313	30	2868	4.76	9	5	ND	4	164	1	2	2	64	5.63	.05	19	390	3.56	85	.01	26	2.59	.01	.06	1	.01	.01	.001
STD C	20	59	39	134	7.0	69	28	1167	4.00	39	17	8	39	53	16	15	21	62	.48	.15	38	59	.08	179	.08	41	1.72	.06	.10	12	-	-	-

ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST.VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO₃-H₂O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR Mn,Fe,Ca,P,Cr,Mg,Ba,Ti,B,Al,Na,K,W,Si,Zr,CE,Sn,Y,NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: SLUDGE AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

TABLE 7

DATE RECEIVED: JULY 24 1985 DATE REPORT MAILED: Aug. 2/85 ASSAYER: D. Saunday DEAN TOYE OR TOM SAUNDAY. CERTIFIED B.C. ASSAYER

AMAZON PETROLEUM FILE # 85-1550

PAGE 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P PPM	La PPM	Ir PPM	Mg %	Ba PPM	Ti PPM	B PPM	Al %	Na PPM	K %	W PPM	Au# PPB
<i>D.D.H.</i> <i>85-04</i>																															
85-04-20	3	177	165	153	.4	88	12	911	3.47	5	5	ND	2	41	1	2	2	61	2.13	.04	6	107	2.12	109	.08	7	2.37	.05	.05	167	1
85-04-30	4	258	17	181	.3	199	19	2790	3.76	3	5	ND	2	50	1	2	2	42	1.54	.02	4	179	3.15	166	.01	6	2.02	.01	.10	273	1
85-04-40	5	518	28	185	.4	193	21	3863	4.72	5	5	ND	2	49	1	2	2	42	1.57	.03	5	171	2.35	173	.01	11	1.75	.01	.19	293	1
85-04-50	22	747	147	489	.5	217	14	3802	12.37	15	5	ND	3	16	1	2	2	9	.59	.03	22	91	4.45	125	.01	8	.26	.01	.09	508	1
85-04-60	4	870	98	371	.3	138	13	5001	3.06	4	5	ND	4	18	1	2	4	17	.33	.03	20	26	.80	246	.01	7	.71	.01	.21	391	2
<i>D.D.H.</i> <i>85-05</i>																															
85-04-70	3	872	57	634	.4	241	13	3375	1.98	2	5	ND	1	17	1	2	2	7	.33	.03	11	14	.33	221	.01	4	.37	.01	.09	619	1
85-04-80	7	227	50	233	.2	370	36	3798	6.63	40	5	ND	3	91	1	2	2	66	1.90	.04	6	460	4.57	224	.01	13	3.56	.01	.20	300	1
<i>85-05</i>																															
85-05-20	3	295	42	197	1.8	98	22	569	4.04	6	5	ND	1	20	47	2	2	94	5.88	.01	4	195	2.14	17	.08	21	4.42	.03	.01	509	1
85-05-30	6	222	78	105	.8	78	29	720	7.80	2	5	ND	1	30	1	2	2	445	3.45	.01	2	115	2.20	19	.40	17	3.76	.02	.02	106	2
85-05-40	5	216	68	71	.7	73	25	648	6.32	2	5	ND	3	32	2	2	2	325	5.01	.01	2	91	2.19	14	.28	19	4.37	.03	.02	58	1
85-05-50	6	205	114	85	.4	88	19	643	4.90	2	5	ND	1	36	2	2	2	136	4.89	.01	2	16	2.37	13	.14	23	4.17	.04	.01	70	2
STD C/AU-0.5	20	60	38	138	7.1	69	25	1177	3.95	38	17	8	38	53	16	15	19	61	.48	.14	39	18	.88	170	.08	38	1.72	.06	.13	12	500

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

GEOCHEMICAL LABORATORY METHODOLOGY - 1985

Sample Preparation

1. Soil samples are dried at 60°C and sieved to -80 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis (AA and ICP)

0.5 gram samples are digested in hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water. Extracted metals are determined by :

A. Atomic Absorption (AA)

Ag*, Bi*, Cd*, Co, Cu, Fe, Ga, In, Mn, Mo, Ni, Pb, Sb*, Tl, V, Zn
(* denotes with background correction.)

B. Inductively Coupled Argon Plasma (ICP)

Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cu, Cr, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Geochemical Analysis for Au*

10.0 gram samples that have been ignited overnite at 600°C are digested with 30 mls hot dilute aqua regia, and 75 mls of clear solution obtained is extracted with 5 mls Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 1 ppb).

Geochemical Analysis for Au, Pd, Pt, Rh**

10.0 - 30.0 gram samples are subjected to Fire Assay preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt, and Rh are determined in the solution by graphite furnace Atomic Absorption. Detections - Au=1 ppb; Pd, Pt, Rh=5 ppb

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml. As is determined in the solution by Graphite Furnace Atomic Absorption (AA) or by Inductively Coupled Argon Plasma (ICP).

Geochemical Analysis for Barium

0.25 gram samples are digested with hot NaOH and EDTA solution, and diluted to 20 ml.

Ba is determined in the solution by ICP.

Geochemical Analysis for Tungsten

0.25 gram samples are digested with hot NaOH and EDTA solution, and diluted to 20 ml. W in the solution determined by ICP with a detection of 1 ppm.

Geochemical Analysis for Selenium

0.5 gram samples are digested with hot dilute aqua regia and dilute to 10 ml with H₂O₂. Se is determined with NaBH₃ with Flameless AA. Detection 0.1 ppm.

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

Geochemical Analysis for Uranium

0.5 gram samples are digested with hot aqua regia and diluted to 10 ml.

Aliquots of the acid extract are solvent extracted using a salting agent and aliquots of the solvent extract are fused with NaF, K₂CO₃ and Na₂CO₃ flux in a platinum dish.

The fluorescence of the pellet is determined on the Jarrel Ash Fluorometer.

Geochemical Analysis for Fluorine

0.25 gram samples are fused with sodium hydroxide and leached with 10 ml water. The solution is neutralized, buffered, adjusted to pH 7.8 and diluted to 100 ml.

Fluorine is determined by Specific Ion Electrode using an Orion Model 404 meter.

Geochemical Analysis for Tin

1.0 gram samples are fused with ammonium iodide in a test tube. The sublimed iodine is leached with dilute hydrochloric acid.

The solution is extracted with MIBK and tin is determined in the extract by Atomic Absorption.

Geochemical Analysis for Chromium

0.1 gram samples are fused with Na₂O₂. The melt is leached with HCl and analysed by AA or ICP. Detection 1 ppm.

Geochemical Analysis for Hg

0.5 gram samples is digested with aqua regia and diluted with 20% HCl.

Hg in the solution is determined by cold vapour AA using a F & J scientific Hg assembly. An aliquot of the extract is added to a stannous chloride / hydrochloric acid solution. The reduced Hg is swept out of the solution and passed into the Hg cell where it is measured by AA.

Geochemical Analysis for Ga & Ge

0.5 gram samples are digested with hot aqua regia with HF in pressure bombs.

Ga and Ge in the solution are determined by graphite furnace AA.
Detection 1 ppm.

Geochemical Analysis for Tl (Thallium)

0.5 gram samples are digested with 1:1 HNO₃. Tl is determined by graphite AA. Detection .1 ppm.

Geochemical Analysis for Te (Tellurium)

0.5 gram samples are digested with hot aqua regia. The Te extracted in MIBK is analysed by AA graphite furnace. Detection .1 ppm.

Geochemical Whole Rock

0.1 gram is fused with .6 gm LiBO₂ and dissolved in 50 mls 5% HNO₃. Analysis is by ICP or M.S. ICP gives excellent precision for major components. The M.S. can analyze for up to 50 elements.

STARTED - July 8/85
COMPLETED - July 12/85

T.D. = 149.96 (492 ft.)
 Dip = -71°
 Azim. = 263°

FROM	TO	DESCRIPTION
0	3.66	overburden
	4.42	rubble, broken core
	9.14	volc., grn-grey, silicified, altered
	12.80	volc., dark grey, vfg, qz. por. (?) - dis. Py throughout
	19.51	tuff - argl.; tuff, grn, massive, argl, blk. layering = $40-50^{\circ}$
	23.47	diorite FW contact = 18cm qz vein + brec + silver mineral (~ 1%)
	32.3	volc., light grn, vfg, massive
	35.2	volc., massive, vfg, light grn-grey
	33.25	= qz vein (5cm) + silver min
	33.38-34.50	= brec + abn py
	42.5	volc., dark grey, minor Py
	37.58	- some Po veins
	50.0	Volc., light grn
	54.65	Volc., grey - drk grey
	65.07	Volc., andesite, grn, mgr, generally massive some Po, Py
	65.07	- poss. fault zone, broken core
	76.81	Volc., dark grey matrix, lighter inclusions
	105.31	Volc., light grn, generally massive some vesicals - 87.8-89.06 = ves. volc. + minor Po, Py - 92.0 = gouge zone (poss. fault)
	114.21	White dike - no meta-alt of HW volc. - fragments of volc in wht - vfg, poss. tuff - colour gradation over +lm from grn tint to white
	109.6	= qz veins + brec (0.4m)

RGM.

FROM	TO	DESCRIPTION
		109.6 = qz veins + brec (0.4m) - some marapposite - bot 10cm is crumpled contact
149.96	Diorite	- top 0.98m is altered - 124.21 = grnst inclusion

RGM.

STARTED - July 12/85
COMPLETED - July 17/85

T.D. =
Dip =
Azim. = 273°

FROM	TO	DESCRIPTION
3.05	35.48	volc., light grey - vesicular + Py + Qz - abn chert (jasper) layered
3.05	3.23	<u>Detail</u> mass Py + chert (jasper)
-6.55		sericitic, vesic.
-7.62		volc., andes, some sericite
-7.70		sericitic, vesicular + Py
-8.14		mass. Py
-8.84		ser. vesic, layered + Py
-9.30		mass. Py
-19.96		ser., vesic + Py layers
-20.51		massive Py
-20.88		seric. + Py bands
-21.34		mass. Py
-22.86		" " "
-23.93		" " "
29.57	0.15m	brec. zone + qz veins + grn maraposite
34.05	34.66	brec. zone, some mass. Py fragments
35.20	35.48	brec. zone, up to 4cm some maraposite alt minor qz vein
-58.58		volc. vfg, light grn-grey
-69.49		volc., grey abn. Py layers, vesic, sericitic 58.67 = 0.37m mass Py 59.34 = 0.21m " " " 59.77 = 0.58m " " " 60.66 = 1.21m " " " 62.2 = Py layers to chert balls (jasper) 66.1 = mass. Py, 0.3m 66.9 = " " " 2.59m

RPM.

FROM	TO	DESCRIPTION	D.D.H.	85-02
69.49	75.59	volc., grn, mass.		
-80.16		volc., blk to grey, very seric. + Py + chert		
	77.6	= abn Py + Cp		
-83.27		volc, grey-grn, vfg, massive		
-93.50		volc, grey-wht, highly seric.		
	83.7	= 0.3m mass Py + Cp		
	84.3	= 0.8m " " (Cp?)		
	0.1m	parting		
	0.3m	mass Py		
	86.3m	" " , +3.3m + Cp		
	89.6 - 92.5	= volc, vesic, seric, some mass Py layers		
	92.5 - 98.5	= mass Py + volc, seric		
	94.9	= 0.7m brec + mass Py		
-102.02		volc., dom. grn (dark), mgr		
+104.76		volc, light grn		
	103.9	= 12cm + Py + Sp(?)		
	104.5	= 15cm " " "		
-108.97		volc., drk grn, mgr		
-113.66		volc, m-cgr, vesic.		
	112.3	= Py band 50°		
		some Cp in vesic 113.4m		
-120.55		white dike alt. volc.? some qz veins		
-130.76		volc. dark grn, grey		
	121.16 - 125.6	= brec to abn Py		
		some Cp, Sp		
	127.1	= gouge zone (fault?)		
		broken core, qz vein + marapposite		
-133.96		volc. grn-light grn, massive		
	133.2	= some Cp		
-138.4		volc. grey, vfg		
	135.1	= Sp parting in blk argl (?); 2mm th (red-yel)		
-221.59		volc. light grn, large vesic (up to 1cm)		
	148.13	= some Cp in veinlets		
	166.3	= more silicic material (chert)		
		abn Py, some Cp + Sp		
	0.97m			
	0.73m	grnst + Py		

RGM.

FROM	TO	DESCRIPTION	D.D.H. 85-02
-221.59		continued silic + Py, Cp (0.91m) grnst + silic (1.28m) 190.3 = Py band + Cp (0.15m) 191.6 = sericite layers with mass Py, some Cp (2.3m) 206.7 = chert band, abn Cp (5cm) 211.1 = silic band + Py + Cp (?) (1.1m) 219.1 = brec + Py + Cp (10cm)	

Ram.

STARTED - July 17

T.D. = 76.20 (250ft)

COMPLETED - July 19

Dip = - 45°

Azim. = 270°

FROM	TO	DESCRIPTION
0	1.22	overburden
	-3.87	Slsn, black, some fgr sasn
	-6.40	chert banded wht + blk
	some Po, Py, Cp?	
	-10.21	slns + sasn; blk to grey interbeds
	-13.17	chert dom wht
	wht-grey argl partings	
	-17.07	chert with blk argl partings
	14.02 -	partings are Py - Po (?) rich
	21.24	asan + slsn, abn qz veinlets
	26.88	chert, wht; with argl (seric) partings
	some Po (?)	
	25.0	= becomes very carb., blk partings
	25.8	= some Cp with Po along blk partings
	29.47	sasn, m-cgr, grey, greywacke
	36.12	slsn, blk + minor sasn
	38.65	sasn, m-cgr, grey
	41.67	ch + slsn, very carb partings
	45.05	slsn, some ch, some sasn
	47.00	ch with blk partings
	53.04	sasn with slsn, minor ch
	55.47	ch with carb partings
	60.50	blk matrix (mudst) with ch partings
	69.65	ch, dom wht with blk partings
	70.41	sasn + slsn
	73.00	ch, wht + blk partings
	- some sls interbeds	
	76.20	slsn + sasn

RJM

D.D.H. - 85.04

STARTED - July 19/1985

T.D. = 26.82m

COMPLETED - July 22/1985

Dip =

Azim. = 270° Vert = -45°

FROM	TO	DESCRIPTION
0	6.10	O.B., some diorite
	-21.79	broken core - black siltst + chert frag
	-22.71	silt, blk, very carb
	-23.93	" " " abn chl alt
	-26.82	blk silt, very carb. some wht ch fragments some qz veins

RAM.

STARTED - July 23/85
COMPLETED -

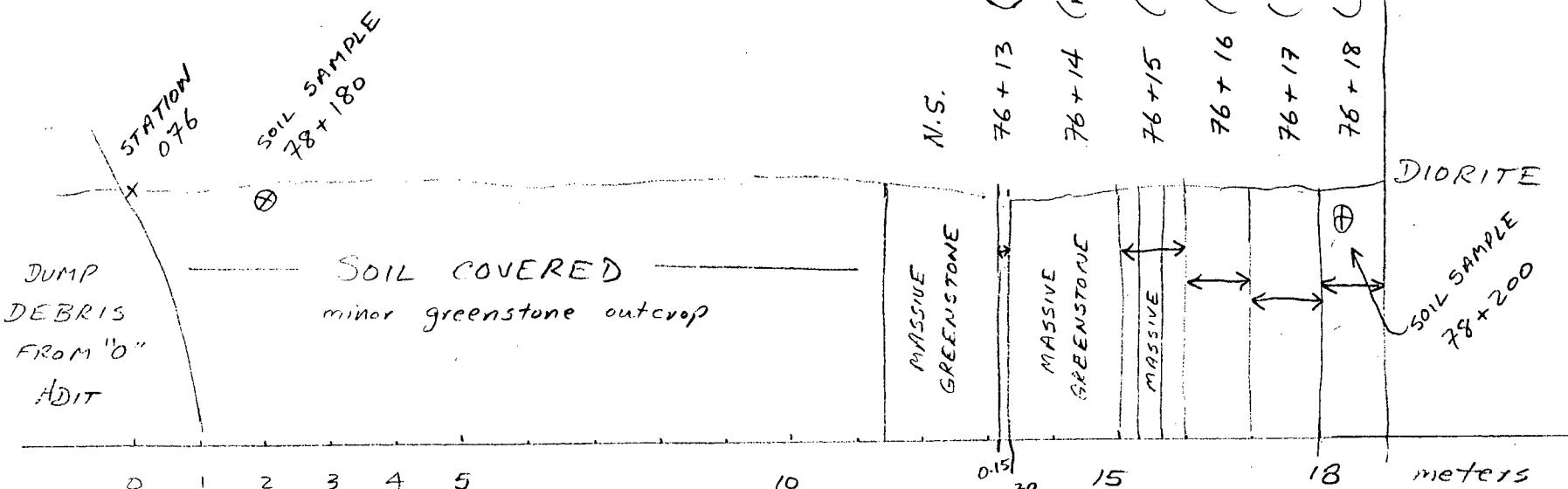
T.D. = in progress as of
Dip = July 28
Azim. = 270° Vert = -45°

FROM	TO	DESCRIPTION
0	2.44	overburden
	-3.05	broken diorite, rubble
	-17.68	Diorite
	-19.05	Diorite?, very carb.
	-26.40	- some Cp at 8.23m; 9.30m (in Po veins)
	-29.4	9.60m
	-34.69	Volc. - Diorite contact zone, very black
	-35.72	Volc. vfg, andes (?)
	-41.21	Diorite black
	-42.98	Volc, grn, some fgr, some cgr
	-45.18	Diorite (?)
	-51.21	Wht dike
	-60.84	volc (?) dark grn, brec
	-61.26	diorite (?) cgr, blk
	-63.86	45.18 = some Cp + Po (10cm)
	-79.71	Volc, grn, cataclastic text. gen. mgr, massive
	-84.31	61.26 = some Cp (over 10cm)
	-84.64	63.86 = some Sp with Py (Cp?)
	-85.95	78.64 = some Cp (1%)
	-94.79	Diorite, cgr, mass, some Ca veins
	-96.77	grad. cont, (volc?) cataclastic
	-97.23	ch, grey - wht
	-97.23	blk, graph
	-97.23	blk, graph
	-97.23	ch with clay lam., grey (seric?)
	-97.23	- some tuff layers - grn grey
	-97.23	grn rock - tuff?
	-97.23	gouge, grey-blk
	-97.23	blk graph, cataclastic

R4M.

ROAD CUT, BELOW "O" ADIT

- see TABLE 3 for results



1 2 5

SCALE = 1 : 100

RJM 85-06-14

SECTION (SHEAR) "O" ADIT

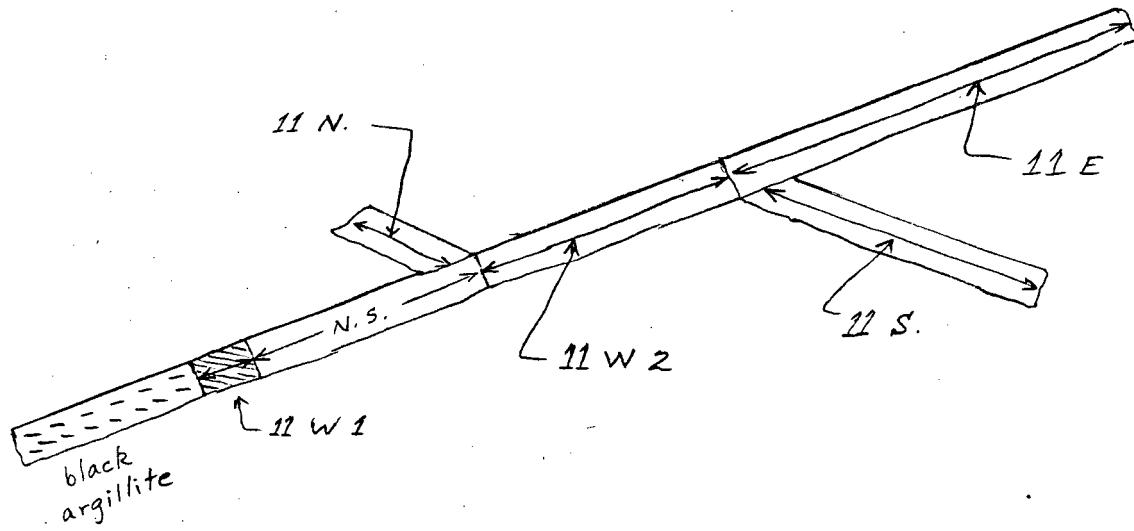
TRENCH No. 11 (PLAN)

N.

- North End ; 11+00 S. , 120 W.

SCALE = 1:200

0 5 10
METERS



N.S. = not sampled

= rust zone

N.D. = no display

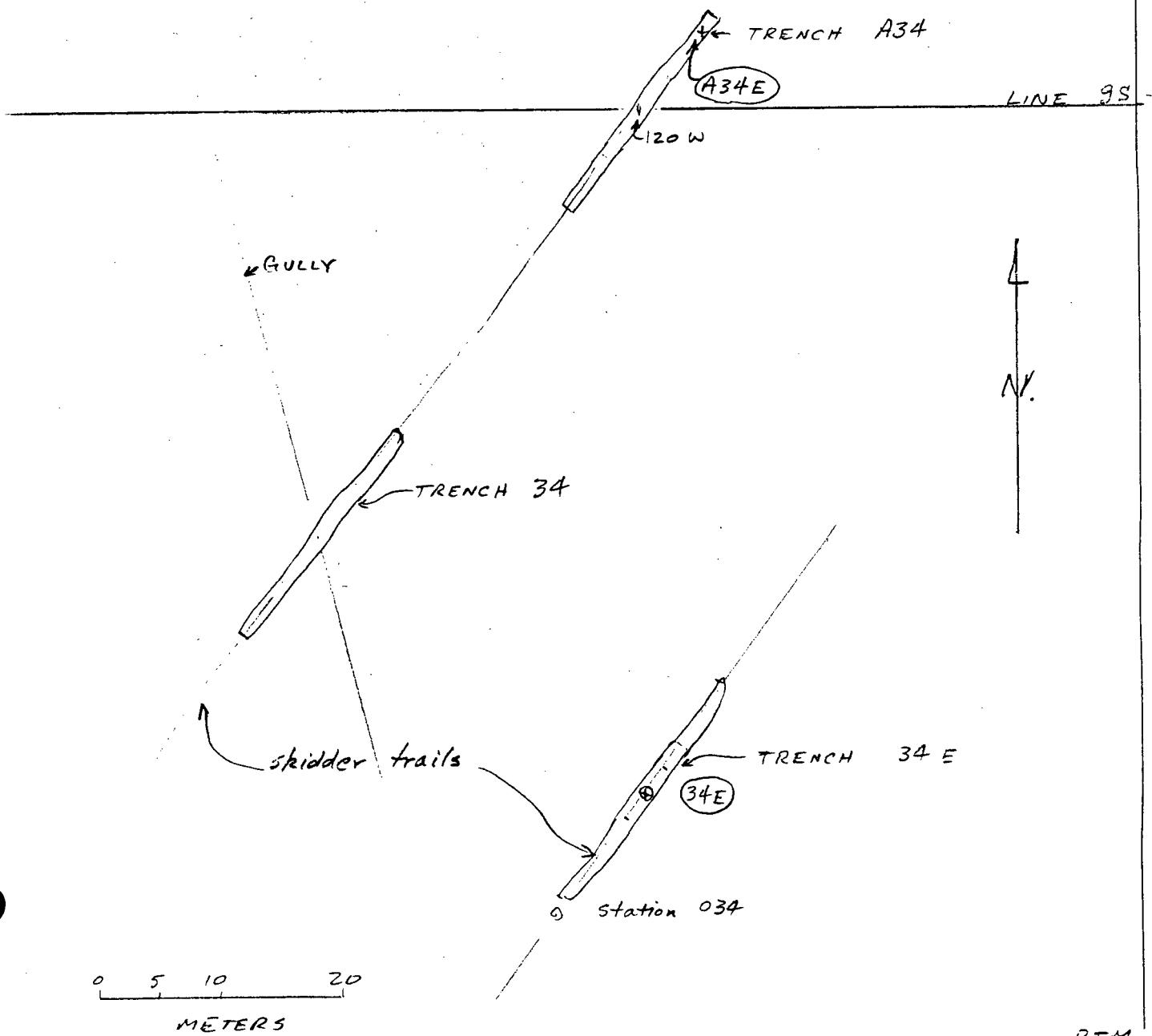
(p.p.m.)

SAMPLE	Ag	Au	As	Se	
11 E	0.1	ND	31	3	soil debris over ~10m
11 S	0.1	ND	50	9	soil debris over 7m
11 N	0.3	ND	210	23	soil debris over 3m
11 W 1	0.8	2	220	15	soil debris over 1.5m
11 W 2	0.8	ND	257	17	soil debris over 7m

TRENCH No. 34 (PLAN)

- North End; between 8S and 9S
approx. 120 W.

SAMPLE	Ag	Au	As	Sb	
34E	0.1	ND	163	2	soil from above rhyolite por.
A34E	0.1	ND	14	2	soil from rusty black argillite

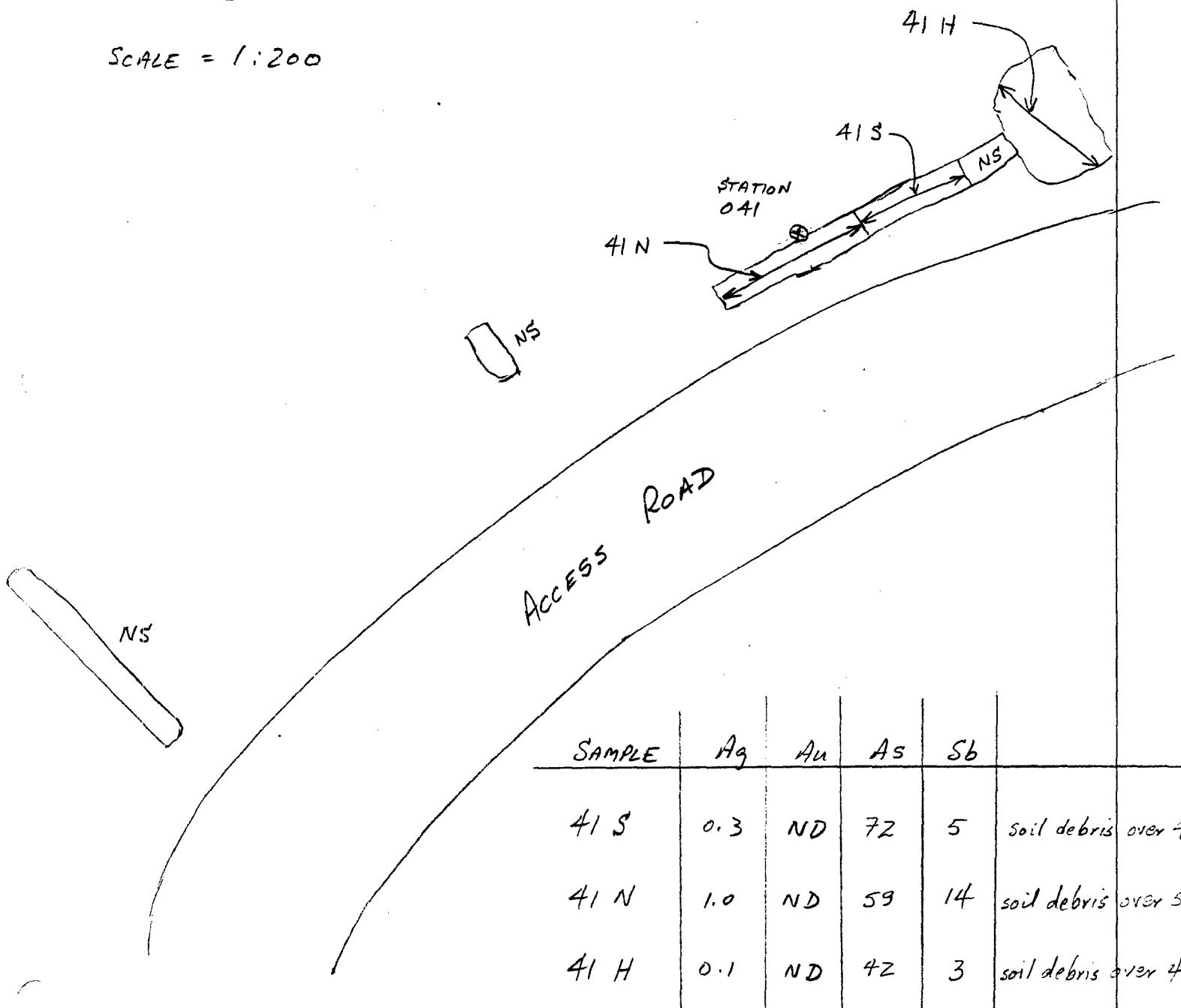


TRENCH No. 41 (PLAN)

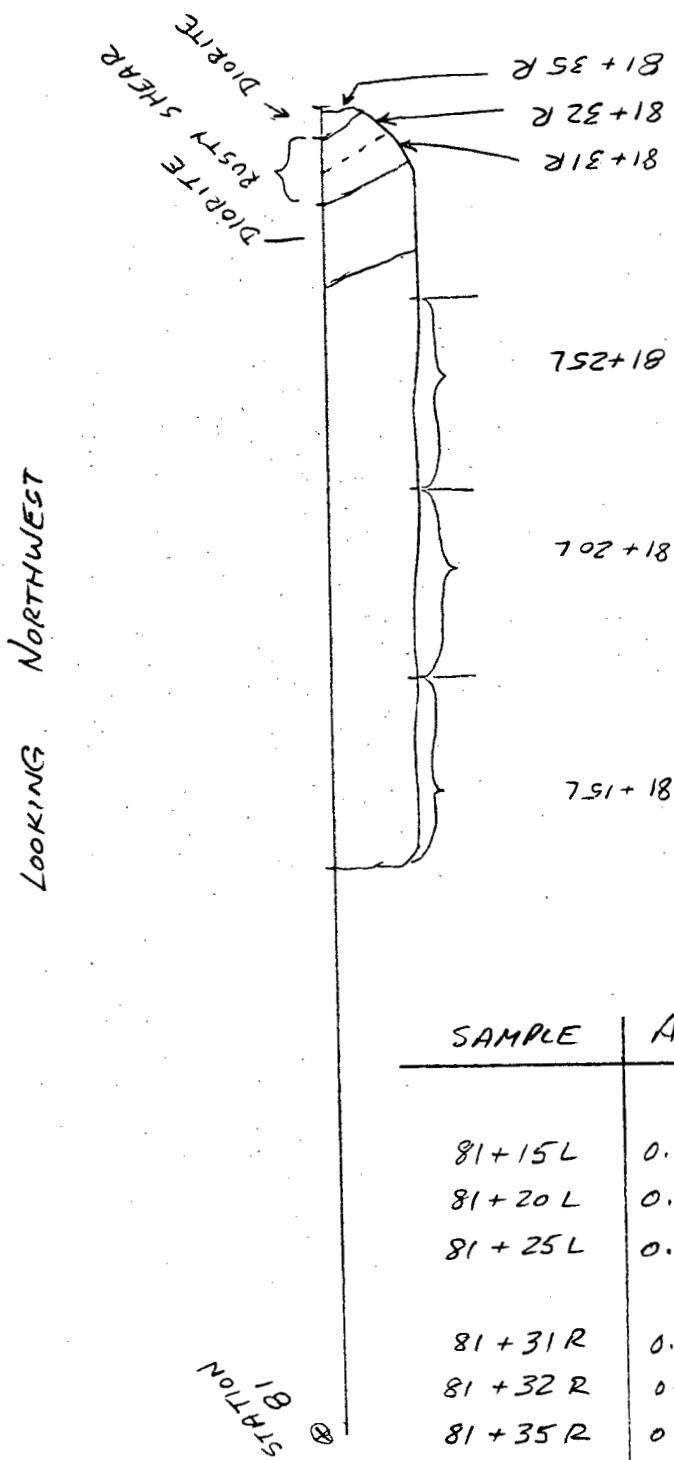
N.
↓

0 5 10
METERS

SCALE = 1:200

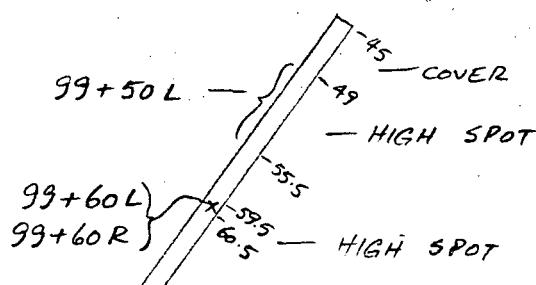
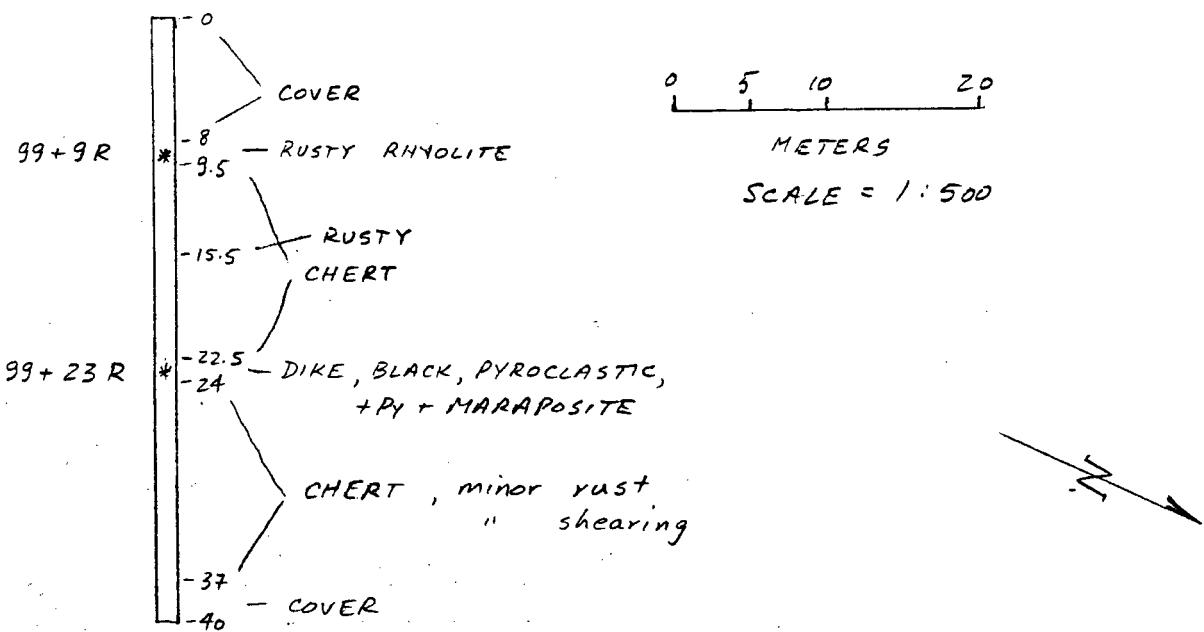


TRENCH 81 (SECTION)



SAMPLE	Ag	Au	As	Sb	DESCRIPTION
81+15L	0.2	ND	49	2	soil over 5m
81+20L	0.3	ND	68	2	" " 5m
81+25L	0.2	ND	44	2	" " 5m
81+31R	0.1	ND	221	2	rock chips over 0.82 m
81+32R	0.1	ND	129	2	" " " 0.82 m
81+35R	0.1	ND	18	2	" " " 0.80 m

TRENCH 99 (PLAN)



SAMPLE	Ag	An	As	Sb	DESCRIPTION
99+9 R	0.1	ND	18	2	rusty rock chips
99+23 R	0.3	ND	71	2	" " "
99+60 R	0.1	ND	6	2	rock chips
99+50 L	0.3	ND	11	2	soil over 6.5 m
99+60 L	0.1	ND	11	2	" " 1 m
99+80 L	0.1	ND	12	2	grab soil
99+90 L	0.2	ND	11	3	" "

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Fig. 20

85-06-26

TRENCH 147 (PLAN)

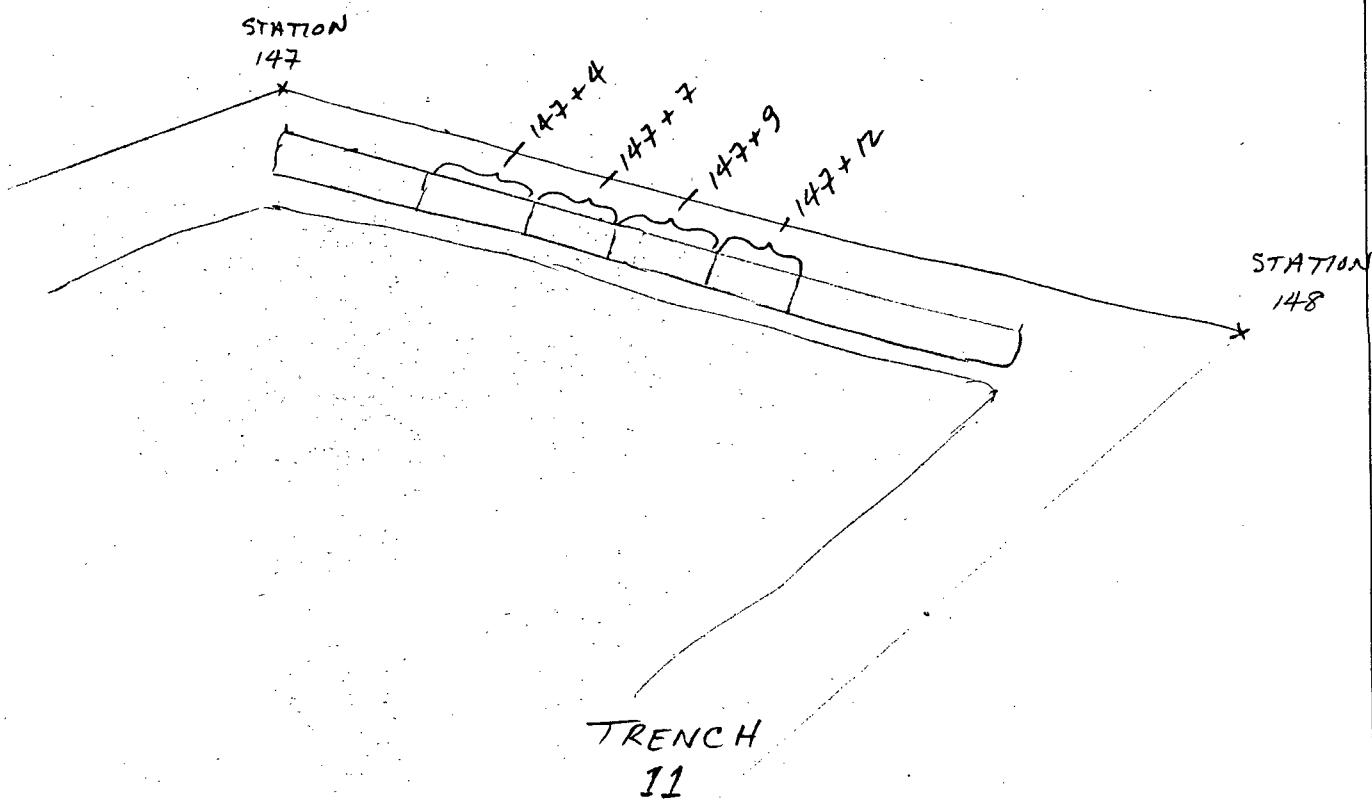


0 5 10

METERS

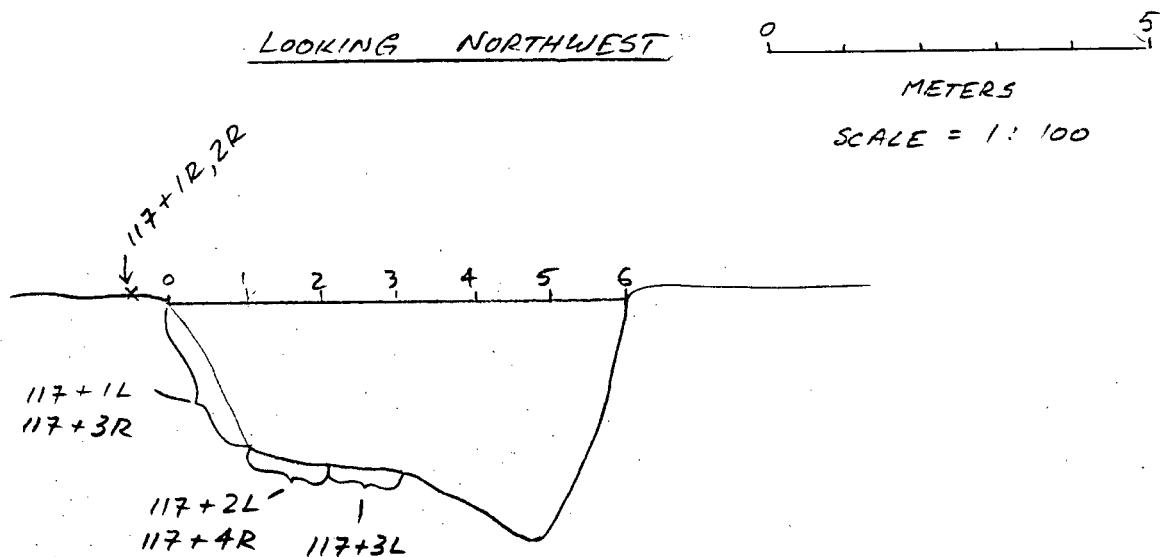
N.

SCALE = 1 : 200



SAMPLE	Ag	Au	As	Sb	
147+4	0.2	ND	18	4	
147+7	0.2	ND	20	3	
147+9	0.1	ND	15	2	
147+12	0.2	ND	35	2	

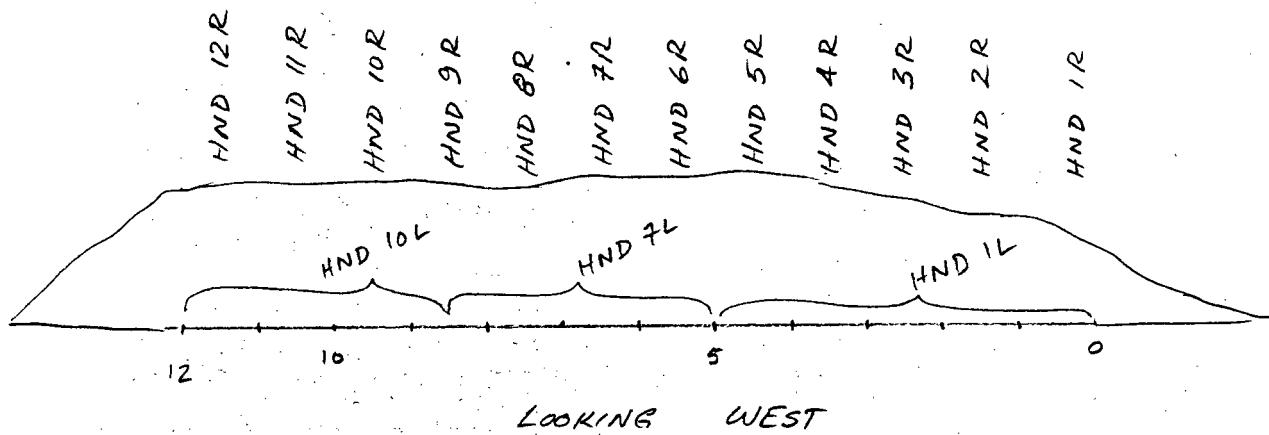
TRENCH 117 (section)



SAMPLE	Cu	Pb	Zn	% Fe	Mo		DESCRIPTION
117 + 1L	84	7	86	3.1	2		
2L	187	12	69	3.4	2		
3L	179	11	78	4.5	4		
117 + 1R	2	5	221	5.8	1		
2R	6	6	38	4.2	12		
3R	62	11	167	8.1	9		
4R	31	7	159	6.0	3		
5R	153	12	159	8.2	1		

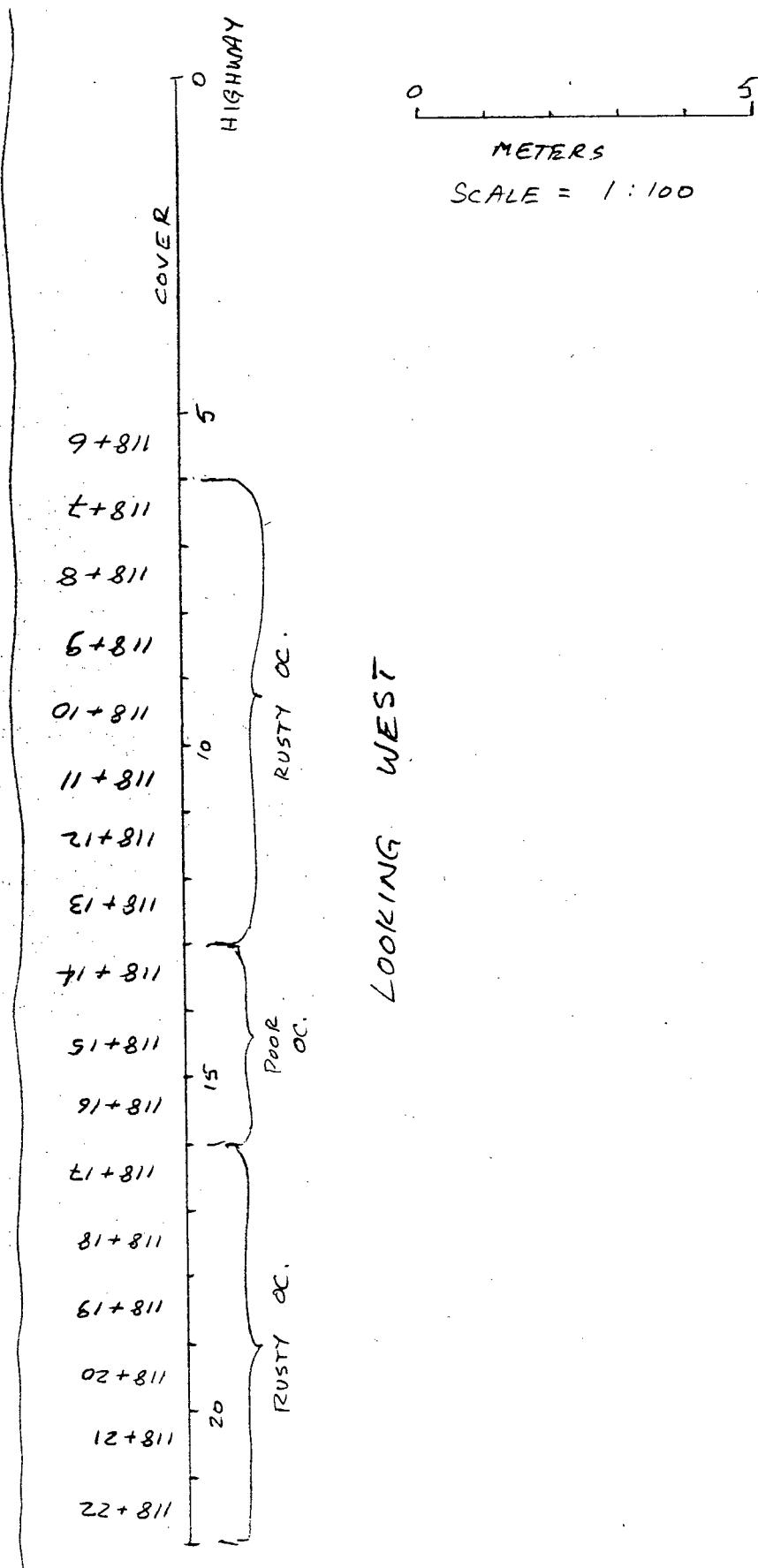
TRENCH 118
(SECTION) (Highway New Discovery)

0 1 2 3 4 5
METERS
SCALE = 1:100

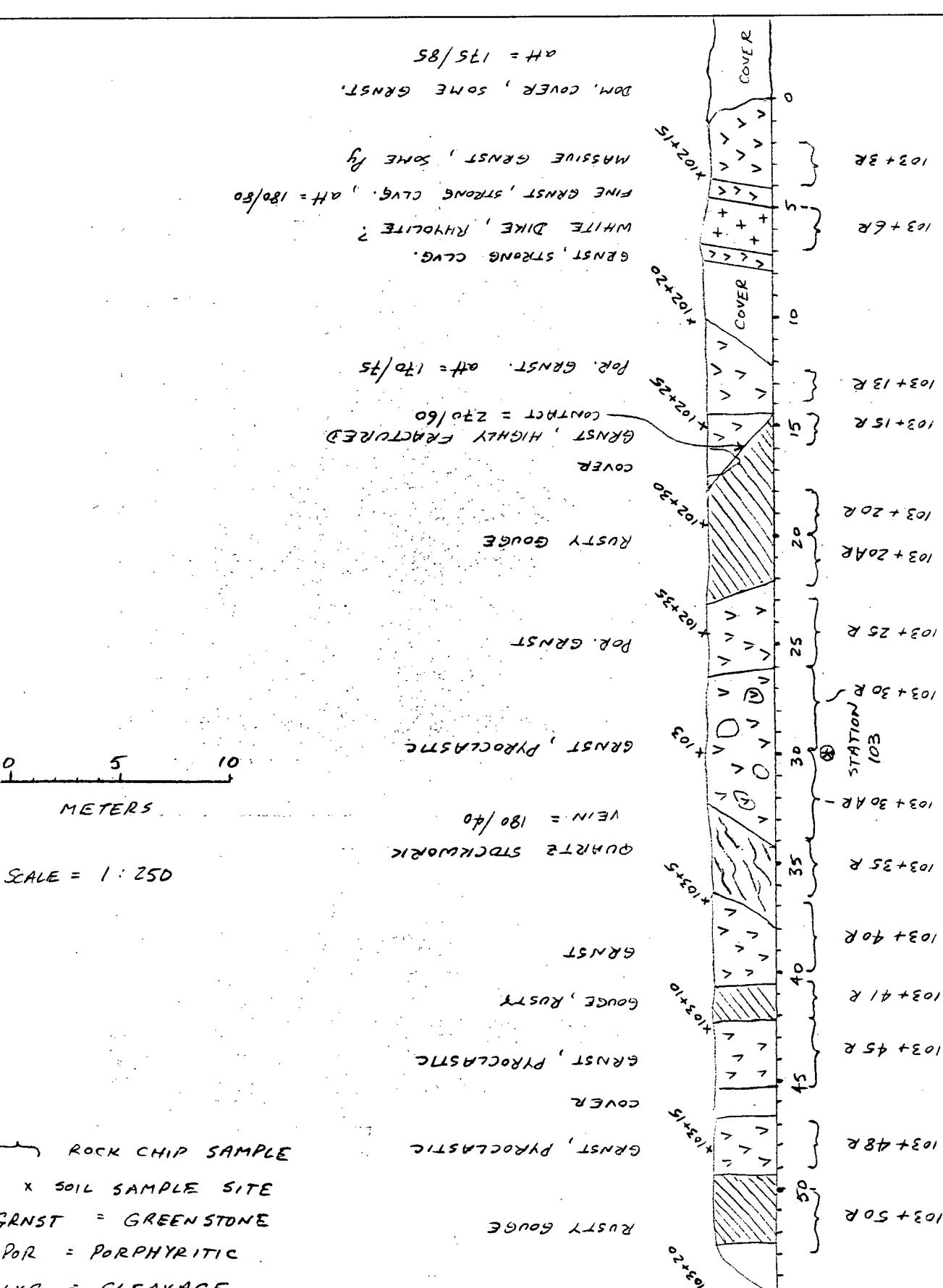


SAMPLE	Cu	Pb	Zn	Fe	Mo			DESCRIPTION
HND 1L	70	<u>21</u>	81	8.6	4			soil over 5m
HND 7L	56	<u>16</u>	60	11.8	6			" " 3.5m
HND 10L	37	<u>14</u>	41	9.7	6			" " 3.5m
HND 1R	60	7	126	23.1	1			rock chips over 1m
2R	42	<u>15</u>	102	14.6	3			" " " "
3R	57	<u>16</u>	105	19.7	4			" " " "
4R	33	<u>15</u>	128	11.8	1			" " " "
5R	38	<u>14</u>	27	11.4	1			" " " "
6R	39	12	41	12.4	4			" " " "
7R	16	6	30	8.8	2			" " " "
8R	18	<u>13</u>	31	14.0	1			" " " "
9R	17	5	14	7.9	1			" " " "
10R	38	8	70	7.3	5			" " " "
11R	19	<u>10</u>	67	10.6	2			" " " "
12R	35	<u>20</u>	109	15.5	5			" " " "

TRENCH 118 A (section)



TRENCH 103 (SECTION)



LOOKING NORTH

Fig. 25

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85-06-26

TRENCH 6N 500 W (PLAN)

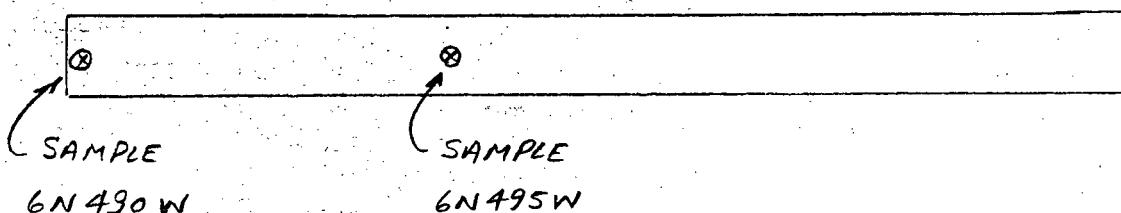


METERS
SCALE = 1 : 100



(WHITE'S GRID)

6N 500 W



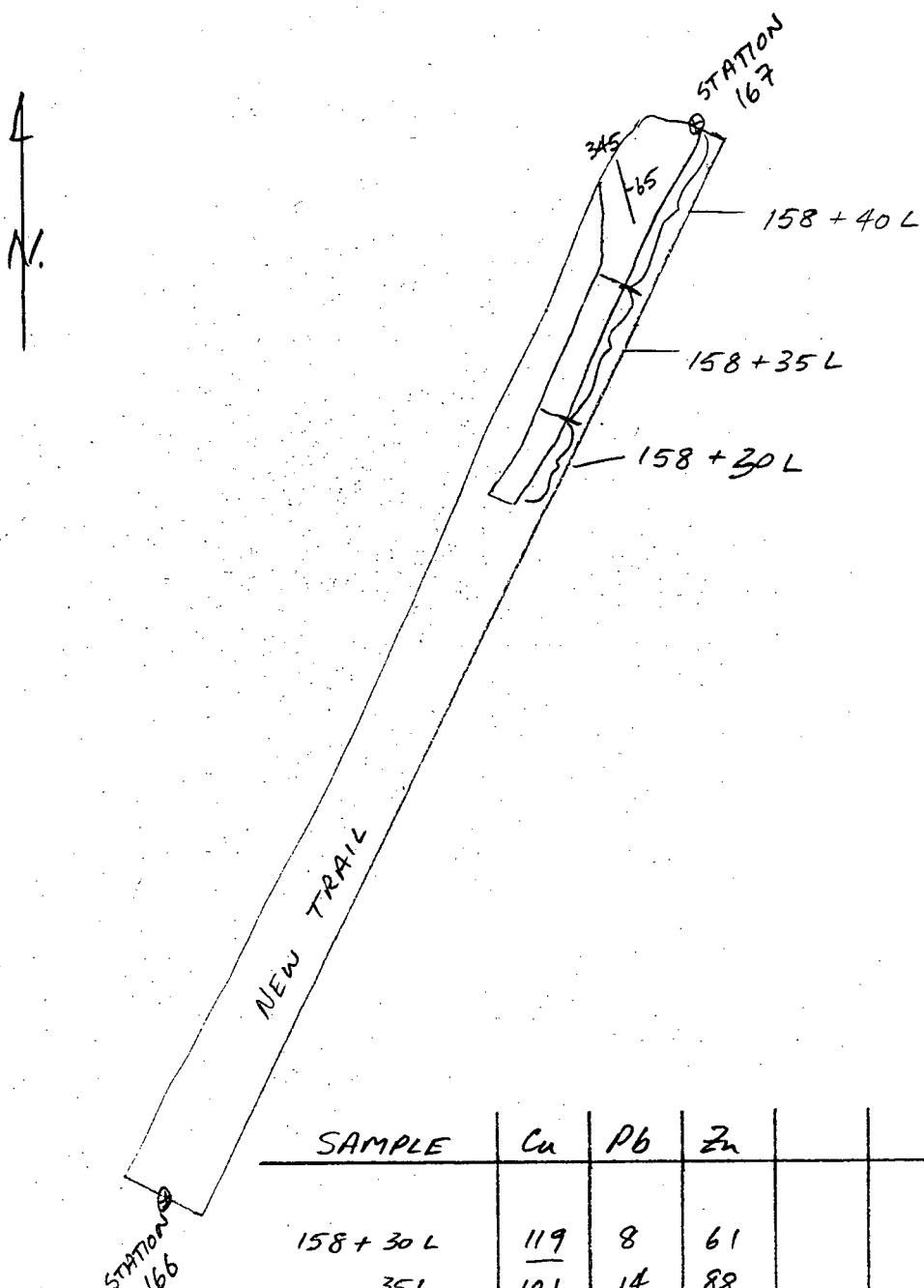
SAMPLE	Cu	Pb	Zn	DESCRIPTION
6N 495 W	50	3	63	SOIL FROM TILL, 4.5m DEPTH
6N 490 W	116	6	118	SOIL FROM TILL, 5.5m DEPTH

TRENCH 158 (plan)

0 5 10

METERS

SCALE = 1:250



SAMPLE	Cu	Pb	Zn	DESCRIPTION
158+30L	119	8	61	
35L	101	14	88	
40L	84	6	52	

Fig. 27

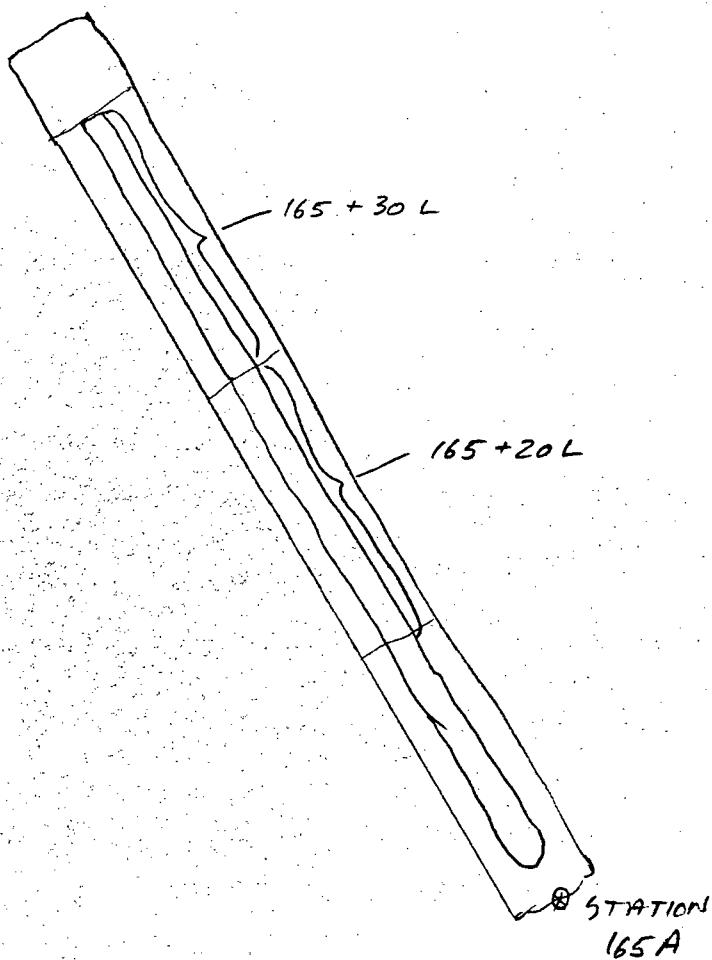
TRENCH 165 (plan)

0 5 10

METERS

SCALE = 1:250

N.





SAMPLE	Cu	Pb	Zn	Fe	Mn		DESCRIPTION
165 + 20 L	91	16	71	3.75	1		soil over 10 m
165 + 30 L	65	11	71	3.51	1		" " "


④ STATION 165


Fig. 28


RJM
85-06-28













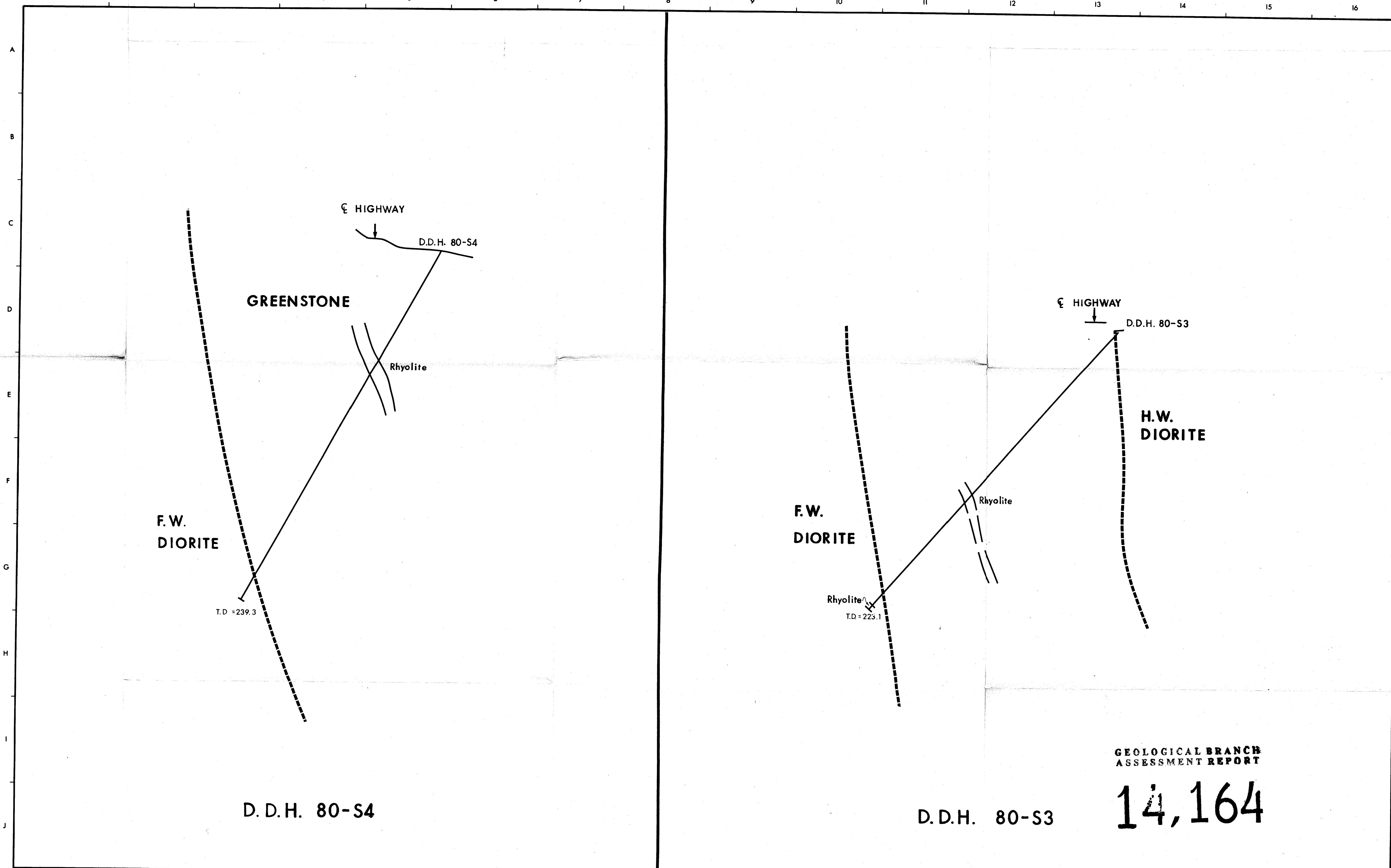




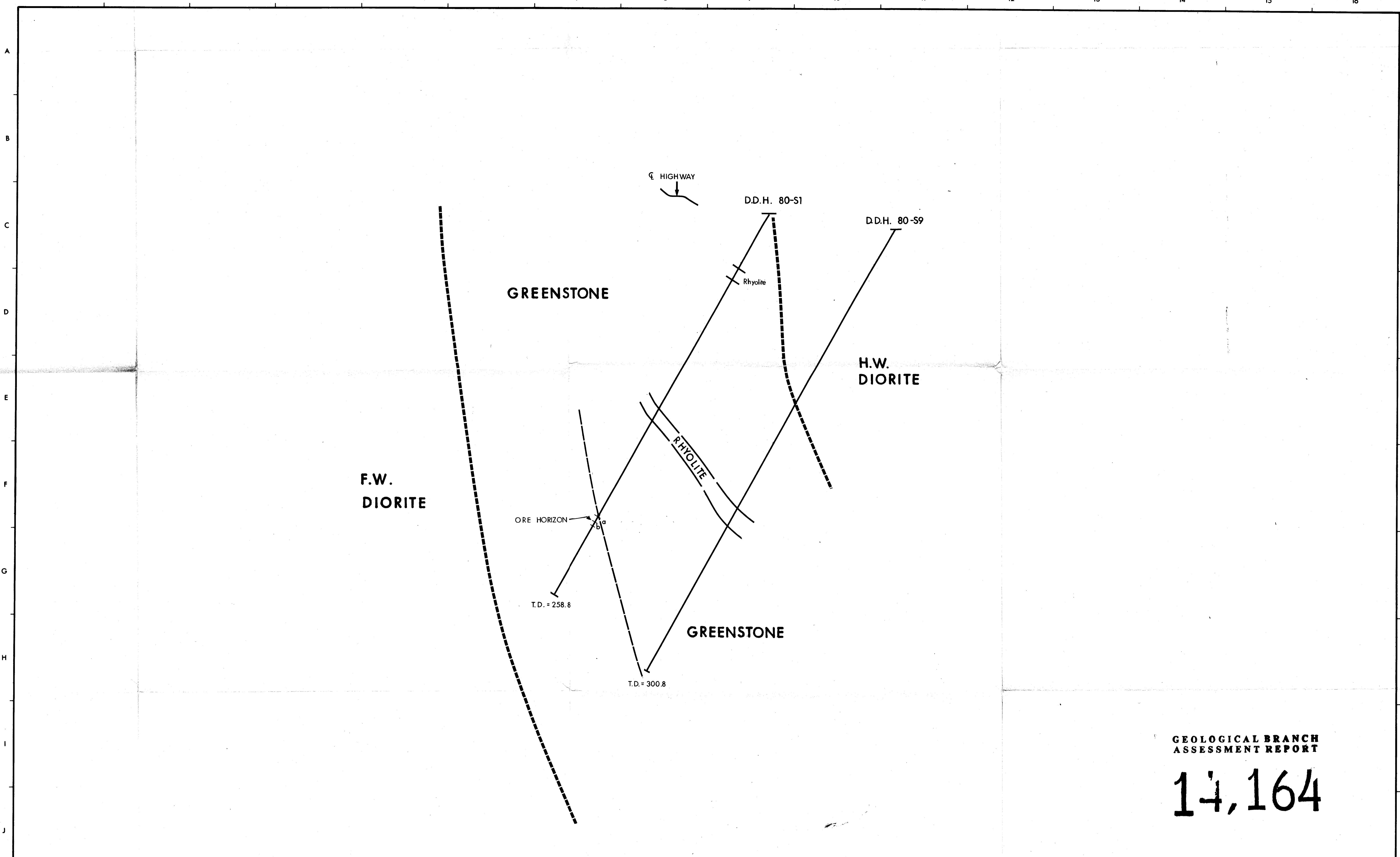


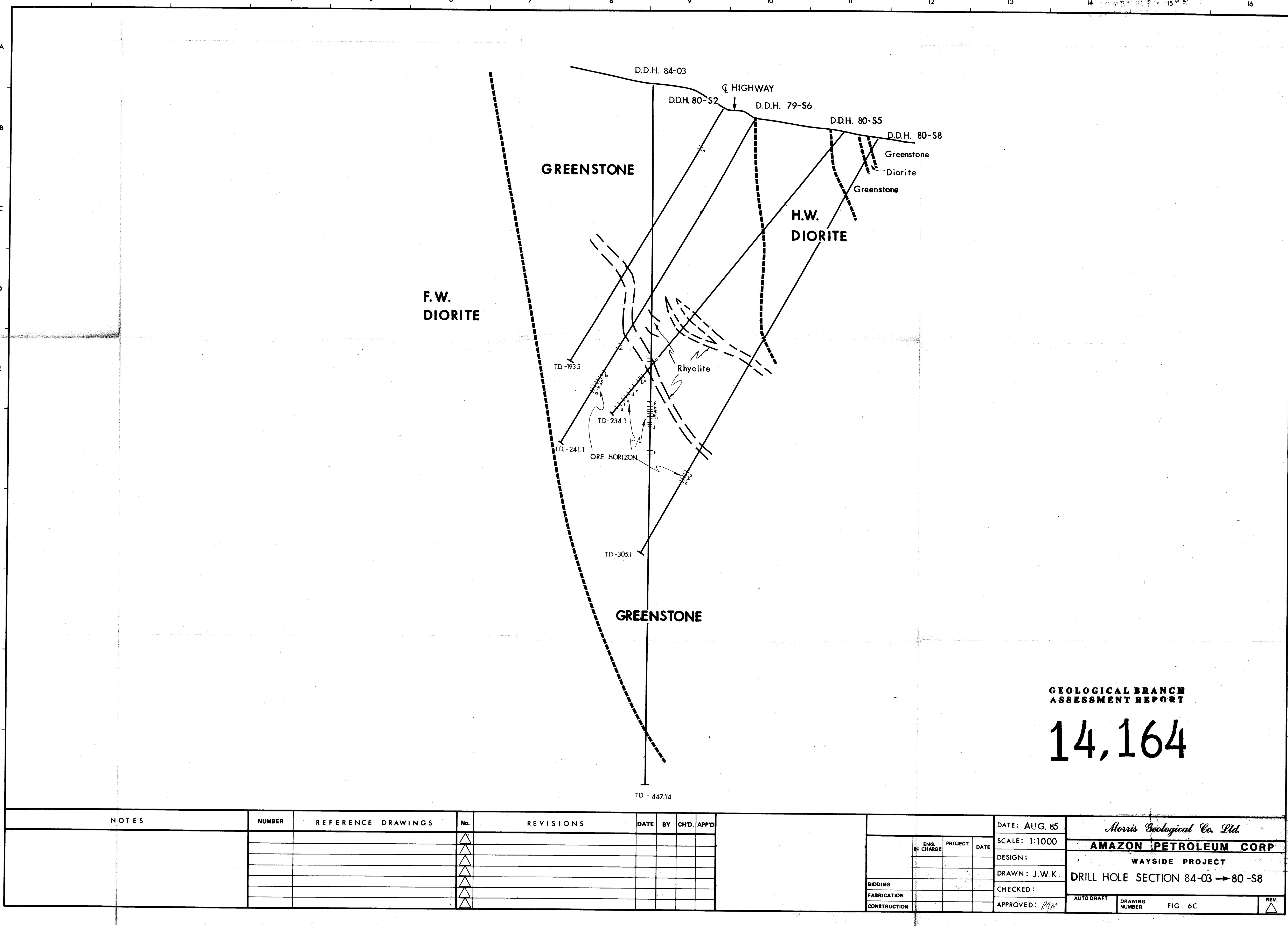


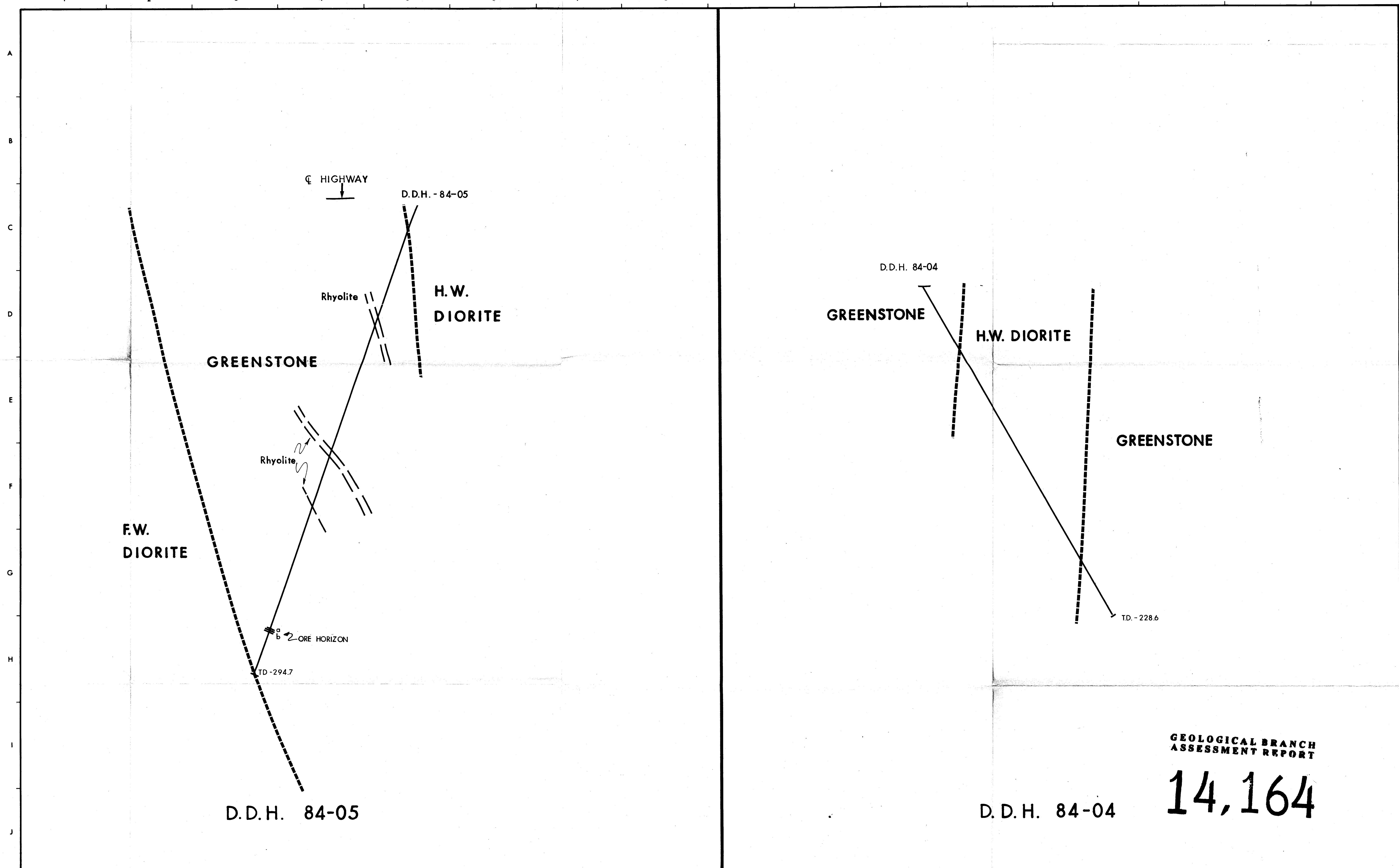


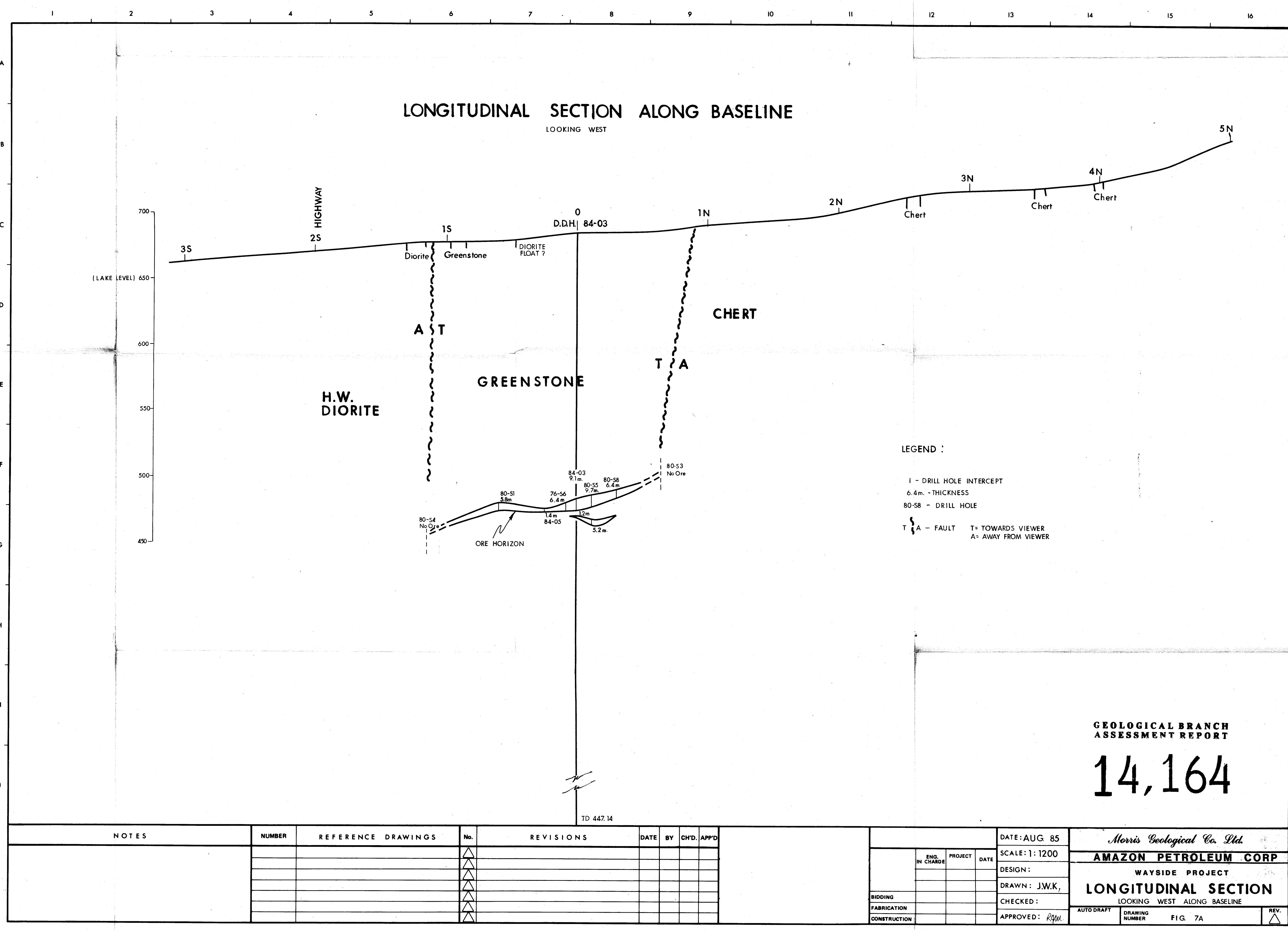


NOTES	NUMBER	REFERENCE DRAWINGS	No.	REVISIONS	DATE	BY	CH'D.	APP'D					DATE: AUG. 85	Morris Geological Co. Ltd.
									ENG. IN CHARGE	PROJECT	DATE	SCALE: 1:1000		
														AMAZON PETROLEUM CORP
														WAYSIDE PROJECT
														DRILL HOLE SECTIONS-80-S3 & 80-S4
									BIDDING					LOOKING NORTH
									FABRICATION					
									CONSTRUCTION					
									APPROVED:	R.P.			AUTO DRAFT	DRAWING NUMBER FIG. 6A
									REV.					



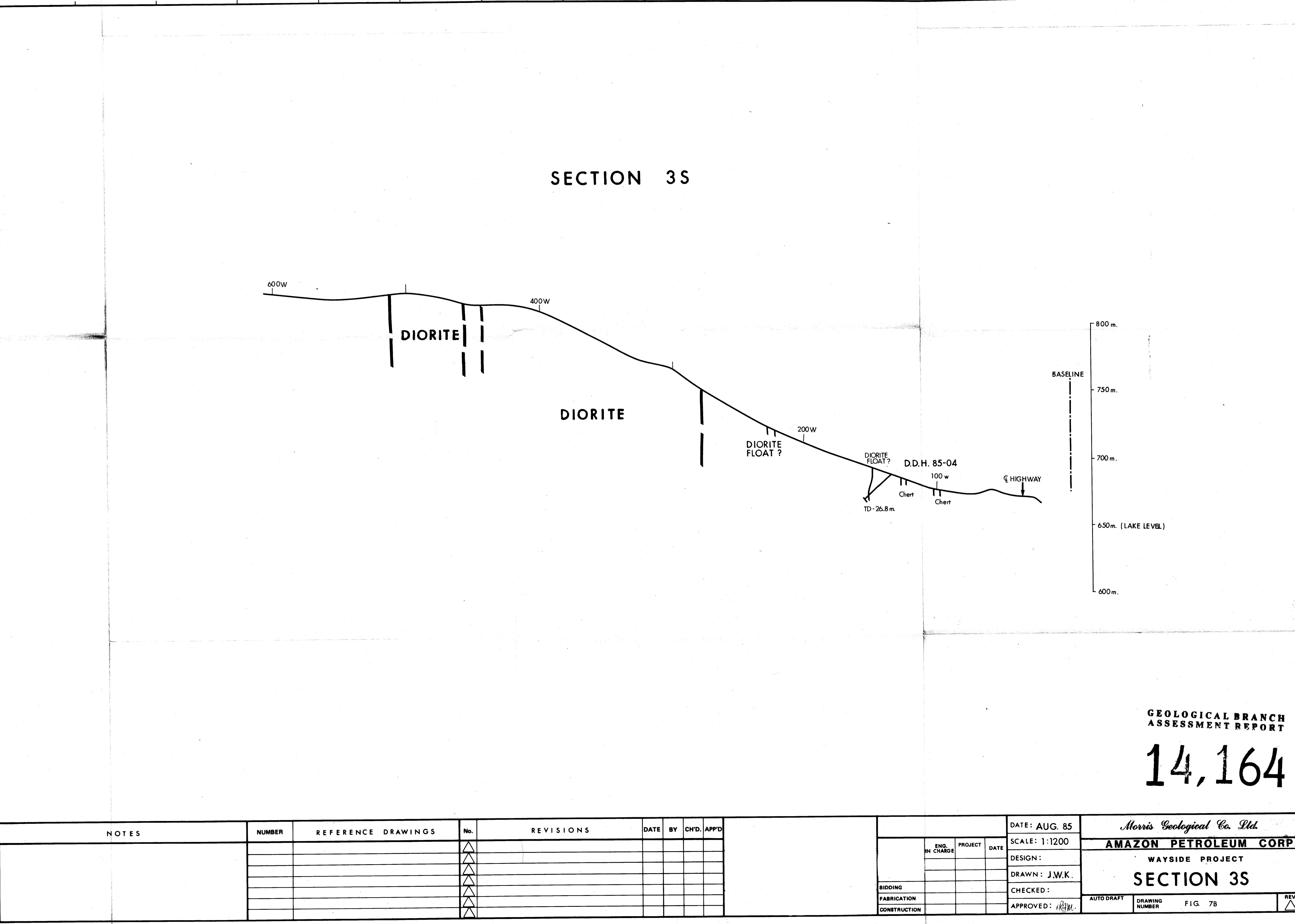




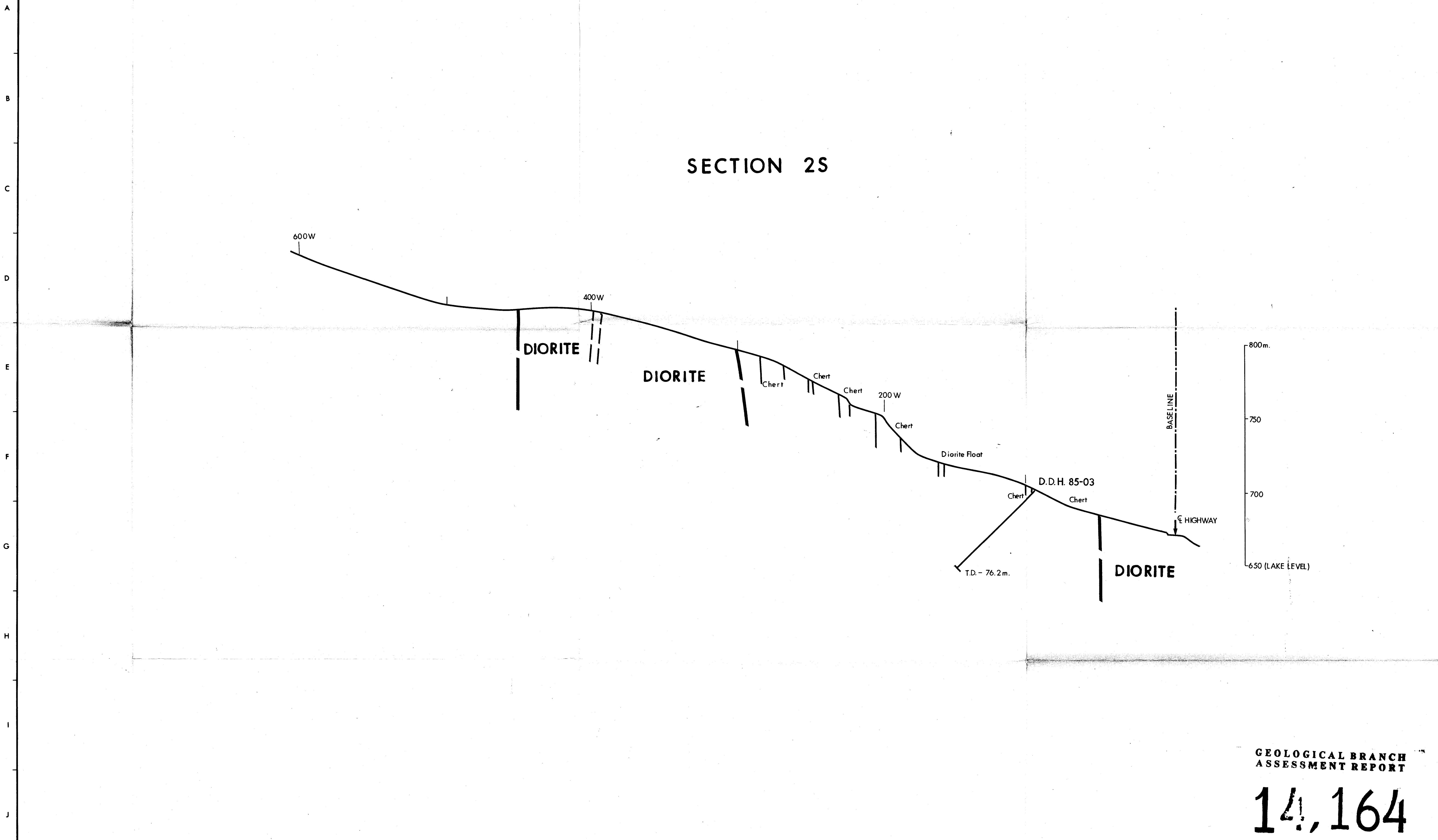


I 2 3 4 5 6 7 8 9 10 II 12 13 14 15 16

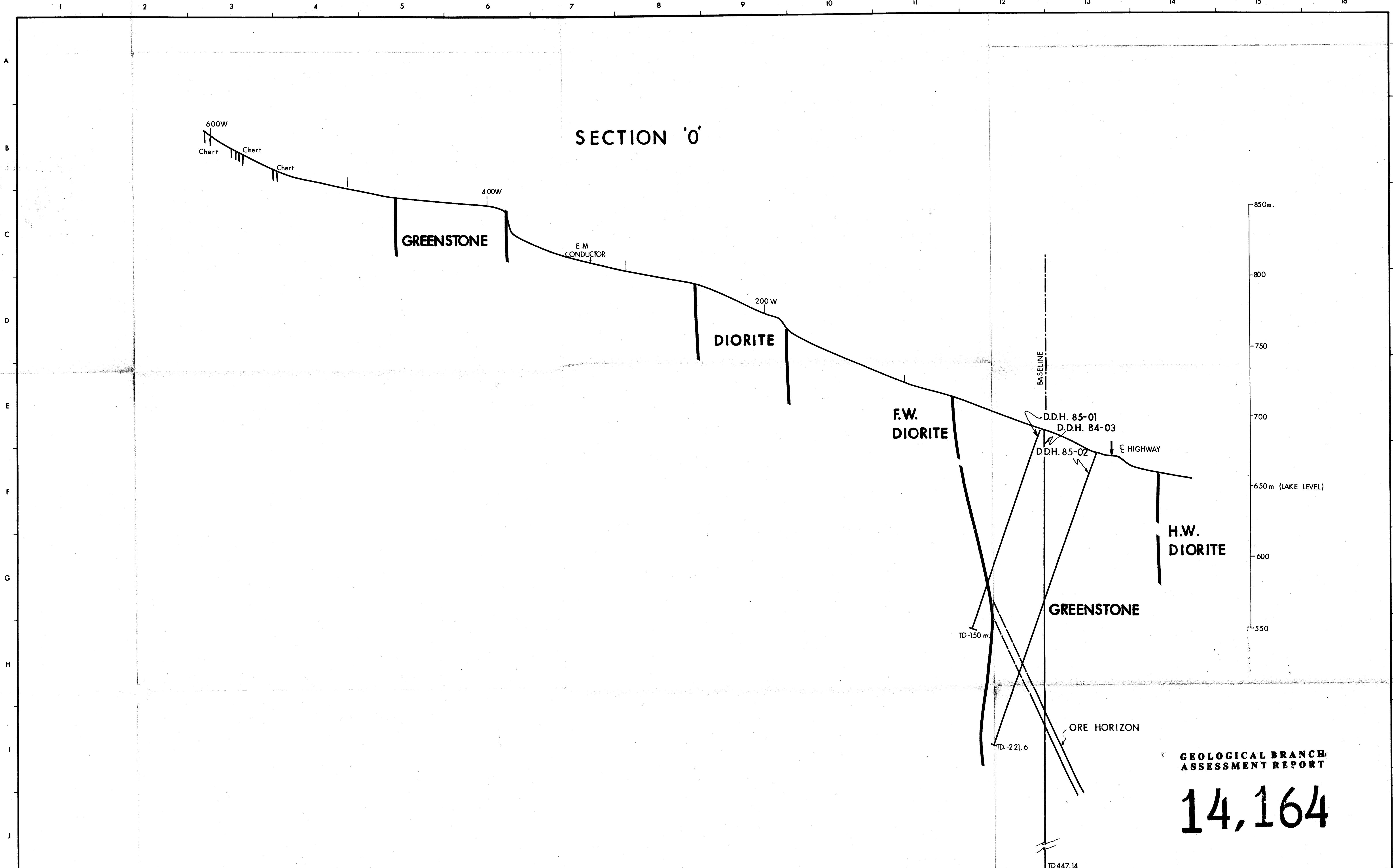
A
B
C
D
E
F
G
H
I
J



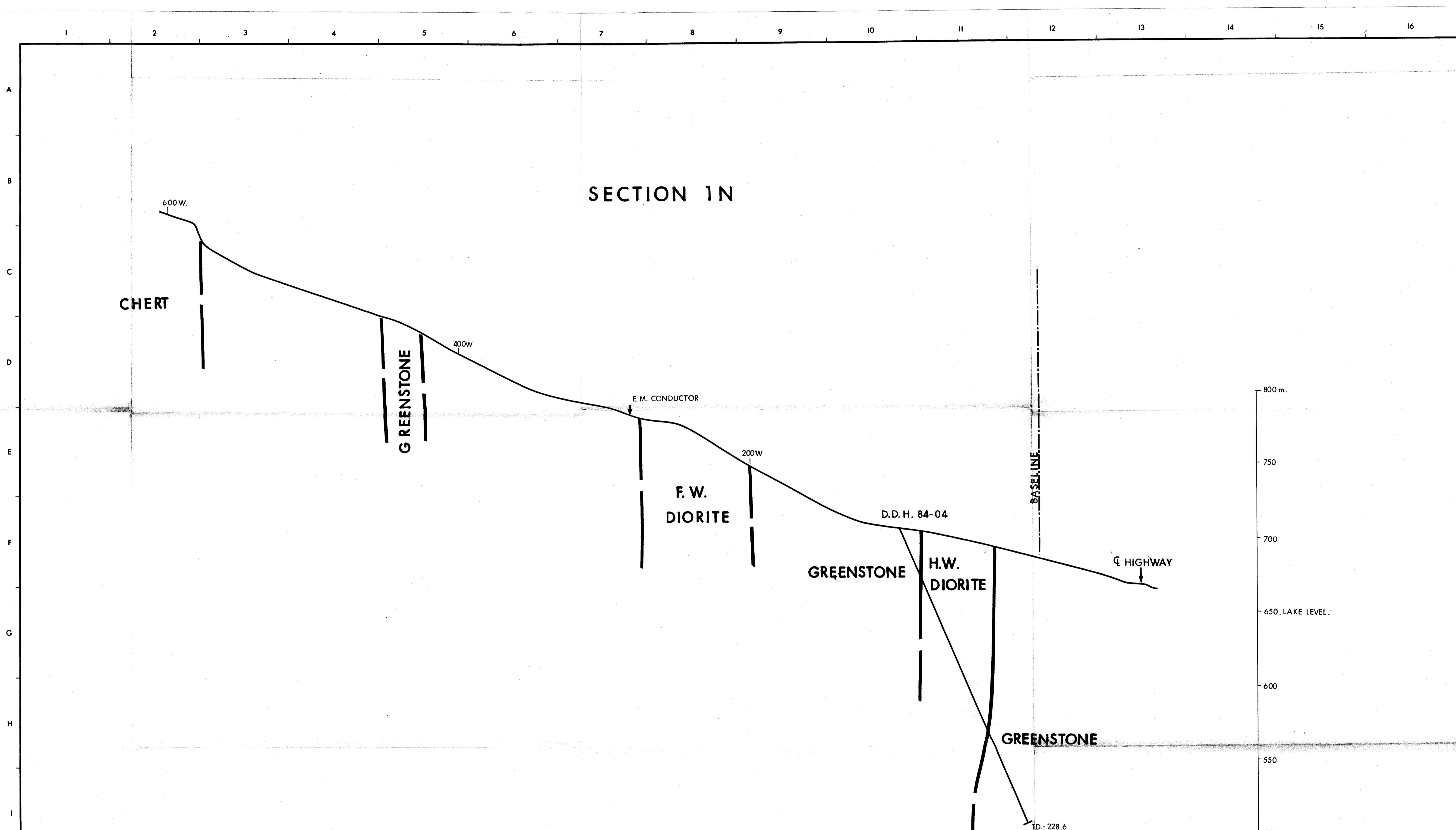
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NOTES	NUMBER	REFERENCE DRAWINGS	No.	REVISIONS	DATE	BY	CH'D.	APP'D		DATE: AUG. 85				Morris Geological Co. Ltd.		
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											IN CHARGE			DESIGN:	WAYSIDE PROJECT	
											BIDDING			DRAWN:	J.W.K.	
											FABRICATION			CHECKED:		
											CONSTRUCTION			APPROVED:	Ryan	
											AUTO DRAFT	DRAWING NUMBER	FIG. 7C	REV.		



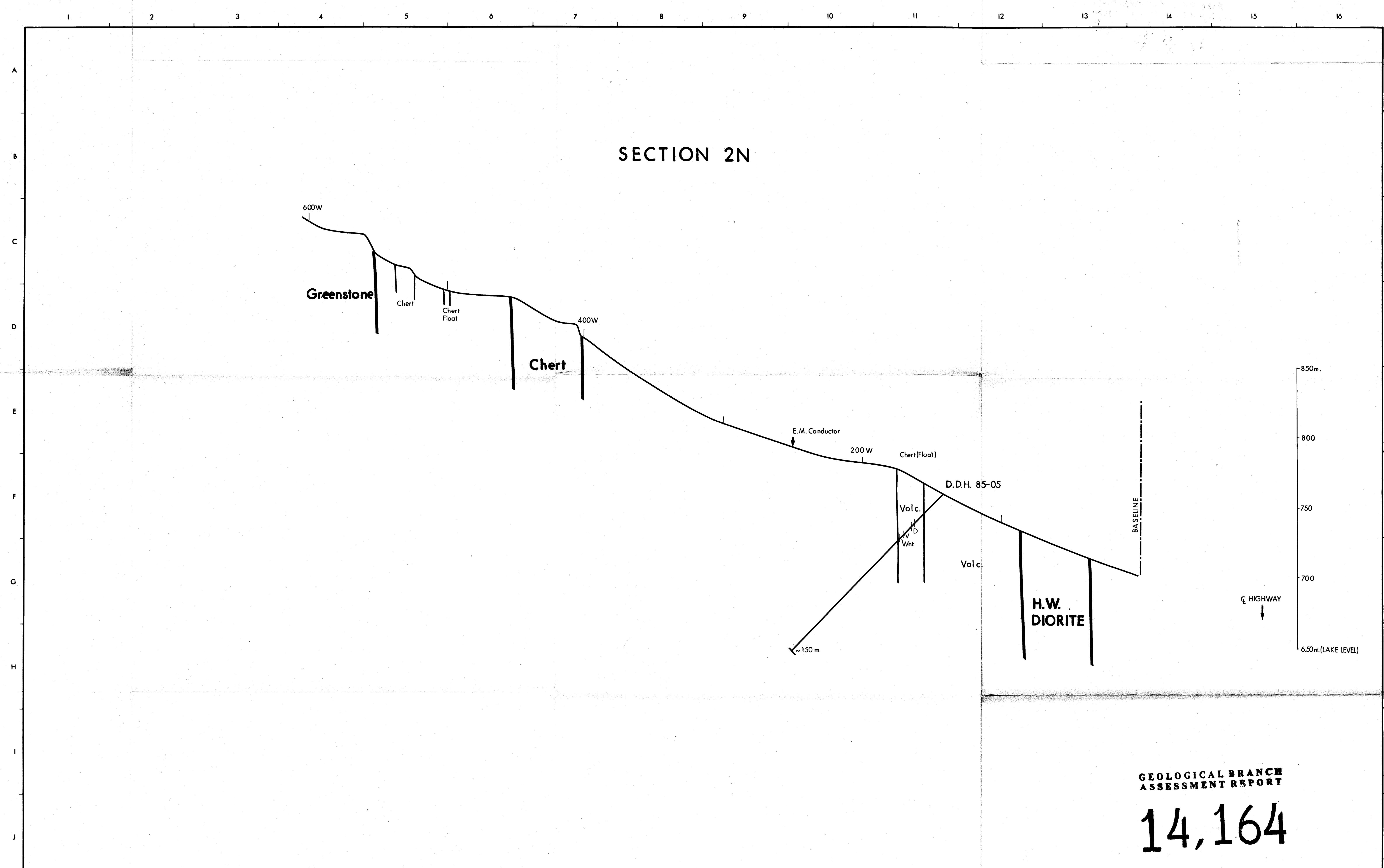
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													BIDDING:	SECTION '0'
													FABRICATION:	
													CHECKED:	
													CONSTRUCTION:	
													APPROVED: R.M.	AUTO DRAFT DRAWING NUMBER FIG. 7D REV. C



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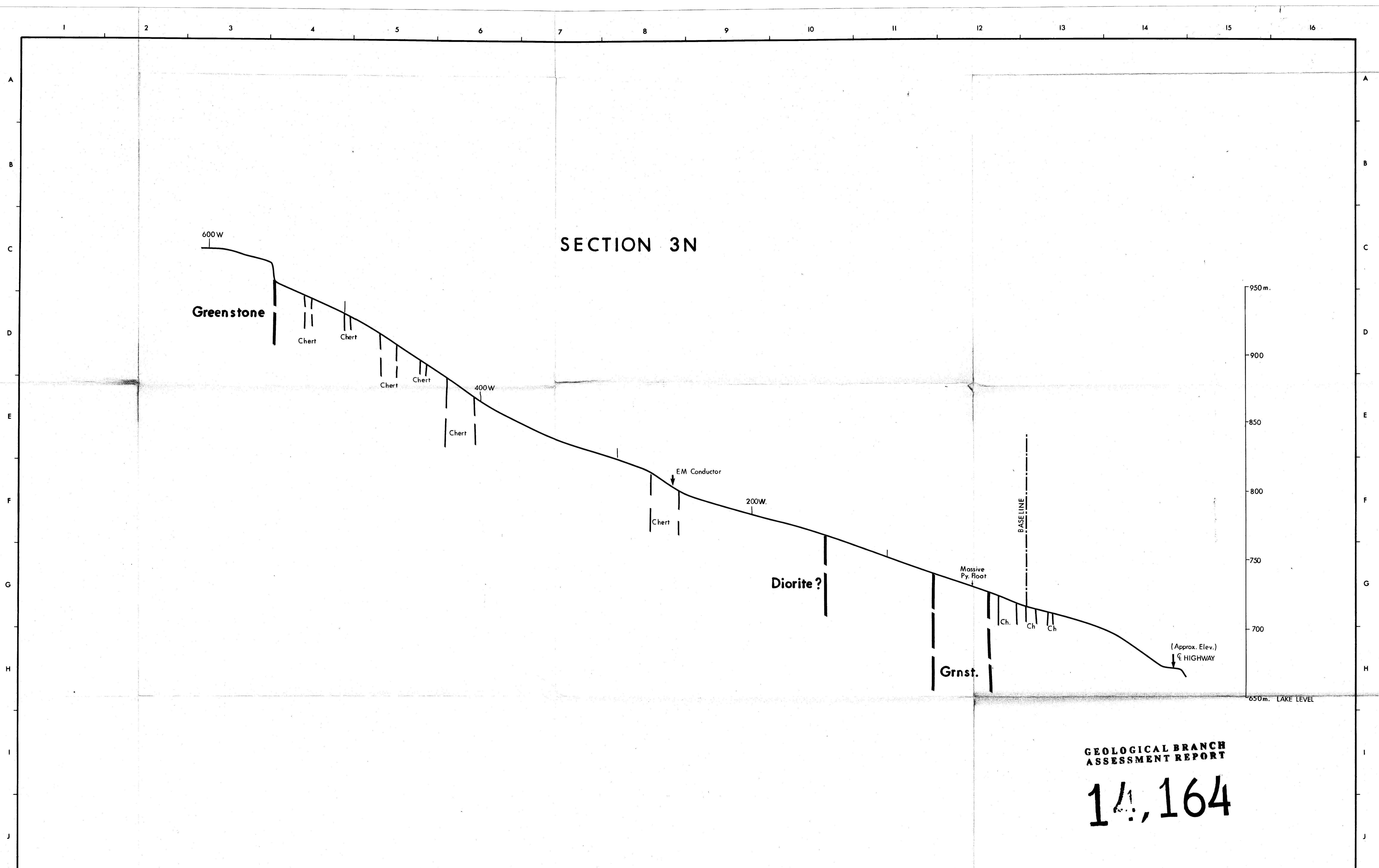
SECTION 2N



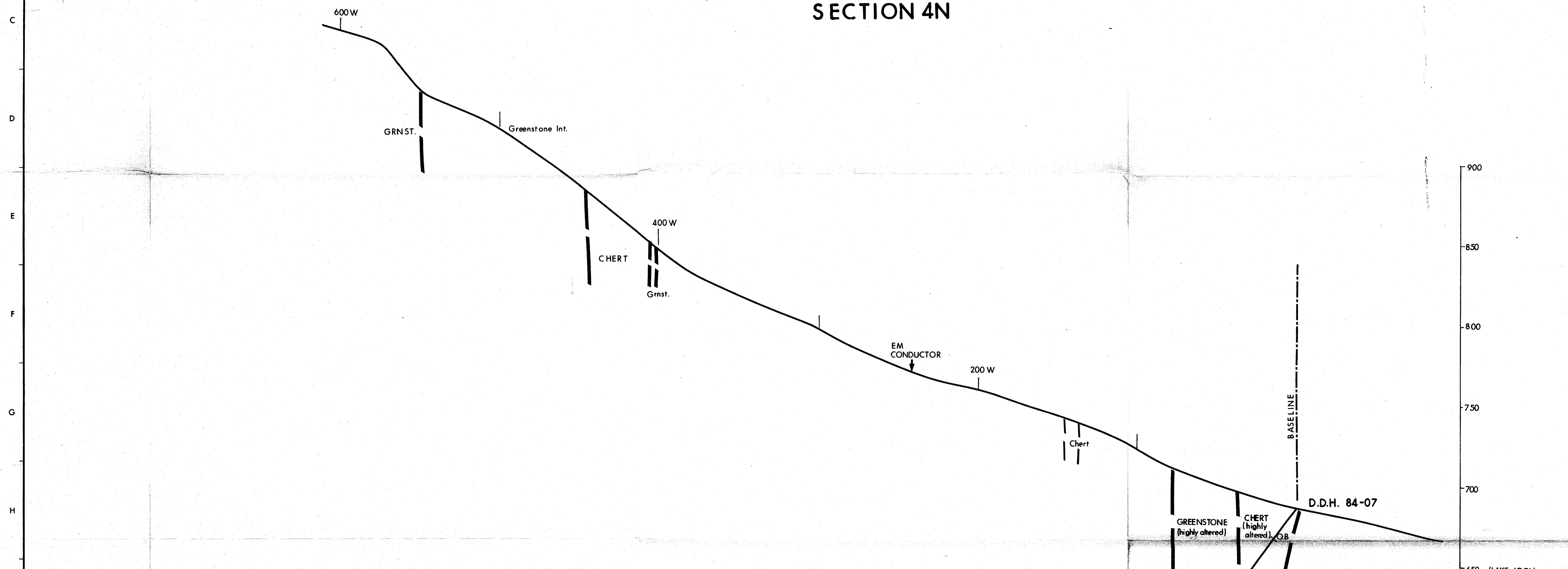
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14,164

NOTES	NUMBER	REFERENCE DRAWINGS	No.	REVISIONS	DATE	BY	CH'D.	APP'D					DATE: AUG. 85	Morris Geological Co. Ltd.
			△										SCALE: 1:1200	AMAZON PETROLEUM CORP.
			△										DESIGN:	WAYSIDE PROJECT
			△										DRAWN: J.W.K.	SECTION 2N
			△										BIDDING:	
			△										FABRICATION:	
			△										CHECKED:	
			△										APPROVED: R.P.	
			△										AUTO DRAFT	DRAWING NUMBER
			△										REV.	FIG. 7F

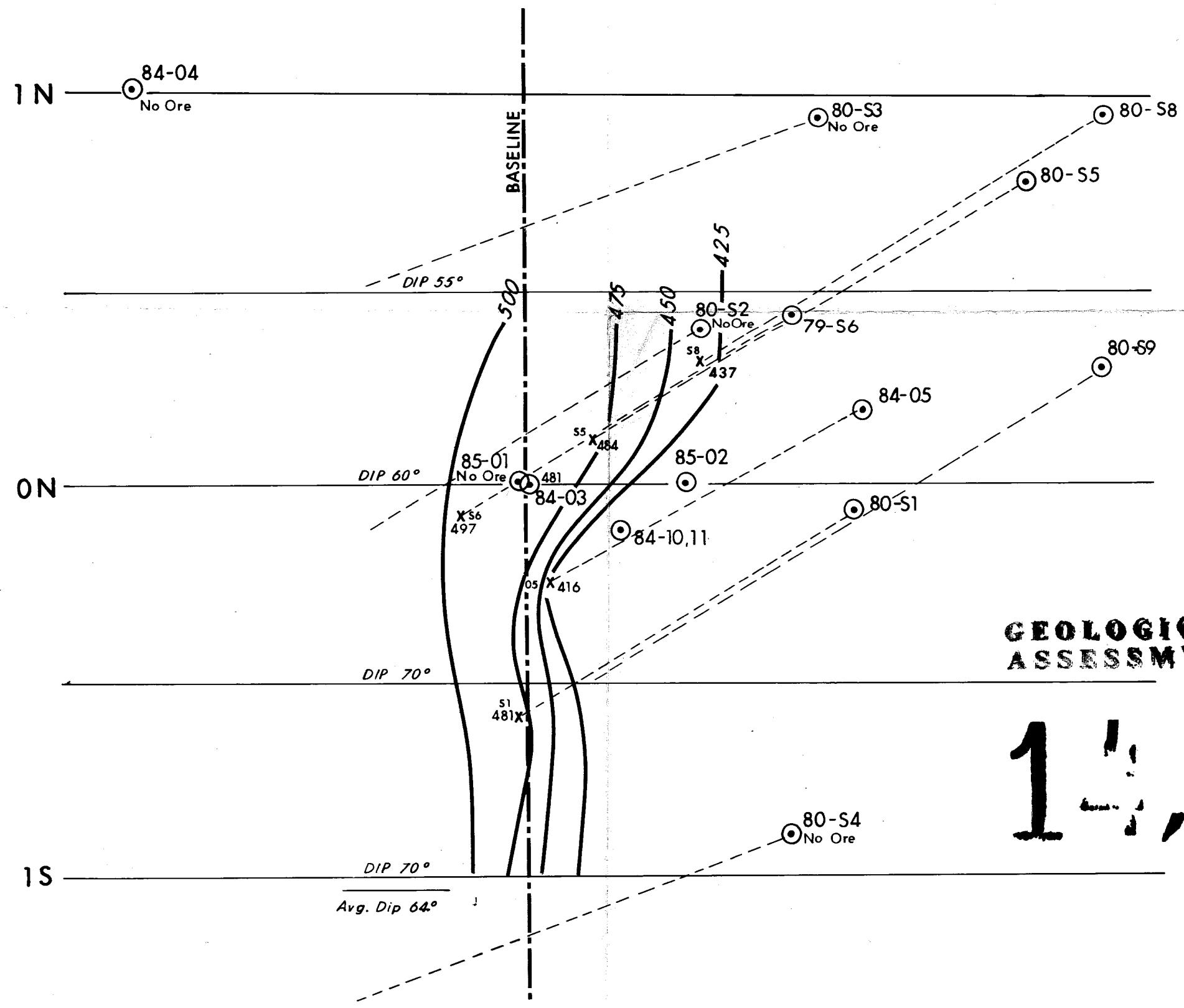


SECTION 4N



830m.(LAKE LEVEL)

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Morris Geological Co. Ltd.	
AMAZON PETROLEUM CORP.	
WAYSIDE PROJECT	
STRUCTURE CONTOURS	
ORE HORIZON	
DRAWN BY: JWK	DATE: AUG. '85
AUTHOR: R.J. MORRIS	SCALE: 1:1200
FIG. 8	

R9M