PR-Quintette 76(1)B

QUINTETTE COAL LIMITED

1976 GEOLOGICAL ASSESSMENT REPORT

ł

GEOLOCICAL BRANCH ASSESSMENT REPORT



OPEN FILE

G. P. Gormley, P. Geol. Project Geologist Denison Coal Limited December, 1976 Appendices E, F and G of this report contain coal quality data, and remain confidential under the terms of the *Coal Act Regulation*, Section 2(1). They have been removed from the public version.

http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_251_2004

TABLE OF CONTENTS

-

.

•

____

,

-

.

-

-

Section	Page
Preface	1
Summary	2
Introduction	3
Geological Mapping & Core Logging	4
Trenching	7
Road Construction and Field Camps	8
Diamond Drilling	9
Geophysical Logging	12
Adits _	13
Quality Analysis	15
Surveying, Topographic Mapping and Aerial Photography	19 ,
Reserves	20
Reclamation	24
Conclusion	25
Acknowledgements	26

-

LI.ST OF MAPS, TABLES, ILLUSTRATIONS AND APPENDICES

.

	<u>Location</u>
APS	
Regional Geology - 1:50,000	Back Pocket
Windy Pit Geology - 1:2,500	Back Pocket
Roman Pit Geology - 1:2,500	Back Pocket
Sheriff Pit Geology - 1:2,500	Back Pocket
Frame Pit Geology 0 1:2,500	Back Pocket
Preliminary Geology Johnson Area - 1" - 1000'	Back Pocket
	-Quintette 76(2)
LLUSTRATIONS	
Windy Pit Geological Cross-Sections	Back Pocket
Roman Pit Geological Cross-Sections -)	Back Pocket
Sheriff Pit Geological Cross-Sections	Back Pocket
Frame Pit Geological Cross-Sections	Back Pocket
1976 Adit Sections - Sheriff Pit	Page 14
Diamond Drill Core Analytical Flow Chart	Page 16
Adit Sample Flow Chart	Page 17
Process Flow Sheet of E.M.R. Pilot Plant	Page 18
E.M.R. Coal Processing Plant	Page 19

TABLES

ŧ

••

Quintette Open Pit - Summary of Average True Coal Thickness of Mineable Seams	Page 5
Summary of 1976 Quintette Diamond Drilling Program	Pages 10 & 11
Summary of Windy and Roman Pit Reserves	Page 22
Summary of Sheriff and Frame Pit Reserves	Page 23

.

List of Maps, Tables, Illustrations and Appendices - continued

APPENDICES:

.

.

<u>Contents</u>

.

.

Appendix A:	<pre>1. Windy Pit Structure Contours Seams D,E,F,G,J and K ~ 1:5,000 ~</pre>
	2. Roman Pit Structure Contours Seams D,E,F,I and J - 1:5,000 ⁻
	3. Sheriff Pit Structure Contours Seams D,E,G and J - 1:5,000
	4. Frame Pit Structure Contours Seams D,E,F,G and J - 1:5,000
	5. General Stratigraphic Correlation Charts Windy, Roman, Sheriff and Frame Pits - 1:500 and 1:250
	6 Seam Variation and Correlation Charts <u>Windy</u> , Roman, <u>Sheriff</u> and F <u>rame Pits</u> - 1:50
Appendix B-1:	Mining Cross-Sections and Detailed Reserve Tables . Windy, Roman and Sheriff Pits
Appendix B-2:	Mining Cross-Sections and Detailed Reserve Tables 🛩 Frame Pit
Appendix C:	1976 Roman Pit, Frame Pit and Johnson Area 🗸 Geophysical Logs.
Appendix D:	1976 Sheriff Pit Geophysical Logs. 🗸
Appendix E:	1976 Roman Pit Drill Hole Core Washability \smile .
Appendix F:	1976 Sheriff Pit Drill Hole Core Washability 🗸 and Adit E-1, J-2 Washability.
Appendix G:	1976 Frame Pit and Johnson Area Drill Hole Core Washability.

.

PREFACE

This report is intended primarily to present the geological results of the 1976 Exploration Program. As exploration continues, changes will occur in some of the interpretations presented in this report. At the present time, a complete evaluation of this geological data in conjunction with mining, environmental and economic aspects is being put into a Feasibility Study of the project.

SUMMARY

The 1976 exploration of the Quintette coal licences was undertaken between May 18th and October 22nd, 1976. The Exploration Program can be summarized as follows:

- 1. Detailed geological mapping in the Sheriff, Frame and Roman Pits.
- 2. Preliminary mapping north of the Sheriff Pit and south of the Sheriff and Frame Pits.
- 3. Completion of 25 diamond drill holes in the Sheriff, Frame, Roman and Johnson Areas, including geophysical logging, visual logging, sampling and quality testing.
- 4. Completion of three adits in the Sheriff Pit and resultant bulk sampling and quality testing.
- 5. Surveying of drill holes and control surveying which led to new 1:2500 and 1:5000 scale topographic maps.
- 6. Complete geological interpretation including geology maps, cross-sections, structure contour maps and correlation charts of the four pits at Quintette.
- 7. Reserve calculation by computer from cross-section grids in the pits.
- 8. Reclamation of all 1976 disturbances and some previous disturbances.

Using the new data acquired, the program successfully confirmed the reserves in the areas explored.

INTRODUCTION

The 1976 field exploration on the Quintette licences commenced on May 18th and ceased on October 22nd, 1976. During this period, field work was undertaken to further confirm the presence of "open pit" coal in the Roman Mountain and Murray Areas (Sheriff/Frame Pits) and to carry out additional geological investigation of coal-bearing strata adjacent to the Murray Area. At Roman Mountain, the Babcock Campsite was opened on May 30th to accommodate exploration crews. Previously built access roads to the camp and to the Pit were utilized. A total of 12 diamond drill holes were drilled in the pit area totalling 1000 metres. Further detailed geological mapping, surveying and reclamation was undertaken prior to the closure of the Babcock Camp on August 19th.

At the Murray Area, a new campsite was established on the access road to the Kerr McGee drill sites south of the Wolverine River (approximately 300 metres east of wellsite - 93P3b 60A). From this camp location, approximately 9.6 kilometres of access road were built to the Sheriff and Frame Pit areas. This road was then used to mobilize and demobilize equipment and for daily access requirements. Two diamond drills were used to complete a 22-hole program (seven at Frame and 15 at Sheriff), totalling 2469 metres. Three adits totalling 222 metres were constructed in Seams 'E-1' and 'J-2' in the Sheriff Pit. During the course of the above work, comprehensive detailed geological mapping was carried out in the pits and limited detailed mapping was undertaken immediately north and south (Johnson Area) of these proposed pits. While reclamation work at Sheriff and Frame was being completed, three "helicopter" diamond drill holes totalling 633 metres were completed in the Johnson Area prior to demobilization of the camp and cessation of field work on October 22nd, 1976.

A standard format has been used to present the geological interpretations of the four pits at Quintette. Although no new geological field work was undertaken at the Windy Pit, slight modifications were made in interpretations and the same series of maps, illustrations, scales, etc. were generated and reserve calculation procedures followed as in other pits.

The format of presentation is as follows:-

- 1. An updated 1:50,000 regional geology map, plus geological pit maps and geological cross-sections (1:2500) are located in the back of this text.
- 2. Structure contour maps for each mineable seam in each pit are presented in "Appendix A".
- 3. General stratigraphic and detailed seam correlation charts which incorporate drill hole and trench logs are also presented in "Appendix A".

Roman Mountain

Detailed surface mapping was undertaken to obtain additional surface information at the Pit and to check the accuracy of the transfer of the previous information from 1" - 400' to the 1:2500 metric topographic map. No major differences were found in structural interpretation from previous work, however, more detailed information was gathered on faulting, and core logs indicated that the average aggregate coal thickness of the Middle Gates had increased by 17% from 13.82 m. to 16.18 m.

Sheriff and Frame Pits

Detailed geological mapping was started on 1" - 400' topographic maps and continued on the new map scale of 1:2500 which became available part way through the program. No major structural or stratigraphic changes were encountered from that which was previously interpreted. At Sheriff, the main thrust fauls (Mesa thrust) had a more shallow dip than previously estimated, thus decreasing the amount of Gates Member on the eastern edge of the pit. However, this loss was partially compensated by the confirmation of additional outcrop of 'J' Seam (unoxidized) coal in the vicinity of drill hole QMD 7612. At Frame, it was found that the coal seams extended further to the north than what was previously mapped and that the shallow western limb was found to contain minor faulting and a warped anticlinal axis in the northeastern section of the Pit. The effects of this were to increase both reserves and stripping ratios. From core and trench logs, it was found that the average aggregate coal seam thickness in the Sheriff Pit was 17.73 metres, down 15% from last year's estimate, and that Frame Pit's new aggregate total was 13.55 metres, up 7.9% from 1975. For a complete summary of the coal seam thickness, please refer to the table on the following page.

QUINTETTE OPEN PIT

SUMMARY OF AVERAGE TRUE COAL THICKNESS OF MINEABLE SEAMS *

PIT	SEAM	THICKNESS (m)	
WINDY	D	2.443	
	E	2.057	
	F	2.017	
	G	1.295	•
·	J	3.759	
	K **	2.077	
	TOTAL	13.648	
ROMAN	D-1	1.259	
	D-2	2.976	
	· E	2.035	\wedge
	F	2.078)
	I	2.960	
	J	4.869	
	TOTAL	16.177	
SHERIFF	D	1.695	
	E-1 **	6.062	/
	E-2	6.062 .843 රා	5-
	· G	1.143	
	· J	7.983	
	TOTAL	17.726	
FRAME	D	2.011	2
	E **	3.730	, كم
•	F	1.445	
	G **	3.106	
	J ***	3.255	
	TOTAL	13.547	

* Thickness is Coal Only and does not contain in-seam or out-of-seam dilution.
** Seam Contains 2 Sections (Splits)

*** Seam Contains 3 Sections (Splits)

-5-

Geological Mapping & Core Logging - continued

Northern Extension & Johnson Area

A limited amount of mapping was undertaken at 1" - 400' map scale in the areas immediately north and northwest of the Sheriff Pit in the Gates Member, bounded to the north by the Wolverine River and in the area immediately south of the Sheriff and Frame Pits (Johnson Area) bounded on the south by the Murray River. In the northern area it was not possible to obtain a detailed stratigraphic section or evaluation of the total coal thickness of the Gates Member, however, one seam of at least 1.5 metres was mapped in a number of locations and inferred to be continuous over at least 1000 metres. In general, it appears that the "tight" nature of the folding combined with adverse topography will preclude the discovery of large strippable reserve blocks. However, smaller pits could be found if sufficient coal thickness, continuity and quality can be confirmed by drilling. (See previous reports 1972 and 1974). Results of the mapping are found on the Regional Geology Map at the end of this text.

In the Johnson Area, two moderately tight synclines were mapped immediately south of the Frame Pit. The synclines were separated by a tight anticline having dips in the 60 to 80 degree range and were mapped largely on the basis of prominent conglomerate units originally considered to be in the Upper Gates Member. Drill Hole QJD 7641 was placed near the asix-of the anticline. (See Preliminary Geology Johnson Area - 1"-1000' Map at end of text.) East of the second syncline, the prominent conglomerate was intensely folded and a second drill hole was placed in this region (QJD 7642). This folded area was truncated to the east by a major fault which appears to be a continuation of the Mesa thrust system found in the Sheriff Pit. An incomplete section of Gates was mapped east of the thrust and a final drill hole (QJD 7643) was placed near the Gates/Hulcross contact. One coal seam approximately 6.6 metres thick was located in the first drill at a depth of 85 metres along with minor carbonaceous zones. Washability results of clean coal on the seam indicated 17.35% volatile with F.S.I. of 2. The lithology in the hole was predominantly conglomerate and sandstone.

In the second hole, three seams were sampled at depths of 20, 35 and 69 metres with respective true thicknesses of 6.2, 0.95 and 0.80. Lithologies were similar to the first hole but predominance of conglomerate made correlations unreliable. The clean coal volatiles and F.S.I.'s were 17.4% and 2, 17.5% and 4, and 16.5% and $1\frac{1}{2}$, respectively. From a comparison with previous quality results, this strongly suggests that these coals are from the Gething Formation. Petrographic work will be undertaken on the samples. The section encountered in the third hole was intensely faulted and of the two coal zones encountered, only one having a thickness of approximately one metre at a depth of 211 metres was sampled. A volatile content of 23.4% and an F.S.I of 7 indicate Gates coal and it is assumed a faulted section of Gates was drilled. From the results encountered to date, no viable open pits have been indicated, however, underground potential may be available if coking quality and continuity of the main Gething coal seam can be established. Further exploration for strip coal should concentrate on the basal Gething and Gates Formations in dip slopes and the "nose" areas of folds found immediately north of the Murray River.

-6-

TRENCHING

A total of seven trenches were constructed during the courst of the program, to confirm the location and development of seams within the pit limits. The location of the 1976 trenches and previous trenches can be found on the various pit maps presented. The work was undertaken by Tompkins Contracting of Fort St. John, under on-site direction of a geological staff member, and using D6 and D7 Caterpillars. Far fewer trenches were constructed than were approved in the 1976 exploration proposal due to environmental concern and all trenches which were built were completely infilled, fertilized and seeded. (See Reclamation Section.)

Logs of the trenches have been incorporated on the seam variations and correlation diagrams of the various pits in "Appendix A".

Road Construction

All road construction was contracted to Tompkins Contracting Ltd. of Fort St. John and was undertaken with D6, D7 and D8 Caterpillars. Approximately ten kilometres of "main access" road were constructed from the Murray Camp to the Sheriff and Frame Pits and secondary access or trails were constructed to the drill holes. At Roman Mountain, a previously built access road was utilized to gain access to the pit area and trails were used for access to the various drill holes. Culverts and ditches were installed on all main roadways and grades were generally kept to 7% or less.

Field Camps

Westcamp Construction Catering Ltd. of Edmonton provided services in the trailer camps established at Babcock and the Murray Area where approximately 15 and 40 men respectively were accommodated throughout the program. On completion of the exploration, most of the camps trailers were demobilized and the main access roads were "blocked off" subsequent to consultation with Forestry, Fish & Wildlife and Department of Mines & Petroleum Resources officials.

DIAMOND DRILLING

Tonto Drilling Limited of Vancouver were contracted for all 1976 drilling services at Quintette. Three Canadian Longyear "Super 38" drills were used, two in the Murray Area and one at Roman. The rigs were equipped for wireline recovery, with triple tube core barrels and H.Q. rods and bits. Drills were skid-mounted and moved with D6 or D7 Caterpillars in both areas. Crew changes were generally made by pick-up truck in the Murray Area, and by helicopter in the Roman Area. For the Johnson drilling area, one of the drills was dismantled for mobilization by a large helicopter and fully supported by the smaller helicopter at the main Murray Camp. Previous results documented that substantially increased core recovery is obtained from drilling vertical holes and thus the majority of the holes were drilled vertically unless terrain or geological structure necessitated angle drilling. All drill core was taken to the main camps for logging and complete sampling of the coal seams. It should be noted that all diamond drill core, including previous programs up to 1970, but excluding the core from the 1972 Five Cabin Area and the 1976 Johnson Area, was removed by Department of Mines & Petroleum Resources staff and transported to the core storage facility at Charlie Lake, British Columbia. A summary of the 1976 diamond drill holes is included in the following pages.

SUMMARY OF 1976 QUINTETTE DIAMOND DRILLING PROGRAMME

.

	ROM/	AN AREA	
Hole #	Total Depth (m)	Seams Intersected	% Coal Core Recovery
QBD 76-51	12	D (U) D (L) E F	77.5 94.0 91.3 90.5
QBD 76-52	38	. E	99.0
QBD 76-53	87	I J	95.0 98.7
QBD 76-54	76	I J	91.0 80.3
QBD 76-55	58	E F	96.9 86.2
QBD 76-56	35	D (L) E F	100.0 93.5 80.3
. 76-57 dي. أ	83	I J	94.3 93.5
QBD 76-58	172	E F J J	96.5 95.8 85.3 98.5
QBD 76-59	44	I J	78.1 87.0
QBD 76-60	124	F I J	88.4 82.4 93.5
QBD 76-61	109	I J	98.3 96.4
QBD 76-62	162	I J	100.0 100.0
TOTAL	1000		

6

SHERIFF AREA

Hole #	Total Depth (m)	Seams Intersected	% Coal Core Recovery
QMD 76-01	55	D E	99.0 99.0
QMD 76-02	46	D	99.0
QMD 76-03	(19 3)	D E	99.0 99.0
QMD 76-04	115.5	G	91.3
QMD 76-05	48	D E G J	87.0 55.5 99.0 76.6
QMD 76-06/	51.5	G J	51.4 62.6
QMD 76-07 -	55.5	G J	100.0 82.1
QMD 76-08	84	G J	99.0 85.0
QMD 76-09	191	D E	99.0 72.5 -
QMD 76-10	150.5	D E G J	84.6 74.1 70.1 61.9
QMD 76-11	152.4	E G (U) G (L) J	59.5 80.8 35.7 69.5
QMD 76-12	32.6	J	75.9
QMD 76-13	103	E (U) E (L) G J	52.5 91.0 99.0 79.0
QMD 76-15	39.6	G	41.2
QMD 76-17	83 J	E (U) E (L) G J	71.0 60.1 61.0 56.9
TOTAL	1380.6		

-10-

Page 2 SUMMARY OF 1976 QUINTETTE DIAMOND DRILLING PROGRAMME

FRAME AREA

JOHNSON AREA

Hole #	Total Depth (m)	Seams Intersected	% Coal Core Recovery
QMD 76-14-	118	F G (U) G (L)	91.0 100.0 92.0
QMD 76-16	152	D E F	91.3 98.5 75.9
QMD 76-18.	177	D E (U) E (L) F G (U) F (L) J	97.0 100.0 99.0 91.0 91.8 87.5 97.0
QMD 76-19	73	E (U) E (L) F G (U) G (L)	88.0 99.0 47.0 99.0 99.0
UMD 76-20.		D E (U) E (L) F (U) F (L) G (U) G (L)	97.0 87.0 86.0 99.0 65.0 95.0 95.9
QMD 76-21	96	F G (U) G (L) J (U) J (L)	50.4 56.3 70.5 83.0 55.0
QMD 76-22	223	E F G (U) G (L) J	96.0 83.0 92.0 72.4 97.0
TOTAL ·	1088		

.

 (\cdot)

Hole #	Total Depth (m)	Seams Intersected	% Coal Core Recovery
QJD 76-41	213	#1	81.0
QJD 76-42	183	#1 #2 #3	99.0 100.0 60.0
QJD 76-43	237	#1 #2	100.0 93.0
TOTAL	633	4	<u> </u>

GEOPHYSICAL LOGGING

All geophysical logging was contracted to Roke Oil Enterprises Ltd. of Calgary. A truck-mounted logging unit was used on all holes except those in the Johnson Area where a "helicopter unit" was required. The following list of logs were run in all holes except those in which caving prevented a logging run.

1.	Gamma Ray and Neutron - General Scale 1:200
2.	High Resolution Density and Chliper - General Scale 1:200
3.	High Resolution Density and Chliper - Detail Scale 1:50
4.	Temperature* - General Scale 1:200
	* - used occasionally

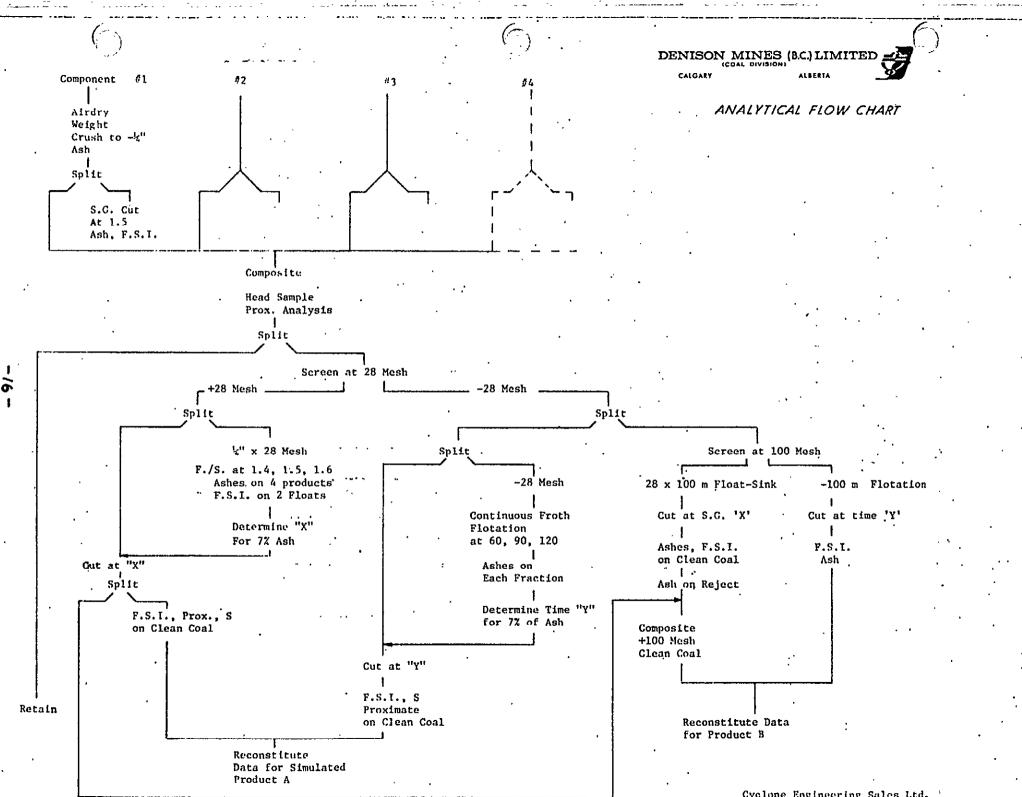
The logs were used in conjunction with visual logging of the core to confirm driller's depth markers (converted to metric depth) and to estimate the development of coal seams where recovery was poor. All geophysical logs are contained in "Appendices C and D".

ADITS

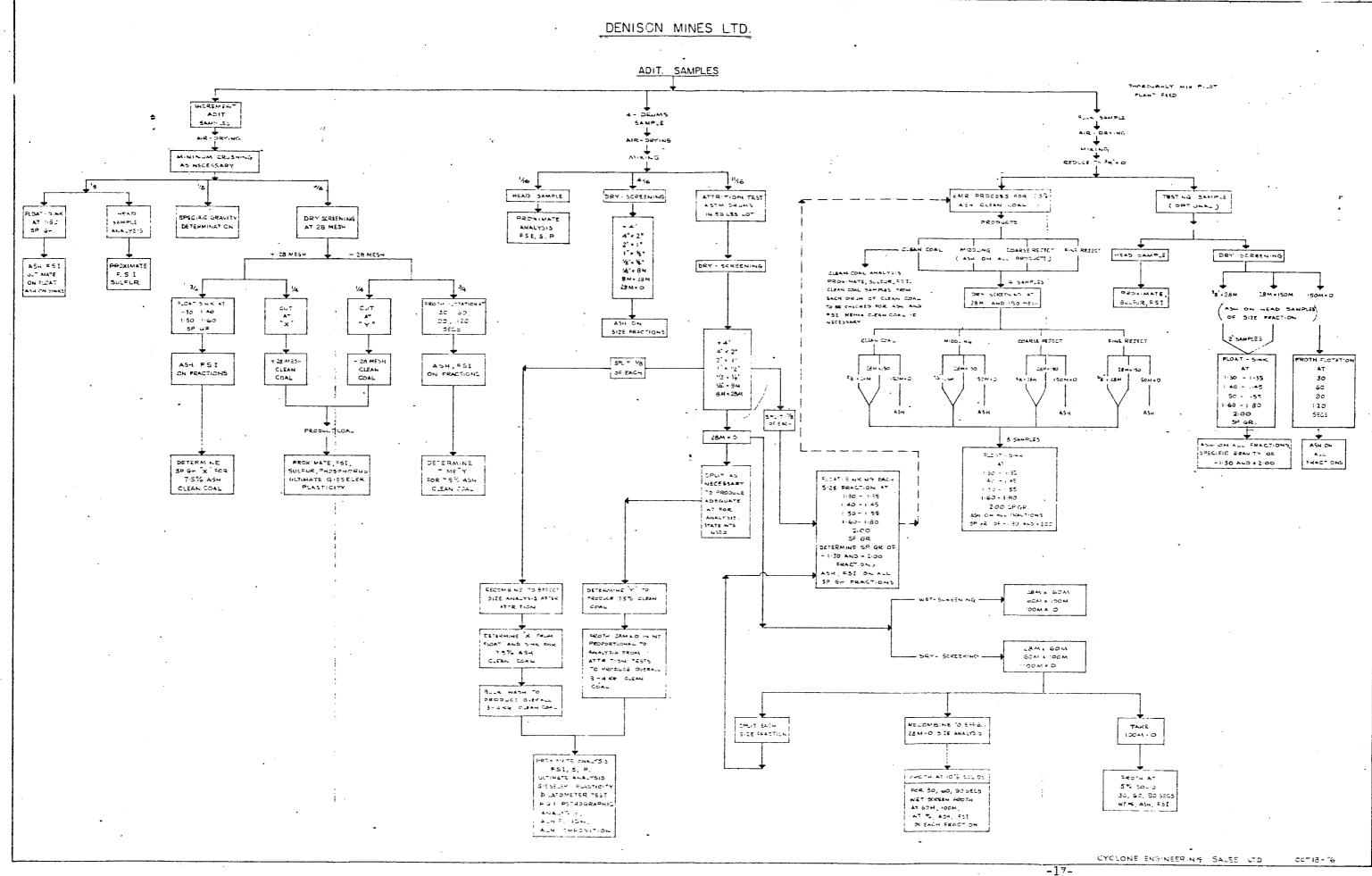
Adit driveage was contracted to A & B Contracting Ltd. of Calgary. Three adits totalling 222 metres were constructed in the Sheriff Pit. The first adit (J-1) was driven in "j" Seam at the north end of the Pit. This adit was not sampled as partially oxidized coal was found at 91 metres which was effectively the penetration limit of the equipment being used. Although an excess of 30 metres of vertical cover was estimated at the face of the adit, it was concluded that intensely jointed sandstone found above the adit created an abnormally condusive porosity through the roof strata and thus abnormally deep oxidation. The <u>second adit</u> was driven in <u>'E' Seam</u> near the southern end of the Pit and was sampled at a length of 40 metres. The third adit was driven in <u>'J' Seam</u>, immediately below the 'E' Adit and was sampled at 91 metres. A total of 53 drums were taken from each of the sampled adits. During the program, inspections of the work were made by Mr. D. Tidsbury, the Department of Mines & Petroleum Resources Inspector from Prince George. The location of the adits can be found on various maps enclosed for the Sheriff Pit and lithologic descriptions of the adit faces are included in the following page.

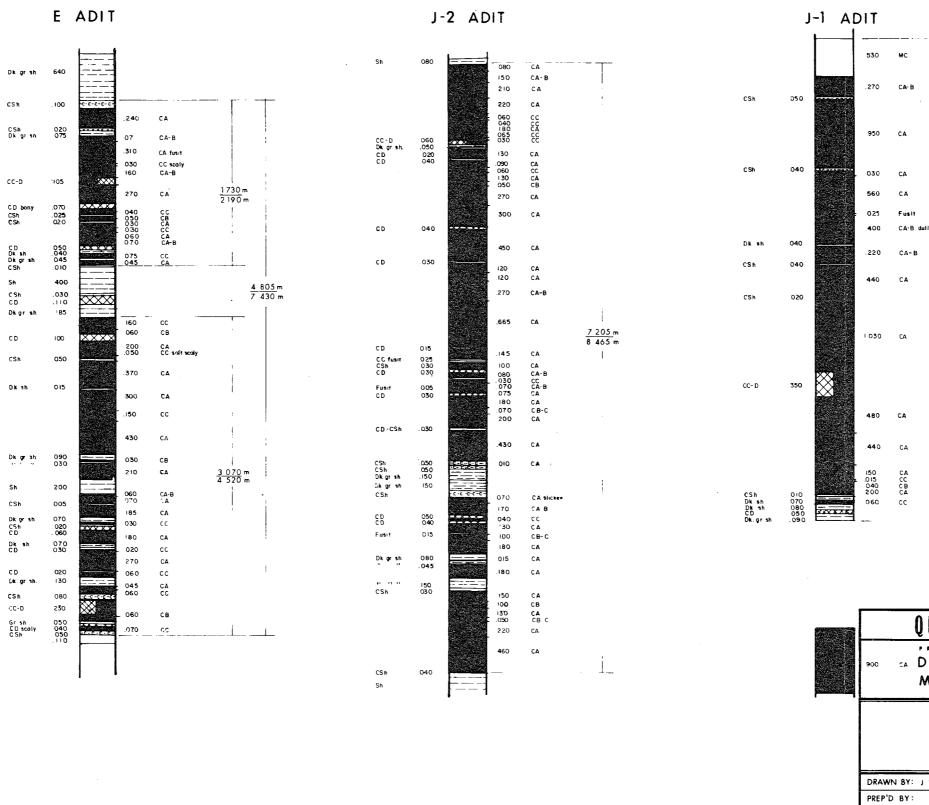
QUALITY ANALYSIS

Washability and analyses of all 1976 drill core from Quintette was undertaken by Cyclone Engineering Sales Ltd. of Edmonton. Washability, cleaning, analysis and coking character tests of the bulk adit samples are being undertaken by Cyclone and the Department of Energy, Mines and Resources, Clover Bar Lab. In addition to the above work, petrographic and small scale over tests of drill hole samples are currently planned or under way in Canada and Japan. The following pages include the main sample "flow chart" procedures and actual results of all drill sample washability and available adit sample analyses can be found in "Appendices E, F and G".



Cyclone Engineering Sales Ltd.





-

APPR'D

MC	
CA-8	
CA	
CA	
CA	
Fusit	
CA-B dull/bright A DIT SECTION	
СА-В	
CA	
CA	
н н	
CA	
1	
CA	
CA	
CA	
CB CA	
cc	
· • • • • • • • • • • • • • • • • • • •	
7. 300	
	٦

QUINTEITE COAL LIMITED

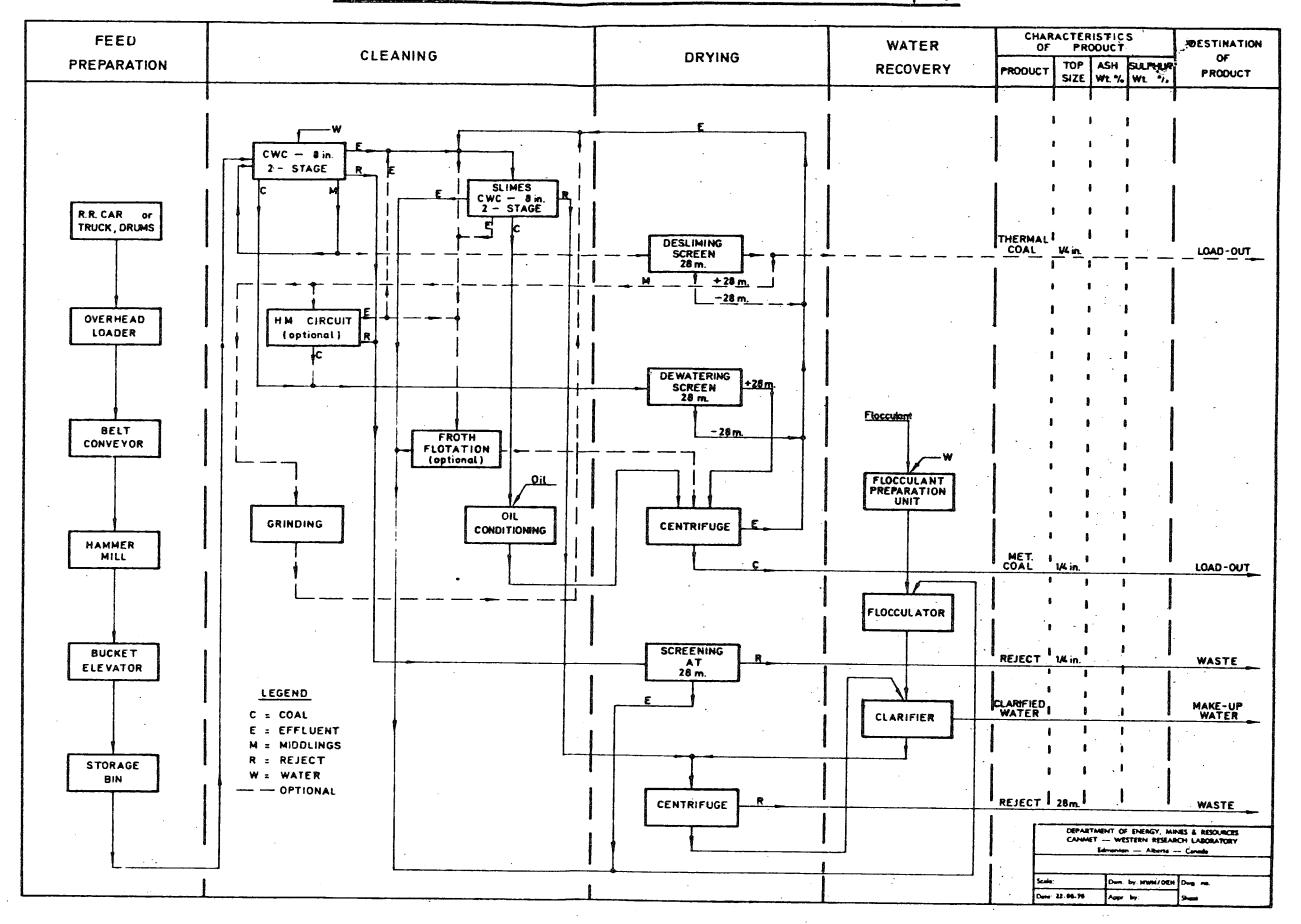
MITSUI MINING CO.LTD.



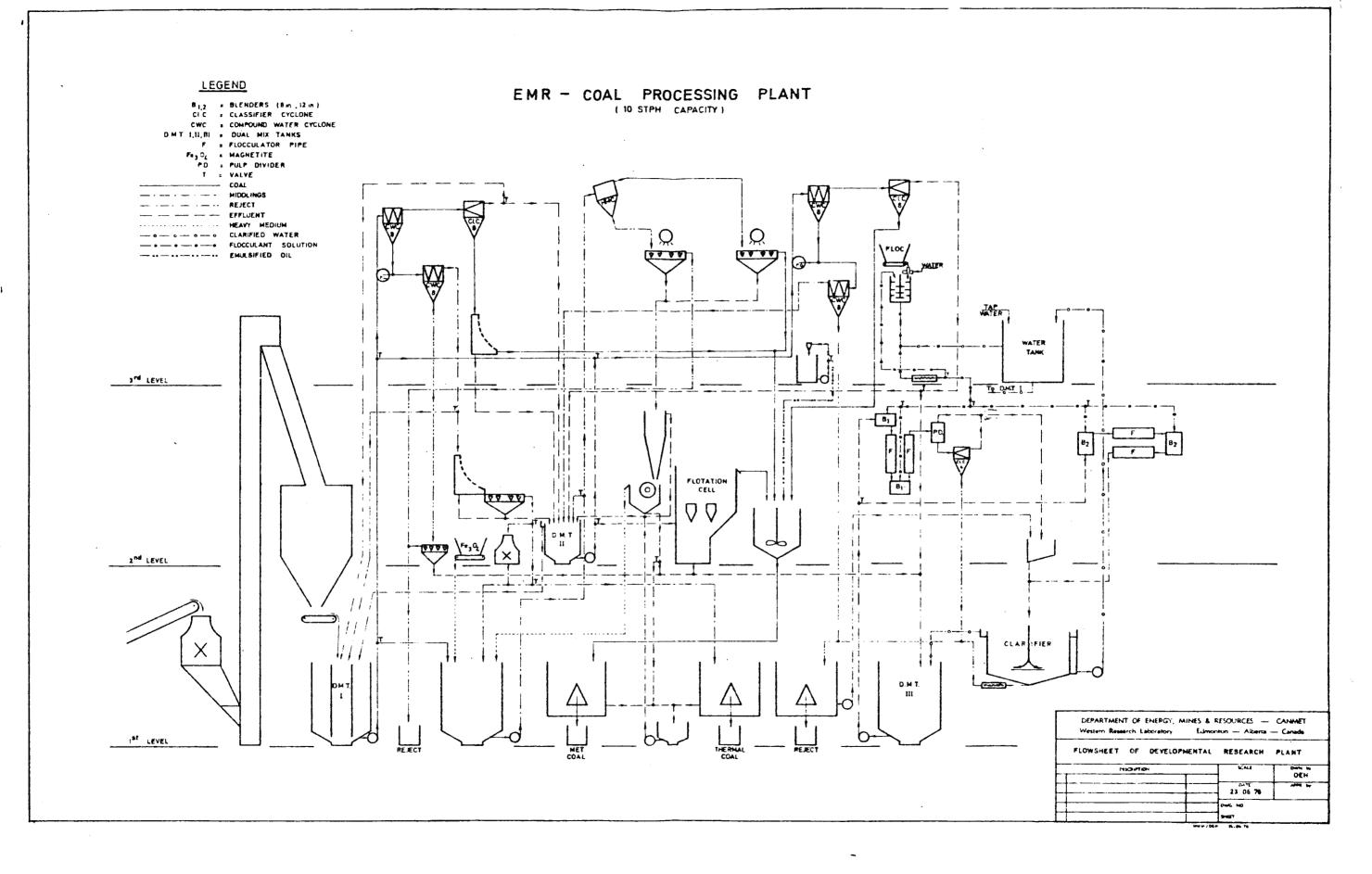
1976 ADIT SECTIONS SHERIFF PIT

8Y: JW K	DATE: DEC, 76	SCALE: 1:50
8Y :	DATE :	DRAWING NUMBER:
BY:	DATE:	QNTT76-0715-R01

PROCESS FLOWSHEET OF EMR PILOT PLANT (10 stph)



-18-



-19-

SURVEYING, TOPOGRAPHIC MAPPING AND AERIAL PHOTOGRAPHY

All surveying, topographic mapping and aerial photography was carried out by Burnett Resource Surveys Ltd. and is summarized as follows:

Surveying

- 1. Control surveying for 1:5000 topographic maps was undertaken to control medium (1:15000) and hi-level (1:25000 and 1:32000) air photographs obtained in 1975 over an area of approximately 64,750 hectares.
- 2. All 1976 drill holes and some previous data points were surveyed in the Roman, Sheriff, Frame and Babcock areas.
- 3. A detailed control survey of low-level photography (1:10000) from 1975 for the Sheriff and Frame areas was undertaken and "tied-in" with the primary control network. This survey covered approximately 1,200 hectares.
 - *NOTE All surveying was based on the U.T.M. System. Geodetic data was calculated using the prime Government control station at Quintette Mountain.

Topographic Mapping and Cartography

- 1. Detailed topographic maps at 1:2500 scale with 2 metre contours were completed for the Sheriff and Frame Pit Areas.
- The main infrastructure area at Quintette covering approximately 54,400 hectares is currently planned for 1:5000 (5 metre contour) maps. At present 13,000 hectares are complete.
 - *NOTE All maps are on the U.T.M. System and sheets are laid out according to the coal licence boundaries. 1:2500 scale maps are incorporated in the 1:5000 scale series.

Aerial Photography

- 1. A 1:50000 scale black and white mosaic was prepared for the Quintette Area bounded to the north and south by Bullmoose Mountain and Kinuseo Creek, and to the west and east by the reserve areas and Grizzly Valley.
- 2. A series of nine (1:25000 scale) black and white mosaics are currently being prepared in areas of geomorphological interest.
- 3. Approximately one-half of the Johnson Area was covered by 1:12000 scale colour photos during the latter part of the 1976 field season.

RESERVES

Results of reserve calculations for the Quintette proposed pits are summarized on the following pages. The reserves were calculated from crosssection (mining section) grids in each of the pits. The mining sections were constructed from structure contour maps of the various seams. This system was used instead of a "planimetric" approach, since cross-sections and related tonnages were required by pit design engineers. Mining sections and detailed reserve calculations are included in "Appendix B".

The following is an explanation of the parameters and procedures as they are presented on the detailed reserve calculation tables. Please note that all units are metric.

Coal Thickness and In-Seam Dilution Thickness (C.T. and I.D.T.):

Reliable sections (good recoveries) were selected from various drill holes, adits and trenches for each mineable seam in each pit. True coal thickness and true in-seam dilution values were then interpolated from these points to the various mining sections in the grid for each pit. The data was placed on computer cards for each mining section.

Specific Gravity of Coal, In-Seam Dilution and Out-of-Seam Dilution (S.G.C. - S.G.I.D. and S.G.O.D.):

Coal S.G.

Based on extensive quality tests, it was decided to use 1.3 S.G. for Quintette coal.

In-Seam and Out-of-Seam Dilution S.G.

From raw ash versus specific gravity curves and on individual specific gravity testing, it was possible to estimate the specific gravity of the various carbonaceous and non-carbonaceous partings within reliable mining sections. Weighted average in-seam dilution specific gravities were then calculated for each section and a final total estimate for each seam was derived. The same specific gravity data was used to predict out-of-seam dilution S.G., however, the procedure was not as detailed as roof and floor rock were usually of a consistent lithology and thus a consistent S.G.

The specific gravities established were placed on computer cards.

Out-of-Seam Dilution Thickness (0.D.T.):

It was consistently estimated that 5% (by weight) of a mining section should be included during mining as out-of-seam dilution. With a known specific gravity, the out-of-seam dilution thickness was then calculated on each section for each seam.

				•						•		•	•	•	
 SUMMAI	RY PEPOP	T (GEOLGY	· ()	•	-						•			•	
			IN TITLE	+#TNDY-P	<u>+</u>	6-76							·		
_	· •					• • •			•	<i>.</i>			• •	•	
PROPE	RTY: QUI	NTETTE	PI	TI WINDY	PIT										
									*2			•	CLEAN		
SEAN	AVG 1	THEOP8	TICAL 1 SERVESTY	THEU, I Rax COAT	N=PLACE:	THEORI RAN-COAI	TICAL I	RAW COAL	RESRUST		PLANT		CDAL	PRODUCT	
OF COL	THICKS	UX10	UNDXID 1	OXID	UNOXID :	OXID	UNOXIO 1	OXID	UNOXIO :	PLANT FEED	FEED	YIELD	RESERVES	COAL	•
D	2,443	463	.889	.552	1.092	.579	1.146	.538	1.016	1,430	1_836				
F	2.057	365	1 468	546	2.084	.545	2,188	506	1,785	1,461	1.703	692	1 1109	1,1694	•
G j	1,295	.218	1,026	270	1.267	.284	1,330	\$263	1,169	1,398	1,115	738	7798 2-3613	8209 856	
-J		.142	3.069	182	<u>-3.937</u> 1.971	.008	2,069	<u></u>		1.385		811	1.3420	1,4126	
Jox	5.620	069		086	2,972	.090	3 121	.081	2.453	1,429	2,531	736	1.7576	1,8501	
-T0T*C		1.659	-11,757-	5.593	-12.593.	2.376	16,027	5.502.	-14:073-	1,465	(13:426	701-		9,3865	
*1 T	NCLUDES -	IN SEAM	OTLUTION	ONLY	٠					• •			·		
*2 T	NCLUDES	TN SEAM	AND OUT	OF SEAM	DILUTION		· ·			;					
	END OF							<u> </u>							
						•				•,•					
						•					•				
	RY PEPOR	T (GF01.G1	· · · · · · · · · · · · · · · · · · ·			• •			1.7110.1.1111.111 III III.1111		-			L. A. Y.	
	RY PEPOR					• 		<u></u>	••••••••••••••••••••••••••••••••••••••	-		<u></u>		••••••••••••••••••••••••••••••••••••••	
SUMMA		Rt	/) IN-TITLE	1R0HAN										• • • • • • • • • • • • • • • • • • •	<u></u>
SUMMA	RTY: QUI	R	IN-TITLE-	TI ROMAN	· · · · · · · · · · · · · · · · · · ·	· 			······					· · · · · · · · · · · · · · · · · · ·	
SUMMA	RTY: QUI	Rt	IN-TITLE-	•					*5						
SUMMA	RTY: QUI	NTETTE THEORE	PI PI	T: ROMAN	N-PLACE:	THEOR			ACTORED :	HTID AVG	•		CLEAN		
SUMMA	RTYI QUI AVG I Coal I	THEORE	IN TITLE PI TICAL T FBEPVES	TI ROMAN THEO, 1 RAW CRAE	N-PLACE:	THEORE	RESEVEN	RAW COAT	RESRVST	HTID AVG			COAL	PRODUCT	
SUMMA	RTY: QUI	THEORE	TICAL T ETICAL T BEPVEST UNOXID T	T: ROMAN THEO, 1 RAW COAL OXID 530	N-PLACE: RESPVSI UNOXID : 6-219	THEORE		RAW COAT	RESRVST	HTID AVG			COAL RESERVES	PRODUCT COAL 3.4342	
SUMMA	RTY: DUI AVG : CTAL : THICK: 2.950 4.869	ТНЕ ПРЕ СПАСТРЕ ОХТО . 490 	PI TICAL # BEPVES # UNOXIO # 5.731 	THEO, 1 RAW COAL 0X10 -530 -939	N-PLACE: RESPVSI UNOXID : 6.219 10.543	THEORE RAK COAL 0XID -557 -986	RESRVS1 UNOXIO 6.530 11.071	RAW COAL OXID 463 854	UNOXID : 5.446 9.212	HT1D AVG SP.G OF PLANT FEED 1.368 1.352	FEED 5,195 	YIELD .667 	COAL RESERVES 3.7625	COAL 3,4342 7,3573	
SUMMA PROPE SEAM J	AVG 1 AVG 1 CTAL 1 THICK1 	ТНЕ ОК СПАСТРЕ ОХТО . 490 . 469 . 253	TICAL : TICAL : BEPVES : UNOXID : -5.731 -9.724 -2.068	THEO, 1 PAW COAL OXID 	N-PLACE: RESPVSI UNOXID : 6.219 10.543 2.965	THEORE RAK COAL 0XID •557 •986 • •392	RESRVS1 UNOXIO 6.530 11.071 3.113	RAW COAL OXID 483 854 350	CTORED : RESRVST UNOXID : 	HT1D AVG SP.G-OF PLANT FEED 1.368 1.352 1.554	FEED 5,195 	YIELD .667 .845 .631	COAL RESFRVES 3.2625 6.9695 1.5029	COAL 3,4342	
SUMMAN PROPE J J D~2 F	AVG : COAL : COAL : THICK: 2.960 - 4.869 2.035 2.976 - 2.078	Rt THEORE CTAL PE 0X JO .400 .407 .253 .292 .247	PI PI ETICAL # BEPVES I UNOXIO # 5.731 9.724 2.068 1.990 2.571	THEO, 1 THEO, 1 RAW COAL OXID 	N-PLACE: RESPVSI UNOXID: 6.219 10.543 2.965 2.174 3.076	THEORE RAN COAL OXID .557 .986 .392 .344 .305	RESRVS1 UNOXIO 1 6.530 11.071 3.113 2.263 3.230	RAW COAL 0XID 483 854 350 310	ACTORED : RESRVST UNOXID : 5.446 9.212 2.621 1.924 2.710	NTID AVG SP.G OF PLANT FEED 1,358 1,352 1,554 1,367 1,416	FEE0 5,195 8,788 2,500 1,835	YIELD .667 .845 .631 .827 .775	COAL RESFRVES 3.2625 6.9695 1.5029 1.4482 1.8659	COAL 3.4342 7.3573 1.5820 1.5245 1.9641	
SUMMA PROPE J J D-2 D-1	AVG I CG&L I THICKI 2.960 4.869 2.035 2.976 2.976 1.259	Rt THEORE CHAL PE CHAL PE CHAL PE CHAL PE CHAL PE .469 .469 .469 .292 .247 .015	PI PI PI PI PI PI PI PI PI PI	THEO, 1 THEO, 1 RAW COAL OXID 	N-PLACE: RESPVST UNOXID : 6.219 10.543 2.965 2.174 3.076 .170	THEORE RAK COAL 0XID •557 •986 •392 •344 •306 •018	RESRVS1 UNOXIO 1 6.530 11.071 3.113 2.263 3.230 179	RAW CDA 0XID 483 854 350 310 -273 016	CTORED : RESRVST UNOXID : 5.446 9,212 2.621 1.924 2,621 1.924 2,710 ,148	NTID AVG SP.G OF PLANT FEED 1.368 1.352 1.554 1.367 1.416 1.359	FEE0 5.195 8.788 2.500 1.835 2.586 .142	YIELD .667 .845 .631 .827 .775 .845	COAL RESFRVES 3.7625 6.9695 1.5029 1.4482 1.8659 .1132	COAL 3.4342 7.3573 1.5820 1.5245 1.9641 .1192	
SUMMAN PROPE J J D-2 F D-1 TOTAL	AVG 1 CTAL T THICK: 2.960 2.035 2.976 2.035 2.976 1.259	Rt THEORE CTIL PE OXID . A49 . 253 . 292 . 267 . 216 2.167	TICAL : SEPVES : UNOXIO : 5.731 9.724 2.068 1.990 2.571 .158 22.241	THEO, 1 RAW COAL OXID -530 -374 -328 -291 -017 2.479	N-PLACE: RESPVSI UNOXID: 6.219 10.543 2.965 2.174 3.076	THEORE RAN COAL OXID .557 .986 .392 .344 .305	RESRVS1 UNOXIO 1 6.530 11.071 3.113 2.263 3.230 179	RAW COAL 0XID 483 854 350 310	CTORED : RESRVST UNOXID : 5.446 9,212 2.621 1.924 2,621 1.924 2,710 ,148	NTID AVG SP.G OF PLANT FEED 1,358 1,352 1,554 1,367 1,416	FEE0 5,195 8,788 2,500 1,835	YIELD .667 .845 .631 .827 .775	COAL RESFRVES 3.7625 6.9695 1.5029 1.4482 1.8659 .1132	COAL 3.4342 7.3573 1.5820 1.5245 1.9641	
SUMMAN PROPE J J D-2 F D-1 TOTAL	AVG 1 CTAL T THICK: 2.960 2.035 2.976 2.035 2.976 1.259	Rt THEORE CTIL PE OXID . A49 . 253 . 292 . 267 . 216 2.167	PI PI PI TICAL * BEPVES* UNOXIO * 5.731 9.724 2.068 1.990 2.571 .156	THEO, 1 RAW COAL OXID -530 -374 -328 -291 -017 2.479	N-PLACE: RESPVST UNOXID : 6.219 10.543 2.965 2.174 3.076 .170	THEORE RAK COAL 0XID •557 •986 •392 •344 •306 •018	RESRVS1 UNOXIO 1 6.530 11.071 3.113 2.263 3.230 179	RAW CDA 0XID 483 854 350 310 -273 016	CTORED : RESRVST UNOXID : 5.446 9,212 2.621 1.924 2,621 1.924 2,710 ,148	NTID AVG SP.G OF PLANT FEED 1.368 1.352 1.554 1.367 1.416 1.359	FEE0 5,195 8,788 2,500 1,835 2,586 ,142 ,21,046	YIELD .667 .845 .631 .827 .775 .845	COAL RESFRVES 3.7625 6.9695 1.5029 1.4482 1.8659 .1132	COAL 3.4342 7.3573 1.5820 1.5245 1.9641 .1192	

-22-

	•										ž			
SUMMARY REPORT (GE	OLGY) -	ź	- 	.	· · · · · · · · · · · · · · · · · · ·			<u>.</u>		···· · · · · · · · · · · · · · · · · ·		·····		
	RUN TITLE	<u>E :Shfrif</u>	PTT REVI	1810N 5.	 Combinëd	WITH DEP	PUTY DEC	20 76					÷	
PROPERTY: QUINTED		PIT: SHER						_ <u>_</u>	<u>_</u>	· · · · · · · · · · · · · · · · · · ·			•	
	··••			, 									` 	•••
AVG 1 TH	EORETICAL	: THEO,)	IN-PLACE:	THEOR	ETICAL	GEO_F/	ACTORED #	WTID AVG			- CLEAN			
THICKI OXI		t OXID	UNDXID :	OXID	UNOXID	<u>iraw coal</u> : Oxid		SP.G.OF		Y1ELD	RESERVES	PRODUCT S COAL		
	,385 7,460 335			1.895	10,306	1.711	8,912	1,465	8,502	.702		5,8691		
E=1 6.062 1.	489 3.085	5 2,256	4,639	2.369	4,871	2,182	4 276	1.476	4 079	.607	2.3384	2.4614		
	010 .032 343 .851		.054 1.041	.018	.057	.016	048 946	1.515	. 046	,537		• 0247 .6706		
	184 .454	4 ,254	.526	.207	,553	.230	.460	1.414	445	,758	.3314	.3468		
	005 023 752 12,272		048 <u>16.643</u>	.010 <u>5.430</u>	.051 <u>17.475</u>	.010	046. <u>15.180.</u>	1.670	.043	.446		.0192		
+1 INCLUDES IN S				•	•	•	•		·	, .		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
•	···-···			<u></u>	······································	<u></u>					· · · · · · · · · · · · · · · · · · ·			
*2 INCLUDES IN S STOP END OF RUN	SEAM AND OUT	I OF SFAM	DILUTION	ł	•									
		<u>*</u>							·····					
								-						
UNMARY REPORT (GFO									• .				•	
				ດມ ລັດອ							•	• • • • •		
	PUN TITLE	IFRAME PI	T REVISI	ON Z DE	C 22 76						•	•		
POPERTY: QUINTETT		IFRAME PI		ON Z DE	C 22 76							·		
POPERTY: QUINTETT		TI FRAME	PIT *1		, ·		*2				CI FAN	·		•••••
AVG F THE	E PI	TI FRAME	PIT +1	THEORET	ICAL #	GED. FAC AW COAL	TORED 🛊	WTID AVG SP.G OF	PLANT	AVG	CLEAN COAL	PRODUCT	· · · · ·	••• • •
AVG I THE EAM COAL COAL THICKS OXIO	E PI ORETICAL E RESERVES E UNOXID E	TI FRAME THEO. IN RAW COAL OXID. U	PIT +1 PLACE RESRVSIR INOXID	THEOREI AN COAL Oxid L	ICAL # RESRVS#R INOXID #	AW COAL Oxid U	TORED Resrvs: Noxid :	SP.G OF PLANT FEED	FEED	YIELD	COAL Reserves	COAL		····
SEAM COAL COAL <u>THICKI OXID</u> 3.157 .7 3.313 .6	E PI ORETICAL I RESERVES I UNOXID I 96 6.666 31 8.064	TI FRAME Theo, In Raw Coal	+1 +1 PLACE RESRVS:R JNOXID 7.807	THEORE1 AW COAL 0XID U .971 .802	ICAL RESRVS:R INOXID 8.197 10.196	AW COAL 0XID U .869 .674	TORED RESRVS NOXID 6.890 8.070	SP.G OF PLANT FEED 1.398 1.400	FEED 6 573 7 699	YIELD 786 761	COAL RESERVES 4.8403 5.5098	COAL 5.0950 5.7998	·	*>=
AVG I THE SEAM COAL COAL <u>THICKI OXIO</u> 3.157 .7 3.313 .6 3.495 .9	E PI ORETICAL E RESERVES E UNOXID E 96 6.066 31 8.064 89 5.353	TI FRAME THEO, IN RAW COAL OXID 925 .764 1.267	PIT +1 RESRVS:R JNOXIV 7.807 9.710 7.020	THEORE1 AW COAL <u>0XID (</u> .802 1,330	ICAL RESRVS R INOXID 8.197 10.196 7.371	AW COAL OXID U .869 .674 1.158	TORED RESRVS NOXID 6.890 8.070 6.243	SP.G OF PLANT FEED 1.398 1.400 1.423	FEED	YIELD 786	CDAL RESERVES 4.8403 5.5098 3.9141 2.2335	COAL 5.0950 5.7998 4.1201 2.3511	•	•••
AVG 5 THE COAL 5 COAL <u>THICKS OXIO</u> 3.157 .7 3.313 .6 3.495 .9 1.445 .3	E PI ORETICAL I RESERVES I UNOXID I 96 6.666 31 8.064	TI FRAME THEO. IN RAW COAL OXID .925 .764 1.267 .554 .788	PIT +1 -PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	·	···
AVG 5 THE COAL COAL THICK OXIO 3.157 .7 3.313 .6 3.495 .9 1.445 .3 2.011 .6	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 31 8.064 31 8.053 49 3.123 59 3.351	TI FRAME THEO. IN RAW COAL OXID .925 .764 1.267 .554 .788	PIT +1 RESRVSR <u>INOXID</u> 7.807 9.710 7.020 4.725	THEORE1 AW COAL 0XID L .802 1.330 .582	ICAL RESRVS:R INOXID 8.197 10.196 7.371 4.961	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542	FEED 6.573 7.699 5.956 3.904	YIELD 786 761 .719 .574 .740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511	• • • • • • • •	••••
AVG J THE EAM COAL COAL <u>THICKE OXIO</u> 3.157 .7 3.313 .6 3.495 .9 1.445 .3 2.011 .6 OTAL 3.4	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.664 R9 5.353 49 3.123 59 3.351 25 26.557	TI FRAME THEO. IN RAW CDAL 0XID U .923 .764 1.267 .554 .554 .788 4.298	PIT +1 -PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · · ·	••••
AVG I THE EAH COAL COAL THICKI OXIO 3.157 .7 3.313 .6 3.495 .9 1.445 .3 2.011 .6 OTAL 3.4 *1 INCLUDES IN	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · ·	•••••
AVG I THE EAH COAL COAL THICKI OXIO 3.157 .7 3.313 .6 3.495 .9 1.445 .3 2.011 .6 3.495 .9 1.445 .3 2.011 .6 3.495 .9 1.445 .3 2.011 .3 41 INCLUDES IN SE *2 INCLUDES IN SE	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · · ·	•••••
AVG I THE EAM COAL COAL THICKI OXIO 3.157 .7 3.313 .6 3.495 .9 1.445 .3 2.011 .6 OTAL 3.4 *1 INCLUDES IN	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	·	····
AVG I THE EAH COAL COAL THICKI OXIO 3.157 .7 3.313 .6 3.495 .9 1.445 .3 2.011 .6 3.495 .9 1.445 .3 2.011 .6 3.495 .9 1.445 .3 2.011 .3 41 INCLUDES IN SE *2 INCLUDES IN SE	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · ·	·····
AVG I THE EAM COAL COAL <u>THICKI OXIO</u> 3.157 .7 3.313 3.495 .9 1.445 .3 2.011 .6 OTAL	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · ·	·····
AVG I THE EAM COAL COAL THICKI OXIO 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.13 .6 3.495 .9 1.445 .3 .6 3.495 .7 .6 .7 .7 .7 .7 .7 .3 .7 .3 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7 .7	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · · · · · · · · · · · · · · · ·	·····
AVG I THE SEAM COAL COAL THICKI OXIO 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 3.157 .7 5 .9 1.445 .3 6 .9 1.00TAL .445 *1 INCLUDES IN SE *2 INCLUDES IN SE	E PI ORETICAL RESERVES UNOXID 96 6.666 31 8.064 89 5.353 49 3.123 59 3.351 25 26.557 AM DILUTION	TI FRAME THEO, IN RAW COAL 0XID U .923 .764 1.267 .554 .788 4.298	+1 +1 PLACE: RESRVS:R JNOXID 7.807 9.710 7.020 4.725 4.009 33.271	THEORE1 AW COAL 0XID 971 802 1,330 582 827	ICAL RESRVS R INOXID 8.197 10.196 7.371 4.961 4.209	AW COAL OXID U .869 .674 1.158 .502 .731	TORED RESRVS NOXID 6.890 8.070 6.243 4.093 3.612	SP.G OF PLANT FEED 1.398 1.400 1.423 1.542 1.542 1.417	FEED 	YIELD 786 761 719 574 740	COAL RESERVES 4.8403 5.5098 3.9141 2.2335 2.4838	COAL 5.0950 5.7998 4.1201 2.3511 2.6145	· · · · · ·	·····

Reserves - continued

Mining Section Thickness:

The mining section thickness for each seam was then calculated as the sume of coal, in-seam and out-of-seam dilution thicknesses.

Weighted Average Specific Gravity of Mining Section:

Using the thickness and S.G. of the three portions of each mining section, a weighted average specific gravity was calculated.

Seam Length (Oxidized - L.O. and Unoxidized - L.U.):

The oxidized and unoxidized portions of each seam within the pit were measured on each mining section and transferred to the computer data cards.

*NOTE - It should be noted that the lengths found in the detailed reserve print-outs are those within pit limited, however, the outline of the pit is not shown on respective mining sections as pit planning is not yet complete.

Section Width (W):

The width or influence was also input and normally represented 100 metres of strike length as this was the grid spacing.

Reserve Categories and Calculations:

Theoretical Coal (Oxidized and Unoxidized)

The in-place coal only tonnage with no deductions.

Calculation: C.T. x S.G.C. x L.U. or L.O. x W

Theoretical In-Place Raw Coal (Oxidized and Unoxidized)

The in-place coal and in-seam dilution tonnage with no deductions.

Calculation: Theoretical coal reserve + I.D.T. x S.G.I.D. x L.U. or L.O. x W

Theoretical Raw Coal Reserve (Oxidized and Unoxidized)

The in-place coal, in-seam dilution and out-of-seam dilution tonnage with no deductions.

Calculation: Theoretical in-place Raw Coal Reserve + O.D.T. x S.G.O.D. x L.U. or L.O. x W

Raw Coal Reserve (Oxidized and Unoxidized)

The theoretical raw coal tonnage is reduced by a geological factor (g.f.) to give the raw coal reserve. At this point, 6% pit water is included with the oxidized raw reserve.

Reserves - continued

Reserve Categories and Calculations - continued

Plant Feed

Plant feed is the unoxidized raw coal tonnage received at the wash plant and is derived by including 6% pit water with unoxidized raw tonnage and reducing it by the mining factor (m.f.) (.9) to account for mining loss.

Clean Coal

Clean coal is an estimate of the dry coal produced by the wash plant. To obtain clean coal, the plant feed tonnage of any seam is multiplied by the estimated plant yield for that seam.

Plant Yield

The equation used for plant yield is as follows:

C.T. x S.G.O. x .96 C.T. x S.G.C. x I.D.T. x S.G.I.D. x O.D.T. x S.G.O.D.

which is simply a weight ratio of coal reduced by 4% for wash plant inefficiency to the weight of the entire section. It should be noted that actual yields from reliable cored section washabilities were compared to this calculated yield and generally found to be within 5% of the actual value.

Product Coal

Five percent (5%) moisture was added to clean coal to obtain product coal.

RECLAMATION

Reclamation involving slash abatement, water bar and culvert installation, ditching, recontouring, infilling and the harrowing of fertilizer and seed mixture was undertaken on all land disturbed by 1976 exploration, and on some disturbed areas from previous programs. Numerous site inspections were made by members of the Inspection and Reclamation Branches of the British Columbia Government Department of Mines and Petroleum Resources. A report dealing with 1976 reclamation has been submitted to the Department of Mines & Petroleum Resources by J. Baker who was responsible for the reclamation program.

CONCLUSION

The 1976 Quintette Exploration Program successfully improved the level of confidence of reserves in the Roman, Sheriff and Frame Pits. At present, a total of 109,000,000 metric tonnes of theoretical raw coal reserve (in-place) are within mine planning areas of the four Quintette proposed open pits. In addition to geological information further quality tests were carried out from drilling and two bulk samples from "e" and 'J' Seams in the Sheriff Pit and indicated that all coal was of acceptable metallurgical quality.

Preliminary mapping north and south of the Sheriff and Frame Pits indicated that small pits in the Gates Member may be confirmed with drilling northeast of the Sheriff Pit. With verification of quality and continuity, underground reserves in the Gething Formation may be confirmed in the Gething Formation south of the Sheriff and Frame Pits with open pit potential restricted to further exploration in the Gates and basal Gething immediately north of the Murray River.

ACKNOWLEDGEMENTS

Acknowledgement and thanks are extended to the following staff members and contractors whose efforts led to the successful completion of the 1976 **Ouintette Exploration Program.**

Denison Coal Limited Staff:

Geological:

- Geologist J. Perry - Geologist A. Bak D. Patterson - Geologist B. Wong - Geological Engineer C. Mankowski - Geologist C. Bickford - Geology Student - Geology Student D. Gatto

Camp Management and Reclamation:

- Reclamation and Camp J. Baker Management - General Assistant L. Scorgie
 - P. Roman - General Assistant

Mitsui Mining Co. Ltd. Staff:

ť

- I. Kakizaki - Manager, Geology Section - Geologist T. Shima
- Y Kowaguchi
 - Geologist
- I. Ohwa
- Geologist

Contractors:

Adits:

Air Support:

Air Support:

Heavy Equipment:

Diamond Drilling:

Catering:

Fuel:

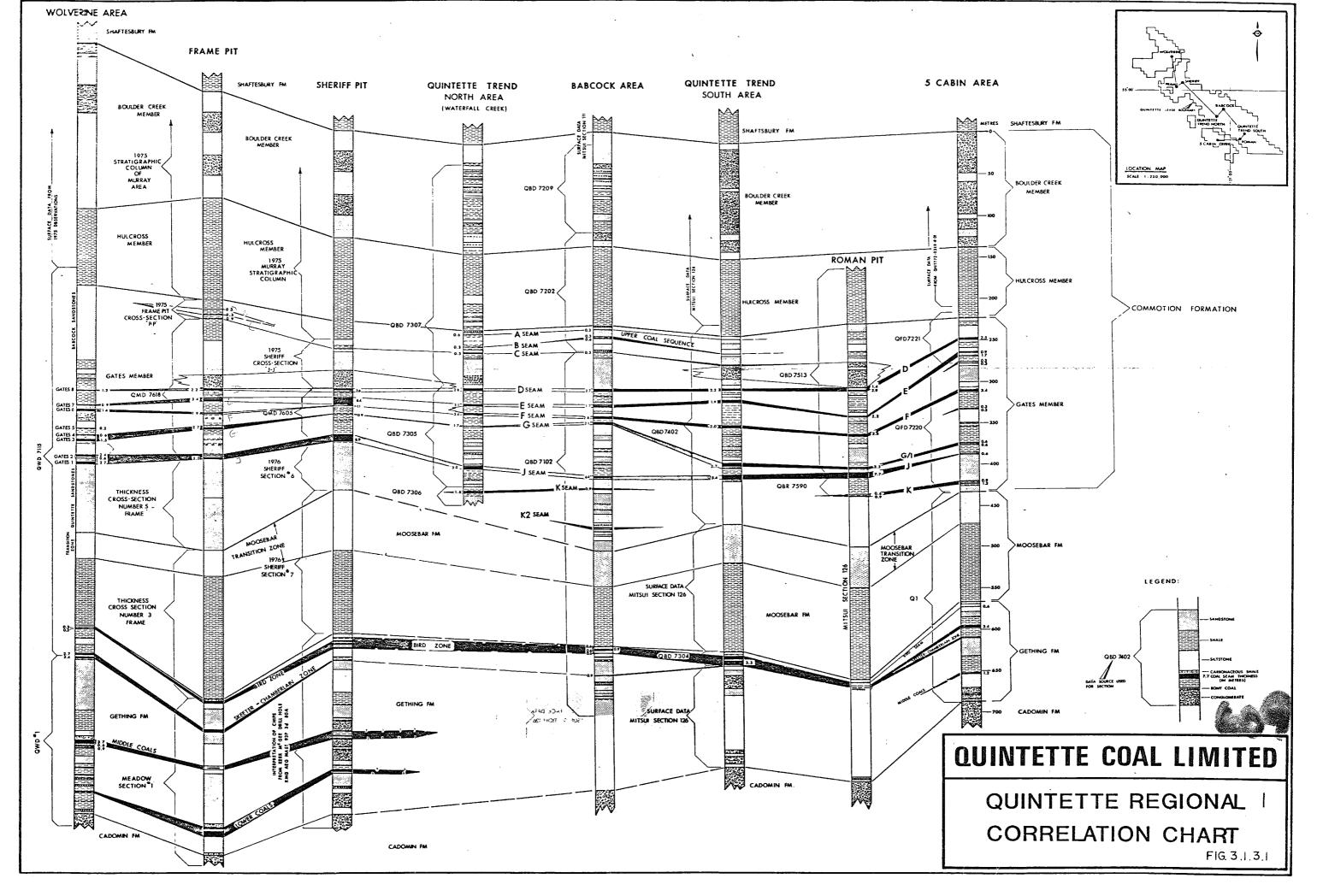
Surveying, Photogrammetry and Cartography:

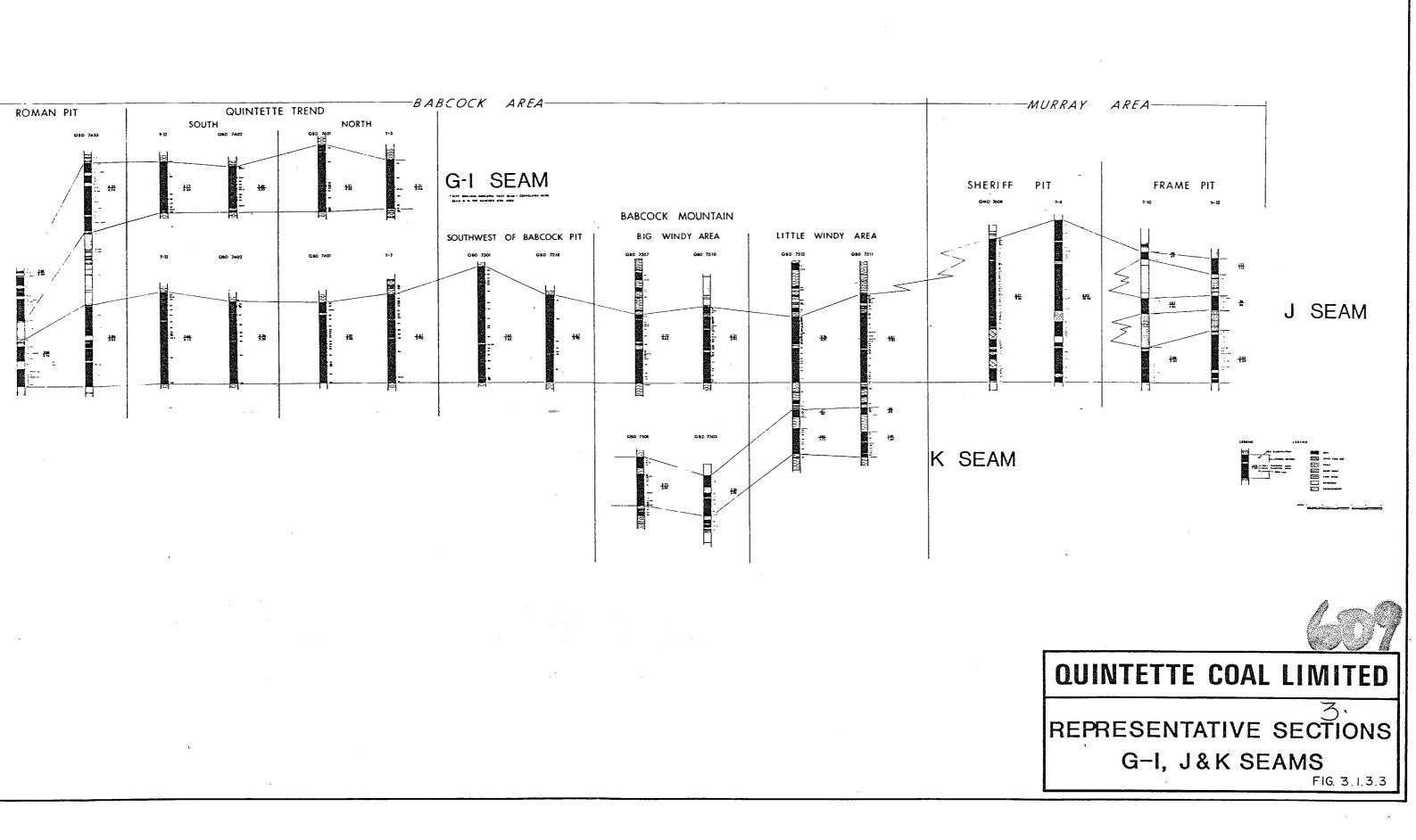
Geophysical Logs Analysis

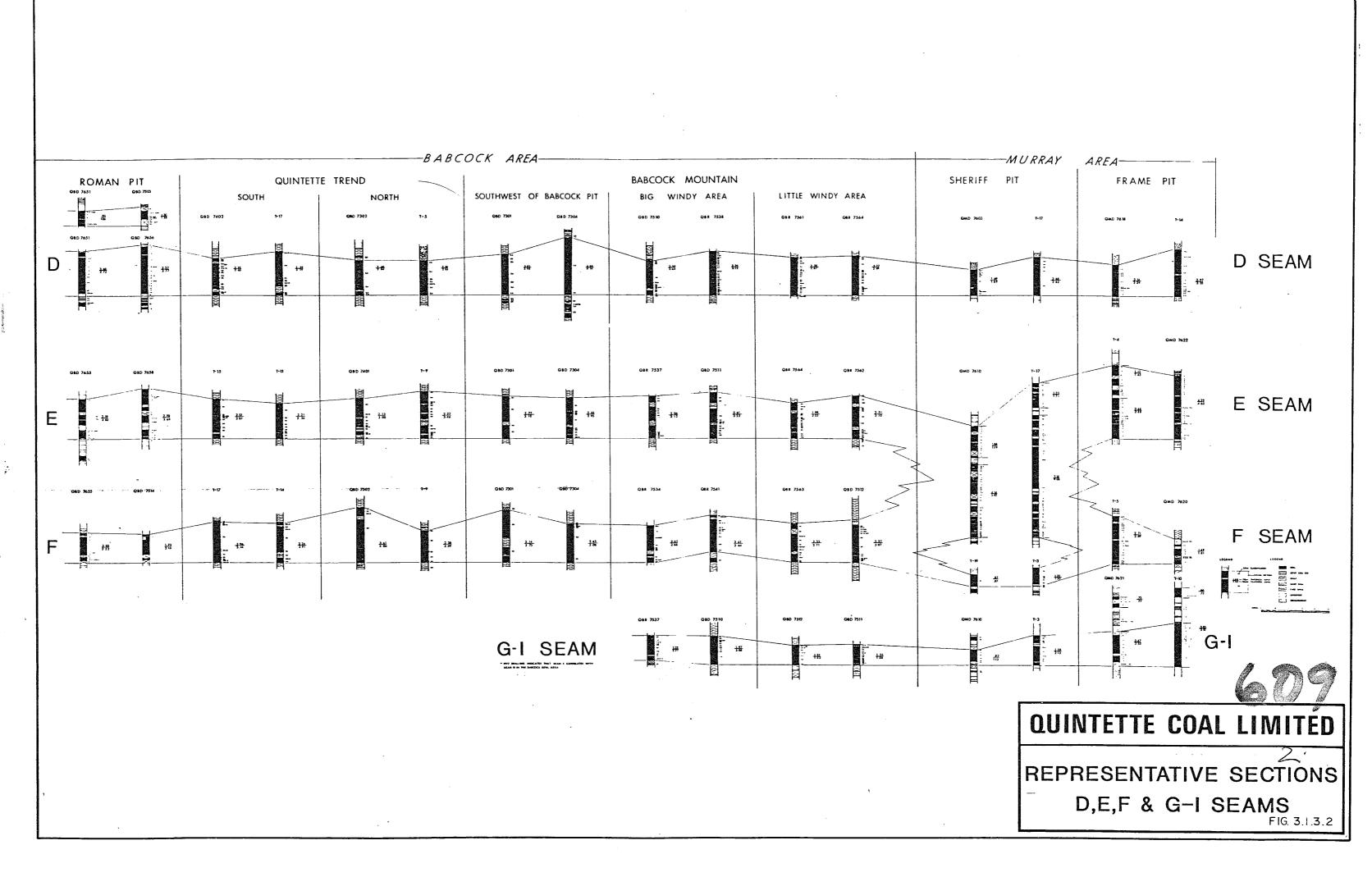
A & B Contracting Ltd., Calgary McCord Helicopters, Calgary Nahanni Helicopters, Calgary Tompkins Contracting, Fort St. John Tonto Drilling, Vancouver Westcamp Construction Catering, Edmonton South Peace Petroleums, Dawson Creek

Burnett Resource Surveys, Calgary and GEOL Galgary Vancouver Roke Oil Enterpris Sales, Edmonton Cyclone Engin íng. e Project Geol

-28-



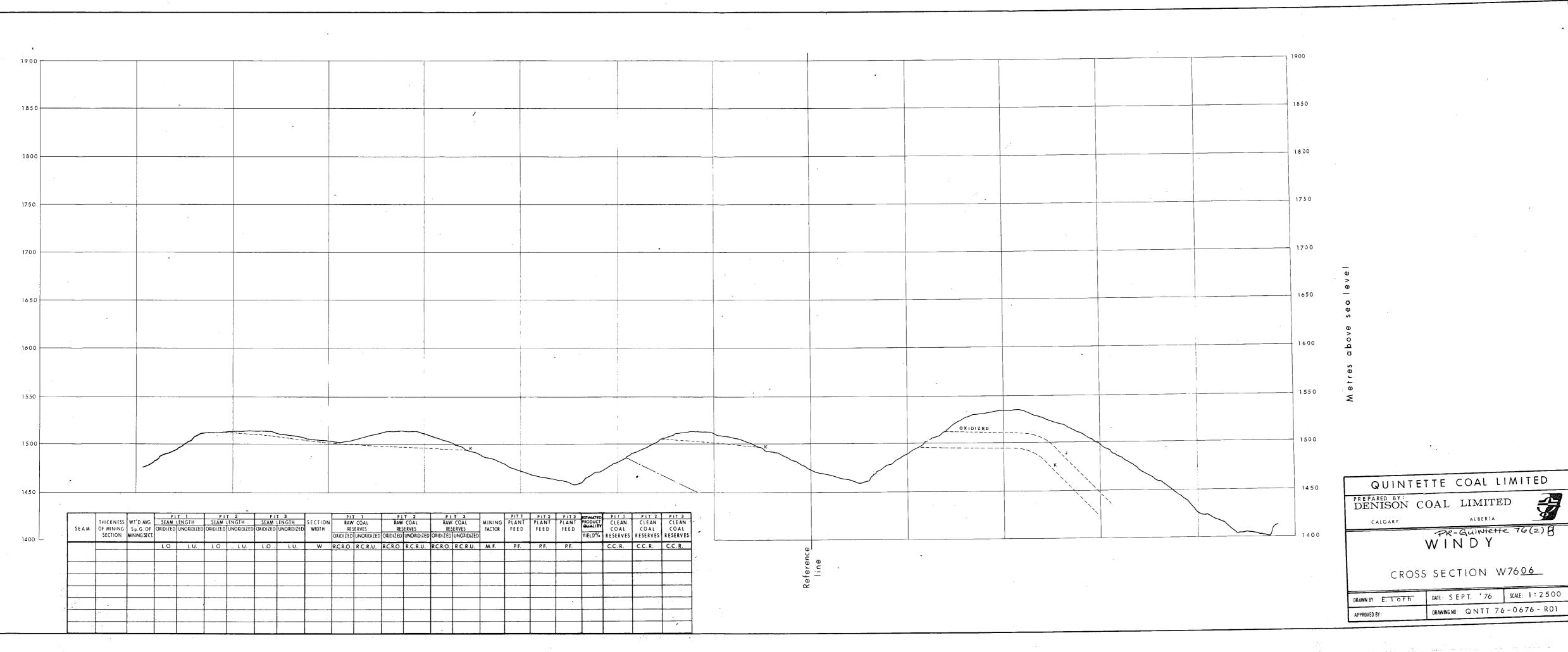


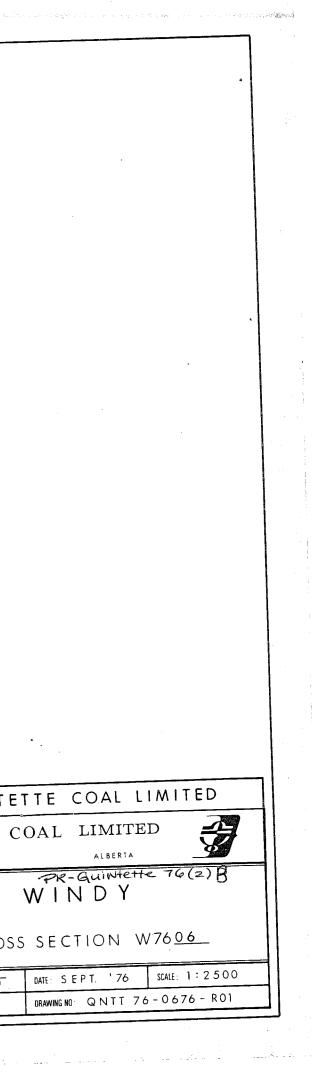


PR- Quintette 76 (2) 8

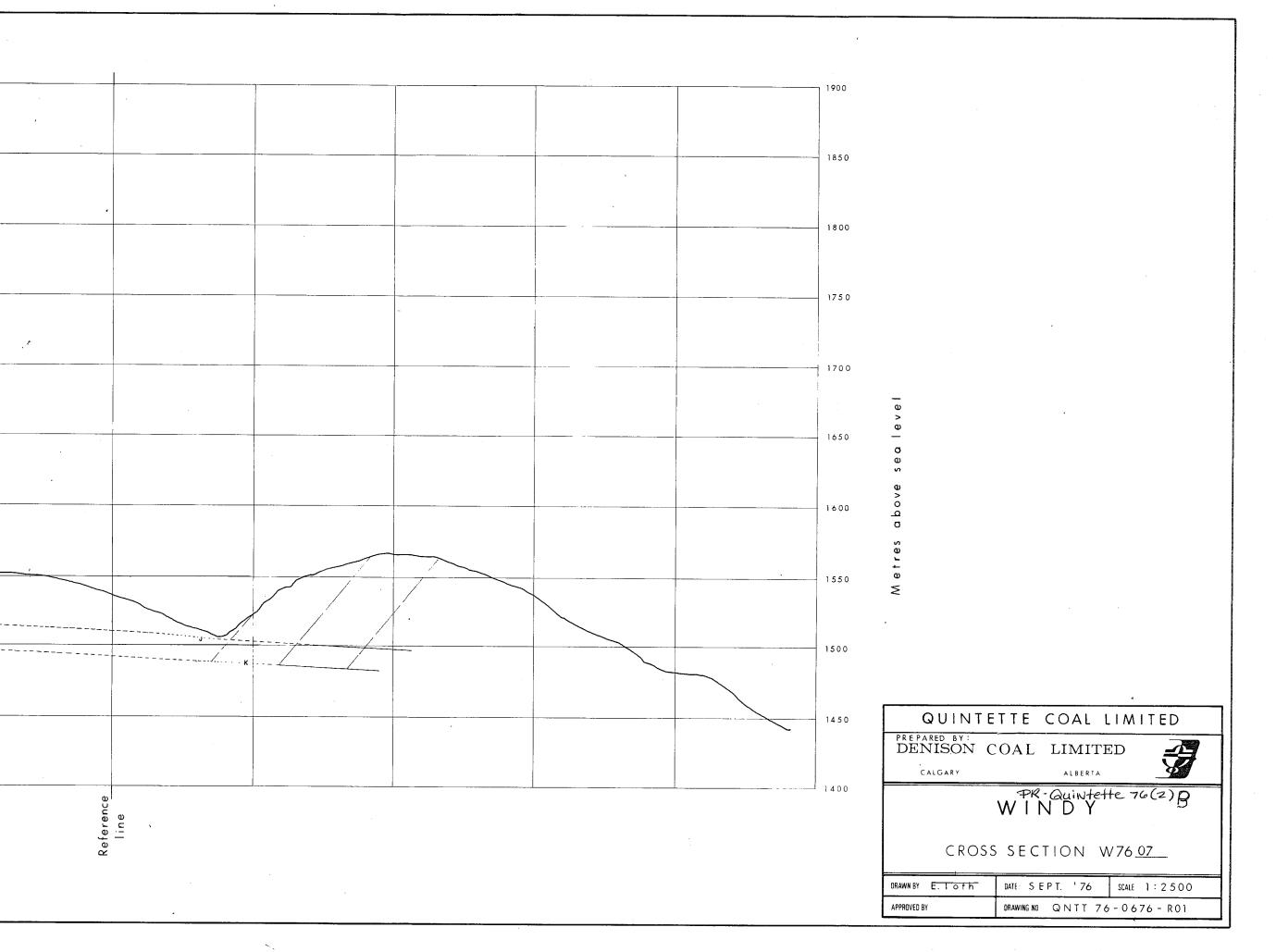
GEOLOGICAL BRANCH ASSESSMENT REPORT

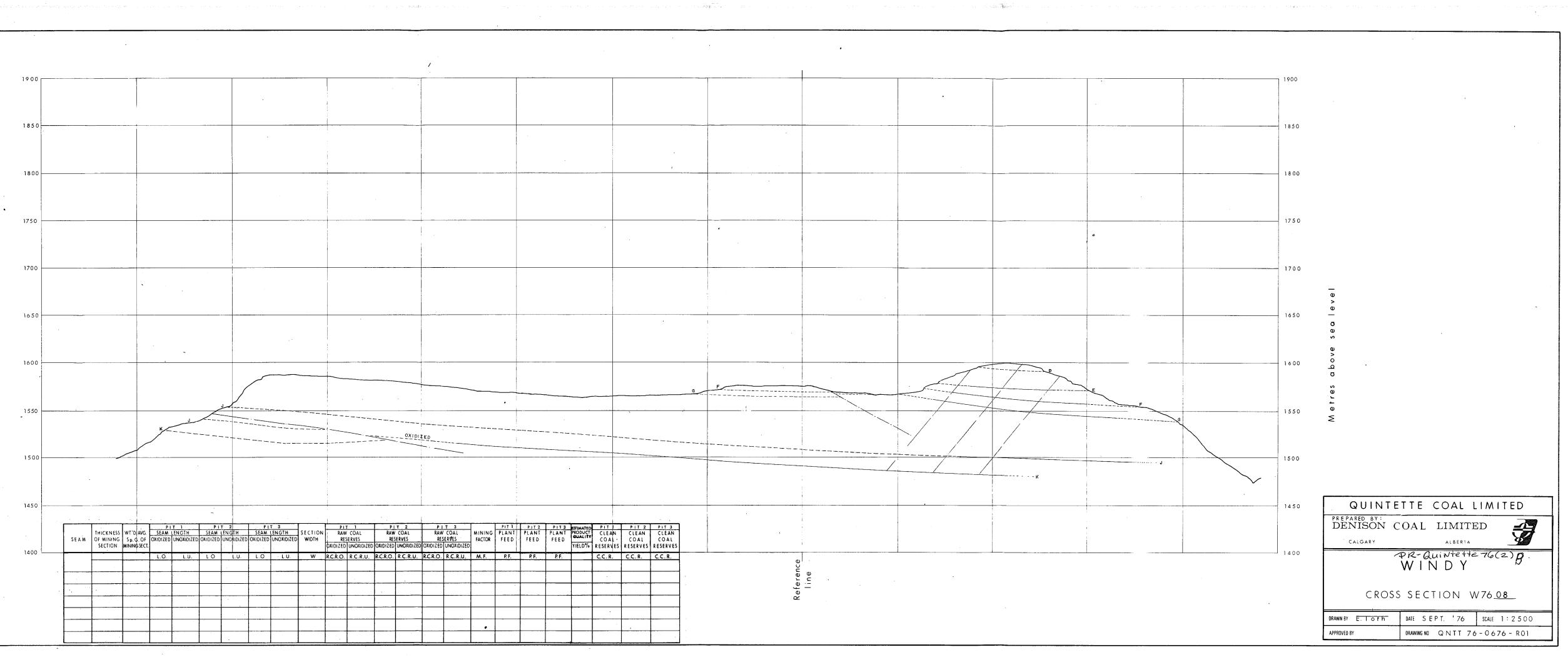
Windy. Cross section. W7606-W7632.





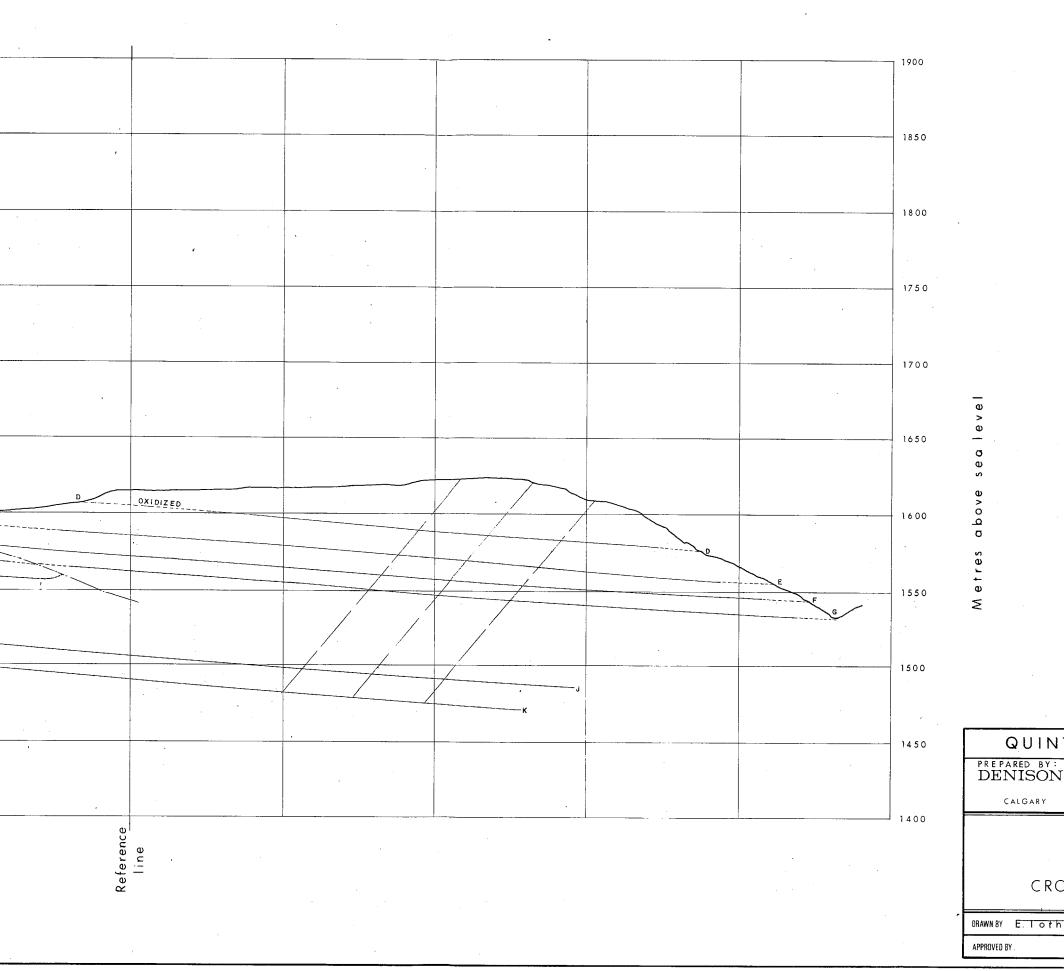
un en ser an	elandi ken sindaken	i a stranjev	levytak i s	An ag an tri tri tri			nen un Turre v	ante, Ar		2. 14173	L 14 (5787	10 41 - 12	e en		en e de la de la de	1997 - 19 19	• • • • • • • • • • •		a stra	eferi a Ara	1992 - 1993 - 1998 1997 - 1997 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 - 1998 -	dana na ara	•	· · ·						1	ngip eta da da da
																								····		-					
	1900																<u>_</u>									<u>.</u>		<u></u>			
	1850																											•			
	1800		<u></u>								-	.																			
- •	1750 -									· · · · ·					-																
	1700 -																		1 ²¹⁰⁰⁰			<u></u>									
	1650 —																														
	1600 —			-																						•					
	1550	W															<u> </u>														
	1500							*			+ 									·				×					0X101Z	<u>ED</u>	
	1450																														
	1400		SEAM	THICKN OF MINI SECTIC	ESS WT NG Sp NN MINI	D AVG. . G. OF NG SECT.	SEAM OXIDIZED	T 1 LENGTH UNOXIDIZ	SEA	PIT MLEN ED UNG	dth 🛛	SEAM	T 3 LENGTH UNOXIDIZE	SECTION WIDTH		RESE	COAL RVES	RAV	IT2 N COAL SERVES	RA	IT 3 W COAL ESERVES D UNOXIDIZE	FACTOR	PIT 1 PLANT FEED	PIT 2 PLANT FEED	PIT3 PLANT FEED	ESTIMATED PRODUCT QUALITY YIELD%		PIT 2 CLEAN COAL RESERVES	CLEAN COAL		
							L.Q.	L.U.			L U.	LO	L U.	w .	R.C.R.	.O. F	R.C.R.U.	R.C.R.O	. R.C.R.U	. R.C.R.O	. R.C.R.U.	M, F.	P.F.	P. F.	P.F.		C.C. R.	C.C. R.	C.C. R.		
						<u> </u>	1		I	. <u> </u>			L	<u> </u>	<u> </u>			L	I				L	<u> </u>	I	1		I	L	<u> </u>	-



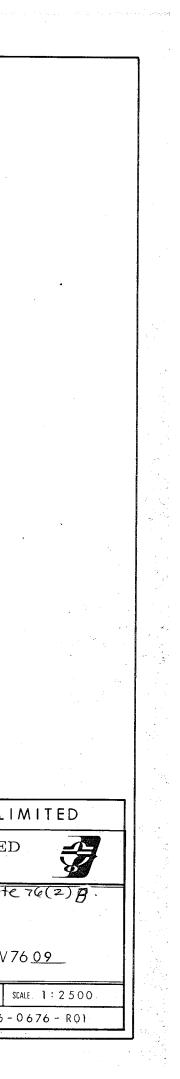


. .

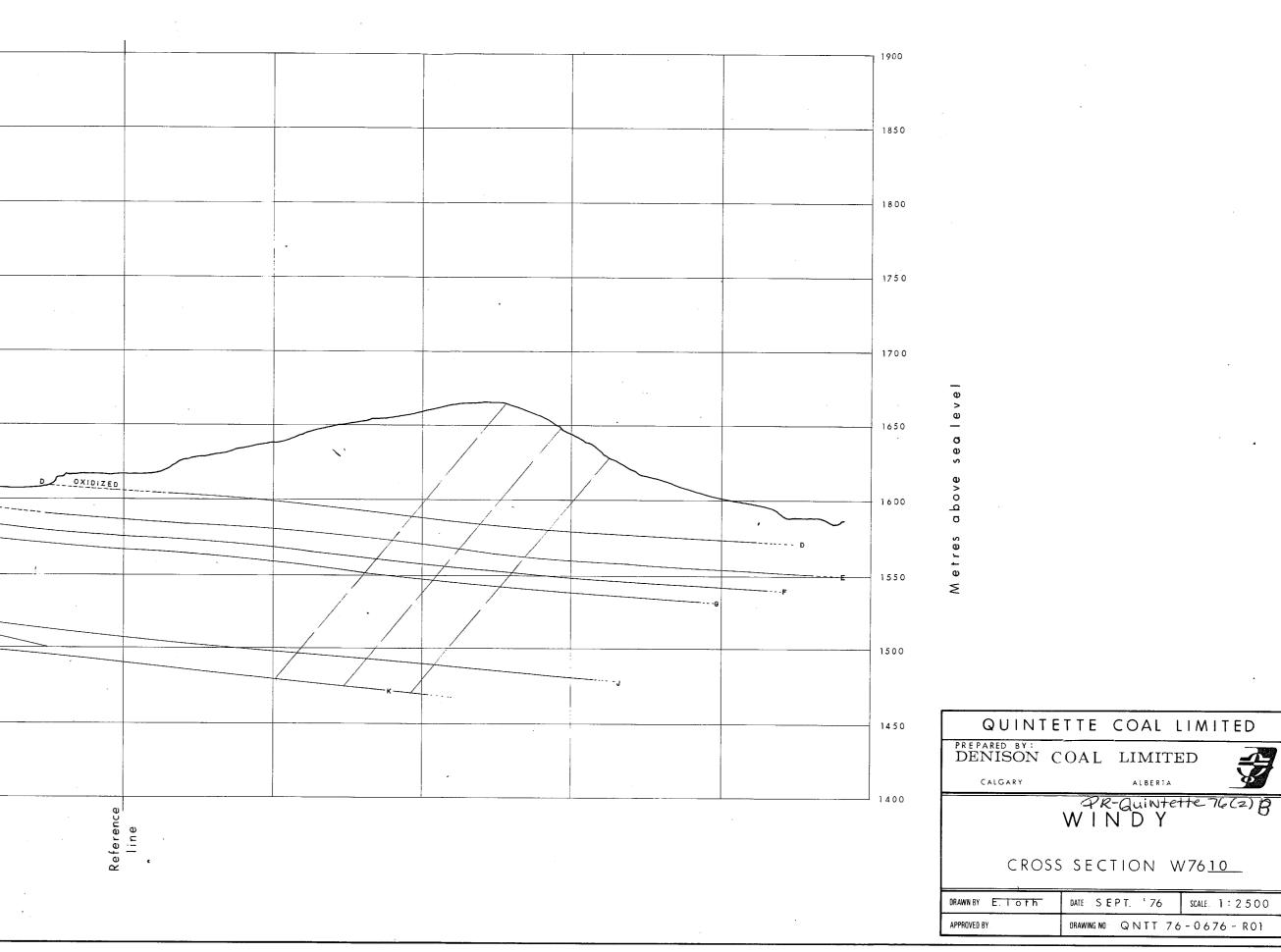
					 		-
1900							
1850							
1750							
1700							
1650							
1600		, . ,			F	E	
1550					G		
1500							
1450							
1400	SEAM THICKNESS WT'D. OF MINING Sp.G SECTION MINING	AVG. SEAM LENGTH SEAM LENG OF OXIDIZED UNOXIDIZED OXIDIZED UNOX SECT. L.O. L.U. LO I	TH SEAM LENGTH SECTION DIZED OXIDIZED UNOXIDIZED WIDTH Q	PIT 1 PIT 2 RAW COAL RAW COAL RESERVES RESERVES XIDIZED UNOXIDIZED OXIDIZED UNOXIDIZED C.R.O. R.C.R.U. R.C.R.O. R.C.R.U.	PIT 2 PIT 3 ESTIMATED PIT 1 PLANT PLANT PRODUCT CLEAN FEED FEED YEED COAL YIELD% RESERVE P.F. P.F. C.C.R.	CLEAN CLEAN COAL COAL S RESERVES RESERVES	
		· · · · · · · · · · · · · · · · · · ·			•		
	•						

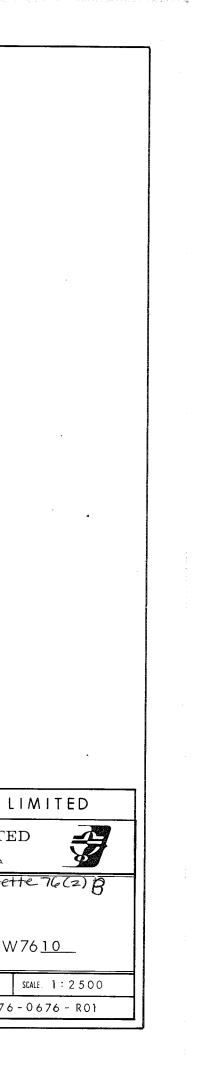


QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA PK-QUINHETTE 76(2)B. WINDY CROSS SECTION W7609 DRAWINBY E. TOTH DATE SEPT. '76 SCALE 1:2500 APPROVED BY. DRAWING NO QNIT 76-0676-R01

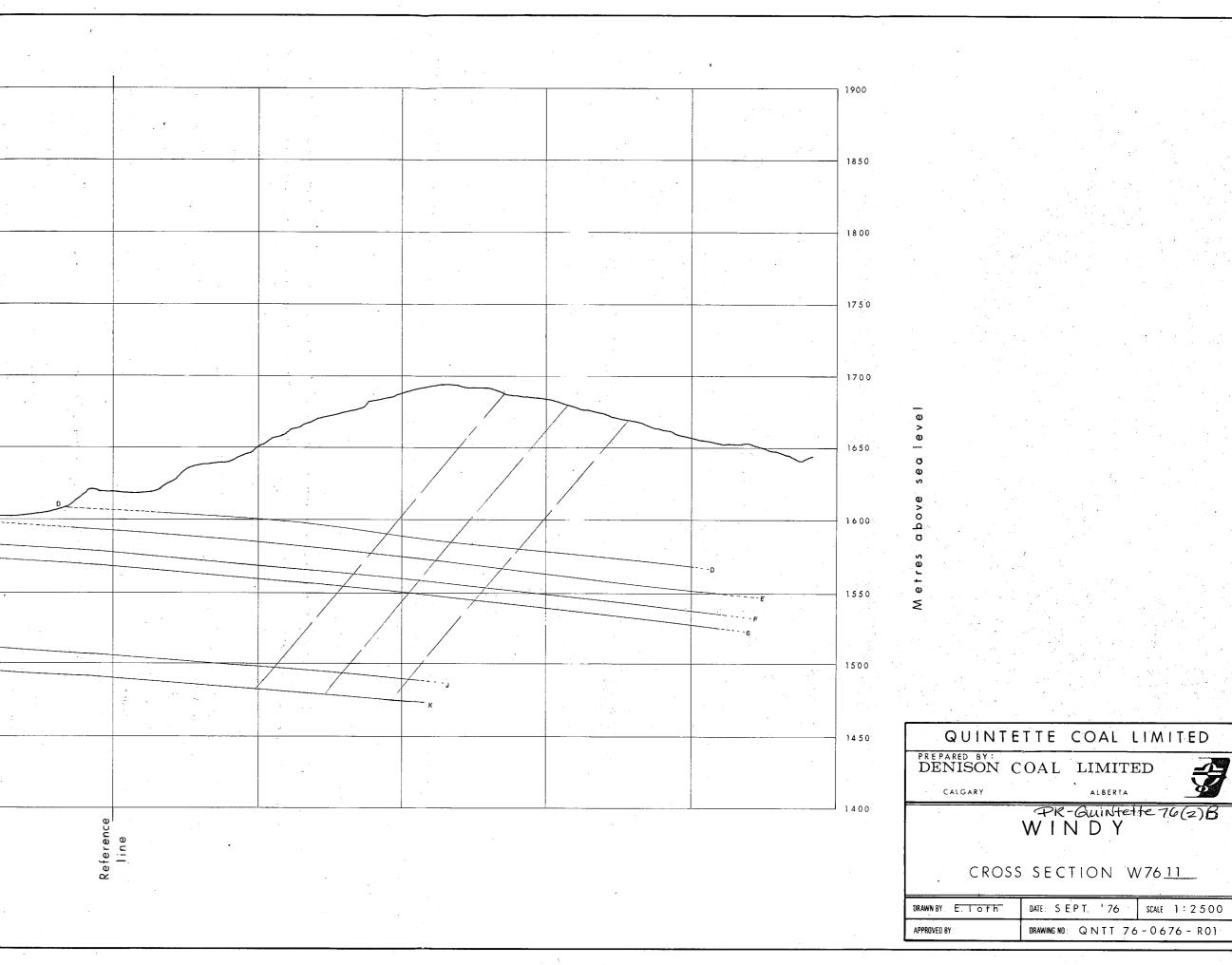


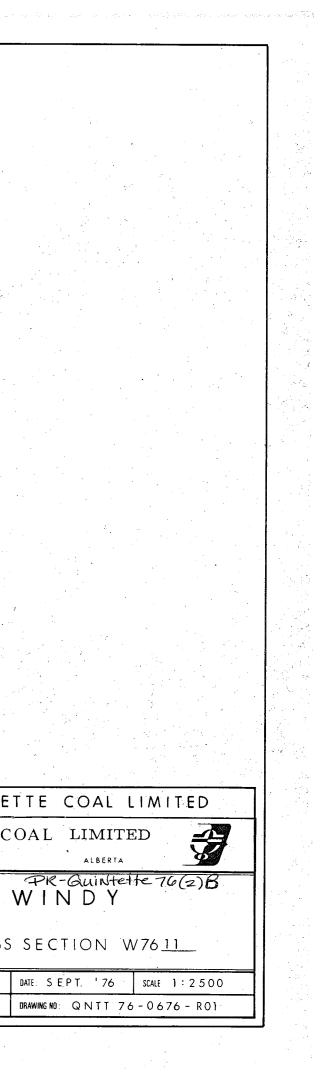
00 [· · · · · ·					Į			• •														
															-				i e						
50										• .			÷			-									<u> </u>
00																					_				
o																									
0								-	•							•		- -		-					
	•																								
50																									
00		<u></u>																			6		F		E Contraction
50																						-			
					к <u>,</u>																				
00		/																							
50 -								•																	
	SEA M	THICKNESS OF MINING SECTION	WT ¹ D. AVG. S.p. G. OF MINING SECT.	<u>PI</u> SEAM OXIDIZED	T LENGTH UNOXIDIZEI	P SEAM D OXIDIZEE	LENGTH	P I SEAM D OXIDIZED	T 3 LENGTH UNOXIDIZED	SECTION WIDTH	N RA' QXIDIZFI	UT 1 W COAL ESERVES D UNOXIDIZED	RAW	T 2 COAL SERVES	RAW	T 3 V COAL SERVES	MINING	PIT 1 PLANT FEED	PIT 2 PLANT FEED	PIT3 PLANT FEED	ESTIMATED PRODUCT BUALITY	PIT 1 CLEAN COAL	PIT 2 CLEAN COAL	PIT 3 CLEAN COAL RESERVES	
00 L				L.O.	L.U.	LO	L.Ü.		L.U.	w	R.C.R.O	. R.C.R.U.	R.C.R.O.	R.C.R.U.	R.C.R.O.	R.C.R.U.	M.F.	P.F.	P. F.	P. F.			C.C.R.		
		-						· · · · · · · · · · · · · · · · · · ·																	

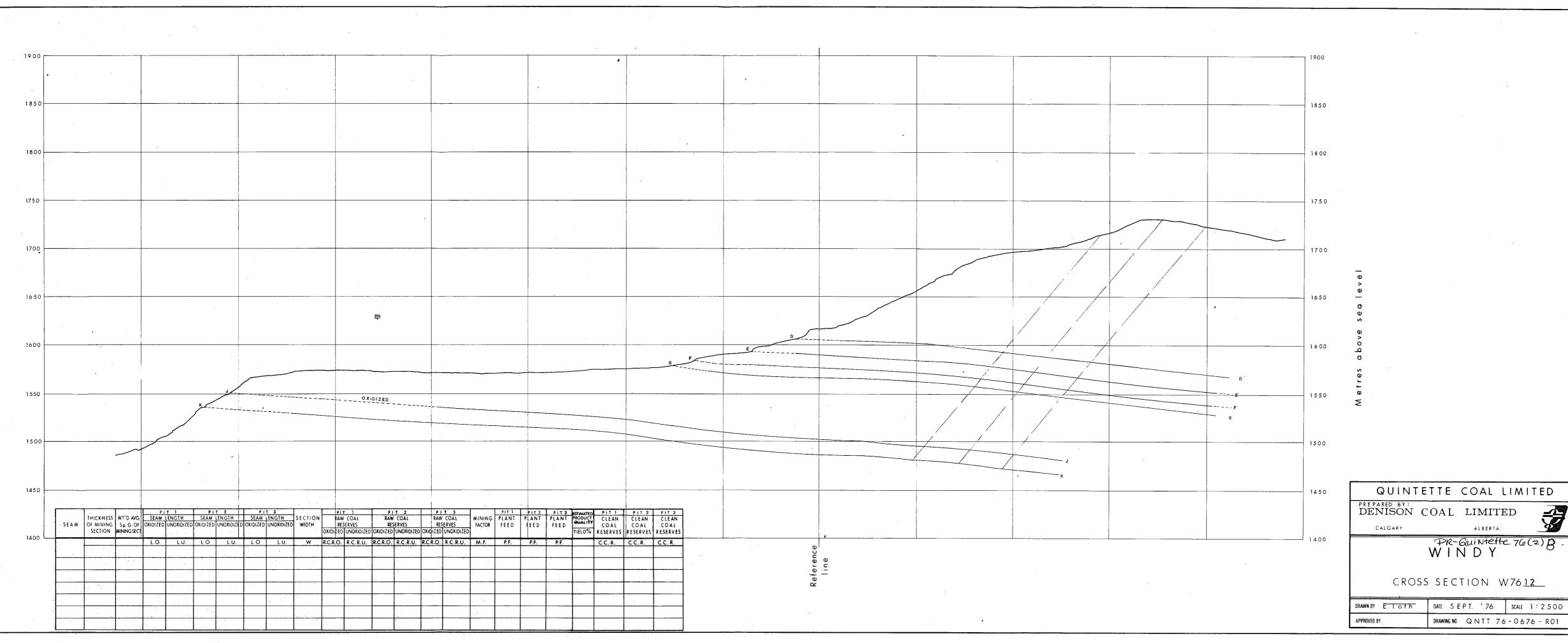


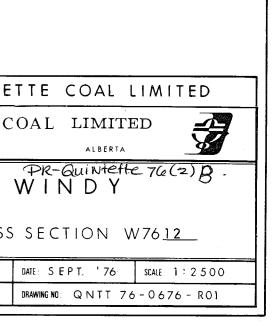


																<u> </u>				-					ang ting tang ting ting ting ting ting ting ting ti	
																						:				
																-				-						
1900				<u>.</u>									• •													
														-												
							-					· .				• •			:	•						
1850				<u>+</u>			:	,			·											· · ·			· ·	
	•						ε								-							•				
									L.															-		
1800											,				•							······································			· · · ·	
															-		,									
1750													·	•						•.	-					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•								-	,	•									2	•				
														,			÷.						1			
1700									×			. :				·	•				-	•				
				-									r	-											· ·	
																			-							
1650																			-	 .			•.	•		
													· .									1	-		-	
																									· ·	
1600						•												*	-				6	F		
																						· · ·				
								OXIDIZED																	-	
1550					ĸ											······								-	:	
							-			3																
1500			/	T						•															:	
						•												-							-	
																								••.	•	
1450																						•				
	· · · ·	<u>, (</u>		P	17 1	1 P +	T 2		т 3			T 1	1	T 2		т з	· · ·	PLT, 1	PIT 2	PIT3	1	P (T 1	P1T 2	PIT 3	1	
	SEA M	THICKNESS OF MINING SECTION	WT'D AVG. Sp.G.OF	SEAM	LENGTH	SEAM	LENGTH	SEAM	LENGTH	SECTION	N RAY	V COAL SERVES	RAW	COAL SERVES	RAV	ERVES	FACTOR	PLANT FEED	PLANT	PLANT	PRODUCT	CLEAN COAL	CLEAN COAL	CLEAN COAL		
1400		SECTION	MINING SEC	L.O.		· L'O .		L.O		w		R.C.R.U.					M.F.	P.F.	P. F.	P.F.	YIELD%	RESERVES	RESERVES	RESERVES		
										<u>.</u>			· .						-							
Ξ.			+	+					- 				-													
															, <u>, ,</u> ,						. 7]	
			-	 									<u> </u>										· · ·		-	
:		1		1.								1	+		+					<u> </u>	+					

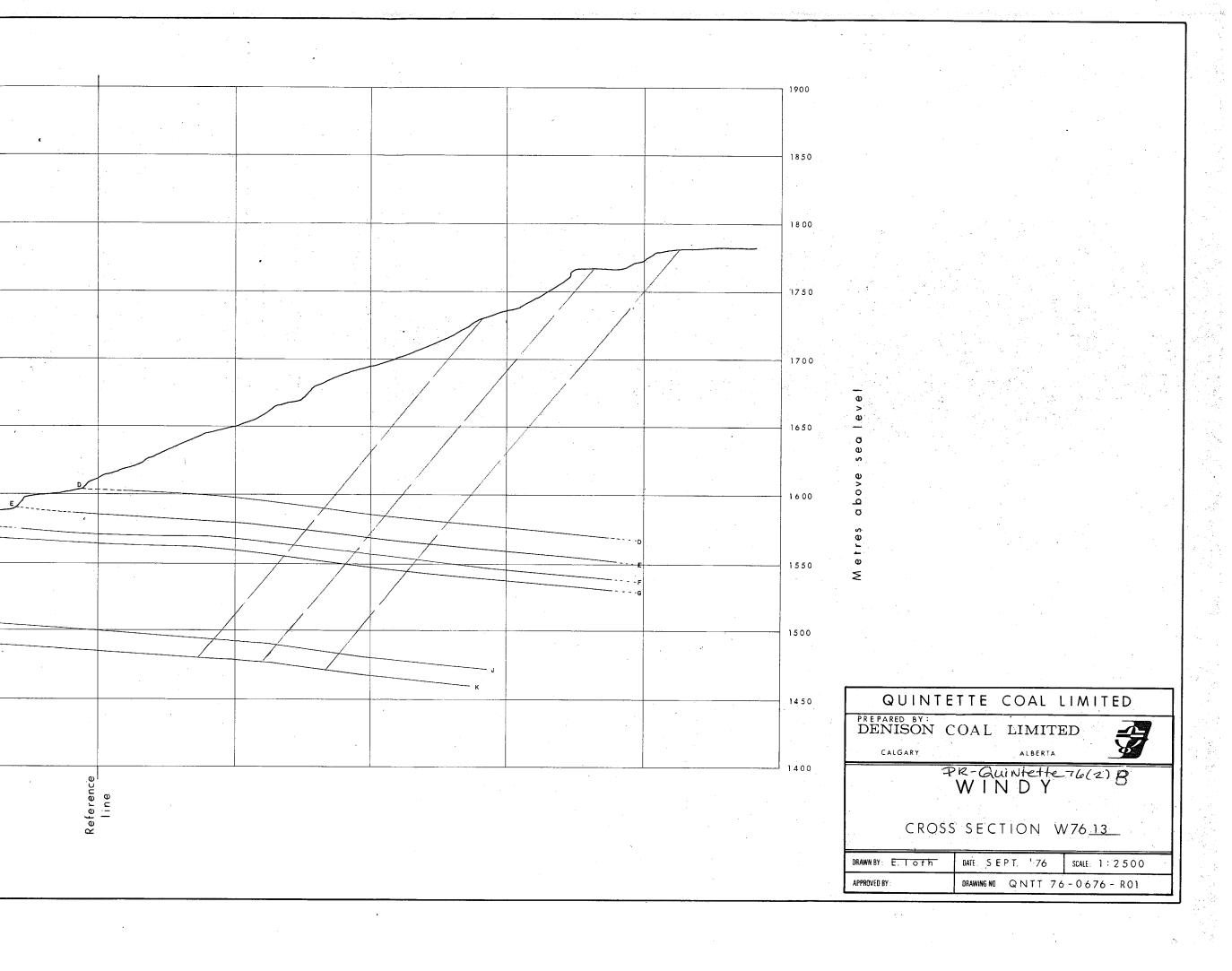




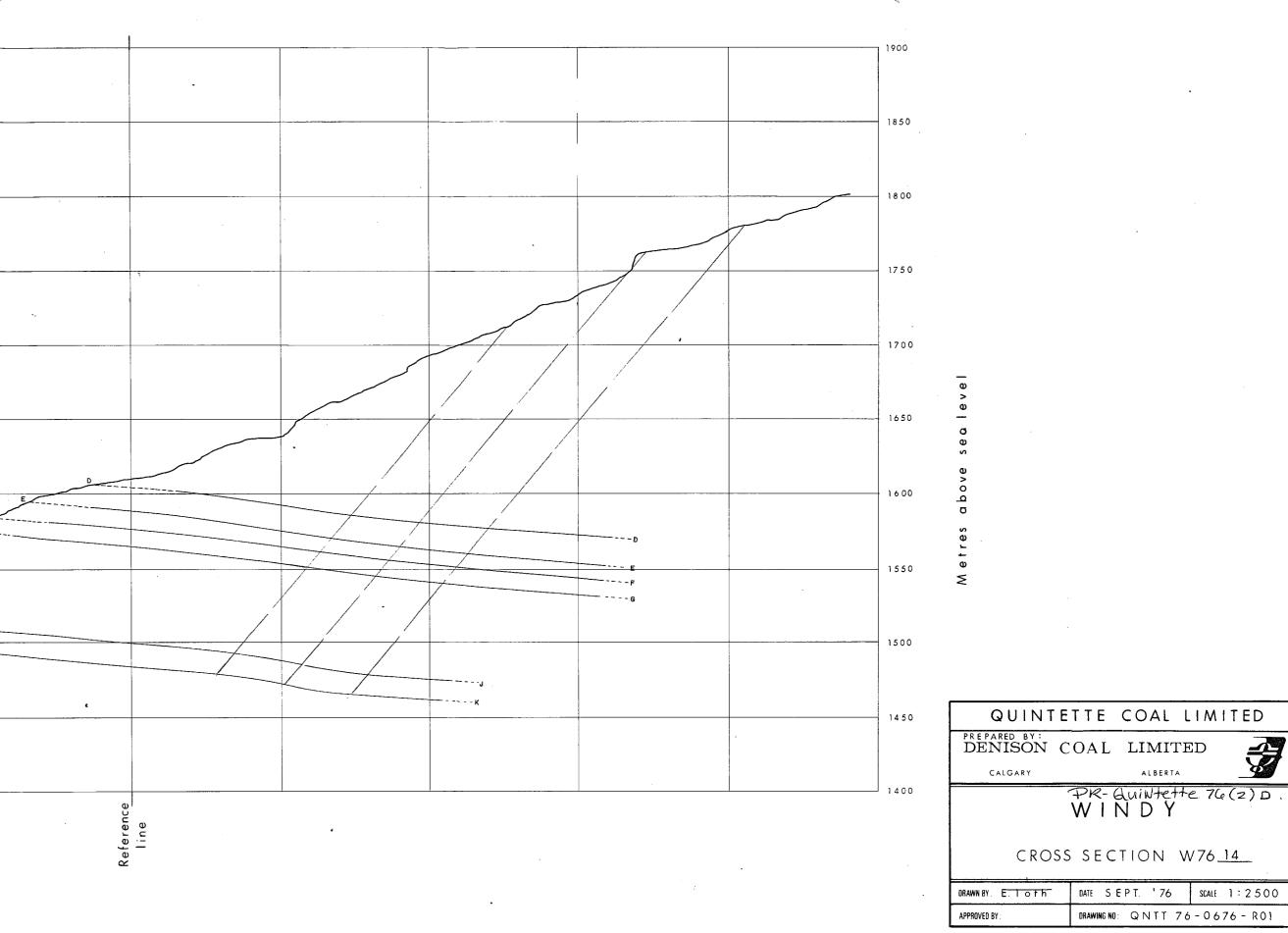


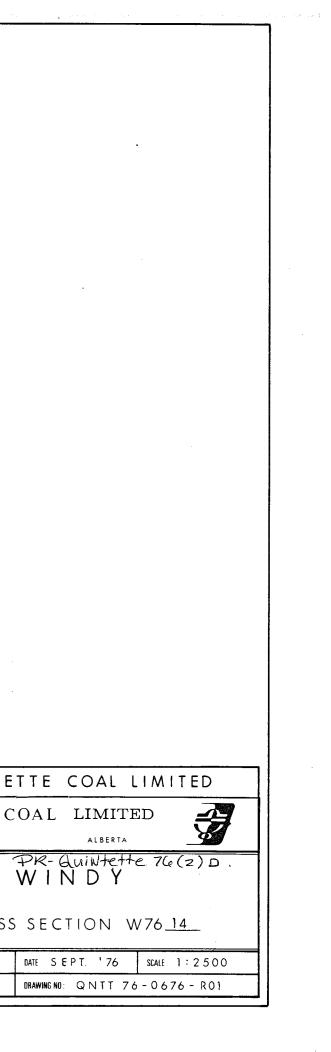


1800 —												•		- '			·							•			
1750 -						-						•										· · · ·			-		
1650						e .						[•] · .															
1600 -							· · · · · · · · · · · · · · · · · · ·	,																· · · · · · · · · · · · · · · · · · ·			<u>.</u>
1550																·								6	F		
1500								ĸ					0XID	DIZED													
1450																,						•		· · · · · · · · · · · · · · · · · · ·			
	S E A M	THICKNESS WT OF MINING S SECTION MIN	p. G. OF OX ING SECT		IGTH IOXIDIZED OX	XIDIZED U	LENGTH UNOXIDIZE	SEAM D OXIDIZED	UNOXIDIZED		RAW RE OXIDIZED	T 1 V COAL SERVES UNOXIDIZED	RAW RES OXIDIZED		RAW RES OXIDIZED						YIELD%	RESERVES		PIT 3 CLEAN COAL RESERVES			
	SEAM	THICKNESS WI OF MINING S SECTION MIN	p. G. OF OX ING SECT	SEAM LENG	IGTH IOXIDIZED OX	SEAM 1	1 EN GTH	SEAM D OXIDIZED	IENGTH	WIDTH	RAW RE OXIDIZED	/ COAL	RAW RES OXIDIZED	COAL ERVES UNOXIDIZED	RAW RES OXIDIZED	COAL ERVES UNOXIDIZED	MINING FACTOR M.F.	PIT I PLANT FEED P.F.	PLANT FEED P.F.	PIT3 PLANT FEED P.F.	YIELD%	RESERVES	CLEAN COAL RESERVES	CEEAN COAL		```	
THICKNESS WI'D AVG I SEAM IF	THICKNESS WT'D AVG. SEAM LE OF MINING Sp. G. OF SECTION MININGSECT L.O.	D. AVG. <u>SEAM LE</u> G. OF OXIDIZED U ING SECT	DIZED U	N (IGTH IOXIDIZED OX	SEAM LE XIDIZED U	LENGTH UNOXIDIZE	SEAM D OXIDIZED	LENGTH UNOXIDIZED	WIDTH	RAW RE OXIDIZED	V COAL SERVES UNOXIDIZED	RAW RES OXIDIZED	COAL ERVES UNOXIDIZED	RAW RES OXIDIZED	COAL ERVES UNOXIDIZED	FACTOR	P. F.			YIELD%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVES C.C.R.		x	

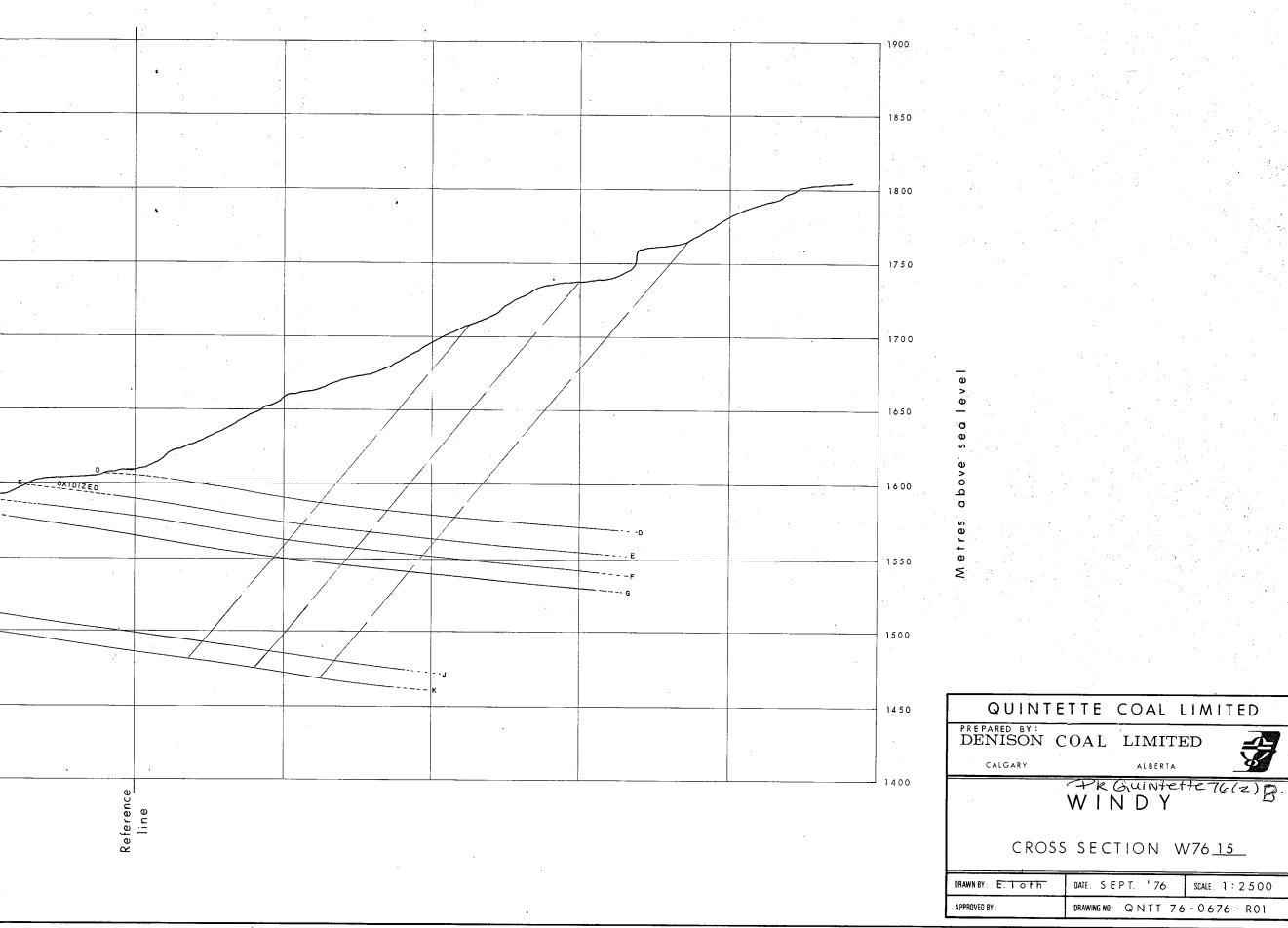


				 		<u> </u>	 			· .											•					
•																										
19	00						 -			. <u> </u>							<u> </u>			-						
18	350																					•				
18	800 -	· · · · ·																							.	
17:	50							- - - -																		
17	700 -																									
16	550 -																		e						· · · ·	
16	500			 				<u> </u>											_						6	F
15	550 -			 								ĸ	OXI			_										
15	500-						 									-										
14	450 -			 										•												
14	400		SEA M	 W T ' D. AVG. S p. G. OF MINING SECT	EAM SEAM OXIDIZED		T 2 ENGTH UNOXIDIZED L.U.	PI SEAM OXIDIZED LO	LEN GTH UNOXIDIZED	SECTION WIDTH	OXIDIZED		RAW RES OXIDIZED		RA R OXIDIZE	IT 3 W COAL ESERVES D UNOXIDIZED	2	PIT 1 PLANT FEED P.F.	PIT-2 PLANT FEED P.F.	PIT3 PLANT EEED P.F.	ESTIMATED PRODUCT QUALITY YIELD%	CLEAN COAL RESERVES C.C.R.	PIT 2 CLEAN COAL RESERVES C.C.R.	CLEAN		
							· · · · · · · · · · · · · · · · · · ·																			

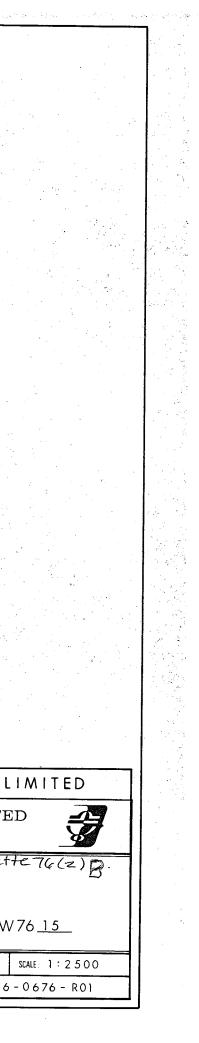




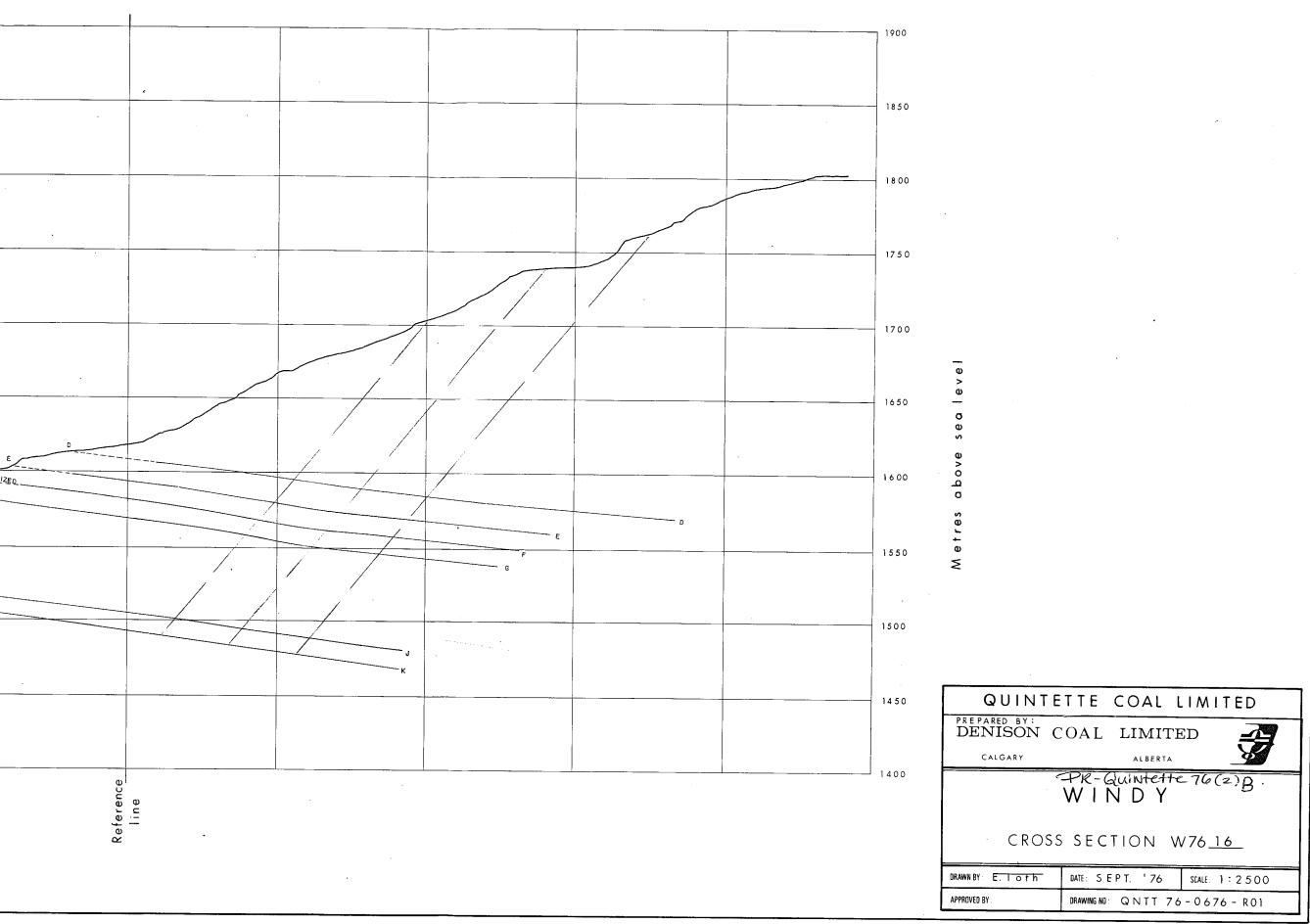
		1900																										
		1850																		•				. <u></u>				
		Ì												-														
		1800 -																					,					
			•											.*														
																											,	
	-	1750 -																										<u></u>
																								•		÷.,		
		1700																* 										
																										•		
		1650-																										
	۰																											
		1600																							-			
									, ,														·				G	
1500 PT 2 PT 3 PT 3 <th< td=""><td></td><td>1550</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>		1550																										
1500 PT 2 PT 3 PT 3 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>`</td><td></td><td></td><td></td><td></td><td></td><td></td><td>ĸ</td><td>U.</td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>											`							ĸ	U.		_							
1500 1450																												- - -
1450 1450 PLT_1 PLT_2 PLT_3		1500								•				-						·								
1450 PIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 PIT 3 PIT 1 PIT 2 PIT 3														\smile									1					
1450 PIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 PIT 3 PIT 1 PIT 2 PIT 3																												
1400 1400 L.O. L.U. L.O. L.U. L.O. L.U. V RCRO, RCRO, RCRO, RCR, R.F. C.A. C.A. <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													•	•														
1400 SECTION MININGSEC SECRUES RESERVES RESERVES RESERVES RESERVES RESERVES RESERVES 1400 L.O. L.O. L.U. L.O. L.U. W RCR.O. RC.R.U. RCR.O. RC.R.U. M.F. PF. PF. C.C. R. C.C.		1450 -							ľ																			
1400 SECTION MININGSEC SECRUES RESERVES RESERVES RESERVES RESERVES RESERVES RESERVES 1400 L.O. L.O. L.U. L.O. L.U. W RCR.O. RC.R.U. RCR.O. RC.R.U. M.F. PF. PF. C.C. R. C.C.				THICKNE		P SFAM		P I SEAM	T 2	P I SEAM	T 3	SECTION			P	T 2	P		NINUNČ	PIT 1 PLANT	PIT 2	· PIT3	ESTIMATED	PIT 1	PIT 2	PIT 3	1	
1400 LU LO LU LO LU V RCRO RCRU RCRO RCRU M.F. PF. PF. PF. CC.R. CC.R. CC.R. CC.R. 			SEAM	OF MININ SECTION	G Sp.G.O	F OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZE	OXIDIZED	UNOXIDIZED	WIDTH		SERVES	RE			SERVES	FACTOR	FEED	EEED	FEED	PUALITY	COAL	I COAL	COAL		
Image: Note of the state o		1400 L																		P. F.	P. F.	P.F.				1		
Image: Note of the state o				,	-					-									_									
																							<u> </u>	ļ				
								-											1				<u> </u>			<u>.</u>	1.	
												1						-								•.		
				<u> </u>			-	. · ·			• •						 		-				 .				4	
				<u></u>				1		1		<u> </u>	<u> </u>		L	<u> </u>	<u> </u>	<u> </u>	<u> </u>				<u> </u>			<u> </u>]	



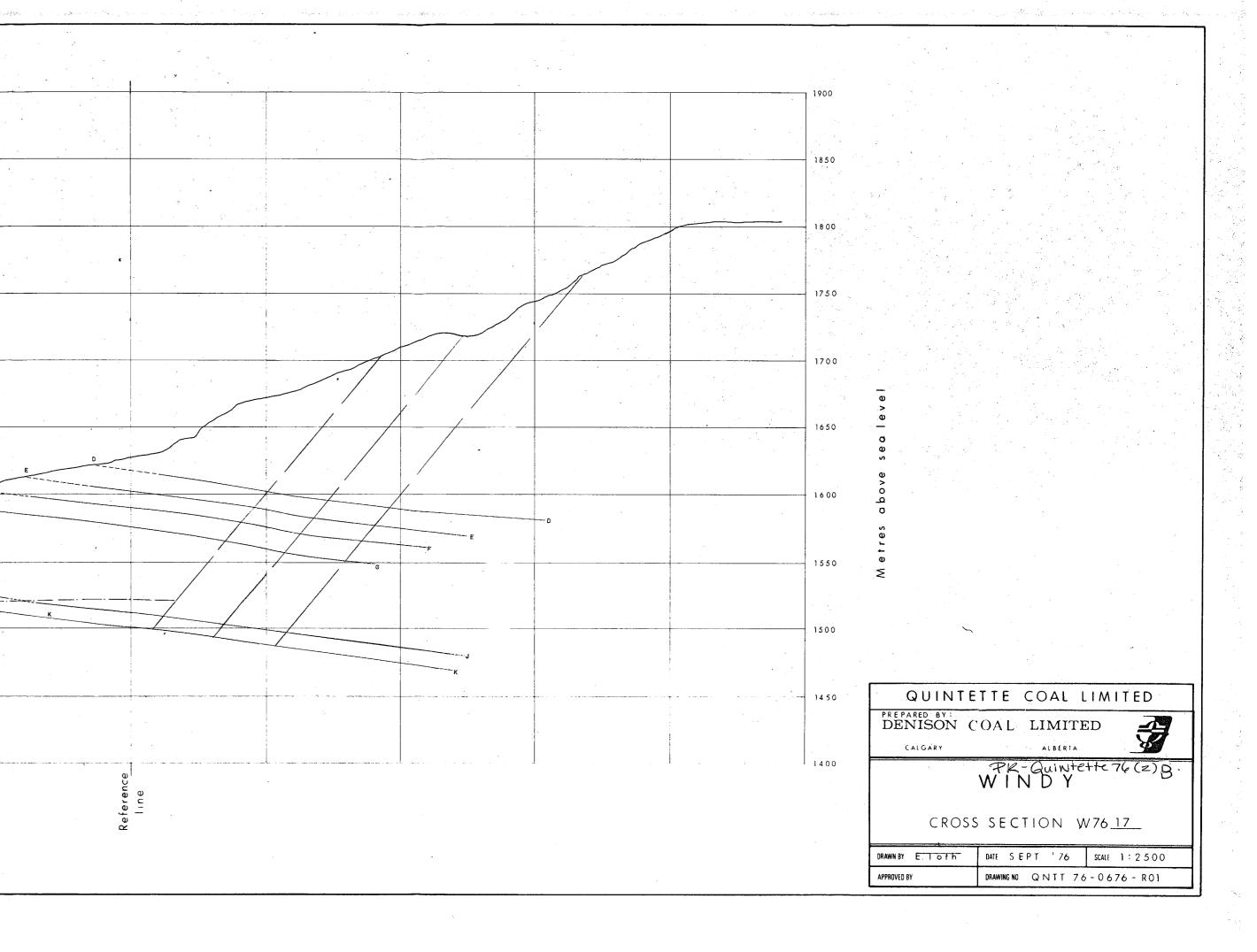
. .



. 1900	-			1																						
1850					•																					
		-																				<u> </u>				
1800		<u></u>						·																		
1750									•											· .						
1700												•				•										
1650	<u> </u>		•																							
1600																								,		
1550 -	• .																					-				
1500-				-														ĸ								
									•			/														
- 1450 -	SEAM	THICKNESS OF MINING SECTION	WT'D AVG. Sp.G.OF	SEAM OXIDIZED	T 1 LEN GTH UNOXIDIZED	P I SEAM OXIDIZED	T 2 LENGTH UNOXIDIZED	P 1 SEAM OXIDIZED	T 3 LENGTH UNOXIDIZED	SECTION	I RAV	T 1 V COAL SERVES	RAW	T 2 COAL SERVES	P RAV	IT 3 W COAL SERVES	MINING	PIT 1 PLANT	PIT 2 P.ANT	PIT 3. PLANT FEED	ESTIMATED PRODUCT QUALITY	PIT 1 CLEAN	PIT 2 CLEAN	CLEAN		· · · ·
1400		SECTION	MINING SECT	L.O.				L.O				R.C.R.U.	OXIDIZED	UNOXIDIZE	DOXIDIZE	DUNOXIDIZED	M.F.	P.F.	P.F.	P.F.	YIELD%	RESERVES	COAL RESERVES	COAL RESERVE	5	
2 ¹		- x		· · · · · ·					\$	· .								· · · · ·								
	,				i				•										 				· ·]	-

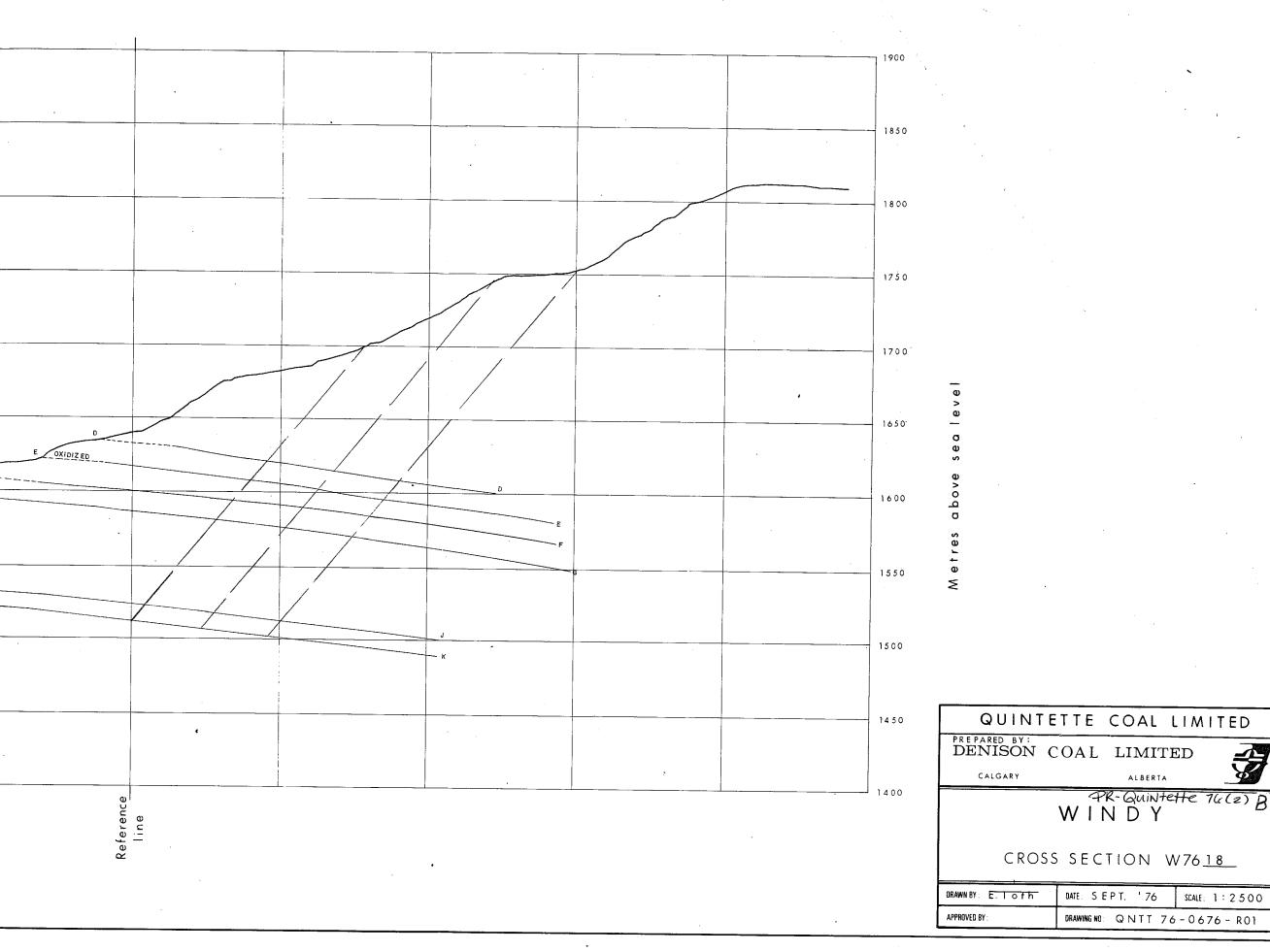


							- · · ·	<u></u>															• •			
																•	-			*.						
	900		<u> </u>											-	-				-							r .
					,											2.			4. ·		•					
																	·	-							*	4.
	1850																					~	•			
																		•		-						
	1800		· · · · ·																	•			• - -			
															•											
	1750								.					·		-										
											· .			~												
	1700		-					-	· ·	-	-								-							
1600 4 6 1500 4 6 1500 4 6 1500 4 6 1500 4 6 1500 5 6 1500 6 6 1500 6 6 1500 6 6 1500 7 7 1500 7 7 1500 7 7 1500 8 7 1500 8 8 1500 8 8 1500 8 8 1500 8 8 1500 8 8 1500 8 8 1600 8 8 1610 10 10 10 160 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 1	.,										•															
1600 4 6 1500 4 6 1500 4 6 1500 4 6 1500 4 6 1500 5 6 1500 6 6 1500 6 6 1500 6 6 1500 7 7 1500 7 7 1500 7 7 1500 8 7 1500 8 8 1500 8 8 1500 8 8 1500 8 8 1500 8 8 1500 8 8 1600 8 8 1610 10 10 10 160 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 1																										
1500 SEAD PTT I PTT 2 PTT 3 P	1650				×								_							· · .						
1500 5	1													·												
15 D0 16 D	1600												····	,								-			G	
15 D0 16 D																							~~~			
ISOD PLT PLT <td>1550</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>• •</td> <td>n</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td> ·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1550		1							• •	n									·						
1450 PIT I PIT Z																						OXIDIZ	ED			
1450 PIT I PIT 2 PIT 3 PIT 3 PIT 3 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING Sp. G. OF OKIDIZED UNOXIDIZED UNOXIDIZED OKIDIZED UNOXIDIZED UNO																	ſ			-				K		
Internet Pit 1 Pit 2 Pit 3 Set M Pit 1 Pit 2 Pit 3 Raw COAL	1500		k									•									•					
1400 PIT 1 PIT 2 PIT 3 SECTION RAW COAL RESERVES RAW COAL RESERVES RAW COAL RESERVES PIT 3 PIT 1 PIT 2 PIT 3 STMATED PIT 1 PIT 2 PIT 3 1400 SEAM LENGTH SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION RAW COAL RAW														-	~											
1400 SECTION MINNOSECT VIEL 0° RESERVES	1450										· · · · · · · · · · · · · · · · · · ·						-						· · ·			
1400 SECTION MINNOSECT VIEL 0° RESERVES			THICKNESS	WT'D. AVÇ.	SEAM	TENGTH	SEAM	I FN GTH	SEAM	LENGTH	SECTION	RAV	V COAL	RAW	COAL	RAW	T 3 COAL	MINING	PLANT	PIT 2 PLANT	PIT 3 PLANT	ESTIMATED PRODUCT	PIT 1 CLEAN	CLEAN	CLEAN	
Image: Series of the series	1400	SEAM	OF MINING SECTION	S.p.G.OF MINING SECT								OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED					YIELD%	RESERVES	RESERVES	RESERVES	
																			1.14							
		;	· · ·					· · ·																-		
								-					- 							· · · · · ·						
																	-									



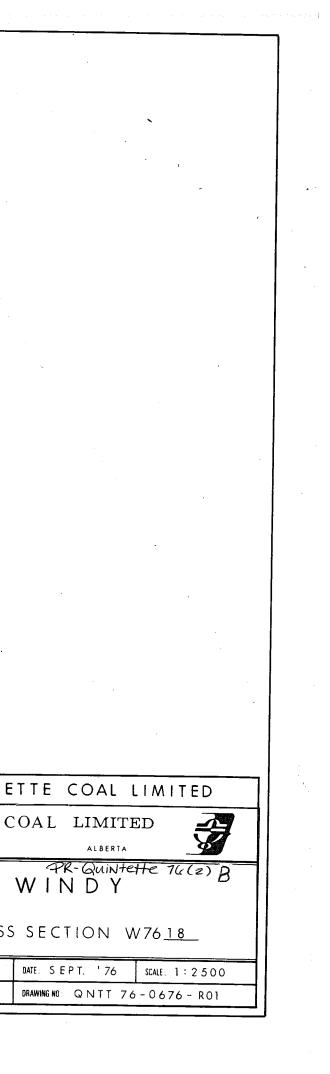
		-						·																٠			
1900															F~											,	
	•																						r				
1850-	·									<u></u>										·	-						
1800-													-														
750 -		+			······································														-								_
										-																	
700 -																											
																						•					
	¢.																										
550	19 <u>1</u>																						<u> </u>	<u>.</u>		·	
										-								-									
600																								G			
																	•										
																				/						p.	
550 -																		ŀ		<u>/</u>							
00	·····		<u> </u>														/									· .	
450		 ·																						<u></u>	_		
	SEAM		s wt'd avg	SEAM		SFAM	T 2 LENGTH	SEAM	T 3	SECTION	RAW	r 1 COAL	P I RAW	T 2 COAL ERVES	P RA	IT 3 W CQAL ESERVES	MINING	PIT 1 PLANT	PIT 2 PLANT	PIT 3 PLANT FFFD	ESTIMATED PRODUCT	PIT 1 CLEAN	CLEAN	PIT 3 CLEAN			
400	JLAM	OF MINING SECTION	MINING SEC	L.O.		LO					OXIDIZED		OXIDIZED	UNOXIDIZE	DOXIDIZE	ESERVES DUNOXIDIZED		·	FEED			RESERVES	COAL RESERVES	COAL RESERVE			-
											R.C.R.U.	K.C.K.U.	R.C.R.U.		R.C.R.O	. <u>K.C.K.U.</u>	M.F.	P.F.	P. F.	P.F.		C.C. R.	C.C. R.	C.C.R.			
					1 P																				_		
														•							-		· · · ·	†			
	· · · · · · · · · · · · · · · · · · ·															a	:							<u> </u>	-		
		<u> </u>																									

• --



Charles and the second

-



| | | | | | | | | | | |
 |

 | | | | |
 | |
 | | | | •
•
 | • | |
|---------------------------------------|-----------------------------------|---|---|--|---|---|--|--|--|---

--
--
---|---|--|--|--|--

--|---
--|---|--|---
--|
| | | | | | | | | | | |
 |

 | | | | |
 | |
 | | | | | | | | | | | |
 | | |
| | | | | | • | | | | | |
 |

 | • | | · · · | - | -
-
-
-
 | |
 | | - | | · · · · · · · · · · · · · · · · · · ·
 | | |
| | | | | | | | | | <u> </u> | × |
 |

 | | - | | |
 | |
 | | | | | | | | | | | |
 | | |
| | | | | • | | | | | | |
 |

 | | | | |
 | |
 | | | | | | | | | | | |
 | · . | |
| | | | | | | | | | | |
 |

 | | | z., | |
 | |
 | | | | | | | | | | | |
 | | |
| | | | | | | | | | | |
 |

 | | | | |
 | |
 | | | 6 | | | | | | | | |
 | F | |
| | | | | | | | | | | |
 |

 | | | | |
 | 1 |
 | | | | · · ·
 | | - |
| | | | | | | | | | | - |
 |

 | | | | |
 | |
 | | | | | | | | | | | |
 | | |
| • | | | | | × | | - | | | |
 |

 | | | | |
 | |
 | | | ¥ |
 | | |
| SEAM | THICKNESS
OF MINING
SECTION | WT'D. AVG.
S.p. G. OF
MINING SEGT | SEAM I | LENGTH | SEAM L | ENGTH | SEAM L | ENGTH | WIDTH | RAV | COAL
 | P I
RAW
RES

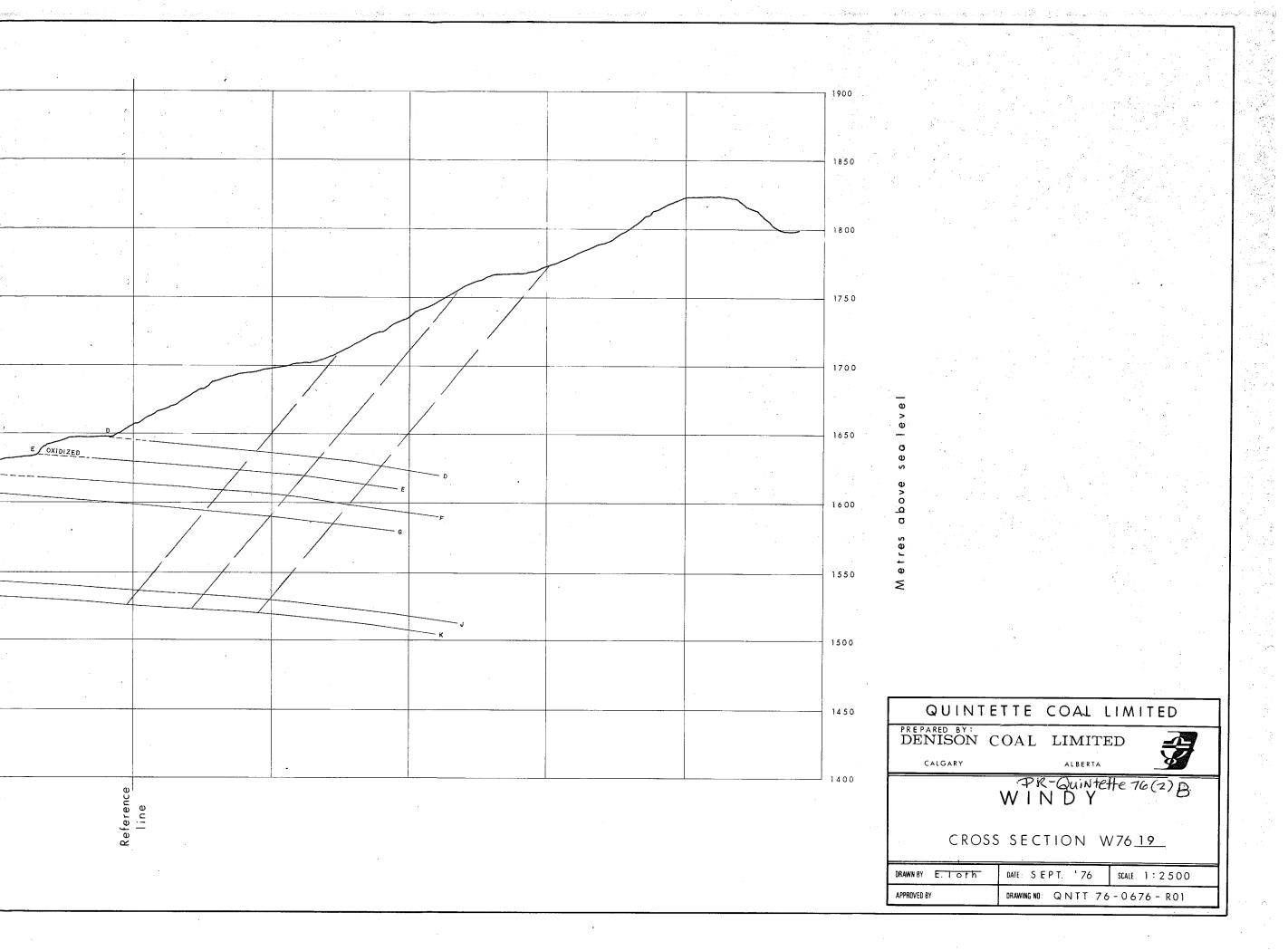
 | F COAL
SERVES | RAW | COAL | FACTOR | PIT 1
PLANT
FEED
 | PIT 2
PLANT
FEED | PIT 3
PLANT
FEED
 | | | CLEAN
COAL | PIT 3
CLEAN
COAL
RESERVES
 | | |
| · · · · · · · · · · · · · · · · · · · | | | | U.U. | LO | <u>L.U.</u> | L.O . | . L.U. | | |
 |

 | | | | M. F. | P.F.
 | P.F. | <u>P.F.</u>
 | | C.C.R. | <u>C.C.R</u> | C.C.R.
 | | - |
| | | | | | | | | | | |
 |

 | - | | | - |
 | |
 | | | | | | | | | | | | | | | | | | | | | | | | | | |
 | | |
| | SEA M | SEAM THICKNESS
OF MINING
SECTION | SEAM THICKNESS WT'DAVC
OF MINING
SECTION MININGSECT | SEAM
SEAM
SEAM
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION
SECTION | SEAM THICKNESS WT'D AVG SEAM LENGTH
OF MINING SP. G. OF OXIDIZED UNOXIDIZED
SECTION MININGSECT
L.O. L.U. | SEAM THICKNESS WT'D AVG
SEAM OF MINING SP. G. OF
SECTION MINING SEQT UNOXIDIZED OXIDIZED
L.O.L.U.L.O | SEAM OF MINING SECTION MINING SECT L.O. L.U. L.O. L.U. | SEAM THICKNESS WT'D AVG
OF MINING Sp. G. OF
SECTION MINING SEQT
UNOXIDIZED UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED UNOXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED UNOXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED UNOXIDIZED
UNOXIDIZED UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED UNOXIDIZED UNOXIDIZED
UNOXIDIZED UNOXIDIZED UNOXIDIZED UNOXIDIZED UNOXIDIZED UNOXIDIZED
UNOXIDIZED UNOXIDIZED UNOX | SEAM THICKNESS
OF MINING
SECTION WT'D.AVG
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SEAM LENGTH
SEAM LENGTH Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Stand Length Stand Length Stand Length Image: Section of the seam length Image: Section of the seam length Stand Length Stand Length Image: Section of the seam length Image: Section of the seam length Image: Section of the seam length Stand Length Image: Section of the seam length Image: Section of the seam length Image: Section of the seam length Image: Section of the seam length Image: Section of the seam length Image: Section of the seam length Image: Section of the seam length Ima | SEAM THICKNESS
OF MINING
SECTION WT'D.AVG
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SECTION Image: Section of the seam section of the seam section of the seam section of the section of t | SEAM THICKNESS
OF MINING
SECTION WT'D AVG
SP, G. OF
MININGSECT PIT 1
SEAM LENGTH
SEAM LENGTH
OXIDIZED
UNOXIDIZED UNOXIDIZED OXIDIZED
OXIDIZED UNOXIDIZED UNOXIDIZED OXIDIZED
UNOXIDIZED UNOXIDIZED UNOXIDIZED
OXIDIZED UNOXIDIZED UNOXIDIZED
OXIDIZED
UNOXIDIZED UNOXIDIZED UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXIDIZED
UNOXID | SEAM MT'D AVG SPIT 1 PIT 2 PIT 3 SEAM OF MINING
SECTION WT'D AVG SEAM LENGTH SEAM LENGTH SEAM OF MINING
SECTION OXIDIZED UNOXIDIZED UNOXIDIZED MININGSEQT UNOXIDIZED UNOXIDIZED UNOXIDIZED UNOXIDIZED MINING L.O L.U LO L.U W MINING MINING MINING MINING MINING MINING L.O L.U L.O L.U W MINING MINING MINING MINING MINING MINING L.O L.U L.O L.U W MINING MINING MINING MINING MINING MINING </td <td>SEAM WT'D AVG PIT 1 PIT 2 PIT 3 SEAM OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SEAM OF MINING
SECTION SECTION RAW COAL
MININGSECT RAW COAL
RAW LO LU LO LU LO LO LU LO LU M LO LU LO LU M</td> <td>SEA M THICKNESS
OF MINING
SECTION WI'D AVG
SEAM LENGTH PIT 2
SEAM LENGTH PIT 3
SEAM LENGTH PIT 1 PIT 2
SEAM COAL SEA M OF MINING
SECTION Sp. G. OF
MINING SECT OXIDIZED UNOXIDIZED UNOXIDIZED WIDTH RAW COAL
RESERVES RESERVES RESERVES Image: Section MINING SECT L.O L.U LO L.U V RC.R.U. RC.R.U. RC.R.U. Image: Section MINING SECT Image: Section MINING MINING Section MINING Section MINING Section MINING MINING Section MINING MINING MINING Section MINING M</td> <td>SEAM THICKNESS WT'D AVG. PIT 1 PIT 2 PIT 3 SEAM OF MINING Sp. G. OF OKIDIZED VINDIZED VIN</td> <td>SEA M OF MINING
SECTION PIT 1
MINING SEQT PIT 1
SEAM LENGTH
MINING SEQT PIT 2
SEAM LENGTH
SECTION PIT 1
RAW COAL
RAW COAL
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVE</td> <td>SEA M THICKNESS
OF MINING
SECTION PIT 1
SEAM LENGTH PIT 2
SEAM LENGTH PIT 3
SEAM LENGTH PIT 3
SECTION
MINING
SECTION PIT 2
RAW COAL
RAW COAL
MINING
SECTION PIT 2
RAW COAL
RAW COAL
RAW</td> <td>SEA M PIT 1 PIT 2 PIT 3 SEA M THICKNESS WT'D AVG SEAM LENGTH SEAM LENGTH SEA M OF MINING
SP, G, OF SEAM LENGTH SEAM LENGTH SEA M SECTION
MINING SP, C, OF OXID/ZED UNOXID/ZED UNOXID/ZED OXID/ZED UNOXID/ZED OXID/ZED UNOXID/ZED OXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/</td> <td>SEAM THICKNESS
OF MINING
SECTION WTD AND
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SECTION
SEAM LENGTH PLT 1
RAW COAL
RESERVES PLT 2
RESERVES PLT 3
RAW COAL
RESERVES MINING
RESERVES PLT 3
RESERVES MINING
RESERVES PLT 3
RESERVES MINING
RESERVES PLT 4
RESERVES PLT 7
RESERVES PLT 3
RESERVES MINING
RESERVES MINING
RESERVES<td>Inickness WTD AVG EPIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION
WIDTH PIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION Raw COAL
RESERVES RESERVES RESERVES RESERVES FEED FE</td><td>SEA M OF MINING
SECTION STIT PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SECTION RAW COAL
RESERVES RESERVES RESERVES<td>SEAM OF MINING SEAM LO LU LO LU LO LU LO LU W RCRO RCRU RCRU</td><td>SEAM OF MINING SEAV LENGTH SEAV LENGTH SECTION PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 3 PLT</td><td>SEA M PIT 1 PIT 2 PIT 3 PIT 3</td><td>THICKNESS PIT 1 PIT 2 PIT 3 PIT 2 PIT 3 PIT 2 PIT 3 SEAM SECION MINING PIT 3 PIT 3 PIT 3 CEAN CLEAN CLEAN CLEAN COAL COAL COAL COAL COAL COAL COAL COAL COAL CO</td></td></td> | SEAM WT'D AVG PIT 1 PIT 2 PIT 3 SEAM OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SEAM OF MINING
SECTION SECTION RAW COAL
MININGSECT RAW COAL
RAW LO LU LO LU LO LO LU LO LU M LO LU LO LU M | SEA M THICKNESS
OF MINING
SECTION WI'D AVG
SEAM LENGTH PIT 2
SEAM LENGTH PIT 3
SEAM LENGTH PIT 1 PIT 2
SEAM COAL SEA M OF MINING
SECTION Sp. G. OF
MINING SECT OXIDIZED UNOXIDIZED UNOXIDIZED WIDTH RAW COAL
RESERVES RESERVES RESERVES Image: Section MINING SECT L.O L.U LO L.U V RC.R.U. RC.R.U. RC.R.U. Image: Section MINING SECT Image: Section MINING MINING Section MINING Section MINING Section MINING MINING Section MINING MINING MINING Section MINING M | SEAM THICKNESS WT'D AVG. PIT 1 PIT 2 PIT 3 SEAM OF MINING Sp. G. OF OKIDIZED VINDIZED VIN | SEA M OF MINING
SECTION PIT 1
MINING SEQT PIT 1
SEAM LENGTH
MINING SEQT PIT 2
SEAM LENGTH
SECTION PIT 1
RAW COAL
RAW COAL
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVES
RESERVE | SEA M THICKNESS
OF MINING
SECTION PIT 1
SEAM LENGTH PIT 2
SEAM LENGTH PIT 3
SEAM LENGTH PIT 3
SECTION
MINING
SECTION PIT 2
RAW COAL
RAW COAL
MINING
SECTION PIT 2
RAW COAL
RAW | SEA M PIT 1 PIT 2 PIT 3 SEA M THICKNESS WT'D AVG SEAM LENGTH SEAM LENGTH SEA M OF MINING
SP, G, OF SEAM LENGTH SEAM LENGTH SEA M SECTION
MINING SP, C, OF OXID/ZED UNOXID/ZED UNOXID/ZED OXID/ZED UNOXID/ZED OXID/ZED UNOXID/ZED OXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ZED UNOXID/ | SEAM THICKNESS
OF MINING
SECTION WTD AND
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SEAM LENGTH
SEAM LENGTH SECTION
SEAM LENGTH PLT 1
RAW COAL
RESERVES PLT 2
RESERVES PLT 3
RAW COAL
RESERVES MINING
RESERVES PLT 3
RESERVES MINING
RESERVES PLT 3
RESERVES MINING
RESERVES PLT 4
RESERVES PLT 7
RESERVES PLT 3
RESERVES MINING
RESERVES MINING
RESERVES <td>Inickness WTD AVG EPIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION
WIDTH PIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION Raw COAL
RESERVES RESERVES RESERVES RESERVES FEED FE</td> <td>SEA M OF MINING
SECTION STIT PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SECTION RAW COAL
RESERVES RESERVES RESERVES<td>SEAM OF MINING SEAM LO LU LO LU LO LU LO LU W RCRO RCRU RCRU</td><td>SEAM OF MINING SEAV LENGTH SEAV LENGTH SECTION PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 3 PLT</td><td>SEA M PIT 1 PIT 2 PIT 3 PIT 3</td><td>THICKNESS PIT 1 PIT 2 PIT 3 PIT 2 PIT 3 PIT 2 PIT 3 SEAM SECION MINING PIT 3 PIT 3 PIT 3 CEAN CLEAN CLEAN CLEAN COAL COAL COAL COAL COAL COAL COAL COAL COAL CO</td></td> | Inickness WTD AVG EPIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION
WIDTH PIT 1 PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SEAM LENGTH SEAM LENGTH SEAM LENGTH SEAM LENGTH SECTION Raw COAL
RESERVES RESERVES RESERVES RESERVES FEED FE | SEA M OF MINING
SECTION STIT PIT 2 PIT 3 PIT 1 PIT 2 PIT 3 SEA M OF MINING
SECTION SECTION RAW COAL
RESERVES RESERVES RESERVES <td>SEAM OF MINING SEAM LO LU LO LU LO LU LO LU W RCRO RCRU RCRU</td> <td>SEAM OF MINING SEAV LENGTH SEAV LENGTH SECTION PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 3 PLT</td> <td>SEA M PIT 1 PIT 2 PIT 3 PIT 3</td> <td>THICKNESS PIT 1 PIT 2 PIT 3 PIT 2 PIT 3 PIT 2 PIT 3 SEAM SECION MINING PIT 3 PIT 3 PIT 3 CEAN CLEAN CLEAN CLEAN COAL COAL COAL COAL COAL COAL COAL COAL COAL CO</td> | SEAM OF MINING SEAM LO LU LO LU LO LU LO LU W RCRO RCRU RCRU | SEAM OF MINING SEAV LENGTH SEAV LENGTH SECTION PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 2 PLT 3 MINING PLT 1 PLT 3 PLT | SEA M PIT 1 PIT 2 PIT 3 PIT 3 | THICKNESS PIT 1 PIT 2 PIT 3 PIT 2 PIT 3 PIT 2 PIT 3 SEAM SECION MINING PIT 3 PIT 3 PIT 3 CEAN CLEAN CLEAN CLEAN COAL COAL COAL COAL COAL COAL COAL COAL COAL CO |

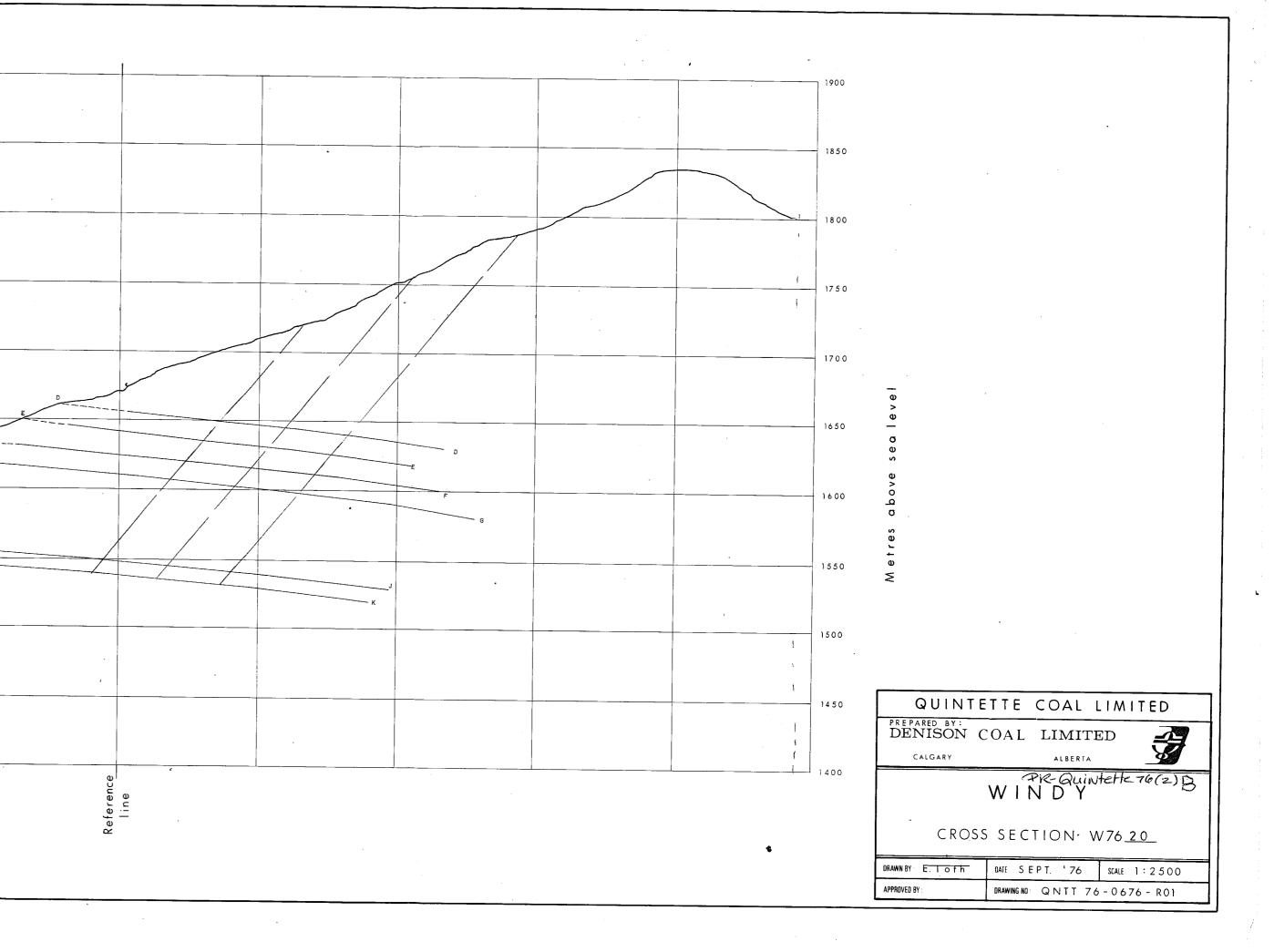
- (_ _ _

6



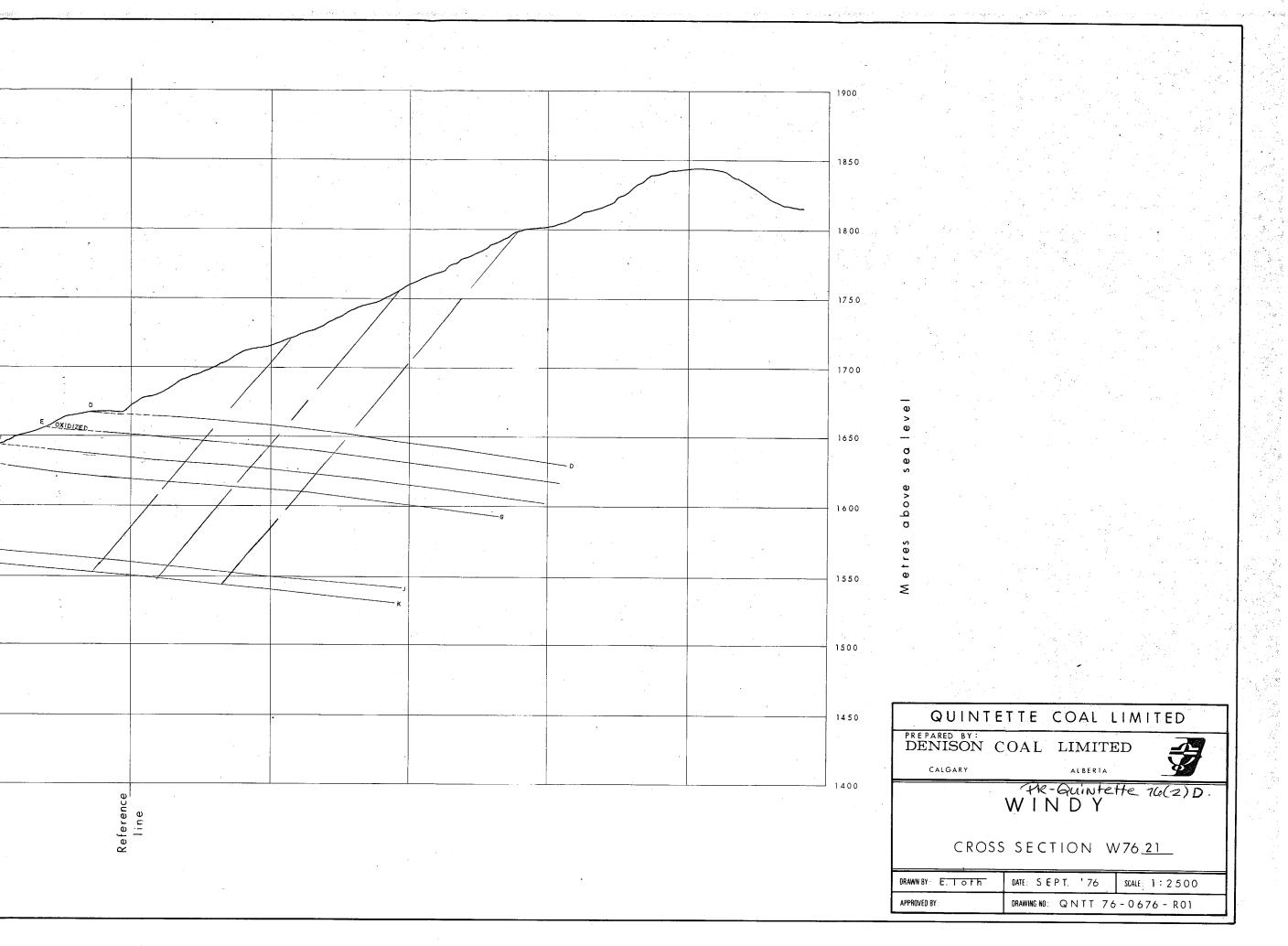
																					·						
1900													-														
1850	>		·								<u></u>									-			:				
1800										•						·									-		
1750																											
1700															········												
1650			•					-																			
				·								-														6	F
1600											·	-				-					3						
1550			- <u></u>		-						 _				•]	*							
1500		•	<u> </u>												1			·					• •				
1450													. .					· ,						-			
		AM	OF MINING	WT'D AVG. Sp. G. OF MINING SECT	SEAM OXIDIZED L.O	L.U.	· SEAM I	2 ENGTH UNOXIDIZED L.U.	SEAM	UNOXIDIZED	SECTION WIDTH	RAV RE OXIDIZED	T 1 W COAL SERVES UNOXIDIZED R.C.R.U.	RAW RES OXIDIZED	T 2 COAL SERVES UNOXIDIZED R.C.R.U.	OXIDIZE	T 3 V COAL SERVES UNOXIDIZED	MINING FACTOR	PIT 1 PLANT FEED P.F.	PIT 2 PLANT FEED P.F.	PIT 3 PLANT FEED P.F.	ESTIMATED PRODUCT QUALITY YIELD%	RESERVES		CLEAN COAL S RESERVES]	-
						*		-																			
1650 1600 1550 1500 1450	SE		OF MINING	WT'D AVG. Sp. G. OF MINING SECT	SEAM OXIDIZED	LENGTH UNOXIDIZED L.U.	PI SEAM I OXIDIZED	2 ENGTH UNOXIDIZE L U.	SEAM OXIDIZED	T 3 LENGTH UNOXIDIZED L.U.	WIDTH W	OXIDIZEL	W COAL SERVES UNOXIDIZEE	RAW RES OXIDIZED	COAL SERVES UNOXIDIZED	OXIDIZE	V COAL SERVES UNOXIDIZED R.C.R.U.	MINING FACTOR	PIT 1 PLANT FEED		PIT3 PLANT FEED P.F.	PRODUCT	PIT 1 CLEAN COAL	CLEAN	CLEAN COAL S RESERVES C.C. R.]	

.*



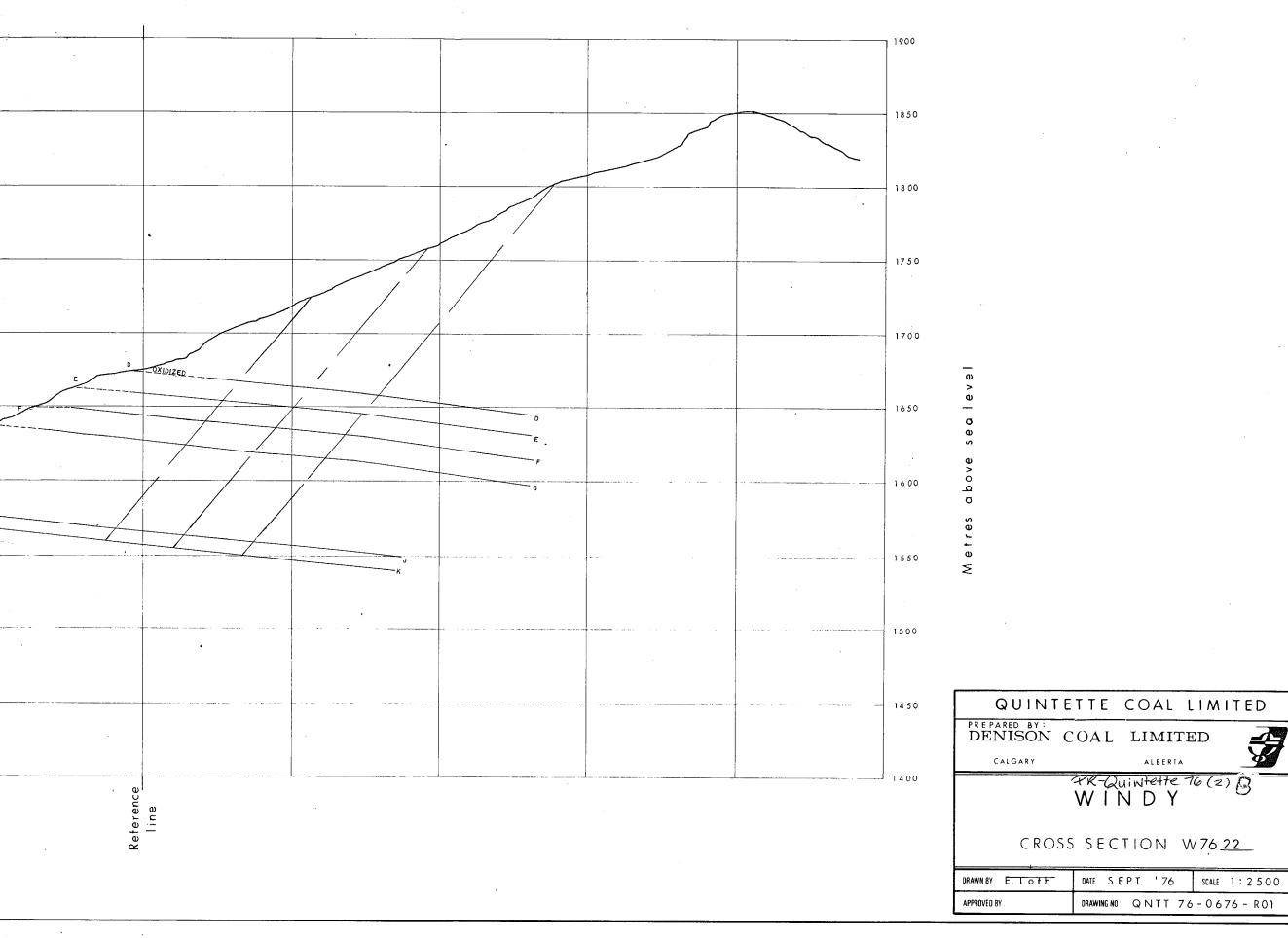
4. Ap. 1

	÷														н н											
	1900 r																· · ·			······			à		۰ ۰	
										x			•		÷										: .	
	1050																		,							
	1850-												e		· .								•		-	
												•			*											
	1800 -		· •				-								· .											
	1750 -	-			-																					
								×															e .		:	
	1700 -													** *					r					<u> </u>		
												-				a.		2								
	1650																		•							
	-																		•							6
×	1600																						/			
		تىي:																			ĸ	<u>,</u>				
	1550 -										1															
					-																				2	
	1500-				:						-					· .				ĺ						
	1500																						•	-		
																		•						-		
	1450 -	 					1 -										· · · · · · · · · · · · · · · · · · ·	······				-				
		S E A M	THICKNESS OF MINING SECTION	WT'D. AVG S.p. G. OF MINING SEC	SEAM OXIDIZED	LENGTH UNOXIDIZED	SEAM OXIDIZED	T 2 LENGTH UNOXIDIZE	D OXIDIZED	T_3 LENGTH UNOXIDIZED	SECTION WIDTH	RA	LT 1 W COAL ESERVES	RAW	T 2 COAL SERVES	RA	AW COAL RESERVES ED UNOXIDIZED	MINING FACTOR	PIT 1 PLANT FEED	PIT 2 PLANT FEED	PIT3 PLANT FEED	ESTIMATED PRODUCT QUALITY	PIT 1 CLEAN COAL DESERVES	PIT 2 CLEAN COAL DESERVES	PIT 3 CLEAN COAL RESERVES	~
	1400 L				L.O.	L.U.	LO	1.0.	LO	£.U.	w	R.C.R.C). R.C.R.U.	R.C.R.O.	R.C.R.U.	R.C.R.C	D. R.C.R.U.	. M. F.	P.F.	P.F.	P.F.		C.C.R.	C.C.R.	C.C.R.	
							4 										1									•
							*							-				· · · · · · · · · · · · · · · · · · ·								
					-		1				21				·					*		<u> </u>				
L			1	<u> </u>	ŀ		<u> </u>	<u> -</u>		:		<u> </u>		<u> </u>							·					

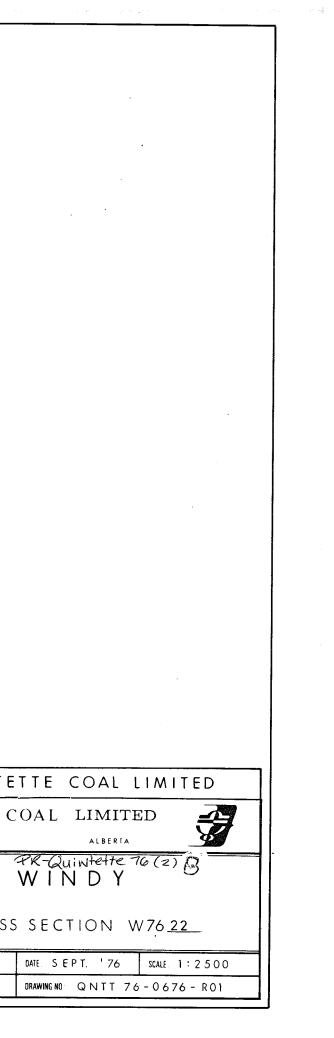


	1900	1																									
	1850)																								· .	
	1000																;										
	1800			i																		-					
	1750											• •															
	1700																										
	1650	,																. <u> </u>									G
	1600										- <u></u>														1		
	1550																						/	*			
ų	1500)					•					۸															
	ŧ.,													-													
	1450		SEAM	THICKNESS OF MINING SECTION	WT'D. AVG. Sp. G. OF	SEAM	T 1 LENGTH UNOXIDIZED	SEAM	T 2	SEAM OXIDIZED	ENGTH	SECTION WIDTH	R/	AW COAL RESERVES	RAW	T 2 COAL SERVES	RAV	V COAL SERVES	MINING	PIT 1 PLANT FEED	PIT 2 PLANT FEED	PIT3 PLANT FEED			PIT 2 CLEAN COAL	PIT 3 CLEÁN COAL	·. · · · · · · · · · · · · · · · · · ·
	1400			SECTION	MINING SECT	L.O.		L O	L U.	L.O	<u>L.U.</u>		OXIDIZ	ED UNOXIDIZE	DOXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED		P.F.	P.F.	P. F.		RESERVES C.C.R.	RESERVES	RESERVES	
			· · · · · · · · · · · · · · · · · · ·																								
																					·						

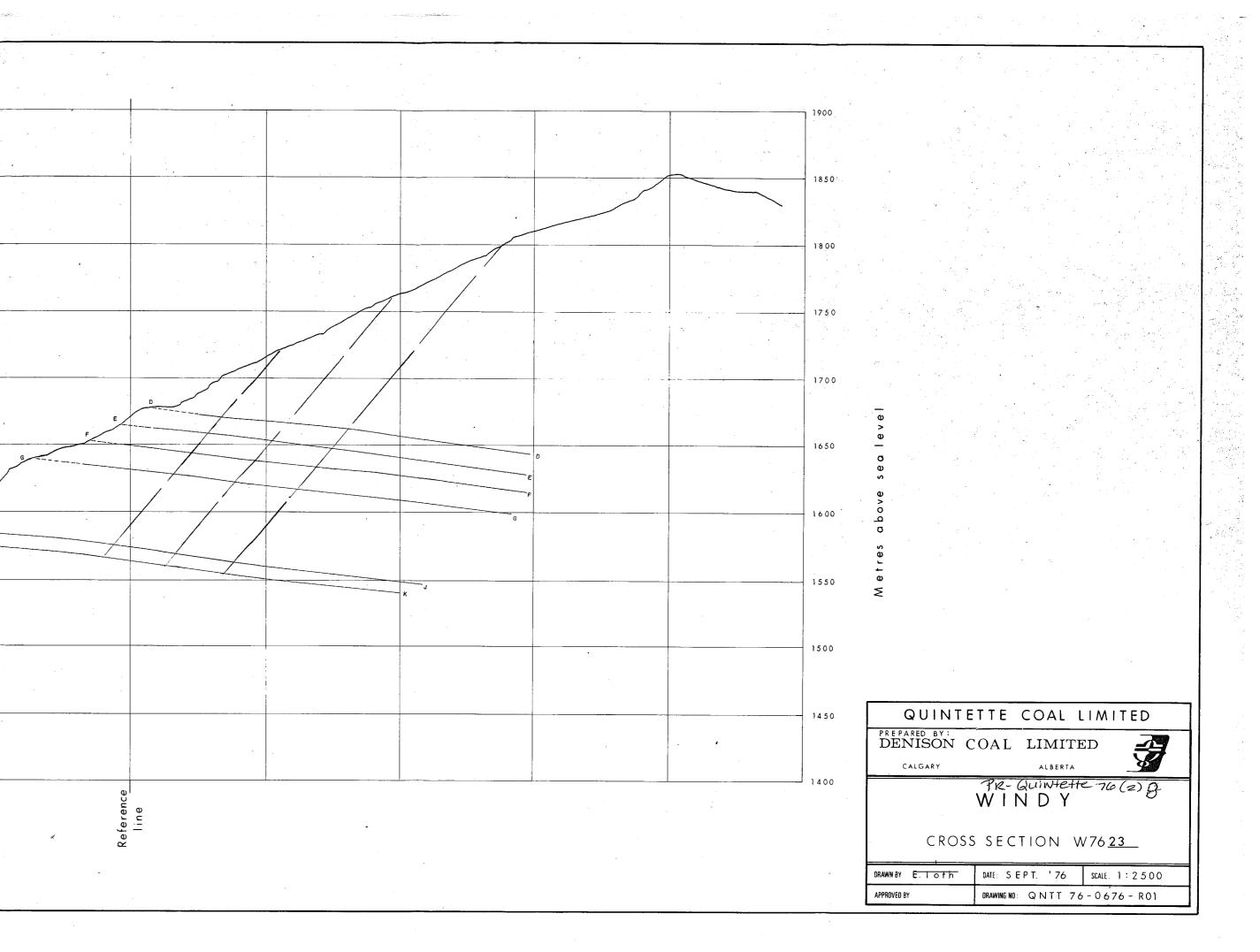
-



- Necd - 2



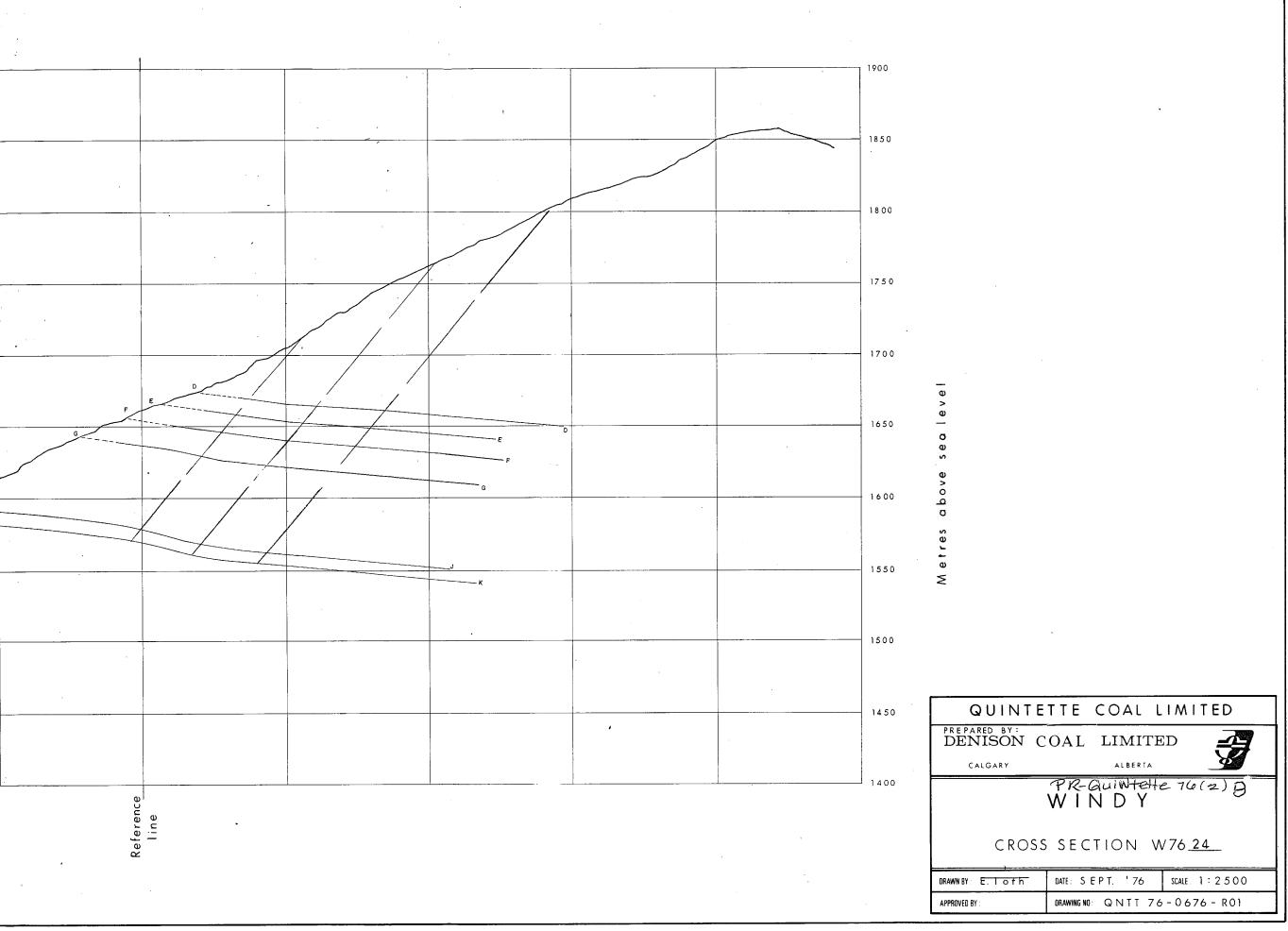
																						•					:
						-																					
1900	i		·																				•				1
																									• • •		-
1850-			· · · · ·													_			· ·				•	~			-+-
	5														-							•					
1800 -									N											1							
						7						5									÷						•
1750 -							· · · ·											· · ·									
												8												•			
1700	,									<u> </u>																	
							×									-											ļ
1650						-																					
								.																-			
1600 -									τ															-			/.
																									K		
					-																						
1550																										·	
-																					_						
. 1500-		. . .				· · · · · ·								•			<u> </u>										
																									-		
1450 -																											
	Г		1 .		I Pi	T 1	T Pi	T 2	P I	T 3		- PI	T 1	PI	T 2	PI	T 3	T	P17 1	PIT 2	PIT 3	STIMATED	PIT 1	PIT 2	PIT 3		
	•	S E A M	THICKNESS OF MINING SECTION	WT'D. AVG. -S.p. G. OF MINING SECT	SEAM L OXIDIZED	ENGTH UNOXIDIZED	SEAM OXIDIZED	LENGTH UNOXIDIZED	SEAM OXIDIZED	LENGTH UNOXIDIZED	SECTION WIDTH	RAN RE OXIDIZEI	N COAL SERVES UNOXIDIZED	RAW RES	T 2 COAL ERVES UNOXIDIZED	RAW RES OXIDIZED	COAL ERVES UNOXIDIZED	MINING FACTOR	PLANT	PLANT	PIT3 PLANT FEED	PRODUCT	CLEAN COAL RESERVES	CLEAN COAL	CLEAN COAL RESERVES		
1400					L.O.	L.U.		ŁU.	L.O	LU.			R.C.R.U.					M. F.	P. F.	P.F.	P.F.		C.C. R.	C.C.R.	C.C.R.		
	F	 						· · ·																			
	 -												· · · · · · · · · · · · · · · · · · ·	-					5				.				
			-				~		· · ·											•							
																									ŀ]	



		•				•																						
19	^{,00}																											
1	850											<u>.</u>									· .		-					-
					-																							
1	800	<u> </u>													,							-						
																										•		
12	750 -																										a annan mheadan	
										·																		
									i																			
ł	700																											
																								٢.				
١	650			• •																	· · ·							
									1														-					
۱	600																-					<u></u>	<u> </u>			K J	\leq	
				. •																								
۱	550				`												-	<u>.</u> :										
۱	1500-		1																									
																								•	3			
					,						. •					,												
1	1450 -														T					PIT 1	PIT 2	1.0.72	Y1	PITI	PIT 2	PIT 3	1	
		s	EAM	THICKNESS OF MINING SECTION	WT'D. AVG S.p. G. OI MINING SEC	SEAM OXIDIZEI		SEAM D OXIDIZED	LENGTH UNOXIDIZE	SEAM D OXIDIZED	LENGTH UNOXIDIZED	SECTION WIDTH	RAW RE OXIEIZED	COAL SERVES	RAW	T 2 COAL RVES UNOXIDIZED	RAW	T 3 COAL SERVES UNOXIDIZED	MINING FACTOR	PLANT FEED	PLANT	PIT 3 PLANT FEED	PRODUCT	CLEAN COAL RESERVES	CLEAN	CLEAN COAL RESERVES		
I	1400 -					'L.Ö.	L.U.	. L O.	L.U.	LO	L.U.	W	R.C.R.O.	R.C.R.U.	R.C.R.O.	R.C.R.U.	R.C.R.O.	R.C.R.U.	M.F.	P. F.	P. F.	P.F.			· C.C. R.	C.C.R.	•	
							-	· · · · · ·			· .																-	
																									 			
								-					· · · · · ·					. <u>.</u>					· · · ·					
						· ·											L		<u> </u>	1				L		<u> </u>	<u> </u>	

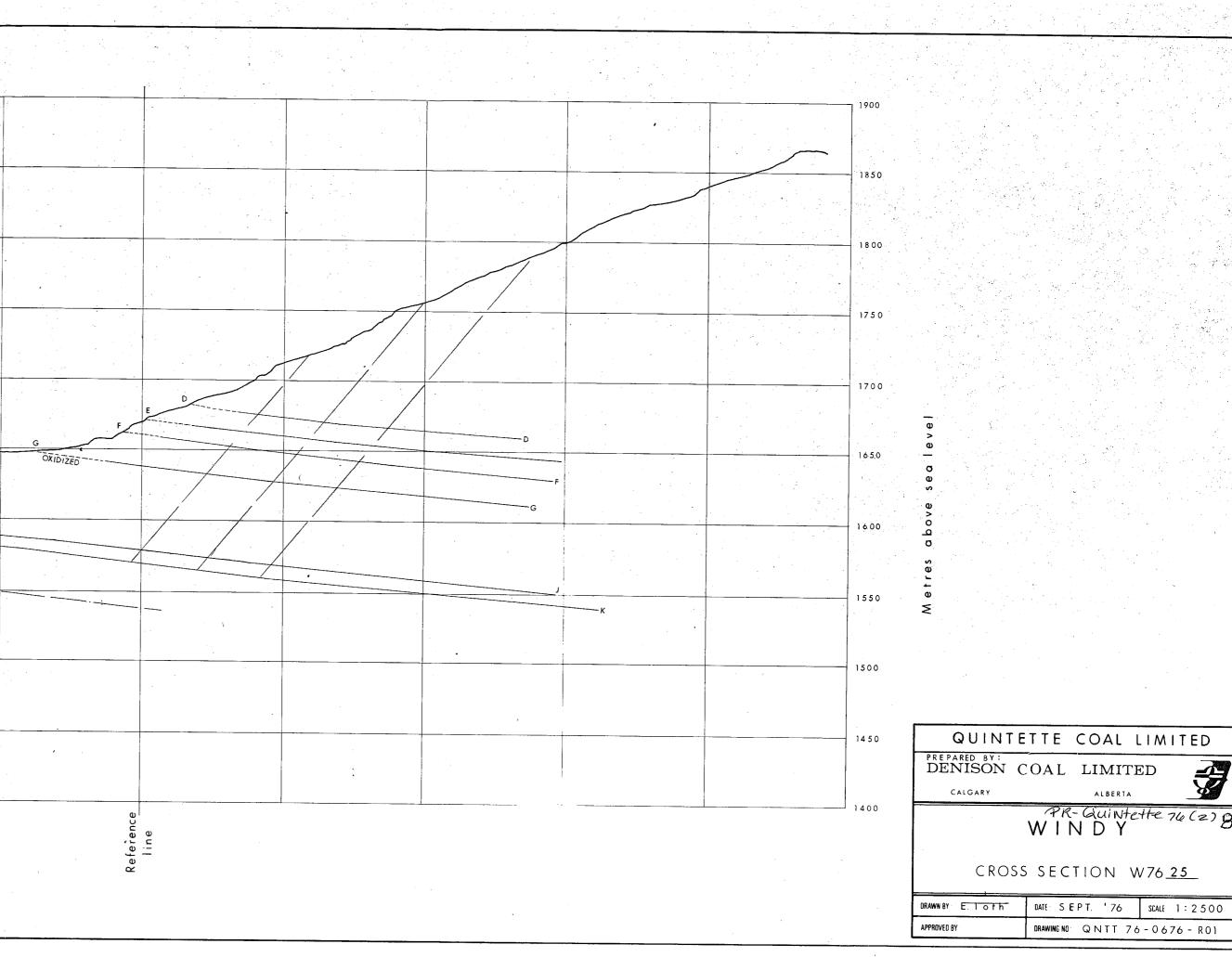
,

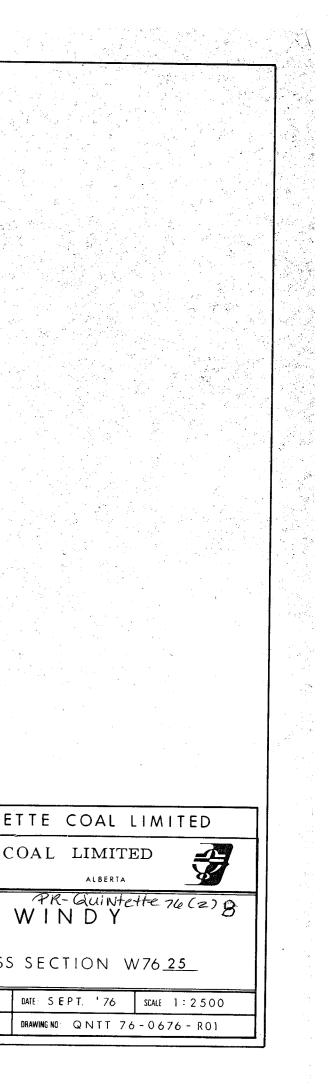
.



.

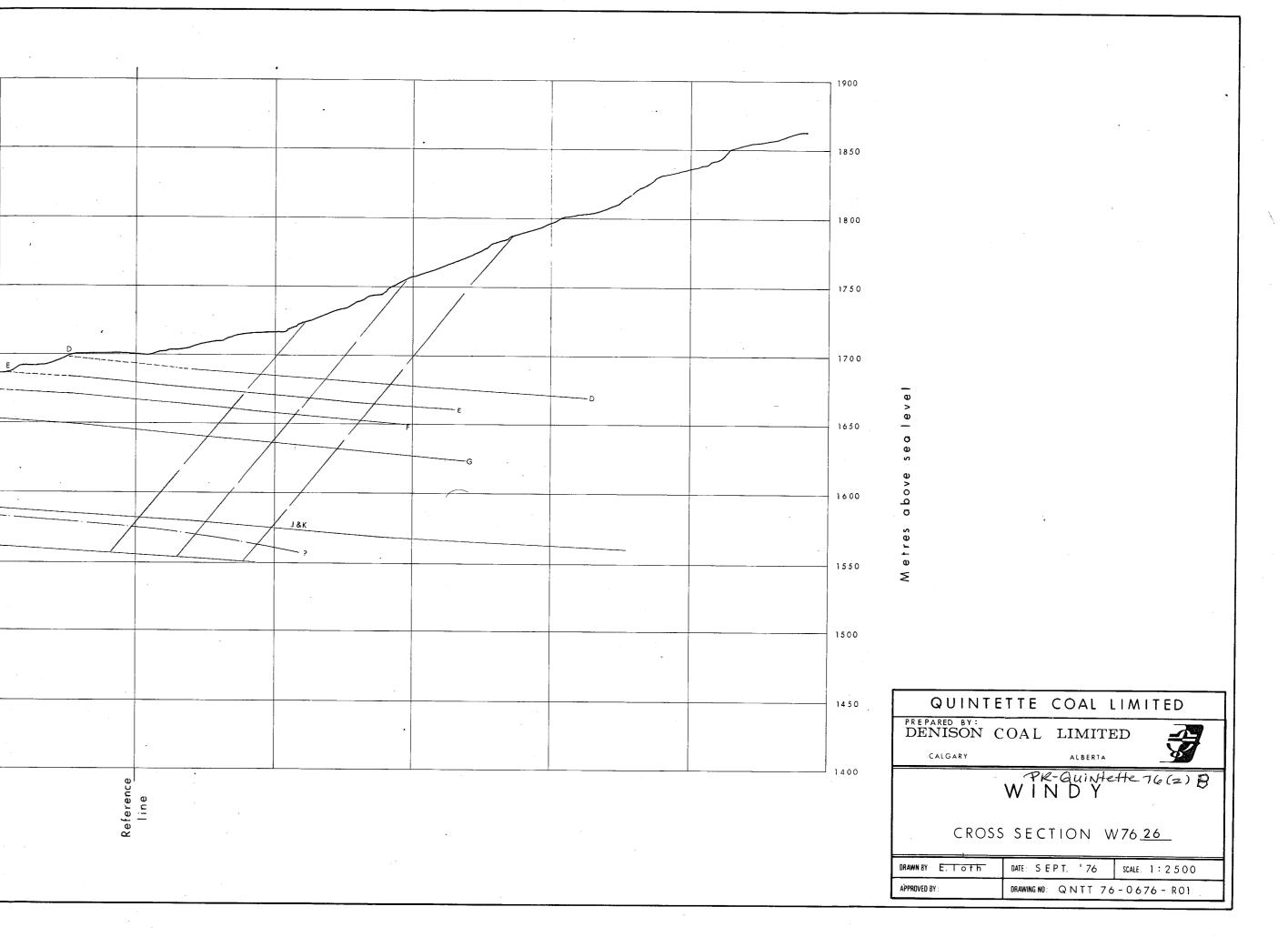
															-											
	•								· .															5		-
								ŭ																: >		
						•		*																		
	÷.,	1. X.								•																
	1900	-					·····		<u>.</u>	· · · · · ·	· ·				<u>.</u>	•	· · · ·									
			• .			1		-	2					-				• . ·								
				· · ·	N 2-												;									
					· .						· -															
	1850		. ·							- 								-		· ·						
1.11		•											•	-					· · ·							
		1								- ,			· .										·			
					•						. :													-		
	1800										1															
													•				-						-			-
		1		8			4	r .																		
						•		•													-			ч. ¹	.*	
			· .															ľ .								
	1750				·							·									<u>.</u>			÷	·	_
			· -															· .								
							1																	•		
																							·		-	-
	1700	·	· · · · ·					· · ·				·		·		····.										
		•	•								-								, [.]		·					
																					•					
•			-				· .																			
	1650								-								·		:	· · · · · · · · · · · · · · · · · · ·	·····	-				-
							•																			-
																	· •					1				
																							2	-		
	1600				· · · ·												×>	1			-					
																		·-+								
		1	•	· .												/						-				
			•								i i i P					\nearrow										
			•			u •					1															
	1550				•	•				16	-								-							
	1550					u				- 12.																
	1550				· · · · · · · · · · · · · · · · · · ·	•	-	· · · · ·		1. 15.																
	1550	I				•		· · · ·		r.																-
	-							· · · · ·	-										-							
	1550					• • • • •																				-
	-									<u> </u>																-
	-																									
	1500								-																	
	-								· · · ·							 										
	1500																									
	1500		THICKNESS WI'D		T 1 LENGTH	P 11 SEAM (T 2 LENGTH	P IT SEAM L	3 ENGTH	SECTION		AL	P1T 2 RAW COAL	P	IT 3 V COAL	MINING	PIT 1 PLANT	P1T 2 PEANT	PIT3 PLANT	ESTIMATED PRODUCT	PIT 1 CLEAN	PIT 2 CLEAN	PIT 3 CLEAN			
	1500 1450		THICKNESS WT'D. DF MINING Sp. C. SECTION. MINING	AVG. PL AVG. SEAM OF QXIDIZED SECT	T 1 LENGTH UNOXIDIZED	SEAM (OXIDIZED	T 2 LENGTH UNOXIDIZED	P I T SEAM L OXIDIZED	3 ENGTH UNOXIDIZED	SECTION WIDTH	PIT 1 RAW CO. RESERVI	AL ES	RAW COAL RESERVES	RAV	V COAL SERVES	FACTOR	PIT 1 PLANT FEED	PIT 2 PLANT FEED	Pit3 PLANT FEED	ESTIMATED PRODUCT GUALITY VIELD%	PIT 1 CLEAN COAL RESERVES	CLEAN	CLEAN			
	1500		ŤHICKNESS WT'D. DF MINING SP.C SECTION	AVG. SEAM OF OXIDIZED SECT L.O.	T 1 LENGTH UNOXIDIZED L.U.	SEAM OXIDIZED L O	T 2 LENGTH UNOXIDIZEC L.U.	PIT SEAM L OXIDIZED	3 ENGIH UNOXIDIZED		PIT AW CO RESERVI OXIDIZED UNC	A L ES DXIDIZED OXI	RAW COAL	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED	FACTOR	PLANT	PLANT	PIT3 PLANT FEED RF.	ESTIMATED PRODUCT QUALITY YIELD%	PLT 1 CLEAN COAL RESERVES C.C.R.	CLEAN COAL RESERVES	CLEAN			
	1500 1450		ŤHICKNESS DF MINING SECTION	AVG. <u>SEAM</u> OF OXIDIZED SECT.	LENGTH UNOXIDIZED	SEAM I OXIDIZED	LENGTH UNOXIDIZED	SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI OXIDIZED UNC	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED R.C.R.U.	FACTOR	PLANT FEED	PLANT FEED		ESTIMATED PRODUCT QUALITY YIELD%	RESERVES	CLEAN	CLEAN COAL RESERVE			
	1500 1450	SEAM	THICKNESS WT'D DF MINING Sp. C SECTION, MININ	AVG. <u>SEAM</u> OF OXIDIZED SECT.	LENGTH UNOXIDIZED	SEAM I OXIDIZED	LENGTH UNOXIDIZED	SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI OXIDIZED UNC	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED	FACTOR	PLANT FEED	PLANT FEED		ESTIMATED PRODUCT PODUCT YIELD%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVE			
	1500 1450		THICKNESS WT'D. DF MINING SECTION MININ	AVG. <u>SEAM</u> OF OXIDIZED SECT.	LENGTH UNOXIDIZED L.U.	SEAM I OXIDIZED	LENGTH UNOXIDIZED	SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI OXIDIZED UNC	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED R.C.R.U.	FACTOR	PLANT FEED	PLANT FEED		ESTIMATED PRODUCT GUALITY YIELD%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVE			
	1500 1450	SEAM	THICKNESS WTD DF MINING Sp. SECTION MINING	AVG. <u>SEAM</u> OF OXIDIZED SECT	LENGTH UNOXIDIZED	SEAM I OXIDIZED	LENGTH UNOXIDIZED	SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI OXIDIZED UNC	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED R.C.R.U.	FACTOR	PLANT FEEÐ PF	PLANT FEED		ESTIMATED PRODUCT GUALITY YIELD%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVE			
	1500 1450	SEAM	THICKNESS WT'D DF MINING Sp. C SECTION.	AVG. <u>SEAM</u> OF OXIDIZED SECT	LENGTH UNOXIDIZED L.U.	SEAM I OXIDIZED	LENGTH UNOXIDIZED	SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI OXIDIZED UNC	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED R.C.R.U.	FACTOR	PLANT FEED P.F.	PLANT FEED		¥IELO%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVE			
	1500 1450	SEAM	THICKNESS DF MINING SECTION MINING	AVG. <u>SEAM</u> OF OXIDIZED SECT	LENGTH UNOXIDIZED L.U.	SEAM I OXIDIZED		SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI DXIDIZED UNC R.C.R.O. R.C	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED R.C.R.U.	FACTOR	PLANT FEED P.F.	PLANT FEED		¥IELO%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVE			
	1500 1450	SEAM	THICKNESS WTD DF MINING Sp. C SECTION. MINING	AVG. <u>SEAM</u> OF OXIDIZED SECT L.O.	LENGTH UNOXIDIZED L.U.	SEAM I OXIDIZED	LENGTH UNOXIDIZED	SEAM L OXIDIZED	ENGTH UNOXIDIZED		PIT AW CO RESERVI DXIDIZED UNC R.C.R.O. R.C	A L ES DXIDIZED OXI	RAW COAL RESERVES. DIZED UNOXIDIZE	RAV RAV D OXIDIZED	V COAL SERVES UNOXIDIZED R.C.R.U.	FACTOR	PLANT FEED P.F.	PLANT FEED		¥IELO%	RESERVES	CLEAN COAL RESERVES	CLEAN COAL RESERVE			



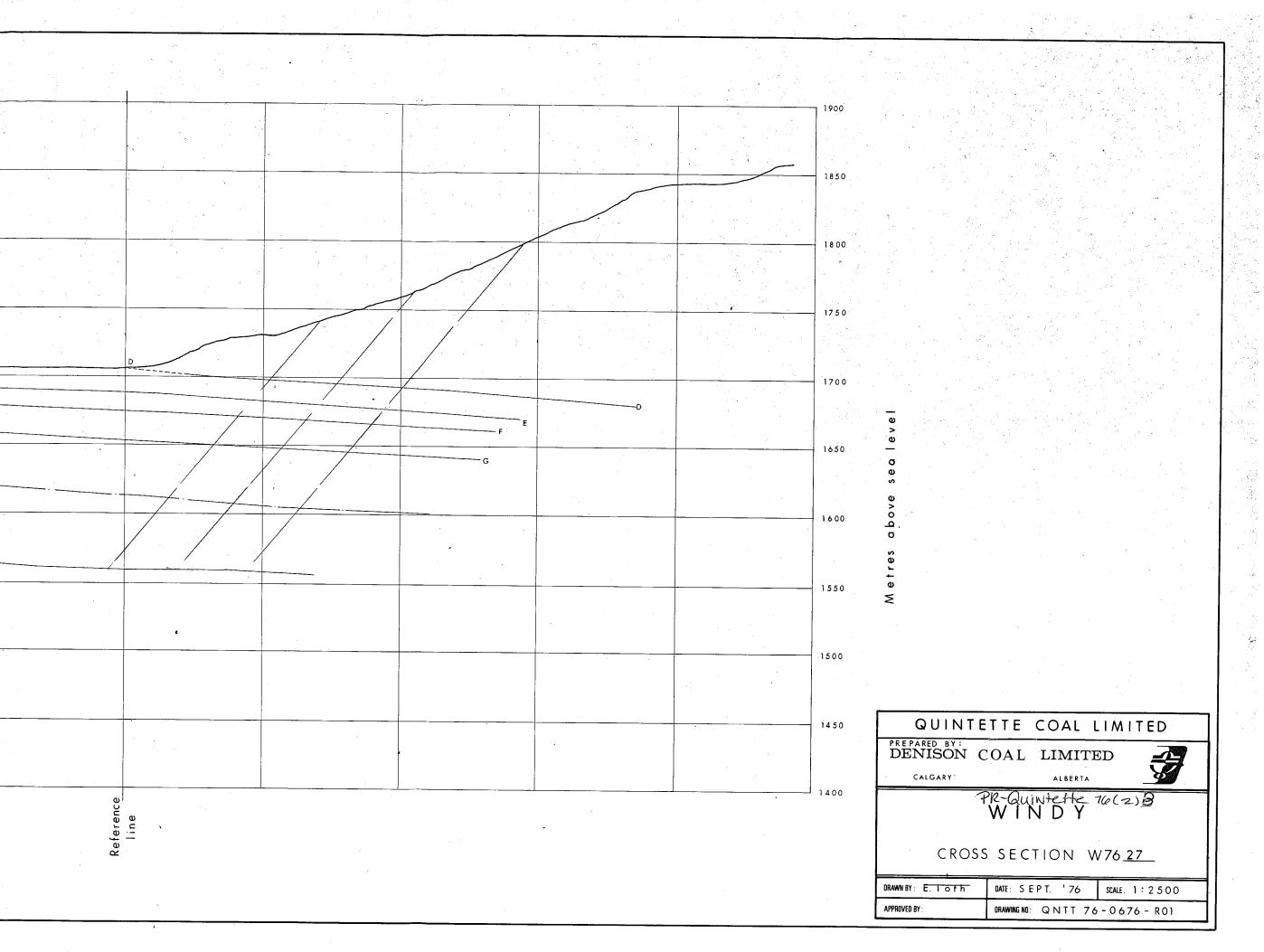


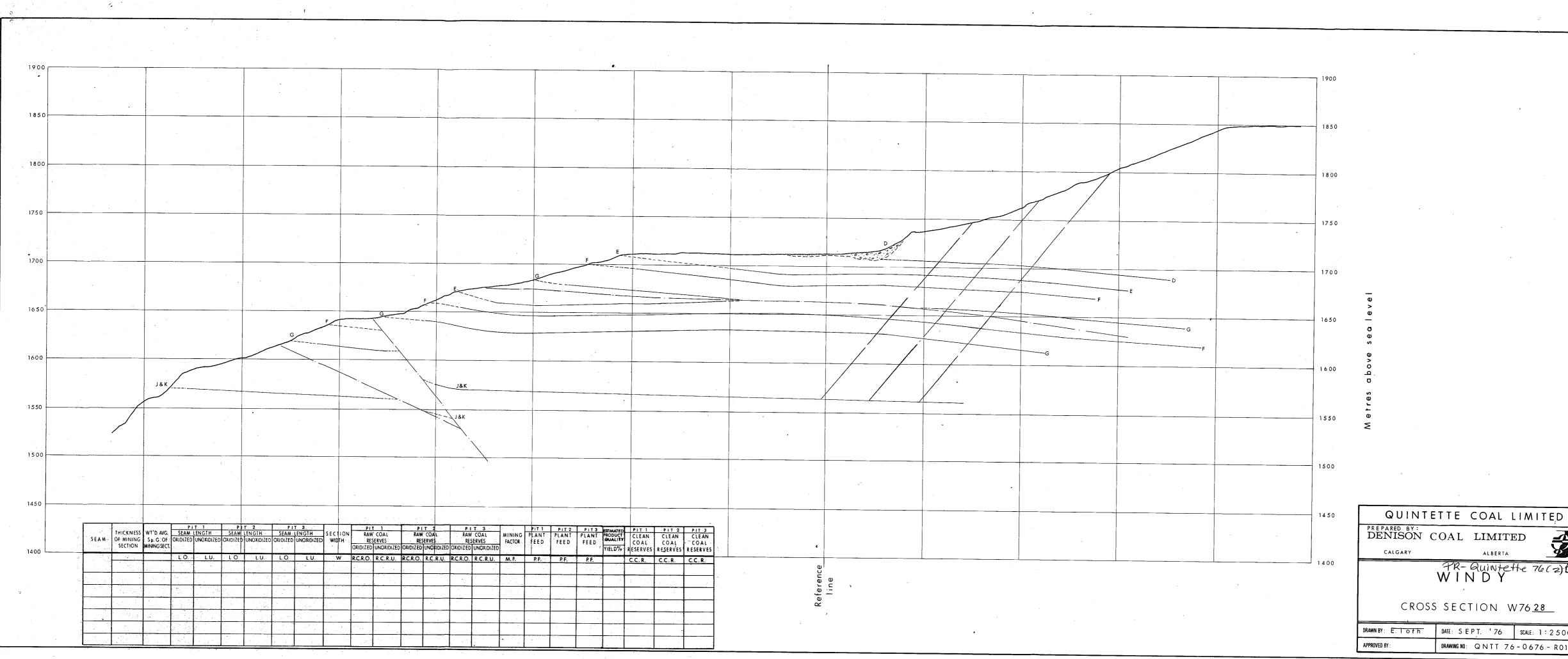
· ·									· .	·									-								
					•						-		• • •								•						
						• •			. •	`	1 1 1 1																
	1900						-11																				
																										-	
	1850-			· · · · · ·						<u></u>								-		_							
					-							Ì					.•										
	1800														-												
	1750 -					•						-						: .									
	1/50																-										
	1700 -												·····					-		-							
	- - -																								F		+
· ·																											
	1650																·			-		-					+-
-																	_										
																ſ	8K										
	1600												· .	-											_		
												<u>عر</u>															_
								-	×.				**/								J&K						
	•).											+-
	1550 -			i						~	<u> </u>					•	<u> </u>		_							<u>.</u>	
		•		· · ·		,																					
																-											
	1500-										<u> </u>			· , .										· 		·,	
	-							ŀ																			
					-																						
	1450		-														·								-		_
	•		·						· · ·	<u>.</u> .			<u></u> r							-			· · · · · ·				
	-	CE A H	THICKNESS	WT'D AVG.	SEAM	T 1 LENGTH	SEAM 1	ENGTH	P I SEAM	LENGTH	SECTION	RAV	T 1 V COAL SERVES	P1 RAW	T 2 COAL ERVES	R	PIT 3 AW COAL RESERVES	MINING	PLANT	PIT 2 PLANT	PIT 3 PLANT	ESTIMATED PRODUCT	CLEAN COÁL	PIT 2 CLEAN	PIT 3 CLEAN		
	1400	SEAM	OF MINING SECTION	S.D. G. OF MINING SECT			-	UNUXIDIALD				OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED	OXIDIZ	EDUNOXIDIZED		FEED	FEED	FEED	YIELD%	RESERVES	COAL	COAL RESERVES	•	
					L.O.	L.U.	10	L.U.	LO	1.U.	W	R.C.R.O.	R.C.R.U.	R.C.R.O.	R.C.R.U.	R.C.R.O	D. R.C.R.U.	M, F.	P.F.	P. F.	P.F.		C.C.R.	C.C. R.	C.C. R.		
	,																										
	•																										
																										•	
																		-	~								
								<u> </u>																			
<u> </u>		<u></u>	<u>I</u>			n te <u>s</u> Ti te di se	1		L			J-						<u>I</u>				L					

×.

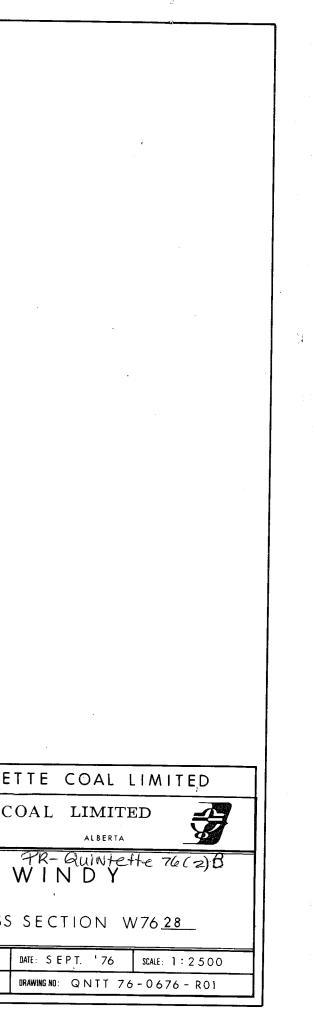


· · · · · · · · · · · · · · · · · · ·		- -	, y				•				··· ··· ··· ··· ··· ···			- `			. 29194-184							,		•	-
	and a			-						:										•	· · ·					, , , , , , , , , , , , , , , , , , ,	
	10	<u> </u>				. •						т. 1.		•	•••					•		2 			: : :	· · · ·	
	19													· .													
					•							•						÷	••							•	· •
	18	50														5. 5.	_					•					· ·
							· .					•		· · ·	. •	• •						•• • •					
	18	00										· · ·										· · ·					·
			•								•		A .										. ·	т н.			
	17 :	50								<u> </u>				e .												<u> </u>	
						Ì															-		•				
	170	00		- 	•				-														F	E	·		
		-																			G						
	16	50			· · · ·							•		<u>·</u>	/			· · · · · · · · · · · · · · · · · · ·									
			-			-							-			-•••				G							
	160	00													6			•	_,					·		. <u>.</u>	
											J & K] \	\			•						1	
	15:	50																<u></u>]&	<u>K</u>				
				~																							
	15	00	<u>.</u>							ι.		-															
-			4		•									•				-				-					
		- 0	`									•															
с. С	145		· · · · · · · · · · · · · · · · · · ·		<u></u>												~							t setse		•	
			SEAM	THICKNESS OF MINING SECTION	WT'D AVG S.p. G. OF MINING SECT	SEAM OXIDIZED	LENGTH UNOXIDIZEE	SEAM OXIDIZED	T 2 LENGTH UNOXIDIZE	P I SEAM D OXIDIZED	LENGTH UNOXIDIZED	SECTION WIDTH	RA	LT 1 W COAL ESERVES D UNOXIDIZEI	RAW	T 2 COAL ERVES UNOXIDIZED	RAV	IT 3 V COAL SERVES	MINING FACTOR	PIT 1 PLANT FEED	PIT 2 PLANT EED	PIT 3 PLANT FEED	PRODUCT	PIT 1 CLEAN COAL RESERVES	PIT 2 CLEAN COAL DESERVES	PIT 3 CLEAN COAL RESERVES	
	• 140	00				L.O.	L.U.	10	1.U.		L.U.			. R.C.R.U.		R.C.R.U.			M. F.	P. F.	P.F.	P. F.		C.C.R.	C.C.R.	C.C.R.	
		د. • • • • • • • • • • • • • • • • • • •																									· .
																-											•
							5.																				
		•	<u>l</u>	1		<u> </u>	L							1	<u> </u>			L	<u> </u>							· /·	· · · · · · · · · · · · · · · · · · ·

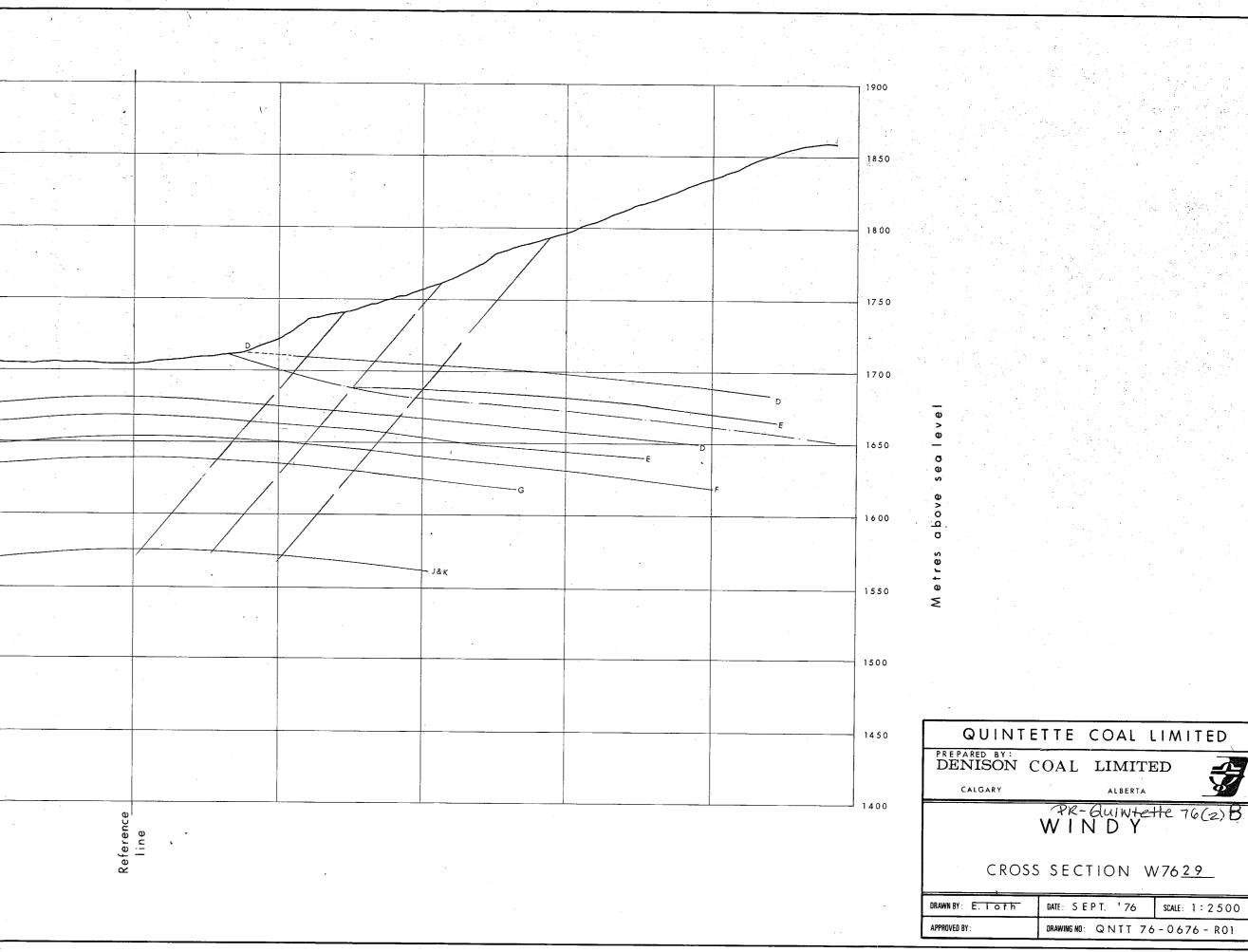


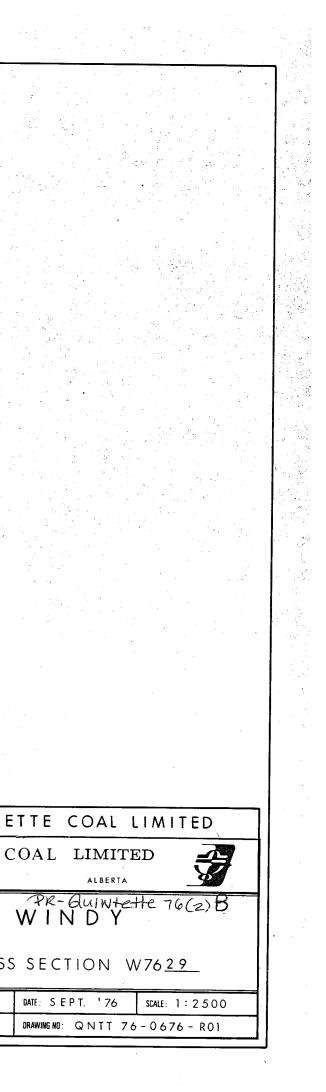


PREPARED BY: DENISON COAL LIMITED CROSS SECTION W76.28 DRAWN BY: E. Loth DATE: SEPT. '76 SCALE: 1:2500



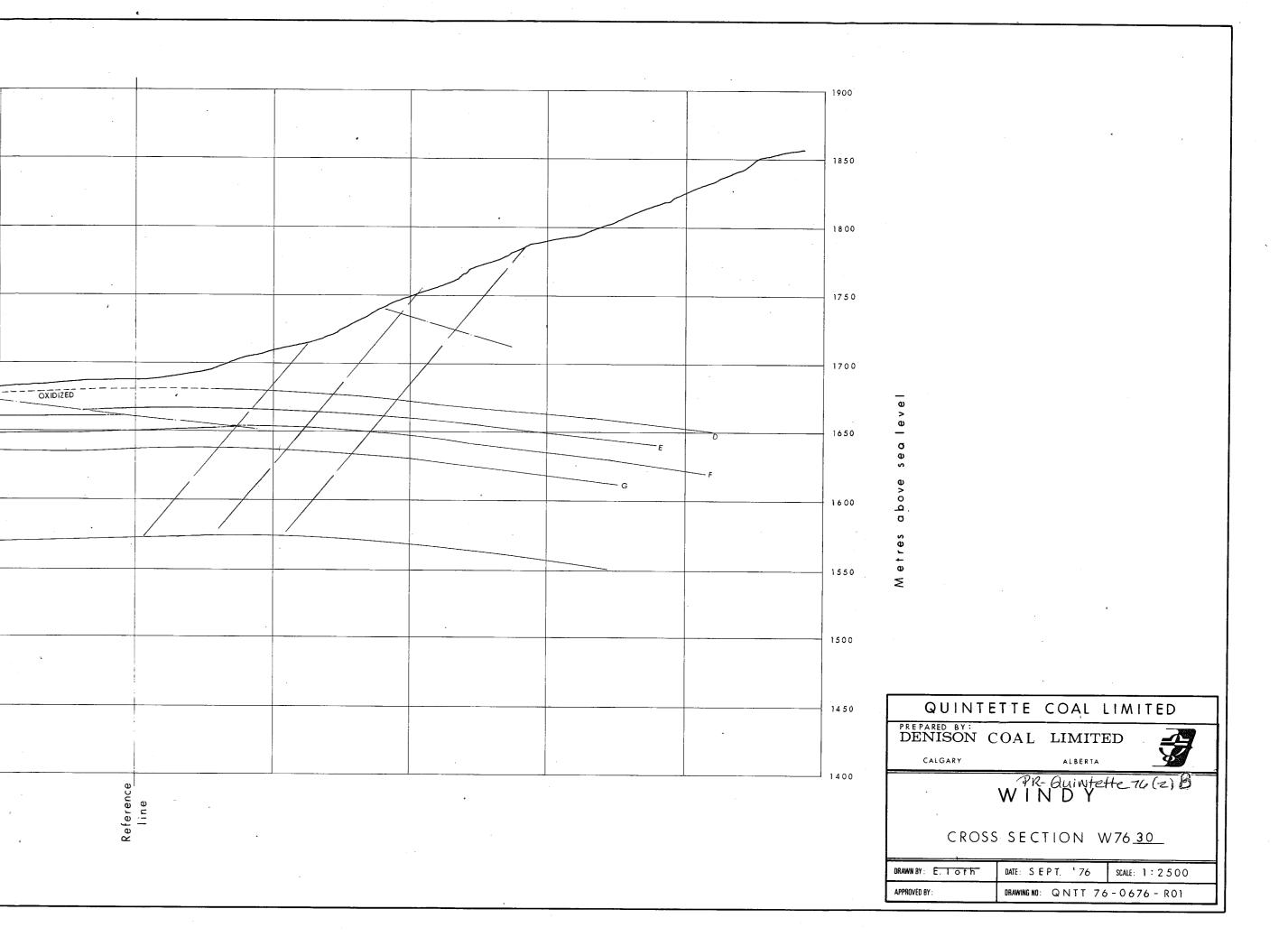
· ·				· -			-																
	•		· · · · · · · · · · · · · · · · · · ·							-	·* ·				-				-	•	· · · ·		-
		х <i>Е</i>				• •		•								· · ·			а. • •		-		
· · ·										•		- 						· · ·	<u>.</u>	Ì			
			• .	· · ·		,	· ·			· · · · ·	* 4												-
	_ · · ·							· ·						- - -	·	•			· · ·				
•																				÷			
	- · ·			· · · · · ·						x						E		D					
					-			•						6	F								
- · · · ·	-				`																		
		J&k									<u>8</u>	ĸ		· · ·	J&K								
						. 1	1				` .								-		-		÷.
						<u>.</u>	•		-								-						
								. <u>.</u>											•			: 	
SEAM	THICKNESS WT'D. OF MINING Sp.G. SECTION MINING	NG <u>Seam</u> Of Oxidize ECT	LENGTH D UNOXIDIZED	PI SEAM OXIDIZED L.O	LENGTH UNOXIDIZEI	SEAM OXIDIZED	LENGTH UNOXIDIZED		RAW RE OXIDIZED	COAL SERVES UNOXIDIZED	RAW RES OXIDIZED	COAL ERVES UNOXIDIZED	OXIDIZED	UNOXIDIZED	EACTOR	PIT 1 PLANT FEED P.F.	PIT 2 PLANT FEE D P.F.	PIT3 PLANT FEED P.F.	ESTIMATED PRODUCT QUALITY YIELD%	CLEAN COAL RESERVES C.C.R.	PIT 2 CLEAN COAL RESERVES C.C.R.	PIT 3. CLEAN COAL RESERVES C.C. R.	•
									•								· · · · · · · · · · · · · · · · · · ·						
						1		·			•		· · · ·	<u> </u>		1			1 .		· ·		
	SEAM	SEAM UHICKNESS WT'D.A SEAM OF MINING SECTION MININGS	SEAM SEAM SECTION SECTION SECTION		SEAM SECTION MINING SECT	SEAM CENTRON MINING SECTION MINING SECTION CONTRACT SEAM CENTRON CONTRACT SECTION SECT	Imickness WT'D AVG PLT PLT PLT SEAM Imickness WT'D AVG SEAM Imickness OF MINING Sp. G. OF OKIDIZED OKIDIZED OKIDIZED SECTION MININGSET Imickness OKIDIZED Imickness	Imickness WT'D AVG PLT PLT PLT 2 PLT 3 SEAM Imickness WT'D AVG SEAM Imickness SEAM Imickness OF MINING Sp. G. OF OKIDIZED UNOXIDIZED OXIDIZED OXIDIZED UNOXIDIZED SECTION MININGSECT Imickness Imickness Imickness Imickness Imickness	Image: Seam of the seam o	JAK JAK JAK SEAM UNICKNESS WTD AVC SEAM LENGTH SEAM LENGTH SEAM LENGTH OF MINING SP, G, OF OXIDIZED UNIOXIDIZED OXIDIZED UNIOXIDIZED UNIOXIDIXED UNIOXIDIZED UNIOXIDIZED UNIOXIDIZED UNIOXIDIZED UNIOX	Image: Seam of the seam o	J&K J&K J&K J&K J J	J&K J&K J&K J&K J&K J&K J&K J&K J&K J&K	JAK JAK JAK	J&K J&K J&K J&K J J	J&K J&K J&K J&K J&K J&K J&K J&K J&K J&K	SEAM DHICKNESS WTO ANG SEAL ENGTH SEAL ENGTH SEAL ENGTH SECTION MAX COAL MAX COAL	JAK JAK JAK	SEAM JAK SEAM 1000H SEAM 1000H SEAM 1000H SECTION SECTION </td <td>JAK JAK JAK JAK JAK JAK JAK JAK</td> <td>JAK JAK JAK JAK JAK JAK JAK JAK</td> <td>JAK JAK JAK JAK JAK JAK</td> <td>JAK JAK JAK JAK</td>	JAK JAK JAK JAK JAK JAK JAK JAK	JAK JAK JAK JAK JAK JAK JAK JAK	JAK JAK JAK JAK JAK JAK	JAK JAK JAK JAK





· · · ·																						-					· · · ·			
1	-																					• •							:	
																									,					
		•																												
	1900															•••							1							
	1																										-			
			•						,										-											
	1850												• • • • •				- 													
		,																												
											-												· ·							
				÷				·																						
											-																i			
	1800																										+			
											1		. *																	
						- 1											•										· ·			
1.1				. '																										
	1750										. ·			•								۰ 								
																_	_													
											1																			
ļ																													-	
	1700			_																						-		• • • • • • • • • •		_
	ŀ	· ,																											D	
																									E					
1	1650			_																				F_			[
	1030																						G	, /						_
	1						;																							
												`																		
																				\sim										
	1600																		\rightarrow			-								
																				J&K	,									
	.																	\backslash	1								-			
														~				\mathbf{X}												
	1.5.50												J&K.	\sim	\rightarrow					N										
	1550		• ·	• .									/				1													
						_						/			· ·			J& K			•			•						
															.			`									-			
	1500'																				·.·.					-				
						•																								
											e I																			
																														1
	1450													-				<u> </u>												
	1400																												· ·	
						100	1	017 1	. 1		T 2	P I	7 3	· · · ·		- 1		т 2		+ 2	<u> </u>	Det T 1	PIT 2	N	T			1	1 .	
			••••	ТНІСІ	KNESS	WT'D AVG	SEA	PIT 1 M LENG	TH I	SEAM	LENGTH	SEAM	LENGTH	SECTION	RAY	T 1 V COAL SERVES	RAW	COAL ERVES	RAW	T 3 COAL ERVES	MINING	PLANT	PLANT FEED	PIT3 PLANT FEED	PRODUCT	PIT 1 CLEAN	PIT 2 CLEAN	CLEAN	1.	
1		ŀ	SEAM	OF MI	INING TION	S.p. G. O MINING SEC	OXIDIZ I	ED UNO	NDIZED	UXIDIZED	UNOXIDIZE	OXIDIZED	UNOXIDIZED	WIDTH	OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED	FACTOR	FEED	FEED	FEED	YIELD%	COAL RESERVES	COAL RESERVES	COAL		
	1400 L						L.O		L.U.	LO	L.U.	LO	L.U.			R.C.R.U.					M.F.	P.F.	P.F.	P.F.		C.C.R.	C.C.R.	C.C.R.		
	:													5											1			1	1	
					- 1.																<u> </u>			<u> </u>	1					
		•		1						<u> </u>					· · · ·								<u> </u>	· · · ·	+		1		1.	,
				+		 											<u> · </u>			· · · ·		<u> </u>	,	· · · ·		· · · ·	-		-	
		- 1	<u> </u>	- 12	<u></u>					1000 A										· · · ·							+	+	ł	
				1		<u> </u>						1				1				· .									-	
			•			· · ·	-					<u> </u>		4						1	.			1. ¹ . 1. 1.	<u> </u>		L		ł	
			ar stale																		· ·								J	
			1.		-	1. 19.15	1.1.1				1.1											-								

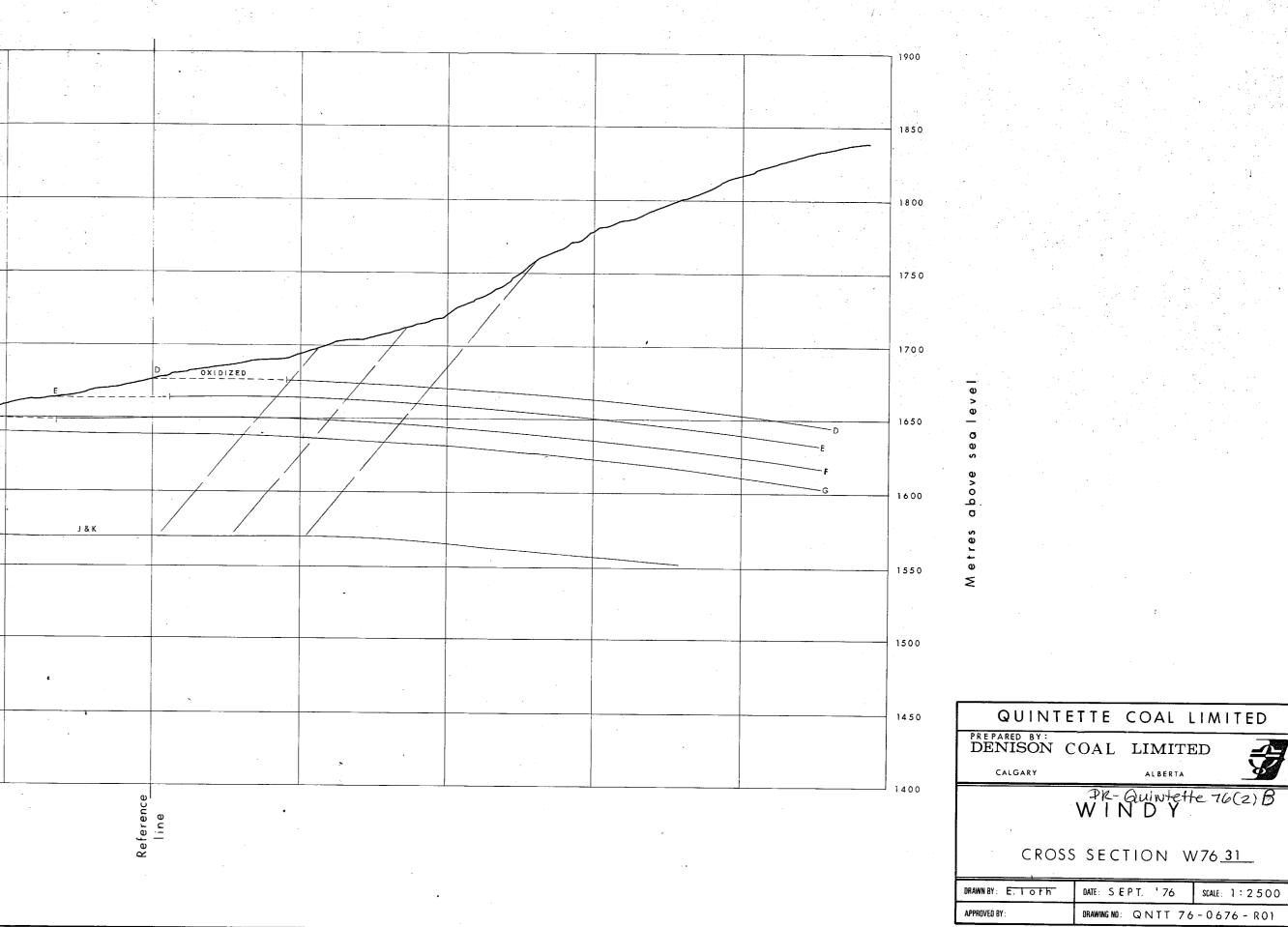
· ·

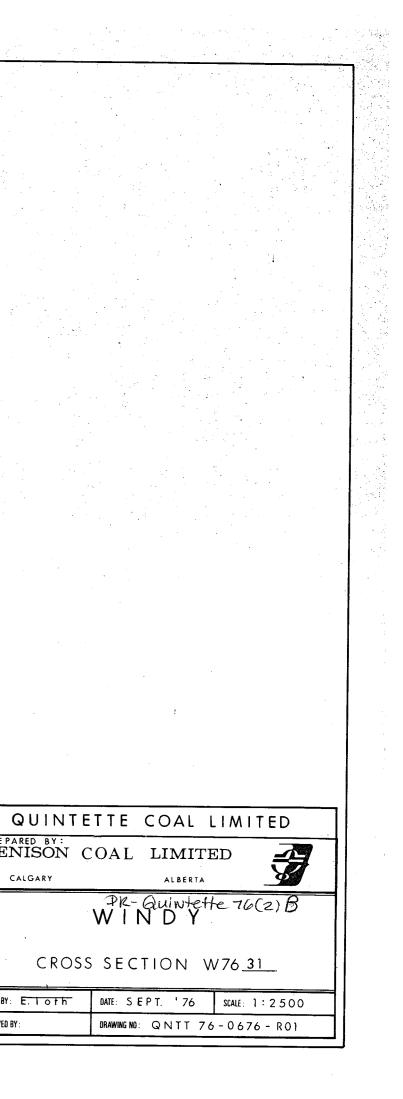


								-						-				·			· •					
																			-				· •• ·	÷.	-	
																			-							
-																										* 2
190	0		· · · · · · · · · · · · · · · · · · ·										• • •													
		17			1					•															· ·	
and the second			-																							
																				e						4
185	50																<u>.</u>	-								
																								1 -		
180								5			<u>.</u>		. •													-
																					-					
		,																								
. 175	•					•																				1
																										-
																										-
170			· .																							
170																								1		
	[•									-						ŗ						-
165	50 <u> </u>								-				•								•••	-			G	F
ж. 					-																				6	
										•																
																					_	~				
160	0																			1	· · ·		\			
																- -					\backslash		$\langle \rangle$			-
											t								<u>\</u>				_			
155	io								-													-				
		-			-				-																	
150	0		-											- 12	·······											
145	o																						-			·
			i		<u>11</u> 1.		· · · · · ·							<u></u> ,												
			THICKNESS	WT'D AVG	SEAM:	T 1 LENGTH	P I SEAM	FNGTH	SEAM L	ENGTH	SECTION	RA	UT 1 W COAL ESERVES	RAW	T 2 COAL	RAW	T 3 COAL	MINING	PLANT	PIT 2 PLANT	PIT 3 PLANT FEED	PRODUCT	PIT 1 CLEAN	PIT 2 CLEAN	PIT 3 CLEAN	
•		SEAM	OF MINING SECTION	S.p. G. OF MINING SEC	OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED	OXIDIZED	UNOXIDIZED	WIDTH	R	ESERVES DUNOXIDIZED	RES RES	ERVES	RES	SERVES	FACTOR	FEED	FEED	FEED	YIELD%	COAL RESERVES	COAL RESERVES	COAL	
1400	U				L.O.	L.U.		LU.	1.0	LU.	1 1		. R.C.R.U.				F .		P.F.	P.F.	P. F.		C.C.R.		C.C.R.	
																-										
							4				• f	 		 												
																				1000 (1000) 1000 (1000) 1000 (1000)		 				
													1			· · · ·		-			· · · · ·					ł
				1								2		1.1												
				$T = \frac{1}{2} \sum_{i=1}^{n} $								· · · ·					-									
						· · · ·								,							-					

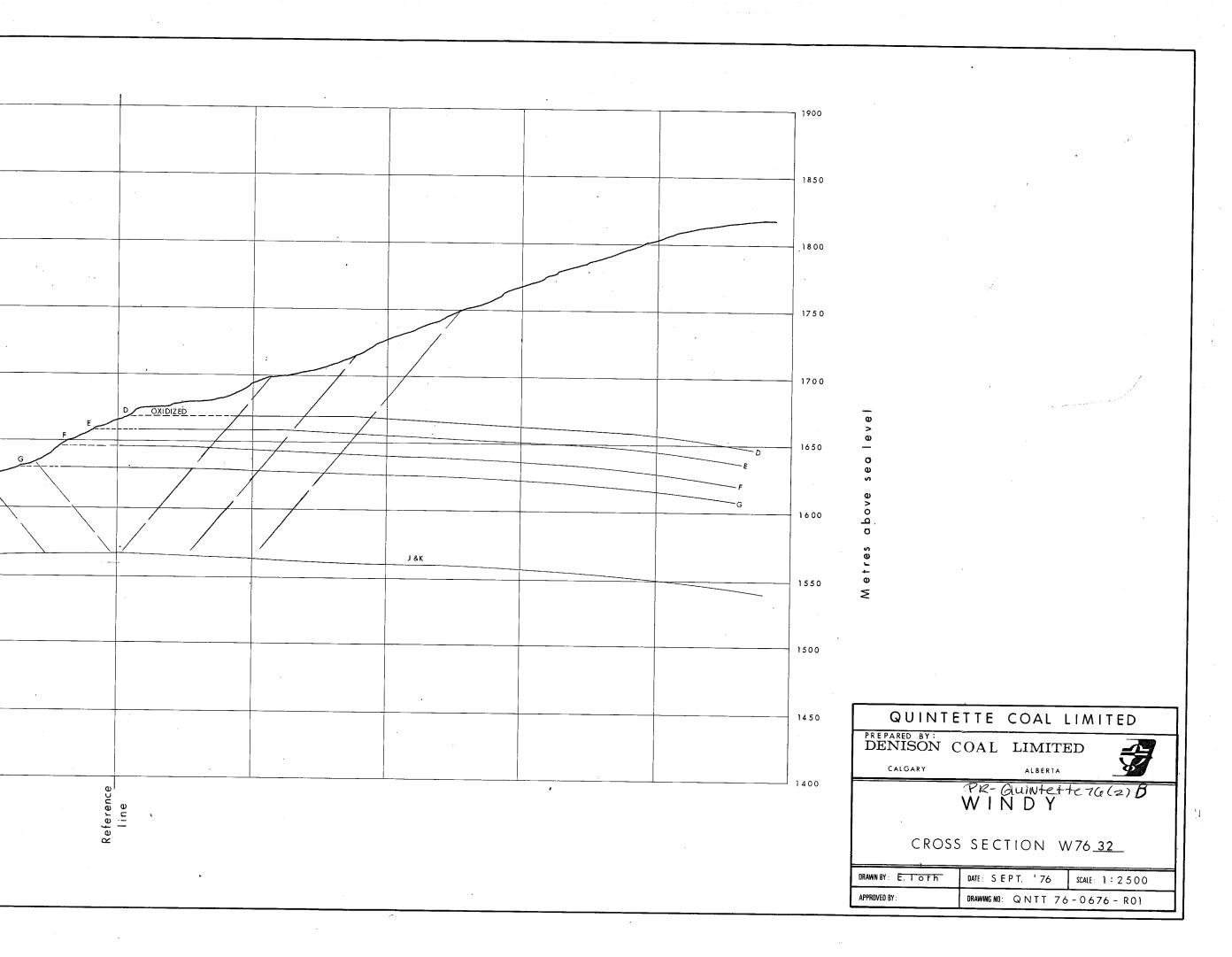
· • ·

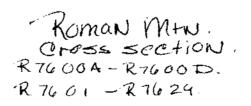
. -

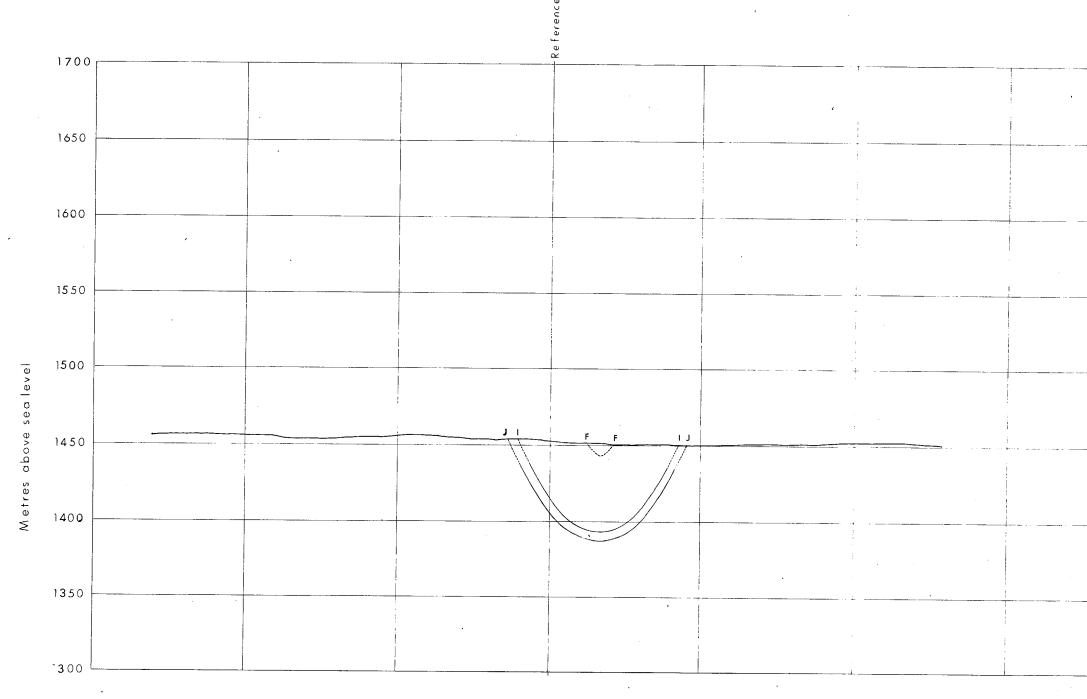




	· .												<u>.</u>		· · · · · · · · · · · · · · · · · · ·			·····								
								•			·		-													
								•		1															·	
1900													1								•					
		÷	e																							
		•																								
1850																										
																				•	-					
1800											·															
				•																						
1750										,, _			·													
									•											ŀ					•	
1700					-		·			· · · · ·																
1650																										
1050												-								•		<u> </u>		+		
			ı																						•	
					2		•			•																
1600			·		<u> </u>					•÷																
																						/				
15.50																										
-																		_								
																		~~~~								
							•		·				_	$\sim$			-									
1500		-							·			-		·	-111.											
					1												•									
																	•			-						
1450															•							· · · · · · · · · · · · · · · · · · ·				
							1	a thair	<u>.</u>		<u> </u>						· · .				-,					
			THICKNES	S WTD AVG	P SEAM	T 1 LENGTH	P I SEAM	T 2 LENGTH	SEAM	T 3 LENGTH	SECTION	RAV	T 1 V COAL	RAW	T Z COAL	R	W COAL	MINING	PIT 1 PLANT	PIT 2 PLANT	PITE	PRODUCT		PIT 2		7
1400		5 E A M	THICKNES OF MINING SECTION	S.p. G. OF	QXIDIZED	UNOXIDIZ	DOXIDIZED	UNOXIDIZE	DOXIDIZED	UNOXIDIZED	WIDTH	RE	SERVES	RES	ERVES	OXIDIZ	W COAL RESERVES ED UNOXIDIZED	MINING FACTOR	FEED	FEED	FEED	YIELD%	COAL	COAL	PIT 3 CLEAN COAL RESERVES	
					1.0	LU.	LO	L.U.	L.O	ε.υ. ¹	w	R.C.R.O.	R.C.R.U.	R.C.R.O.	R.C.R.U.	R.C.R.C	D. R.C.R.U.	M.F.	P.F.	P.F.	P. F.		C.C.R.		C.C.R.	
	-											<u> </u>					-							<u></u>		4
		<u></u>							1 .				<u> </u>	<u> </u>						<u>.</u>	<b> </b>				+	4
	F																	· · ·			<u> </u>	<u> </u>			+	-
			e get art										э́.	1			1							1		+
					1					-													-	<u>+</u>		1.
				1							-									-					T	1







.

P R I D]

____

ORAWA APPRO

1650
1600
1500
1450
1350
1300
QUINTETTE COAL LIMITED
CALGARY ALBERTA
ROMAN MOUNTAIN
CROSS SECTION R76 <u>00A</u>
WN BY E. Loth DATE OCT. '76 SCALE 1:2500
ROVED BY DRAWING NO QNTT 76 - 0674 - RO1

1700 1650 1600 1**5**50 . 1500 Metres above sea level 1450 · · · · I J 1400 **13**50 1**3**00

•

			PR DI
			DRAWN
			APPRO

. .

1 <b>7</b> 00	
1650	
1600	
1500	
1450	
-1 <b>3</b> 50	
J <b>3</b> 00	
	TTE COAL LIMITED
CALGARY	OAL LIMITED
	PR-Quintette 76(2)B. AN MOUNTAIN
CROSS	SECTION R76 <u>00B</u> ,
DRAWN BY E. loth	DATE OCT. '76 SCALE 1:2500
APPROVED BY	DRAWING NO QNTT 76 - 0674 - R01
	1

50 **6**00 Metres above sea level JI **3**00

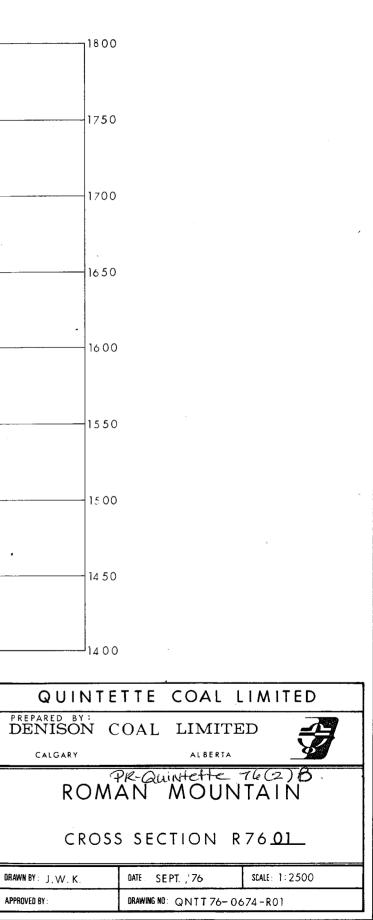
1700	)	
- 1650	)	
	)	
	)	
1500	)	
14 5 0	)	
1400		
1300		
	TTE COAL L	IMITED
CALGARY	OAL LIMITE	
ROM	PR-Quintette 7 AN MOUN	(2).B. TAIN
CROSS	SECTION R	76 <u>00C</u>
DRAWNBY E. loth	DATE OCT. '76	SCALE 1:2500
APPROVED BY	DRAWING NO QNTT 76	- 0 6 74 - R 0 1
	· · ·	······

Ē nce ¢  $\alpha$ 1700 1650 1600 ~ 1550 , 1500 Metres above sea level 1450 J 1 1400 1350 1**3**00

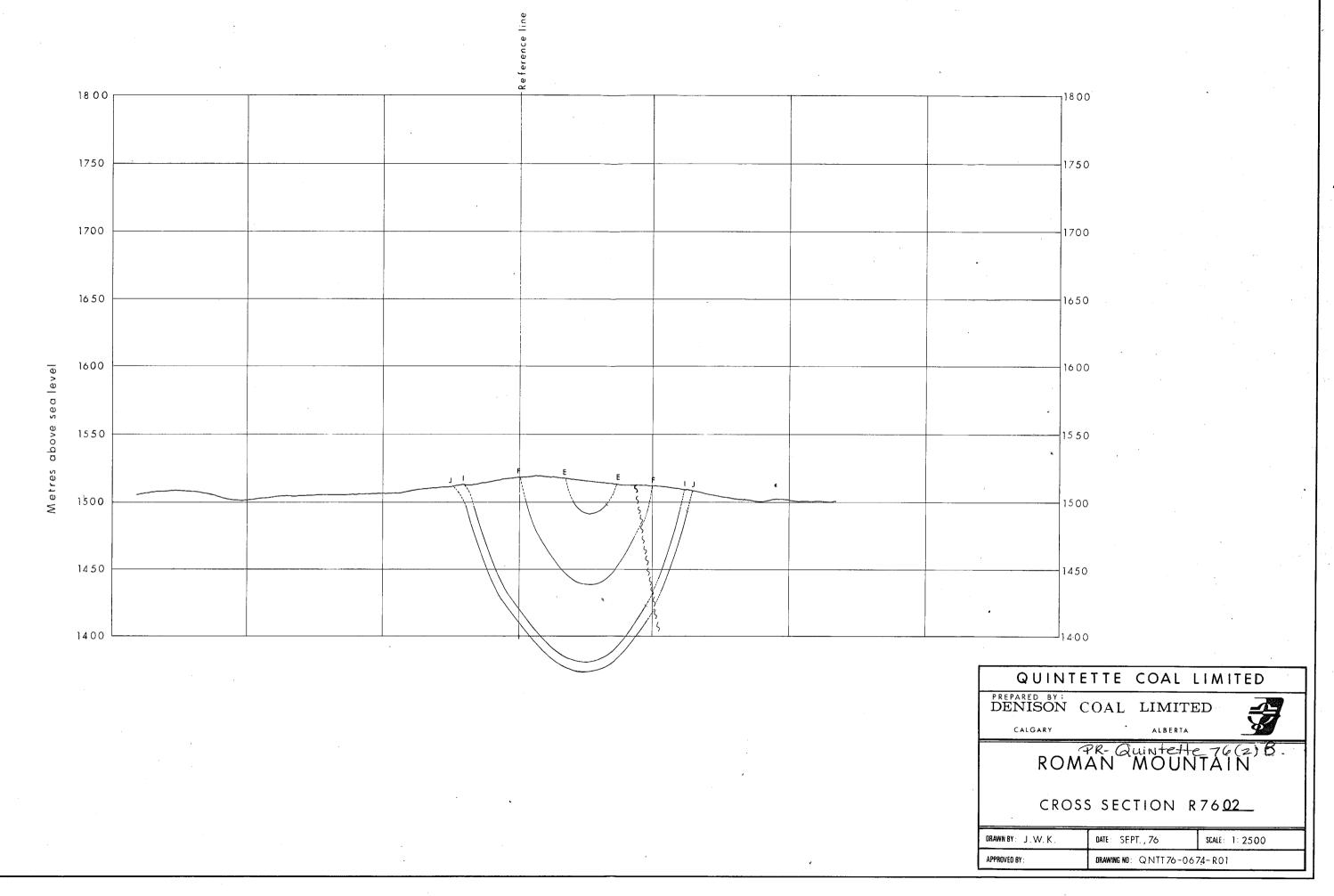
1700         1650         1600         1600         1550         1550         1500         1500         1450         -1400         -1400         -1350         1300			
	1700		
- 1500 - 1500 - 1450 - 1450 - 1400 - 1400 - 1350 - 1300 QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA - ALBERTA 			
	1600	·	
- 1450 - 1400 - 1400 - 1350 - 1350 - 1300 QUINTETTE COAL LIMITED INAUNITED BY: DENISON COAL LIMITED CALGARY ALBERTA PRE-GWINTEHTE 76(2) (5. ROMAN MOUNTAIN CROSS SECTION R76 00D MANN BY E. TOTH DATE OCT. '76 STALE 1: 2500	— 1550		
-1400 -1350 1300 QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA PR-QUINTETTE TG (2) S. ROMAN MOUNTAIN CROSS SECTION R76 OOD DRAWN BY E. TOTH DATE OCT. '76 SLALE 1: 2500			
-1350 -1300 QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED (ALGARY ALBERTA PR-QUINTETE 76(2) B. ROMAN MOUNTAIN CROSS SECTION R76 00D DRAWN BY E. TOTH DATE OCT. '76 STALE 1: 2500			
DRAWN BY E. TOTH DATE OCT. '76 SLALE 1:2500	- 14 00		
QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED (ALGARY ALBERTA PR-QUINTETE 76(2)B. ROMAN MOUNTAIN CROSS SECTION R7600D DRAWN BY E. TOTH DATE OCT. '76 STALE 1:2500	- 1350		
PREPARED BY: DENISON COAL LIMITED ALBERIA PR-QUINTEHE 76(2) B. ROMAN MOUNTAIN CROSS SECTION R7600D DRAWN BY E. TOTH DATE OCT. '76 SCALE 1:2500			
PREPARED BY: DENISON COAL LIMITED ALBERIA PR-QUINTEHE 76(2) B. ROMAN MOUNTAIN CROSS SECTION R7600D DRAWN BY E. TOTH DATE OCT. '76 SCALE 1:2500	QUINTE	TTE COAL LIMITED	
CROSS SECTION R7600D	prepared by : DENISON C	OAL LIMITED	
DRAWN BY E. I O Ph DATE OCT. '76 SCALE 1:2500	ROM	PR-QUINTETTE 76(2) B. AN MOUNTAIN	
	CROSS	SECTION R76 <u>00D</u>	
	DRAWN BY E. Ioth APPROVED BY	DATE         OCT.         '76         SEALE         1:2500           DRAWING NO         QNTT-76-0674-R01	

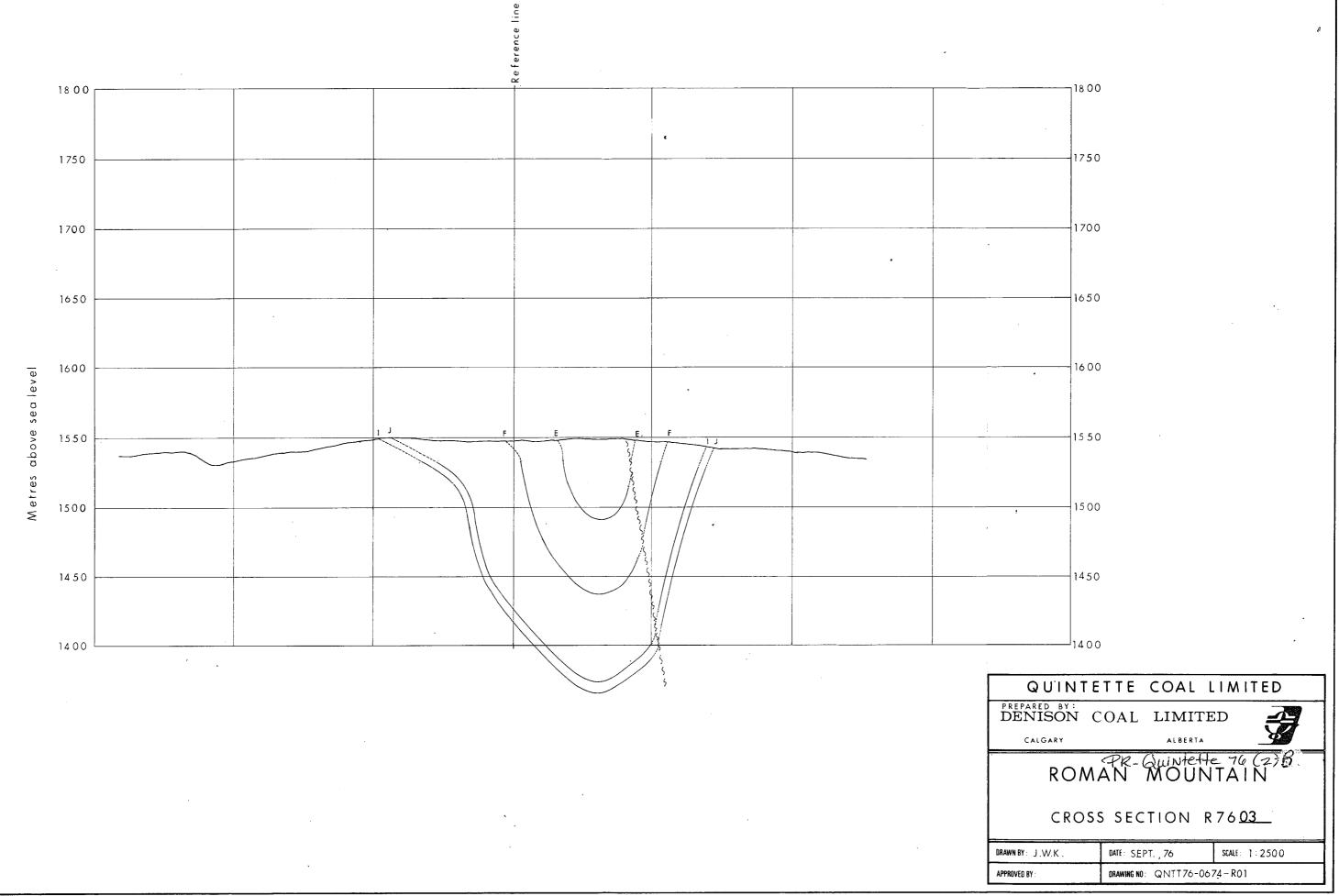
Refer 1800 1750 . 1700 . 1650 1600 Metres above sea level . 1550 1500 ЪТ 14.50 14 0 0

ι.

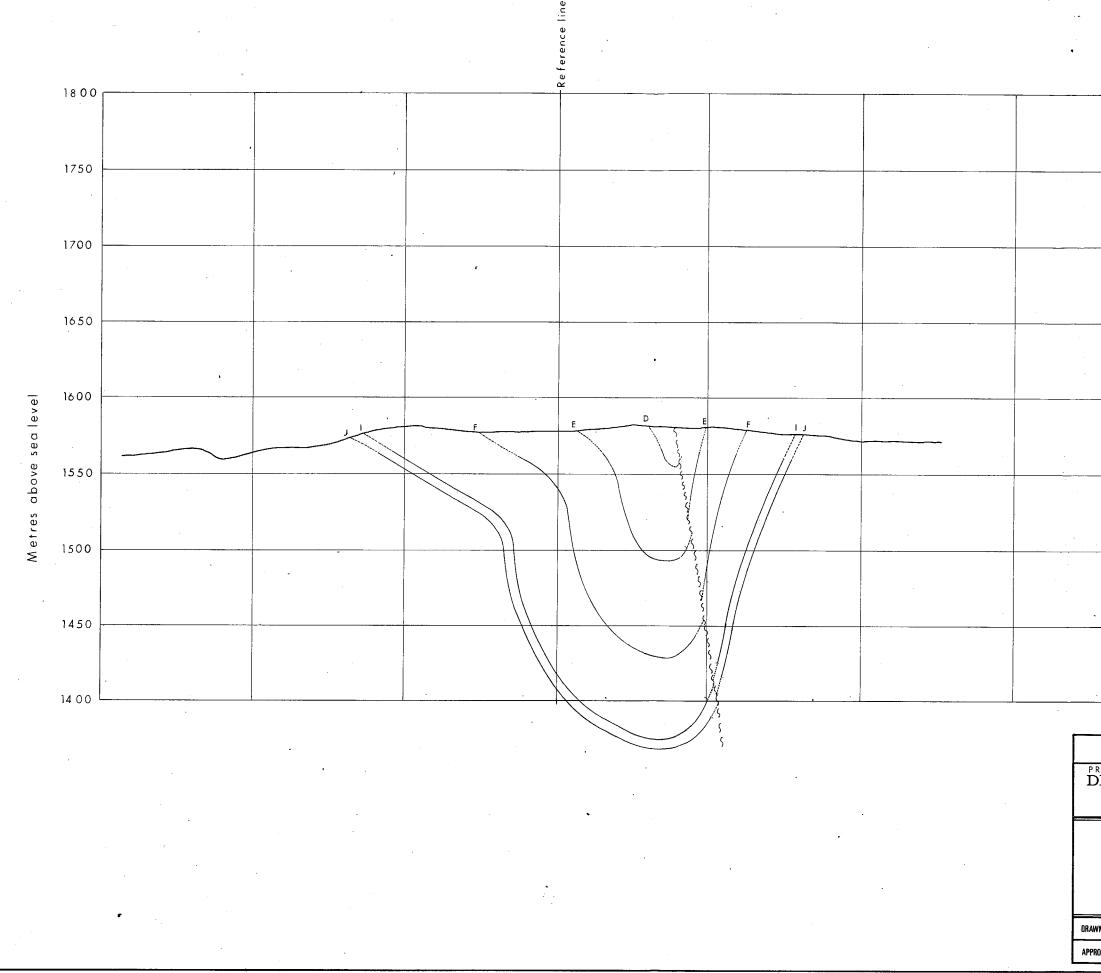


,

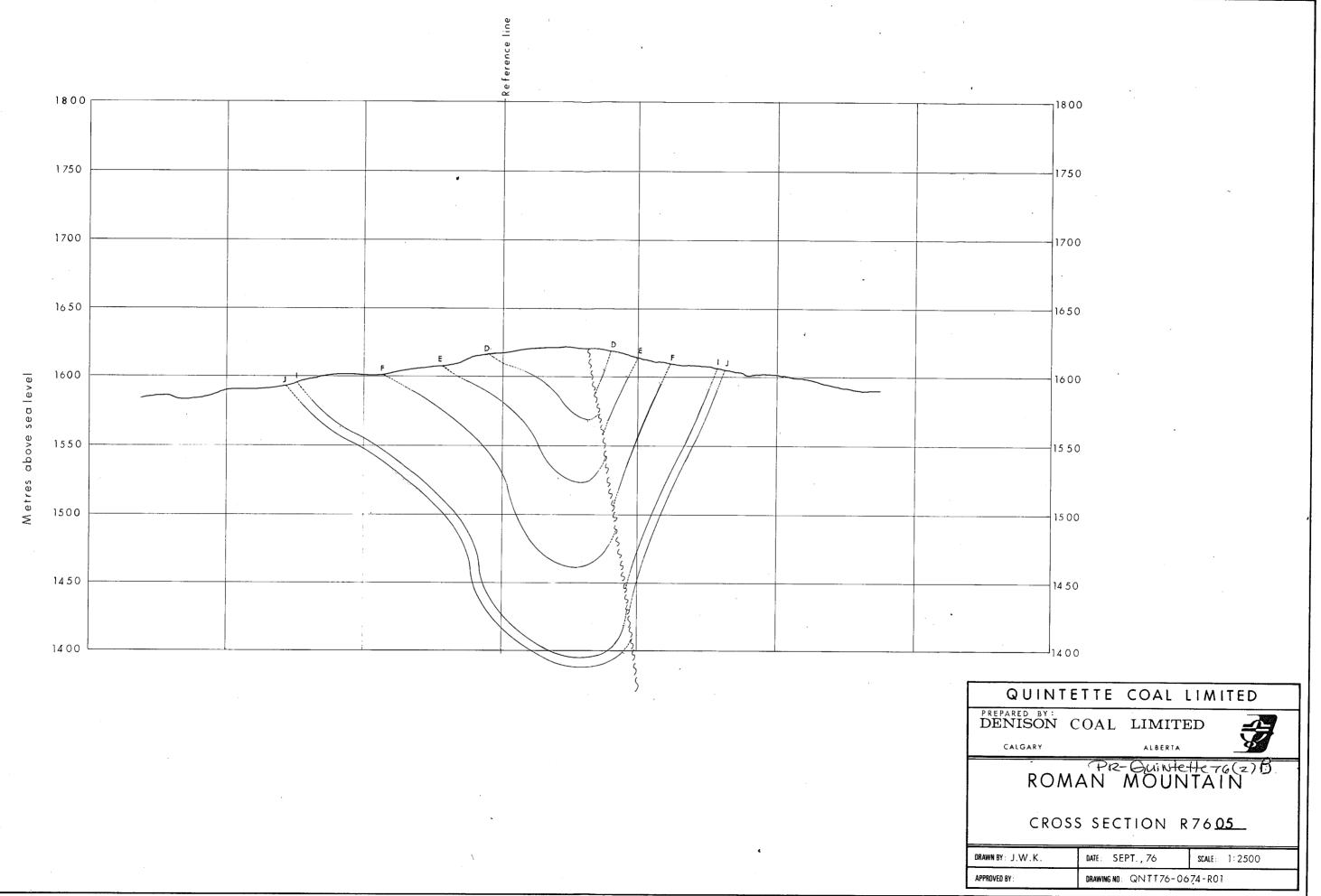




the second second



•		
· · · · · · ·		
18 00	o •	۷ ۲.
		i. A
1750	<b>)</b>	•
1700	)	
		f
		4
1650		
1.600		
		, c
		- -
1550	<b>)</b>	·
1500		• . *
		-
1450		<b>'</b> .
1400		
QUINTE	TTE COAL LIMITED	
PREPARED BY: DENISON (	COAL LIMITED	
CALGARY	ALBERTA	
	PR-GUINTETTE 76(2) B. AN MOUNTAIN	4 A A
KOW	AN MOUNTAIN	:
	S SECTION R7604	
		N.
AWN BY: J.W.K.	DATE: SEPT., 76 SCALE: 1:2500	
PROVED BY:	DRAWING NO: QNTT76-0674-R01	



1

1

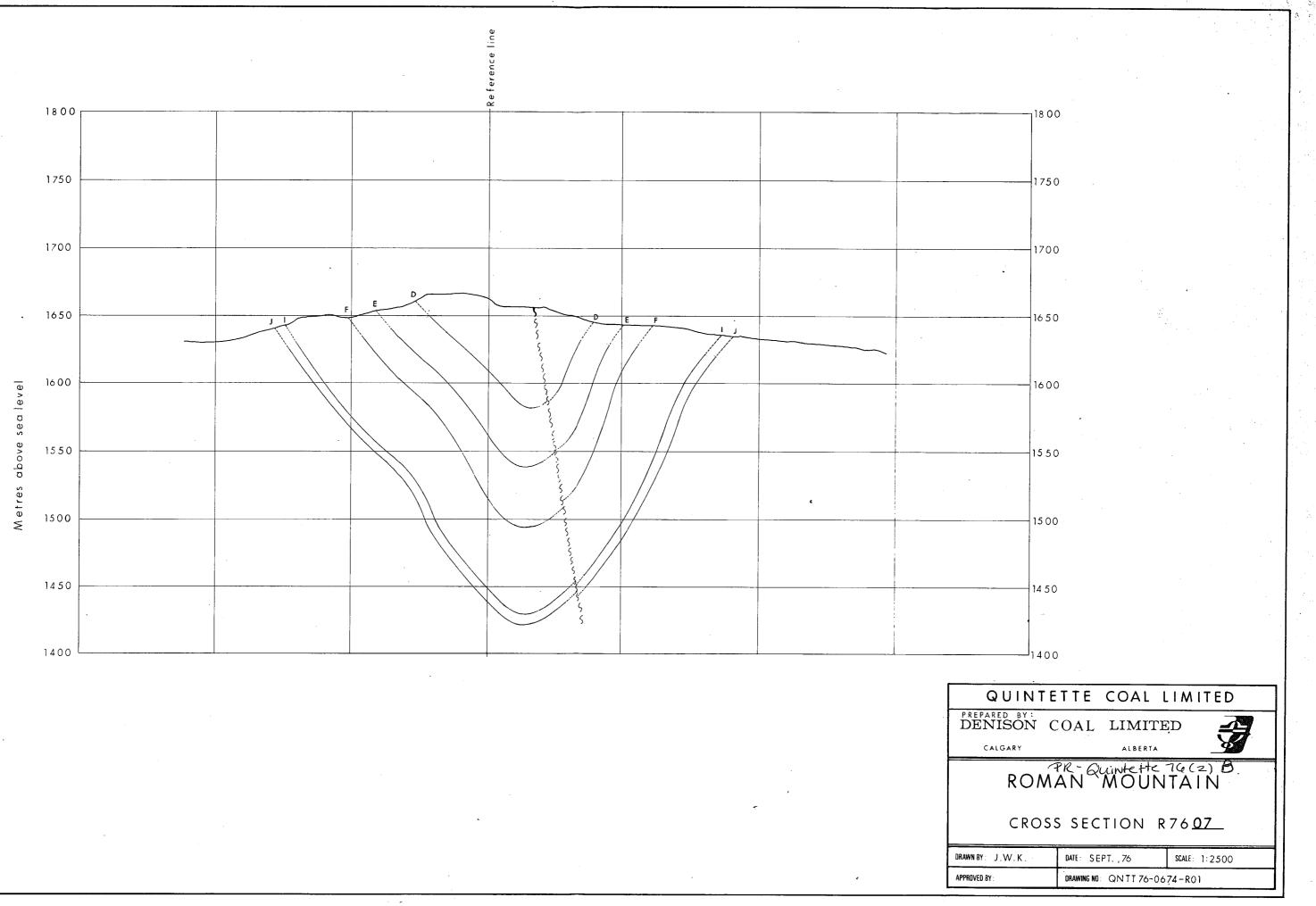
-

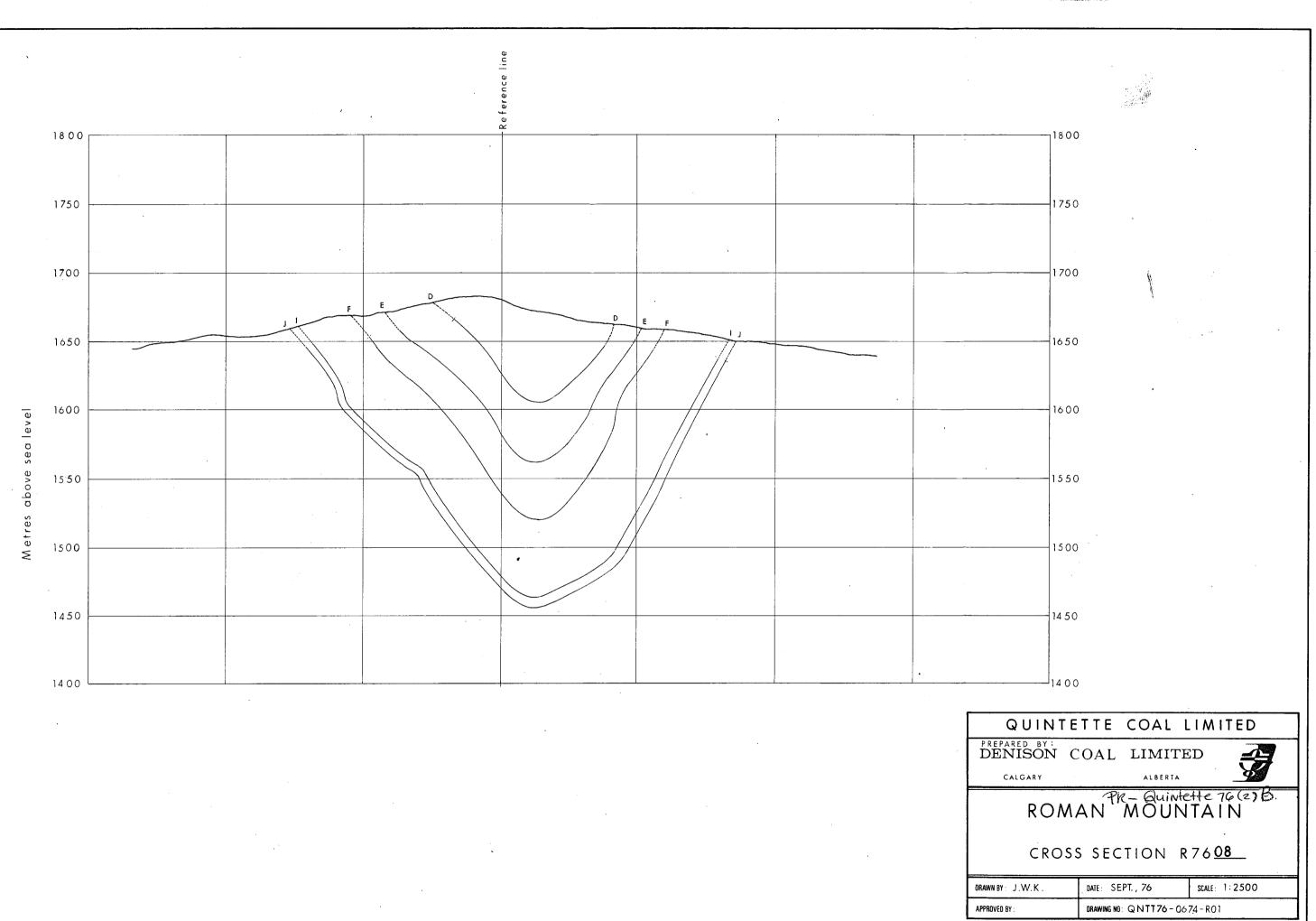
erence line Ref 1800 1750 1700 1650 D D IJ j l 1600 Metres above sea level 1550 ¢ 150**0** 1450 . • 1400 S

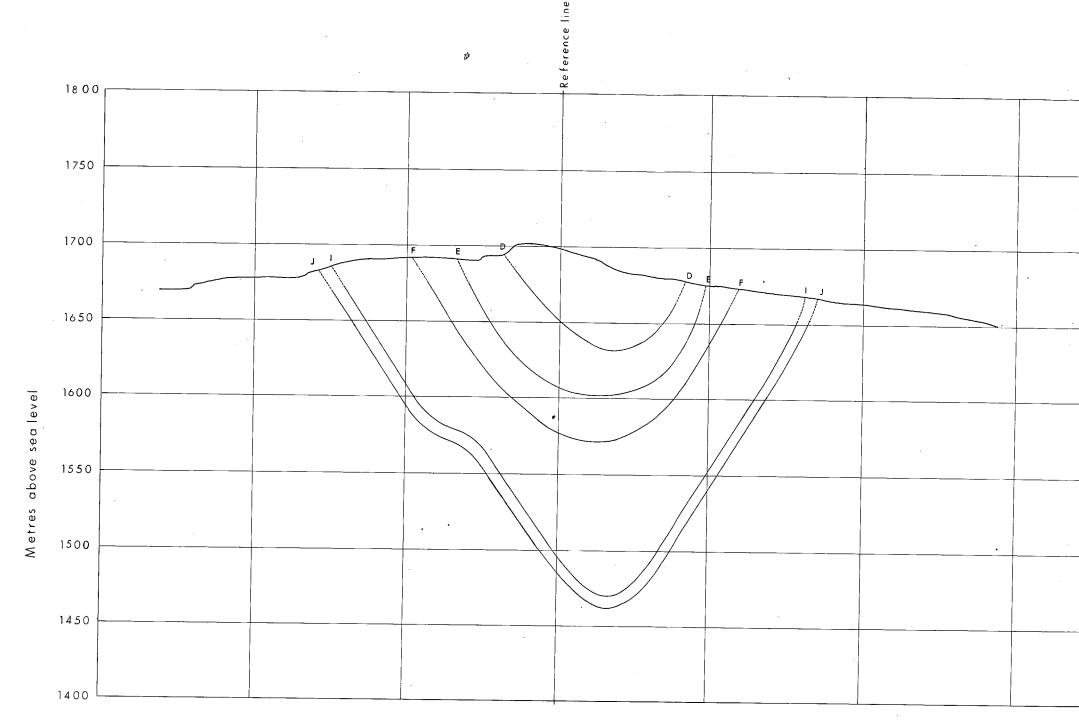
.

F I DRA

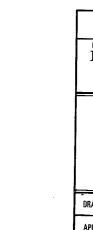
-	
	0
175	0
1700	0
	<u>^</u>
1650	· ·
16.00	0
1550	0
1500	
1450	)
1400	
PREPARED BY:	TTE COAL LIMITED
CALGARY	COAL LIMITED
ROM	PR-Quintette 76(2)B
KOM	AN MOUNTAIN
CROSS	S SECTION R76 <u>06</u>
ORAWN BY: J.W.K.	DATE: SEPT., 76 SCALE: 1:2500
APPROVED BY :	DRAWING NO: QNTT 76-0674-R01



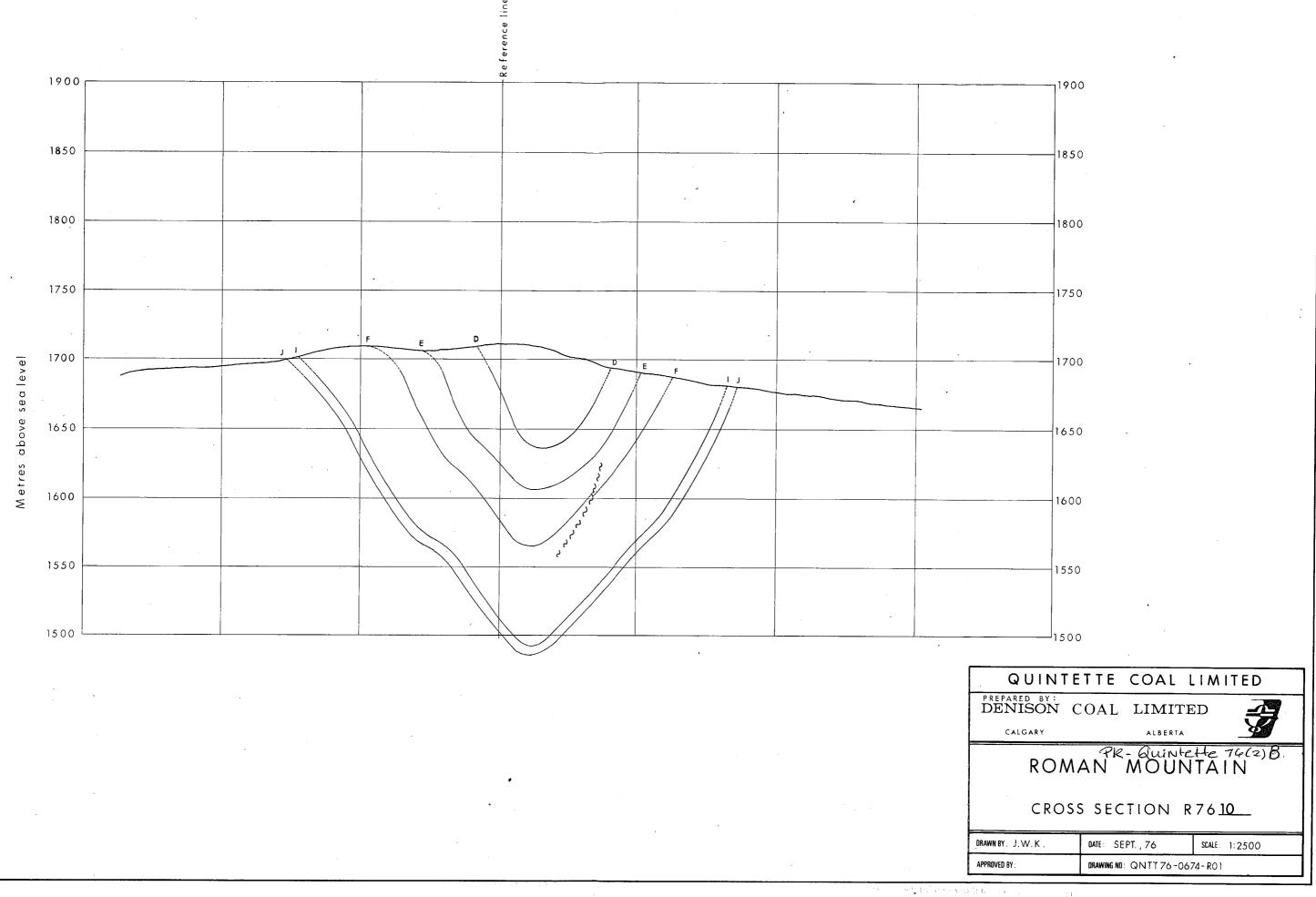


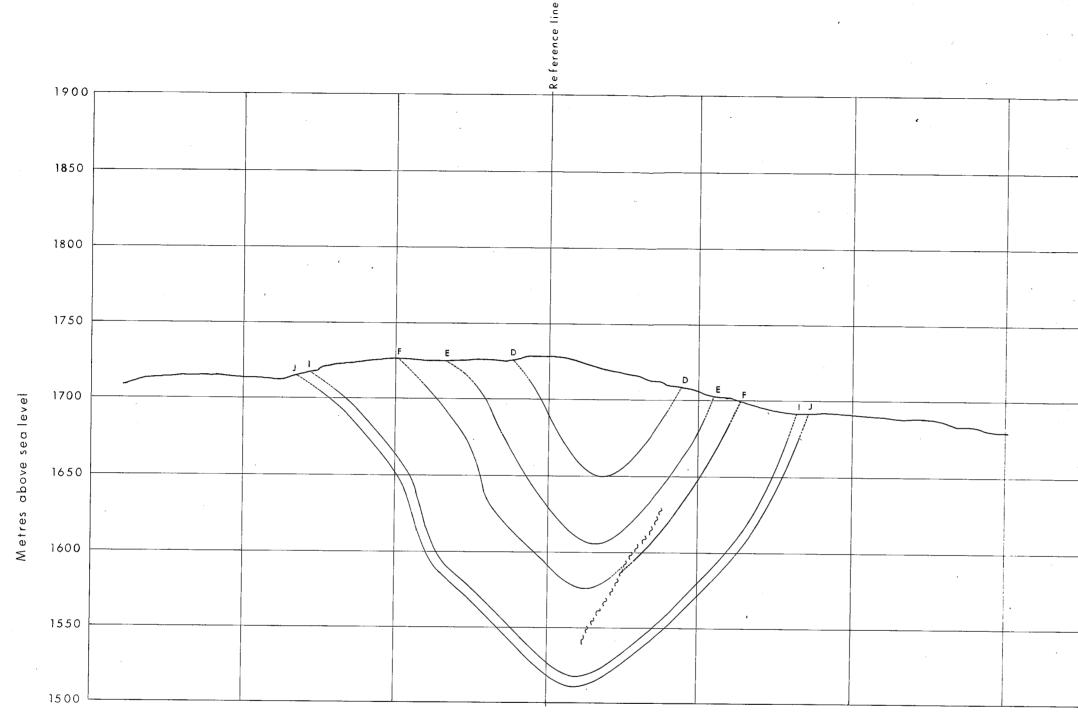


、 .



<i>i</i>											1.11
								N	•		
				. *				÷.,		:	
					• •				*		
· · · · · · · · · · · · · · · · · · ·	180 ך	0								з.,	
		0								· .	
							. •		• *		
	175	0									
		-									
		·		•		· · ·					
	170	0									
										.	
	1650	5									
	1 <b>6</b> 00	C									
,											
ĺ											
· ·	1550	)									
	15 00	)									
.											
	14.50										
	400	I									
						•					
QUIN							\ I T	ED			
PREPARED BY: DENISON		0.4	τ	ττλ		<u>רי</u>			•		
		UA	L			U.		<del>,</del>			
CALGARY					ERTA			22			
PO		PK (	dui	Ntef	te 7 UN	G (-	2)E	5.			•
ĸŪ	1714	A IN	/\	ΛŪ	UΝ	IΑ	ΗN	ł			
-											
CRC	DSS	SE	ECT	101	N R	76	<u>09</u>	-			
DRAWN BY: J.W. K.		DATE :	SEPT.	, 76		SCALE	: 1:2:	500			
APPROVED BY :		DRAWIN	G NO: (	QNTT	76 - 06	74- R	:01				•
			_				·				





/

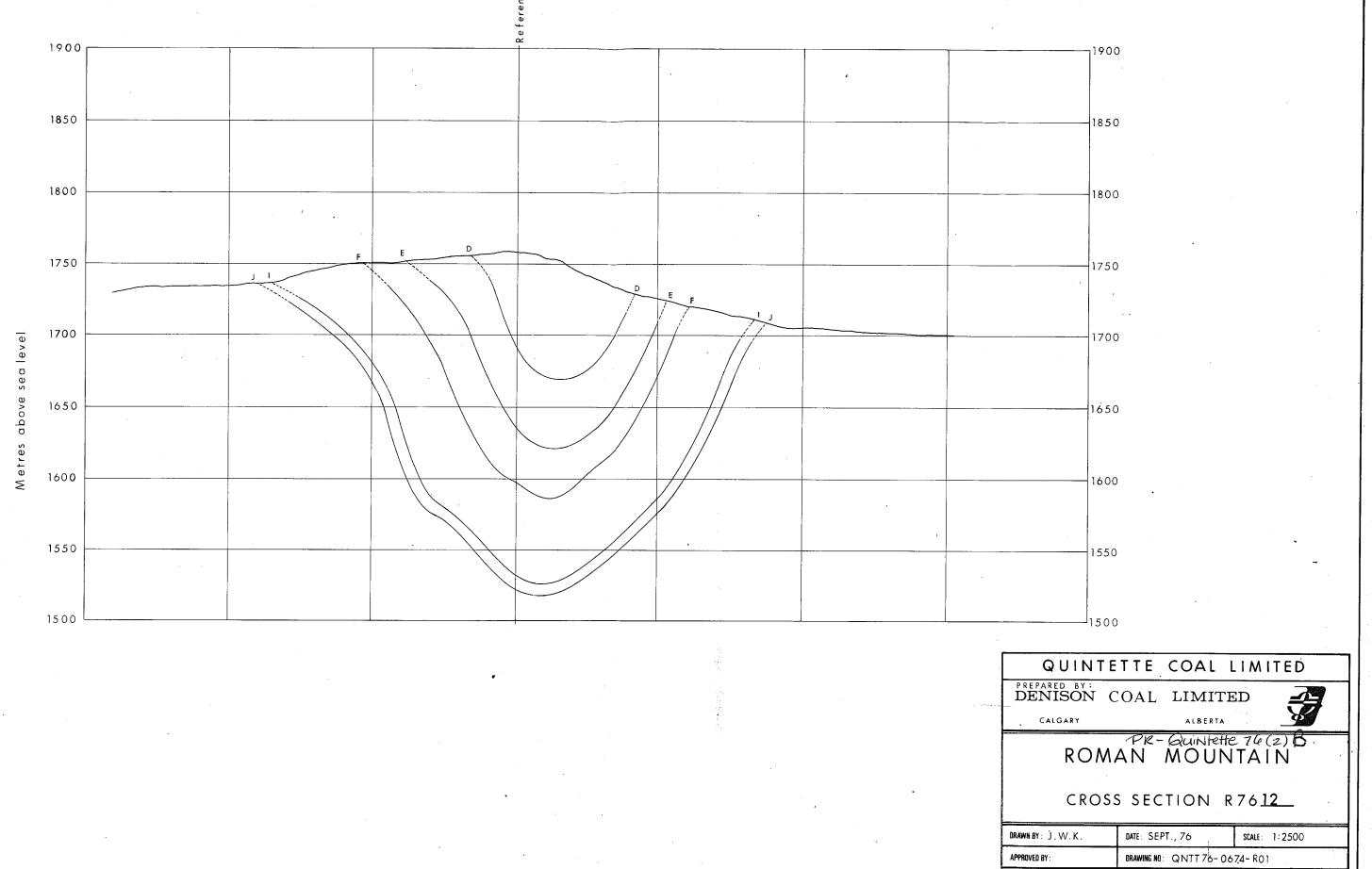
PREF DE DRAWN BY

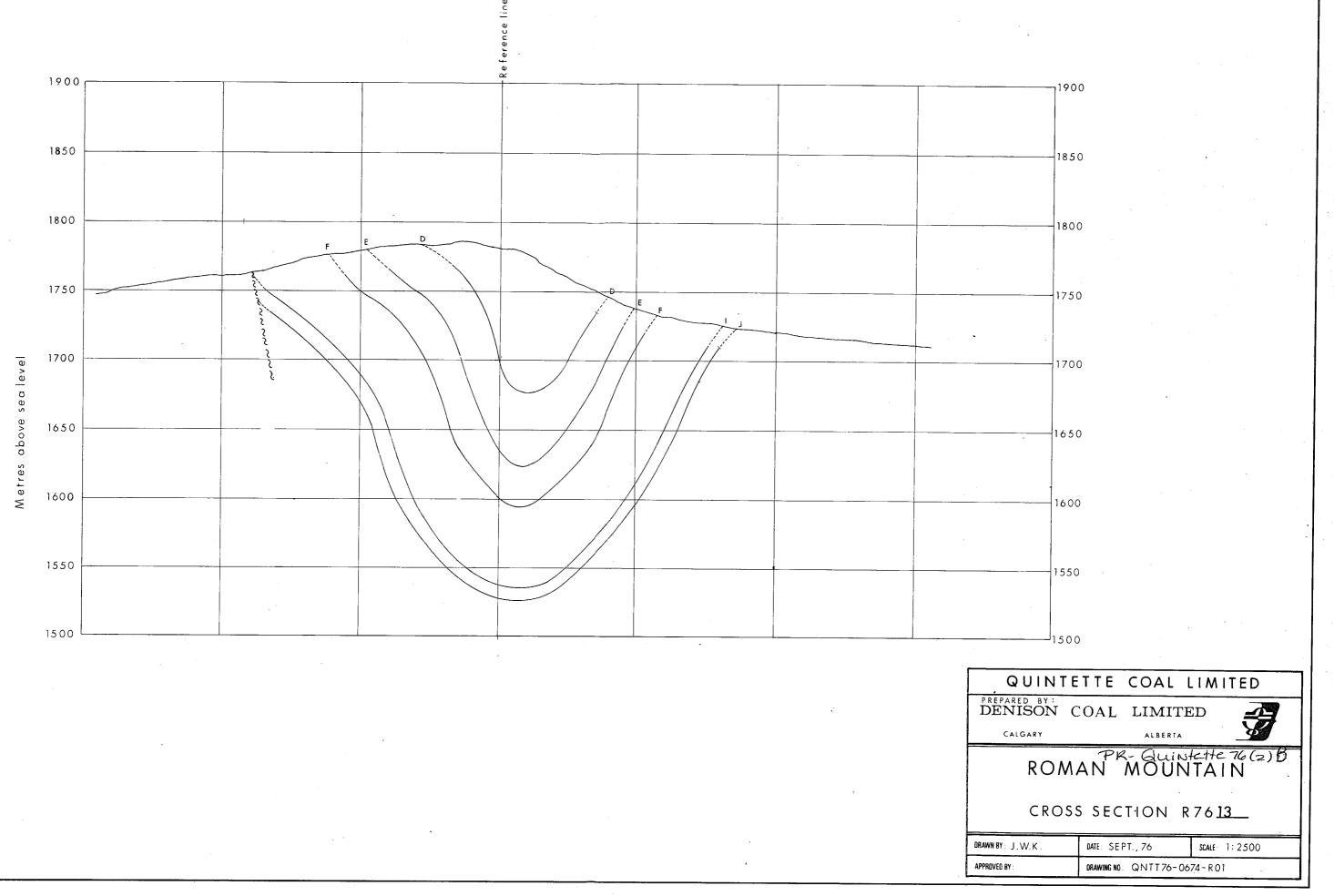
·

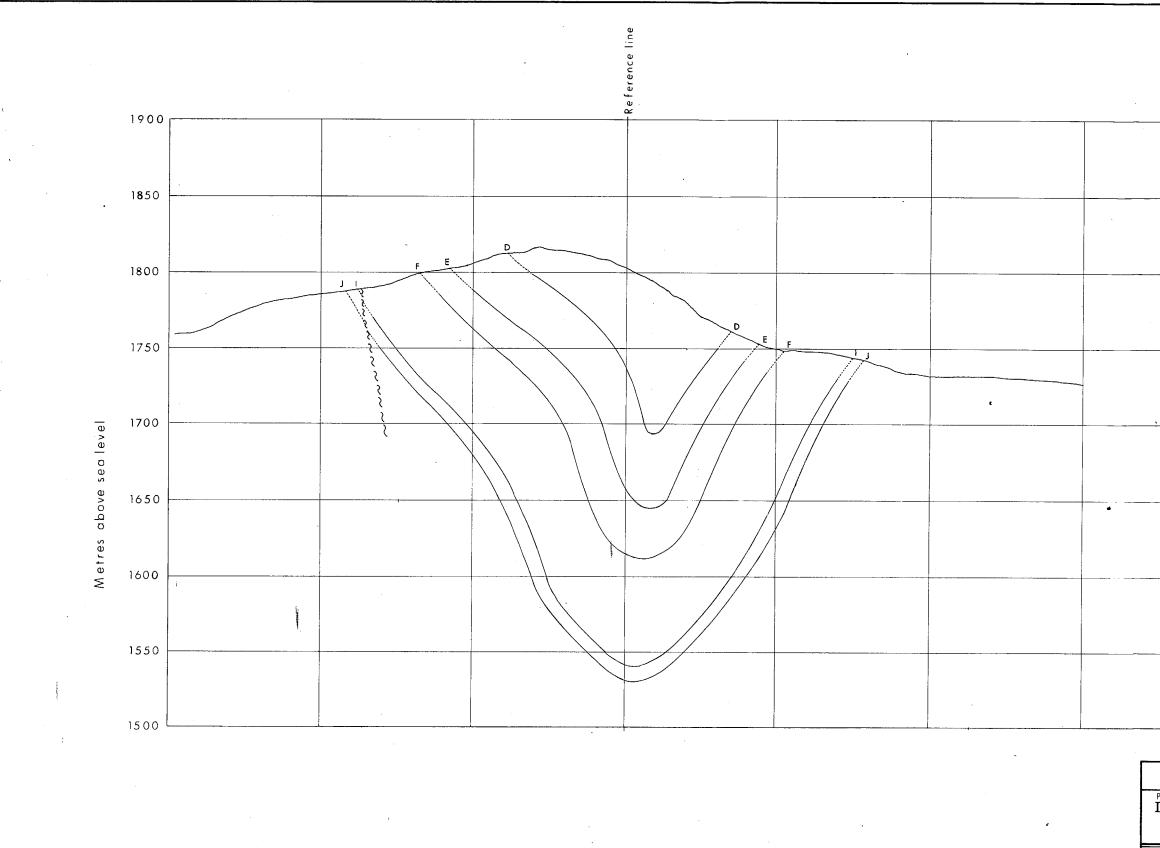
•			]
1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 10000 - 10000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -			
· · ·	1900		
	1850		
	1800		
			- 1
		•	
			· ·
	1750		
			Norse en
	1700		· .
		en e	ан 14
	1650		
			. *
	-		
	1600		
		•	
	1.5.5.0		
	1550		- 1
			. '
	1500		
0.00	1	TTE COAL LIMITED	
PREPARED BY	:		
DENISON	1 C(	OAL LIMITED	
CALGARY		ALBERTA	
RC	MA	N MOUNTAIN	
CR	oss	SECTION R7611	
RAWN BY: J. W. K.		DATE: SEPT.,76 SEALE: 1:2500	
PPROVED BY :		DRAWING ND: QNTT76-0674-R01	

•

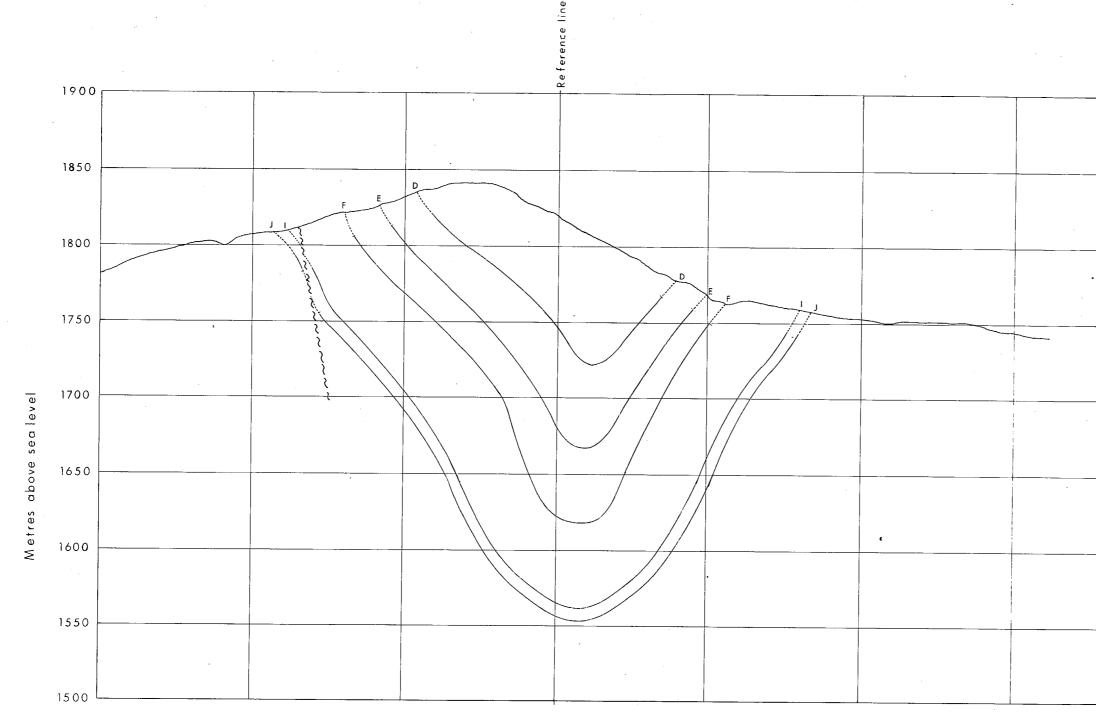
.;





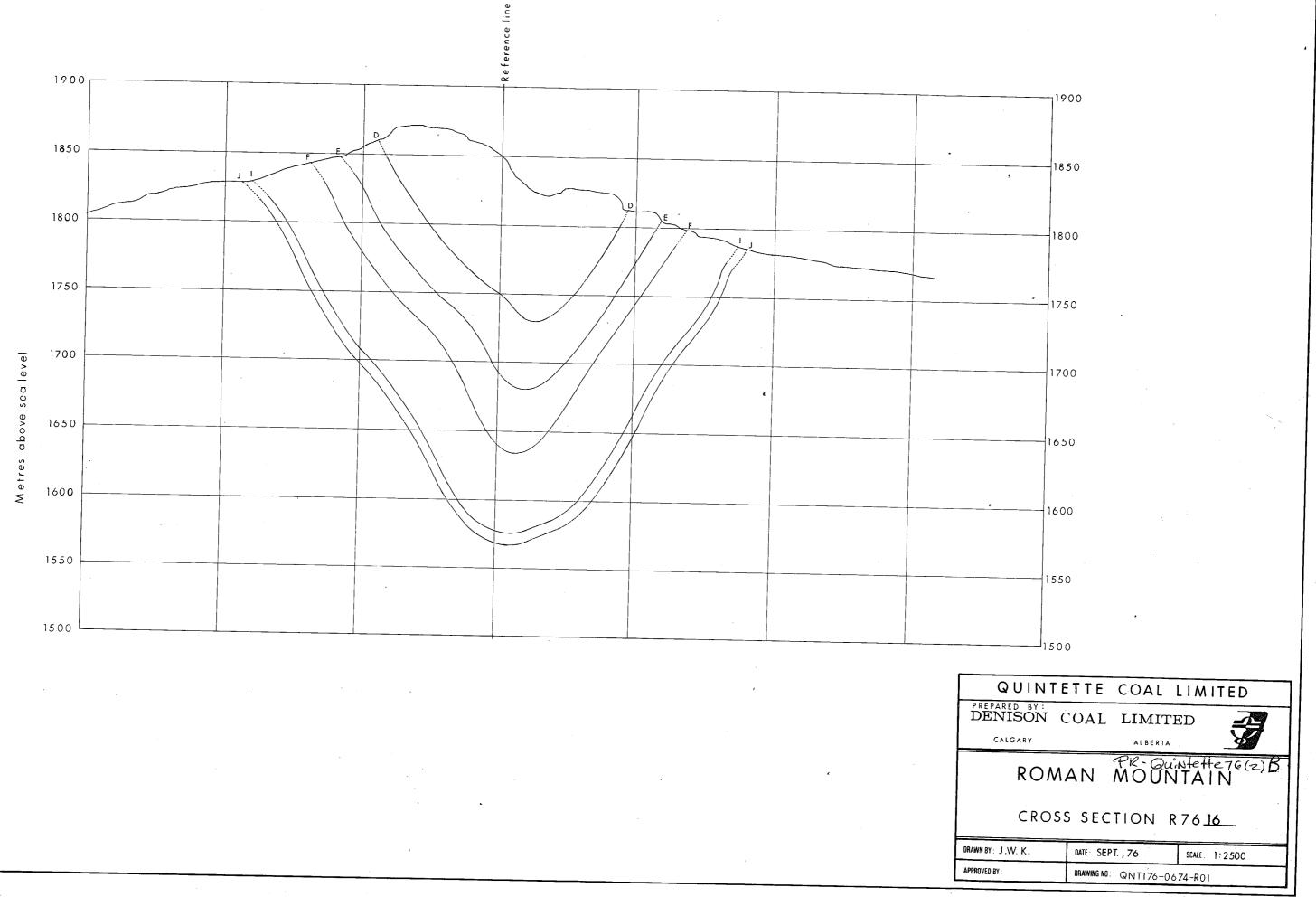


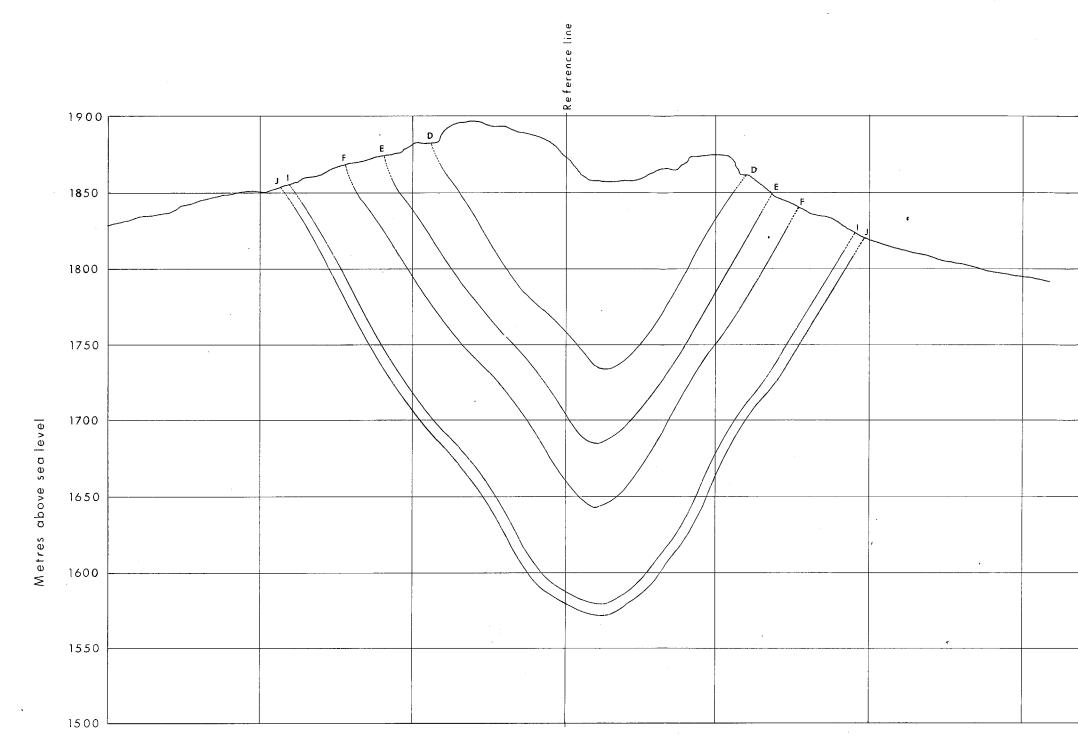
1850					
1750					
1700					
1650					
1600					
1550					
1500					
QUINTETTE COAL LIMITED					
PREPARED BY: DENISON COAL LIMITED					
CALGARY ALBERTA					
ROMAN MOUNTAIN					
CROSS SECTION R7614					
DRAWN BY: J.W.K. DATE: SEPT., 76 SCALE: 1:2500					
APPROVED BY: DRAWING NO. QNTT76-0674-R01					



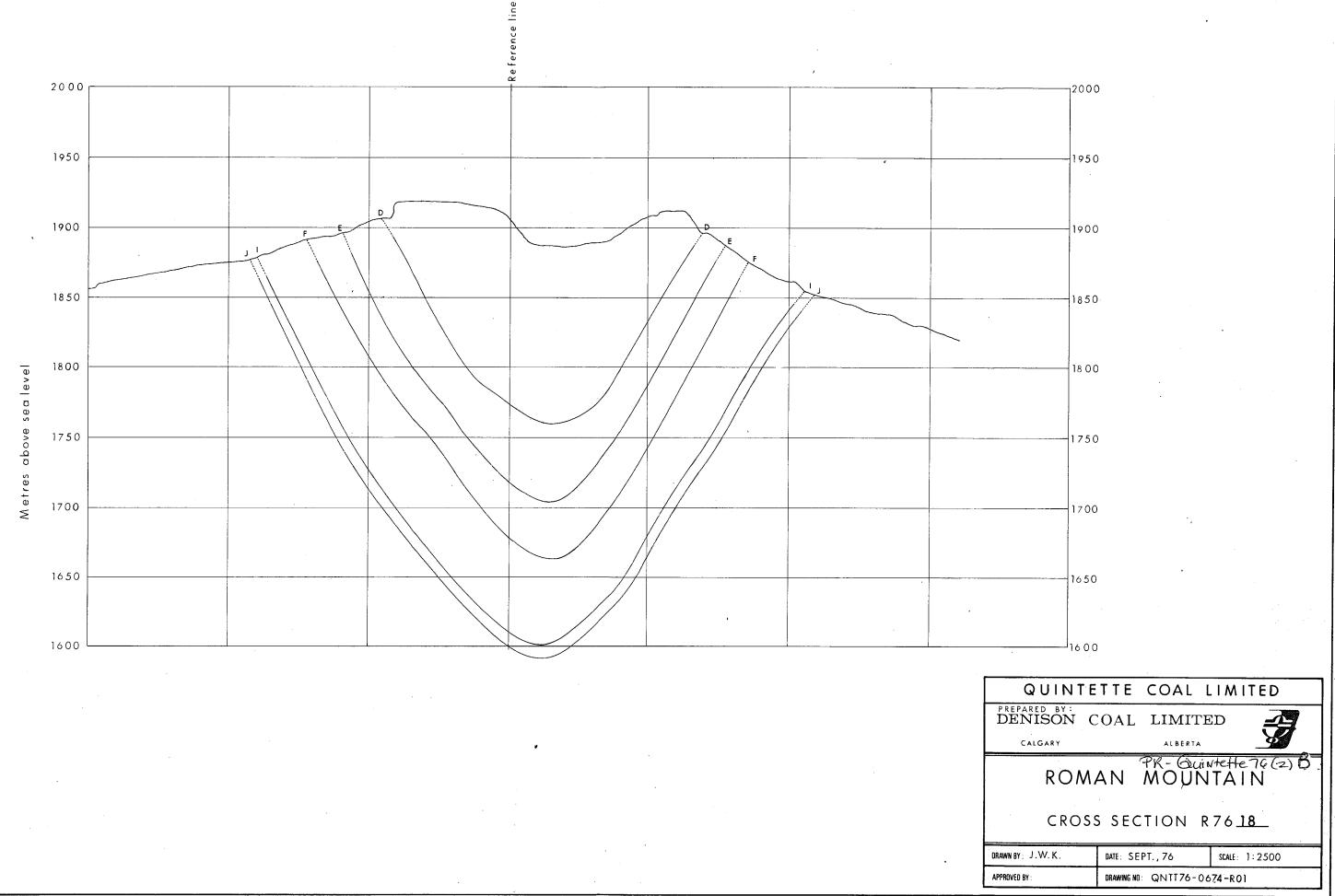
Q PREPARI DENI CAL DRAWN BY: J. APPROVED BY:

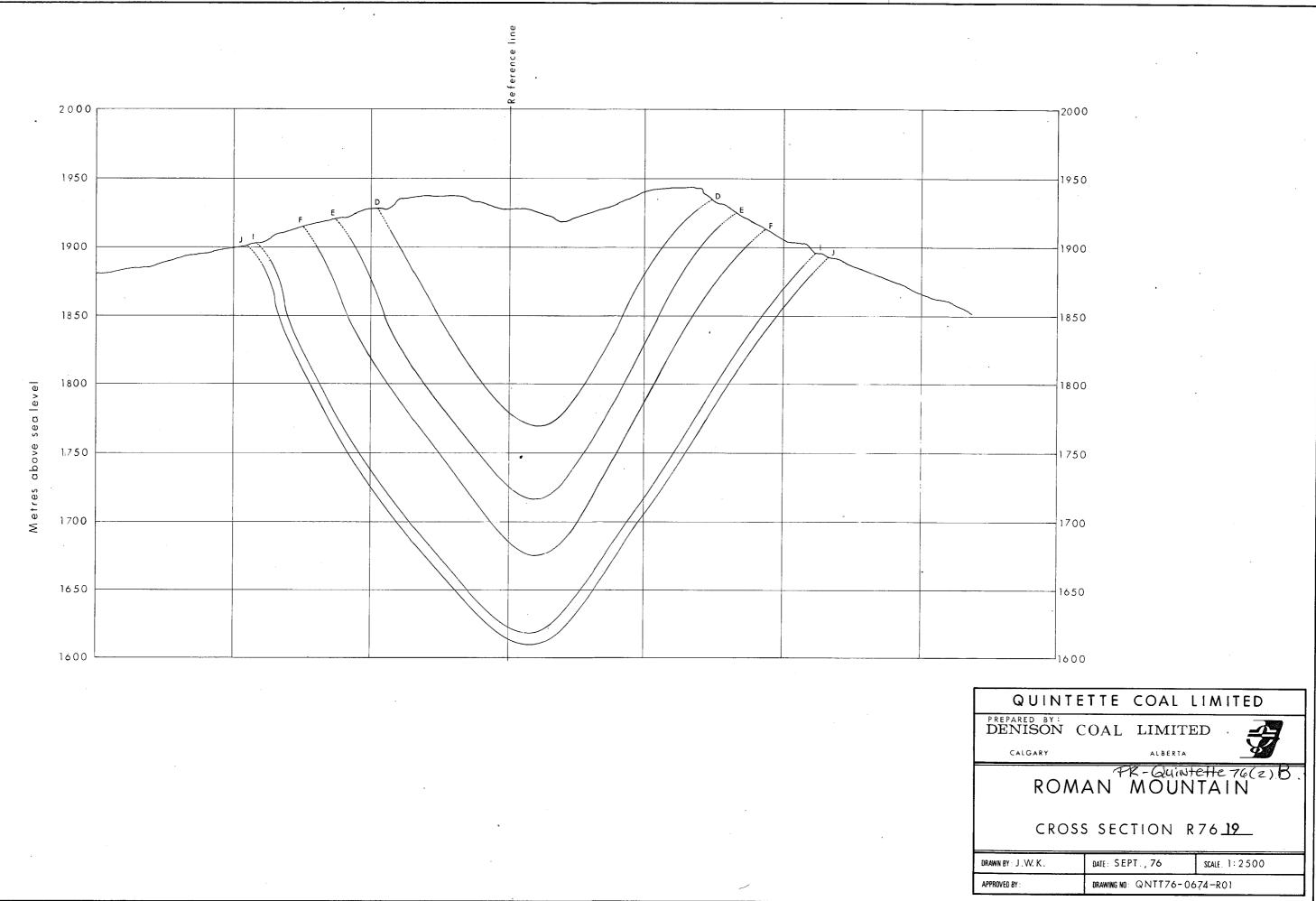
	1900		1
•	1800		
	650		
	600 550		
QUIN	TETTE COAL LIN COAL LIMITED	AITED	
RO	ALBERTA PR-QUINICHE MAN MOUNTA DSS SECTION R76	1 - a - 1 - 1	
AWN BY: J.W.K.	DATE: SEPT., 76 SCAL DRAWING ND: QNTT76-0674-F	E: 1:2500 R01	



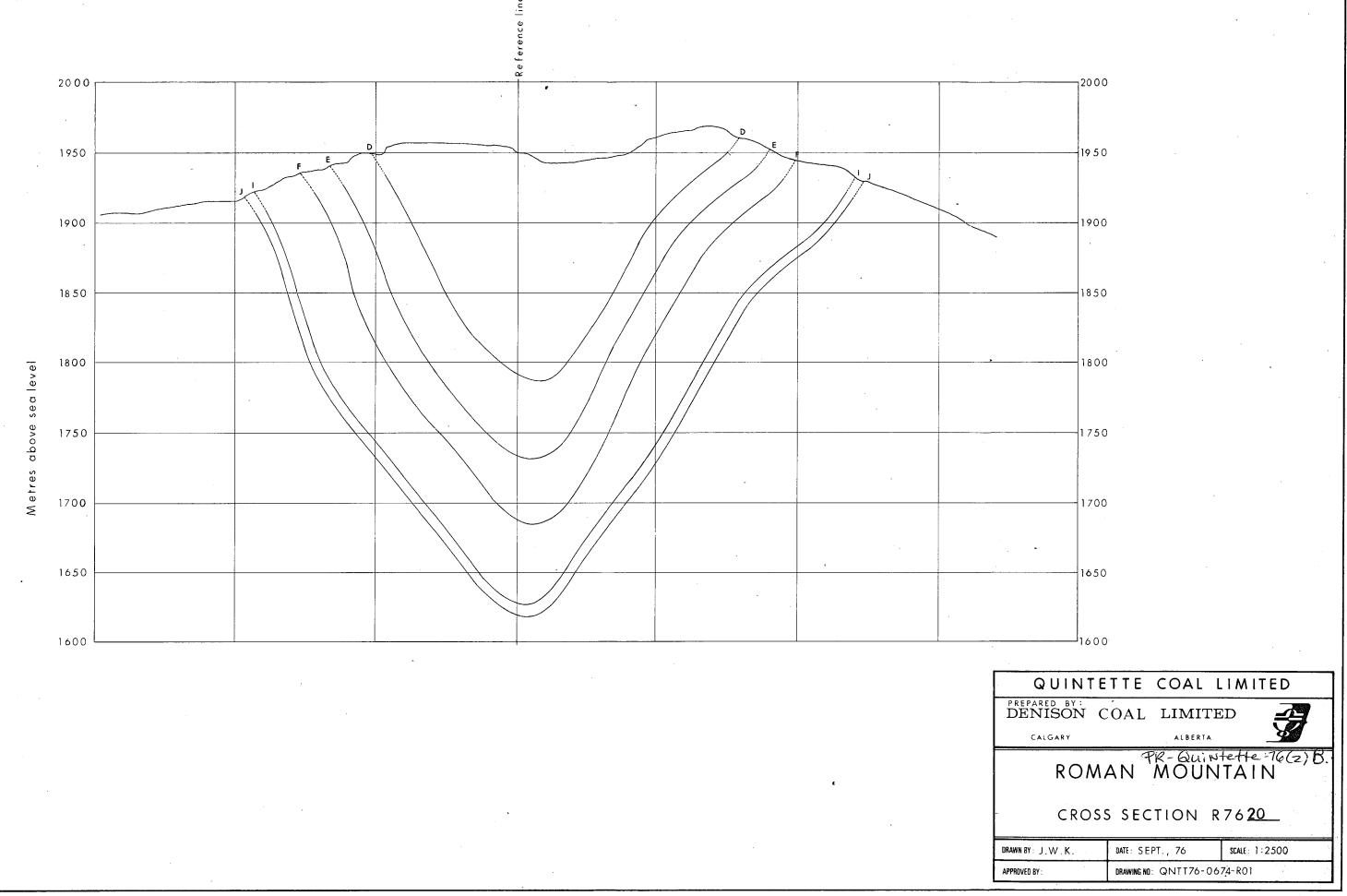


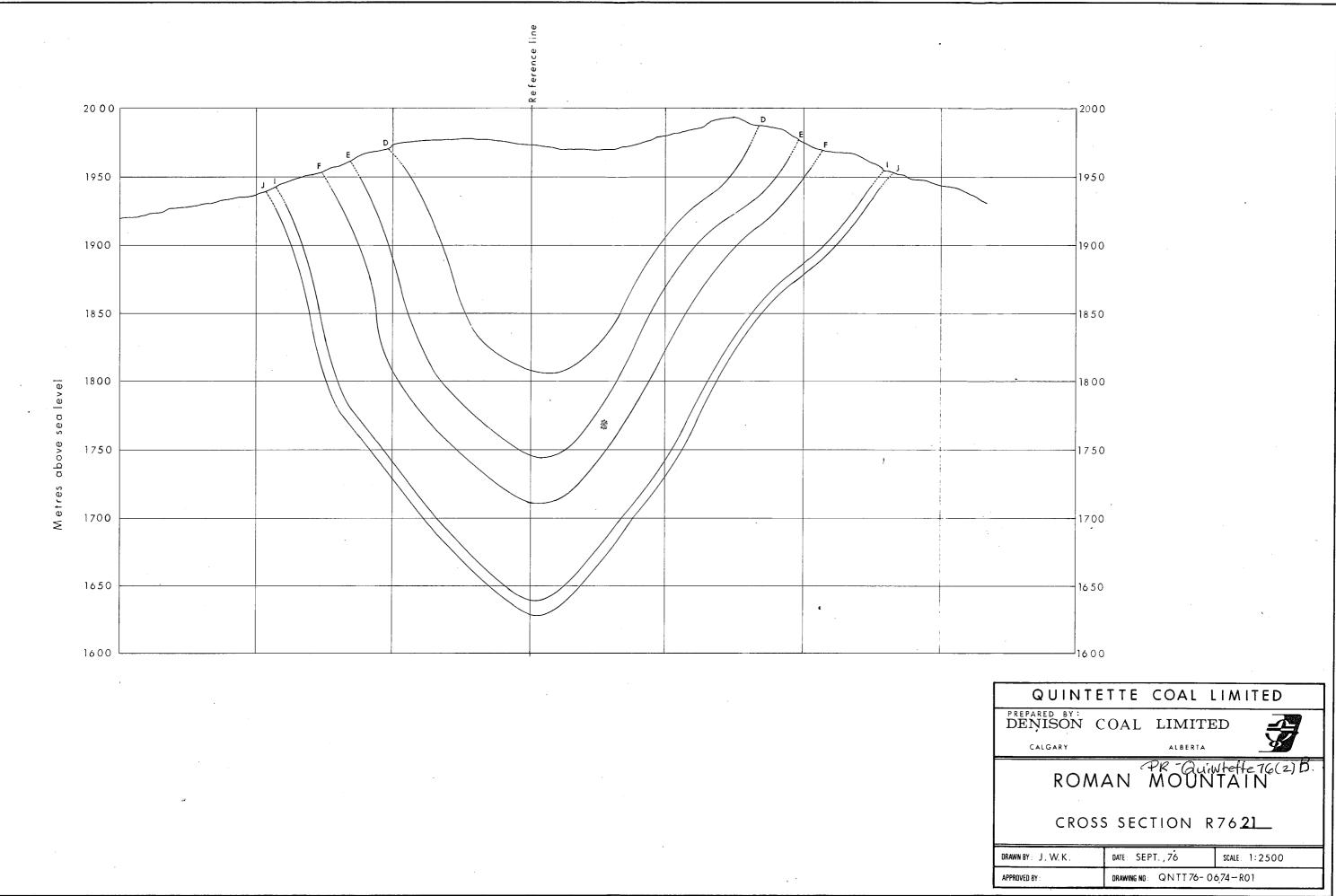
		00					
	18.	50					
		00					
	. 17.	50					
	17	00					
	16	50					
	16	00					
	15.	50					
	15	00					
ſ	QUINT	ETTE COAL L	IMITED				
╏	PREPARED BY :	COAL LIMITE					
	CALGARY ALBERTA						
	ROMAN MOUNTAIN						
	CROSS SECTION R76.17						
ſ	DRAWN BY: J.W.K.	DATE: SEPT., 76	SCALE: 1:2500				
	APPROVED BY :	DRAWING ND: QNTT76-06	₽74- <b>R</b> 01				

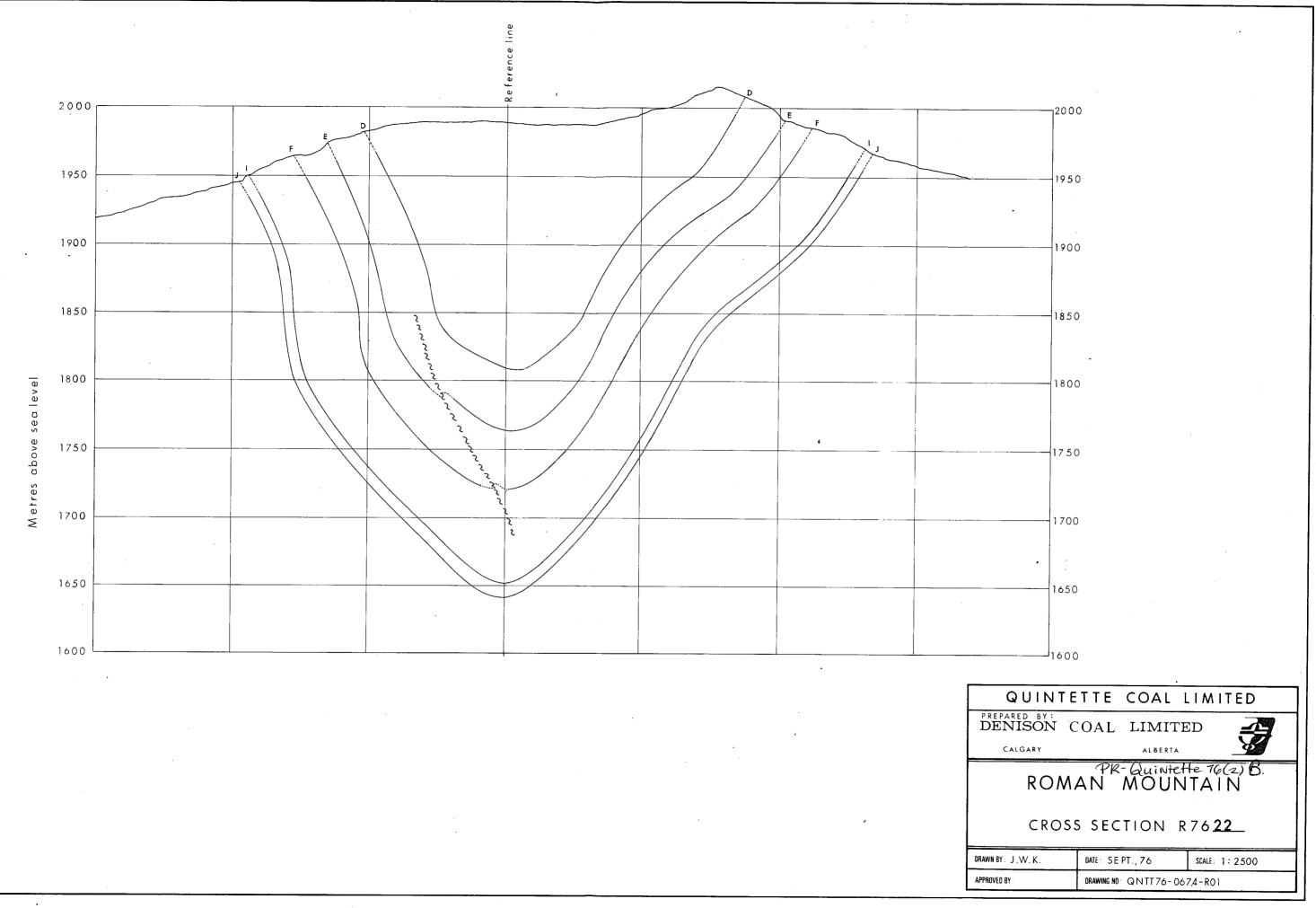


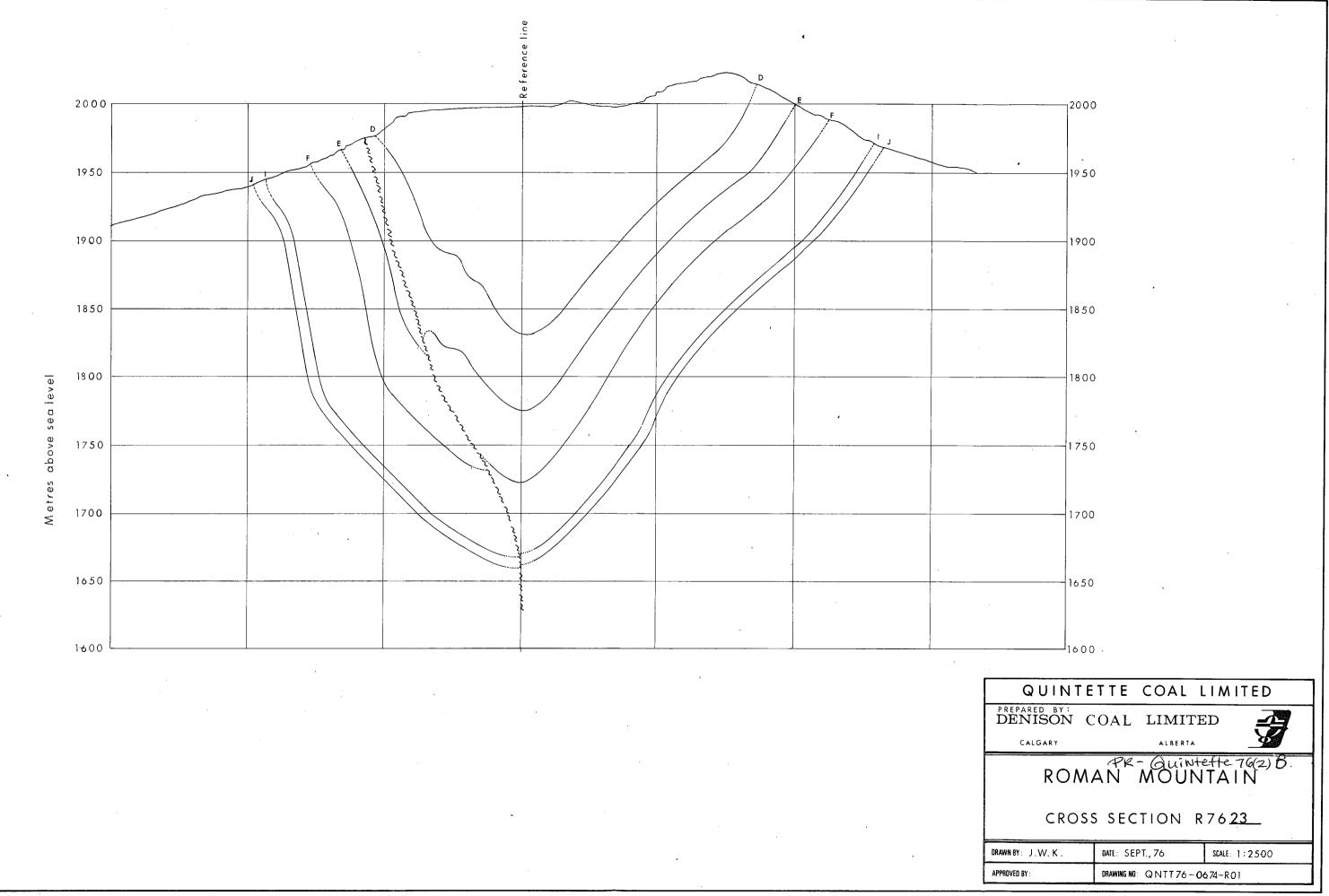


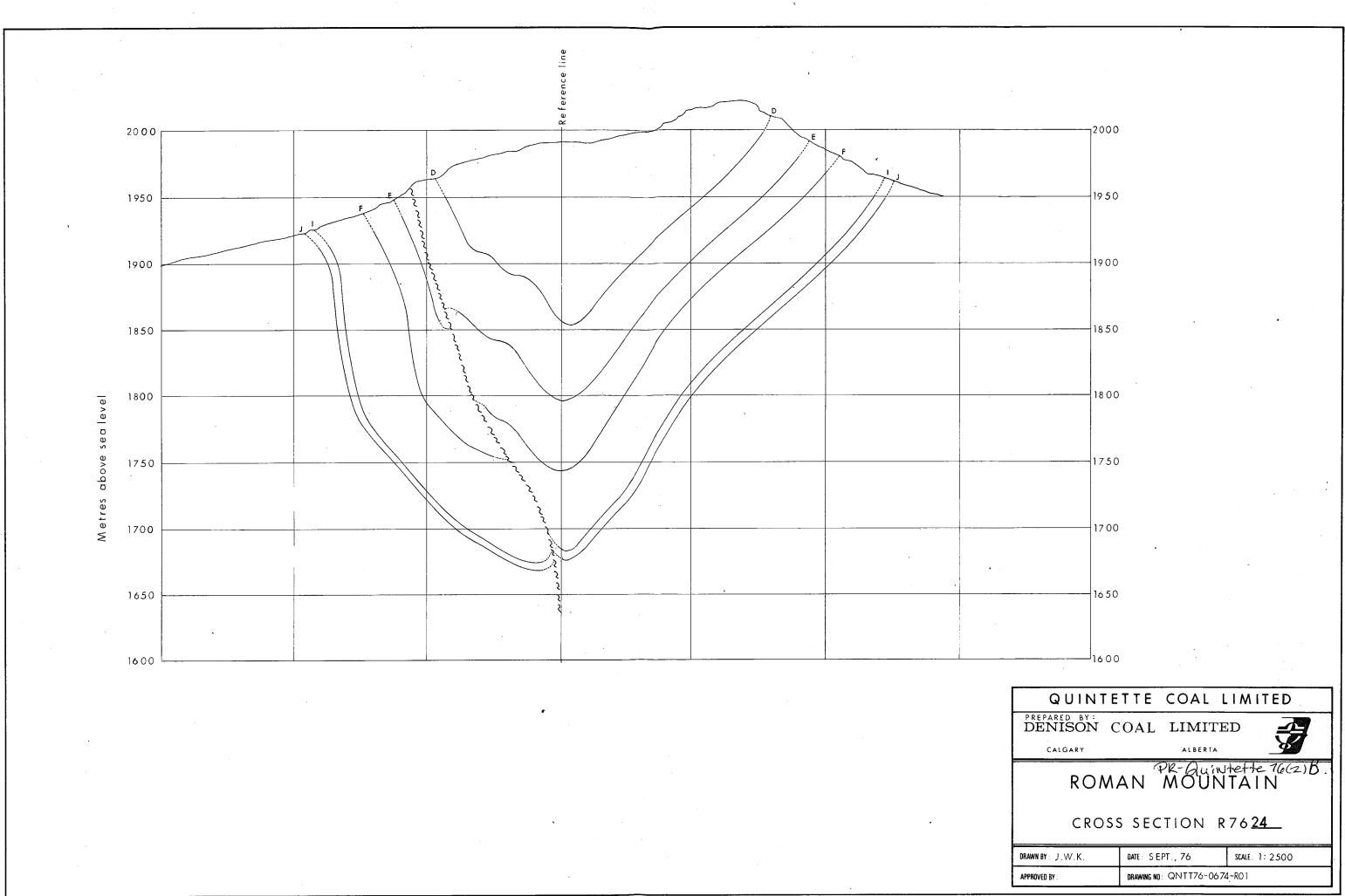
•

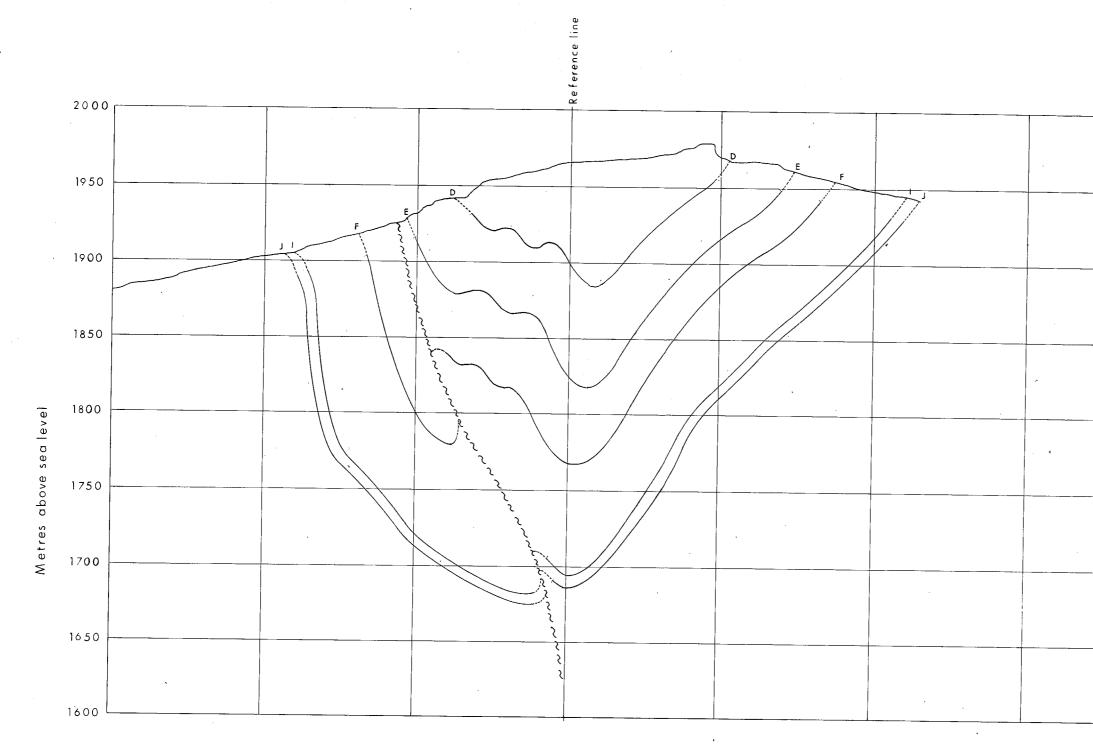












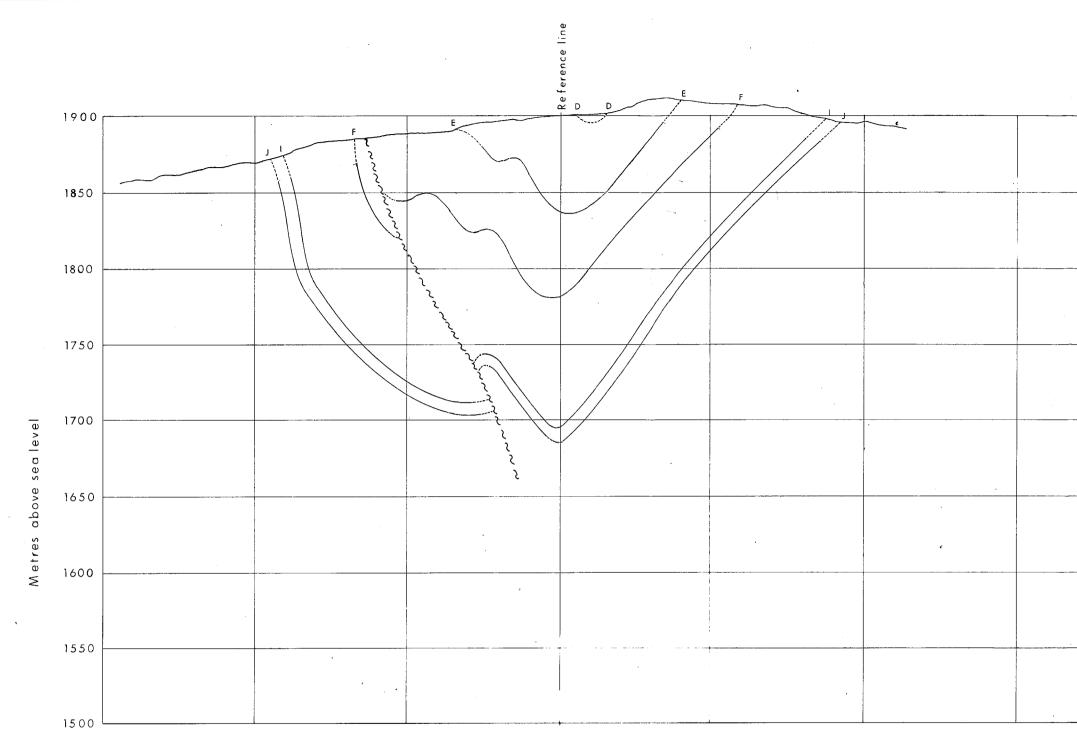
· · ·

÷.

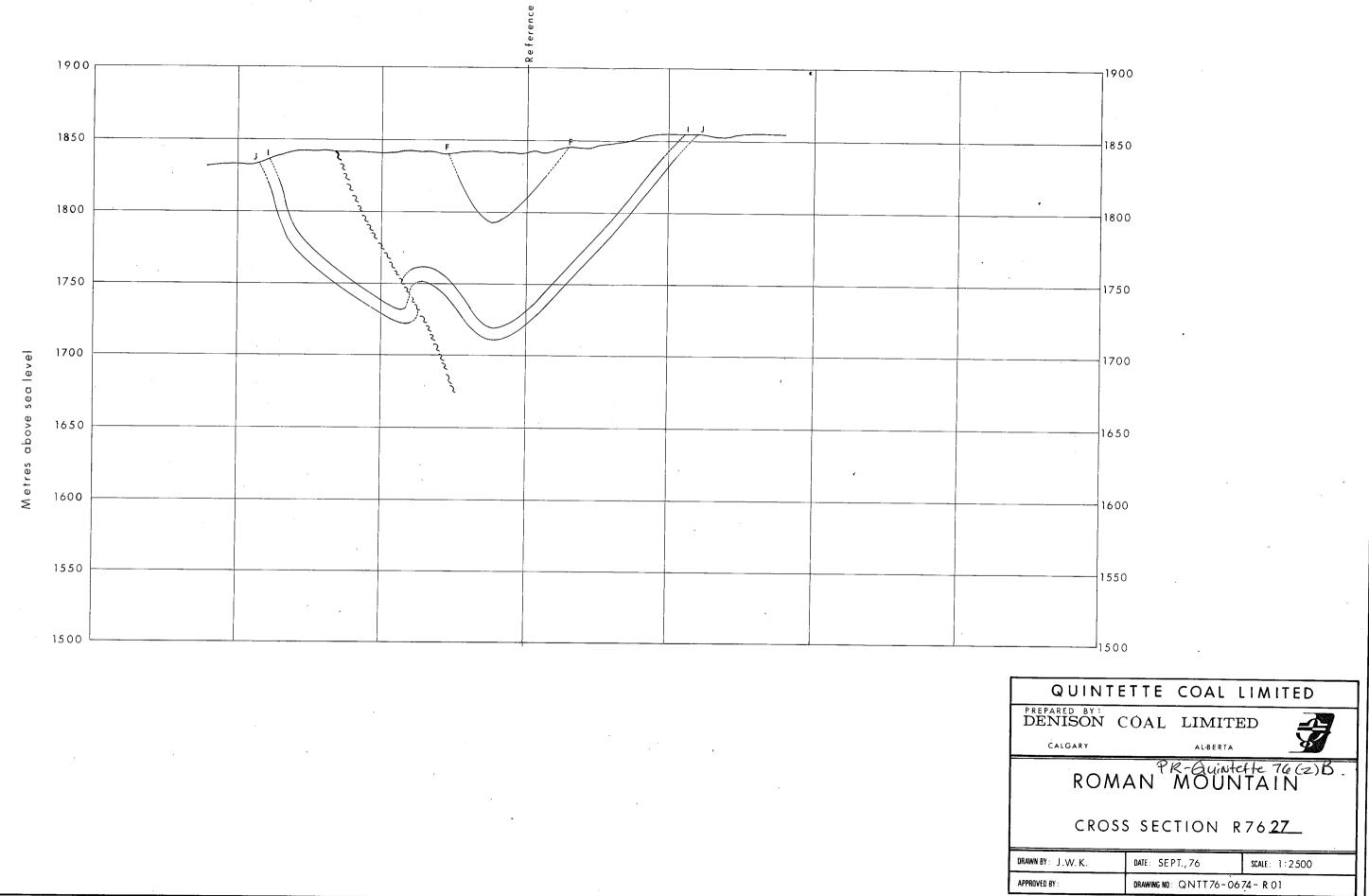
DR/

•

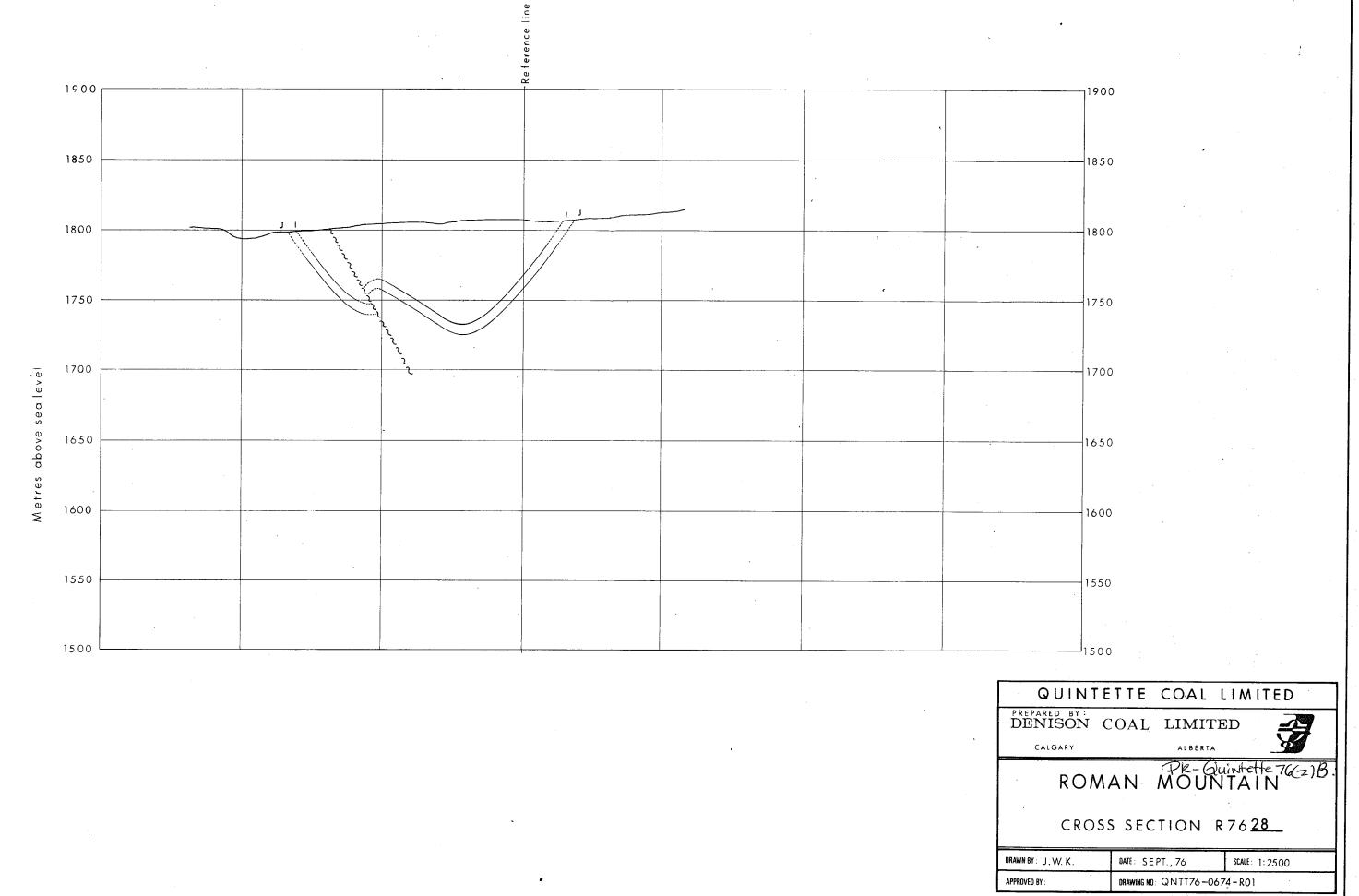
20	00			
195	50			
190	00			
18.5	50			
	)0			
175	0	x		
170	0			
165	0			
16 0	0			
QUINTE	ETTE COAL I	LIMITED		
PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA				
ROMAN MOUNTAIN				
	S SECTION R	76 <b>25</b>		
DRAWN BY: J, W. K.	DATE: SEPT., 76	scale: 1:2500		
APPROVED BY :	DRAWING NO: QNTT76-06	5.74-R01		

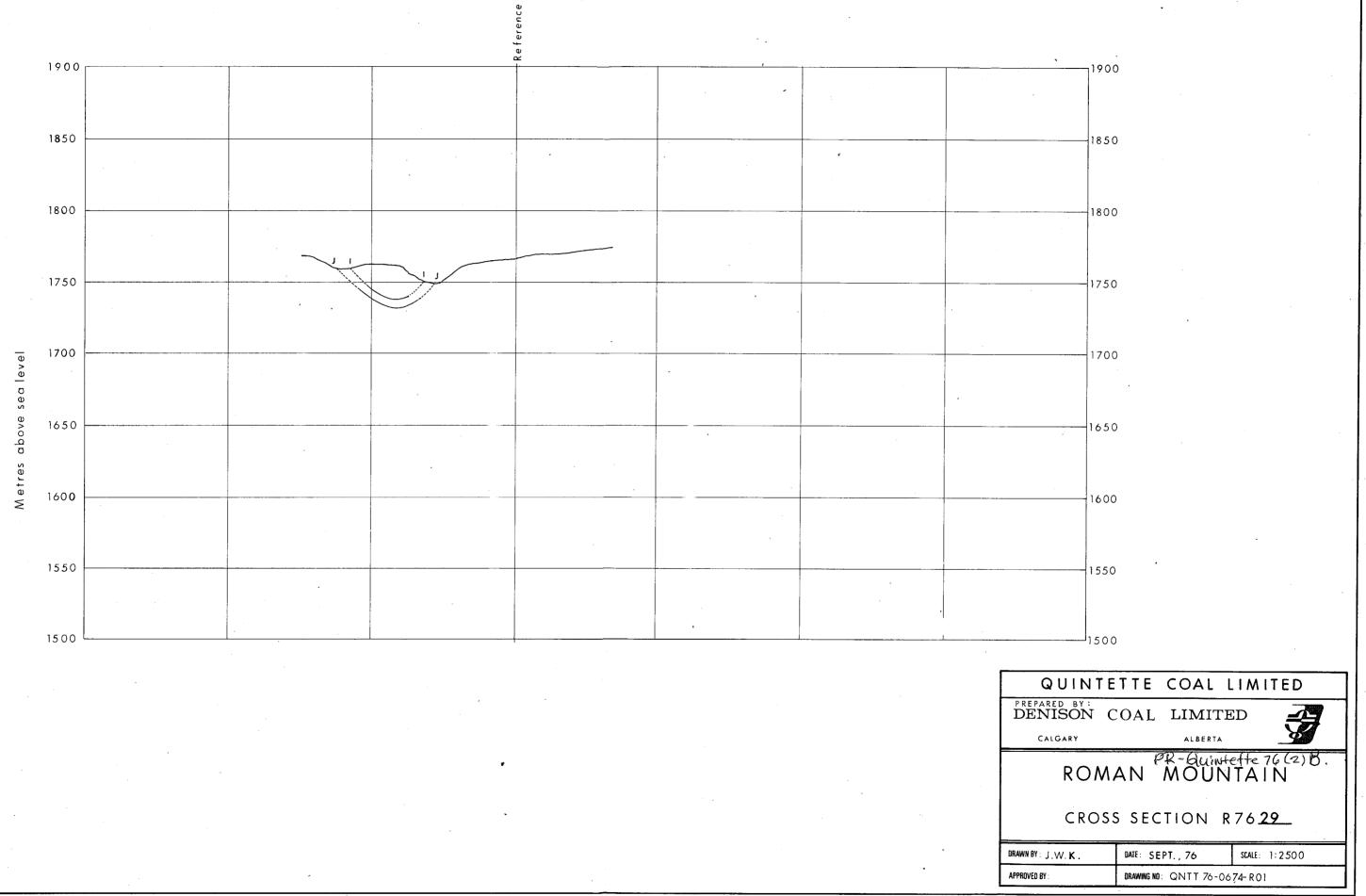


. 1800				
1700				
1550	· · ·			
1500				
	TTE COAL LIMITED			
PREPARED BY: DENISON C CALGARY	OAL LIMITED			
ROMAN MOUNTAIN				
CROSS	5 SECTION R76 <u>26</u>			
DRAWN BY .	DATE : SCALE :			
APPROVED BY	DRAWING NO :			
· ·				



line





Sheriff. Cross section. 57604-57626.

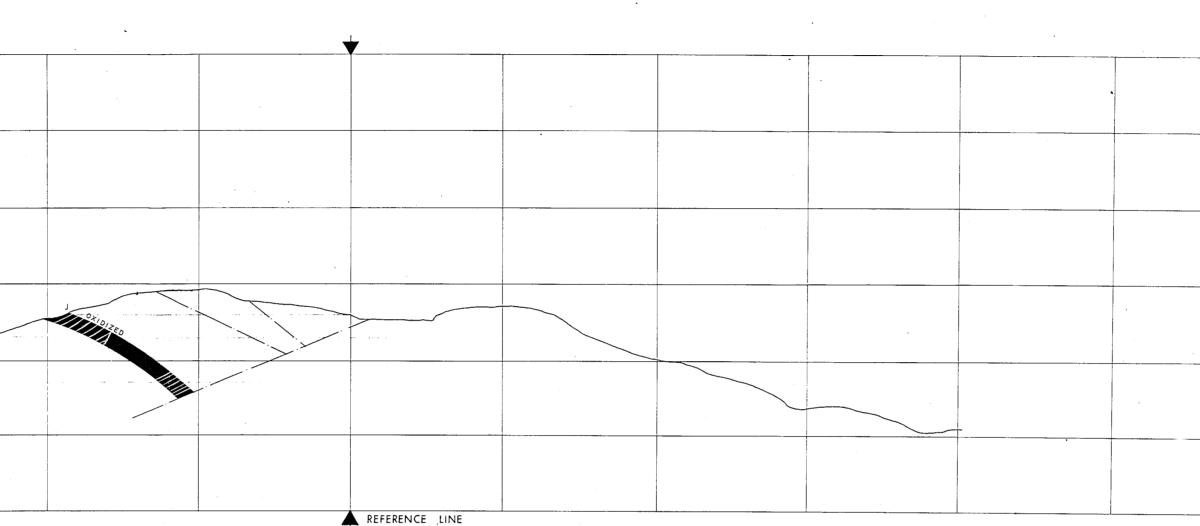
,

-

.

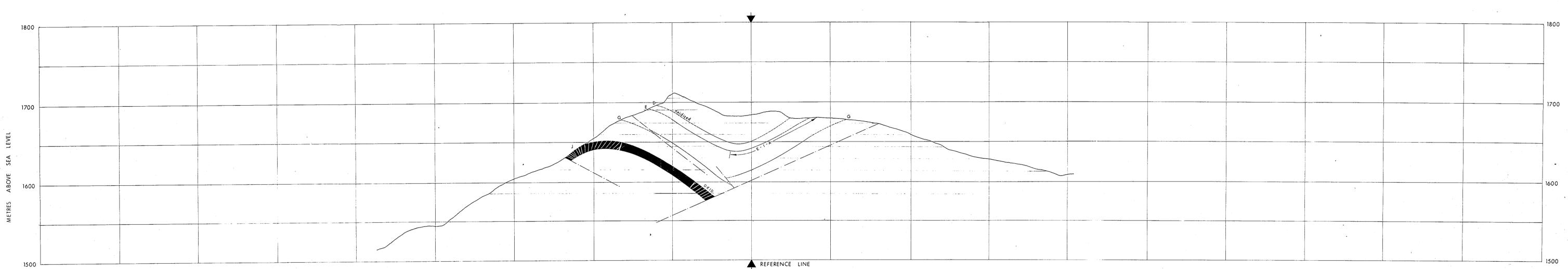
----

.

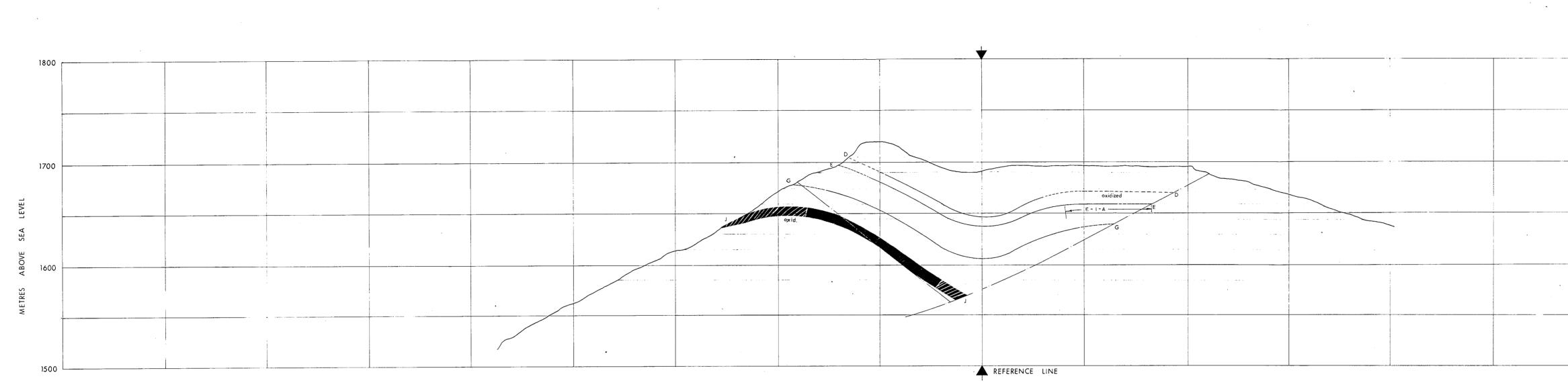


	.2			
				180
		•		-
				170
	•	-		
	Ŧ	`		
4				160
-				
			•	
-				- 150

	ETTE COAL	LIMITED
PREPARED BY: DENISON	COAL LIMIT	ED
CALGARY	, ALBERTA	
	PR-QuiNt	ette $76(2)B$
SHERIFF C	ROSS SECTION	Nº S7604
DRAWN BY J.W.K	DATE SEPT., 76	SCALE 1.2500
APPROVED BY	DRAWING NO QNTT76-0	678- R01



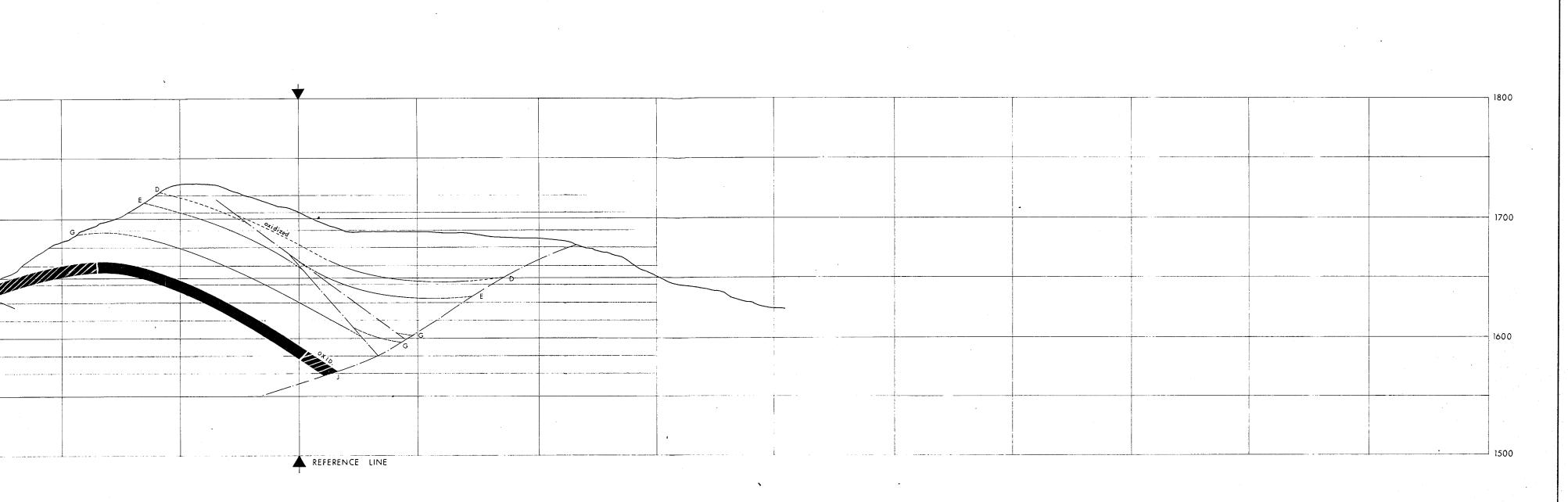
	·	
	ETTE COAL	LIMITED
PREPARED BY: DENISON (	COAL LIMIT	ED
CALGARY	ALBERTA	
	PR-Qu	inteffe $76(2)B$ .
SHERIFF C	ross section	N [≗] S7605
DRAWN BY J W K	DATE SEPT, 76	SCALE 1 2500
APPROVED BY	DRAWING NO QNTT76-0	67 <b>8-</b> RO1
		· · · · · · · · · · · · · · · · · · ·



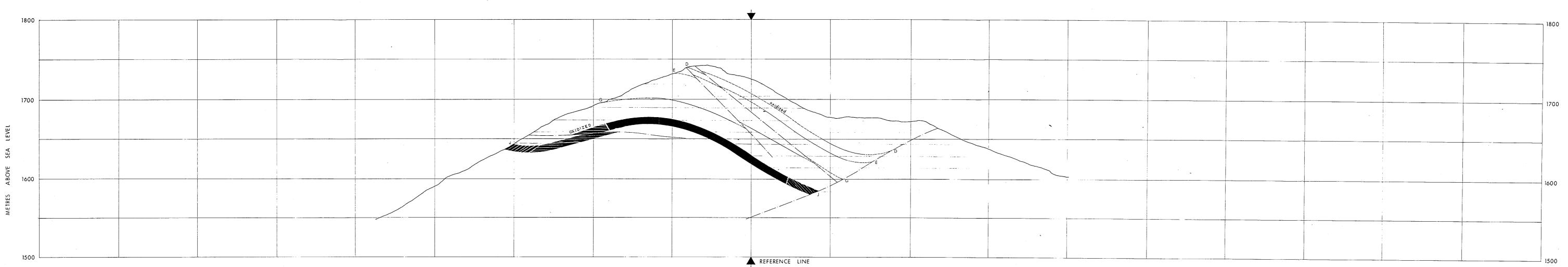
· ·

QUINTI	ETTE	COAL	LIMITE	$\mathbf{D}$
PREPARED BY DENISON	COAL	LIMITE	ED 🛃	7
CALGAFY		ALBERTA	<u> </u>	ſ
· · ·	6	PK-Quinte	He 76(2)	В
SHERIFF C	ROSS	Section	Nº_ 5760	6
DRAWN BY J W K	DATE SE	PT., 76	SCALE   2500	
APPROVED BY	DRAWING NO QNTT76-0678-R01			

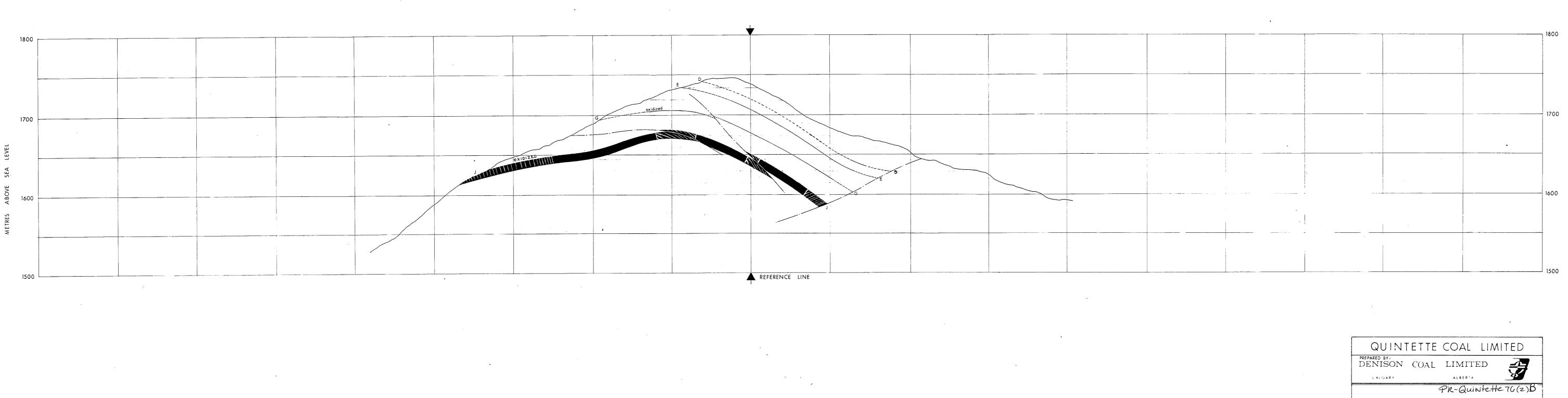
ž



QUIN	ТЕТТЕ	COAL	LIM	ITED
prepared by : DENISON	COAL	LIMITI	ED	2
CALGARY		ALBERTA		
		PK-Qui	wtette	-76(2)B
SHERIFF	CROSS	section	N⁰	S 7607
BRAWN BY JWK	GAH S	EPT 76	SCALE ]	2500
APPROVED BY	DRAWING	BRAWING NO QNTT 76 -0678- RO1		
		····· ,		



QUINT	ETTE	COAL	LIM	ITED
PREPARED BY: DENISON	COAL	LIMITI	ED	4
CALGARY		ALBERTA		
	PR	-Quinte	ette	76(2)B
SHERIFF C	ROSS	Section	N⁰	S 7608
DRAWN BY J VV K	DATE SEF	°T., 76	SCAT	1 2500
APPROVED BY	DRAWING NO QNTT 76 -0678 - ROI			



أعشى

sheriff cross section Nº 57609 DRAWN BY J W K DATE SEPT 76 SCALE 1 2500 DRAWING NO QNTT 76-0678-R01 APPROVED BY

.



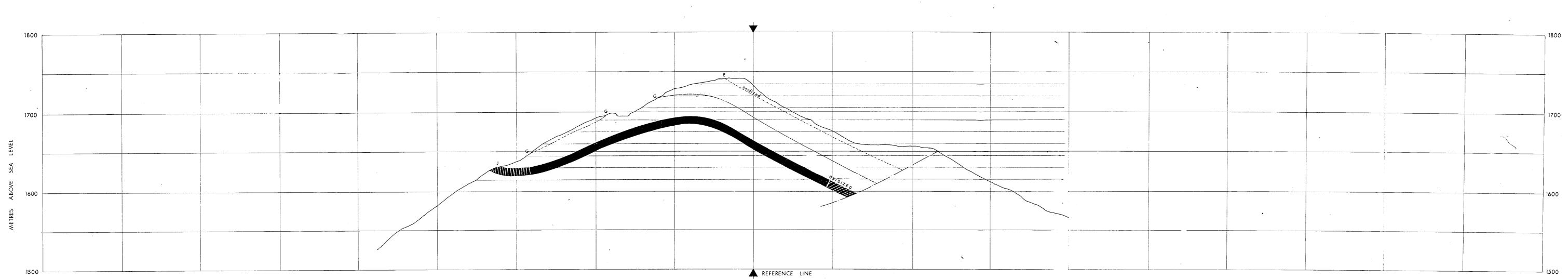
1700 1600

-

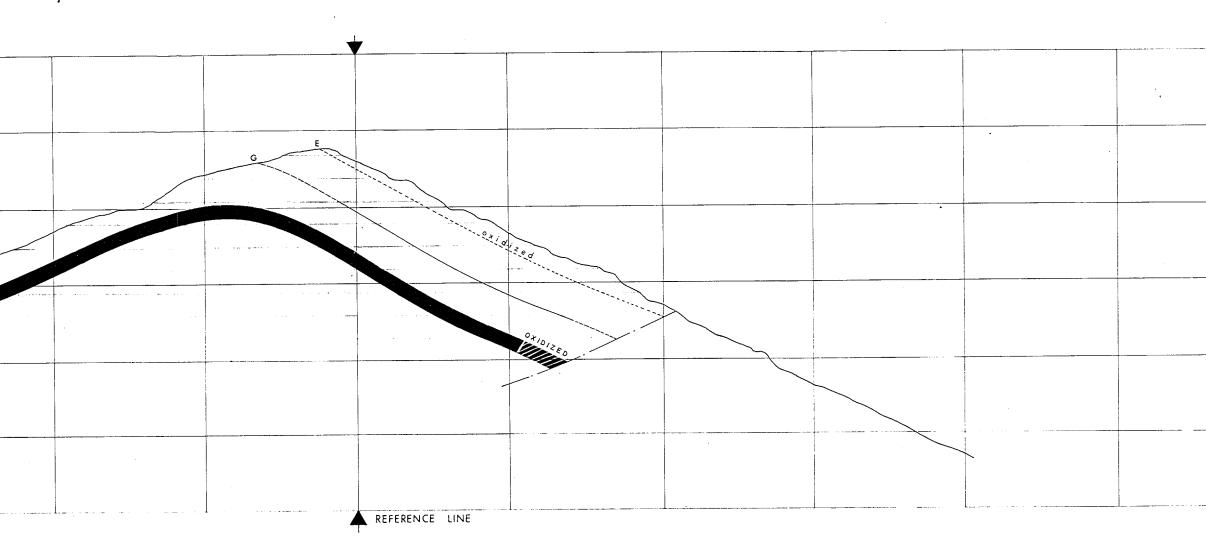
•

	ETTE	COAL	LIMITED	
PREPARED BY: DENISON	COAL	LIMITE	ED 🛃	
CALGARY		ALBERIA		
	P	R-Guint	ette 76(2)B	
SHERIFF C	ROSS	Section	Nº 576]0	
DRAWN BY 👃 W. K	DATE S.E.	PT 70	SEALE 1 2500	
APPROVED BY	DRAWING NO QNTT 76 -0678-ROT			

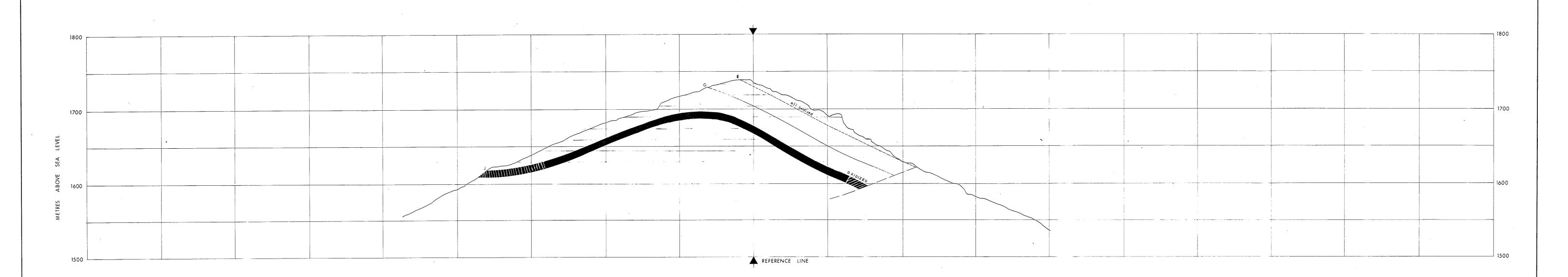
*



QUINT	ETTE	COAL	LIMI	TED
PREPARED BY DENISON	COAL	LIMITE	D	
CALCARY		ALBERIA		<u>_</u>
	Ŧ	R-Guiw	tefte	76(2)B
SHERIFF C	ROSS SI	ECTION	N⁰	S 7611
DRAWN BY J 👽 K	DATE SEPT	76	SCALF 1	2500
APPROVED BY	DRAWING NO QNTT 76-0678-ROI			

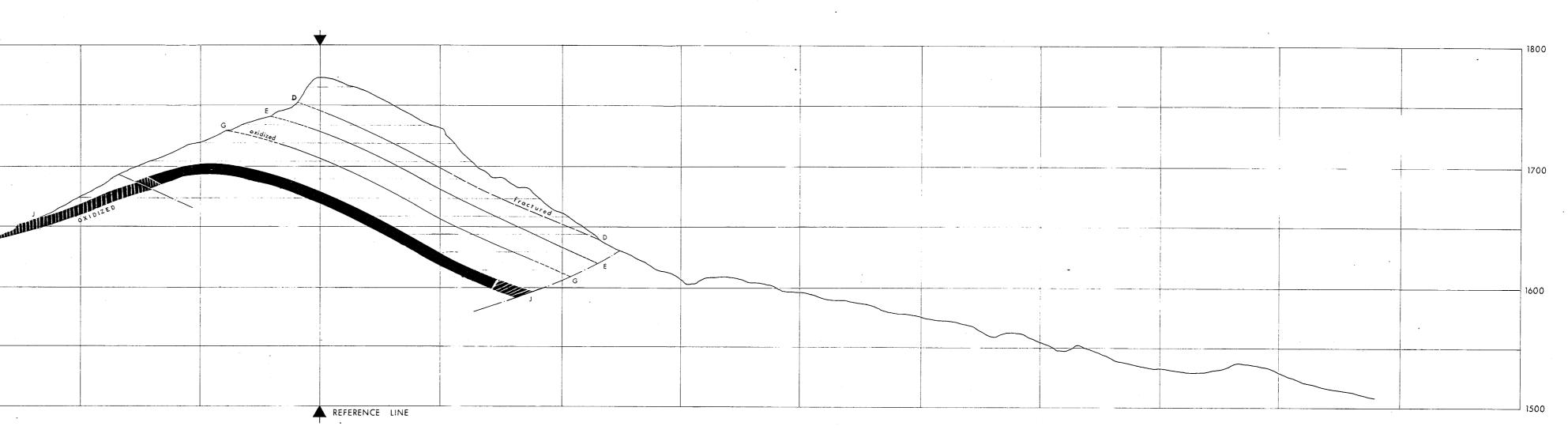


QUINT	ETTE	COAL	LIMI	TED
PREPARED BY: DENISON	COAL	LIMIT	ED	
CALGARY		ALBERTA		<u> </u>
	P	R-Quint	ette 70	6(2)0
SHERIFF C	ROSS	SECTION	N° S	\$ 7612
DRAWN BY J W K	DATE SE	PT , 76	SCALL 1	2500
APPROVED BY	DRAWING NO QNTT 76 -0678- RO1			

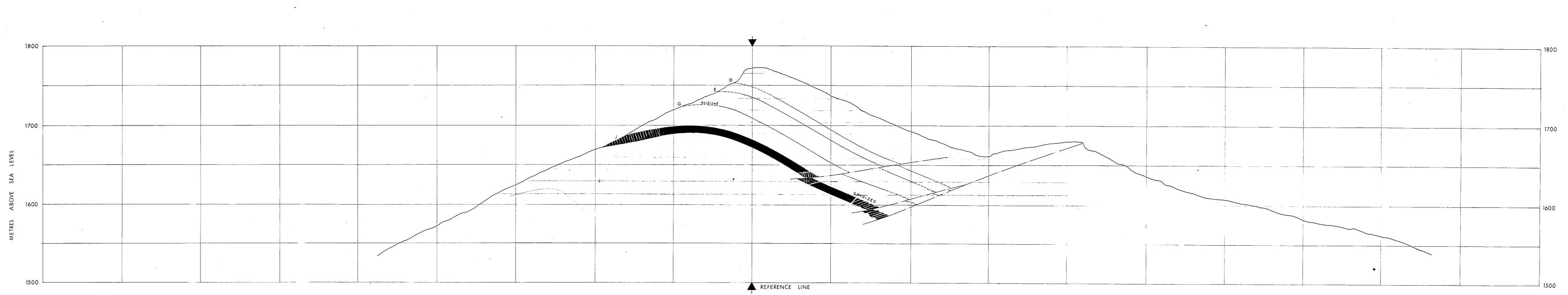


QUINT	ETTE	COAL	LIMI	TED
PREPARED BY: DENISON	COAL	LIMITE	Ď	4
CALGARY	•	ALBERIA		<b>B</b>
	4	PK-Quil	Nteffe	-76(z)B
SHERIFF C	ROSS S	Section	N° \$	57613
ORAWN BY JWK	DAIH SEF	PT 76	SCALL ]	2500
APPROVED BY	DRAWING NO	QNTT 76 -06	78- RO1	

· · · -

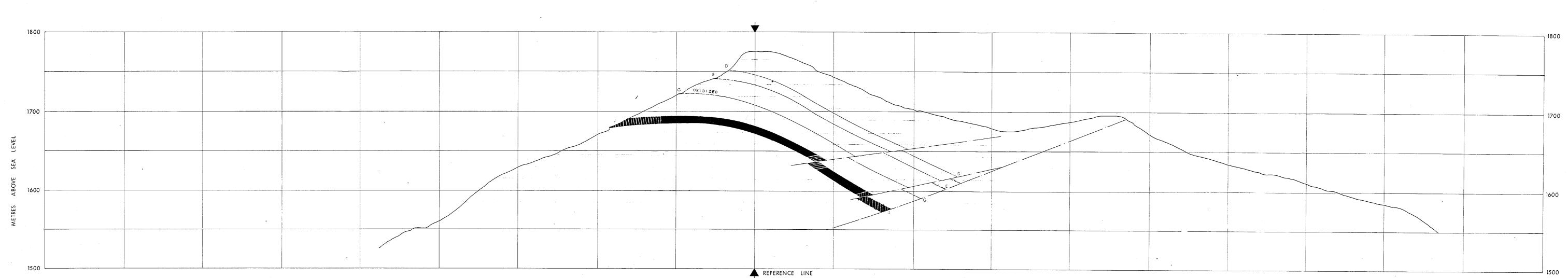


QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED A.GARY ALBERTA PR-QUINTETTE 76(2)D SHERIFF CROSS SECTION Nº S7614 DRAWN BY JWK DATE SEPT. 76 STATE 1 2500 APPROVED BY DRAWING ND QNTT76-0678-R01

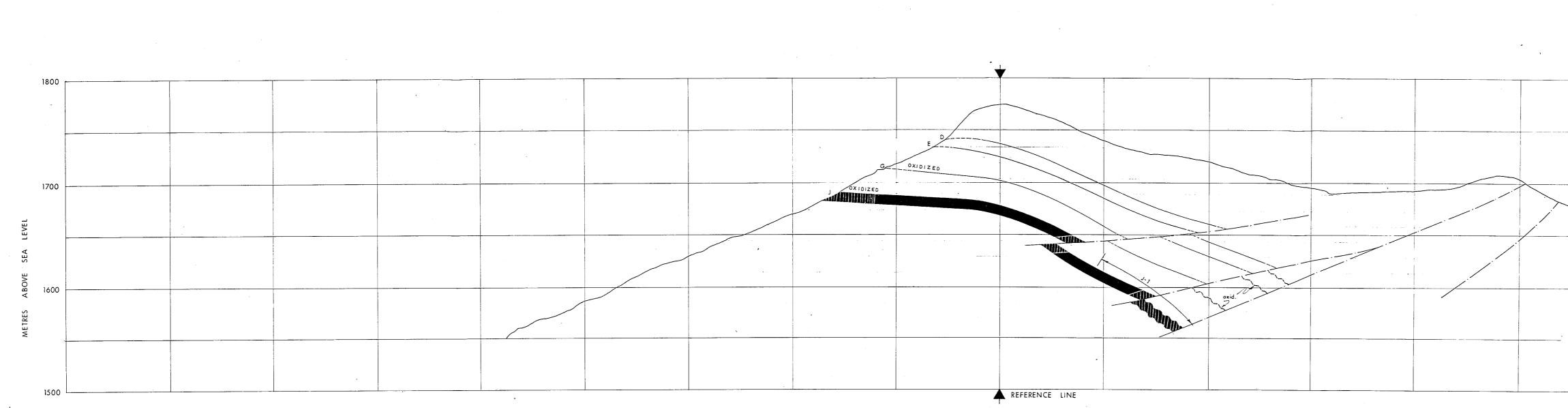


,

QUINTE	ETTE COAL	LIMITED
prepared by: DENISON (	COAL LIMITE	D A
CALGARY	ALBERTA	
	PR-Quir	steffe76(2)B
SHERIFF C	ross section	Nº \$7615
DRAWN BY JWK	DATE SEPT, 76	SCALF 1 2500
APPROVED BY	DRAWING NO QNTT 76-06	78- RO1



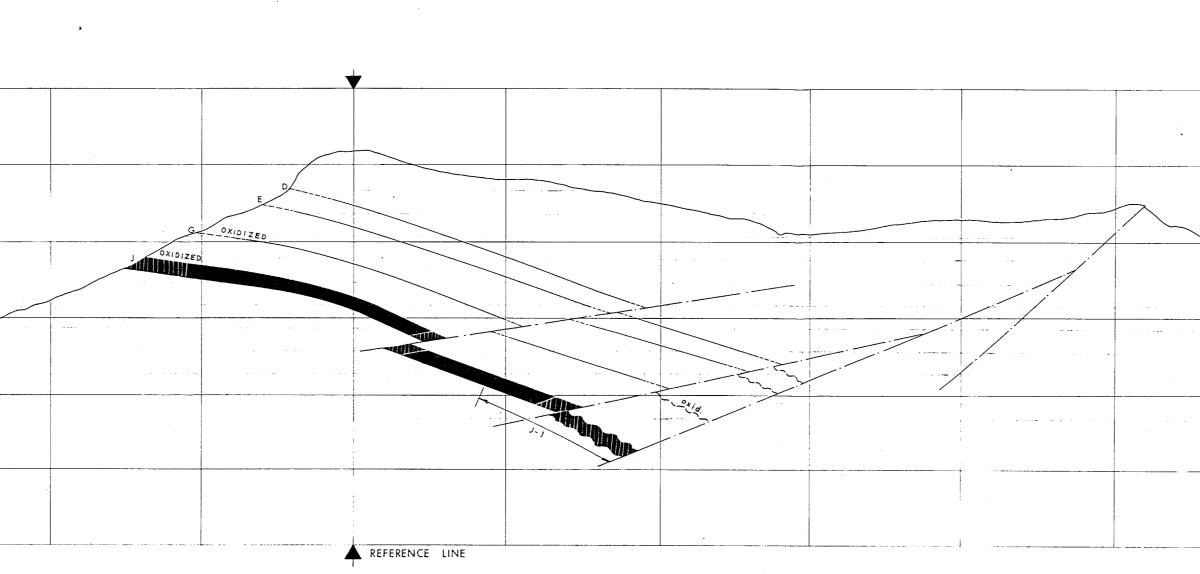
QUINTI	ETTE	COAL	LIMI	TED
PREPARED BY DENISON	COAL	LIMITE	ED	2
CALGARY		ALBERTA		<u>s</u>
	F	PR-Quin	ite-tte	76(z)B
SHERIFF C	ROSS	Section	N⁰	\$7616
DRAWN BY JIVK	DATE SE	PT 76	SCALE }	2500
APPROVED BY	DRAWING NO	QNTT 76 -06	7 <b>8-</b> R01	



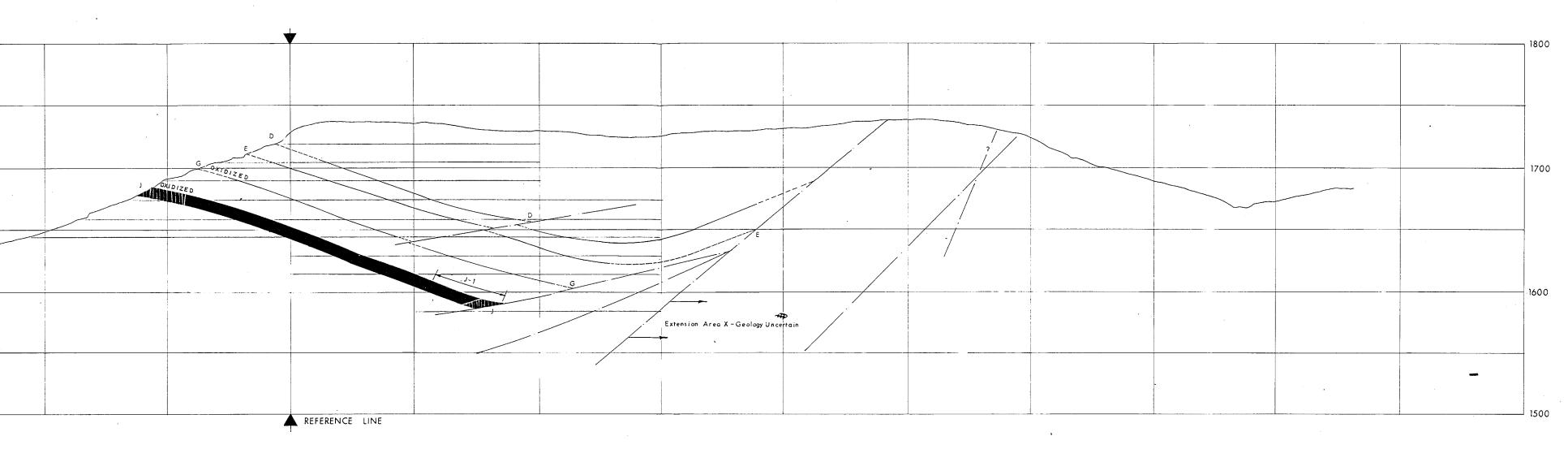
QUINT	ette coal	LIMITED
PREPARED BY: DENISON	COAL LIMIT	ED
CALGARY	ALBERTA	<u>_</u>
1	PR-Quint	tette $76(2)B$
SHERIFF C	ROSS SECTION	Nº \$7617
DRAWN BY J. W. K	DATE SEPT. 76	SCALE 1: 2500
APPROVED BY	DRAWING NO QNTT76-0	678- RO1

:

.



QUINT	ETTE	COAL	LIM	ITED
PREPARED BY	COAL	LIMIT	ED	
CALGAR		ALBÉRIA		
	PR	- Quinte	He 70	b(2)B
SHERIFF C	ROSS	Section	N⁰	S 7618
BRAWN BY J W K	DATE SE	PT 76	SEALF 1	2500
APPROVED BY	ORAWING NO	Q.N.T.T. 76 - C	678-R01	



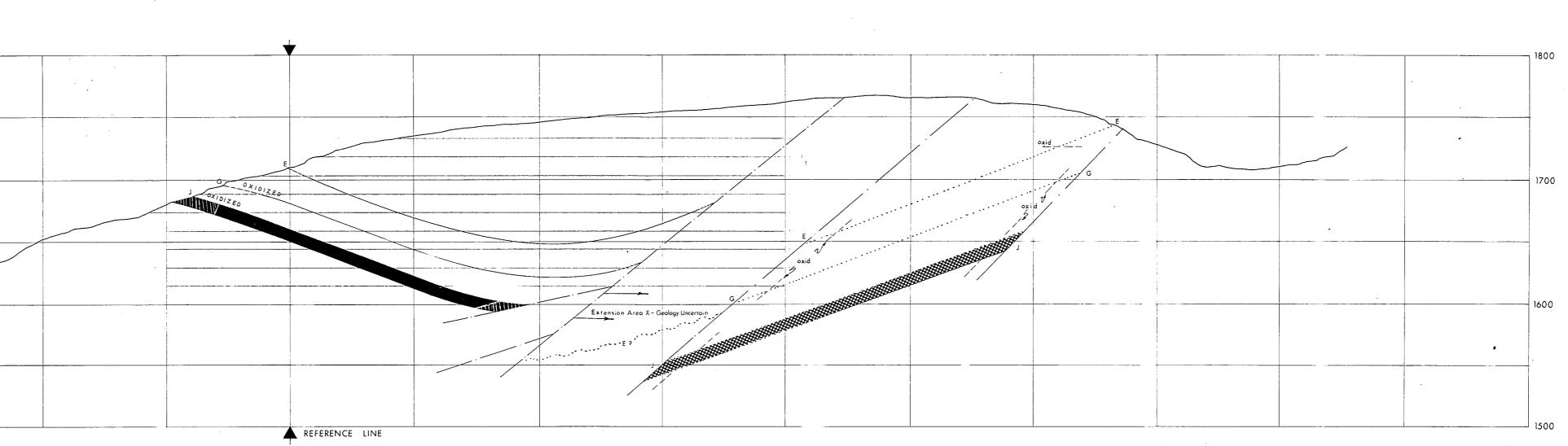
,

,

·

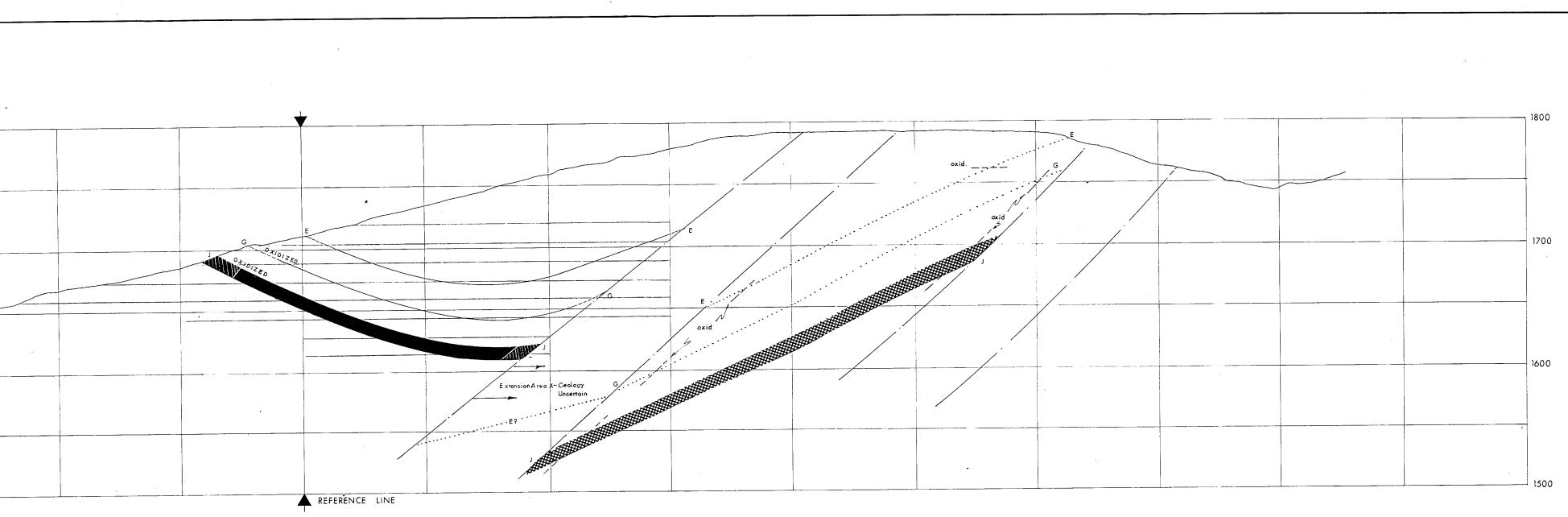
QUINTE	ETTE	COAL	LIM	ITED
PREPARED BY: DENISON (	COAL	LIMI	TED	
CALGARY		ALBERT	٩	6
	P	R-Qui	ntette	76(2)B
SHERIFF C	ROS <u>S</u>	SECTION	- N Nº	S 7619
BRAWN BY JWK	DATE SE	PT 76	SCALE ]	2500
APPROVED BY	DRAWING NO		0678- RO1	

.

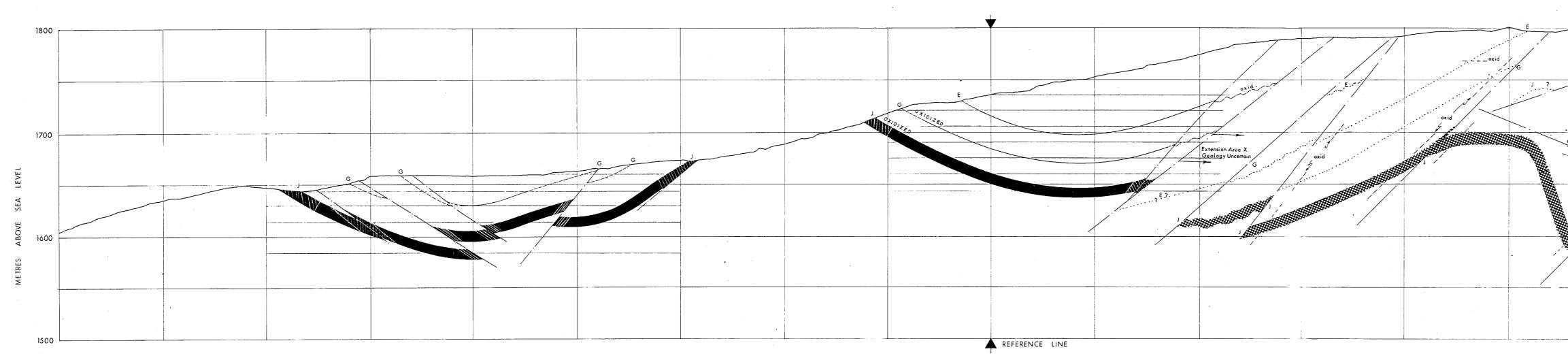


-

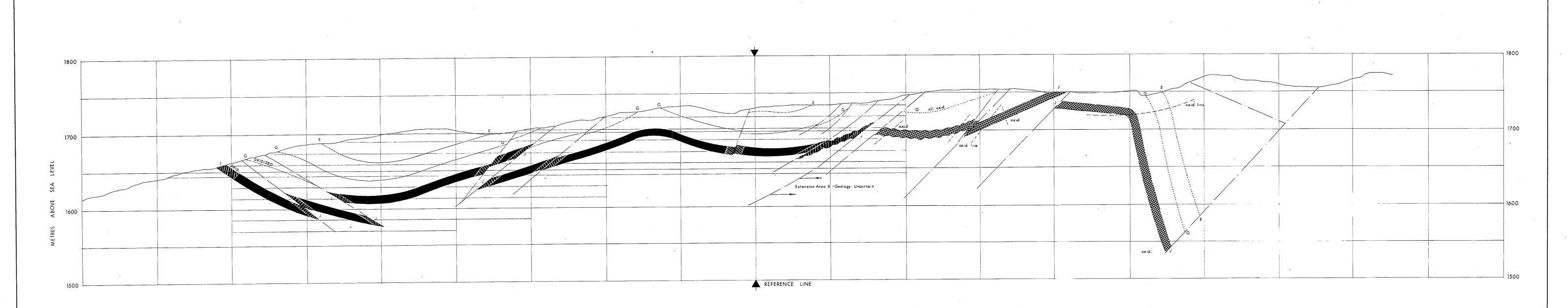
QUINTE	TTE COAL	LIMITED
PREPARED BY: DENISON (	COAL LIMITE	D 🛃
CALGARY	ALBERTA	<b>D</b>
	PR-Quik	stefte 76(2)B.
SHERIFF CI	ross section	N≗ \$7620
DRAWN BY J.W.K	DATE SEPT 76	SCALE 1 2500
APPROVED BY	DRAWING NO QNTT 76-06	78-R01



QUINTE	TTE	COAL	LIMIT	ED
prepared by: DENISON (	COAL	LIMITE	D	4
CALGARY		ALBERTA	-	<u>\$</u>
	4	PK-Quin	staffe	76(2)B
SHERIFF CI	ROSS S	Section	N° S	7621
DRAWN BY JWK	DATE SEI	PT 76	SCALE ] 2	2500
APPROVED BY	DRAWING NO	QNTI 76 -06	78- R01	
APPROVED BY	DRAWING NO	QNTI 76 -06	78- RO1	

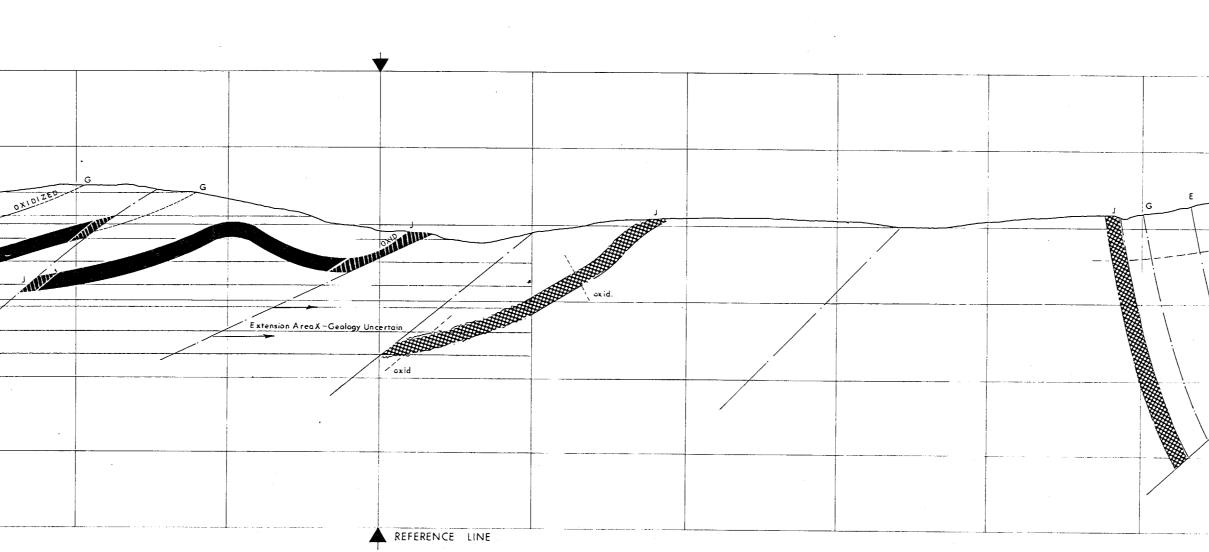


				-	
QUINTE	ETTE	COA	L LIN	NITED	
prepared by DENISON (	COAL	LIMI	TED	$\mathcal{A}$	?
ALGARY		ALBER	• •	- Sel	
· · ·	P	R-Qu	inteft	e 76(2	.)B
SHERIFF C	ROSS	SECTIO	N Nº	S 7622	2
DRAWN BY J W K	DATE SE	PT 76	SLALS:	1-2500	
APPROVED BY	OR AWING NO	QNTT76	-067 <b>8</b> - RC	11	
					· · · · · · · · · · · · · · · · · · ·

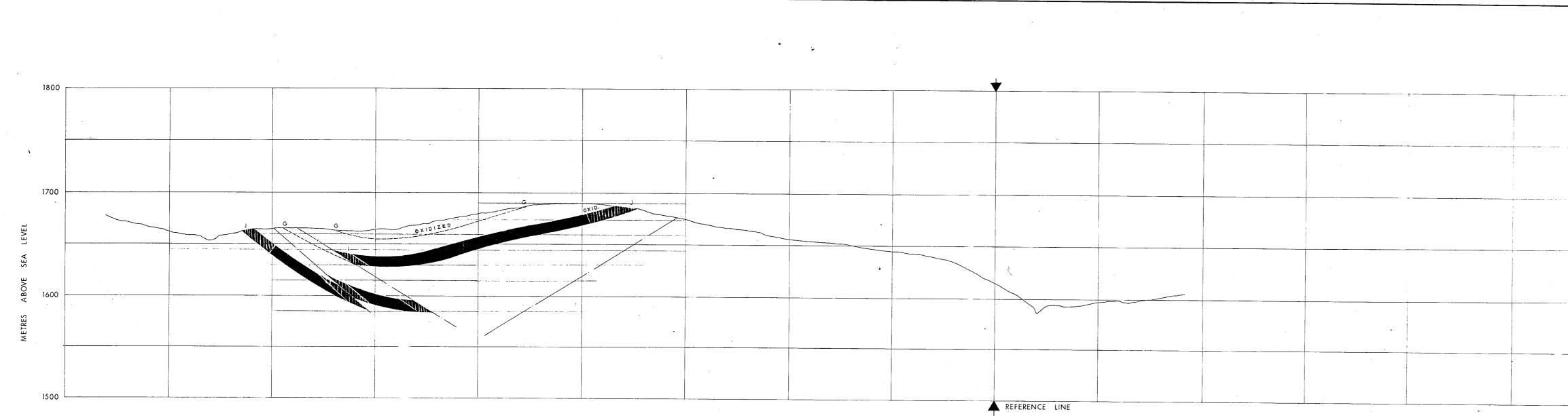


QUINT	етте	COAL	LIM	ITED
PREPARED BY: DENISON	COAL	LIMITE	ED	A
CALGARY		ALBER"A		<u>_</u>
	~	PR-Qui	Ntett	e74(2)0.
SHERIFF C	ROSS	section	N⁰	S 7623
DRAWN BY JWK	DATE ST	EPT 76	SCALE ]	2500
APPROVED BY	ORAWING N	0 QNTT76-06	78- ROI	

je.

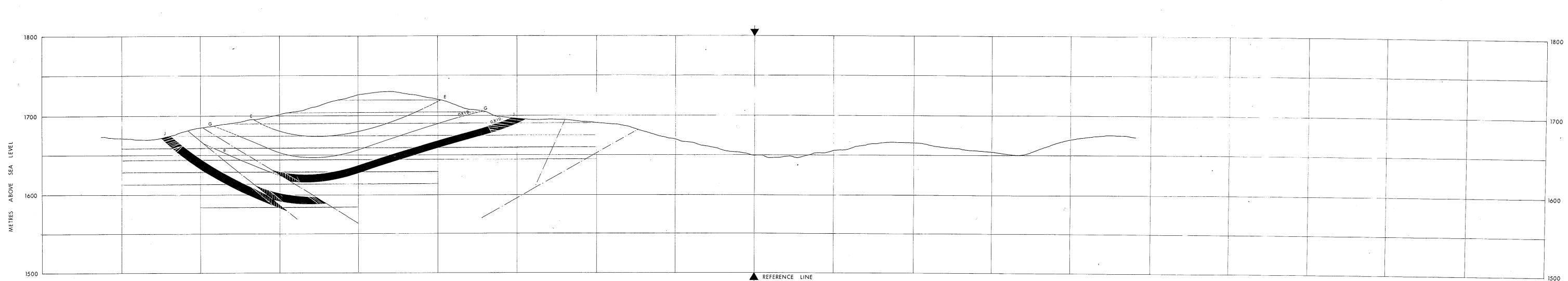


	ETTE COAL	LIMITED			
PREPARED BY: DENISON	COAL LIMIT	ED 🛃			
CALGARY	ALBERTA	<u>_</u>			
	PR-Qui	Ntette 76(2)B			
Sheriff C	ross section	N ^e S7624			
OPAWN BY	DATE SEPT 76	SEALT 1 2500			
APPROVED BY	DRAWING NU QNTT 76 - 0678- RO1				

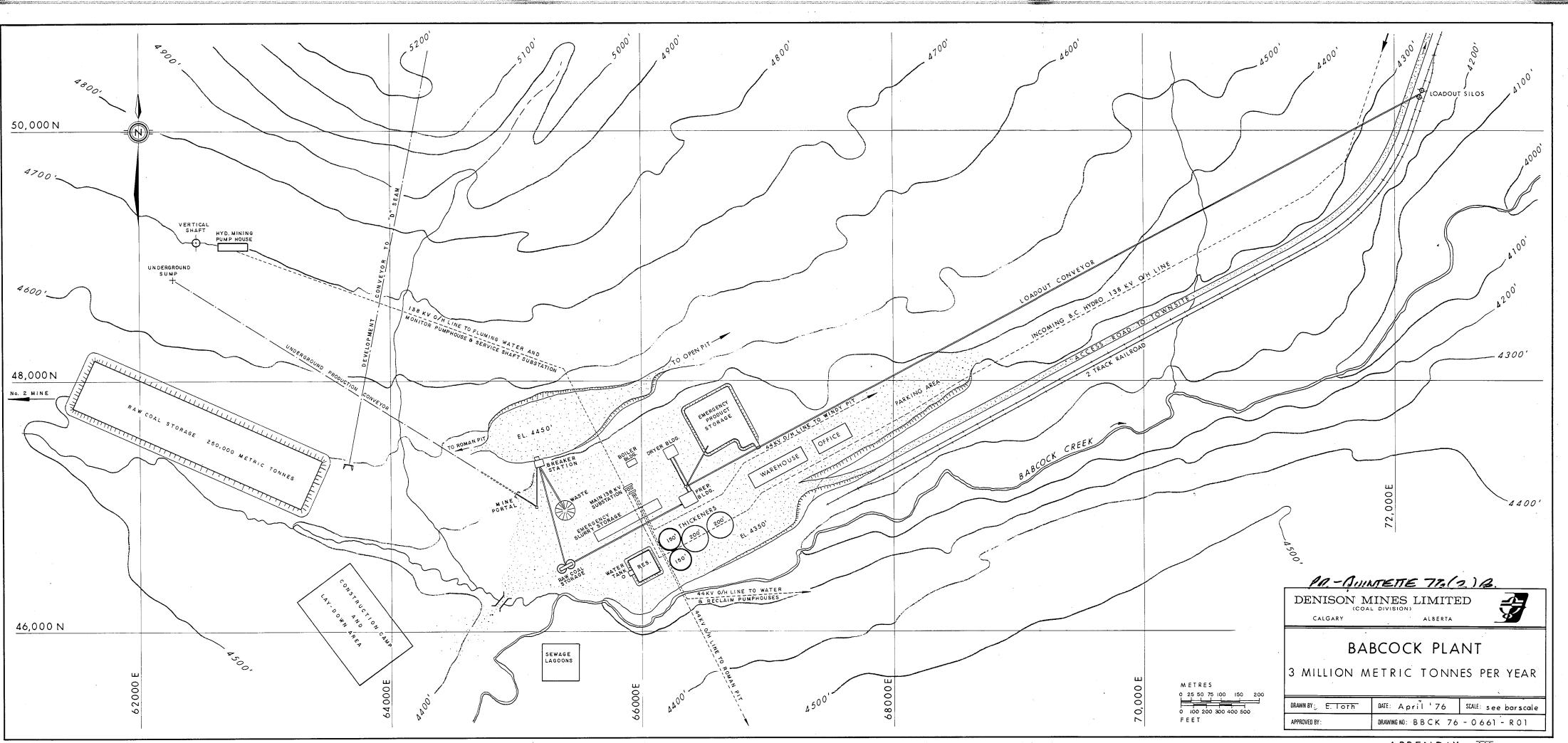


. . 1700

	ETTE COAL	LIMITED	]
PREPARED BY: DENISON (	COAL LIMITE	ED 🛃	
(AL(. 4 R)	ALBERTA PR-G	<u>9</u> NUNTEtte 76	(2)B
Sheriff C	ROSS SECTION	*	
DRAWN BY JVIK	DATE SEPT. 70	SCAL: 1 2500	- *
APPROVED BY	DRAWING NO QNTT 76-06	78- RO1	] .

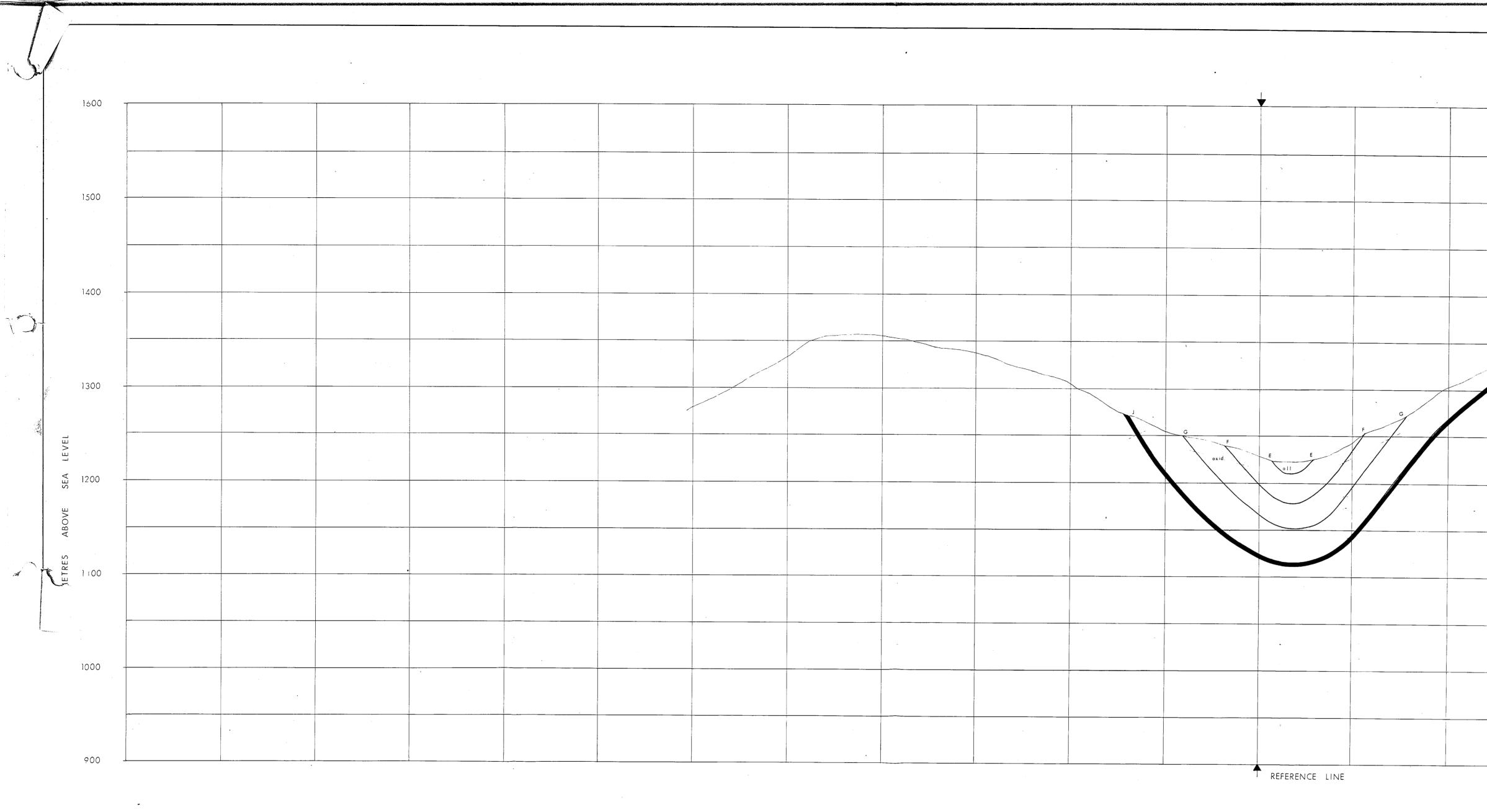


	ette coal	LIMITED				
PREPARED BY: DENISON (	COAL LIMIT	ED				
. ALGARY	ALBERTA					
	PR-Quin	whether $76(2)B$ .				
SHERIFF C	ross section	N [₽] S7625				
ORAWN BY JWK	DATE SEPT, 76	SCALE   2500				
APPROVED BY	BRAWING NO QNTT76-0	11NG NO QNTT 76-0678-R01				



---

APPENDIX VI



-.

 		5 		, , , , , , , , , , , , , , , , , , ,	
	1				
					1500
					1400
					1300
					1200
					1:00
				· · · · · · · · · · · · · · · · · · · ·	1000
					900
		PREPARED BY	INTETTE CC	AL LIMITED	
	Ale o agrector de la constitución d	DENIS CALGA		LBERTA	-
	ti ni	FRAME		tette 76(2)₿ ON Nº F7605	
	An	DRAWN BY : J.W.			•
		APPROVED BY :	DRAWING NO: Q N T	T,76-0675-R01	79
 				01	11

						<u></u>		
							•	
			an a					•
	1700			n an				
					-		· · ·	
							;	
	* 1600							
								•
	1500							
		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			
								4
	2400							
	1400	•						
								С •
VEL						· · ·		
LEV								
SEA	1300		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
1.1								
ABOVĘ								•
AB								
ES			•	-				
METRES	1200		· · · · · · · · · · · · · · · · · · ·					
					· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	· · · ·
							•	
	1100						· · ·	
	1							
	1000					•		

,

1 •

<u>ن</u> . . •

.  $\sum_{i=1}^{n}$ 

•

Singe A

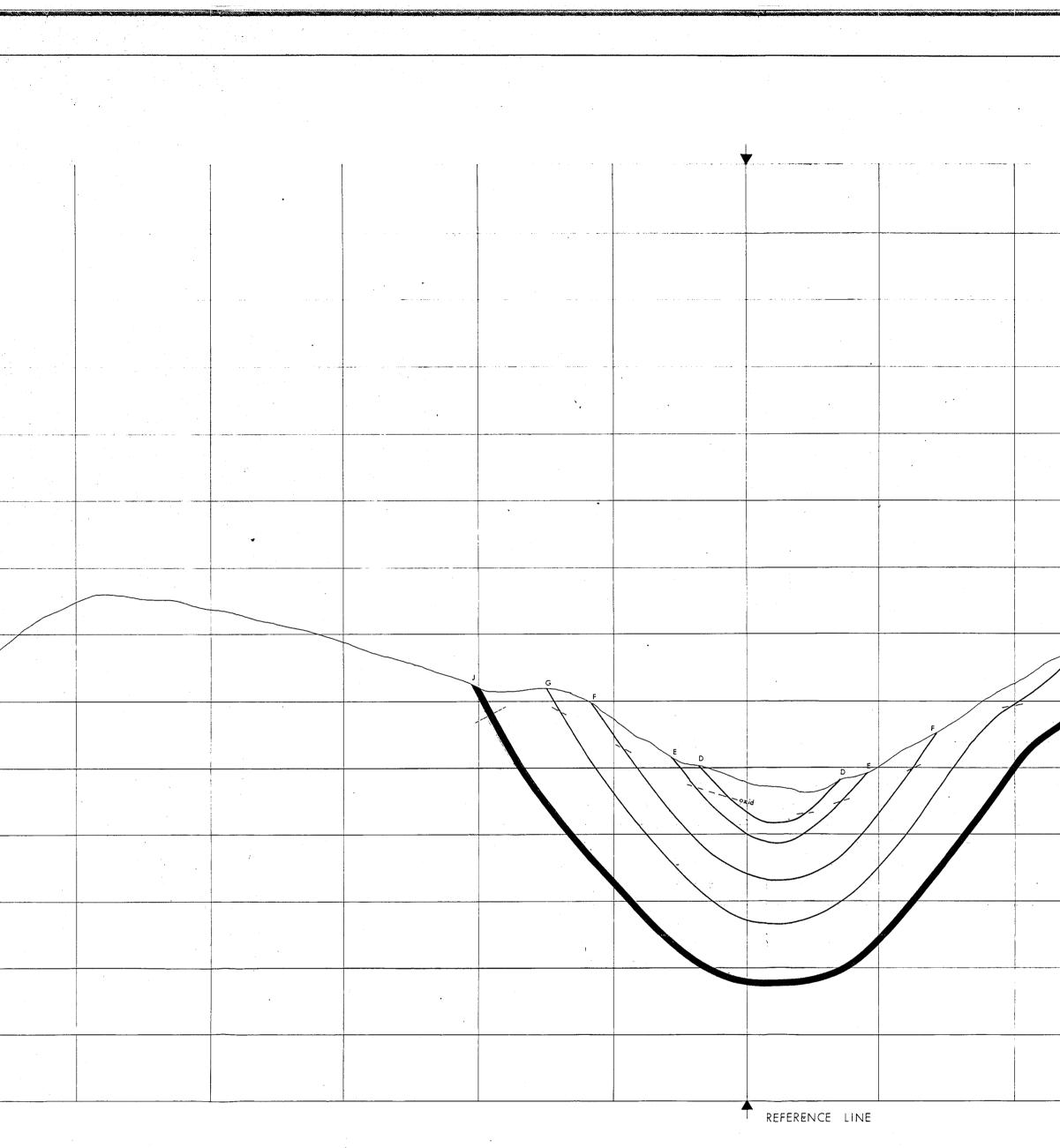
1.2

>

¢,

.

•



¢

· .

.

. .

)

•

	· · · · · · · · · · · · · · · · · · ·				
1700					
- 1700		• • • • • • • • • • • • • • • •			
1600			· · · · · · · · · · · · · · · · · · ·		
_		·			
1500				-	
1400		· · · · · · · · · · · · · · · · · · ·			
					G
- 1300				•	
_					
1200					
					,
1100					
- · ·					
1000					

QUINTE	ETTE	COAL	LIMI	TED	
PREPARED BY: DENISON (	COAL	LIMIT	ED	A	
CALGARY		ALBERTA		<u>_</u>	
	Ŧ	PR-Quin	stette -	16(2)B.	
FRAME CRC	SS-SE	CTION	Nº F2	7606	
DRAWN BY: J.W.K.	DATE SEP	T., 76	SCALE: ]:	2500	
APPROVED BY	DRAWING NO :	QNTT 76 -0	675- RO1		
	<b>*</b> .			60	59

.

•				•	 	· · · · · · · · · · · · · · · · · · ·	;	
	1700							
		;						- - -
	1600	:					•	
•								
-	1500						·	
• • •					•			
	1400							
LEVEL			,	·		-	,	
ve sea	1300	-				· · · · · · · · · · · · · · · · · · ·		
S ABOVE					```			
METRES	1200							
							•	
	1100							
						· · · ·		

• .

.

.

-

········

.

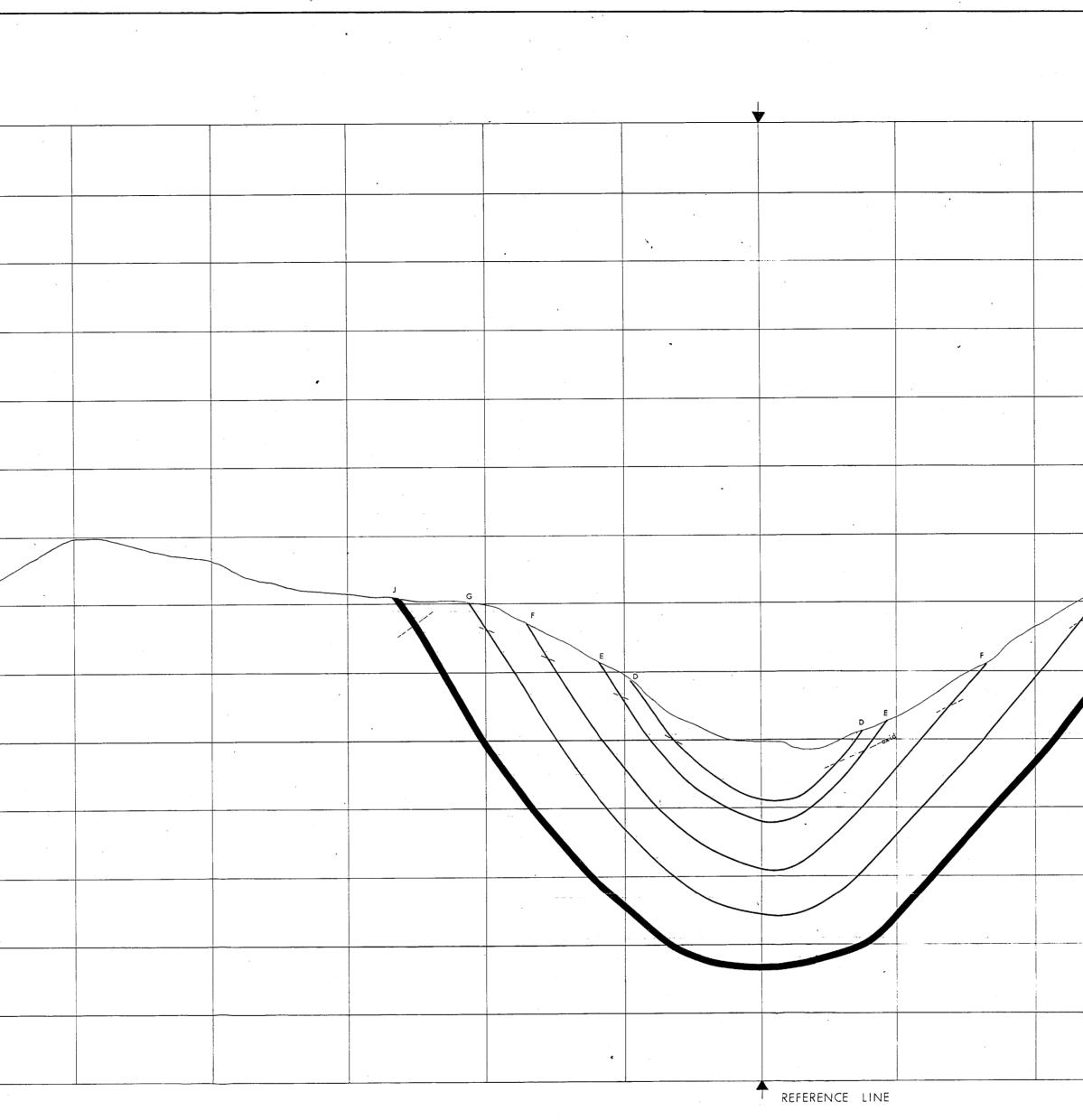
1000

Ŷ,

•

•

<u>n.</u>



	···. ,				
			· · · · · · · · · · · · · · · · · · ·	×	1700
					1600
			r .		
					1500
					1400
G					
					1300
					1200
		•	· · · · · · · · · · · · · · · · · · ·		1100
				· .	1000

QUINT	ETTE	COAL	LIN	AITED
PREPARED BY: DENISON	COAL	LIMIT	ED	
CALGARY		ALBERTA		<u></u>
	PK	e-Quint	ette	76(2) D.
FRAME CR	OSS-SE	ECTION	N⁰	F7607
• ~	•			
DRAWN BY: J.W.K.	DATE: SE	PT., 76	SCALE	1:2500
	DRAWING NO	QNTT76-	3675- P	01

	1700					
	1600				•	
						-
	1500					
						-
	1400.					
	1300					
		р 2011 2011 2011 2011 2011 2011 2011 201				-
-	1200					
-						
]	100					

. •

e. • . .

•

.

------

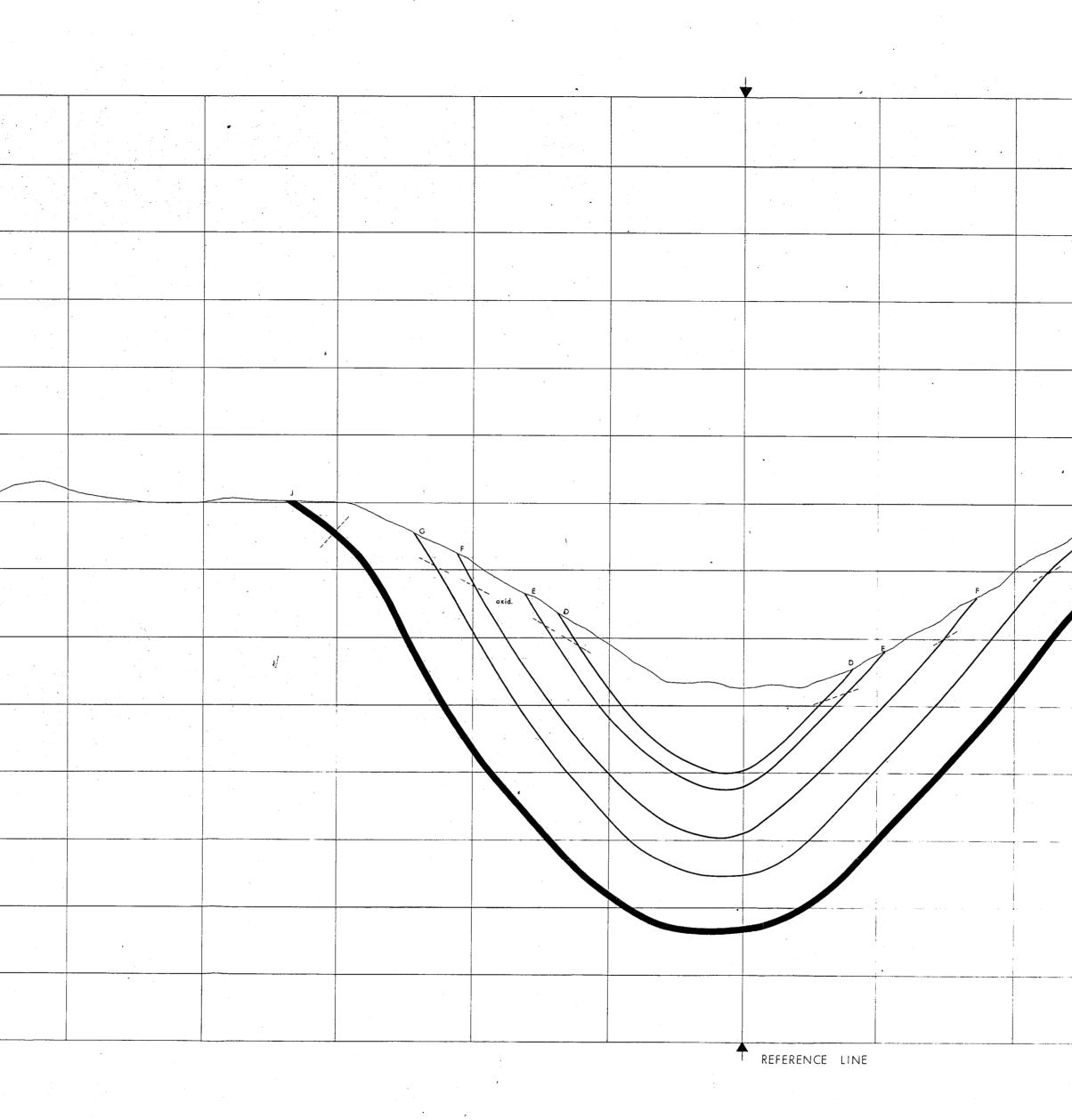
• .

.

-

•

.

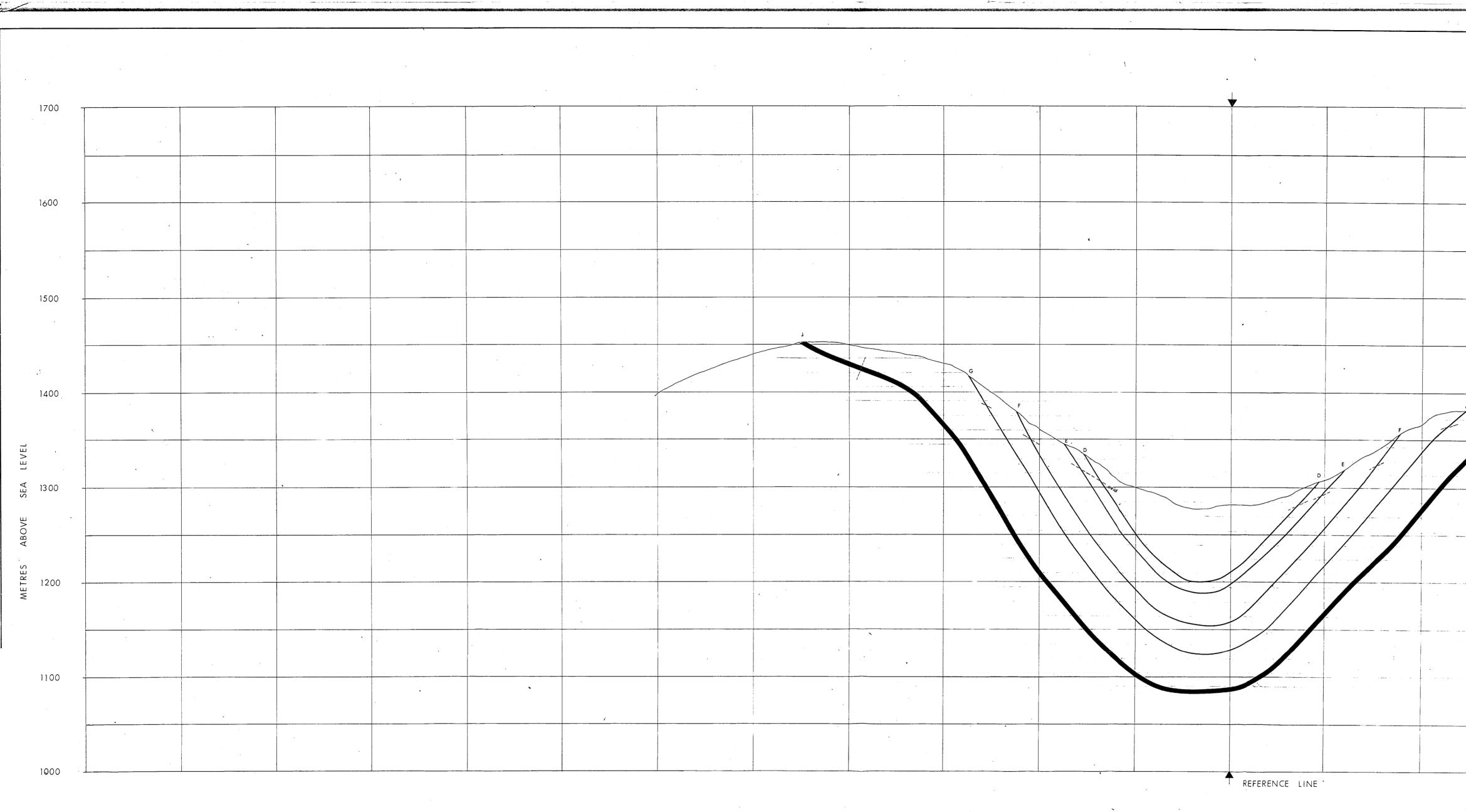


•

· .

.

						- - -		
. ·				-				1700
			:			~		
· · · · · · · · · · · · · · · · · · ·			· · · ·					1600
					·			
<u>-</u>								1500
G					· · ·			1400
	· · · · · · · · · · · · · · · · · · ·				<u> </u>			
				· · · · · · · · · · · · · · · · · · ·				1300
	 				<u>.</u>			
	•			gene				1200
						•		
	 					- 		1100
								م 1000
		•						
			PREPARED B	Y:	TTE COA		TED	
			CALG	A R Y	PR-Q	uintette	76(2)B.	
			FRAME	CRO	SS-SECTIC	NN N°F7	7608	
			DRAWN BY J.V Approved by.		DATE SEPT., 76 DRAWING NO QNTT7	SCALE 1: 76 -0675- RO1	2500	
	 						6	29



r ( na na h

р^{анн}. (

CUINTETTE COAL LIMITED DESTINO COAL LIMITED DESTINO COAL LIMITED DESTINO COAL LIMITED DESTINO COAL LIMITED DESTINO COAL LIMITED TPR-Quintette 70(22) FRAME CROSS-SECTION Nº F7609 FRAME CROSS-SECTION Nº F7609					1700
Image: Second state     100					
QUINTETTE COAL LIMITED         Discourse area         Discourse area         PR-Qui N4EHE 76(2)         FRAME CROSS-SECTION Nº F7609         Image: Junk         Image: Junk					- 1600
Image: Section NP F 7609           Image: Section NP F 7609           Image: Section NP F 7609					1500
Image in the second					
QUINTETTE COAL LIMITED III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 III00 IIII00 III00 III00 III00 III00 III00 III00 III00 III00 III00 IIII00 IIII00 IIII00 IIII00 IIII00 IIII00 IIII00 IIII00 IIII00 IIII00 IIII00 IIIII00 IIIIIIII	L				- 1400
QUINTETTE COAL LIMITED MERAND AV JOOD 1000 QUINTETTE COAL LIMITED MERAND AV DENISON COAL LIMITED CAGATY ALSETTA PR-QUINTEHE TO(2)B FRAME CROSS-SECTION Nº F7609 IBMNY J.W.K. DET SEPT., 76 IELE 12500					1300
Image: 1200         Interview					1300
QUINTETTE COAL LIMITED MEPARED BY, DENISON COAL LIMITED CALGARY ALBERTA PRE-QUINTEHE - TQ(2)B FRAME CROSS-SECTION Nº F 7609 MANN BY J.W.K. DATE SEPT. 76 STALE 1:2500				· · · · · · · · · · · · · · · · · · ·	1200
QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA PR-QUINTETTE 74(2)B FRAME CROSS-SECTION Nº F7609 IMAMENT J.W.K. DATE SEPT. 76 STATE 1:2500	 		- · · • • • • • • • • • • • • • • • • •		
QUINTETTE COAL LIMITED REFARED BY. DENISON: COAL LIMITED CALGARY ALBERTA PR-QUINTETTE 74(2)B FRAME CROSS-SECTION Nº F7609 BRAWEBY: J.W.K. BATE SEPT. 76 STALE 1:2500		· · · · · · · · · · · · · · · · · · ·		х х	1100
QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA PR-QUINTETE 74(2)B FRAME CROSS-SECTION Nº F7609 BRAWN BY: J.W.K. DATE SEPT., 76 STALE 1:2500					1000
PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA PR-QUINTETE 76(2)B FRAME CROSS-SECTION Nº F7609 DRAWN BY: J.W.K. DATE SEPT., 76 SCALE 1:2500					
FRAME CROSS-SECTION Nº F7609		PREPARED E DENIS	SON COAL LIM	ITED	
		FRAME			
	•				

					• • •		• •
		1650				•	-
		1550				•	· · · · · · · · · · · · · · · · · · ·
		14.50					
		1450					
		1350					
	A LEVEL	1250		•			
	ABOVE SEA	1230					
	METRES AB	1150					
	MET	1130				•	
. 1	-	1050					
					r		

.

/

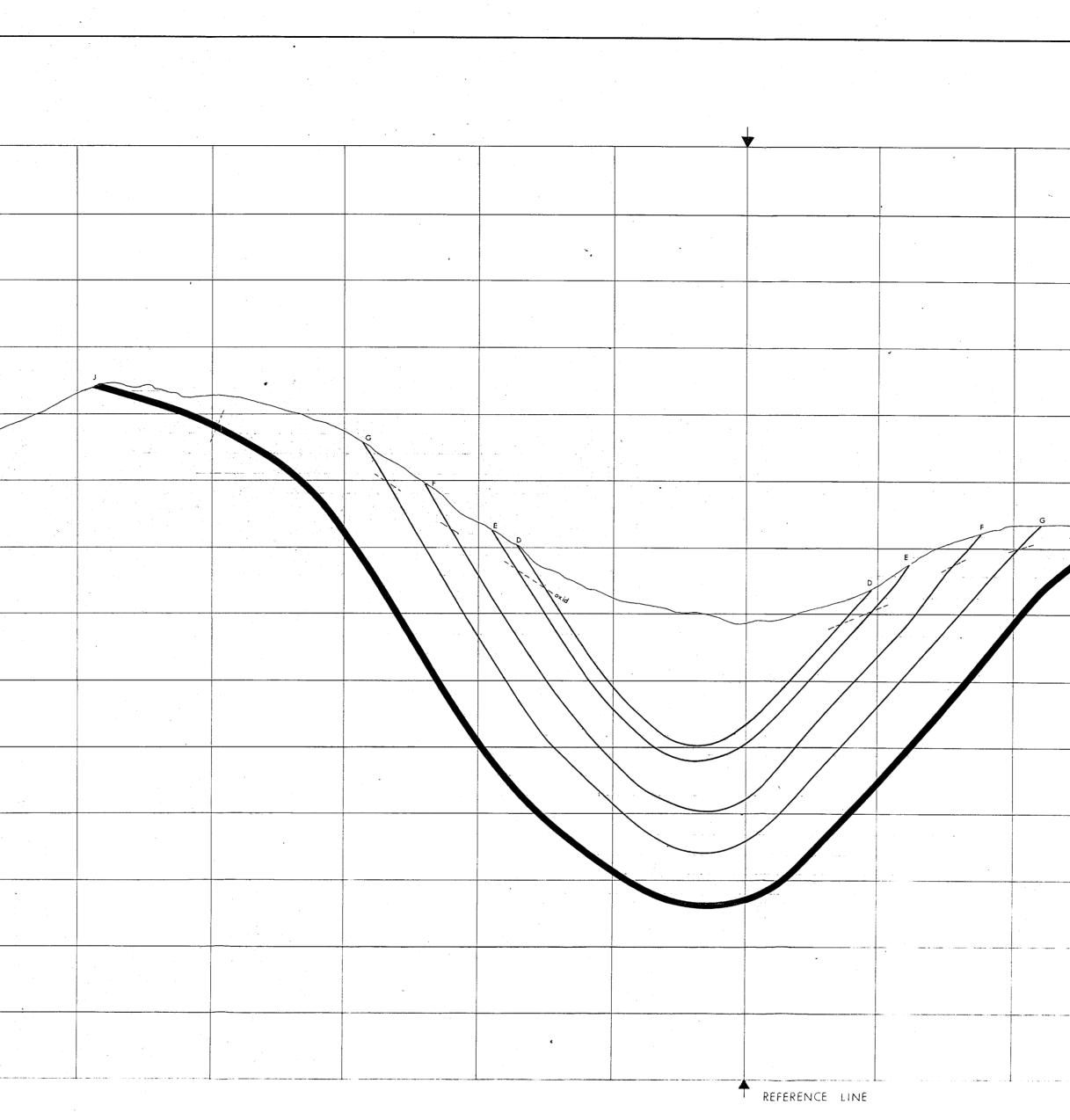
900

•

. . jt

· · · ·

•



•

•

• • • •

.

.

.

.

•

· · ·			•		
					1650
					1550
					1450
					AANGC ,
					لِّے 1350 کے لیے
					)TC201
			•		GRID IN
					- 1250 Jeon N
	•				
					1150
	-				
	-				1050
	•				1050
	and the second	، معروف معطف محمر معرف			900
					,00
	,				
	1	ſ			
		QU PREPARED DENI	SON COAL LI		
			- AK1 - A	uintette 76(2)B	
		FRAM	E CROSS-SECTI		

 DRAWN RY
 J.W.K.
 DATE
 SEPT.
 7.6
 SCAL
 1.2500

 APPROVED BY
 BRAWING NO
 Q.N.11.26
 06.75
 RO1

60

_____

	1700						
	•			s 			
			. *				
	1600				Υ		
		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			
	1			• .	•	•	
	1500						
	·		·				
	1400 -	×					
		·····					
LEVEL							
SEA	1300 -		•				 
ABOVE							
METRES	1200 -						
•							
			· ·				
	1100 -		-				

ć

1000

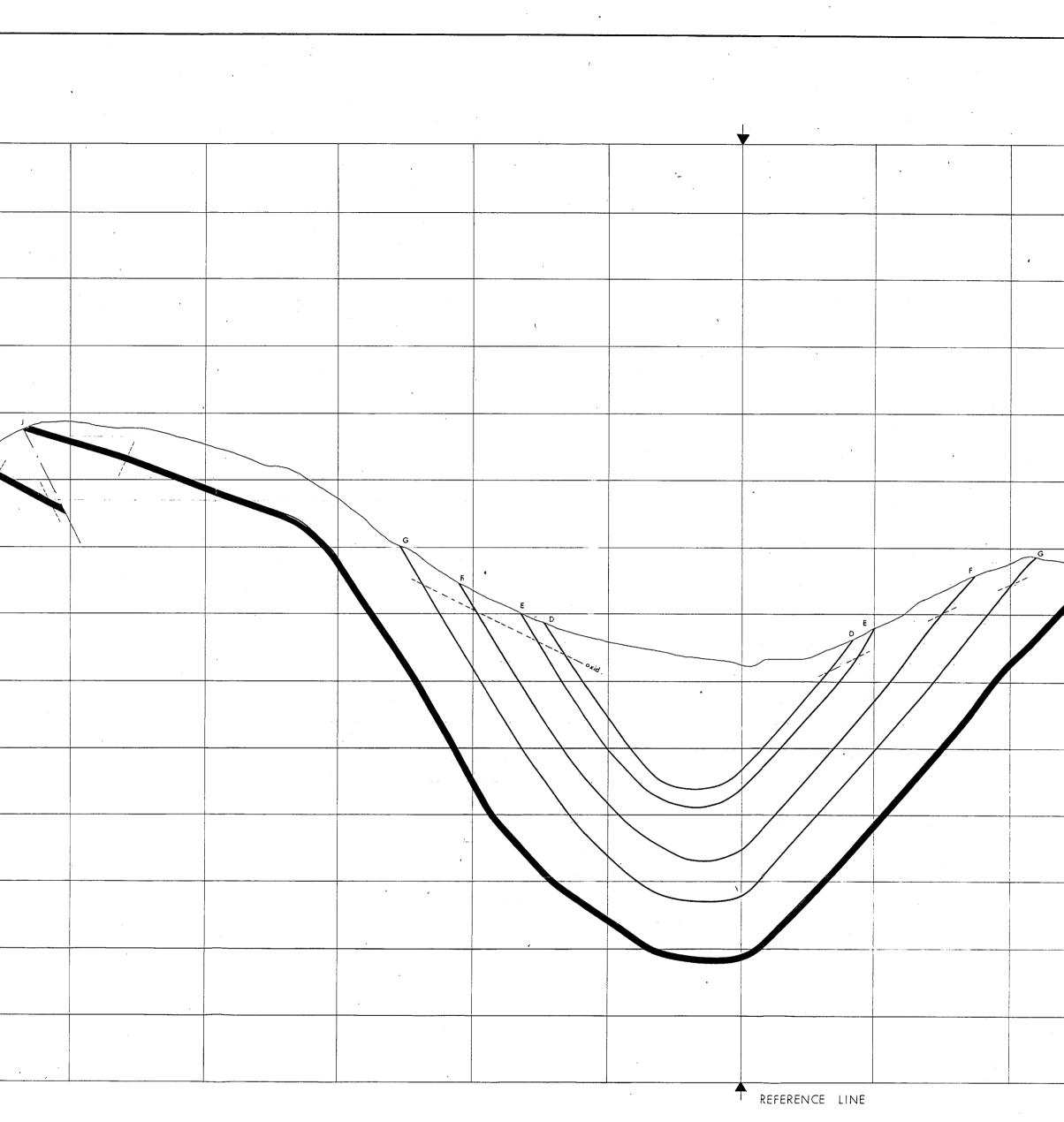
.

•

· .

.

•



•

> > •

			170
		•	170
		, · ·	
			- 160
-			. 1500
			1001
			- 140
	· · · · ·		 130
			120
			 120
	· · · · · · · · · · · · · · · · · · ·	· · · · ·	
			 110

•

•

•

PREPARED BY: DENISON	COAL LIMIT	red der
CALGARY	ALBERT	A <b>S</b>
	PR-Guin	stette 76(2)E
		•
FRAME CR	OSS-SECTION	I № F 7611
	DATE SEPT., 76	SCALE 1:2500

			. `,		
1700 -					
		-			
1600 -				•	-
1500 -			•		-
1400 -					
					-
1300 -				2 	
1200 -			•	· .	
1100 -				,	
1100 -					
1000 -					

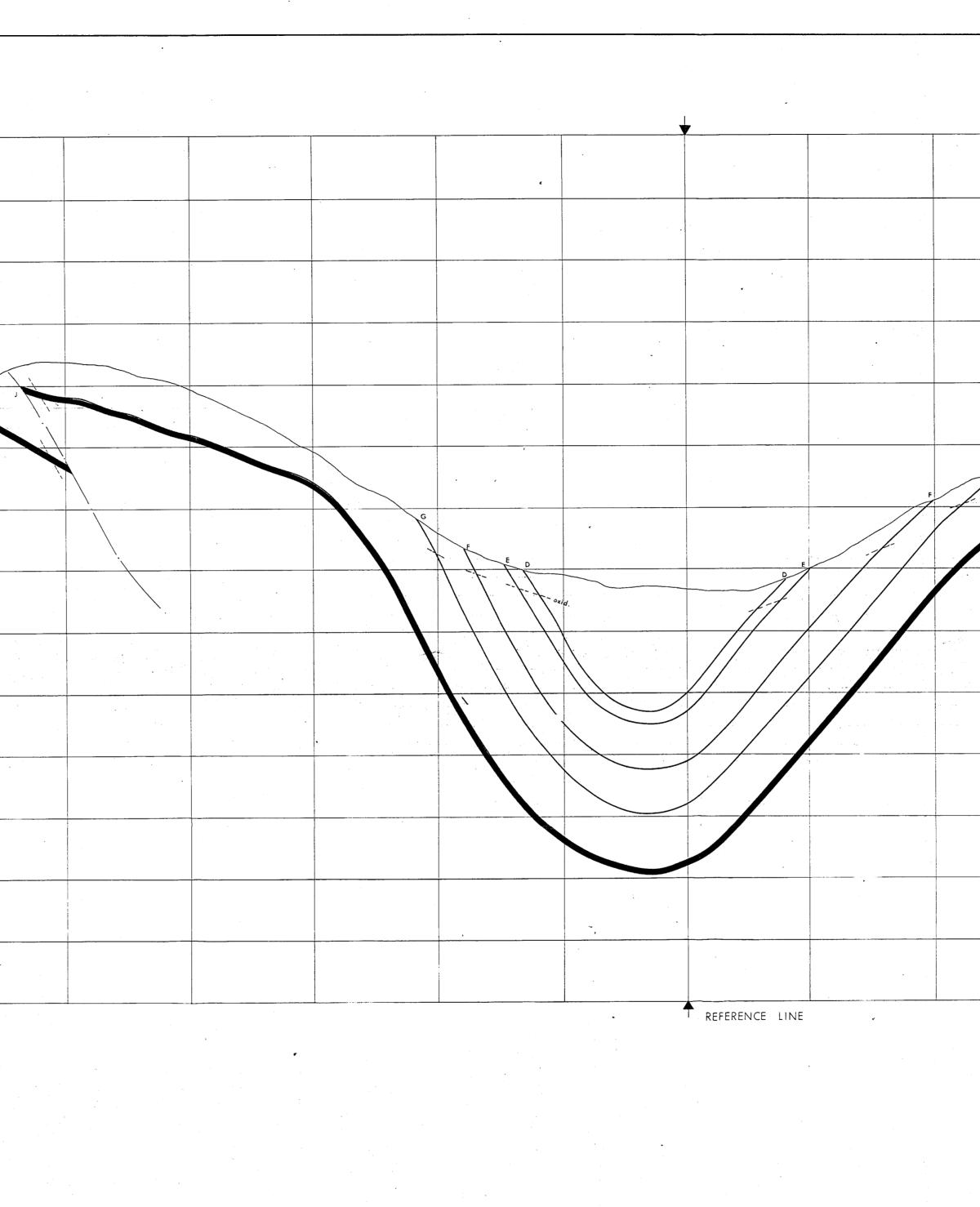
•

4

•

-

.



. .

			1700
			1700
			1600
			1500
G			- 1400
			- 1300
		•	
			1200
			1100
	-		

PREPARED BY: DENISON COAL LIMITED ALBERTA PR-QUINTETTE 74(2)B. FRAME CROSS-SECTION Nº F7612 DRAWN BY: J.W.K. DATE SEPT., 76 SCALE 1:2500 / APPROVED BY: DRAWING NO QNIT 76-0675-R01	QUINTE	ette coa	L LIMIT	ED
PR-QUINTETTE 76(2)B. FRAME CROSS-SECTION Nº F7612 DRAWN BY: J.W.K. DATE SEPT., 76 SCALE 1:2500		COAL LIMI	TED	
FRAME CROSS-SECTION Nº F7612	CALGARY	ALBER	TA	
DRAWN BY: J.W.K. DATE SEPT., 76 SCALE 1:2500	· · ·	PR-Qu	intette 7	(2)B.
	FRAME CRC	SS-SECTIO	N NºF76	512
APPROVED BY: DRAWING NO. Q N TT 76 -0675 - R01	DRAWN BY: J.W.K.	DATE SEPT., 76	SCALE 1:25	00 /
	APPROVED BY	DRAWING NO QNTT76	-0675- R01	
		<u>.</u>	· · · · · · · · · · · · · · · · · · ·	10

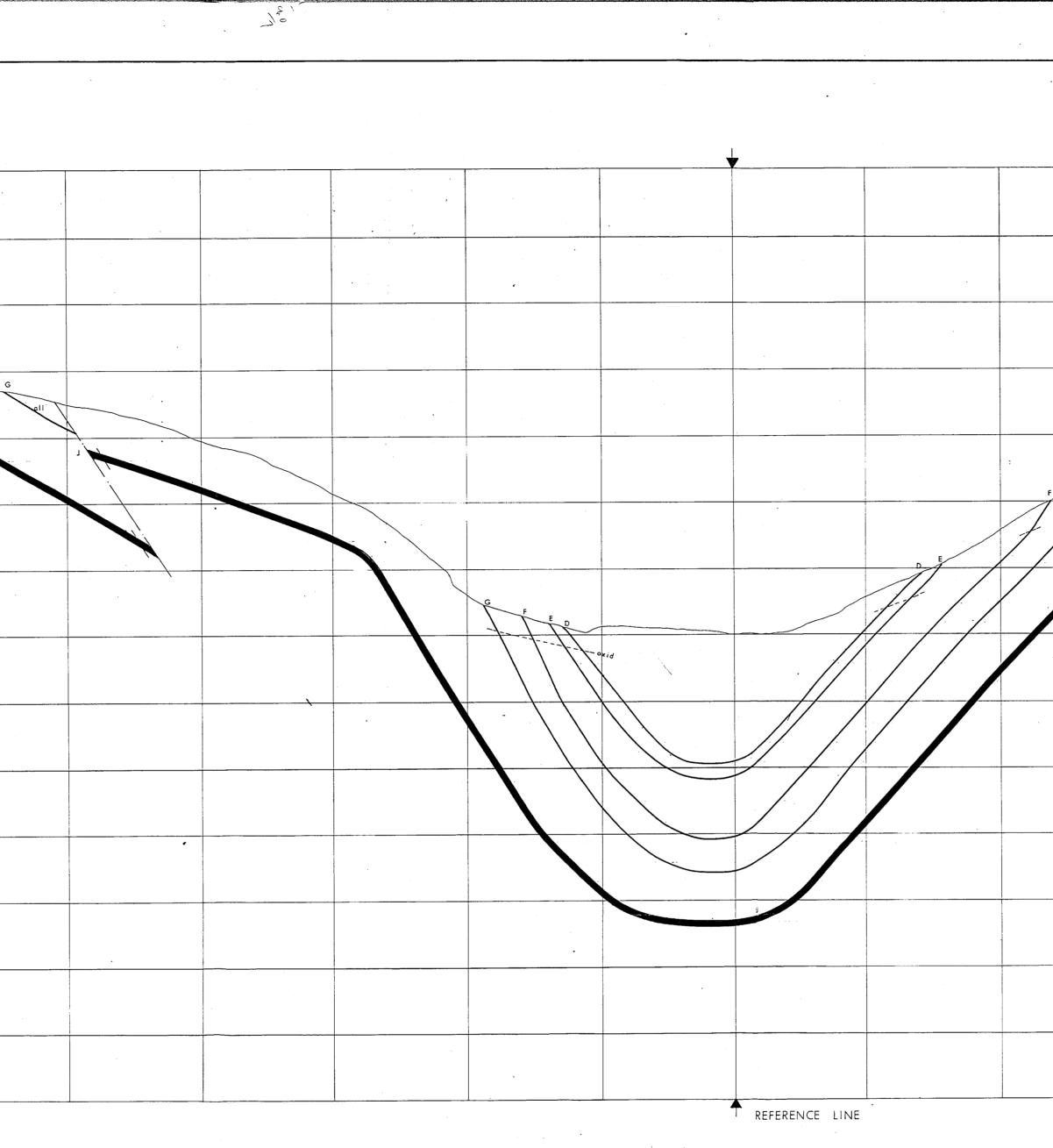
	1700 -	×	· · · · · · · · · · · · · · · · · · ·					
	1700							-
			•		······································			
ţ	1600 -							
								G
	i500 -							
	1400 -							
LEVEL				•				
SEALE	1300							
ABOVE						5. 5.		
METRES	1200 -							
ME								
				· · · · · · · · · · · · · · · · · · · ·		•		
	1100							
	1000		-				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

. ' *

•

•

• •



-

2

¢

.

. .

·			 	170
		······		160
-				150
G				101
				14
		•		13
	-			
				12
	-			
				11

 QUINTETTE COAL LIMITED

 PREPARED BY:

 DENISON COAL LIMITED

 CALGARY

 ALBERTA

 PR-QUINTETEC(2)B

 FRAME CROSS-SECTION Nº F7613

 DRAWN BY: J.W.K.

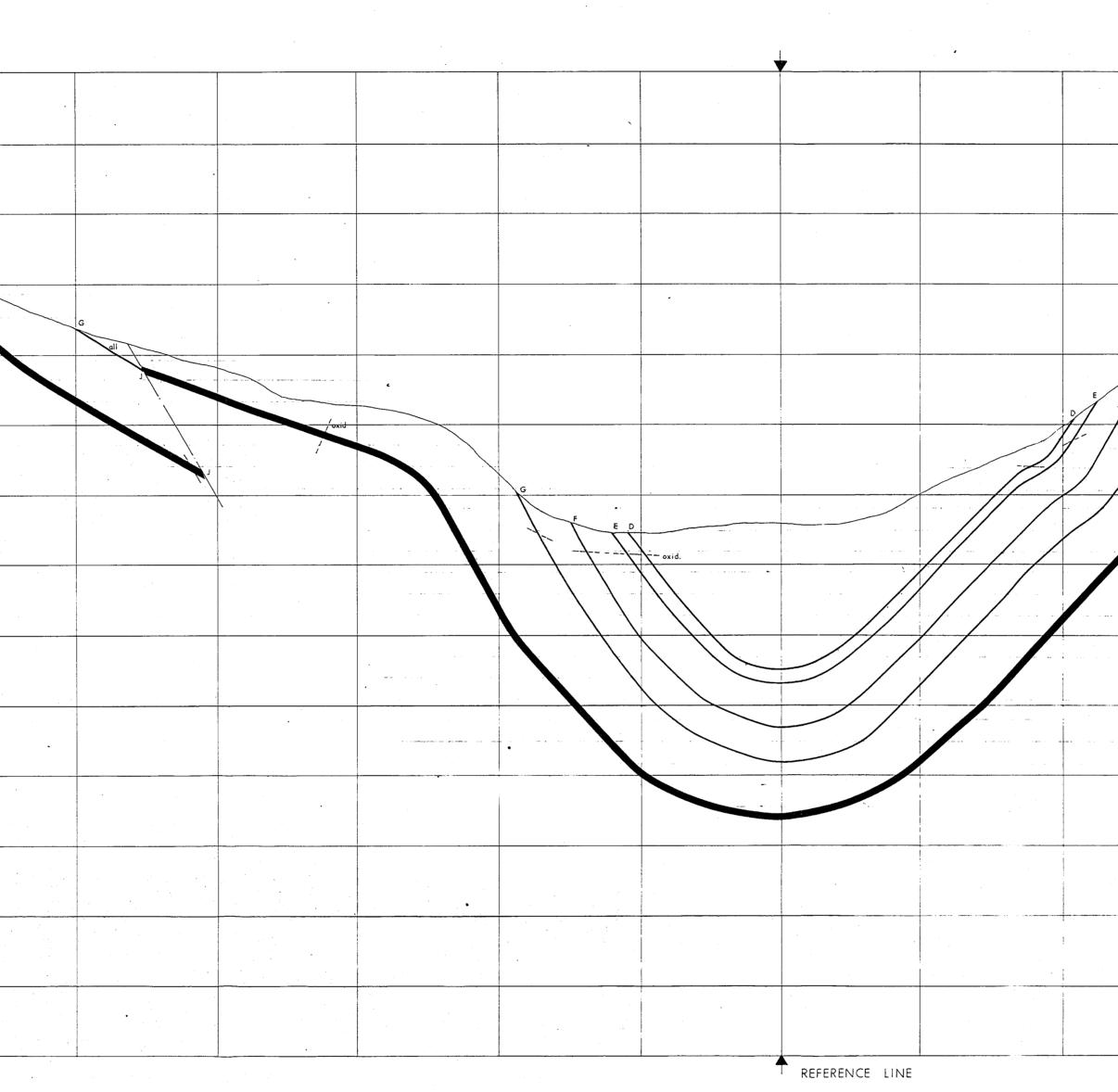
 DATE: SEPT., 76

 SCALE: 1:2500

 APPROVED BY:

1700 -			X				 			
1600 -	 				•		 			
			, ,				 			
1500										
										. 
1400 -				•		•				-
				•					· · · ·	
1300 -										
					· · · · ·					
1200 -						.,	· · ·			-
		• 			•		· · · · · · · · · · · · · · · · · · ·	•		
11.00		· · · ·					<u>.</u>			
		•							•	
1000									•	

.



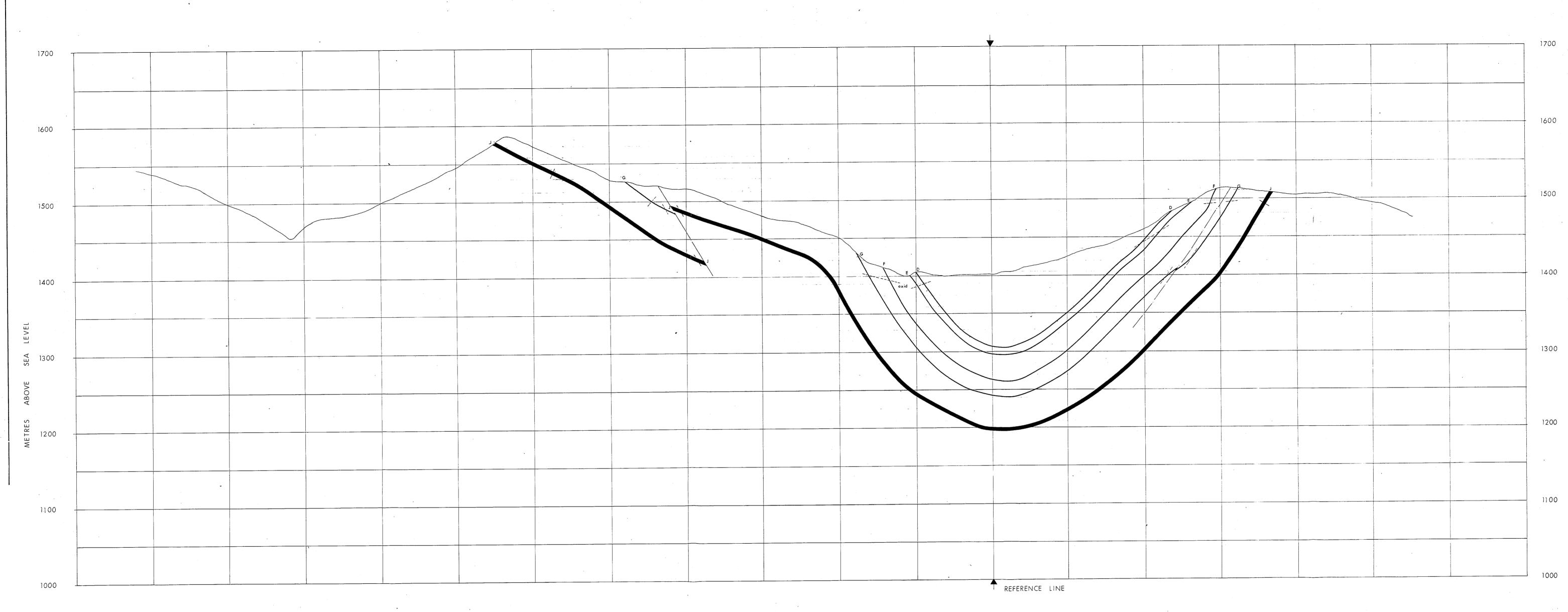
•

- -

			1700
			1600
1-1-			1500
			1400
· · · · · · · · · · · ·		2 	1300
· · · · ·			
			1200
			1100
			1000

QUINTE	ETTE	COAL	LIMITE	D	
PREPARED BY: DENISON (	COAL	LIMIT	ED =	4	
CALGARY		ALBERTA	<u> </u>		
	P	R-Quin	itette=76	(z)B.	
FRAME CRC	SS-SE	CTION	Nº F 761	4	
•	`				
DRAWN BY : . J. W. K.	DATE SEP	РТ., 76	SCALE 1:250	0	
APPROVED BY	DRAWING NO :	QNTT 76 -0	675- R01	k. ev	
				6	09

•



· •

•

· · · · · ·

.

 QUINTETTE COAL LIMITED

 PREPARED BY:

 DENISON COAL LIMITED

 CALGARY

 ALBERTA

 PR-QUINTEFE 76(2)B

 FRAME CROSS-SECTION Nº F7615

 DRAWN BY: J.W.K.

 DRAWN BY: J.W.K.

 DRAWING ND: QNTT76-0675-R01

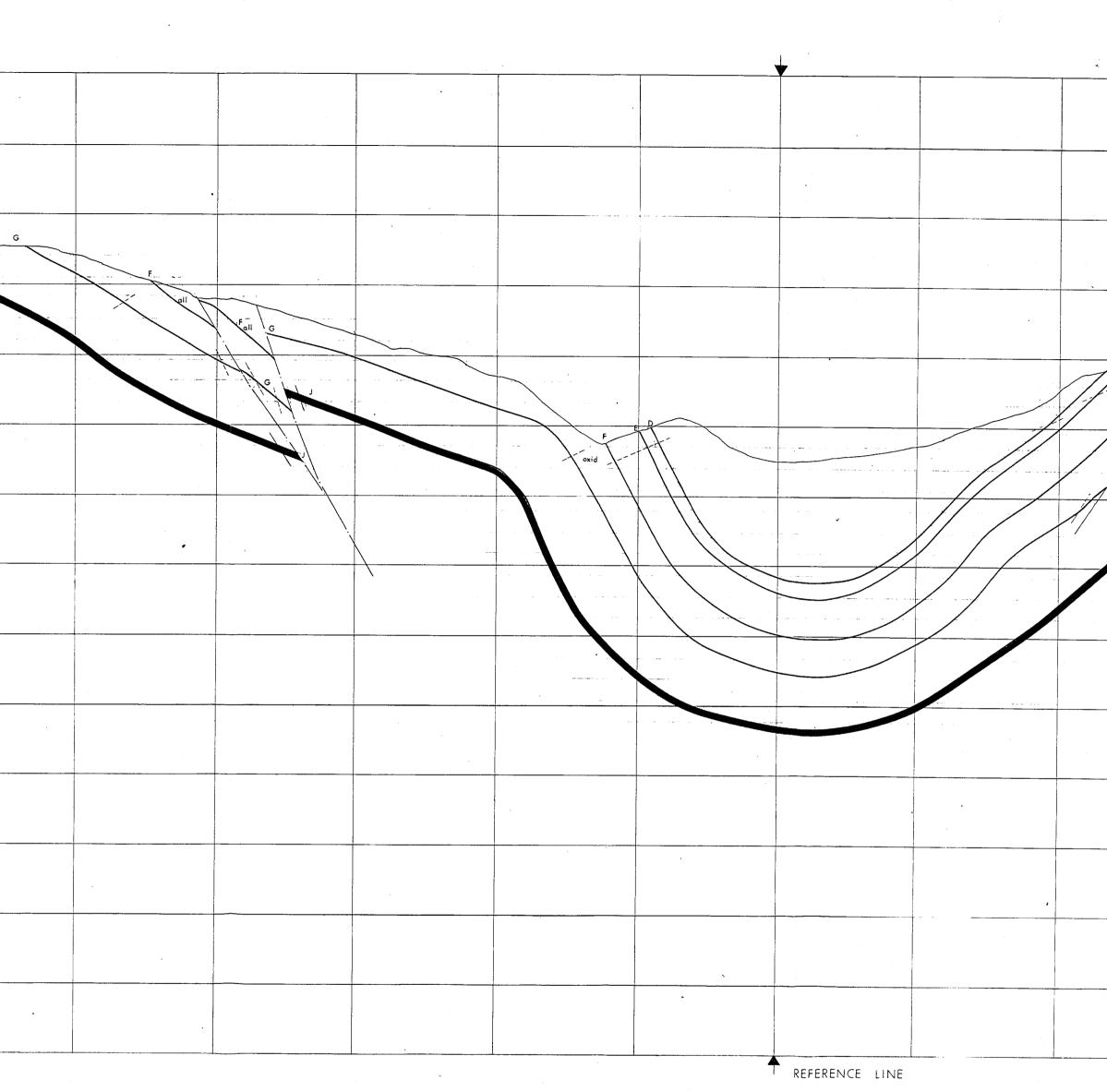
.

----

...

			<b>T</b>		,	
	1700 -					,
	1600 -		•	· .		
	-		•			
- - - - - - - -	1500 -					
	1400 -					 
LEVEL						
SEA LE	1300 -					 
ABOVE						
METRES	1200 -					
			· · ·			
	1100 -					
	1000					
	1000	L	L	•	· · · · · · · · · · · · · · · · · · ·	 

•



					1700
			-		
					- 1600
E					
211					1500
				i	
		· · · · · · · · · · · · · · · · · · ·			14.00
	· · · ·				
					-
					1300
			· · · · · · · · · · · · · · · · · · ·		
					1200
			•		
				· · ·	1100
				•	
					1000

	TETTE COA	L LIMITED
PREPARED BY DENISON	COAL LIM	ITED
CALGARY	ALBE	RIA
	PR-Quin	itefte 76(2)B
FRAME CF	ROSS-SECTIO	N № F 7616
•		
DRAWN BY JWK	DATE SEPT., 76	SCALF 1 2500
APPROVED BY	DRAWING NO QNTT70	

· •

•

1700 -					
			,		
1600 -	· · · · · · · · · · · · · · · · · · ·				
				×	
1500 -					
1400 -		 · · · · · · · · · · · · · · · · · · ·			
10.00	N N			•	
1300 -					
1200					
1200 -					
1100 -					

• • • • •

100 a 100 1

.

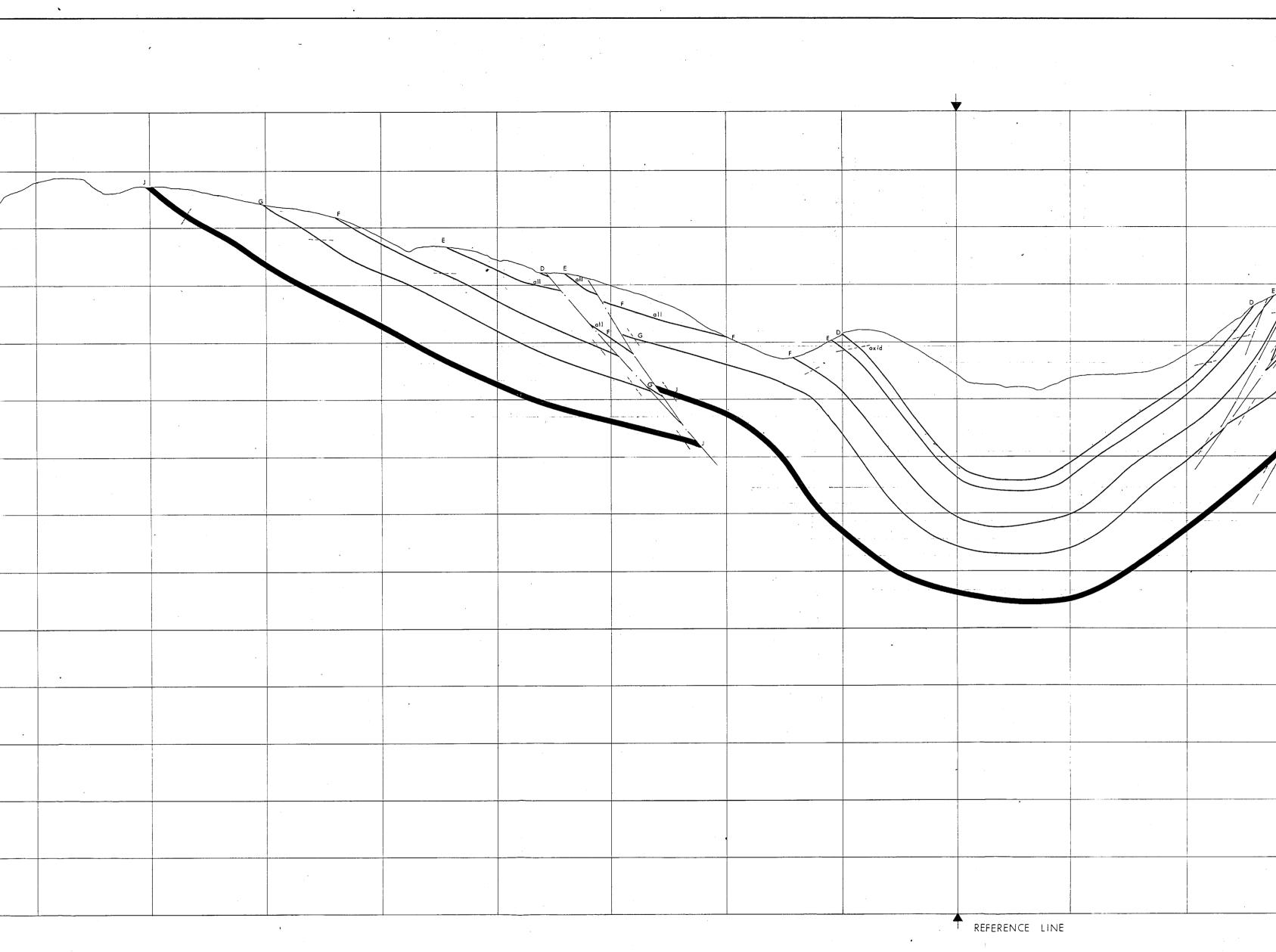
×

•

.

;

.



.____

	· · · · · · · · · · · · · · · · · · ·			1	1700
				· · ·	
, /	-				
·					1600
				· · · · · · · · · · · · · · · · · · ·	1500
				•	
		4. -	· · · · · · · · · · · · · · · · · · ·		14.00
		ŗ			- 1400
					1222
					1300
		· · · · · · · · · · · · · · · · · · ·			1200
					1200
		· · · · · · · · · · · · · · · · · · ·			
				х.	1100
				<u> </u>	
	<u> </u>			]	1000

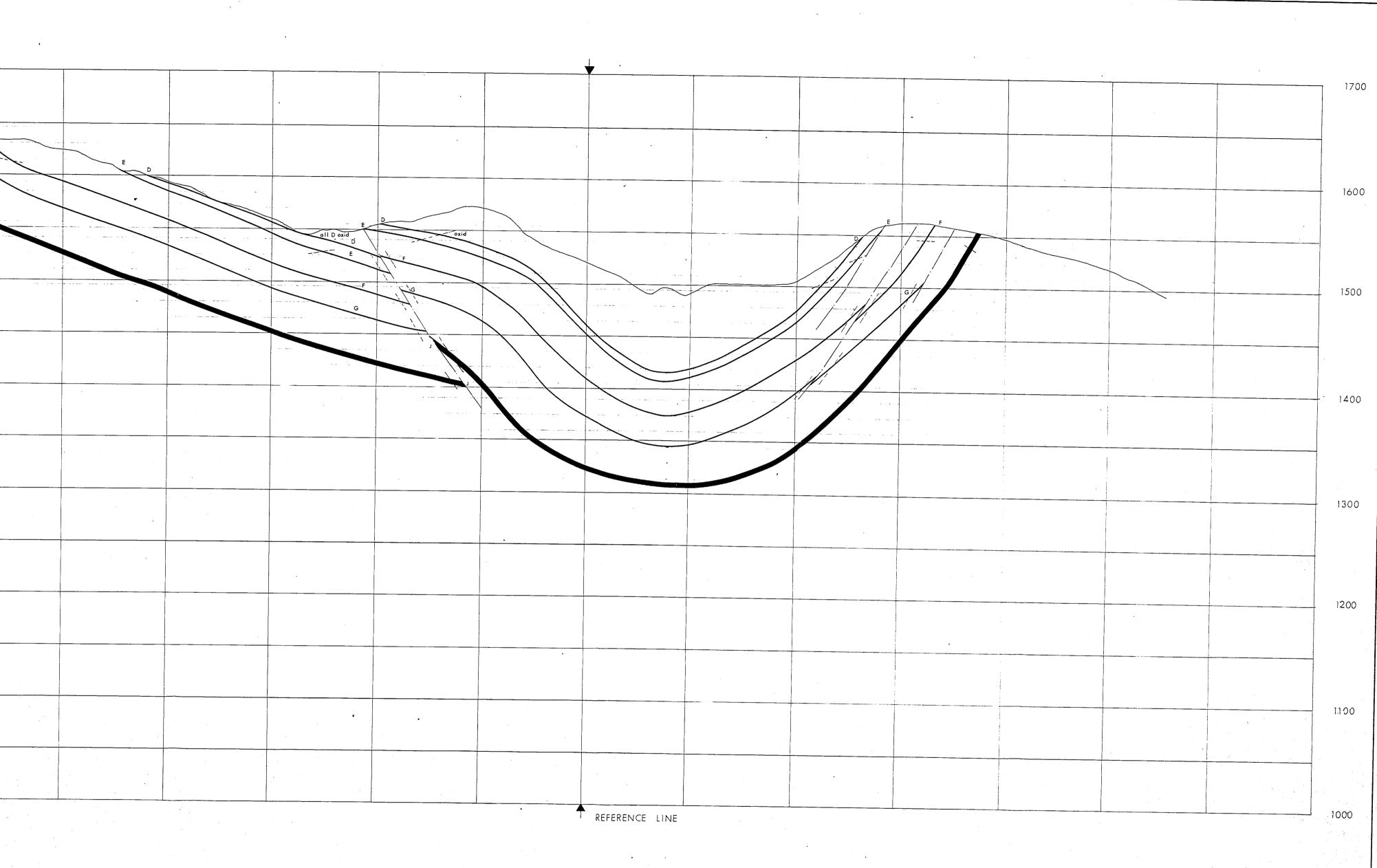
•	ette coal	LIMITED
prepared by: DENISON	COAL LIMIT	ed 🦉
CALGARY	ALBERTA	
	PR-Quint	$ette_{16(2)}B$ .
FRAME CRC	DSS-SECTION	Nº F 7617
DRAWN BY : J.W.K.	DATE SEPT., 76	SCALE: 1:2500
APPROVED BY :	DRAWING NO: QNTT76-0	

· • • • •

	17.00							
			_			,	G	
		-						
	1600	· · · · · · · · · · · · · · · · · · ·						
			-	· · · · · · · · · · · · · · · · · · ·				
	1500							
	1900							
•	1400 -		· · · · · · · · · · · · · · · · · · ·					
•								
EVEL								
	3							
SEA	1300 -							
VE								
ABOVE								
ES				· · ·	•	· ·		
METRES	1200 -	40 			· · ·			
						·		
								· .
ائراني. بالانتشار بالانتشار	1100 -							
بالأخلي م						an a		
1	1000						and the second sec	
	، معنی را در ا		en e					
			a Arian Arian Arian					
nye Nave Nave							•	•
1. 1. 4.								
• • •								
	•							
52 1								
			· · · · · · · · · · · · · · · · · · · ·					

•

'



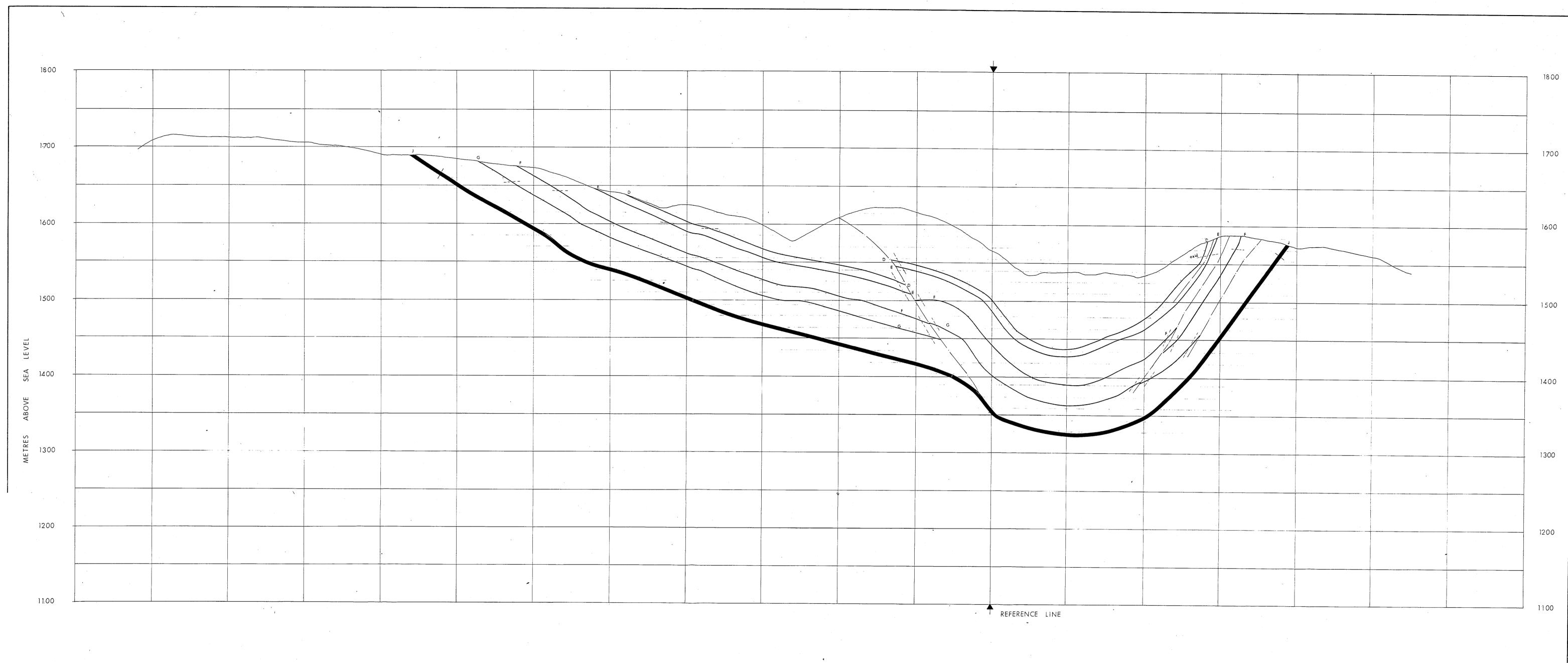
•

1

٠

QUINT	ETTE COAL	LIMITED
DENISON	COAL LIMIT	red
CALGARY	ALBERTA	
	PR-Quin	lefte 76(2) B.
RAME CR	OSS-SECTION	I № F 7618
•	•	
DRAWN BY : J.W.K.	DATE SEPT., 76	SCALE 1:2500
DRAWN BY : J.W.K.	DATE SEPT., 76 DRAWING NO: QNTT76-(	

k.



•

.....

i. •

۴ ۰ ۱

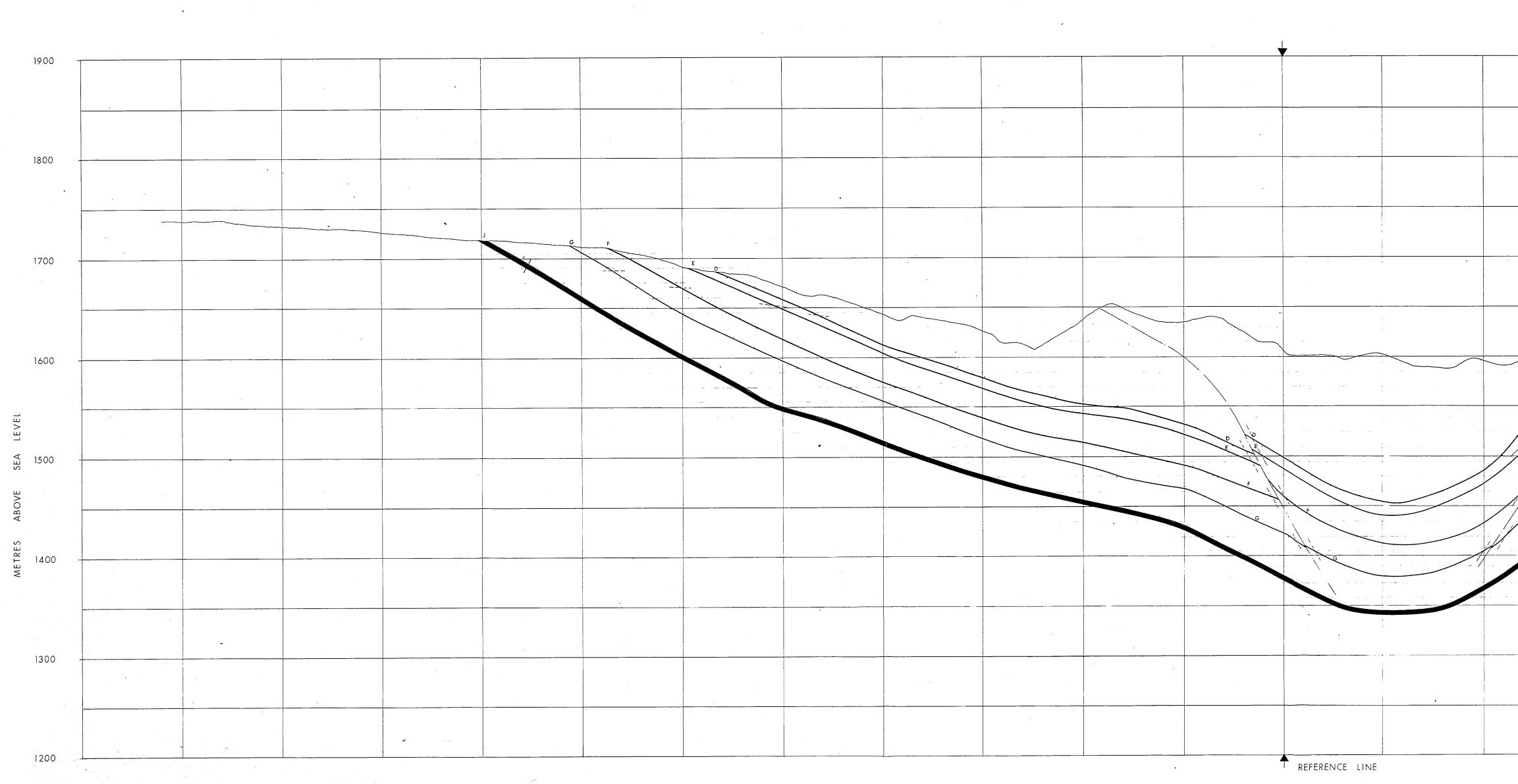
L

•

.

QUINT	ETTE	COAL	LIMIT	ED	
PREPARED BY: DENISON	COAL	LIMIT	ED		
CALGARY		ALBERTA	, <del>.</del>	<b>D</b>	
	PR-1	Auinte	tte76	(z)B.	
FRAME CR	OSS-SE	CTION	Nº F70	519	
•	•				
DRAWN BY J.W.K.	DATE: SEF	РТ., 76	SCALE: 1:25	500	
APPROVED BY :	DRAWING NO :	Q N TT 76 -0	675- R01		
				61	79
					/ /

Ĵ.



. ****** * 2

.

•

¢

.

•

•

4

.

8

					1900
				•	
					- 1800
	· · ·		· · · · · · · · · · · · · · · · · · ·		. 1700
0xid	E F				- 1600
	G				
					1500
	· · · · ·				1400
					1400
		· · · · ·	· ·	· ·	
					1300
		· · · ·			
					1200

QUINT	ETTE	COAL	LIMITED		
PREPARED BY: DENISON	COAL	LIMIT	ed 🟒		
CALGARY		ALBERTA	<u>\$</u>	<b>1</b>	
<u> </u>	Pi	e-Quin	stefte 766	2)B.	
FRAME CR	OSS-SE	CTION	№ F 762	) C	
•		: 			
DRAWN BY : J.W.K.	DATE SEF	РТ., 76	SCALE 1:2500		
APPROVED BY :	DRAWING NO :	QNTT 76 -0	)675- R01		
			6	<u>, C</u>	)9

				•			
	· .			•			
1900 -	1 - James J.						
1800				· · · · · · · · · · · · · · · · · · ·			
					G	F E D	
1700			-	· · · ·			
1600 -							
LEVEL							
UT 4 1500			-				
ABOVE						· 44	
 METRES METRES							
1300		•			· ·		
				,			
		,				r	
1200							

i

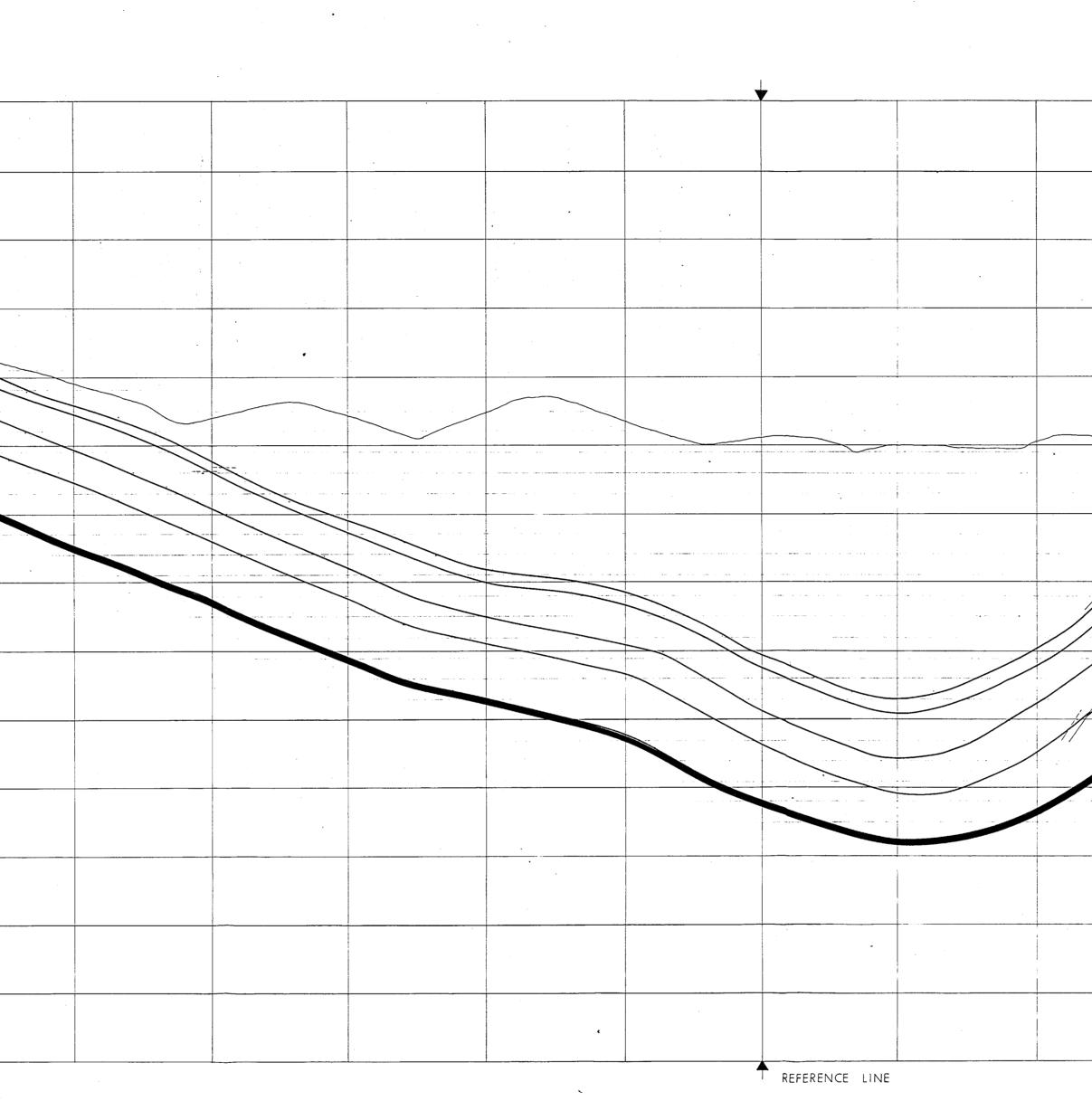
• •

•

•

.

: • • • • •



.

1

د

.

.

•

•

.

.

· . . .

•

•

					1000
					1900
		<b>、</b>			1800
					1700
D T				-	
	oxid				1600
		· · · · · · · · · · · · · · · · · · ·			
		••• ••	•		1500
					1400
					1300
		L			1200

.

.

2 **-** -

•

QUINT	ETTE	COAL	LIN	NITED	
PREPARED BY: DENISON	COAL	LIMIT	ED		
CALGARY		ALBERTA		<u>b</u>	
	PR	-QuiN	feffe	.76(z)B.	· ;
FRAME CR	OSS-SE	ECTION	N⁰	F 7621	
DRAWN BY : J.W.K.	DATE SE	PT., 76	SCALE	1:2500	7
APPROVED BY	DRAWING NO	QNTT76-0	0675- RO	1	
				60	59

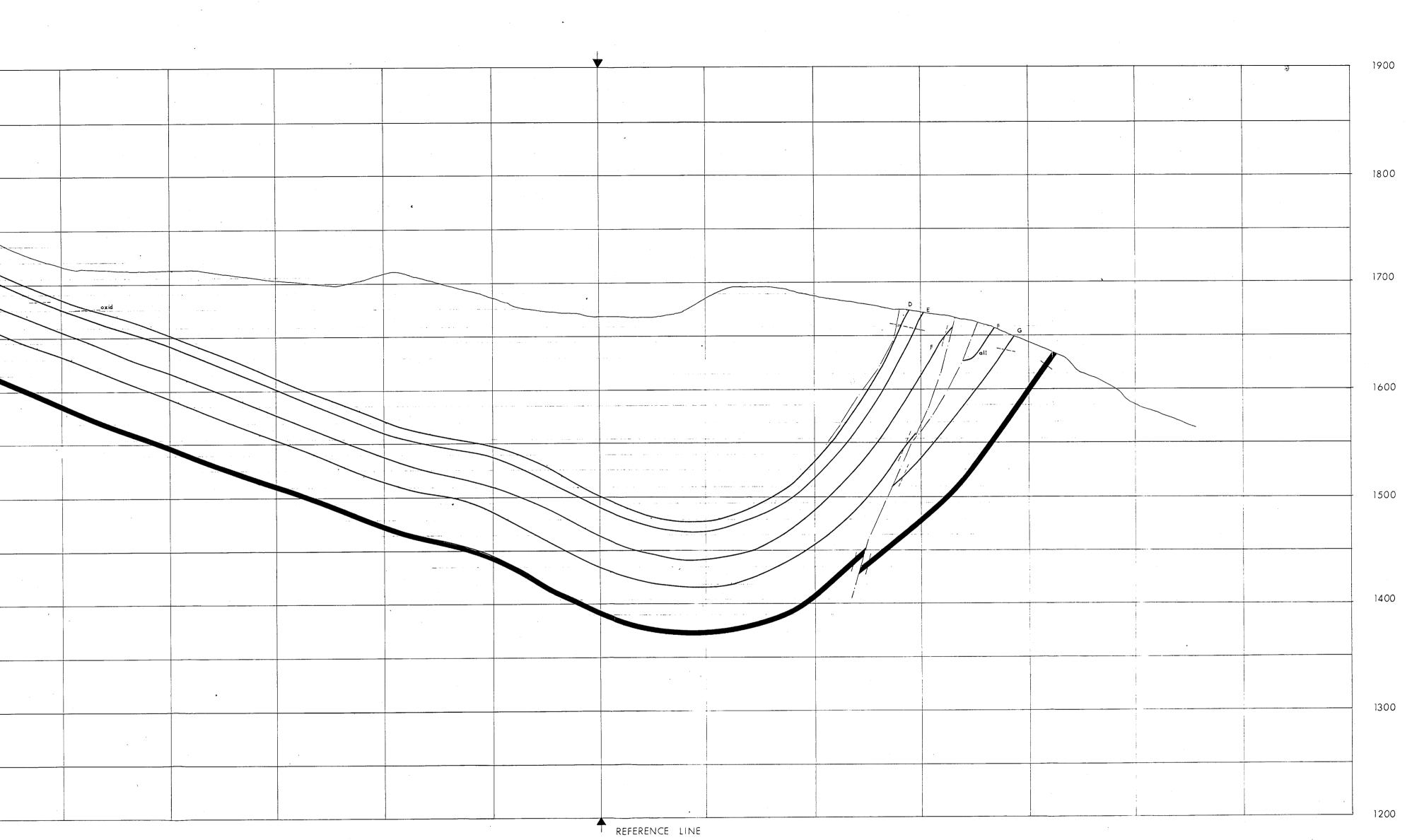
•

1900 -			· .		·	 
1900		,				
				,		
1800			L	G	F	
					E C C C C C C C C C C C C C C C C C C C	
	•	-				
1700						
		•				
1600						
			•			
1500		· · ·				
						 ¢
1400	1	· ·				
• • •						
1300			· · · · · · · · · · · · · · · · · · ·			
				-		
1200						

• .

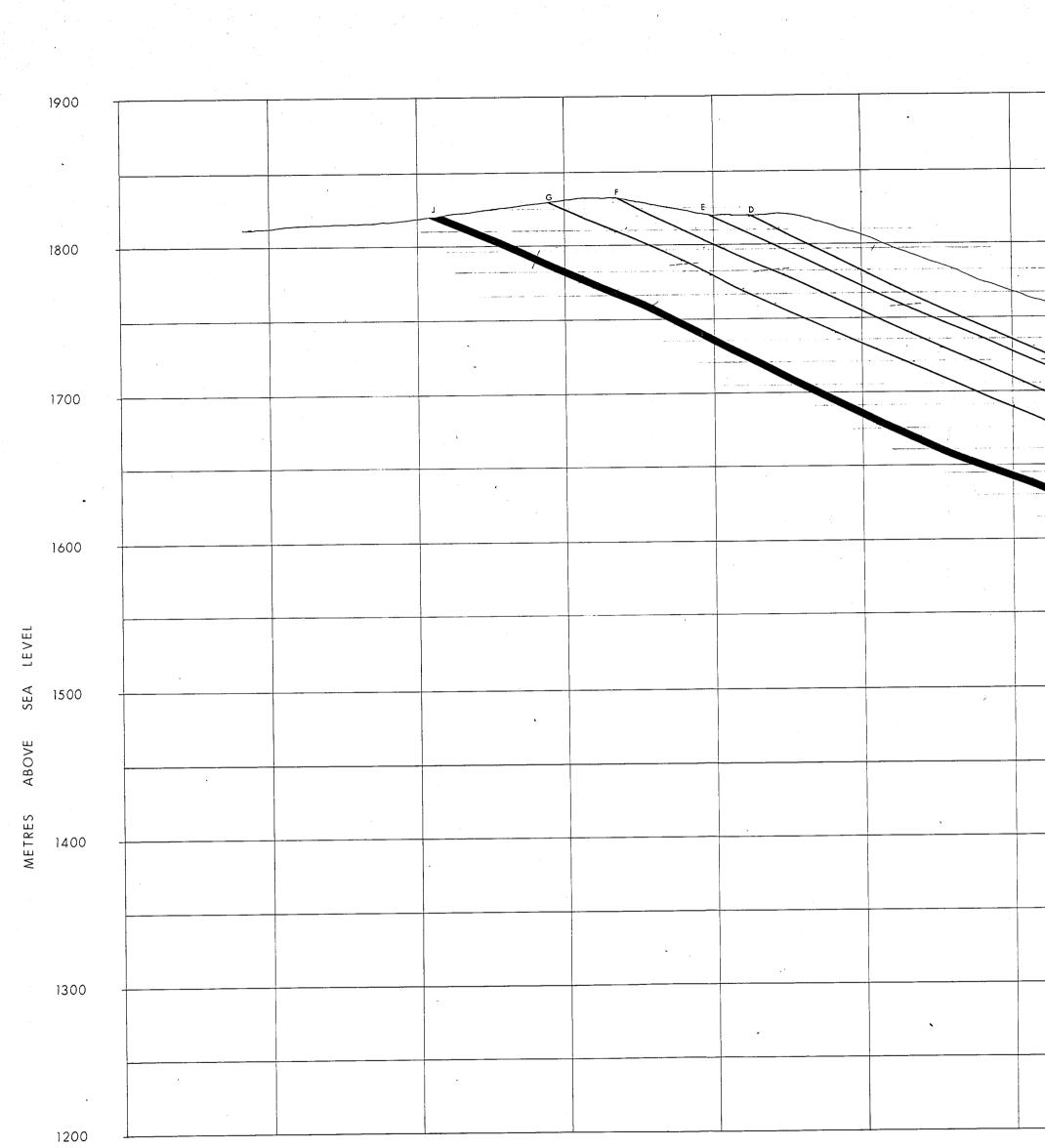
× ...

• •



< C

QUINT				
DENISON	COAL		ED	J.
CALGARY		ALBERTA		
	PR.	- Quint	effe 76(	2) <b>0</b> .
				$\sim$
FRAME CR	OSS-SE	CTION	Nº F 76	22
FRAME CR	OSS-SE	CTION	Nº F 76	22
FRAME CR	OSS-SE		Nº F 76	



-

.

•

•			•					
			1 			,		
					-			
· · · ·							·	
							-	
					د			
		·						
· · · · · · · · · · · · · · · · · · ·								
								+
		- 	· · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	n an	
					· · · · · · · · · · · · · · · · · · ·			
							alaan ahaan ahaa ahaa ahaa ahaa ahaa aha	4.
						· · · · · · · · · · · · · · · · · · ·	an a	- /
								X
	· · · · · · · · · · · · · · · · · · ·							
	,							
							<i>J</i>	$\sum$
			· · · · ·					
				·				
	-							
		п						
	· · · · · · · · · · · · · · · · · · ·							
,			,,,,,	•				
				•				

•

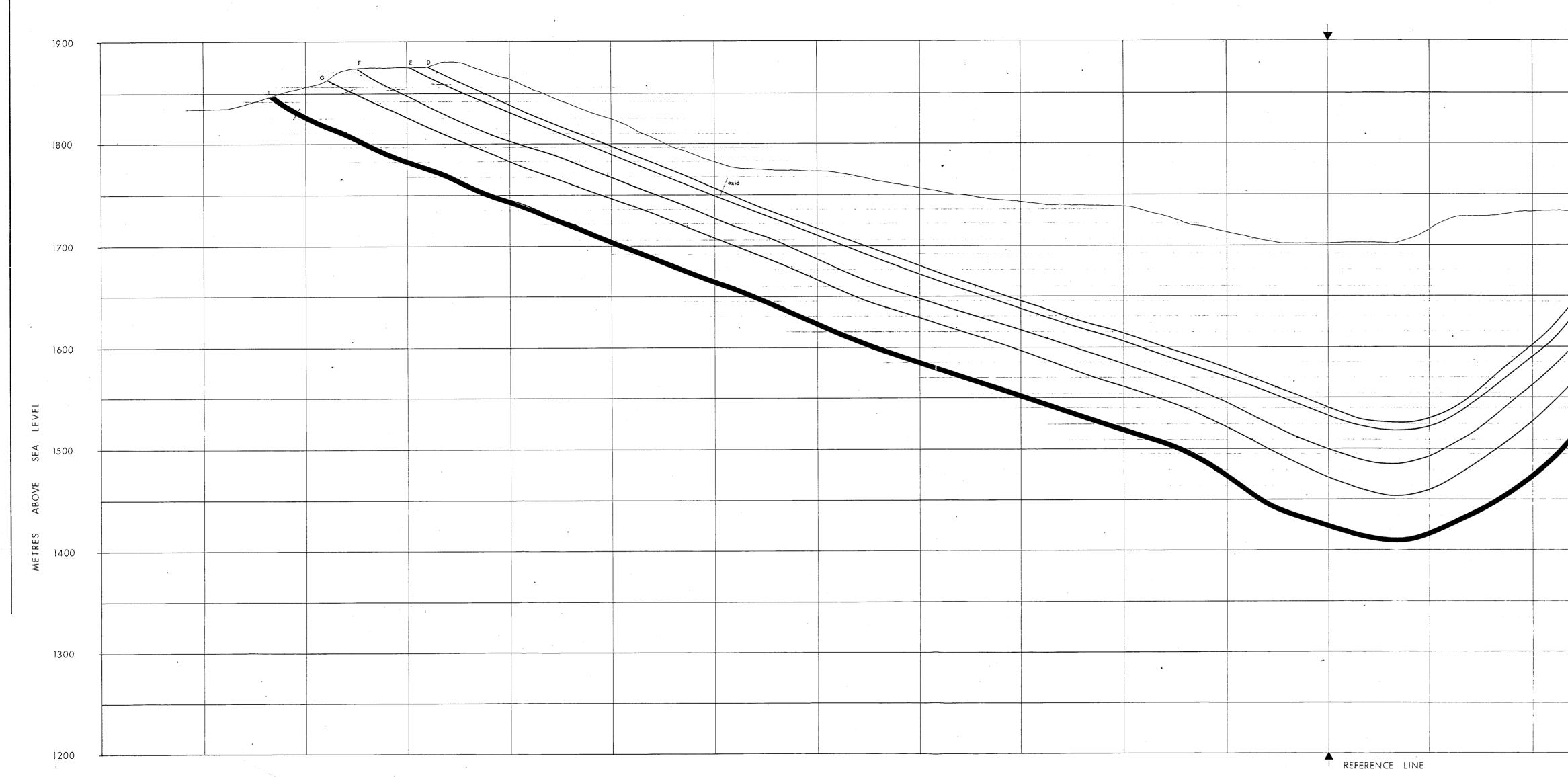
·

.

REFERENCE LINE

.

	,					:		
					<u></u>			1900
						· · · · · · · · · · · · · · · · · · ·		
								- 1800
	P E E							1700
	oxid							•
					<u> </u>	-	•	1600
					, i, i, i i			-
								1500
	· · · · · · · · · · · · · · · · · · ·							
					د		, , , , , , , , , , , , , , , , , , ,	
								1400
								- 1300
								_
•				ι.				
		<u> </u>				<u>}</u>		1200
		,						
. *			QU	INTE	TTE CC	AL LIM	ITED	]
			PREPARED B DENIS	SON (	COAL LI	MITED		
, ,				······································	PR-QU	inteffe 7		
				•	•			
			DRAWN BY : J . V APPROVED BY :	V. K .	DATE SEPT., 7 DRAWING NO: QN	6 SCALE	1:2500	



.

ź

,

and the second s

.

•

make and

•

.

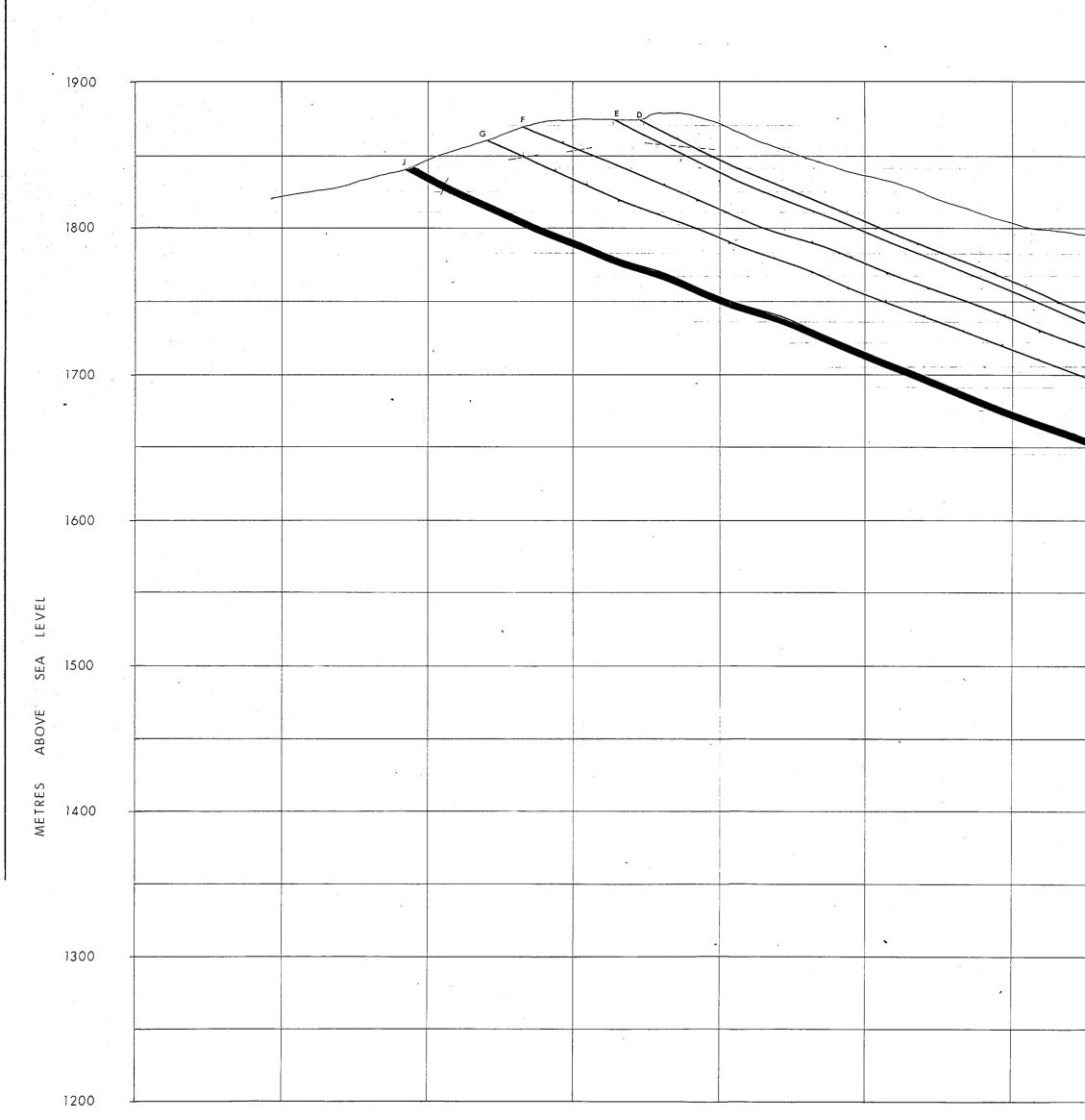
`

• · · · · · • •	1	1		190
				- 180
······································	D E E F G	·		
				170
				- 160
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
	· · ·			- 150
				140
		   	:	130
	×.			120

•

QUINT	ETTE COAL	LIMITED
PREPARED BY: DENISON	COAL LIMIT	red 🛃
CALGARY	ALBERT	A
	PK-Qui	intetle 74(2)B.
FRAME CR	OSS-SECTION	J Nº F 7624
•		
DRAWN BY: J.W.K.	DATE SEPT., 76	SCALE: 1:2500
APPROVED BY :	DRAWING NO: QNTT 76 -	-0675- R01

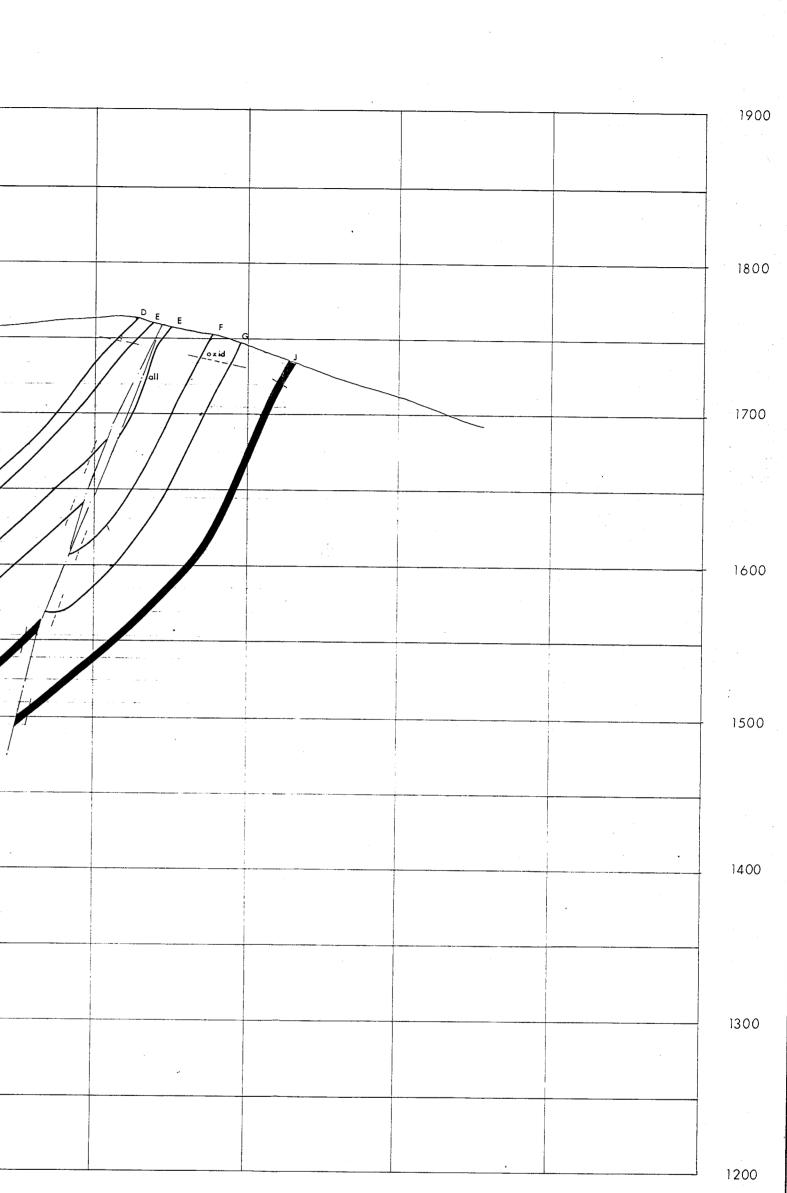
.



				s					
		·.							
							•		
	•								
				1	. ,	,	<b>V</b>	·····	1
				•					
								· · · ·	
						-			
		· · ·							
					•				
					۰.				
			· · · · · · · · ·		· · · · · · · · · · · ·			-	, , ,
	$\langle \rangle$						· · · · · · · · · · · · · · · · · · ·		
	·						· · · · · · · ·	a sur for	
		****							
			and a second						
			2 - 2 						
			4						
			· · · · · · · · · · · · · · · · · · ·						· · · · · · ·
	: •						· · · · · · · · · · · · · · · · · · ·		· · ·
	2				· · · · · · · · · · · · · · · · · · ·				
					•				
REFERENCE LINE				•					
REFERENCE LINE									
REFERENCE LINE		-							
REFERENCE LINE									
REFERENCE LINE									
REFERENCE LINE					· · · · · · · · · · · · · · · · · · ·				
REFERENCE LINE									
REFERENCE LINE	-							•	
. REFERENCE LINE									
							REFERENCE LINE		

· · · · · ·

· ·

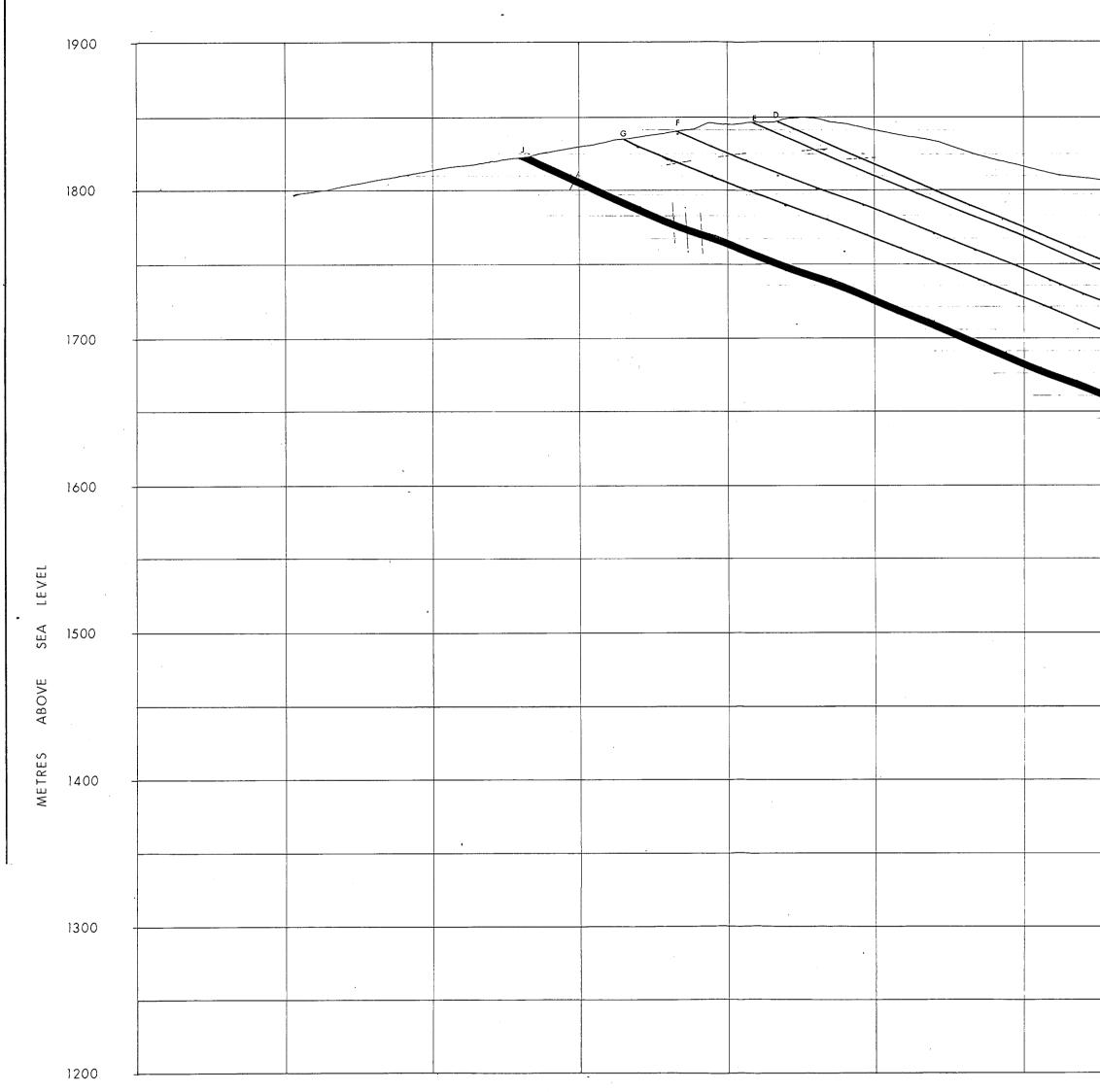


ι,

-

	FETTE	COAL	LIMITED	
PREPARED BY: DENISON	COAL	LIMIT	ED	
CALGARY		ALBERTA		
	P	R-Quir	utette 76(2)B.	
FRAME CR	OSS-SE	ECTION	N ^º F 762.5	
•				
DRAWN BY: J.W.K.	DATE SE	PT., 76	SCALE: ]:2500	
APPROVED BY: DRAWING NO: QNTT 76-0675- RO1				

. .



,

•

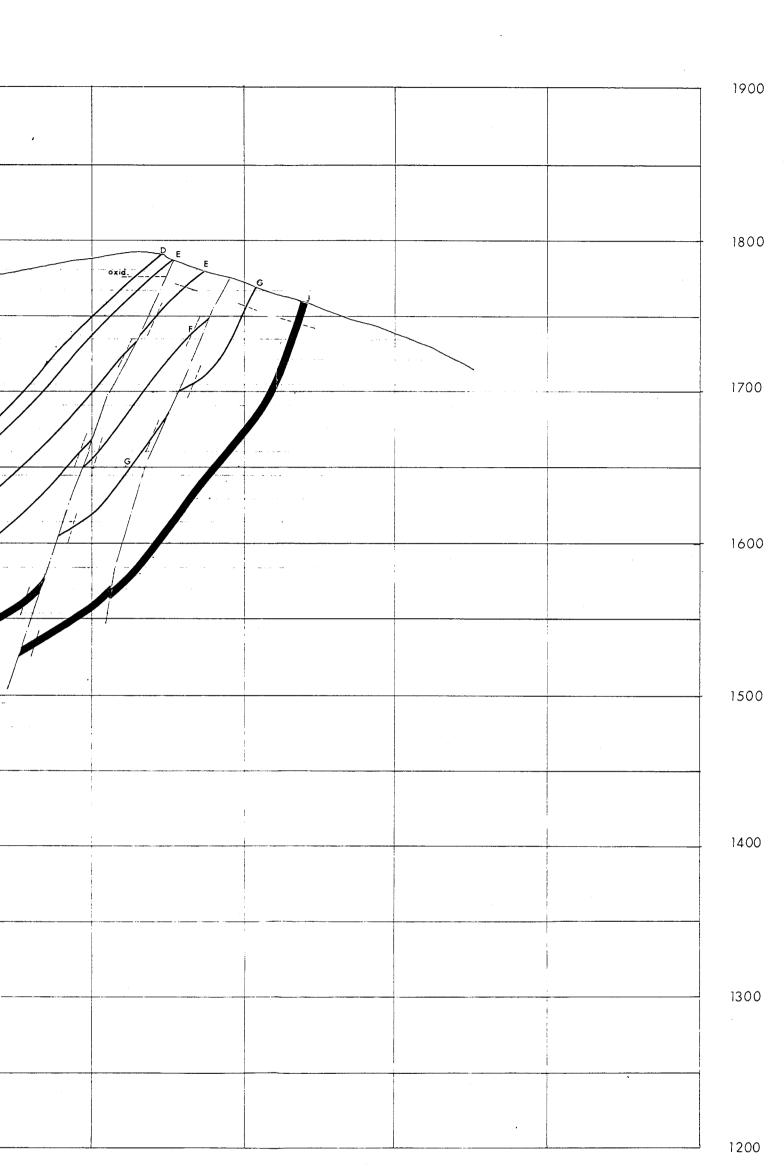
.

•		-						
						1		
						7		
					· · · · · · · · · · · · · · · · · · ·			
					·	· · · · · · · · · · · · · · · · · · ·		
						• • • • • • • • • • • • • • • • • • •		
								*
>								
			· · · · · · · · · · · · · ·					
						the state of the second state of the state o	and in the balance of the second s	
		· · · · · · · · · · · · · · · · · · ·			+			
			ale por en		a and a second and a second a	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	/
				· ····································			······································	/ /
							and a second	//
								//
								/ /
						· · · · · · · · · · · · · · · · · · ·	a man manafara a com	
				· · · · · · · · · · · · · · · · · · ·				
			·			· • • • • • • • • • • • • • • • •		
								/
						and the state of the state		
							the state of the s	
							·	
						1		
							4 4	
				-		1		
	·							
							×	
						REFERENCE LINE		

.

REFERENCE LINE

:



QUINT	ETTE	COAL	LIMI	TED	]
PREPARED BY: DENISON	COAL	LIMIT	ED		1
CALGARY		ALBERTA		<u></u>	
	PK	-QUINT	effe 76	·(2)B.	
FRAME CR	OSS-SE	CTION	N⁰FΣ	7626	
DRAWN BY: J.W.K.	DATE SE	РТ., 76	SCALE 1:	2500	
APPROVED BY :	DRAWING NO	QNTT76 -	0675- RO1		
				6	D

00				. <u> </u>	۰ ۲	,
				•		
			E			
00		oxid				
			-		· · · · · · · · · · · · · · · · · · ·	
00						
.00						
· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			
00	· · · · · · · · · · · · · · · · · · ·					
	-					
100	· · · · · · · · · · · · · · · · · · ·					
00						
			•	· · · · · · · · · · · · · · · · · · ·		

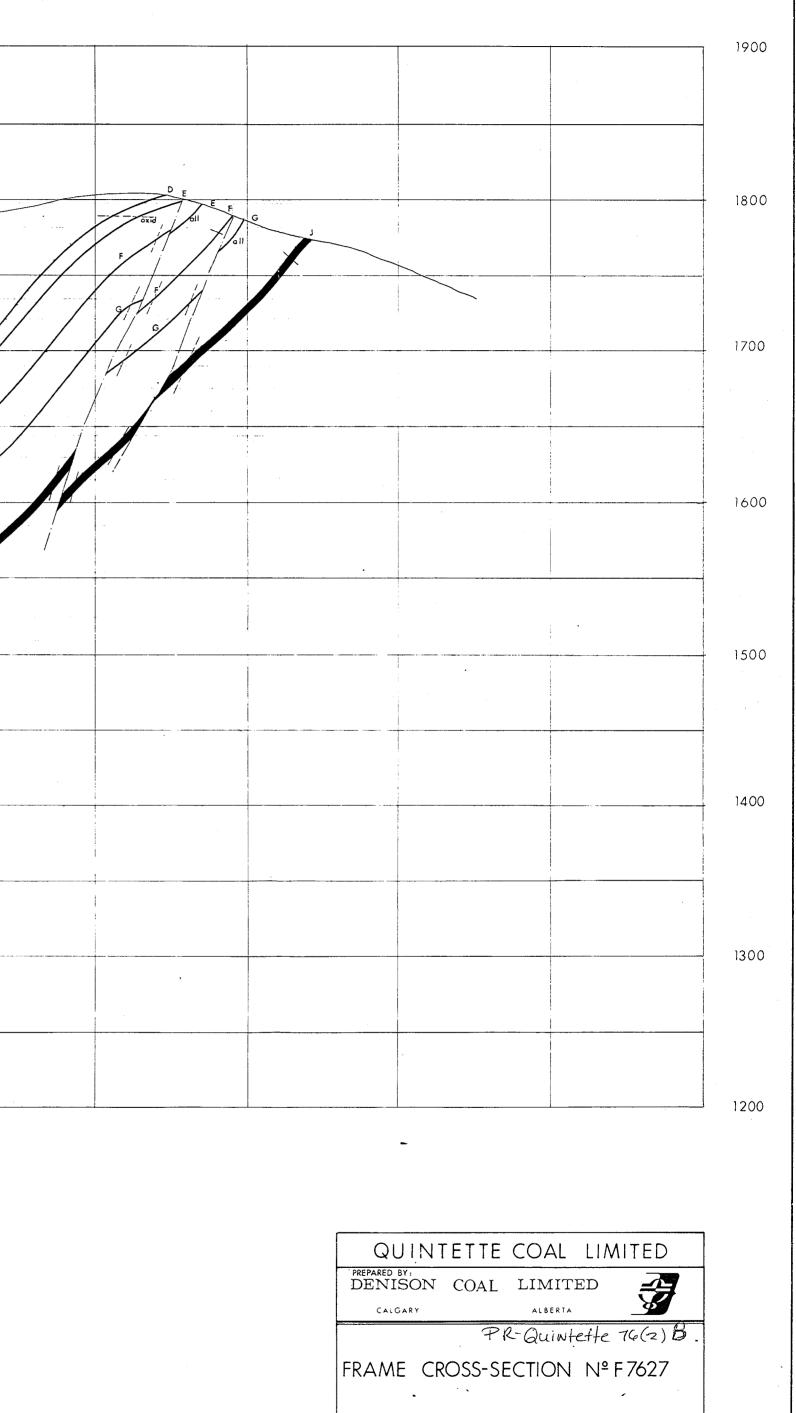
-

.

.

,

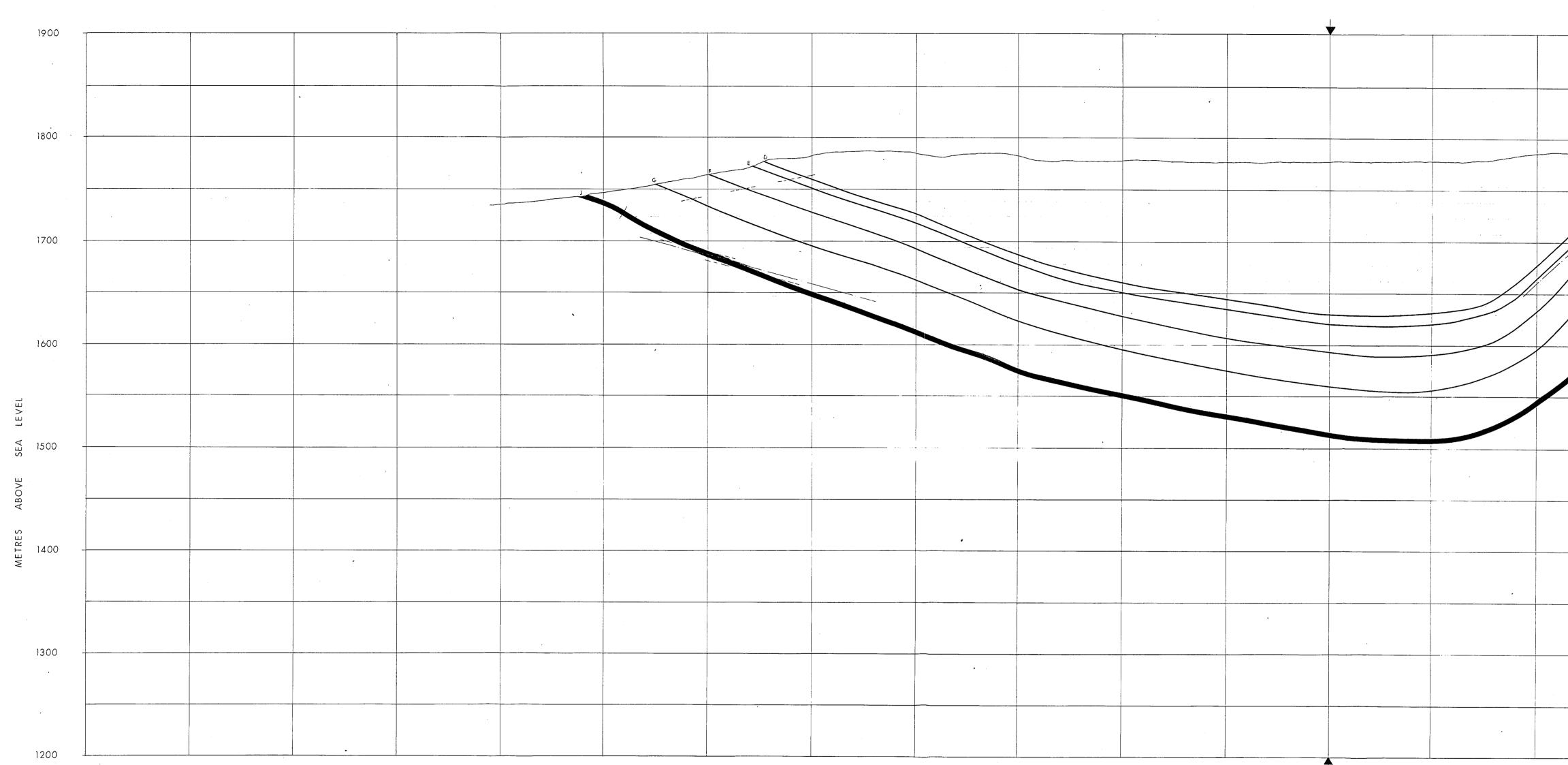
.



 DRAWN BY
 J.W.K.
 DATE
 SEPT., 76
 SCALE:
 1:2500

 APPROVED BY
 DRAWING NO:
 Q N TT 76 -0675- R01

 $\square$ 



•

•

REFERENCE LINE

-

.

.

•

.

.

¢

: .

.

.

					1900
					- 1800
Oxid DEF G					100
	G			· ·	1700
					- 1600
		х.			
				· · · · · · · · · · · · · · · · · · ·	1500
					1400
					1300
			•		

•	ETTE	COAL	LIMITE	)
PREPARED BY: DENISON	COAL	LIMIT	ED	7
CALGARY		ALBERTA	·0	
	PR-G	luinter	te76(2)	Β.
FRAME CR	OSS-SE	CTION	№ F 762	8
	DATE SEP	<b>τ</b> 7 έ		
DRAWN BY J.W.K.	UNIC SEP	T., 76	SCALE 1:2500	

•	• • • • •	e -		· · · · · · · · · · · · · · · · · · ·							
			• • • • • • • • • • • • • • • • • • •							L.	
900											
00				•							
				· · · ·			F D				
700						G		arid		· · · · · · · · · · · · · · · · · · ·	
					•						
00			×								
						•					
00											
				· · · ·					· · · ·		
00		 						•			
0.0						· · · · · · · · · · · · · · · · · · ·		       			
00				•							

•

•

.

•

.

. . .

	·							
		1						1900
					·····	#**#*#**		
						•		
				-				1800
D E F								
	,							1700
							. • ··	
							è	1600
	·							
							· · · · · · · · · · · · · · · · · · ·	1500
*								
		; ·			-			
	•							1400
	••••••••••••••••••••••••••••••••••••••							1400
<b>.</b>		· · · · · · · · · · · · · · · · · · ·					<u> </u>	
	1							
								1200
								1300
								1200
			<b></b>					1
			QL	JINTE	ITE COA	LIMI	TED	
			prepared DENI	SON CO	DAL LIM	ITED	<b>A</b>	
			CALC		ALBE		<u>کې</u>	

Pik-Quintette 74(2)B FRAME CROSS-SECTION NºF7629

.~.,

 DRAWN BY:
 J.W.K.
 DATE:
 SEPT., 76
 SCALE
 ]: 2500

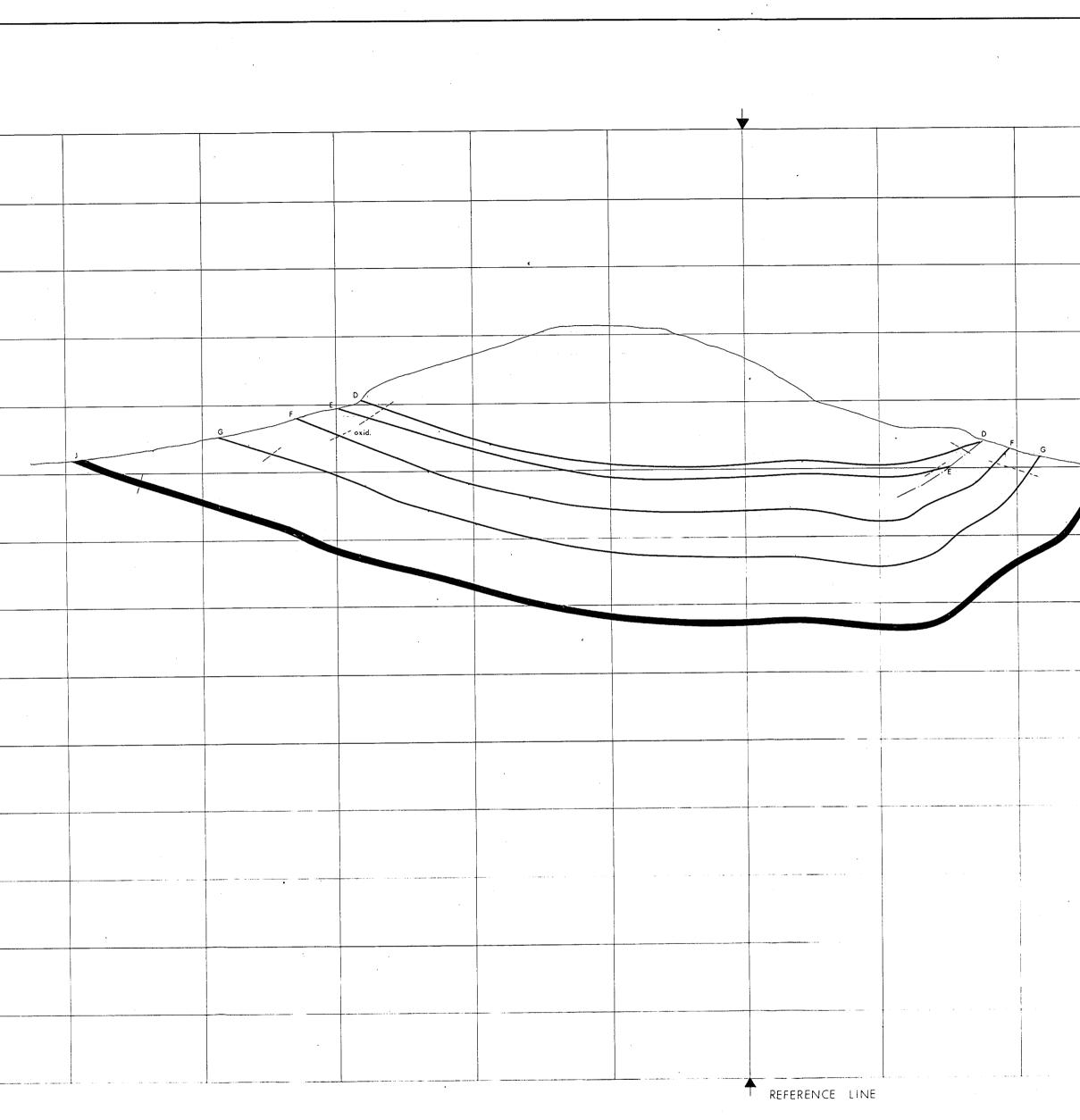
 APPROVED BY:
 DRAWING NO:
 Q N TT 76 -0675- R01

1900 • 1800 • -4 , 1700 • 1600 VEL щ 0021 SEA Ψ •  $\circ$ AB METRES 0071 0071 • . 1300 ,

•

1200

.



•

.

.

.

•

					1900
					_
					1800
 					•
					1700
			<b></b>		1600
 	1				1500
 	<u>.</u>		2		
 · · · · · · · · · · · · · · · · · · ·		• · · · • • • • • • • • • • • • • • • •			1400
1 1 1					
• •			:  - -		
					- 1300
					-
					1200
 		r	ı		1 Z UU
			TTE COAL		7
		PREPARED BY: DENISON (	COAL LIMIT	red	
		CALGARY	PR-Quinte	He 74(2) B.	-
	F	RAME CRO	SS-SECTION	№ F,7630	
	D	RAWN BY J.W.K.	DATE SEPT., 76	SCALE 1:2500	
		PPROVED BY	DRAWING NO QNTT76-	0675- R01	
 				6	09

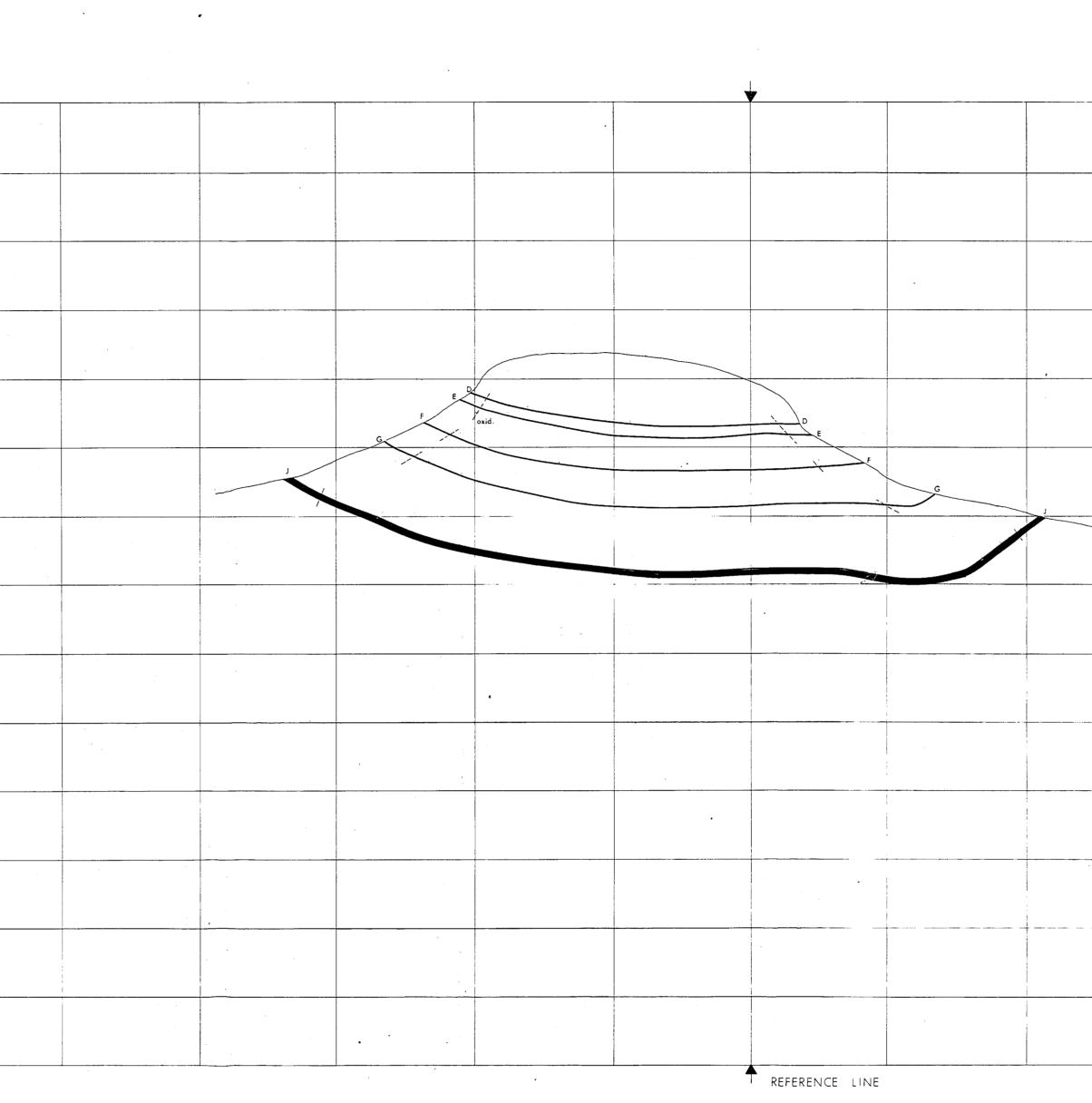
	•							
	1900 -			· · · · · · · · · · · · · · · · · · ·				
						· · · · · · · · · · · · · · · · · · ·		
•	1800							
	1800 -			-				
	•							
	1700 -	· · · · · · · · · · · · · · · · · · ·						
A STATES	1600 -				·			
						•		
LEVEL								
SEA	1500 -							
ABOVE								
METRES	1400 -							
:							•	
	1300						·	
	1200	<u> </u>	•					

+ -

.

-

,



.

•

¥

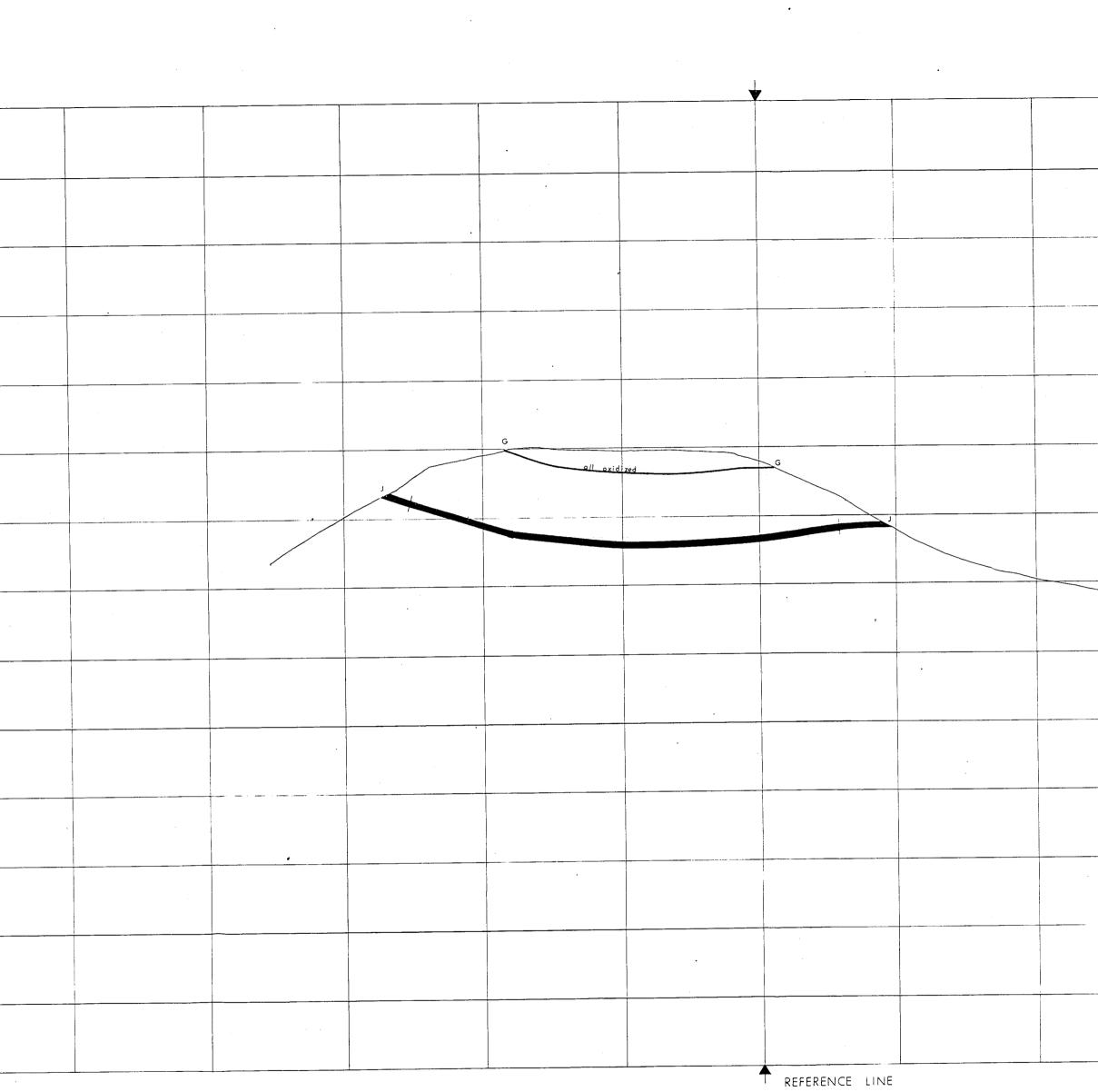
190	······································				
	· · · · · ·				
-		 			
			-		
190					
- 180					
_					
170		 			
160		 · · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
				1	
	<u></u>				
- 150					
150					
150					
150					
150					
					-
140					
140					· ·
140					
140					
140					· · ·
140					· · ·
140					

QUINTE	TTE COAL	LIMITED	
PREPARED BY: DENISON (	COAL LIMIT	ed 🚑	
CALGARY	AL BERTA		
· ·	PR-Quint	effe $7(z)B$	
FRAME CRC	SS-SECTION	Nº F 7631	
BRAWN BY J.W.K.	DATE SEPT., 76	SCALE 1:2500	
APPROVED BY	DRAWING NO: QNTT76-C	0675- R01	
		61	09

	1900 -					
	1800		·			
*5	1700					
	1400					
	1600			•		
	SEA LEVEL 1200				,	
	ABOVE SF					
	METRES A 0071					
	WE					
	1300					
					· · ·	
	1200					

-

•



· ,

÷

•

•

.

.

.

.

,

	·	·	
 		•	
			· .
		1	
 	**	•	
	ļ		

QUINTETTE COAL LIMITED PREPARED BY: DENISON COAL LIMITED CALGARY ALBERTA **H** PR-QUINteffe 76(2)B. _____ FRAME CROSS-SECTION Nº F7632 • • 

,

.