(x 13/100 000 7√1) ≥

# WELDWOOD

## OF CANADA LIMITED



## PRELIMINARY REPORT

ON

QUINSAM EAST AND MIDDLE QUINSAM

COAL AREAS

#### WORK PERFORMED ON QUINSAM LICENSE AREAS - 1977

#### **SUMMARY:**

The Quinsam Licence Areas are broken down into two categories: The Middle Quinsam block and the Lower Quinsam block.

The Middle Quinsam block consists of 5 licenses, for a total of 2044 acres. The Lower Quinsam block consists of 15 licenses for a total of 6779 acres.

#### QUINSAM EAST LICENSE AREA

#### SUMMARY OF WORK:

Work performed in the Quinsam East Licence Area included 5400 feet of drilling (21 holes). Two of these locations were cored, for a total cored footage of 415 feet. This work was carried out on existing access.

#### COAL GEOLOGY:

One economic coal seam exists in the Lower Quinsam Area. This seam consists of three distinct tongues of coal, each one to three feet thick, separated by sandstone partings that vary greatly in thickness. The three coal stringers splay apart very rapidly in a south-easterly direction, as shown on the accompanying cross-section. This indicates a prograding deltaic situation. The Lower Quinsam coal seam is tentatively correlated with the No. 3 seam or later in relation to Middle Quinsam deposition.

#### STRUCTURE:

Limited information permits only a generalized structural interpretation: The major structural characteristics in the Lower Quinsam Area are a series of subparallel northwest to southeast trending normal faults that step away from the uplift separating the Lower Quinsam and Middle Quinsam Areas. Structural blocks in the area have a northeasterly dip of between 5 and 10 degrees. Faults in this area have vertical displacements in the order of tens of feet.

#### MIDDLE QUINSAM LICENCE AREA

#### SUMMARY OF WORK:

Work performed in the Middle Quinsam Licence Area during 1977 consisted of 1960 feet of drilling (18 holes), with three of these holes being cored (169 cored feet). All holes were geophysically logged with a combination gamma, density resistance tool.

In addition to the drilling and coring work, two 20 ton bulk samples were extracted, one from the No. 1 seam and one from the No. 2 seam. These samples were shipped to Cyclone Engineering Sales Ltd. in Edmonton, Alberta for attrition and washability tests.

#### COAL GEOLOGY:

Two seams are present in the Middle Quinsam Licence Area: The Lowermost seam, or No. 1 seam and the middle seam, or No. 2 seam. The No. 1 seam is the main seam and it averages 12 feet thick over the Licence Area, with a 1.5 foot shaly coal section at the base of the seam included. It usually contains one or two mudstone partings of 3 to 6 inches in thickness. The No. 2 seam occurs about 60 feet above the No. 1 seam stratigraphically, and it has an average thickness of 4 feet. It usually contains one or two thin mudstone partings also.

The No. 2 seam is found in the lower depositional cycle, while the No. 2 seam is found in the upper cycle. The lower depositional cycle consists of very fine grained siltstone of a brownish or greenish colour. This siltstone is the product of the weathering of the green coloured basaltic rocks of the Karmutsen Formation. The upper cycle consists of a fine to medium grained arkosic sandstone, which is light grey, interspersed with darker siltstone intervals.

#### MIDDLE QUINSAM LICENCE AREA, cont'd.

The predominant arkosic sandstones of the upper cycle indicate a granitic parent material, such as the granodiorites of the Island Intrusives, which are common in the Quinsam area.

The structure of the sedimentary sequence that contains the Quinsam coal measures in the Licence Area is relatively straightforward. A series of normal faults that parallels the two long lakes south of Middle Quinsam Lake, combined with some minor cross-faulting, has broken the thin wedge of sediments into numerous downthrown blocks. These blocks all have dips of 6 to 12 degrees to the North-East. Displacements along these fault zones vary from ten to forty vertical feet.

D	RIL	LHOLE REPORT	
COAL	FIELD	: Campbell Rier	DATE:
COMP	ANY:	Lexco	
		LQU -77-94 /	
•	•	OCATION:	SECTWPRGEW
•			
SURV	EYED	LOCATION: 18,146,014.48 N 1,	.085,128.0 E
ELEV	ATION	N:801.5	
DRILL	.ER:_	H. Vincett	
- 	<del>-</del>		
FROM	ТО	LOG	REMARKS
0	4	till	
4	40	brown shale	coal stringer at 7'
40	93	grey sandstone	
13	99	carbonaceous shale	
<b>1</b> 00	104	siltstone	
104	120	brownshale	
120	130	grey shale	
130	1.40	green sandstone	
		,	
<u> </u>			
<u> </u>			·
COM	MENT	s	

WATER HORIZON \_\_\_\_\_ FT.\_\_\_\_

		Campbell River	
COMPA	NY: _	Lexco	· · · · · · · · · · · · · · · · · · ·
HOLE	NO.:_	LQU-92 ✓	
APPRO	X. LO	CATION:	SECTWPRGEW
SURVE	YED	LOCATION:18,146,866.81 N1,	084,692.94 E
ELEV	ATION	:	
DRILL	ER: _	H. Vincett	
			DEMARKS
ROM	ТО	LOG	REMARKS
0	5	till	
5	71	grey sandstone	
71	77	coal	shale partings
77	80	grey sandstone	
80	120	brown shale	
TD	120		
			·
<del></del>	L		<u> </u>
COM	MENT	`\$	

COMPA	NY: _	Lexco	•	
		<del></del>	·	
HOLE 1	۷0. :	QU-77-91 ✓		
	•	CATION:		
		· .		
SURVE	YED	LOCATION: 18,143,898.7 N 1,092,	,988.43 E	
		:		
		D. Broen		
FROM	ТО	LOG	REMARKS	
0	23	till		
23	50	brown sandstone		
50	92	grey sandstone		
92	98_	brown shale	water at 97 ft. app. 15 g	
98	107	grey sandstone		
107	110	brown shale		
110	116	coal		
116 -	129	brown shale		
129	148	coal with stringers of shale		
148	165	brown shale		
)				
COMM	IENT:	\$ <u></u>		

# LEXCO TESTING LTD DRILLHOLE REPORT

WATER HORIZON \_

		: Campbell River, B.C.	
		Lexco	·
HOLE	NO.:	I,QU-77-90 🗸	
APPRO	X. LO	CATION:	SEC TWP RGEW
•			
SURVE	YED	LOCATION: 18,147,164.05 N	1,085,156.0 E
ELEV	ATION	: 682.9	
DRILL	.ER:_	H. Vincett	
FROM	TO	LOG	REMARKS
0	6	till	
6	58	grey sandstone	
58	64	coal	shale partings
64	68	shale	·
68	73	coal	0.11 11.11
73	125	brown shale	
125	126	coal	
126	135	brown shale	
135	172	grey sandstone	·
172	176	siltstone	
176	210	grey sandstone	
210	240	brown shale	carbonaceous shale stringer
240	250	grey shale	
250	270	green sandstone	
270	272	basalt	
		·	
COM	MENT	\$	
<b>4-111</b>		,	

COMP	ANY:	Lexco	
HOLE	NO.:	QU-77-89 🗸	
APPR	0X. L	OCATION:	SECTWPRGEW.
		LOCATION: 18,145,026.03 N	
DRILL	ER:_	D. Broen	
FROM	ТО	LOG	REMARKS
0	22	till	
22 ·	70	grey sandstone	
70	109	_brown_shale	
.109	134	grey sandstone	
_136_	150	hrown shale	
<u> 150</u>	163	grey sandstone	·
163	174	brown shae	
174	193	grey sandstone	
193	207	brown shale	
207	212	coal	
212	217	brown shale	
217	220	coal	
220	245	brown shale	· · · · · · · · · · · · · · · · · · ·

The Bird with the way as a second of the sec

,UAL F	IELD	: <u>Campbell River, B.C.</u>	DATE: June 10, 1977
		Lexco	
HOLE	NO.:	QU-77-88 🗸	
APPRO	X. LC	CATION:	SECTWPRGEW.
SURVE	YED	LOCATION: 18,146,900.0 N 1	L,086,187.39 E
ELEVA	TION	:	
DRILL	ER:_	H. Vincett	
ROM	то	LOG	REMARKS
0	8	till	
	70	grey sandstone	
	73	coal	•
	78	carbonaceous shale	Coal partings
	80	siltstone .	
	84	coal	
84	87	brown shale	
87	95	grey sandstone	
95	155	brown shale	
145	224	grey sandstone	
224	240	siltstone	
140	268	grey shale	
268	278	green sandstone	
278	280	basalt	
	İ		1

HOLE	NO.:	<u>0U-77-87 ✓</u>	
APPR	OX. LO	CATION:	SECTWPRGEW
		10.1/5.//. 5.N	1 000 005 ( P
		LOCATION: 18,145,646.5 N	1,088,893.8 E
		: 663.3	
DRILL	_ER:	H. Vincett	:
ROM	ТО	LOG	REMARKS
0	36	# <u>1</u> ]	,
36	73	grey sandstone	coal stringers
73	78	carbonaceous shale	
78	85	siltstone	
85	154	grey_sandstone	
154	1.57	coal	
157	1.59_	siltstone	
<u>159</u>	164	carbonaceous shale	coal partings
164	169	cosl	shale stringers
169	184	grey shale	
184	247	brown shale	
247	300	grey sands tone	
300	324	grey shale	
324	346	grey red shale	
346	350	green sandstone	
350	480	red grey shale	

# LEXCO TESTING LTD DRILLHOLE REPORT

		Lexco	
HOLE	NO.:	LQU-77-85 /	
APPR	OX. LO	OCATION:	SECTWPRGEW
SURVI	EYED	LOCATION:18,146,472.9 N	1,086,912 E
ELEV	ATION	:685	•
		H. Vincett	
01,12			
ROM	ТО	LOG	REMARKS
0	42	till	
42	97	grey sandstone	
97	110	brown shale	
110	117	coal	·
117	160	brown shale	
160	194	grey sandstone	
TD	194		
1			
COM	MENT	s	

FROM TO LOG  0 59 till 59 72 brown shale 72 109 red shale 1109 122 siltstone 122 179 grey sandstone	
### SURVEYED LOCATION:	
SURVEYED LOCATION: 18,147,013.1 N 1,088  ELEVATION: 682  DRILLER: H. Vincett  FROM TO LOG  0 59 till 59 72 brown shale 72 109 red shale 109 122 siltstone 122 179 grey sandstone	
### DRILLER:	
### DRILLER:	
## PRILLER:	8,590.0 E
0 59 till 59 72 brown shale 72 109 red shale 109 122 siltstone 122 179 grey sandstone	
0 59 till 59 72 brown shale 72 109 red shale 1109 122 siltstone 122 179 grey sandstone	
0 59 till 59 72 brown shale 72 109 red shale 1109 122 siltstone 122 179 grey sandstone	T
59       72       brown shale         72       109       red shale         109       122       siltstone         122       179       grey sandstone	REMARKS
72	
109 122 siltstone 122 179 grey sandstone	
122 179 grey sandstone	
400 200 moon more conditions	
179 205 green grey sandstone	
205 209 coal	
209 228 brown shale	
248 252 coal	
252 275 brown shale	
275 305 grey shale	
305 234 green sandstae	
TD 334	
COMMENTS	

COALF	IELD:	Campbell River	DATE:May 22, 1977
COMPA	NY: _	Lexco Testing	·
HOLE	NO.: _	QU-77-77 V	·
			SECTWPRGEW.
Surve	YED	LOCATION: 18,146,570.0 N 1,0	088_770_0_E
		:694.1	· · · · · · · · · · · · · · · · · · ·
		H. Vincett	
J			
ROM	то	LOG	REMARKS
0	70	till	
70	71	coal	
71	82	brown shale	
82_	83	coal	·
83	87	brown shale	
87	95	siltstone	
95_	259	grey sandstone	
TD	259		
			•
	-		
COM	MENT	s	
J 0 iii	·*· - 14 · 1 ·		
,	E		

COMPANY: Lexco Testing  HOLE NO.: QU-77-75 \times APPROX. LOCATION: SEC. TWP_RGE.  SURVEYED LOCATION: 18,146,028.85 N 1,082,857.61 E  ELEVATION: 872.3  DRILLER: D. Broen  FROM TO LOG REMARKS  0 16 till 16 123 brown shale 123 140 grey sandstone 140 156 green sandstone 156 160 grey shale 160 210 brown shale 210 244 red shale 244 265 basalt				DATE: May 19, 1977
### APPROX. LOCATION:	COMP	ANY:	Lexco Testing	·
SURVEYED LOCATION: 18,146,028.85 N 1,082,857.61 E  ELEVATION: 872.3  DRILLER: D. Broen  FROM TO LOG REMARKS  0 16 till 16 123 brown shale 123 140 grey sandstone 140 156 green sandstone 156 160 grey shale 160 210 brown shale 210 244 red shale 244 265 basalt	HOLE	NO.:_	QU-77-75 V	
SURVEYED LOCATION: 18,146,028.85 N 1,082,857.61 E  ELEVATION: 872.3  DRILLER: D. Broen  FROM TO LOG REMARKS  0 16 till 16 123 brown shale 123 140 grey sandstone 140 156 green sandstone 156 160 grey shale 160 210 brown shale 210 244 red shale 244 265 basalt	APPR	OX. LC	CATION:	_ SECTWPRGEW
### DEFINITION:			· · · · · · · · · · · · · · · · · · ·	
DRILLER:	SURV	EYED	LOCATION: 18,146,028.85 N	1,082,857.61 E
FROM TO LOG REMARKS  0 16 till 16 123 brown shale 123 140 grey sandstone 140 156 green sandstone 156 160 grey shale 160 210 brown shale 210 244 red shale 244 265 basalt	ELEV	ATION	: 872.3	
FROM TO LOG REMARKS  0 16 till  16 123 brown shale  123 140 grey sandstone  140 156 green sandstone  156 160 grey shale  160 210 brown shale  210 244 red shale  244 265 basalt	DRILL	.ER: _	D. Broen	
TO   LOG   REMARKS     O   16   till     16   123   brown shale     123   140   grey sandstone     140   156   green sandstone     156   160   grey shale     160   210   brown shale     210   244   red shale     244   265   basalt				and the second s
16 123 brown shale 123 140 grey sandstone 140 156 green sandstone 156 160 grey shale 160 210 brown shale 210 244 red shale 244 265 basalt	ROM	ТО	LOG	
16	0	16		
123	16	123		
140	123_	140	grey sandstone	
156	140	_156	green sandstone	•
160   210   brown shale 210   244   red shale 244   265   basalt	156	160		
210 244 red shale 244 265 basalt	160	210	_brown_shale	
244 265 basalt	210	244	red shale	
	244		basalt	1
				-
			<del>_</del>	,
<del>-</del>				
			——————————————————————————————————————	
COMMENTS	COM			

#### DRILLHOLE REPORT

COMPANY: Lexco Testing  HOLE NO: QU-77-74  APPROX. LOCATION: SEC. TWP_RGEW.  SURVEYED LOCATION: 18,146,143.4 N 1,088,092.9  ELEVATION: 670.0  DRILLER: H. Vincett  FROM TO LOG REMARKS  0 43 till hard grey clay  43 64 grey sandstone  14 74 coal  74 127 brown shale sandstone ledges  127 131 siltstne  131 194 grey sandstone  194 202 grey siltstone  202 245 green siltstone  245 251 green sandstone  256 272 grey sandstone  272 283 green brown shale  283 285 green siltstone  285 307 green brown shale  285 307 green brown shale  307 319 green siltstone				Mar 19 1077				
## HOLE NO.: _QU-77-74				DATE:				
### APPROX. LOCATION:	COMP	COMPANY: Lexco Testing						
### SEC. TWP RGE. W. SEC. TWP RGE. W. SURVEYED LOCATION: 18,146,143.4 N 1,088,092.9    ELEVATION: 670.0   DRILLER: H. Vincett	HOLE	NO.:	QU-77-74 /					
### SURVEYED LOCATION:	APPR	OX. LO	CATION:	SECTWPRGEW				
### SURVEYED LOCATION:	-		##************************************					
FROM TO   LOG   REMARKS	_	EYED	LOCATION:18,146,143.4 N	1,088,092.9				
FROM   TO   LOG   REMARKS	ELEV	ATION	:670.0					
FROM   TO   LOG   REMARKS	DRILL	.ER: _	H. Vincett					
0 43 till hard grey clay  43 64 grey sandstone  34 74 coal  74 127 brown shale sandstone ledges  127 131 siltstne  131 194 grey sandstone  194 202 grey siltstone  202 245 green siltstone  245 251 green sandstone  251 256 green sandstone  256 272 grey sandstone  272 283 green brown shale  285 307 green brown shale								
43   64   grey sandstone   74   74   coal	FROM	ТО	LOG	REMARKS				
74         coal           74         127         brown shale         sandstone ledges           127         131         siltstne           131         194         grey sandstone           194         202         grey siltstone           202         245         green siltstone           245         251         green sandstone           251         256         green sandstone           272         283         green brown shale           283         285         green siltstone           285         307         green brown shale	0	43	till	hard grey clay				
74       127       brown shale       sandstone ledges         127       131       siltstne         131       194       grey sandstone         194       202       grey siltstone         202       245       green siltstone         245       251       green sandstone         251       256       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	43	64	grey sandstone					
74       127       brown shale       sandstone ledges         127       131       siltstne         131       194       grey sandstone         194       202       grey siltstone         202       245       green siltstone         245       251       green sandstone         251       256       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	54	74	coal					
131       194       grey sandstone         194       202       grey siltstone         202       245       green siltstone         245       251       green sandstone         251       256       green sandstone         256       272       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	74	127		sandstone ledges				
194       202       grey siltstone         202       245       green siltstone         245       251       green sandstone         251       256       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	127	131	siltstne					
202       245       green siltstone         245       251       green sandstone         251       256       green sandstone         256       272       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	131	194	grey sandstone					
245       251       green sandstone         251       256       green sandstone         256       272       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	194	202	grey siltstone					
251       256       green sandstone         256       272       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	202	245	green siltstone					
256       272       grey sandstone         272       283       green brown shale         283       285       green siltstone         285       307       green brown shale	245	251	green sandstone					
272 283 green brown shale 283 285 green siltstone 285 307 green brown shale	251	256	green sandstone					
272 283 green brown shale 283 285 green siltstone 285 307 green brown shale	256	272	grey sandstone					
283 285 green siltstone  285 307 green brown shale		283	green brown shale					
285 307 green brown shale	1 1							
	-							
	,							
	7							

WATER HARITAN

COMMENTS \_\_\_\_\_

r- <del>-</del>

### DRILLHOLE REPORT

COMMENTS \_\_\_\_\_

HO! F	NO:	QU-77-73 ✓	
	•		SECTWPRGEW.
			0001
SURVE	EYEĎ :	LOCATION:18,144,915.88 N	1,087,254.4 E
		:739.2	
DRILL	ER:	H. Vincett	
<del></del>	1		
FROM	TO	LOG	REMARKS
0_	8	gravel till	
8	57	grey sandstone	
_ 57	75	grey siltstone	
75	92	brown grey shale	
92	93	coal	·
93	135	red brown shale	
135	193	grey brown shale	
193	308	green siltstone	
308	312	basalt	
1		<del></del>	

	_	QU-77-71 CATION:	
HDVE	YED !	OCATION: 40+00 9683° It of	. в/т.
		11.52'	
			•
KILL	EK:	D. Broen	
ROM	то	LOG	REMARKS
)	6	till	
	60	sandstone	
1			

## "EXCO TESTING LIL

COAL FIELD:			DATE: May 14, 1977
COMPA	ANY: _		
		LQ-77-70 V	
			SECTWPRGEW
			· · · · · · · · · · · · · · · · · · ·
₅SURV!	EYED L	LOCATION:	
ELEV	ATION:		·
DRILL	.ER:	H. Vincett	
	,′		
FROM	ТО	LOG	REMARKS
282	292	Coal	Stringer of Brown shale
<b>2</b> 92	319	.Brown shale	
319	327	Grey shale	
327	329	Coal	
329	379	Brown shale	Coal partings
379	398	Grey-brown shale	
398	416	Silkstone	
416	432	Brown-red shale	
432	492	Brown and grey shale	
492	499	Basalt	
1			
<b>!</b>			
СОМ	MENTS	S	
•			
WAT	FR HC	PRIZON	F T

ا OAL ا	FIELD	: Campbell River	DATE:May 14, 1977
COMP	ANY: _	Lexco Testing Ltd.	
1		10-77-70	
		CATION:	SEC TWP PGF W
	· · · · · ·		<u>,</u>
1 011011	EVED	LOCATION:Mercator 18,152,723.1'N	
			1,002,638.6
•		: 596.9	
		H. Vincett	
FROM	· · · · · · · · · · · · · · · · · · ·	LOG	REMARKS
	,		
0	4	Till	
4	13	Red Shale	
13	23	Brown Shale	
23	75	Grey shale	Coal Stringers at 40' 42' 53'
75	79	Coal	
79	88	Brown Shale	
88	180	Grey sandstone	
180	205	Grey shale	
205	213	Brown shale	
213	230	Grey sandstone	
230	241	Grey shale	
241	244	Coal	
244	257		
		Brown shale	
257	260	Coal	
260 272	272 276	Brown shale Coal	
$\frac{272}{276}$	282	Brown shale	
	MENT		
		t ·	
WAT	FR HO	ORIZONFTFT	

DRILLHOLE REPORT COALFIELD: Campbell Tiver DATE: April 27,1977 COMPANY: Texco Testing HOLE NO.: 20-77-65 APPROX. LOCATION: \_\_\_\_\_\_ SEC. \_\_TWP.\_\_RGE. \_\_W. \_\_\_ SURVEYED LOCATION: \_\_\_ line 40+00 7022 It of B/I ELEVATION: \_\_\_\_\_1179' DRILLER: \_\_\_\_\_\_\_D. Boen FROM ΤO LOG REMARKS 114 sandstone 114 121 coal 121. 134 brown shale 134 170 brown sandstone 170 183 | coal 183 200 brown sandstone 200 225 basalt COMMENTS \_\_\_\_\_ WATER HORIZON \_\_\_\_\_ FT.

		Campb			DATE.		<del> </del>	<del></del>
OMPA	NY: 1	Inrea Mart	ing					···
			fine 50	8000 ft	left			
	•					TWD	PCF :	14/
4FFR(	יא. בכ	CATION			360	1 11 15	RGE	***
			Tine 50+00	7941 I	.t			<del></del>
			Line 50+00	· · · · · · · · · · · · · · · · · · ·		<del> </del>		
		:		<u></u>		<del> </del>		
DRILL	.ER:_	H. Vincett	<u> </u>			<del></del>		· · · · · · ·
ROM	ТО		LOG	<del></del>		REMAR	N.C	
ROM	10					TEWAN		
0	<u>58</u>	Till	······································			· · · · · · · · · · · · · · · · · · ·		<del></del>
<u>ς</u> 2.	70	coal				<del></del>		
72	101	brown sha	ile	<del></del>				
101	110	hasalt						·
<u>TD</u>	119							
		· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·	
				<del></del>		<del></del>	·	
			· ,			<del> </del>		
							·. · · · · · · · · · · · · · · · · · ·	· - · ·
		·						
				•				
:				· · · · · · · · · · · · · · · · · · ·		······································	<u> </u>	· · · · · · · · · · · · · · · · · · ·

# LEXCO TESTING LTD DRILLHOLE REPORT

	D:Campbell River	
	: Lexco Testing	
HOLE NO.	:0!!-77-59.	
		SEC. TWP RGE. W.
SURVEYE	D LOCATION: 38+03 9026 Lt	of B/L
ELEVATI	on: <u>1175.6'</u>	
DRILLER	: H. Vincett	
<del></del>		
FROM TO	LOG	REMARKS
0 60	till	
60 92	crev candstone	
	·	
,		
COMME	NTS	

## LEXCO IESHUU EIL

			59.					_
APPRO	X. LO	CATION:			_ SEC	TWP	RGE\	N.
SIIDVI	YED I	OCATION:	Tine 35+00	9096 Lt	of B/L			
			0'					
ROM	то		LOG			REMARK	S	
0	113	ጥነገነ						
43	71	Pasalt				· 		
						·		
						·		
				· · · · · · · · · · · · · · · · · ·		•	<del></del>	
				***************************************			<del></del> -	
							·	
		<del></del>			<del> </del>		·	
-	-					· · · · · · · · · · · · · · · · · · ·		
						<b></b>		
			•	<del></del>	,		<del></del>	
				· · · · · · · · · · · · · · · · · · ·		•	<del></del>	
	•						<del></del>	
		·			<u> </u>			

HOLE NO.:	7/				
APPROX. LOCATION:			SECT	WPRGE.	W
· ·				······································	· · · · · ·
SURVEYED LOCATION:_	line 35+00	8758.3	lt of B/	I,	
ELEVATION: 1102'			<del></del>		
DRILLER: Vincett					<u> </u>
FROM TO	LOG		RE	EMARKS	
0 43 Till			2 coal	stringers	
43 76 Bacalt			· · · · · · · · · · · · · · · · · · ·		<del></del>
	· · · · · · · · · · · · · · · · · · ·				
		,	· · · · · · · · · · · · · · · · · · ·		<u> </u>
·					<del></del>
					····
			·		
					·····
	· · · · · · · · · · · · · · · · · · ·	,			
	· · · · · · · · · · · · · · · · · · ·				<del></del>
				··	
	,			<del></del>	
					··
	-				
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	<del></del>
COMMENTS	· · · · · · · · · · · · · · · · · · ·				<del> </del>

HOLE	NO.:	011-77-55						
	-		ine 30+00	9000 Lt of3	/L SEC	TWP	_RGE	w.
		OCATION:	30+00 875 ncett	34.2 Lt. o	f B/L			
DRILL	ER:			<u>-</u>			<del> </del>	
ROM	то	· · · · · · · · · · · · · · · · · · ·	LOG			REMARI	<s< th=""><th></th></s<>	
C	1,5	Till						
45	47	granite_				<del></del>	· · · · · · · · · · · · · · · · · · ·	·
·								
		<del></del>		<u> </u>	<del></del> -		<del></del>	
						<del></del>		
		·						
		······································	<del></del>	·				
			<del></del>					
<u> </u>			· · · · · · · · · · · · · · · · · · ·					
				· · · · ·			·	
			- <del></del>	<del> </del>		<del></del>		
]	<u> </u>							
COM	MENTS	S		<del></del>	<del></del>			

COALF	OAL FIELD: Campbell River		DATE:		
r		Texco Testing			
		2!-77-52			
	_	CATION:	SEC TWP PGF W		
MUTH	),. LU	VAIIVIT			
		LOCATION: 35+00 9096' It of I	3/L		
		: 1180'			
DRILL	.ER:	H. Vincett	<u> </u>		
ROM	ТО	LOG	REMARKS		
0	3	till			
3 .	236	grey sandstone			
236	240	coal			
, . 240	283	brown shale			
202 - <del>500</del>	200	coal			
200	300	carbonaceous shale			
300	316	brown shale			
316	354	rreen sandstone			
35%	380	bisalt			
	, ,				
<del></del>					
	11				
		\$			

COAL F	HELD	: Campbell River	DATE: April 15,1977
COMPA	NY:.	Texco Testing	en de la companya de
		QU-77-51	- the same and an analysis and a same and a
	•	CATION:	SEC TWO DOES WITH
			320   W   RGEW
CHOVE	.VE0	LOCATION: 36+77 . 9743'Lt of B/I	
		: 1180	<del></del>
			* #·
DRILLI	ER: _	H. Vincett	And the second s
ROM	то	I O C	DEMONO
110111		<u></u> LOG	REMARKS
0	9	till	
9	1.1	coal	
11	30	brown shale	
30	35	bisalt	
		Marie Committee of the	
		g and the second second depoint of the second secon	
		A Secretary of the second of	
		F	e e e e e e e e e e e e e e e e e e e
			NA.
`. IM	MENTS	s	
		*** *** *** *** *** *** ***	
		ORIZONFT	

	IELD	o: <u>Campbell ?iver</u>	DATE:April 15, 1977
COMPA	NY:,	Iexco Testing	
HOLE	۷0. : ـ	QU-77-49	
	•	OCATION:	SEC. TWP RGF W
			W.
SURVE	YED	LOCATION: 36+81 9475' Tt of P/T	
ELEVA	TION	l: <u>1175'</u>	
DRILLE	:R;_	H. Vincett	
·			
FROM	ТО		REMARKS
0	10	±111	
10	33	areen candstone	
33	110	hisalt	
	,		
		. <u> </u>	
	_,-		
	-		
<del></del>			

# LEXCO TESTING LTD DRILLHOLE REPORT

✓ OAL F	IELD:	Campbell Piver	DATE: April 14, 1977
COMPA	NY: _	Terco Testing	
HOLE	NO.:	011 - 77 - 118	
	•	CATION:	SECTWPRGEW
SURVE	YED	LOCATION: 36+39 9998' It of B	з/т
ELEV	ATION	: 1174'	
DRILL	ER: _	H. Vincett	
			· · · · · · · · · · · · · · · · · · ·
FROM	то	LOG	REMARKS
0	24	till	·
24	41	sand	
<u> 41 -  </u>	50	coal	
50		brown shale	
75	PO	rreen sandstone	
		<u> </u>	
		·	
		······································	
		·	
l	1		

COMP	\ AI 🗸 :	Texco Tecting	
	•	211-77-47	
APPRO	OX. LO	OCATION:	SECTWPRGEW
SURVE	EYED	LOCATION: 47+78 9551' Lt o	f B/I.
ELEV	ATION	: 1161'	
DRILL	ER:_	D. Broen	
<del> </del>			
FROM	ТО	LOG	REMARKS
n	14	till	·
<u>t</u>	45	brown shale	
45	<i>۴</i> ٦	coal	
51	65	brown shale	
55	၉၉	rrey sandstone	water at 120 ft app. 20 s
9,8	104	red shale	per min.
104	125	bisalt	·
			,
COM	M E N I	S	

IOLE NO.:	<del></del>	Core Lole Qu-77-	, , , ,
APPROX. L	OCATION:		SECTWP RGEW.
MINUTYFO	1 OCATIO	v: 45+00 7987.8' I.t. of B/L	
ELEVATION:		·	
RILLER:_			
FROM	то	LOG	REMARKS
0	6	Boulders	Core /1-50-58
6	102	Candatone	Core #2-58-62
107	117	Coal	Core #3-62-65.5
117	130	Prown Shale	Core "4-65 5-72
_130	<del>-13</del> 5	Sandatona Erown Shale	Core #5-72-81
135	167	_ prown Shale	Core #6-81-90
162.	188		- Core 27-90-99
176 186		Shale with coal stringers Sandstone	Core #8-101-110 Core #9-110-119
-1-0-1	<del>- 500</del>  -		3,079 3,4-110-119
			Drilled from 119-164
			Core 10-164-171.5 " " 11-171.5-176.5 " " 12-176.5-185.5 " " 13-185.5-191
			" " 11-171.5-176.5
			" " # 12 <b>-</b> 176, 5 <b>-</b> 185, 5
			" " 13-185.5-191
			" " " 1½-191-200
<del></del>	<del></del>		
<del></del>	<del></del> }-		
<del></del> f-			<del></del>
<del></del>		· · · · · · · · · · · · · · · · · · ·	
<del></del>	<u>{</u> -		· · ·
<del></del>			
COMMEN	TS		·

TUALF	IELD:	Campbell River	DATE: Feb 23, 1977
COMPA	NY: _	Texco Testina	
HOLE 1	NO.: _	Tine 45 QU-77-33 V	
		CATION:	SEC TWD DGE W
	20		JEO 1 Wr NOCW
CHONE	VED :	LOCATION: 45+00 9499 T.t	·
ELEVA			
			· · · · · · · · · · · · · · · · · · ·
DRILLE	ER:	H. Vincett	
FROM	то	LOG	REMARKS
0	7	Meathered sandstone	
7	15	grey sandstone	
15	20_	siltstone	
-20	35	_coal	
35	117	_hrown_shale	
47	73	gray shale	
73		basalt	
		•	
			·
			I .

## LEXCO TESTING LID DRILLHOLE REPORT

WATER HORIZON \_\_\_\_\_

## PRILLER: H. Vincett    PROM   TO	b. 16. 1977
### SEC. 1  ### SURVEYED LOCATION:	-
### SEC. 1  ### SURVEYED LOCATION:	· · ·
SURVEYED LOCATION: 3978 8464.7 Lt  ELEVATION: 1178.6'  DRILLER: H. Vincett  FROM TO LOG R  0 7 till  7 56 grey sandstone 55 62 coal 62 65 carbonaceous shale 65 70 grey sandstone 70 81 brown shale 81 90 grey sandstone 90 196 brown shale 106 116 coal 116 123 carbonaceous shale 123 140 grey sandstone	T W.P RGEW
ELEVATION: 1178.6'  DRILLER: H. Vincett  FROM TO LOG R  0 7 till  7 56 grey sandstone 56 62 coal 62 65 carbonacecus shale 65 70 grey sandstone 70 81 brown shale 81 90 grey sandstone 90 196 brown shalk 106 116 coal 116 123 carbonaceous shale 123 140 grey sandstone	
## PRILLER: H. Vincett    FROM   TO	
## PRILLER: H. Vincett    FROM   TO	
### FROM TO LOG R    O   7	-
0 7 till  7 56 grey sandstone  55 62 coal  62 65 carbonaceous shale  65 70 grey sandstone  70 81 brown shale  81 90 grey sandstone  90 196 brown shalk  106 116 coal  116 123 carbonaceous shale  123 140 grey sandstone	
7 56 grey sandstone  56 62 coal  62 65 carbonaceous shale  65 70 grey sandstone  70 81 brown shale  81 90 grey sandstone  90 196 brown shalk  106 116 coal  116 123 carbonaceous shale  123 140 grey sandstone	EMARKS
7 56 grey sandstone  55 62 coal  62 65 carbonaceous shale  65 70 grey sandstone  70 81 brown shale  81 90 grey sandstone  90 196 brown shalk  106 116 coal  116 123 carbonaceous shale  123 140 grey sandstone	
55       62       coal         62       65       carbonacecus shale         65       70       grey sandstoe         70       81       brown shale         81       90       grey sandstone         90       196       brown shale         106       116       coal         116       123       carbonaceous shale         123       140       grey sandstone	
6.2 65 carbonaceous shale 6.5 70 grey sandstoe 70 81 brown shale 81 90 grey sandstone 90 196 brown shalk 106 116 coal 116 123 carbonaceous shale 123 140 grey sandstone	
70   81   brown shale	
70 81 brown shale  81 90 grey sandstone  90 196 brown shalk  106 116 coal  116 123 carbonaceous shale  123 140 grey sandstone	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
81 90	teritore e comencial access
90	
106 116 coal  116 123 carbonaceous shale  123 140 grey sandstone	
116 123 carbonaceous shale  123 140 grey sandstone	
123 140 grey sandstone	
COMMENTS	

OMPA	NY: _	Texco lTesting	
		QU-77-26	V
		CATION:	
SURVE	YED (	OCATION: 45+00 8880 Lt of	FB/L .
		1194	
		D Broen	
ROM	то	LOG	REMARKS
			TEMATINO .
0	_5	boulders	
5	_33_	sandstpe	
33	37		
37	49	brown_shale	
49	58	brown sandstone	
58	102	brown shale	
102	117	coal	
117		brown shale	
135	164	brown sandstone	
141	104	basalt	
			· · · · · · · · · · · · · · · · · · ·
İ			

COAL	FIELD:	Campbell River	DATE:February 15,1977
COMPA	ANY:	Iexco	
HOLE	NO.:	. Qu-77-25	
	•	CATION:	
	_		
SURVE	EYED L	OCATION: 45+00 8444 T.t. of	B/t
		1163'	
		D. Broen	
Dille			
FROM	ТО	LOG	REMARKS
0	10	Boulders	
10	51	Grey Sand Stone	
_51	56	Cosl	
_56	81	Brown Shale	
<u>81</u>	95	Brown Sand stone	
95	118	" " Shale	
118	131	Coal	
131	136	Brown Shale	
136	140	Brown Silt Stone	
140	150	Brown Shale	
1.50	163	Brown Sand Stone	
163	184	Basalt	
		·	
,		· · · · · · · · · · · · · · · · · · ·	
СОМ	MENTS		
			<del></del>
WAT	ER HO	RIZON FT,	

# -LEXCO TESTING LTD DRILLHOLE REPORT

CUAL	FIELD	Campbell River	_ DATE: _ <u>Feb_12. 1977</u>
COMP	ANY: _	Texco Testing	
		QU-77-21 /	
	•	CATION:	
SURVI	EYED	LOCATION: 22+73 6750.2 Lt	
		:1207.8'	
		D. Broen	
DRILL	. E. N		
FROM	то	LOG	REMARKS
0	11	boulders	`
11 .	38	sand stone	
38	40	carbonaceous shale	
40	45	sandstone	
45	46	carbonaceous shale	
46	118	grev sandstone	
118	121	carbonaceous shale	
121	1 51	green siltstone	
151	204	basalt	<u> </u>
;		· ·	
İ			
		<del></del>	
			<u> </u>
	MEALT	s·	

#### LEXCO RESIDUE LIE

		7.0022. 112.00	DATE:Feb 9, 1977
COMPA	\NY <b>:-</b> -	Lexco_Testing	
HOLE	NO.:	QU-77-16 V	
	•	CATION:	
SURVE	EYED	LOCATION: 45+00 7543 1th.	
		:	
DRILL	ER:	H. Vincett	
The state of the s	energe in the first to the facilities of		
FROM	ТО	LOG	REMARKS
0	3	Till	
3	102	gray sandstone	
102	106	brown shale	
106	109	coal	
109	167	brown shale	
167	172	coal with shale partings	
172	182	coal	
182	206	brown shale .	
206-	<u>-21</u> 2	gray-sandstone	
212	218	green sandstone	
218	24rd	bisalt	
		·	

		Lexco Testing QU-77-12			
HOLE NO.:					
APPROX. L	OCATION	:	SEC	TWP	RGEW.
			,		·
<b></b>		on: 30+00 6320.6 Lt			
SURVEYED	LOCATIO	· AARD O			
ELEVATION	:	1174.8			
DRILLER:		J.L Lodoen	<del></del>	·	
			-		
FROM	то	LOG	<u> </u>	REMA	RKS
0	4	till			
4	27	sandstone	<del> </del>	3	
27 32	<u>32</u> 48	brown and carbonaceous shab trace sandstone	i or c	oa.L	
48		brown shale			
	52 82	·			
52 82	85	coal partings of carbonaceous sh	. <b>\$</b> .⊥e		
85	87	grey shale stringers of sandston	<u> </u>		
87	117	ciltstne	<del> </del>		
117 119	11 <u>9</u> 259	incom shale	<del>                                     </del>		
259	263	- Goal stone	1		
263	272	brown shale			
272	282	brown and carbonaceous shale			
282	206	coal partings of brown shale	<u> </u>		
206	310	brown snale	<del></del>		
310 325	<del>- 326</del>	green sandstone basalt		·	
)20	331	Dasaro			<u> </u>
			<u> </u>		
			<b></b>		<u> </u>
	<del></del> ,		<del> </del>		
			1		
			ļ		
	<del></del>		<del> </del>		
			1	•	
	<del> </del>				
			<del> </del>		
			1		
				•	

OAL F	IELD:	Campbell River	DATE:June 19,1977
COMPA	ANY: _	Lexco Testing Ltd.	
HOLE	NO.: _	LQU-77- 93 L	
		CATION:	
			\
SURVE	EYED	LOCATION: 18,144,503.7 N 1	
		(1/ 7	
FROM	ТО	LOG	REMARKS
0	14	Till	
14	26	Grey sandstone	
26	27	Coal	
27	37	Brown shale	
37	112	Grey sandstone	
112	117	Coal	
117	119	Brown shale	
119	122	Coal	
122	145	Brown shale, with stringer of coal	
145	157	Brown sandstone	
157	165	Red shale	
COM	MENT	S	
WAT	FR H	ORIZON FT	

			DATE: June 22, 1977
COMPA	ANY: _	Lexco Testing Ltd.	
HOLE	NO.: _	LQU-77-95 /	
			SECTWPRGEW.
			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
SURVI	EYED	LOCATION: 18.143.819 N	1.090.321 E
ELEV	ATION	:632	
DRILL	.ER:	D. Broen	· · · · · · · · · · · · · · · · · · ·
	.′		·
ROM	ТО	LOG	REMARKS
0	22	Till	
22	41	Brown shale	
41	161	Grev sandstone	· · · · · · · · · · · · · · · · · · ·
161	168	Coal	
168	170	Brown shale	
170	173	Coal	
173	175	Brown shale	
175	178	Coal	
178	205	Brown shale	
		· · · · · · · · · · · · · · · · · · ·	
	İ		
			4

### 

DRILLHOLE REPORT	D	RI	I L	L	-	O	L	Æ	R	Ξ	P	0	R	T
------------------	---	----	-----	---	---	---	---	---	---	---	---	---	---	---

COALI	FIELD	: Campbell River	DATE: June 16, 1977				
COMP	ANY: .						
HOLE	NO.: _	LQU-77-96 V	<u> </u>				
APPR	OX. LC	CATION:	SECTWPRGEW.				
		· · · · · · · · · · · · · · · · · · ·	`\				
SURVI	EYED	LOCATION: 18,143,111.25 N	1,096,388.24 E				
ELEV	ATION	: 574.1					
DRILL	.ER:_	H. Vincett					
			<del></del>				
ROM	TO	LOG	REMARKS				
0	38	Till					
38	42	Brown shale					
42	100	Grey sandstone					
100	232	Grey silkstone					
232	238	Grey shale					
238	243	Brown shale					
243	245	Coal .	Shale partings				
245	270	Brown shale .					
270	278	Coal					
278	320	Brown shale					
320	340	Grey shale					
	<u></u>						
COM	MENT	S Flowing hole					
		<b>b</b>					

WATER HORIZON \_\_\_\_\_ FT.\_

UOAL F	FIELD	: Campbell River	DATE: June 20, 1977
		Lexco Testing Ltd.	
HOLE	NO:	LQU-77-98 🗸	
•			SECTWPRGEW
MEERI	JX. LC	CATTON	SEU   W.E KGEW
		10.1/0.070.0.3	
		LOCATION: 18,140,879.8 N	
		575.5	
DRILL	ER: _	H. Vincett	
	· <u>·</u>		
FROM	ТО	LOG	REMARKS
0	21	Till	
21	60	Grey sandstone	
60	74	Grey silkstone	
<u>74</u>	76	Grey shale	
76_	110	Grey sandstone	·
110	197	Grey silkstone	
197	199	Coal	
199	206	Grey silkstone	
206	208	Coal	
208	229	Grey shale	
229	234	Coal	
234	236	Silkstone	,
236	240	Carbonaceous shale	
240	330	Brown grey shale	
330	340	Grey sandstone	
~ T.D.	340		
СОМ	MENT	s	<u> </u>
l		•	

COAL	FIELD:	Campbel]	<u> </u>		DATE:_	June	8, 19//	
COMP	ANY: _	Lexco Te	esting Ltd.	····			· <u></u>	9
		LQ-77-97						
APPRI	UX. LU						• (	w
	· .			<u> </u>				
SURV	EYED I	LOCATION:	18,146,30	7 N 1,091	.835.1 E			
ELEV	ATION:	714.6	<u> </u>		·			<del></del>
DRILL	.ER:	H. Vinc	ett					
	· <u>·</u>	,	· · · · · · · · · · · · · · · · · · ·					
FROM	ТО	<u> </u>	LOG	·		REMAR	RKS	
. 0	106	Till				· <u>- · - · - · - · - · - · - · - · - · -</u>		
			·			<del> </del>		
<del></del>								
		·				<del>\\ - d = \\</del>		
		<del></del>		···		<del></del>		<del></del>
			<del></del>					<del> </del>
				·				<del></del>
	 	·						
				·		<u> </u>		· · · · · · · · · · · · · · · · · · ·
			<u> </u>					
						<del></del>		<del></del>
		·	· · · · · · · · · · · · · · · · · · ·			<u> </u>		
					<u> </u>	·····		<del>_</del>

WATER HORIZON \_\_\_\_\_\_FT.\_

COAL I	FIELD	: Campbell River	DATE:				
COMPA	ANY:.	Lexco Testing Ltd.					
HOLE	NO.: _	LQ-77-100 ~					
	OX. L	OCATION:	_ SEC TWP RGEW				
•			\				
	EYED	LOCATION:18.142.544' N1.094.70	1' E				
ELEV	ATION	V:659					
DRILL	ER:_	H. Vincett					
	. <u>.</u>						
FROM	то	LOG	REMARKS				
0	24	Till					
24	98_	Grey sandstone					
-98	142	Silkstone					
142	144	Coal					
144	160	Silkstone					
160	167	Coal					
167	170	Grey shale					
170	171	Coal					
171	182	Silkstone					
182	190	Coal					
190	217	Brown shale					
217	21.9	coal					
219_	226	Brown shale					
226	228	Coal					
228	258	Brown shale	Coal stringer 245'				
258	259	Coal					
COM	MENT	s					

JAL FIEL	D: <u>Campbell River</u>	DATE:June 22, 1977
OMPANY:		
IOLE NO:	LQ-77-100 V	
		SEC TWP RGEW
		`\
Subveyer	LOCATION:	
	N:	
	H. Vincett	·
JRILLER:		
ROM TO	LOG	REMARKS
259 280	Brown_shale	
280 288	Silkstone	
288 300	Red silkstone	<u> </u>
300 320	Grey silkstone	
		`
,		
COMMEN	ITS	• · ·
- Junio		

DRIL	LH.	OLE	REP	OR	T
------	-----	-----	-----	----	---

WATER HORIZON \_

<del>.</del>						
_			DATE: June 23, 1977			
		Lexco Testing Ltd.				
HOLE	NO.: _	LQU 77-99				
			SECTWPRGEW			
•						
SURVI	EYED	LOCATION: 18,139,862 N	1.095.917 E			
ELEV	ATION	:578	<u>.                                    </u>			
•		D. Broen	·			
<i>-</i>	··					
FROM	TO.	LOG	REMARKS			
0	34	Grey sandstone				
34	37	Coal				
37	42	Brown shale				
42	44	Coal				
44	60	Brown shale				
60	65	Coal				
65	75	Brown shale				
75	80	Grey sandstone				
80	101	Brown shale				
101	103	Coal	<u> </u>			
103	117	Brown shale				
117	120	Coal				
120	145	Brown shale				
: 						
CON	MENT	·s				
		•				
			•			



